Public Utilities Commission of the City and County of San Francisco

Wastewater Enterprise

Annual Disclosure Report

For Fiscal Year Ending June 30, 2020



Services of the San Francisco Public Utilities Commission





March 27, 2021

VIA: MSRB EMMA

Ladies and Gentlemen:

Attached hereto is the Fiscal Year 2020 Annual Disclosure Report for the Public Utilities Commission of the City and County of San Francisco ("SFPUC"), Wastewater Enterprise. This filing relates to the following associated base CUSIP number(s):

SFPUC Wastewater Enterprise: 79768H

This Annual Disclosure Report is being provided by the SFPUC in connection with our undertaking entered into in accordance with Rule 15c2-12, promulgated by the U.S. Securities and Exchange Commission. The information provided in this Annual Disclosure Report speaks only as of its date, March 27, 2021. The delivery of this Annual Disclosure Report may not, under any circumstances, create an implication that there has been no other change to the information provided in any final official statement. Other than as set forth in the Continuing Disclosure Agreement, SFPUC has not agreed to notify the secondary market of subsequent changes to the information in this Annual Disclosure Report ("Report").

The filing of this Report does not constitute or imply any representation (1) that any or all of the information provided is material to investors, (2) regarding any other financial, operating or other information relating to the security for the referenced securities, (3) that no changes, circumstances or events have occurred which may have a bearing on the security for the referenced securities or an investor's decision to buy, sell, or hold the referenced securities.

Any statements regarding the referenced securities, other than a statement made by the City and County of San Francisco in an official release or subsequent notice or annual report, published in a financial newspaper of general circulation and/or filed with the Municipal Securities Rulemaking Board ("MSRB") or on Electronic Municipal Market Access ("EMMA"), are not authorized by the SFPUC. The SFPUC shall not be responsible for the accuracy, completeness, or fairness of any such unauthorized statement.

If you have any questions regarding this Annual Disclosure Report, please contact Eric Sandler, Assistant General Manager, Business Services & CFO at (415) 554-3155 or by e-mail at ESandler@sfwater.org.

Sincerely,

London N. Breed Mayor

Sophie Maxwell President

> Anson Moran Vice President

Tim Paulson Commissioner

Ed Harrington Commissioner

Newsha Ajami Commissioner

Michael Carlin Acting General Manager



Michael Carlin Acting General Manager

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Enclosure

CC: José Cisneros, Treasurer
Ben Rosenfield, Controller
Dennis J. Herrera, City Attorney
Anna Van Degna, Director, Office of Public Finance
Angela Calvillo, Clerk of the Board of Supervisors

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Sophie Maxwell, President Anson Moran, Vice President Tim Paulson, Commissioner Ed Harrington, Commissioner Newsha Ajami, Commissioner

PUBLIC UTILITIES COMMISSION OFFICIALS

Michael Carlin, Acting General Manager & Chief Operating Officer Greg Norby, Assistant General Manager, Wastewater Enterprise Eric Sandler, Assistant General Manager, Business Services and Chief Financial Officer Masood Ordikhani, Interim Assistant General Manager, External Affairs Barbara Hale, Assistant General Manager, Power Enterprise Kathy How, Assistant General Manager, Infrastructure Division Steven Ritchie, Assistant General Manager, Water Enterprise

CITY AND COUNTY OF SAN FRANCISCO MAYOR

London Breed

BOARD OF SUPERVISORS

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CITY ATTORNEY
Dennis J. Herrera

CITY TREASURER

José Cisneros

OTHER CITY AND COUNTY OFFICIALS

Ben Rosenfield, Controller Carmen Chu, City Administrator

The San Francisco Public Utilities Commission ("SFPUC") hereby provides this Annual Disclosure Report for the fiscal year ending June 30, 2020 in connection with obligations undertaken pursuant to Continuing Disclosure Certificates for revenue bonds issued by SFPUC's Wastewater Enterprise, as provided in the table below. Audited Financial Statements for the years ending June 30, 2020 and June 30, 2019 are attached and submitted separately and may be viewed on EMMA or downloaded from the SFPUC website at: http://www.sfwater.org/index.aspx?page=347.

SFPUC WASTEWATER ENTERPRISE OUTSTANDING PARITY REVENUE BONDS AND LOAN OBLIGATIONS (1) (\$000's)

			Final CUSIP		Par Outstanding (June 30,
Series of Bonds	Purpose	Date	(79768H)	Original Par	2020)
Wastewater Revenue Bonds, 2010 Series A	Refund outstanding commercial paper notes	June 8, 2010	AS7	\$ 47,050	\$ 17,220
Wastewater Revenue Bonds, Revenue Bonds – Build America Bonds (BABs), 2010 Series B ⁽²⁾	Wastewater system capital improvements and refund commercial paper notes	June 8, 2010	AL2	192,515	192,515
Wastewater Revenue Bonds, 2013 Series A	Refund previously outstanding Bonds & State Revolving Fund Loans	January 30, 2013	BF4	193,400	44,445
Wastewater Revenue Bonds, 2013 Series B	Wastewater system capital improvements under Prop E and refund outstanding commercial paper notes	February 27, 2013	CG1	331,585	331,585
Wastewater Revenue Bonds, 2016 Series A (Green Bonds)	Finance and refinance (through retirement of commercial paper notes) select SSIP projects	May 24, 2016	DB1	240,580	240,580
Wastewater Revenue Bonds, 2016 Series B	Finance and refinance (through retirement of commercial paper notes) select Wastewater Capital projects	May 24, 2016	DX3	67,820	67,820
Wastewater Revenue Bonds, 2018 Series A (Green Bonds)	Finance and refinance (through retirement of commercial paper notes) select SSIP projects	August 9, 2018	ET1	229,050	229,050
Wastewater Revenue Bonds, 2018 Series B	Finance select Wastewater Capital projects	August 9, 2018	FM5	185,950	185,950

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Series of Bonds	Purpose	Date	Final CUSIP (79768H)	Original Par	Par Outstanding (June 30, 2020)
Wastewater Revenue Bonds, 2018 Series C (Green Bonds)	Finance SSIP projects	August 9, 2018	DZ8	179,145	179,145
TOTAL (3)				\$ 1,667,095	\$ 1,488,310

Loan Agreement	Purpose	Date	Agreement Amount	Disbursements Received	Outstanding Principal*
Clean Water State Revolving Fund Loan, D15-01009	Lake Merced Green Infrastructure Project	June 17, 2016	\$ 7,435	\$ 4,893	\$ 6,117
Clean Water State Revolving Fund Loan, D17-01003	Southeast Treatment Plant Primary/Secondary Clarifier Upgrade Project	September 14, 2017	34,446	29,197	27,595
Clean Water State Revolving Fund Loan, D17-01004	Southeast Treatment Plant 521/522 and Disinfection Upgrade Project	September 14, 2017	40,007	36,152	38,193
Clean Water State Revolving Fund Loan, D17-01002	North Point Facility Outfall Rehabilitation Project	September 14, 2017	20,199	17,706	16,644
Clean Water State Revolving Fund Loan, SWRCB0000000000D1901029	Biosolids Digester Facility Project	May 7, 2020	132,000	-	-
Clean Water State Revolving Fund Loan, SWRCB0000000000D1901027	OSP Digester Gas Utilization Upgrade Project	May 7, 2020	54,388	-	-
WIFIA Loan Agreement, N17128CA	Biosolids Digester Facility Project	June 12, 2020 ⁺	699,242	-	-
WIFIA Loan Agreement, N19131CA	Southeast Treatment Plan Improvements	June 12, 2020	513,862	-	-
TOTAL				\$ 87,948	\$ 88,549

Represents outstanding indebtedness secured by a parity senior lien pledge of Net Revenues. Does not include subordinate debt.

⁽²⁾ Issued as Build America Bonds.

Wastewater Annual Disclosure Report Fiscal Year Ended June 30, 2020

- (3) Total excludes Commercial Paper. The Wastewater Enterprise maintains a \$750 million Interim Funding Program, which is subordinate to the outstanding revenue bonds and parity State Revolving Fund and WIFIA loans. As of June 30, 2020, the SFPUC had approximately \$207.9 million in commercial paper notes outstanding which are secured by: a) \$150 million letter of credit from Sumitomo Mitsui Bank (Series A-1), which expires March 10, 2021; (b) a \$150 million letter of credit from Bank of America N.A. (Series A-2), which expires April 24, 2023; (c) a \$75 million liquidity facility from TD Bank (Series A-4), which expires July 8, 2022; (d) a \$200 million liquidity facility from State Street Bank and Trust Company (Series A-6), which expires October 14, 2023; (e) a \$100 million letter of credit from Sumitomo Mitsui Bank (Series A-7), which expires June 2, 2022; and (g) a \$75 million Revolving Credit Agreement from US Bank NA, which expires July 25, 2020.
- * Outstanding SRF principal include reimbursement amounts requested but not received as of June 30, 2020.
- * WIFIA Loan Agreement, N17128CA was re-executed on June 12, 2020 with a lower rate of 1.45%.

The following tables are provided pursuant to the Continuing Disclosure Certificates executed in connection with the SFPUC's Wastewater Revenue Bonds.

SFPUC WASTEWATER ENTERPRISE ACCOUNTS AND BILLINGS BY USER TYPE FOR FISCAL YEAR ENDING JUNE 30, 2020

User Type	Active Accounts	Billings (000s) ⁽¹⁾	Billings as % of Total
Multi-Family Residential	36,467	\$146,548	45.1%
Single-Family Residential	111,869	89,688	27.6%
Subtotal Residential	148,336	\$236,236	72.8%
Commercial	24,721	79,350	24.4%
Municipal Customers	1,150	8,885	2.7%
Unmetered Properties	302	112	0.0%
Suburban (watershed keepers)	7	3	0.0%
Total	174,516	\$324,586	100.0%

Billings shown on a cash basis; revenues are on accrual basis in accordance with GAAP.

Source: SFPUC Comprehensive Annual Financial Report, June 30, 2020

SFPUC WASTEWATER ENTERPRISE HISTORICAL AND ADOPTED SEWER RATES (PER HUNDRED CUBIC FEET OF WATER CONSUMPTION)

SINGLE-FAMILY RESIDENTIAL USER

Fiscal Year	Tier One ⁽¹⁾	Additional Discharge Units ⁽¹⁾	Estimated Average Monthly Bill
2012-13	7.52	10.03	46.63
2013-14	7.90	10.53	48.97
2014-15 ⁽²⁾	9.06	11.23	44.89
2015-16 ⁽²⁾	9.82	11.34	45.97
2016-17 ⁽²⁾	10.84	11.66	50.24
2017-18(2)	12.40	12.40	56.92

Until June 30, 2014, Tier One included the first 300 cubic feet of water consumption per dwelling unit per month billed at the lifeline rate and all excess use at the regular residential rate. As of July 1, 2014, first tier includes the first 400 cubic feet. Effective July 1, 2017, residential wastewater billing will be based on a single tier.

(2) Rates approved on May 13, 2014.

MULTI-FAMILY RESIDENTIAL USER

Fiscal Year	Tier One ⁽¹⁾	Additional Discharge Units ⁽¹⁾	Estimated Average Monthly Bill
2012-13	7.86	10.49	38.27
2013-14	8.25	11.01	40.16
2014-15 ⁽²⁾	9.24	11.48	36.90
2015-16 ⁽²⁾	9.95	11.51	37.91
2016-17 ⁽²⁾	10.91	11.75	40.96
2017-18 ⁽²⁾	12.40	12.40	45.88

⁽¹⁾ Tier One includes the first 300 cubic feet of water consumption per dwelling unit per month billed at the lifeline rate and all excess use at the regular residential rate. Effective July 1, 2017, residential wastewater billing is based on a single tier.

⁽²⁾ Rates approved on May 13, 2014.

SFPUC WASTEWATER ENTERPRISE HISTORICAL AND ADOPTED SEWER RATES (PER HUNDRED CUBIC FEET OF WATER CONSUMPTION) SINGLE-FAMILY AND MULTI-FAMILY RESIDENTIAL USER

Fiscal Year	Monthly Service Charge	All Discharge Units	Projected Average Monthly Bill (Single-Family)	Projected Average Monthly Bill Per Dwelling Unit ⁽¹⁾ (Multi-Family)
2018-19 ⁽²⁾	\$0.98	\$13.06	\$61.84	\$52.02
2019-20 ⁽²⁾	\$2.19	\$13.88	\$65.76	\$55.67
2020-21 ⁽²⁾	\$3.60	\$14.89	\$77.45	\$63.24

⁽¹⁾ The average water consumption for multi-family residential customers is assumed to be 1,250 cubic feet of water per month for 3 dwelling units.

HISTORICAL AND ADOPTED NON-RESIDENTIAL USER DISCHARGE RATES (PER DISCHARGE UNIT)

Fiscal Year	Volume charge (per 100 cubic feet)	Suspended solids (per pound)	Oil/Grease (per pound)	Chemical Oxygen Demand (per pound)
2012-13	6.5548	0.8819	1.1035	0.2156
2013-14	6.6203	0.8907	1.1145	0.2178
2014-15	6.1450	0.8280	0.8670	0.4400
2015-16	6.4530	0.8700	0.8670	0.4400
2016-17	6.9040	0.9310	0.9740	0.4940
2017-18	7.6640	1.0330	1.0820	0.5480
2018-19 ⁽¹⁾	7.8400	1.3200	1.3310	0.5190
2019-20(1)	8.2900	1.4120	1.4240	0.5550
2020-21(1)	8.8600	1.5250	1.5380	0.5990

⁽¹⁾ Rates approved on April 10, 2018. Non-residential users are billed a fixed monthly service charge: these rates for FY19, FY20, and FY21 were \$0.98, \$2.19, and \$3.60 /mo, respectively.

⁽²⁾ Rates approved April 10, 2018.

SFPUC WASTEWATER ENTERPRISE HISTORICAL AND ADOPTED SEWER RATES (MONTHLY SEWER SERVICE ATTRIBUTABLE TO STORMWATER RUNOFF)

Fiscal Year	Low Runoff	Standard Runoff
2018-19 ⁽¹⁾	\$19.83	\$32.49
2019-20 ⁽¹⁾	\$20.47	\$33.56
2020-21 ⁽¹⁾	\$21.31	\$34.93

⁽¹⁾ Rates approved on April 10, 2018. This is a monthly sewer service charge attributable to stormwater runoff for property owners who do not have water and wastewater accounts with the SFPUC.

Source: SFPUC Comprehensive Annual Financial Report, June 30, 2020, Rates Schedules & Fees for Water Power and Sewer Service, & SFPUC Financial Services

SFPUC WASTEWATER ENTERPRISE HISTORICAL REVENUES, OPERATING & MAINTENANCE EXPENSES AND DEBT SERVICE COVERAGE FOR FISCAL YEARS ENDED JUNE 30 (IN THOUSANDS) (1)

	2016	2017	2018	2019	2020
OPERATING & INVESTMENT REVENUE					
Sewer Service Charges ⁽²⁾	\$249,203	\$267,601	\$303,037	\$317,761	\$331,721
Other Revenues	5,328	5,395	6,273	6,443	6,511
Investing Activities ⁽³⁾	1,185	2,327	2,317	20,701	12,137
Capacity Fees ⁽⁴⁾	7,244	4,345	5,786	6,877	5,896
Total Revenues	\$262,960	\$279,668	\$317,413	\$351,782	\$356,265
OPERATING & MAINTENANCE EXPENSE					
Salary and Fringe Benefits ⁽⁵⁾	\$79,088	\$115,288	\$91,977	\$80,693	\$91,013
Contractual Services ⁽⁶⁾	15,069	13,825	16,061	19,040	19,357
Materials and Supplies	10,192	8,736	9,446	9,853	8,991
Depreciation	50,799	55,441	55,591	60,033	62,967
Services of Other Departments	36,157	36,832	36,374	36,629	37,309
General and Administrative (7)	5,323	406	3,958	6,470	4,969
Other (8)	24,925	13,692	25,499	47,095	37,653
Total Operating Expenses	\$221,553	\$244,220	\$238,906	\$259,813	\$262,259
OPERATING AND INVESTMENT					
INCOME	\$41,407	\$36,448	\$78,507	\$91,969	\$94,006
COVERAGE CALCULATION					
Operating and Investment Income	\$41,407	\$36,448	\$78,507	\$91,969	\$94,006
+Adjustment to Investing Activities	(12)	251	(489)	(8,047)	2,950
+Depreciation & Non-Cash Expenses	56,285	57,998	60,072	68,568	68,603
+Changes in Working Capital	2,404	26,292	18,336	(2,125)	523
= "Net Revenue" (9),(10)	100,084	119,989	156,426	150,365	166,082
+Other Available Funds ⁽¹¹⁾	139,847	131,554	153,596	103,281	215,722
Funds Available for Debt Service	\$239,931	\$251,543	\$310,022	\$253,646	\$381,804
Bond and Loan Debt Service ^{(10),(14)}	\$60,022	\$48,769	\$47,003	\$60,347	\$62,797
DEBT SERVICE COVERAGE (12),(14) Including "Other Available					
Funds"(10),(11),(15) (17)	4.00x	5.16x	6.60x	4.20x	6.08x
Current Basis ^{(10),(13),(16),(17)}	1.67x	2.46x	3.33x	2.49x	2.64x

Operating and Investment Income presented in this table differs from the Change in Net Assets presented in the Statement of Revenues, Expenses and Changes in Net Assets in the Audited 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 Assets. Examples of excluded elements are Grant Revenue, Interest Expense and Gains from Sale of Assets.

⁽²⁾ Increase in FY2019-20 mainly due to rate increase effective July 1, 2018 offset by a sanitary flow decrease of 0.9% from residential and non-residential customers.

⁽³⁾ Decrease in FY2019-20 is mainly due to decrease of \$5.3M in interest earned on cash mainly attributed to lower cash balances coupled with lower annualized interest rate and \$3.3M in unrealized gains due to declined market value.

⁽⁴⁾ Decrease in FY2019-20 due to 16% decrease in number of permits issued and increase in uncollectible allowance..

⁽⁵⁾ Increase in Fiscal Year 2019-20 is mainly due to a 3% increase in cost of living allowance (COLA) and increase in expenses related to pension and other post-employment benefits obligations.

Wastewater Annual Disclosure Report Fiscal Year Ended June 30, 2020

- (6) Increase in Fiscal Year 2019-20 is primarily due to higher expenses in professional and specialized services.
- (7) Decrease in Fiscal Year 2019-20 mainly due mainly due to decrease in judgment and claims expenses.
- (8) Decrease in FY2019-20 of \$9.4M is mainly due to higher capitalization of capital project spending.
- (9) The Indenture defines "Net Revenues" on a cash basis.
- (10) Represents adjustments to show investing activities on a cash basis.
- (11) Increase in Fiscal Year 2019-20, due to classification the State Revolving Fund (SRF) loan project funds as restricted.
- (12) 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.
- (13) 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.
- (14) Bond Debt Service and Debt Service Coverage calculated per Indenture are net of capitalized interest; these differ from amounts presented in previous Annual Reports (as defined herein) and SFPUC Comprehensive Annual Financial Reports.
- (15) Calculated as the sum of Net Revenues plus "Other Available Funds," divided by debt service on Bonds and Parity State Loans.
- (16) Unaudited. Per the Indenture, calculated as Net Revenues divided by debt service on Bonds and SRF Loans.
- (17) The Enterprise recorded certain immaterial corrections to the FY2017-18 financial statements to eliminate the recognition of certain capital assets; the impact of the change was to increase Fiscal Year 2017-18 expenses and decrease beginning net position as of July 2017. As a result of this change, the ratio calculated for FY2017-18 differs from the ratio presented in the Annual Disclosure Report for FY2017-18.

Source: SFPUC, Audited Financial Statements, June 30, 2020 & SFPUC Financial Services

SUBSEQUENT EVENTS

1. Wastewater Interim Funding Program – Credit Providers

- i. On July 1, 2020, the SFPUC entered into its first amendment to the \$75 million Revolving Credit Agreement with US Bank National Association (US Bank) (Series R-1), extending the commitment expiration to January 19, 2021. On January 12, 2021, the SFPUC entered into its second amendment to the \$75 million Revolving Credit Agreement with US Bank (Series R-1), extending commitment duration to January 19, 2022.
- ii. On March 9, 2021, the SFPUC entered into its first amendment to the \$150 million Letter of Credit with Sumitomo Mistui Banking Corporation (SMBC) (Series A-1), extending the commitment expiration to March 7, 2024.

2. Clean Water State Revolving Fund Loan- SEP New Headworks Project

i. On October 13, 2020 the SFPUC Commission authorized the General Manager to enter into a State Revolving Fund Loan Agreement to partially fund the Wastewater Enterprise Southeast Treatment Plant New Headworks Project in an amount not to exceed \$112,036,181. The SFPUC expects full execution of the loan by the State Water Resources Control Board in Fiscal Year 2020-21.

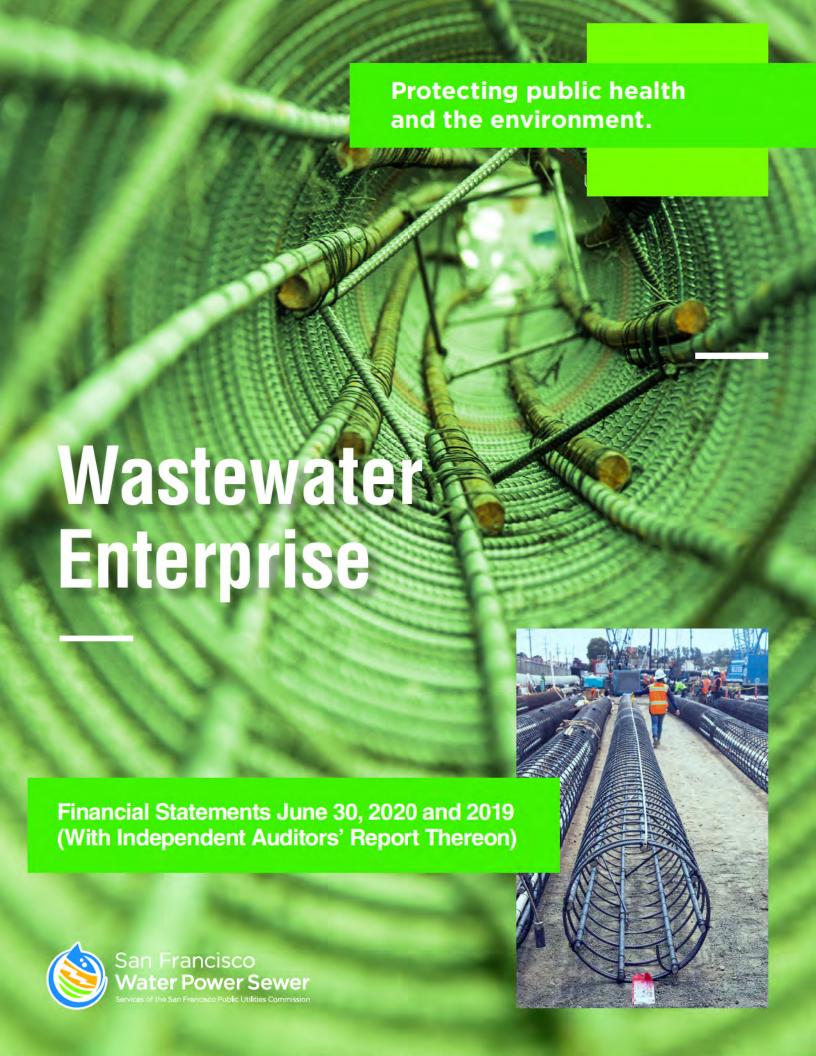


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KPMG LLP Suite 1400 55 Second Street San Francisco, CA 94105

Independent Auditors' Report

The Honorable Mayor and Board of Supervisors City and County of San Francisco, California:

Report on the Financial Statements

We have audited the accompanying financial statements of the San Francisco Wastewater Enterprise (the Enterprise), an enterprise fund of the City and County of San Francisco, California (the City), as of and for the years ended June 30, 2020 and 2019, and the related notes to the financial statements, which collectively comprise the Enterprise's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Enterprise, as of June 30, 2020 and 2019, and the respective changes in financial position and, where applicable, cash flows thereof for the years then ended in accordance with U.S. generally accepted accounting principles.



Emphasis of Matter

As discussed in Note 1, the financial statements of the Enterprise are intended to present the financial position, the changes in financial position and, where applicable, 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, 2020 and 2019, the changes in its financial position, or, where applicable, its cash flows for the years then ended in accordance with U.S. generally accepted accounting principles. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis on pages 3-15 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated January 22, 2021 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.

KPMG LLP

San Francisco, California January 22, 2021

Management's Discussion and Analysis (Unaudited)
June 30, 2020 and 2019
(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, 2020 and 2019. 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
- COVID-19
- 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 1,123 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, 2020, the Enterprise serves 148,336 residential accounts, which discharge about 16.9 million units of sanitary flow per year (measured in hundreds of cubic feet, or ccf) and 26,180 non-residential accounts, which discharge about 6.8 million ccf per 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.

Management's Discussion and Analysis (Unaudited)
June 30, 2020 and 2019
(Dollars in thousands, unless otherwise stated)

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, non-capital, 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.

COVID-19

On February 25, 2020 the Mayor issued a Proclamation declaring a local emergency to exist in connection with the imminent spread within the City of the novel coronavirus ("COVID-19"). On March 16, 2020, the City's Health Officer issued a stay safe at home order, Health Officer Order No. C19-07 (the "Stay Safe At Home Order"), requiring most people and City employees to remain in their homes subject to certain exceptions including obtaining essential goods such as food and necessary supplies, and requiring the closure of nonessential businesses. In addition, Section 2 of the second supplement to the emergency proclamation authorizes the SFPUC to suspend the (a) discontinuation or shut off of water service for residents and businesses in the City for non-payment of water and sewer bills and (b) the imposition of late payment penalties or fees for delinquent water and/or sewer bills through July 11, 2020. This proclamation did not suspend or have a material effect on the operations of the Wastewater enterprise.

Financial Analysis

Financial Highlights for Fiscal Year 2020

- Total assets of the Enterprise exceeded total liabilities by \$1,273,337.
- Net position increased by \$63,793 or 5.2% during the year.
- Capital assets, net of accumulated depreciation and amortization, increased by \$340,484 or 12.5% to \$3,062,288.
- Operating revenues increased by \$13,047 or 3.9% to \$344,128.
- Operating expenses increased by \$2,446 or 0.9% to \$262,259.

Financial Highlights for Fiscal Year 2019

- Total assets of the Enterprise exceeded total liabilities by \$1,218,386.
- Net position increased by \$55,018 or 4.7% during the year.

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- Capital assets, net of accumulated depreciation and amortization, increased by \$230,678 or 9.3% to \$2,721,804.
- Operating revenues increased by \$15,985 or 5.1% to \$331,081.
- Operating expenses increased by \$20,907 or 8.8% to \$259,813.

Financial Position

The following table summarizes the Enterprise's changes in net position.

Table 1
Comparative Condensed Net Position
June 30, 2020, 2019, and 2018

		2020	2019	2018	2020-2019 Change	2019-2018 Change
Total assets:	-					
Current and other assets	\$	473,620	821,796	268,983	(348,176)	552,813
Capital assets, net of accumulated depreciation and amortization		3,062,288	2,721,804	2,491,126	340,484	230,678
Total assets	- 5	3,535,908	3,543,600	2,760,109	(7,692)	783,491
Deferred outflows of resources:	7					
Unamortized loss on refunding of debt		189	326	500	(137)	(174)
Pensions		30,422	26,886	29,984	3,536	(3,098)
Other post-employment benefits		10,065	4,669	3,264	5,396	1,405
Total deferred outflows of resources	_	40,676	31,881	33,748	8,795	(1,867)
Liabilities:	-					
Current liabilities:						
Revenue bonds		23,240	22,085	21,010	1,155	1,075
Certificates of participation		747	711	676	36	35
Commercial paper		207,939	291,498	262,859	(83,559)	28,639
State revolving fund loans		2,458	1,239	296	1,219	943
Other liabilities		148,585	101,156	98,185	47,429	2,971
Subtotal current liabilities	- 5	382,969	416,689	383,026	(33,720)	33,663
Long-term liabilities:	ē					
Revenue bonds		1,598,493	1,630,524	998,136	(32,031)	632,388
Certificates of participation		26,112	26,892	27,645	(780)	(753)
State revolving fund loans		86,091	86,793	22,311	(702)	64,482
Other liabilities		168,906	164,316	181,241	4,590	(16,925)
Subtotal long-term liabilities		1,879,602	1,908,525	1,229,333	(28,923)	679,192
Total liabilities:	-				-	
Revenue bonds		1,621,733	1,652,609	1,019,146	(30,876)	633,463
Certificates of participation		26,859	27,603	28,321	(744)	(718)
Commercial paper		207,939	291,498	262,859	(83,559)	28,639
State revolving fund loans		88,549	88,032	22,607	517	65,425
Other liabilities		317,491	265,472	279,426	52,019	(13,954)
Total liabilities	-	2,262,571	2,325,214	1,612,359	(62,643)	712,855
Deferred inflows of resources:	-					
Related to pensions		16,892	16,157	7,277	735	8,880
Other post-employment benefits		4,185	4,967	96	(782)	4,871
Total deferred inflows of resources	-	21,077	21,124	7,373	(47)	13,751
Net position:	-					
Net investment in capital assets		1,183,288	1,133,662	1,172,623	49,626	(38,961)
Restricted for debt service		1,227	1,279	1,312	(52)	(33)
Restricted for capital projects		_	18,505	_	(18,505)	18,505
Unrestricted		108,421	75,697	190	32,724	75,507
Total net position	\$	1,292,936	1,229,143	1,174,125	63,793	55,018

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Net Position, Fiscal Year 2020

For the year ended June 30, 2020, the Enterprise's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$1,292,936. The Enterprise's total net position increased by \$63,793 or 5.2% as a result of increases of \$49,626 in net investment in capital assets and \$32,724 in unrestricted net position, offset by decreases of \$18,505 in restricted for capital projects and \$52 in restricted for debt service (see Table 1).

During the fiscal year 2020, current and other assets decreased by \$348,176 or 42.4%. The decrease was mainly due to a decrease of \$309,289 in restricted and unrestricted cash and investments mainly due to increased spending for the Sewer System Improvement Program (SSIP) and debt principal and interest repayment. Other decreases included \$39,043 in receivables from the State Water Resources Control Board (SWRCB) consisting of \$36,152 in cash receipts for disbursements claim relating to the Southeast Plant (SEP) 521/522 and Disinfection Upgrade Project, \$1,508 unreimbursed State Revolving Fund (SRF) claim, and \$1,383 in cash receipts for the retention balance relating to the Stormwater Flood Management projects. The other decreases included \$3,313 in restricted and unrestricted interest and other receivable due to lower cash balance in pooled cash fund, \$30 in custom work interfund receivables mainly due to collection from the Department of Public Works (DPW) for the Mission Bay South and Hunters Point Projects, and \$21 in charges for services. These decreases in current and other assets were offset by increases of \$3,265 in reimbursement receivables from SWRCB for the SEP 521/522 and Disinfection Upgrade and Lake Merced projects, \$192 in inventory as there were more purchases than issuances during the year and \$63 in prepaid charges.

Capital assets, net of accumulated depreciation and amortization, increased by \$340,484 or 12.5% reflecting an increase in construction and capital improvement activities. The largest portion of the Enterprise's net position of \$1,183,288 or 91.5%, represents net investment in capital assets (see Capital Assets section of the MDA for more information). Deferred outflows of resources increased by \$8,795 mainly due to increases of \$5,396 in other post-employment benefits and \$3,536 in pensions based on actuarial report offset by \$137 in amortization of the 2013 Series A bonds loss on refunding.

Total liabilities decreased by \$62,643 or 2.7%. As of June 30, 2020, total outstanding balance of \$1,945,080 for revenue bonds payable, commercial paper, certificates of participation, and SRF loans represented 86.0% of total liabilities, a decrease of \$114,662 or 5.6%. The decrease was mainly due to \$111.984 in debt repayments, \$8,824 in amortization of premium during the year, and \$1,508 loan reduction for the SRF SEP 521/522 and Disinfection Upgrade unreimbursed disbursements claim, offset by \$4,390 additional commercial paper issuance and \$3,264 SRF loan to fund for the SEP 521/522 and Disinfection Upgrade and Lake Merced projects. Other liabilities of \$317,491 such as payables to vendors. contractors, and other government agencies for goods and services under contractual agreements, increased by \$52,019 or 19.6%, due to increases of \$44,336 in restricted and unrestricted payable to vendors and contractors due to higher capital project spending, \$4,616 in other post-employment benefits obligations based on actuarial report, \$2.632 in employee related benefits including vacation, workers' compensation, and accrued payroll mainly due to actuarial estimates, 3% increase of cost of living adjustment (COLA), and more days in current year-end accrual compared to prior year-end accrual, \$1,198 in net pension liability based on actuarial report, \$621 in customer credit balances mainly due to overpayments, \$300 in pollution remediation liability due to increased estimated cleanup liabilities for the toxic sediments at Yosemite Creek, and \$1 interfund payable to City Attorney's Office. These increases were offset by decreases of \$1,070 in bond and loan interest payable due to lower outstanding debt principal, \$477 in general liability based on actuarial estimates, \$107 in payable to Hetch Hetchy Power due to

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payment for the 525 Golden Gate Living Machine System, and \$31 decrease in deposit from Pacific Gas & Electric due to expenses incurred for the Cross Bore Project. Deferred inflows of resources decreased by \$47 due to \$782 decrease in other post-employment benefits based on actuarial report offset by \$735 increase in pensions based on actuarial report.

Net Position, Fiscal Year 2019

For the year ended June 30, 2019, the Enterprise's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$1,229,143. The Enterprise's total net position increased by \$55,018 or 4.7% as a result of increases of \$75,507 in unrestricted net position and \$18,505 in restricted for capital projects, offset by decreases of \$38,961 in net investment in capital assets and \$33 in restricted for debt service (see Table 1).

During the fiscal year 2019, current and other assets increased by \$552,813 or 205.5%. The increases included \$523,491 in restricted and unrestricted cash and investment mainly due to debt issuance of 2018 Series ABC revenue bonds offset by debt principal and interest repayment and Sewer System Improvement Program (SSIP) related capital projects spending, \$21,795 in grant receivables mainly from the State Water Resources Control Board (SWRCB) consisting \$37,660 for the Southeast Plant (SEP) 521/522 and Disinfection Upgrade Project and \$23 for stormwater flood management projects, offset by \$15,888 in cash receipts from the SWRCB for the North Point and Lake Merced projects, \$4,845 in restricted and unrestricted interest and other receivable due to higher cash balance in pooled cash fund and higher annualized interest rates, \$2,384 in charges for services due to a 7% planned rate increase, \$202 in inventory as there were more purchases than issuances during the year, and \$104 in custom work interfund receivables mainly due from the Department of Public Works (DPW) for the Mission Bay South and Hunters Point Projects. These increases were offset by a decrease of \$8 in prepaid charges.

Capital assets, net of accumulated depreciation and amortization, increased by \$230,678 or 9.3% reflecting an increase in construction and capital improvement activities. The largest portion of the Enterprise's net position of \$1,133,662 or 92.2%, represents net investment in capital assets (see Capital Assets section of the MDA for more information). Deferred outflows of resources decreased by \$1,867 mainly due to decreases of \$3,098 in pensions based on actuarial report and \$174 in unamortized loss on refunding of the 2013 Series A bonds, offset by \$1,405 increase in other post-employment benefits based on actuarial report.

Total liabilities increased by \$712,855 or 44.2%. As of June 30, 2019, total outstanding balance of \$2,059,742 for revenue bonds payable, commercial paper, certificates of participation, and State Revolving Fund (SRF) loans represented 88.6% of total liabilities, an increase of \$726,809 or 54.5%. The increase was mainly due to \$663,103 issuance of revenue bonds Series 2018 ABC, \$66,850 in SRF loans to fund capital project spending, and \$53,639 issuance of commercial paper to fund capital projects, offset by \$48,111 in debt repayments, and \$8,672 in amortization of premium during the year. Other liabilities of \$265,472 such as payables to vendors, contractors, and other government agencies for goods and services under contractual agreements, decreased by \$13,954 or 5.0%, due to decreases of \$15,936 in net pension liability based on actuarial report, \$5,950 in other post-employment benefits obligations based on actuarial report, \$5,737 in restricted and unrestricted payable to vendors and contractors due to more payments than vouchers, \$114 deposit from Pacific Gas & Electric due to expenses incurred for the Cross Bore Project, \$106 to Hetch Hetchy Power due to payment for the 525 Golden Gate Living Machine System, \$34 in prepaid rent from tenants, and \$14 in grant advance recognized to revenue in current year for the Green Infrastructure Leadership. These decreases were offset by increases of \$6,958 in bond and loan interest payable due to higher outstanding debt principal, \$2,797 in pollution remediation liability due to

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increased estimated cleanup liabilities of \$3,000 for the toxic sediments at Yosemite Creek, offset by \$203 payment for paving surrounding soils due to contamination of hazardous materials at Southeast Plant, \$2,302 in general liability based on actuarial estimates, \$1,250 in employee related benefits including vacation, workers' compensation, and accrued payroll mainly due to actuarial estimate and 3% increase of cost of living adjustment (COLA), and \$630 in customer credit balances. Deferred inflows of resources increased by \$13,751, of which \$8,880 in relation to pensions based on actuarial report and \$4,871 in other post-employment benefits based on actuarial report.

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, 2020, 2019, and 2018

	2020	2019	2018	2020-2019 Change	2019-2018 Change
Revenues:					
Charges for services	331,721	317,761	303,037	13,960	14,724
Rents and concessions	664	702	611	(38)	91
Other operating revenues	11,743	12,618	11,448	(875)	1,170
Interest and investment income	12,137	20,701	2,317	(8,564)	18,384
Net gain from transfer of assets		619	-	(619)	619
Other non-operating revenues	5,596	5,545	5,330	51	215
Total revenues	361,861	357,946	322,743	3,915	35,203
Expenses:					
Operating expenses	262,259	259,813	238,906	2,446	20,907
Interest expenses	43,216	43,803	24,978	(587)	18,825
Amortization of premium, refunding loss, and issuance cost	(8,647)	(5,697)	(5,400)	(2,950)	(297)
Non-operating expenses	52	1,013	414	(961)	599
Total expenses	296,880	298,932	258,898	(2,052)	40,034
Change in net position before transfers	64,981	59,014	63,845	5,967	(4,831)
Transfers from the City and County of San Francisco	280		_	280	_
Transfers to the City and County of San Francisco	(1,468)	(3,996)	(26,960)	2,528	22,964
Net transfers	(1,188)	(3,996)	(26,960)	2,808	22,964
Change in net position	63,793	55,018	36,885	8,775	18,133
Net position at beginning of year					
Beginning of year, as previously reported	1,229,143	1,174,125	1,146,263	55,018	27,862
Cumulative effect of accounting change due to error	_	_	(6,767) **	_	6,767
Cumulative effect of accounting change	-		(2,256) *		2,256
Net position at beginning of year as restated	1,229,143	1,174,125	1,137,240	55,018	36,885
Net position at end of year	1,292,936	1,229,143	1,174,125	63,793	55,018

^{*} Cumulative effect of accounting change per GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions.

Results of Operations, Fiscal Year 2020

The Enterprise's total revenues were \$361,861, an increase of \$3,915 or 1.1% from prior year (see Table 2). Charges for services increased by \$13,960 or 4.4% mainly due to an average 7% adopted rate increase, offset by a sanitary flow decrease of 215,896 ccf or 0.9% from residential and non-residential customers.

^{**} The Enterprise recorded certain immaterial corrections to the 2018 financial statement to eliminate the recognition of certain capital assets that are recorded by another fund. The impact of the change was to decrease beginning position as of July 2017 by \$6,767 and increase fiscal year 2018 expenses by \$28,313.

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Other non-operating revenues increased slightly by \$51 mainly due to \$642 in miscellaneous revenue largely due to receipts from California State Parks Foundation for a project at Yosemite Slough Site, \$38 gain from sale of assets in current year, \$14 in federal interest subsidy, and \$11 in Federal Emergency Management Agency (FEMA) grant relating to COVID-19, offset by a decrease of \$391 in biofuel revenue as the SFGreasecycle Program ended in prior year, grants received in prior year of \$234 from the State for the stormwater flood management projects and \$29 from the Green Infrastructure Leadership Exchange. These increases were offset by a decrease of \$8,564 or 41.4% in interest and investment income due to lower pooled and fiscal agent cash balances and lower annualized interest rate. Other operating revenues decreased by \$875 mainly due to \$981 decrease in capacity fees resulting from a 16% decrease in permits issued and increase in uncollectible allowance, offset by \$106 increase in charges for services to other City departments such as the Recreation & Park and San Francisco General Hospital, \$619 gain from transfer of assets in prior year, and \$38 decrease or 5.4% in rents and concessions mainly due to \$56 catch-up billing adjustment in prior year for a lease at Southeast Water Pollution Control Plant offset by \$18 increase in rental revenue from tenants with 3% consumer price index average rate increase.

Total expenses were \$296,880, a decrease of \$2,052 or 0.7% due to decreases of \$2,950 in amortization of premium, refunding loss, and issuance cost due to decrease of \$2,760 in issuance cost attributable to bond series 2018 ABC issuance in prior year, decrease of \$36 in refunding loss and increase of \$154 in bond premium, \$961 in other non-operating expenses mainly due to \$987 loss from sale of assets in prior year offset by \$26 increase in City grants program expenses as there were more expenses incurred for community-based organization services, and \$587 decrease in interest expenses mainly due to more capitalization of interest expense for fixed assets in the current year. These decreases were offset by an increase of \$2,446 in operating expenses. The increase of \$2,446 in operating expenses was mainly due to \$10,320 increase in personnel services due to 3% increase in COLA, increase in retirement contribution rates and expenses related to pension and other post-employment benefits, \$2,934 in depreciation expense due to more capitalized assets put in service, \$680 in services provided by other departments mainly for legal services, street cleaning, neighborhood beautification, and risk management services, and \$317 in contractual services mainly due to higher professional and specialized services. These increases were offset by decreases of \$10.943 in general and administrative and other operating expenses mainly due to higher capitalization of capital project spending and prior year higher capital project expense related to the Southeast Plant Improvement Project and \$862 in materials and supplies mainly due to water sewage treatment supplies for Bayside Operations.

Net transfers of \$1,188 included transfer out of \$1,436 to the San Francisco Art Commission for integrated artworks at the Headworks Facility and \$32 to the Office of the City Administrator for the Surety Bond Program, offset by \$240 transfer in from General Fund for the Central Shop Relocation Project contingency release and \$40 for the Sidewalk Garden Grants Project.

Results of Operations, Fiscal Year 2019

The Enterprise's total revenues were \$357,946, an increase of \$35,203 or 10.9% from prior year (see Table 2). Charges for services increased by \$14,724 or 4.9% due to an average 7% adopted rate increase offset by a sanitary flow decrease of 476,093 ccf or 2% from residential and non-residential customers. Interest and investment income increased significantly by \$18,384 or 793.4% due to increases of \$13,632 in interest earned on cash mainly attributed to higher cash balance coupled with higher annualized interest rate and \$4,752 in unrealized gains due to improved market value. Other operating revenues increased by \$1,170 or 10.2% mainly due to \$1,091 increase in capacity fees resulting from 6% increase in number of permits and 7% increase in average permit price, and \$79 in charges for services to other City departments such as the Laguna Honda Hospital and San Francisco Municipal Transportation Agency. Net gain from

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transfer of assets was \$619 due to transfer of 1800 Jerrold from General Services Agency (GSA). Other non-operating revenues increased by \$215 or 4.0% mainly due to increases of \$305 in miscellaneous revenue such as Stormwater Control Plan review fees, overhead and late payment charges, \$235 State grant received for the stormwater flood management projects, \$29 from the Green Infrastructure Leadership Exchange Grant, \$11 in federal interest subsidy, \$3 net loss from sale of fixed assets in prior year, and \$2 from sale of scrap and waste. These increases were offset by \$228 decrease in biofuel revenue as the SFGreasecycle Program ended in April 2019, \$141 in settlements received in prior year from insurance claim, and \$1 in services to other government agencies. Rents increased by \$91 or 14.9% mainly due to \$68 catch-up billing for a lease at Southeast Water Pollution Control Plant in the current year and \$23 from tenants with 4% consumer price index (CPI) average rate increase.

Total expenses were \$298,932, an increase of \$40,034 or 15.5% due to increases of \$20,907 in operating expenses, \$18,825 in interest expenses mainly due to higher outstanding debt principal, and \$599 in other non-operating expenses mainly due to \$987 net loss on sale of fixed assets due to 1801 Jerrold property exchange with DPW, offset by \$388 decrease in City grants program expenses as there were no expense incurred for community-based organization services in the current year coupled with lower expense incurred for the flood water management program. These increases were offset by \$297 amortization of premium, refunding loss, and issuance cost. The increase of \$20,907 in operating expenses was attributed largely to \$24,108 increase in general and administrative and other operating expenses, mainly due to lower capitalization of capital project spending coupled with higher capital project expenses related to Southeast Plant Improvement Project, \$4,442 in depreciation expense due to more capitalized assets put in service, \$2,979 in contractual services mainly due to higher maintenance services on building structures and higher professional and specialized services, \$407 in materials and supplies, and \$255 in services provided by other departments mainly for light, heat, and power. These increases were offset by a decrease of \$11,284 in personnel services mainly due to decrease in expenses related to pension and other post-employment benefits.

Total transfers out of \$3,996 included \$3,724 to the City Real Estate Division for the Central Shop Relocation Project and the Land Reuse 1800 Jerrold related to the Southeast Plant Improvement Project, \$150 to the Neighborhood Development Fund for the Watershed Stewardship Grants, \$90 to the San Francisco Art Commission for art enrichment, and \$32 to the Office of the City Administrator for the Surety Bond Program.

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, 2020, 2019, and 2018

	2020	2019	2018	2020-2019 Change	2019-2018 Change
Facilities, improvements, machinery, and equipment	\$ 2,104,332	1,916,979	1,799,548	187,353	117,431
Intangible assets	3,046	3,183	3,320	(137)	(137)
Land and rights-of-way	44,572	36,018	35,737	8,554	281
Construction work in progress	910,338	765,624	652,521	144,714	113,103
Total	\$ 3,062,288	2,721,804	2,491,126	340,484	230,678

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Capital Assets, Fiscal Year 2020

The Enterprise has capital assets of \$3,062,288, net of accumulated depreciation and amortization, invested in a broad range of utility capital assets as of June 30, 2020 (see Table 3). This amount represents an increase of \$340,484 or 12.5% 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. Facilities, improvements, machinery, and equipment increased by \$187,353 or 9.8%, construction work in progress increased by \$144,714 or 18.9%, and land and rights-of-way increased by \$8,554 or 23.7% due to the Rankin Street land purchase, offset by a decrease of \$137 or 4.3% in intangible assets due to amortization.

Major additions to construction work in progress during the year ended June 30, 2020 include the following:

Southeast Plant Biosolids and Digester Facilities Project	\$	116,761
Southeast Plant New Headworks Grit Removal and Influent Pump Station		69,287
Southeast Community Center		14,708
Seismic Reliability - Phase 1		13,066
Oceanside Plant Digester Gas Handling Utilization		11,087
As-Needed Spot Sewer Replacement No. 38		10,501
Southeast Plant Water System Improvements		9,206
Program Management		9,088
Public Works Lombard Street Infrastructure Improvements		7,729
Mariposa Pump Station & Force Main		7,411
Islais Creek Outfall		7,401
Geary Bus Rapid Transit Sewer Improvements		6,013
Southeast Plant 062 Archimedes Screw Pump		5,236
Richmond Early Implementation Project		5,211
Channel Tunnel/Bayside Drainage		5,180
Public Works Various Locations Pavement Number 37		4,966
Van Ness Bus Rapid Transit Sewer Improvements		4,674
Public Works Various Locations Number 39 Infrastructure Improvements		4,639
As-Needed Main Sewer Replacement #7		4,385
Ocean Beach Project		4,255
Westside Pump Station Reliability Improvements		4,245
Taraval Sewer Improvements		4,174
Other project additions individually below \$4,000	_	76,575
Total	\$	405,798

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, 2020 include the following:

South East Plant Water System Improvements	\$ 64,526
Griffith Pump Station Improvements	20,305
Oceanside Plant Condition Assessment Repairs	15,440
Seismic Reliability - Phase 1	14,317
As Needed Spot Sewer Replacement Number 38	12,136
Islais Creek Outfall	9,206
South East Plant 740 Digester Gas Upgrade	8,688
Various Locations Sewer Replacement Number 3	8,245
Public Works Various Locations Pavement Number 37	7,123
Public Works Filbert Other Street Infrastructure Improvements	5,784
Public Works Various Locations Number 28 Infrastructure Improvements	5,772
Various Locations Sewer Replacment Number 5	5,013
Oceanside Plant Building 620 Digester Recirculation Pump	4,965
Westside Pump Station Reliability Improvements	4,756
5Th/North/6Th Division Street Combined Sewer Discharge	4,691
Public Works Evans Avenue Infrastructure Improvements	4,538
As Needed Main Sewer Replacement Number 7	4,385
Public Works As Needed Number 11 Infrastructure Improvements	4,284
Public Works Irving Street Phase 2 Infrastructure Improvements	4,115
Public Works Clayton Other Street Infrastructure Improvements	3,950
46Th/47Th/48Th Avenues Sewer Replacement	3,149
Wastewater 16Th Street Sewer Replacement	3,080
Oceanside Plant Facility Ventilation System	3,042
Other project additions individually below \$3,000	28,880
Total	\$ 250,390

See Note 4 for additional information about capital assets.

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Sewer System Improvement Program

The Sewer System Improvement Program (SSIP) includes three phases over 20 years to improve the existing wastewater system. In March 2016, the refined program scope and budget increased from \$6.9 billion to \$7.0 billion endorsed by the Commission along with the baseline for scope, schedule and budget for phase I, II, and III projects.

As of June 30, 2020, 32 projects or 45.7% totaling \$324 million were completed, with 15 projects in preconstruction phase, 17 projects in construction phase, and 6 projects in close-out phase. The SEP Existing Digester Gas Handling Improvements was completed on February 28, 2020 with reported project expenditures of \$15.5 million. The goal of this project is to cost effectively integrate the digester gas handling system at the SEP, improve the reliability of the cogeneration facility, and provide backup fuel source for the boilers. The SEP New Headworks Facility–SCOPE II.A is on-going construction. The project is reported at 82.7% completion and forecasted final completion is on November 14, 2020. Program expenditures as of June 30, 2020 totaled \$1,079.0 million. Additional details regarding the SSIP are available at www.sfwater.org.

Capital Assets, Fiscal Year 2019

The Enterprise has capital assets of \$2,721,804, net of accumulated depreciation and amortization, invested in a broad range of utility capital assets as of June 30, 2019 (see Table 3). This amount represents an increase of \$230,678 or 9.3% 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. Facilities, improvements, machinery, and equipment increased by \$117,431 or 6.5%, construction work in progress increased by \$113,103 or 17.3%, and land and rights-of-way increased by \$281 or 0.8%, offset by a decrease of \$137 or 4.1%, in intangible assets due to amortization. The \$281 increase in land and rights-of-way is due to jurisdictional transfer of properties between Enterprise with GSA and DPW for 1800 and 1801 Jerrold.

Major additions to construction work in progress during the year ended June 30, 2019 include the following:

Southeast Plant Biosolids and Digester Facilities Project	\$	84,770
Southeast Plant New Headworks Grit Removal and Influent Pump Station		58,369
Southeast Plant Building 521/522 and Disinfection Upgrades		14,262
As-Needed Spot Sewer Replacement No. 37		11,134
Griffith Pump Station Improvements		10,986
Channel Tunnel/Bayside Drainage		9,989
Seismic Reliability - Phase 1		9,146
Van Ness Bus Rapid Transit Sewer Improvements		8,065
Northshore to Channel Force Main		7,983
Southeast Plant Primary and Secondary Clarifier		7,173
Mariposa Pump Station & Force Main		5,800
Southeast Plant Existing Digester Gas Handling Improvements		5,741
As-Needed Main Sewer Replacement #6		5,294
Southeast Community Center		5,187
Southeast Plant Oxygen Generation Plant 01		4,964
Various Locations Sewer Replacement #1		4,917
Oceanside Plant Condition Assessment Repairs		4,915
Westside Pump Station Reliability Improvements		4,836
Southeast 740 Digestor Gas Upgrade		4,810
Drumm & Jackson St Sewer Improvement		4,773
Various Locations Sewer Replacement #3		4,681
Public Works Filbert St and Leavenworth St Infrastructure Improvements		4,531
Public Works Various Locations No. 28 Infrastructure Improvements		4,341
Various Locations Sewer Replacement #5		4,191
Oceanside Plant Digester Gas Handling Utilization		4,157
Other project additions individually below \$4,000	_	1,957
Total	\$	296,972
	_	

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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, 2019 include the following:

Southeast Plant Existing Digester Gas Handling Improvement	\$	19,683
As-Needed Spot Sewer Replacement No. 37	Ψ	11,158
Southeast Plant Oxygen Generation Plant 01		9,457
Northshore to Channel Force Main		9,330
Lange Marie Committee Comm		
Wastewater Crocker Amazon/Excelsior/Ingleside Districts Sewer Replacement		8,688
Southeast Plant Primary and Secondary Clarifier Upgrade		8,268
Various Locations Sewer Replacement and Pavement Renovation No. 1		7,935
Drumm & Jackson Street Sewer Improvement		7,720
Various Locations Sewer Replacement and Pavement Renovation No. 2		7,100
Sunnydale Early Implementation Project		6,262
Public Works Various Locations No. 22 Infrastructure Improvement		6,012
Public Works Polk St Infrastructure Improvement		5,582
Public Works Various Locations No. 27 Infrastructure Improvement		5,510
Hydraulic & Drainage Sewer Improvement		5,345
As-Needed Main Sewer Replacement #6		5,294
Haight-Ashbury/Tenderloin/Diamond		5,234
Various Locations Sewer Replacement and Pavement Renovation No. 4		4,908
Public Works Various Locations No. 24 Infrastructure Improvement		4,678
Public Works 25th Ave and Lowell Street Sewer Replacement		3,710
Collection Division Consolidation		3,140
Other project additions individually below \$3,000		33,387
Total	\$	178,401

See Note 4 for additional information about capital assets.

Sewer System Improvement Program

The Sewer System Improvement Program (SSIP) includes three phases over 20 years to improve the existing wastewater system. In March 2016, the refined program scope and budget increased from \$6.9 billion to \$7.0 billion endorsed by the Commission along with the baseline for scope, schedule and budget for phase I, II, and III projects.

As of June 30, 2019, 25 projects or 35.7% totaling \$176 million were completed, with 21 projects in preconstruction phase, 13 projects in construction phase, and 11 projects in close-out phase. The SEP Primary and Secondary Clarifier Upgrades Project was completed on January 21, 2019 with reported project expenditures of \$32.6 million. The project is intended to upgrade the mechanical, structural, and electrical components at the primary and secondary sedimentation tanks (clarifiers) at SEP to address operational reliability and compliance with regulatory requirements for liquid treatment. The SEP 521/522 and Disinfection Upgrades (SEP Building 521 Replacement) are on-going construction. The project is reported at 96.0% completed and forecasted completion in October 2019. Program expenditures as of June 30, 2019 totaled \$913.4 million. Additional details regarding the SSIP are available at www.sfwater.org.

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Debt Administration

As of June 30, 2020, 2019, and 2018, the Enterprise's debt from revenue bonds, commercial paper, certificates of participation, and State revolving fund loans were \$1,945,080, \$2,059,742, and \$1,332,933, 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, 2020, 2019, and 2018

	2020	2019	2018	2020-2019 Change	2019-2018 Change
Revenue bonds	\$ 1,621,733	1,652,609	1,019,146	(30,876)	633,463
Commercial paper	207,939	291,498	262,859	(83,559)	28,639
Certificates of participation	26,859	27,603	28,321	(744)	(718)
State revolving fund loans	88,549	88,032	22,607	517	65,425
Total	\$ 1,945,080	2,059,742	1,332,933	(114,662)	726,809

The decrease of \$114,662 was mainly due to \$111,984 repayment of outstanding debt, \$8,824 of premium amortizations, and \$1,508 SRF loan reduction for unreimbursed disbursement claim, offset by \$4,390 issuance of commercial paper and \$3,264 SRF loans for SEP 521/522 and Disinfection Upgrade and Lake Merced projects.

Credit Ratings and Bond Insurance – As of June 30, 2020 and 2019, the Enterprise carried underlying ratings of "Aa2" and "AA" and "Aa3" 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 2020 and 2019, 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, 2020, the Enterprise had \$3,441,862 in combined debt issuance authorization from the Board of Supervisors under Proposition E, with \$2,735,708 issued against this authorization. The Enterprise has a \$750,000 authorized commercial paper program, with \$207,939 in tax-exempt commercial paper outstanding as of June 30, 2020 and \$291,498 in tax-exempt commercial paper outstanding as of June 30, 2019.

Cost of Debt Capital – The coupon interest rates on the Enterprise's outstanding revenue bonds ranged from 1.0% to 5.8%, with a blended true interest cost of 3.4%, after factoring in federal interest subsidy receipts on Build America Bonds at June 30, 2020. The 2009 Series C certificates of participation carried coupon interest rates from 2.0% to 5.0% and 2009 Series D certificates of participation carried coupon interest rates from 6.4% to 6.5% in fiscal years 2020 and 2019, respectively. The interest rates on short-term debt ranged from 0.2% to 1.9% as of end of fiscal year 2020. The State revolving fund loans (CWSRF loans) carried interest rates ranging from 1.4% to 1.8% for a weighted average of 1.54% as of end of fiscal year 2020.

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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 VIIIB, 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 was completed in April 2018 and resulted in four-year wastewater rate increases from July 1, 2018 through June 30, 2022. The SFPUC Rates Schedules and Fees is available at http://sfwater.org/modules/showdocument.aspx?documentid=7743.

The following table is the Enterprise's ten-year approved average rate adjustments:

Ten-year Average Ra	te Adjustments	
Effective Date	Rate	7.4
July 1, 2012	5.0 1 %	
July 1, 2013	5.0 1	
July 1, 2014	5.0 ²	
July 1, 2015	5.0 ²	
July 1, 2016	7.0 ²	
July 1, 2017	11.0 ²	¹ Four-year rate increases adopted and effective July 1, 2009.
July 1, 2018	7.0 ³	² Four-year rate increases adopted and effective July 1, 2014.
July 1, 2019	7.0 ³	³ Four-year rate increases adopted and effective July 1, 2018.
July 1, 2020	8.0 ³	
July 1, 2021	8.0 ³	

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 http://www.sfwater.org/index.aspx?page=344.

Statements of Net Position June 30, 2020 and 2019 (In thousands)

Assets		2020	2019
Current assets:			2020
Cash and investments with City Treasury	\$	351,915	209,109
Cash and investments outside City Treasury Receivables:		356	274
Charges for services (net of allowance for doubtful accounts of \$3,189 as of			
June 30, 2020 and \$2,308 as of June 30, 2019)		33,749	33,781
Due from other City departments		190	220
Due from other governments Interest		983	39,043 1,454
Restricted due from other governments		3,265	1,454
Restricted interest, other receivable, and prepaid (net of allowance for doubtful accounts of \$38 as		_,	
of June 30, 2020 and \$19 as of June 30, 2019)		1,864	4,720
Total current receivables	-	40,051	79,218
Prepaid charges, advances, and other receivables, current portion	_	195	128
Inventory		2,476	2,284
Restricted cash and investments outside City Treasury	-	11,043	44,928
Total current assets	-	406,036	335,941
Non-current assets: Restricted cash and investments with City Treasury		EE 130	483,885
Restricted cash and investments with only freasury		55,132 10,461	465,665
Restricted dash and investments outside only reasony Restricted interest, other receivable, and prepaid (net of allowance for doubtful accounts of \$29		10,401	
as of June 30, 2020 and \$31 as of June 30, 2019)		467	453
Charges for services, less current portion (net of allowance for doubtful accounts of \$577 as of			
June 30, 2020 and \$567 as of June 30, 2019)		339	328
Prepaid charges, advances, and other receivables, less current portion		1,185	1,189
Capital assets, not being depreciated and amortized		957,956	804,688
Capital assets, net of accumulated depreciation and amortization	_	2,104,332	1,917,116
Total non-current assets	_	3,129,872	3,207,659
Total assets	-	3,535,908	3,543,600
Deferred outflows of resources		480	200
Unamortized loss on refunding of debt Pensions		189 30,422	326 26,886
Other post-employment benefits		10,065	4,669
Total deferred outflows of resources	- 1	40,676	31,881
Liabilities	-		
Current liabilities:			
Accounts payable		20,044	18,132
Accrued payroll		5,510	4,652
Accrued vacation and sick leave, current portion Accrued workers' compensation, current portion		4,801 1,112	4,151 1,031
Due to other City departments, current portion		110	107
Damage claims liability, current portion		8,994	7,013
Unearned revenues, refunds, and other		5,243	4,653
Bond and loan interest payable		17,416	18,486
Revenue bonds, current portion		23,240	22,085
Certificates of participation, current portion Commercial paper		747 207,939	711 291,498
State revolving fund loans payable, current portion		2,458	1,239
Current liabilities payable from restricted assets		85,355	42,931
Total current liabilities	11/2	382,969	416,689
Long-term liabilities:	1.0	002,000	120,000
Other post-employment benefits obligations		58,183	53,567
Net pension liability		86,235	85,037
Accrued vacation and sick leave, less current portion		4,113	3,126
Accrued workers' compensation, less current portion		4,939	4,883
Due to other City departments, less current portion Damage claims liability, less current portion		739 6,897	848 9.355
Revenue bonds, less current portion		1,598,493	1,630,524
Certificates of participation, less current portion		26,112	26,892
State revolving fund loans payable, less current portion		86,091	86,793
Pollution remediation obligation	_	7,800	7,500
Total long-term liabilities	_	1,879,602	1,908,525
Total liabilities	_	2,262,571	2,325,214
Deferred inflows of resources			
Related to pensions		16,892	16,157
Other post-employment benefits	_	4,185	4,967
Total deferred inflows of resources	-	21,077	21,124
Net position		1 183 200	1 132 660
Net investment in capital assets Restricted for debt service		1,183,288 1,227	1,133,662 1,279
MODELING OF MODE SOLVING			18,505
Restricted for capital projects			13,303
Restricted for capital projects Unrestricted		108.421	75.697
	\$	108,421	75,697 1,229,143

Statements of Revenues, Expenses, and Changes in Net Position Years ended June 30, 2020 and 2019 (In thousands)

		2020	2019
Operating revenues:			
Charges for services	\$	331,721	317,761
Rents and concessions		664	702
Capacity fees		5,896	6,877
Other revenues		5,847	5,741
Total operating revenues		344,128	331,081
Operating expenses:			
Personnel services		91,013	80,693
Contractual services		19,357	19,040
Materials and supplies		8,991	9,853
Depreciation and amortization		62,967	60,033
Services provided by other departments		37,309	36,629
General and administrative and other		42,622	53,565
Total operating expenses		262,259	259,813
Operating income	-	81,869	71,268
Non-operating revenues (expenses):			
Federal and state grants		11	235
Interest and investment income		12,137	20,701
Interest expenses		(43,216)	(43,803)
Amortization of premium, refunding loss, and issuance cos	ts	8,647	5,697
Net gain/(loss) from sale of assets		38	(987)
Net gain/(loss) from transfer of assets			619
Other non-operating revenues		5,547	5,310
Other non-operating expenses		(52)	(26)
Net non-operating expenses		(16,888)	(12,254)
Change in net position before transfers	-	64,981	59,014
Transfers from the City and County of San Francisco		280	
Transfers to the City and County of San Francisco		(1,468)	(3,996)
Net transfers		(1,188)	(3,996)
Change in net position		63,793	55,018
Net position at beginning of year		1,229,143	1,174,125
Net position at end of year	\$	1,292,936	1,229,143

See accompanying notes to financial statements.

Statements of Cash Flows Years ended June 30, 2020 and 2019 (In thousands)

		2020	2019
Cash flows from operating activities:	-		
Cash received from customers, including cash deposits	\$	343,966	328,729
Cash received from tenants for rent		640	653
Cash paid to employees for services		(89,751)	(84,071)
Cash paid to suppliers for goods and services		(99,755)	(107, 233)
Cash paid for judgments and claims		(4,105)	(367)
Net cash provided by operating activities	-	150,995	137,711
Cash flows from non-capital financing activities: Cash received from grants		1,394	212
Cash received from miscellaneous revenues		1,511	897
Cash paid for rebates and program incentives		(52)	(26)
Transfers from the City and County of San Francisco		280	(20)
Transfers to the City and County of San Francisco		(1,468)	(4,510)
Net cash provided by (used in) non-capital financing activities	-	1.665	(3,427)
		1,005	(5,721)
Cash flows from capital and related financing activities: Proceeds from sale of capital assets		38	-
Proceeds from bond issuance, net of premium		100 mm	663,103
Proceeds from commercial paper borrowings		4,390	53,639
Proceeds from State revolving fund loans		36,152	45,078
Principal paid on long-term debt		(22,796)	(21,686)
Principal paid on commercial paper		(87,949)	(25,000)
Principal paid on State revolving fund loans		(1,239)	(1,425)
Interest paid on long-term debt		(67,775)	(60,309)
Interest paid on commercial paper		(4,288)	(3,646)
Interest paid on State revolving fund loans		(787)	(232)
Issuance cost paid on long-term debt		(40)	(2,801)
Acquisition and construction of capital assets		(337,299)	(278,006)
Federal interest income subsidy for Build America Bonds		4,032	4,018
Net cash provided by (used in) capital and related financing activities		(477,561)	372,733
Cash flows from investing activities:	-	15.097	10.654
Interest income received		15,087	12,654
Proceeds from sale of investments outside City Treasury		101,291	166,729
Purchase of investments outside City Treasury	-	(92,971)	(173,033)
Net cash provided by investing activities	-	23,407	6,350
Increase (decrease) in cash and cash equivalents Cash and cash equivalents:		(301,494)	513,367
Beginning of year		727,184	213,817
End of year	\$	425,690	727,184
Reconciliation of cash and cash equivalents to the statements of net position:			
Cash and investments with City Treasury:			
Unrestricted	\$	351,915	209,109
Restricted		55,132	483,885
Less: Unrealized gain on investments with City Treasury		(3,217)	(2,692)
Cash and investments outside City Treasury:			
Unrestricted		356	274
Restricted		21,504	44,928
Less: Restricted (with maturity more than 90 days - see table in Note 3)			(8,320)
Cash and cash equivalents at the end of year on statements of cash flows	\$	425,690	727,184

Statements of Cash Flows Years ended June 30, 2020 and 2019 (In thousands)

		2020	2019
Reconciliation of operating income to net cash provided by		11.7	
operating activities:			
Operating income	\$	81,869	71,268
Adjustment to reconcile operating income to net cash	<u>-</u>	· · · ·	
provided by operating activities:			
Depreciation and amortization		62,967	60,033
Provision for uncollectible accounts		908	149
Write-off of capital assets		4,728	8,386
Receivables:			
Charges for services		(870)	(2,674)
Prepaid charges, advances, and other		(79)	508
Due from other City departments		(129)	(184)
Inventory		(192)	(202)
Accounts payable		1,912	52
Accrued payroll		858	258
Other post-employment benefits obligations		(1,562)	(2,484)
Pension obligations		(1,603)	(3,958)
Accrued vacation and sick leave		1,637	862
Accrued workers' compensation		137	130
Due to other City departments		1	
Pollution remediation obligation		300	2,797
Damage claims liability		(477)	2,302
Unearned revenues, refunds, and other liabilities		590	468
Total adjustments		69,126	66,443
Net cash provided by operating activities	\$	150,995	137,711
Noncash transactions:			
Accrued capital asset costs	\$	85,355	42,931
Interfund payable		849	955
Unrealized gain on investments		(3,217)	(2,692)

See accompanying notes to financial statements.

Notes to Financial Statements
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(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 (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 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 Enterprises are included in the Comprehensive Annual 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, 2020 and 2019, 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).

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 are valued at acquisition value at the time of donation. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the

Notes to Financial Statements
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related 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

Under GASB Statement No. 51, Accounting and Financial Reporting for 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, and permits. The accounting pronouncement also provides guidance on the capitalization of internally generated intangible assets, such as the development and installation of computer software by or on behalf of the reporting entity.

According to the standard, the Enterprise is required to capitalize intangible assets with a useful life extending beyond one reporting period. The Enterprise has established a capitalization threshold of \$100. GASB Statement No. 51 also requires amortization of intangible assets over the benefit period, 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) Capitalization of Interest

A portion of the interest cost incurred on capital projects is capitalized on assets that require a period of time for construction or to otherwise prepare them for their intended use. Such amounts are amortized over the useful lives of the assets (see Note 4).

(i) 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.

(k) 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 11(b)).

Notes to Financial Statements
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(Dollars in thousands, unless otherwise stated)

(I) 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 11(a)).

(m) 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. No arbitrage liability is due as of June 30, 2020 or 2019.

(n) 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.

(o) Income Taxes

As a department of a government agency, the Enterprise is exempt from both federal income taxes and California State franchise taxes.

(p) 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 bimonthly 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, 2020 and 2019 were \$13,429 and \$13,991, respectively.

(q) 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.

(r) 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:

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- 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
- 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 12(d)).

(s) 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.

(t) New Accounting Standard Adopted in Fiscal Year 2020

In May 2020, the GASB issued Statement No. 95, Postponement of the Effective Dates of Certain Authoritative Guidance. GASB Statement No. 95 extends the effective dates of certain accounting and financial reporting provisions in Statements and Implementation Guides that were first effective for reporting periods beginning after June 15, 2018. The Enterprise adopted the provisions of this Statement, which did not have a significant impact on its financial statements.

(u) GASB Statements Implemented in Fiscal Year 2019

- 1) In November 2016, the GASB issued Statement No. 83, Certain Asset Retirement Obligations. GASB Statement No. 83 establishes accounting and financial reporting standards for certain asset retirement obligations (AROs). The new standard is effective for periods beginning after June 15, 2018. The Enterprise adopted the provisions of this Statement, which did not have a significant impact on its financial statements.
- 2) In March 2018, the GASB issued Statement No. 88, Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements. GASB Statement No. 88 establishes additional financial statement note disclosure requirements related to debt obligations of governments, including direct borrowings and direct placemets. The new standard is effective for

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periods beginning after June 15, 2018. The Enterprise adopted the provisions of this Statement. Refer to Notes 6 and 7 for details.

(v) Future Implementation of New Accounting Standards

- In January 2017, the GASB issued Statement No. 84, Fiduciary Activities. GASB Statement No. 84 establishes criteria for state and local governments to identify fiduciary activities and how those activities should be reported. The new standard is effective for periods beginning after December 15, 2019. The Enterprise will implement the provisions of Statement No. 84 in fiscal year 2021.
- 2) In August 2018, the GASB issued Statement No. 90, Accounting and Financial Reporting for Majority Equity Interests. GASB Statement No. 90 provides clarification when a government should report a majority equity interest in a legally separate organization as either a component unit or an investment. The new standard is effective for periods beginning after December 15, 2019. The Enterprise will implement the provisions of Statement No. 90 in fiscal year 2021.
- 3) 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 Enterprise will implement the provisions of Statement No. 87 in fiscal year 2022.
- 4) 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 a construction period. The new standard is effective for periods beginning after December 15, 2020. The Enterprise will implement the provisions of Statement No. 89 in fiscal year 2022.
- 5) 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 will implement the provisions of Statement No. 91 in fiscal year 2023.
- 6) 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 will implement provisions of Statement No. 92 in fiscal year 2022.
- 7) 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 will implement the provisions of Statement No. 93 in fiscal year 2022.
- 8) 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 new standard is effective for periods beginning after June 15, 2022. The Enterprise will implement the provisions of Statement No. 94 in fiscal year 2023.

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- 9) 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 will implement the provisions of Statement No. 96 in fiscal year 2023.
- 10) In June 2020, The GASB issued Statement No. 97 Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans an amendment of GASB Statement No. 14 and No. 84, and a supersession of GASB Statement No. 32. GASB Statement No. 97 clarifies rules related to reporting of fiduciary activities under Statements No. 14 and No. 84 and enhances the accounting and financial reporting of IRS Code section 457 plans that meet the definition of a pension plan. The new standard is effective for periods beginning after June 15, 2021. The Enterprise will implement the provisions of Statement No. 97 in fiscal year 2022.

(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 for bond reserves is held by an independent trustee outside the City investment pool. The balances as of June 30, 2020 and 2019 were \$21,504 and \$44,928, 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 the Federal Securities Act of 1933 and having a rating by S&P of "AAAm-G," "AAAm," or "AAAm" 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.

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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, 2020 and 2019.

Cash and Investments outside City Treasury

						Fair Valu	e Measureme	nts Using
		June 30), 2020			Quoted prices in active markets for	Significant other	0. 0. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
Investments	Credit Ratings (S&P/Moody's)	Maturities	F	air Value	Investments exempt from fair value	identical assets (Level 1)	observable inputs (Level 2)	Unobservable Inputs (Level 3)
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days		21,372	21,372			_
Money Market Funds	A-1+/P-1	< 90 days		124	124	-	-	· -
Cash and Cash Equivalents	N/A			8	8		-	-
Total Restricted Cash and In	vestments outside (ity Treasury	\$	21,504	21,504	1-1	_	
Cash and Cash Equivalents	N/A			356	356			
Total Cash and Investments	outside City Treasury		\$	356	356		==	p-

Cash and Investments outside City Treasury

						Fair Valu	e Measureme	nts Using
		June 30,	201	.9	Transaction and	Quoted prices in active markets for	Significant other	
Investments	Credit Ratings (S&P/Moody's)	Maturities		Fair Value	Investments exempt from fair value	identical assets (Level 1)	observable inputs (Level 2)	Unobservable Inputs (Level 3)
Commercial Paper	A-1/P-1	October 31, 2019	\$	8,320	8,320			
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days		36,578	36,578	_	_	_
Money Market Funds	A-1+/P-1	< 90 days		23	23	-	(-1)	-
Cash and Cash Equivalents	N/A			7	7		4	
Total Restricted Cash and In	vestments outside	City Treasury	\$	44,928	44,928			
Cash and Cash Equivalents	N/A			274	274	=		===
Total Cash and Investments	outside City Treasu	ry	\$	274	274			
							12	

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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, 2020 and 2019 included a \$0 and \$21 unrealized gain due to changes in fair values on Commercial Paper.

The Enterprise's cash, cash equivalents, and investments are shown on the accompanying statements of net position as follows:

	2020	2019
Current assets:		
Cash and investments with City Treasury	\$ 351,915	209,109
Cash and investments outside City Treasury	356	274
Restricted cash and investments outside City Treasury	11,043	44,928
Non-current assets:		
Restricted cash and investments with City Treasury	55,132	483,885
Restricted cash and investments outside City Treasury	10,461	<u> </u>
Total cash, cash equivalents, and investments	\$ 428,907	738,196

The following table shows the percentage distribution of the City's pooled investments by maturity:

Figure Vision		Investment maturi	ties (in months)	
Fiscal years ended June 30	Under 1	1 to less than 6	6 to less than 12	12 to 60
2020	30.1%	32.4%	15.6%	21.9%
2019	17.4%	22.2%	16.3%	44.1%

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(4) Capital Assets

Capital assets with a useful life of 50 years or greater include buildings and structures, sewers, wastewater treatment plants, pump stations, and other pipelines.

Capital assets as of June 30, 2020 and 2019 consisted of the following:

	2019	Increases	Decreases	2020
Capital assets not being depreciated and amortized:				
Land and rights-of-way	\$ 36,018	8,554	_	44,572
Intangible assets	3,046	_	_	3,046
Construction work in progress	765,624	405,798	(261,084)	910,338
Total capital assets not being depreciated and amortized	804,688	414,352	(261,084)	957,956
Capital assets being depreciated and amortized:				
Facilities and improvements	3,171,227	247,802	_	3,419,029
Intangible assets	4,615	_	_	4,615
Machinery and equipment	99,961	2,588	(954)	101,595
Total capital assets being depreciated and amortized:	3,275,803	250,390 *	(954)	3,525,239
Less accumulated depreciation and amortization for:				
Facilities and improvements	(1,286,210)	(58,620)	_	(1,344,830)
Intangible assets	(4,478)	(137)	_	(4,615)
Machinery and equipment	(67,999)	(4,417)	954	(71,462)
Total accumulated depreciation and amortization	(1,358,687)	(63,174)	954	(1,420,907)
Total capital assets being depreciated and amortized, net	1,917,116	187,216	_	2,104,332
Total capital assets, net	\$ 2,721,804	601,568	(261,084)	3,062,288

^{*} Decrease in construction work in progress is greater than increase in capital assets being depreciated is explained by \$4,728 in capital project writeoffs, mainly related to the Collection System Condition Assessment Project, Westside Pump Station Force Main Project, and the Oceanside Plant
Improvements Project. The remaining difference of \$5,966 is related to \$8,554 of construction work in progress transferred to land offset by \$2,588
direct additions to intangible assets and machinery and equipment.

	2018	Increases	Decreases	2019
Capital assets not being depreciated and amortized:				
Land and rights-of-way	\$ 35,737	291	(10)	36,018
Intangible assets	3,046	_	_	3,046
Construction work in progress	652,521	296,972	(183,869) *	765,624
Total capital assets not being depreciated and amortized	691,304	297,263	(183,879)	804,688
Capital assets being depreciated and amortized:				
Facilities and improvements	2,996,648	176,608	(2,029)	3,171,227
Intangible assets	4,615	_	_	4,615
Machinery and equipment	98,223	1,793	(55)	99,961
Total capital assets being depreciated and amortized:	3,099,486	178,401 *	(2,084)	3,275,803
Less accumulated depreciation and amortization for:	4 PM STV	7 6 6 6	7	N. J. L. Santa
Facilities and improvements	(1,231,798)	(55,422)	1,010	(1,286,210)
Intangible assets	(4,341)	(137)	-	(4,478)
Machinery and equipment	(63,525)	(4,474)	<u>-</u>	(67,999)
Total accumulated depreciation and amortization	(1,299,664)	(60,033)	1,010	(1,358,687)
Total capital assets being depreciated and amortized, net	1,799,822	118,368	(1,074)	1,917,116
Total capital assets, net	\$ 2,491,126	415,631	(184,953)	2,721,804

^{*} Decrease in construction work in progress is greater than increase in capital assets being depreciated is explained by \$8,386 in capital project write-offs, mainly related to the Biofuel Alternative Energy Program, Advanced Rainfall Prediction Project, and the Flood Resilience Early Projects

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GASB Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 Financial Accounting Standards Board (FASB) and American Institute of Certified Public Accountants (AICPA) Pronouncements, requires that interest expense incurred during construction of assets be capitalized. Interest included in the construction work in progress and total interest expense incurred during the years ended June 30, 2020 and 2019 are as follows:

		2020	2019
Interest expensed	\$	43,216	43,803
Interest included in construction work in progress	_	28,563	27,354
Total interest incurred	\$	71,779	71,157

(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 State revolving fund loans;
- The payment of bonds, parity State revolving fund loans, policy costs, and amounts due as reimbursement under any letter of credit agreement; and
- 4. Any other lawful purpose of the Enterprise.

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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, 2020 and 2019:

		2020	2019
Cash and investments with City Treasury:	_		
Wastewater revenue bond construction fund	\$	55,132	483,885
Cash and investments outside City Treasury:			
2009 Series C Certificates of Participation - 525 Golden Gate		480	475
2009 Series D Certificates of Participation - 525 Golden Gate		1,890	1,873
2010 Series A Wastewater revenue bond fund		3,621	3,609
2010 Series B Wastewater revenue bond fund		6,493	6,480
2013 Series B Wastewater revenue bond fund			2
2016 Series A Wastewater revenue bond fund		(=)	2
2018 Series A Wastewater revenue bond fund		4,002	14,617
2018 Series B Wastewater revenue bond fund		3,462	12,648
2018 Series C Wastewater revenue bond fund		1,424	5,192
Commercial Paper - Tax Exempt		132	30
Total cash and investments outside City Treasury		21,504	44,928
Interest and other receivables:			
Wastewater revenue bond construction fund including capacity fee receivables		2,331	5,173
Due from other government for State Revolving Fund		3,265	_
		5,596	5,173
Total restricted assets	\$	82,232	533,986
	_		

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 has 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 \$207,939 and \$291,498 in commercial paper outstanding as of June 30, 2020 and 2019, respectively.

In accordance with GASB Statement No. 88, Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements, the Enterprise had \$542,061 and \$458,502 in unused authorization as of June 30, 2020 and 2019, 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, 2020, there were no such events described herein.

(7) Changes in Long-Term Liabilities

Long-term liability activities for the years ended June 30, 2020 and 2019 are as follows:

	rate	Year)	2019	Additions	Reductions	2020	within one year
Revenue Bonds:					-		
2010 Series A 4.0	0% - 5.00%	2021	\$ 25,190	1 A	(7,980)	17,210	8,390
2010 Series B (Build America) 4.	65 - 5.82	2040	192,515	=		192,515	_
2013 Series A 1.	00 - 5.00	2025	58,550	~	(14,105)	44,445	14,850
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	104	104	67,820	_
2018 Series A 4.	00 - 5.00	2043	229,050	-	-	229,050	-
2018 Series B	5.00	2043	185,950	=		185,950	-
2018 Series C	2.13	2048	179,145	=		179,145	-
For issuance premiums			142,224	_	(8,791)	133,433	-
Total revenue bonds payable			1,652,609	-	(30,876)	1,621,733	23,240
2009 Series C Certificates of Participation (COPs) 2.0	00 - 5.00	2022	3,069	_	(711)	2,358	747
2009 Series C COPs issuance premiums			76		(33)	43	-
2009 Series D COPs (Build America) 6.3	36 - 6.49	2041	24,458	_	_	24,458	_
State Revolving Fund Loans (CWSRF loans) 1.0	60 - 1.80	2050	88,032	1,756	(1,239)	88,549	2,458
Other post-employment benefits obligations			53,567	9,002	(4,386)	58,183	_
Net pension liability			85,037	18,863	(17,665)	86,235	_
Accrued vacation and sick leave			7,277	4,324	(2,687)	8,914	4,801
Accrued workers' compensation			5,914	1,932	(1,795)	6,051	1,112
Damage claims liability			16,368	1,952	(2,429)	15,891	8,994
Pollution remediation obligation			7,500	300		7,800	
Total			\$ 1,943,907	38,129	(61,821)	1,920,215	41,352

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		Maturity Calenda Year)		2018	Additions	Reductions	2019	Due within one year
Revenue Bonds:			-					
2010 Series A	4.00% - 5.00%	2021	\$	32,820	-	(7,630)	25,190	7,980
2010 Series B (Build America)	4.65 - 5.82	2040		192,515	_	- 4	192,515	
2013 Series A	1.00 - 5.00	2025		71,930	_	(13,380)	58,550	14,105
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	_
2018 Series B	5.00	2043		_	185,950	_	185,950	_
2018 Series C	2.13	2048		_	179,145	_	179,145	_
For issuance premiums				81,896	68,958	(8,630)	142,224	_
Total revenue bonds payable			1	L,019,146	663,103	(29,640)	1,652,609	22,085
2009 Series C Certificates of Participation (COPs)	2.00 - 5.00	2022		3,745	_	(676)	3,069	711
2009 Series C COPs issuance premiums				118	_	(42)	76	_
2009 Series D COPs (Build America)	6.36 - 6.49	2041		24,458	_	_	24,458	_
State Revolving Fund Loans (CWSRF loans)	1.60 - 1.80	2050		22,607	66,850	(1,425)	88,032	1,239
Other post-employment benefits obligations				59,517	2,833	(8,783)	53,567	_
Net pension liability				100,973	12,620	(28,556)	85,037	_
Accrued vacation and sick leave				6,415	3,953	(3,091)	7,277	4,151
Accrued workers' compensation				5,784	1,944	(1,814)	5,914	1,031
Damage claims liability				14,066	4,699	(2,397)	16,368	7,013
Pollution remediation obligation			_	4,703	3,000	(203)	7,500	
Total			\$ 1	L,261,532	759,002	(76,627)	1,943,907	36,230

The payments of principal and interest amounts on various bonds 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, 2020 and 2019, the 2010 Series A bonds' principal amount outstanding was \$17,210 and \$25,190, respectively.

(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, 2020 and 2019, the 2010 Series B bonds' principal amount outstanding was \$192,515.

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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 have a true interest cost of 1.2%. 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. As of June 30, 2020 and 2019, the principal amount outstanding of the 2013 Series A bonds was \$44,445 and \$58,550, 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 is 3.6%. As of June 30, 2020 and 2019, the principal amount outstanding of the 2013 Series B bonds was \$331,585.

(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, 2020 and 2019, the principal amount outstanding of the 2016 Series A bonds was \$240,580.

(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, 2020 and 2019, 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 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,

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2043. The bonds have a true interest cost of 3.4%. As of June 30, 2020 and 2019, the principal amount outstanding of the 2018 Series A bonds was \$229,050.

(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, 2020 and 2019, the principal amount outstanding of the 2018 Series B bonds was \$185,950.

(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. Bonds mature through October 1, 2048. 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, 2020 and 2019, the principal amount outstanding of the 2018 Series C bonds was \$179,145.

(j) Future Annual Debt Services of Revenue and Refunding Bonds

The following table presents the future annual debt service relating to the revenue and refunding bonds outstanding as of June 30, 2020. The interest before subsidy amounts include the interest for 2010 Series A and B, 2013 Series A and B, 2016 Series A and B, and 2018 Series A, B, and C bonds. The federal interest subsidy amounts represent 35% of the interest, excluding sequestration, for the 2010 Series B revenue bonds.

	_	Principal	Interest before subsidy	Federal interest subsidy*	Interest net of subsidy
Fiscal years ending June 30:					
2021	\$	23,240	64,966	(3,527)	61,439
2022		22,880	63,863	(3,527)	60,336
2023		34,345	62,496	(3,471)	59,025
2024		36,905	62,441	(3,356)	59,085
2025		36,935	62,291	(3,234)	59,057
2026-2030		212,780	281,459	(14,069)	267,390
2031-2035		269,170	220,538	(9,771)	210,767
2036-2040		337,050	146,963	(4,393)	142,570
2041-2045		336,905	66,939	(133)	66,806
2046-2049	_	178,090	12,958		12,958
		1,488,300	1,044,914	(45,481)	999,433
Less: Current portion		(23,240)			
Add: Unamortized bond premiums		133,433			
Long-term portion as of June 30, 2020	\$	1,598,493			

^{*}The SFPUC received IRS notice dated August 27, 2020 that the federal interest subsidy on the 2010 Series B bonds is reduced by 5.7%, or a total reduction of \$2,749, due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same.

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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).

(k) 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 mature 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 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 C outstanding as of June 30, 2020 are as follows:

Certificates of Participation 2009

Series C (Tax Exempt)	Principal	Interest	Total
Fiscal years ending June 30:	_		
2021	\$ 747	99	846
2022	785	61	846
2023	826	21	847
	2,358	181	2,539
Less: Current portion	(747)		
Add: Unamortized bond premiums	43		
Long-term portion as of June 30, 2020	\$ 1,654		

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The future annual debt services relating to the certificates of participation 2009 Series D outstanding as of June 30, 2020 are as follows:

Certificates of Participation 2009 Series D (Taxable)		Principal	Interest before subsidy	Federal interest subsidy*	Interest net of subsidy
Fiscal years ending June 30:					
2021	\$	_	1,578	(521)	1,057
2022		_	1,578	(521)	1,057
2023		_	1,578	(521)	1,057
2024		864	1,551	(512)	1,039
2025		900	1,494	(493)	1,001
2026-2030		5,099	6,545	(2,160)	4,385
2031-2035		6,276	4,723	(1,559)	3,164
2036-2040		7,740	2,458	(811)	1,647
2041-2042		3,579	235	(78)	157
Total	_		21,740	(7,176)	14,564
Long-term portion as of June 30, 2020	\$	24,458			

^{*}The SFPUC received IRS notice dated August 27, 2020 that the federal interest subsidy on the 2009 Series D bonds is reduced by 5.7%, or a total reduction of \$434, due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same

(I) 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; substantial completion is expected by July 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 \$4,893 and a receivable for reimbursement of \$1,224. As of June 30, 2020 and 2019, the principal amount outstanding of the loan was \$6,117 and \$4,893, respectively.

(m) 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 Clean Water State Revolving Fund ("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 \$36,152 and a receivable for

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reimbursement of \$2,041. As of June 30, 2020 and 2019, the principal amount outstanding of the loan was \$38,193 and \$37,661, respectively.

(n) 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 Clean Water State Revolving Fund ("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, 2020 and 2019 the principal amount outstanding of the loan was \$16,644 and \$17,098, respectively.

(o) 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 Clean Water State Revolving Fund ("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 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 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, 2020 and 2019, the principal amount outstanding of the loan was \$27,595 and \$28,380, respectively.

(p) 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 Clean Water State Revolving Fund ("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, with loan repayment beginning one year after substantial completion of each project's construction; substantial completion is expected in August 2021. The CWSRF loan is secured on a parity lien basis with the Enterprise's outstanding revenue bonds. As of June 30, 2020, the principal amount outstanding of the loan was \$0.

(q) 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 Clean Water State Revolving Fund ("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

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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. As of June 30, 2020, the principal amount outstanding of the loan was \$0.

(r) Future Annual Debt Services of State Revolving Fund Loans (CWSRF Loans)

The future annual debt services relating to the State Revolving Fund Loan to fund the Lake Merced Green Infrastructure Project, the North Point Facility Outfall Rehabilitation Project, the SEP Primary/Secondary Clarifier Upgrade Project, and the SEP 521/522 and Disinfection Upgrade Project outstanding as of June 30, 2020 are as follows:

California Clean Water State Revolving Fund Loan		Principal	Interest	Total	
Fiscal years ending June 30:					
2021	\$	2,458	1,123	3,581	
2022		2,394	1,537	3,931	
2023		2,436	1,495	3,931	
2024		2,480	1,451	3,931	
2025		2,524	1,407	3,931	
2026-2030		13,313	6,341	19,654	
2031-2035		14,546	5,109	19,655	
2036-2040		15,893	3,762	19,655	
2041-2045		17,365	2,290	19,655	
2046-2050		14,886	718	15,604	
2051		254	4	258	
		88,549	25,237	113,786	
Less: Current portion		(2,458)			
Long-term portion as of June 30, 2020	\$	86,091			

(s) WIFIA Loan Agreement-Biosolids Digester Facility Project

In July 2018 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 \$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.

The SFPUC has not submitted any requests for loan disbursements to date and there is no outstanding loan principal as of June 30, 2020.

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(t) 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, 2020.

(u) 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, 2020, there were no such events described herein.

(8) Revenue Pledge

The Enterprise has pledged future revenues to repay various revenue bonds and State Revolving Fund loans. Proceeds from the revenue bonds and State Revolving Fund provided financing for various capital construction projects, and to refund previously issued bonds. The bonds and State Revolving Fund loans are payable through fiscal years 2049 and 2050, respectively and are solely from revenues of the Enterprise.

The original amount of revenue bonds issued and State Revolving Fund loans, total principal and interest remaining, principal and interest paid during fiscal years 2020 and 2019, applicable net revenues, and funds available for debt service are as follows:

	2020	2019
Bonds issued with revenue pledge	\$ 1,667,095	1,667,095
Clean Water State Revolving Fund (CWSRF) loans with revenue pledge	91,213	89,456
Principal and interest remaining due at the end of the year	2,647,000	2,735,352
Principal and interest paid during the year	62,797	60,347
Net revenues for the year ended June 30	166,082	150,365
Funds available for debt service	381,804	253,646

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(9) Employee Benefits

(a) Pension Plan

The Enterprise participates in a cost-sharing multiple-employer defined benefit pension Plan (the Plan). The 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 Plans, and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by Cheiron, the consulting actuary for the 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 reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:

San Francisco Employees' Retirement System - Cost Sharing

Fi	scal year 2020
Valuation Date (VD)	June 30, 2018 updated to June 30, 2019
Measurement Date (MD)	June 30, 2019
Measurement Period (MP)	July 1, 2018 to June 30, 2019
Fi	iscal year 2019
Valuation Date (VD)	June 30, 2017 updated to June 30, 2018
Measurement Date (MD)	June 30, 2018
Measurement Period (MP)	July 1, 2017 to June 30, 2018

The City is an employer of the Plan with a proportionate share of 94.13% as of June 30, 2019 (measurement date), and 94.10% as of June 30, 2018 (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 2019 and 2018. The Enterprise's net pension liability, 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 2.05% as of June 30, 2019 and 2.11% as of June 30, 2018 (measurement dates).

Plan Description – The 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 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 Plan. 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 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 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 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 Plan provides for a Supplemental COLA in years when there are sufficient "excess" investment earnings in the 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 Plan is also fully funded on a market value of assets basis. Certain provision 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 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 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.

Funding & Contribution Policy – Contributions are made to the basic plan 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 13.0% as a percentage of gross covered salary in

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fiscal years 2020 and 2019. 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, 2018 actuarial report, the required employer contribution rate for fiscal year 2020 was 20.69% to 25.19%. Based on the July 1, 2017 actuarial report, the required employer contribution rate for fiscal year 2019 was 18.81% to 23.31%.

Employer contributions and employee contributions made by the employer to the 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, 2019 and 2018 (measurement periods) were \$607,408 and \$582,568, respectively. The Enterprise's allocation of employer contributions for fiscal year 2019 and 2018 were \$12,816 and \$12,523, respectively.

Pension Liabilities, Pension Expenses, Deferred Outflows, and Inflows of Resources Related to Pensions

Fiscal Year 2020

The City reported net pension liabilities for its proportionate share of the pension liability of the Plan of \$4,213,808 as of June 30, 2020. The City's net pension liability for the Plan is measured as the proportionate share of the net pension liability. The net pension liability of the Plan is measured as of June 30, 2019 (measurement date), and the total pension liability for the Plan used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2018 rolled forward to June 30, 2019 using standard update procedures. The City's proportion of the net pension liability was based on a projection of the City's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. The Enterprise's allocation of the City's proportionate share of the net pension liability for the Plan as of June 30, 2020 was \$86,235.

For the year ended June 30, 2020, the City's recognized pension expense was \$883,395 including amortization of deferred outflow/inflow related pension items. The Enterprise's allocation of pension expense including amortization of deferred outflow/inflow related pension items was \$12,748. Pension expense increased from the prior year, largely due to the amortization of deferrals.

As of June 30, 2020, the Enterprise's reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

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Fiscal Year 2020 Schedule of Deferred Outflows and Inflows of Resources

		Deferred Outflows of Resources	Deferred Inflows of Resources
Pension contributions subsequent to measurement date	\$	14,352	-
Differences between expected and actual experience		639	949
Changes in assumptions Net difference between projected and actual earnings on		12,264	=
pension plan investments		-	15,891
Change in employer's proportion		3,167	52
Tota	1\$	30,422	16,892

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:

	Deferred Outflows/(Inflows)
Fiscal years	of Resources
2021	\$ 4,181
2022	(5,055)
2023	(1,240)
2024	 1,292
Total	\$ (822)

Fiscal Year 2019

The City reported net pension liabilities for its proportionate share of the pension liability of the Plan of \$4,030,207 as of June 30, 2019. The City's net pension liability for the Plan is measured as the proportionate share of the net pension liability. The net pension liability of the Plan is measured as of June 30, 2018 (measurement date), and the total pension liability for the Plan used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2017 rolled forward to June 30, 2018 using standard update procedures. The City's proportion of the net pension liability was based on a projection of the City's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. The Enterprise's allocation of the City's proportionate share of the net pension liability for the Plan as of June 30, 2019 was \$85,037.

For the year ended June 30, 2019, the City's recognized pension expense was \$488,255 including amortization of deferred outflow/inflow related pension items. The Enterprise's allocation of pension expense including amortization of deferred outflow/inflow related pension items was \$8,858. Pension expense decreased from the prior year, largely due to the impact of actual investment earnings.

Notes to Financial Statements
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As of June 30, 2019, the Enterprise's reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

Fiscal Year 2019 Schedule of Deferred Outflows and Inflows of Resources

	ı	Deferred Outflows of Resources	Deferred Inflows of Resources
Pension contributions subsequent to measurement date	\$	12,816	_
Differences between expected and actual experience		690	2,407
Changes in assumptions Net difference between projected and actual earnings on		13,259	
pension plan investments		-	13,669
Change in employer's proportion		121	81
Total	\$	26,886	16,157

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:

		Deferred Outflows/(Inflows)
Fiscal years		of Resources
2020	\$	5,427
2021		2,387
2022		(6,994)
2023		(2,907)
Total	\$	(2,087)
	2021 2022 2023	2020 \$ 2021 2022 2023

Actuarial Assumptions

Fiscal Year 2020

A summary of the actuarial assumptions and methods used to calculate the Total Pension Liability as of June 30, 2019 (measurement period) is provided below, including any assumptions that differ from those used in the July 1, 2018 actuarial valuation. Refer to the July 1, 2018 actuarial valuation report for a complete description of all other assumptions, which can be found on the Retirement System's website http://mysfers.org.

Notes to Financial Statements June 30, 2020 and 2019 (Dollars in thousands, unless otherwise stated)

Key Actuarial Assumptions

Valuation Date June 30, 2018 updated to June 30, 2019

Measurement Date June 30, 2019 **Actuarial Cost Method Entry-Age Normal Cost**

7.40% net of pension plan investment, including inflation Expected Rate of Return

Municipal Bond Yield 3.87% as of June 30, 2018 3.50% as of June 30, 2019

Bond Buyer 20-Bond GO Index, June 28, 2018 and June 27, 2019

Inflation 2.75%

Salary Increases 3.50% plus merit component based on employee classification and years of service

Discount Rate 7.50% as of June 30, 2018 7.40% as of June 30, 2019

Administrative Expenses 0.60% of payroll as of June 30, 2018

0.60% of payroll as of June 30, 2019

Old Police & Fire. Old Police & Fire. Old Miscellaneous and Old Police & Fire, Charters A8.595 Charters A8,559 Basic COLA All New Plans pre 7/1/75 and A8.596 and A8.585 June 30, 2018 2.00% 3.10% 4.20% 2.50% June 30, 2019 2.00% 2.50% 3.10% 4.20%

Mortality rates for active members and healthy annuitants were based upon the adjusted Employee and Healthy Annuitant CalPERS mortality tables projected generationally from the 2009 base year using a modified version of the MP-2015 projection scale.

Fiscal Year 2019

A summary of the actuarial assumptions and methods used to calculate the Total Pension Liability as of June 30, 2018 (measurement period) is provided below, including any assumptions that differ from those used in the July 1, 2017 actuarial valuation. Refer to the July 1, 2017 actuarial valuation report for a complete description of all other assumptions, which can be found on the Retirement System's website http://mysfers.org.

June 30, 2017 updated to June 30, 2018 Valuation Date

Measurement Date June 30, 2018 Actuarial Cost Method **Entry-Age Normal Cost**

Expected Rate of Return 7.50%

Municipal Bond Yield 3.58% as of June 30, 2017 3.87% as of June 30, 2018

Bond Buyer 20-Bond GO Index, June 29, 2017 and June 28, 2018

Inflation 3.00%

Salary Increases 3.50% plus merit component based on employee classification and years of service

Discount Rate 7.50% as of June 30, 2017 7.50% as of June 30, 2018

Administrative Expenses 0.60% of payroll as of June 30, 2017 0.60% of payroll as of June 30, 2018

Old Police & Fire, Old Police & Fire, Old Miscellaneous and Old Police & Fire, Charters A8.595 Charters A8.559 Basic COLA All New Plans pre 7/1/75 and A8.596 and A8.585 June 30 2017 2 00% 3 30% 4 40% 2 70% June 30, 2018 2.00% 2.50% 3.10% 4.20%

Mortality rates for active members and healthy annuitants were based upon adjusted Employee and Healthy Annuitant CalPERS mortality tables projected generationally from the 2009 base year using a modified version of the MP-2015 projection scale.

Notes to Financial Statements
June 30, 2020 and 2019
(Dollars in thousands, unless otherwise stated)

Discount Rate

Fiscal Year 2020

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, 2019 (measurement date) and 7.50% as of the June 30, 2018 (measurement date).

The discount rate used to measure the total pension liability as of June 30, 2019 was 7.40%. The projection of cash flows used to determine the discount rate assumed that 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, 2018 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 amortization schedules are established as a level percentage of payroll so payments increase 3.50% 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 COLA's 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, the following assumptions were developed for the probability and amount of Supplemental COLA for each future year. The City has assumed that a full Supplemental COLA will be paid to all Post 97 Retirees effective July 1, 2019. The table below shows the net assumed Supplemental COLA for members with a 2.00% basic COLA for sample years.

Notes to Financial Statements
June 30, 2020 and 2019
(Dollars in thousands, unless otherwise stated)

Assumed Supplemental COLA for Members with a 2.00% Basic COLA

DC101C TT/ 0/ 30	Before	11,	/6/	96
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Fiscal years	96 - Prop C	or After Prop C
2021	0.75 %	0.27 %
2023	0.75	0.34
2025	0.75	0.36
2027	0.75	0.37
2030+	0.75	0.38

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 3.50% to the extent they are not available. The single equivalent rate used to determine the total pension liability as of June 30, 2019 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 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	31.0 %	5.3 %
Private Equity	18.0	8.3
Real Assets	17.0	5.4
Hedge Funds/Absolute Returns	15.0	3.9
Private Credit	10.0	5.2
Treasuries	6.0	0.9
Liquid Credit	3.0	3.6
Total	100.0	

Fiscal Year 2019

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 7.50% as of the June 30, 2018 (measurement date) and June 30, 2017 (measurement date).

Notes to Financial Statements
June 30, 2020 and 2019
(Dollars in thousands, unless otherwise stated)

The discount rate used to measure the total pension liability as of June 30, 2018 was 7.50%. The projection of cash flows used to determine the discount rate assumed that 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, 2017 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. 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 3.50% 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 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 COLA's for current members when they are expected to be granted. For members who worked after November 6, 1996 and before Proposition C passed, 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 System for certain members, Cheiron developed an assumption as of June 30, 2018 for the probability and amount of Supplemental COLA for each future year. We have assumed that a full Supplemental COLA will be paid to all Post 97 Retirees effective July 1, 2018. 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
2019	0.75 %	0.00 %
2022	0.75	0.29
2025	0.75	0.35
2028	0.75	0.36
2031+	0.75	0.38

Notes to Financial Statements
June 30, 2020 and 2019
(Dollars in thousands, unless otherwise stated)

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 System's fiduciary net position was projected to be available to make projected future benefit payments for current members until fiscal year end 2097 when only a portion of the projected benefit payments can be made from the projected fiduciary net position. Projected benefit payments are discounted at the long-term expected return on assets of 7.50% to the extent the fiduciary net position is available to make the payments and at the municipal bond rate of 3.87% to the extent they are not available. The single equivalent rate used to determine the total pension liability as of June 30, 2018 was 7.50%.

The long-term expected rate of return on pension plan investments was 7.50%. 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

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global Equity	31.0 %	5.4 %
Private Equity	18.0	6.6
Real Assets	17.0	4.5
Hedge Funds/Absolute Returns	15.0	3.7
Private Credit	10.0	4.6
Treasuries	6.0	0.5
Liquid Credit	3.0	3.3
Total	100.0	

Sensitivity of Proportionate Share of the Net Pension Liability to Changes in the Discount Rate – The following presents the Enterprise's allocation of the employer's proportionate share of the net pension liability for the 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 would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate.

Fiscal Year 2020

	1% De	crease Share	Share of NPL	1% Increase Share
Employer	of N	PL @ 6.40%	@ 7.40%	of NPL @ 8.40%
Wastewater	\$	162,775	86,235	22,995

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Fiscal Year 2019

	1% De	crease Share	Share of NPL	1% Increase Share
Employer	of N	PL @ 6.50%	@ 7.50%	of NPL @ 8.50%
Wastewater	\$	159,265	85,037	23,656

(b) Other Post-Employment Benefits

The Enterprise participates in the City's single employer defined benefit 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.

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

	Fiscal year 2020
Valuation Date (VD)	June 30, 2018 updated to June 30, 2019
Measurement Date (MD)	June 30, 2019
Measurement Period (MP)	July 1, 2018 to June 30, 2019
	Fiscal year 2019
Valuation Date (VD)	June 30, 2018
Measurement Date (MD)	June 30, 2018
Measurement Period (MP)	July 1, 2017 to June 30, 2018

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, 2019. 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, 2019 and 2018 measurement dates was 1.49%.

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 service1	
		Age 60 with 10 years of credited service	
	Safety	Age 50 with 5 years of credited service	
Disabled Retirement ²	Any age with 10 year	ars of credited service	
Terminated Vested ³	5 years of credited service at separation		

Notes to Financial Statements
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- ¹ 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.
- 2 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.
- ³ Effective with Proposition B, passed June 3, 2008, participants hired on or after January 10, 2009 must retire within 180 days of separation in order to be eligible for retiree healthcare benefits.

Retiree healthcare benefits are administered by the San Francisco Health Service System and include the following:

Medical: PPO - City Health Plan (self-insured) and UHC Medicare Advantage (fully insured)

HMO - Kaiser (fully-insured) and Blue Shield (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.

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 1st 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 1st 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 GASB 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, 2020 and 2019, the City's funding was based on "pay-as-you-go" plus a contribution of \$39,518 and \$32,786 to the Retiree Healthcare Trust Fund, respectively. The "pay-as-you-go" portion paid by the City was \$196,445 for a total contribution of

Notes to Financial Statements
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\$235,963 for the fiscal year ending June 30, 2020, and \$185,839 for a total contribution of \$218,625 for the fiscal year ending June 30, 2019. The Enterprise's proportionate share of the City's contributions for fiscal year 2020 was \$3,506, and for fiscal year 2019 was \$3,252.

OPEB Liabilities, OPEB Expenses and Deferred Outflows/Inflows of Resources Related to OPEB

Fiscal Year 2020

As of June 30, 2020, the City reported net OPEB liabilities related to the Plan of \$3,915,814. The Enterprise's proportionate share of the City's net OPEB liability as of June 30, 2020 was \$58,183.

For the year ended June 30, 2020, the City's recognized OPEB expense was \$330,673. 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 \$1,943.

As of June 30, 2020, the Enterprise reported its proportionate share of the City's deferred outflows/inflows of resources related to OPEB from the following sources:

Wastewater		Ou	Deferred tflows of esources	Inf	eferred flows of sources
Contributions subsequent to measurement date		\$	3,506	\$	- 6
Differences between expected and actual experience			2,472		4,094
Changes in assumptions			1,179		
Net difference between projected and actual earnings					
on plan investments			(2)		91
Change in proportion			2,908		
	Total	\$	10,065	\$	4,185

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:

2021	\$ 376
2022	376
2023	399
2024	394
2025	409
Thereafter	420
Total	\$ 2,374

Notes to Financial Statements
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Fiscal Year 2019

As of June 30, 2019, the City reported net OPEB liabilities related to the Plan of \$3.6 billion. The Enterprise's proportionate share of the City's net OPEB liability as of June 30, 2019 was \$53,567.

For the year ended June 30, 2019, the City's recognized OPEB expense was \$320,332. Amortization of the City's deferred inflow is included as a component of OPEB expense. The Enterprise's proportionate share of the City's OPEB expense was \$768.

As of June 30, 2019, the Enterprise reported its proportionate share of the City's deferred outflows/inflows of resources related to OPEB from the following sources:

Wastewater		Out	eferred flows of sources	Int	eferred flows of sources
Contributions subsequent to measurement date		\$	3,252	\$	
Differences between expected and actual experience			=		4,918
Changes in assumptions			1,417		i-
Net difference between projected and actual earnings					
on plan investments			4.5		49
	Total	\$	4,669	\$	4,967

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:

Total	\$ (3,550)
Thereafter	(583)
2024	(583)
2023	(578)
2022	(602)
2021	(602)
2020	\$ (602)

Notes to Financial Statements
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(Dollars in thousands, unless otherwise stated)

Actuarial Assumptions

Fiscal Year 2020

A summary of the actuarial assumptions and methods used to calculate the Total OPEB Liability as of June 30, 2019 (measurement date) is provided below:

Key Actuarial Assumptions

Valuation Date June 30, 2018 updated to June 30, 2019

Measurement Date June 30, 2019

Actuarial Cost Method

The Entry Age Actuarial Cost Method is used to measure the Plan's Total OPEB Liability

Healthcare Cost Trend Rates

Pre-Medicare trend starts at 6.35% in 2021 and trends down to ultimate rate of 3.93% in 2076

Medicare trend starts at 7.00% in 2021 and trends down to ultimate rate of 3.93% in 2076

10-County average trend starts at 5.82% in 2021 and trends down to ultimate rate of 3.93% in 2076

Vision and expenses trend remains a flat 3.50% for all years

Expected Rate of Return on Plan Assets 7.40% Discount Rate 7.40%

Salary Increase Rate Wage Inflation Component: 3.50%

Additional Merit Component (dependent on years of service):

Police: 1.50% - 8.00% Fire: 1.50% - 15.00% Muni Drivers: 0.00% - 15.00% Craft: 0.00% - 3.50% Misc: 0.00% - 5.25%

Inflation Rate Wage Inflation: 3.50% compounded annually

Consumer Price Inflation: 2.75% compounded annually

Mortality Tables

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, 2014.

Non-Annuitant - CalPERS employee mortality tables without scale BB projection

Gender	Adjustment Factor	Base Year
Female	0.918	2009
Male	0.948	2009

Healthy Annuitants - CalPERS healthy annuitant mortality table without scale BB projection

Gender	Adjustment Factor	Base Year
Female	1.014	2009
Male	0.909	2009

Miscellaneous Disabled Annuitants - RP-2014 Disabled Retiree Tables without MP-2014 projection

Gender	Adjustment Factor	Base Year
Female	1.066	2006
Male	0.942	2006

Safety Disabled Annuitants - CalPERS industrial disability mortality table without scale BB projection

	Adjustment	
Gender	Factor	Base Year
Female	0.983	2009
Male	0.909	2009

The mortality rates in the base tables are projected generationally from the base year using the modified version of the MP-2015 projection scale. The scale was modified using the Society of Actuaries' model implementation tool with rates converging to the ultimate rate in 2017 (instead of 2029) and an ultimate rate of improvement of 0.85% (instead of 1.00%) up to age 85 decreasing to 0.70% (instead of 0.85%) at age 95.

Notes to Financial Statements
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Fiscal Year 2019

A summary of the actuarial assumptions and methods used to calculate the Total OPEB Liability as of June 30, 2018 (measurement date) is provided below:

Key Actuarial Assumptions

 Valuation Date
 June 30, 2018

 Measurement Date
 June 30, 2018

Actuarial Cost Method The Entry Age Actuarial Cost Method is used to measure the Plan's Total OPEB Liability

Healthcare Cost Trend Rates Pre-Medicare trend starts at 6.50% and trends down to ultimate rate of 3.93% in 2076

Medicare trend starts at 7.50% and trends down to ultimate rate of 3.93% in 2076

10-County average trend starts at 5.90% and trends down to ultimate rate of 3.93% in 2076

Vision and expenses trend remains a flat 3.50% for all years

Expected Rate of Return on Plan Assets 7.40%
Discount Rate 7.40%

Salary Increase Rate Wage Inflation Component: 3.50%

Additional Merit Component (dependent on years of service):

Police: 1.50% - 8.00% Fire: 1.50% - 15.00% Muni Drivers: 0.00% - 15.00% Craft: 0.00% - 3.50% Misc: 0.00% - 5.25%

Inflation Rate Wage Inflation: 3.50% compounded annually

Consumer Price Inflation: 2.75% compounded annually

Mortality Tables

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, 2014.

Non-Annuitant - CalPERS employee mortality tables without scale BB projection

Gender	Adjustment Factor	Base Year
Female	0.918	2009
Male	0.948	2009

Healthy Annuitants - CalPERS healthy annuitant mortality table without scale BB projection

Gender	Adjustment Factor	Base Year
Female	1.014	2009
Male	0.909	2009

Miscellaneous Disabled Annuitants - RP-2014 Disabled Retiree Tables without MP-2014 projection

Gender	Adjustment Factor	Base Year
Female	1.066	2006
Male	0.942	2006

Safety Disabled Annuitants - CalPERS industrial disability mortality table without scale BB projection

Gender	Adjustment Factor	Base Year		
Female	0.983	2009		
Male	0.909	2009		

The mortality rates in the base tables are projected generationally from the base year using the modified version of the MP-2015 projection scale. The scale was modified using the Society of Actuaries' model implementation tool with rates converging to the ultimate rate in 2017 (instead of 2029) and an ultimate rate of improvement of 0.85% (instead of 1.00%) up to age 85 decreasing to 0.70% (instead of 0.85%) at age 95.

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June 30, 2020 and 2019
(Dollars in thousands, unless otherwise stated)

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 2020				
Employer	-1.00%	Health	ncare Trend	1.00%
Wastewater	\$ 50,356	\$	58,183	\$ 67,900
Fiscal Year 2019				
Employer	-1.00%	Health	ncare Trend	1.00%
Wastewater	\$ 46,558	\$	53,567	\$ 62,259

Discount Rate

Fiscal Year 2020

The discount rate used to measure the Total OPEB Liability as of June 30, 2019 was 7.4%. 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 7.4% 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
Equities		
U.S. Equities	41.0%	8.1%
Developed Market Equity (non-U.S.)	20.0%	8.5%
Emerging Market Equity	16.0%	10.4%
Credit		
High Yield Bonds	3.0%	6.5%
Bank Loans	3.0%	6.1%
Emerging Market Bonds	3.0%	5.2%
Rate Securities		
Investment Grade Bonds	9.0%	3.9%
Treasury Inflation Protected Securities	5.0%	3.6%
Total	100.0%	

Notes to Financial Statements
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(Dollars in thousands, unless otherwise stated)

The asset allocation targets summarized above have a 20-year return estimate of 8.3%, which was weighted against a 10-year model estimating a 7.5% return, resulting in the ultimate long-term expected rate of return of 7.4%.

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:

	1% Dec	rease Share	Dis	count Rate @	1% Increas	se Share
Employer	of NO	L @ 6.40%		7.40%	of NOL @	8.40%
Wastewater	\$	67,184	\$	58,183	\$	50,829

Fiscal Year 2019

The discount rate used to measure the Total OPEB Liability as of June 30, 2018 was 7.4%. 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 7.4% 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 are summarized in the following table:

Target Allocation	Long-term Expected Real Rate of Return
	Same Street
41.0%	7.3%
20.0%	7.1%
16.0%	9.4%
3.0%	5.4%
3.0%	5.0%
3.0%	4.9%
9.0%	3.6%
5.0%	3.3%
100.0%	
	Allocation 41.0% 20.0% 16.0% 3.0% 3.0% 3.0% 9.0% 5.0%

The asset allocation targets summarized above have a 20-year return estimate of 7.5%, which was weighted against a 10-year model estimating a 6.3% return, resulting in the ultimate long-term expected rate of return of 7.4%.

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

Notes to Financial Statements
June 30, 2020 and 2019
(Dollars in thousands, unless otherwise stated)

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:

1% Decrease Share		Dis	scount Rate @	1% Increase Share		
of NO	DL @ 6.40%		7.40%	of NOL	@ 8.40%	
\$	61,585	\$	53,567	\$	47,006	

(10) 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 \$27,897 or 30.2%, which included COVID-19 Project expenses, and \$25,658 or 30.0% were allocated to the Enterprise for the years ended June 30, 2020 and 2019, 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 \$10,760 and \$10,907 for the years ended June 30, 2020 and 2019, 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 \$1,474 and \$1,266 for the years ended June 30, 2020 and 2019, 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 Department, 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 \$12,750 and \$13,884 for the years ended June 30, 2020 and 2019, 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 \$12,324 and \$10,571 for the years ended June 30, 2020 and 2019, respectively, have been included in services provided by other departments in the accompanying financial statements.

As of June 30, 2020 and 2019, the Enterprise has payables in the amount of \$848 and \$955, respectively, which is associated with the SFPUC Headquarters Living Machine system. As of June 30, 2020, the Enterprise has payable of \$1 to the City Attorney's Office for legal services provided.

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,

Notes to Financial Statements
June 30, 2020 and 2019
(Dollars in thousands, unless otherwise stated)

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, 2020, the Enterprise's allocable shares of expenses and prepayment were \$22 and \$1,188, respectively, and as of June 30, 2019 were \$21 and \$1,210, 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, 2020, the Enterprise's expenses and prepayment were \$17 and \$472, respectively, and as of June 30, 2019 were \$14 and \$488, respectively.

(11) 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-yougo 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.

	Risk Types	Coverage Approach
(a)	General Liability	Self-Insured
(b)	Workers' Compensation	Self-Insured through Citywide Pool
(c)	Property	Purchased Insurance and Self-Insured
(d)	Public Officials Liability	Purchased Insurance
(e)	Employment Practices Liability	Purchased Insurance
(f)	Crime	Purchased Insurance
(g)	Electronic Data Processing	Purchased Insurance and Self-Insured
(h)	Surety Bonds	Purchased and Contractually Transferred
(i)	Errors and Omissions	Combination of Self-Insured and Contractual Risk Transfer
(j)	Professional Liability	Combination of Self-Insured and Contractual Risk Transfer
(k)	Builders' Risk	Contractually Transferred

(a) General Liability

Through coordination with the Controller 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 booked as expenses as required under

Notes to Financial Statements
June 30, 2020 and 2019
(Dollars in thousands, unless otherwise stated)

GAAP for financial statement purposes for both the Enterprise and the City and County of San Francisco's Comprehensive Annual 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, 2020 and 2019 were as follows:

Fiscal years	Beginning of year		Claims and changes in estimates	Claims paid	End of year
2020	\$	16,368	1,952	(2,429)	15,891
2019		14,066	4,699	(2,397)	16,368

(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.

The changes in the liabilities for workers' compensation for the years ended June 30, 2020 and 2019 were as follows:

Fiscal years	Beg	inning of year	Claims and changes in estimates	Claims paid	End of year
2020	\$	5,914	1,932	(1,795)	6,051
2019		5,784	1,944	(1,814)	5,914

(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.

Notes to Financial Statements
June 30, 2020 and 2019
(Dollars in thousands, unless otherwise stated)

(e) Employment Practices Liability

A Policy is retained to protect against employment-related claims and liabilities.

(f) 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.

(g) Electronic Data Processing

The Electronic Data Processing policy protects selected high-value electronic property in case of damage or loss.

(h) 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.

(i) Errors and Omissions

Errors and omissions 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.

(j) Professional Liability

Professional liability is 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

(12) Commitments and Litigation

(a) Commitments

As of June 30, 2020 and 2019, the Enterprise has outstanding commitments with third parties of \$453,061 and \$269,132, 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.

Notes to Financial Statements
June 30, 2020 and 2019
(Dollars in thousands, unless otherwise stated)

(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, 2020 and 2019, the Enterprise recorded \$7,800 and \$7,500 in pollution remediation liability, respectively. This increase of \$300 in pollution remediation liability in fiscal year 2020 is due to increase in cleanup cost estimates for the toxic sediments at Yosemite Creek.



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.

Southeast Treatment Plant Headworks Facility Project: Essential crew workers preparation of pile steel reinforcement cages. Photo by: Robin Scheswohl 如果您需要中文翻譯, 請致電: (415) 554-3289. Si necesita una traducción o asistencia en español llame al: (415) 554-3289. Communications Division Date of Publication: January 2021 Financial Services 525 Golden Gate Avenue, 4th Floor San Francisco, CA 94102-3220 sfwater.org



KPMG LLP Suite 1400 55 Second Street San Francisco, CA 94105

Independent Auditors' 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

The Honorable Mayor and Board of Supervisors City and County of San Francisco

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of San Francisco Wastewater Enterprise (the Enterprise), an enterprise fund of the City and County of San Francisco, California (the City), which comprise the statement of net position as of June 30, 2019, and the related statements of revenues, expenses, and changes in net position, and cash flows for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated December 23, 2019.

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) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Enterprise's internal control. Accordingly, we do not express an opinion on the effectiveness of the Enterprise's internal control.

Our consideration of internal control was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that have not been identified. However, as described below, we did identify a certain deficiency in internal control that we consider to be material weakness.

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. We consider the deficiency described below as item 2019-001 to be a material weakness.

2019-001: Incorrect Recognition of Construction in Progress

An entity must establish and maintain effective internal control over financial reporting and on compliance with provisions of laws, regulations, contracts, and grant agreements that have a material effect on the financial statements. The Enterprise entered into an agreement with another City agency (the Agency) in fiscal year 2016 to fund a new facility for the Agency in exchange for the Enterprise to expand their operations into an existing facility owned by the Agency. During the years ended June 30, 2018 and 2017, the Enterprise incorrectly recorded building improvement and constructions costs in their financial records as construction in progress instead of expensing such costs in operating expenses on the Statements of Revenues, Expenses, and Changes in Net Position, resulting in an overstatement of net position and understatement of changes in net position. The error described is a due to lack of adequate oversight and communication amongst the



Enterprise and the Agency. The error resulted in amounts incorrectly capitalized as construction in progress during the years ended June 30, 2018 and 2017.

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 determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards* and which are described above as item 2019-001.

The Enterprise's Response to Findings

Management acknowledges the identified control deficiency and has implemented additional internal controls to further strengthen the control environment supporting inter-agency construction costs, inclusive of adequate oversight and communication.

The Enterprise's response to the findings identified in our audit is described previously. The Enterprise's response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on the response.

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 Enterprise'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 Enterprise's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

KPMG LLP

San Francisco January 30, 2020

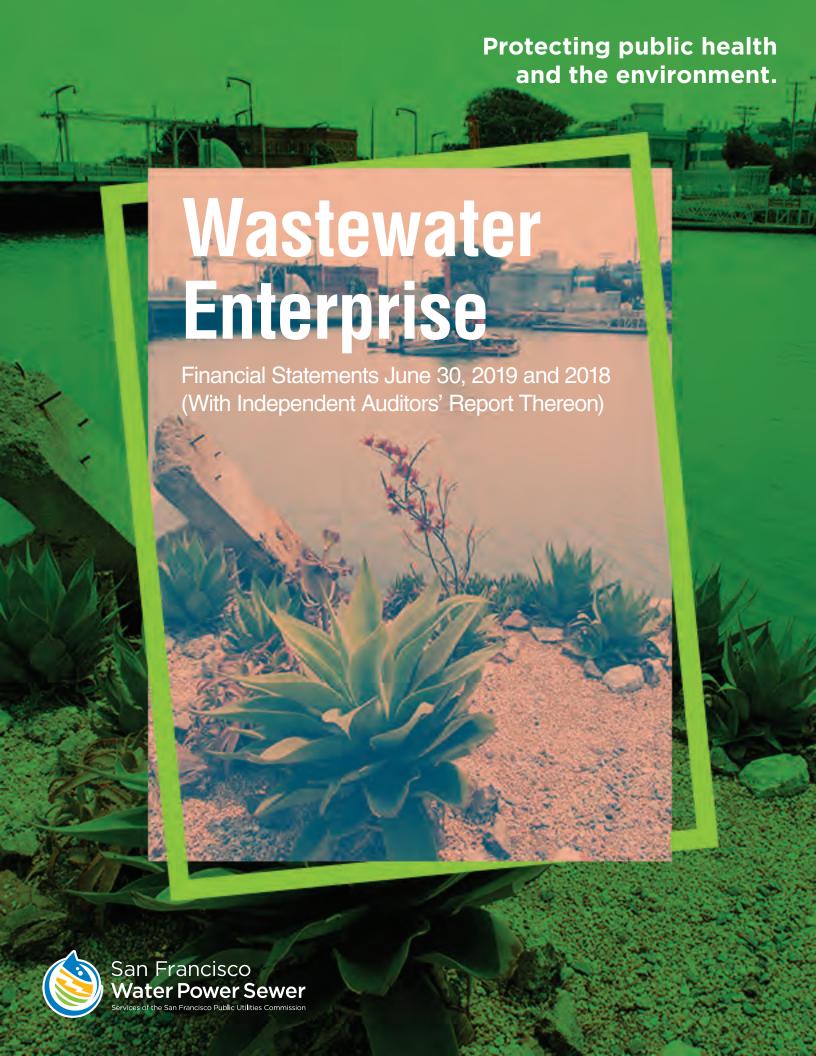


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KPMG LLP Suite 1400 55 Second Street San Francisco, CA 94105

Independent Auditors' Report

The Honorable Mayor and Board of Supervisors City and County of San Francisco:

Report on the Financial Statements

We have audited the accompanying financial statements of the San Francisco Wastewater Enterprise (the Enterprise), an enterprise fund of the City and County of San Francisco, California (the City) as of and for the years ended June 30, 2019 and 2018, and the related notes to the financial statements, which collectively comprise the Enterprise's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Governmental Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Enterprise as of June 30, 2019 and 2018 and the respective changes in its financial position and, where applicable, cash flows thereof for the years then ended in accordance with U.S. generally accepted accounting principles.



Emphasis of Matter

As discussed in Note 1, the financial statements of the Enterprise are intended to present the financial position, the changes in financial position and, where applicable, 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 City as of June 30, 2019 and 2018, the changes in its financial position, or, where applicable, its cash flows for the years then ended in accordance with U.S. generally accepted accounting principles. Our opinion is not modified with respect to this matter.

As discussed in Note 2(t) to the financial statements, the 2018 financial statements have been restated to correct a misstatement. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis on pages 3 through 15 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 23, 2019 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.

KPMG LLP

San Francisco, California December 23, 2019

Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(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, 2019 and 2018. 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 993 miles of combined storm and sanitary collection system pipes, sewer mains, transport/storage boxes, other storage structures, 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, 2019, the Enterprise serves 148,068 residential accounts, which discharge about 16.3 million units of sanitary flow per year (measured in hundreds of cubic feet, or ccf) and 25,897 non-residential accounts, which discharge about 7.6 million ccf per year.

The Enterprise includes the Source Control Program, which includes both Industrial Pretreatment to address point source pollution and a broad Pollution Prevention Program, which uses public education and outreach, legislative strategies, and regional collaboration to prevent non-point pollution from entering the separate and combined sewer systems and to help recover high quality resources such as biosolids, biogas, and biofuel.

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

Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

decreases in net position may serve as a useful indicator of whether the financial position of the Enterprise is improving or worsening.

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, non-capital, 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 2019

- Total assets of the Enterprise exceeded total liabilities by \$1,218,386.
- Net position increased by \$55,018 or 4.7% during the year.
- Capital assets, net of accumulated depreciation and amortization, increased by \$230,678 or 9.3% to \$2,721,804.
- Operating revenues increased by \$15,985 or 5.1% to \$331,081.
- Operating expenses increased by \$20,907 or 8.8% to \$259,813.

Financial Highlights for Fiscal Year 2018

- Total assets of the Enterprise exceeded total liabilities by \$1,147,750.
- Net position increased by \$27,862 or 2.4% during the year.
- Capital assets, net of accumulated depreciation and amortization, increased by \$239,426 or 10.6% to \$2,491,126.
- Operating revenues increased by \$37,755 or 13.6% to \$315,096.
- Operating expenses decreased by \$5,314 or 2.2% to \$238,906.

Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(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, 2019, 2018, and 2017

Total assets:	
Current and other assets \$ 821,796 268,983 285,444 552,813	(16,461)
<u></u>	239,426
Total assets 3,543,600 2,760,109 2,537,144 783,491	222,965
Deferred outflows of resources:	
Unamortized loss on refunding of debt 326 500 705 (174)	(205)
Pensions 26,886 29,984 48,192 (3,098)	(18,208)
Other post-employment benefits 4,669 3,264 — 1,405	3,264
Total deferred outflows of resources 31,881 33,748 48,897 (1,867)	(15,149)
Liabilities:	
Current liabilities:	
Revenue bonds 22,085 21,010 20,015 1,075	995
Certificates of participation 711 676 643 35	33
Commercial paper 291,498 262,859 111,411 28,639	151,448
State revolving fund loans 1,239 296 – 943	296
Other liabilities 101,156 98,185 58,559 2,971	39,626
Subtotal current liabilities 416,689 383,026 190,628 33,663	192,398
Long-term liabilities:	
Revenue bonds 1,630,524 998,136 1,024,910 632,388	(26,774)
Certificates of participation 26,892 27,645 28,370 (753)	(725)
State revolving fund loans 86,793 22,311 - 64,482	22,311
Other liabilities	(9,536)
Subtotal long-term liabilities 1,908,525 1,229,333 1,244,057 679,192	(14,724)
Total liabilities:	
Revenue bonds 1,652,609 1,019,146 1,044,925 633,463	(25,779)
Certificates of participation 27,603 28,321 29,013 (718)	(692)
Commercial paper 291,498 262,859 111,411 28,639	151,448
State revolving fund loans 88,032 22,607 – 65,425	22,607
Other liabilities 265,472 279,426 249,336 (13,954)	30,090
Total liabilities 2,325,214 1,612,359 1,434,685 712,855	177,674
Deferred inflows of resources:	
Related to pensions 16,157 7,277 5,093 8,880	2,184
Other post-employment benefits 4,967 96 — 4,871	96
Total deferred inflows of resources 21,124 7,373 5,093 13,751	2,280
Net position:	
Net investment in capital assets 1,133,662 1,172,623 1,095,165 (38,961)	77,458
Restricted for debt service 1,279 1,312 977 (33)	335
Restricted for capital projects 18,505 – 1,653 18,505	(1,653)
Unrestricted 75,697 190 48,468 75,507	(48,278)
Total net position \$ 1,229,143 1,174,125 1,146,263 55,018	27,862

Net Position, Fiscal Year 2019

For the year ended June 30, 2019, the Enterprise's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$1,229,143. The Enterprise's total net position increased by \$55,018 or 4.7% as a result of increases of \$75,507 in unrestricted net position and \$18,505 in restricted for capital projects, offset by decreases of \$38,961 in net investment in capital assets and \$33 in restricted for debt service (see Table 1).

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During the fiscal year 2019, current and other assets increased by \$552,813 or 205.5%. The increases included \$523,491 in restricted and unrestricted cash and investment mainly due to debt issuance of 2018 Series ABC revenue bonds offset by debt principal and interest repayment and Sewer System Improvement Program (SSIP) related capital projects spending, \$21,795 in grant receivables mainly from the State Water Resources Control Board (SWRCB) consisting \$37,660 for the Southeast Plant (SEP) 521/522 and Disinfection Upgrade Project and \$23 for stormwater flood management projects, offset by \$15,888 in cash receipts from the SWRCB for the North Point and Lake Merced projects, \$4,845 in restricted and unrestricted interest and other receivable due to higher cash balance in pooled cash fund and higher annualized interest rates, \$2,384 in charges for services due to a 7% planned rate increase, \$202 in inventory as there were more purchases than issuances during the year, and \$104 in custom work interfund receivables mainly due from the Department of Public Works (DPW) for the Mission Bay South and Hunters Point Projects. These increases were offset by a decrease of \$8 in prepaid charges.

Capital assets, net of accumulated depreciation and amortization, increased by \$230,678 or 9.3% reflecting an increase in construction and capital improvement activities. The largest portion of the Enterprise's net position of \$1,133,662 or 92.2%, represents net investment in capital assets (see Capital Assets section of the MDA for more information). Deferred outflows of resources decreased by \$1,867 mainly due to decreases of \$3,098 in pensions based on actuarial report and \$174 in unamortized loss on refunding of the 2013 Series A bonds, offset by \$1,405 increase in other post-employment benefits based on actuarial report.

Total liabilities increased by \$712.855 or 44.2%. As of June 30, 2019, total outstanding balance of \$2,059,742 for revenue bonds payable, commercial paper, certificates of participation, and State Revolving Fund (SRF) loans represented 88.6% of total liabilities, an increase of \$726,809 or 54.5%. The increase was mainly due to \$663,103 issuance of revenue bonds Series 2018 ABC, \$66,850 in SRF loans to fund capital project spending, and \$53.639 issuance of commercial paper to fund capital projects, offset by \$48,111 in debt repayments, and \$8,672 in amortization of premium during the year. Other liabilities of \$265,472 such as payables to vendors, contractors, and other government agencies for goods and services under contractual agreements, decreased by \$13,954 or 5.0%, due to decreases of \$15,936 in net pension liability based on actuarial report, \$5,950 in other post-employment benefits obligations based on actuarial report, \$5,737 in restricted and unrestricted payable to vendors and contractors due to more payments than vouchers, \$114 deposit from Pacific Gas & Electric due to expenses incurred for the Cross Bore Project, \$106 to Hetch Hetchy Power due to payment for the 525 Golden Gate Living Machine System, \$34 in prepaid rent from tenants, and \$14 in grant advance recognized to revenue in current year for the Green Infrastructure Leadership. These decreases were offset by increases of \$6,958 in bond and loan interest payable due to higher outstanding debt principal, \$2,797 in pollution remediation liability due to increased estimated cleanup liabilities of \$3,000 for the toxic sediments at Yosemite Creek, offset by \$203 payment for paying surrounding soils due to contamination of hazardous materials at Southeast Plant, \$2,302 in general liability based on actuarial estimates, \$1,250 in employee related benefits including vacation, workers' compensation, and accrued payroll mainly due to actuarial estimate and 3% increase of cost of living adjustment (COLA), and \$630 in customer credit balances. Deferred inflows of resources increased by \$13,751, of which \$8,880 in relation to pensions based on actuarial report and \$4,871 in other post-employment benefits based on actuarial report.

Net Position, Fiscal Year 2018

For the year ended June 30, 2018, the Enterprise's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$1,174,125. The Enterprise's total net position increased by

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\$27,862 or 2.4% as a result of increases of \$77,458 in net investment in capital assets and \$335 in restricted for debt service, offset by decreases of \$48,278 in unrestricted net position and \$1,653 in restricted for capital projects (see Table 1).

Total assets increased by \$222,965 or 8.8%. Current and other assets represent 9.7% of total assets, a decrease of \$16,461 or 5.8%. The decrease was mainly due to a decrease of \$33,749 in restricted and unrestricted cash and investment attributed to increased spending for the Sewer System Improvement Program (SSIP). Other decreases included \$44 due from the Department of Public Works for the Mission Bay South and Hunters View projects, \$23 in lease prepayment to the Recreation and Parks Department for the Civic Center Garage, \$17 in prepayments for property rents, and \$15 in accrued payroll credits. These decreases were offset by increases of \$14,997 in receivables from the State, of which \$15,889 for expenses incurred for the Lake Merced and North Point Facility Outfall projects, offset by \$892 grant collection for the Sunnydale and Valencia Street Low Impact Development stormwater flood management projects, \$1,976 in charges for services due to an 11% planned rate increase, \$378 in restricted and unrestricted interest and other receivables mainly due to higher annualized interest rates, and \$36 in inventory as there were more purchases than issuances during the fiscal year.

Capital assets, net of accumulated depreciation and amortization, increased by \$239,426 or 10.6% reflecting an increase in construction and capital improvement activities. The largest portion of the Enterprise's net position of \$1,172,623 or 99.9%, represents net investment in capital assets (see Capital Assets section of the MDA for more information). Deferred outflows of resources decreased by \$15,149 due to decreases of \$18,208 in pensions based on actuarial report and \$205 in unamortized loss on refunding of the 2013 Series A bonds, offset by an increase of \$3,264 in other post-employment benefits per implementation of GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions.

Total liabilities increased by \$177,674 or 12.4%. As of June 30, 2018, total outstanding balance of \$1,332,933 for revenue bonds payable, commercial paper, certificates of participation, and State Revolving Fund loans represented 83.1% of total liabilities, an increase of \$147,584 or 12.5%. The increase was mainly due to \$151,448 issuance of commercial paper and \$22,607 in State revolving fund loans to fund capital project spending, offset by \$20,658 in debt repayments, and \$5,813 in amortization of premium during the year. Other liabilities of \$279,426, such as payables to vendors, contractors, and other government agencies for goods and services under contractual agreements, increased by \$30,090 or 12.1%, which is comprised largely of \$37,806 payable to vendors and contractors attributable to SSIP related projects and prior year activities to close out the legacy system payables, \$7,847 in other postemployment benefits due to implementation of GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions, \$1,992 in pollution remediation liability due to increased estimated cleanup liabilities of \$2,500 for the toxic sediments at Yosemite Creek and \$103 for the hazardous materials at South East Plant, offset by \$611 violation penalty payments, of which \$380 for the discharge of chlorinated treated wastewater at South East Plant and \$231 for the discharge of partially treated wastewater at the Oceanside Plant. The increase in other liabilities also included \$470 in employee related benefits including workers' compensation, vacation, and accrued payroll, \$236 in customers' prepayments from charges for services, \$47 in prepaid rents, \$33 in bond and loan interest payable due to issuance of commercial paper during the year, and \$14 in grant received in advance from the Green Infrastructure Leadership Exchange for the San Francisco GSI Modeling project. These increases were offset by decreases of \$17,934 in net pension liability based on actuarial report, \$149 deposit from Pacific Gas & Electric due to expenses incurred for the Cross Bore Project, \$105 repayment made to Hetch Hetchy Power for the 525 Golden Gate Living Machine System, \$84 in payments to DPW for the street and sewer

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repairs & maintenance as well as engineering support, and \$83 in general liability based on actuarial estimates. Deferred inflows of resources increased by \$2,280, of which \$2,184 in relation to pensions based on actuarial report and \$96 in other post-employment benefits per implementation of GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions.

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, 2019, 2018, and 2017

		2019	2018		2017	2019-2018 Change	2018-2017 Change
Revenues:							
Charges for services	\$	317,761	303,037		267,601	14,724	35,436
Rents and concessions		702	611		606	91	5
Other operating revenues		12,618	11,448		9,134	1,170	2,314
Interest and investment income		20,701	2,317		2,327	18,384	(10)
Net gain from transfer of assets		619	_		_	619	_
Other non-operating revenues		5,545	5,330		8,633	215	(3,303)
Total revenues	•	357,946	322,743		288,301	35,203	34,442
Expenses:							
Operating expenses		259,813	238,906		244,220	20,907	(5,314)
Interest expenses		43,803	24,978		28,474	18,825	(3,496)
Amortization of premium, refunding loss, and issuance cos	st	(5,697)	(5,400)		(5,806)	(297)	406
Non-operating expenses		1,013	414		383	599	31
Total expenses		298,932	258,898		267,271	40,034	(8,373)
Change in net position before transfers		59,014	63,845		21,030	(4,831)	42,815
Transfers from the City and County of San Francisco		_			40		(40)
Transfers to the City and County of San Francisco		(3,996)	(26,960)		(30,747)	22,964	3,787
Net transfers		(3,996)	(26,960)		(30,707)	22,964	3,747
Change in net position		55,018	36,885		(9,677)	18,133	46,562
Net position at beginning of year							
Beginning of year, as previously reported		1,174,125	1,146,263		1,155,940	27,862	(9,677)
Cumulative effect of accounting change due to error		_	(6,767)		_	6,767	(6,767)
Cumulative effect of accounting change			(2,256)	*		2,256	(2,256)
Net position at beginning of year as restated		1,174,125	1,137,240		1,155,940	36,885	(18,700)
Net position at end of year	\$	1,229,143	1,174,125		1,146,263	55,018	27,862

^{*}Cumulative effect of accounting change per GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions.

Results of Operations, Fiscal Year 2019

The Enterprise's total revenues were \$357,946, an increase of \$35,203 or 10.9% from prior year (see Table 2). Charges for services increased by \$14,724 or 4.9% due to an average 7% adopted rate increase offset by a sanitary flow decrease of 476,093 ccf or 2% from residential and non-residential customers. Interest and investment income increased significantly by \$18,384 or 793.4% due to increases of \$13,632 in interest earned on cash mainly attributed to higher cash balance coupled with higher annualized interest rate and \$4,752 in unrealized gains due to improved market value. Other operating revenues increased by \$1,170 or 10.2% mainly due to \$1,091 increase in capacity fees resulting from 6% increase in number of permits and 7% increase in average permit price, and \$79 in charges for services to other City departments such as the Laguna Honda Hospital and San Francisco Municipal Transportation Agency. Net gain from transfer of assets was \$619 due to transfer of 1800 Jerrold from General Services Agency (GSA). Other non-

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operating revenues increased by \$215 or 4.0% mainly due to increases of \$305 in miscellaneous revenue such as Stormwater Control Plan review fees, overhead and late payment charges, \$235 State grant received for the stormwater flood management projects, \$29 from the Green Infrastructure Leadership Exchange Grant, \$11 in federal interest subsidy, \$3 net loss from sale of fixed assets in prior year, and \$2 from sale of scrap and waste. These increases were offset by \$228 decrease in biofuel revenue as the SFGreasecycle Program ended in April 2019, \$141 in settlements received in prior year from insurance claim, and \$1 in services to other government agencies. Rents increased by \$91 or 14.9% mainly due to \$68 catch-up billing for a lease at Southeast Water Pollution Control Plant in the current year and \$23 from tenants with 4% consumer price index (CPI) average rate increase.

Total expenses were \$298,932, an increase of \$40,034 or 15.5% due to increases of \$20,907 in operating expenses, \$18,825 in interest expenses mainly due to higher outstanding debt principal, and \$599 in other non-operating expenses mainly due to \$987 net loss on sale of fixed assets due to 1801 Jerrold property exchange with DPW, offset by \$388 decrease in City grants program expenses as there were no expense incurred for community-based organization services in the current year coupled with lower expense incurred for the flood water management program. These increases were offset by \$297 amortization of premium, refunding loss, and issuance cost. The increase of \$20,907 in operating expenses was attributed largely to \$24,108 increase in general and administrative and other operating expenses, mainly due to lower capitalization of capital project spending coupled with higher capital project expenses related to Southeast Plant Improvement Project, \$4,442 in depreciation expense due to more capitalized assets put in service, \$2,979 in contractual services mainly due to higher maintenance services on building structures and higher professional and specialized services, \$407 in materials and supplies, and \$255 in services provided by other departments mainly for light, heat, and power. These increases were offset by a decrease of \$11,284 in personnel services mainly due to decrease in expenses related to pension and other post-employment benefits.

Total transfers out of \$3,996 included \$3,724 to the City Real Estate Division for the Central Shop Relocation Project and the Land Reuse 1800 Jerrold related to the Southeast Plant Improvement Project, \$150 to the Neighborhood Development Fund for the Watershed Stewardship Grants, \$90 to the San Francisco Art Commission for art enrichment, and \$32 to the Office of the City Administrator for the Surety Bond Program.

Results of Operations, Fiscal Year 2018

The Enterprise's total revenues were \$322,743, an increase of \$34,442 or 11.9% from prior year (see Table 2). Charges for services increased by \$35,436 or 13.2% due to an average 11% adopted rate increase and a sanitary flow increase of 509,865 ccf or 2% from residential and non-residential customers. Other operating revenues increased by \$2,314 or 25.3% mainly due to \$1,441 increase in capacity fees resulting from an increase in average permit price coupled with the collection of previously written-off capacity fee receivables and \$873 in charges for services to other City departments such as the Recreation & Park and Zuckerberg San Francisco General Hospital and Trauma Center due to an 11% average rate increase coupled with a 3.9% increased sanitary flow. Rents increased slightly by \$5 or 0.8%. Other non-operating revenues decreased by \$3,303 or 38.3% mainly attributed to \$3,274 State grant received in prior year for the stormwater flood management projects, \$116 decrease in penalty charges, \$109 in custom work services for the Hunters View and Mission Bay South projects from the Department of Public Works, and \$40 from sale of assets. These decreases were offset by \$141 in settlements received from insurance claim, \$82 in biofuel revenue, and \$13 in federal interest subsidy. Interest and investment income decreased by \$10 due to an increase in unrealized losses of \$853 attributed to decline in market value, offset by \$843 increase in interest earned on cash due to higher annualized interest rates.

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Total expenses decreased by \$8,373 or 3.1% due to decreases of \$5,314 in operating expenses, and \$3,496 in interest expenses mainly attributed to increased capitalized bond interest, offset by \$406 amortization of premium, refunding loss, and issuance cost and \$31 in other non-operating expenses due to lower expense incurred for the flood water management program. The decrease of \$5,314 in operating expenses was mainly attributable to \$23,311 decrease in personnel services mainly from pensions, and \$458 in services provided by other departments mainly for light, heat, and power. These decreases were offset by \$15,359 increase in general and administrative and other operating expenses mainly due to decreased capitalization of capital project spending and \$2,236 increases in contractual services mainly due to higher professional and specialized services particularly on engineering services, management, and system consulting services and maintenance services on building structures particularly on sludge removal, pest control, and security services, \$710 in materials and supplies, \$150 in depreciation expense due to increased capitalized assets.

Total transfers of \$26,960 included \$26,738 to the City Real Estate Division for the Central Shop Relocation Project, Land Reuse 1800 Jerrold related to Southeast Plant improvement project, \$150 to the Neighborhood Development Fund for the Watershed Stewardship Grants, \$40 to Art Commission for art enrichment, and \$32 to the Office of the City Administrator for the Surety Bond Program.

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, 2019, 2018, and 2017

	2019	2018	2017	2019-2018 Change	2018-2017 Change
Facilities, improvements, machinery, and equipment	\$ 1,916,979	1,799,548	1,664,327	117,431	135,221
Intangible assets	3,183	3,320	3,457	(137)	(137)
Land and rights-of-way	36,018	35,737	35,737	281	_
Construction work in progress	765,624	652,521	548,179	113,103	104,342
Total	\$ 2,721,804	2,491,126	2,251,700	230,678	239,426

Capital Assets. Fiscal Year 2019

The Enterprise has capital assets of \$2,721,804, net of accumulated depreciation and amortization, invested in a broad range of utility capital assets as of June 30, 2019 (see Table 3). This amount represents an increase of \$230,678 or 9.3% 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. Facilities, improvements, machinery, and equipment increased by \$117,431 or 6.5%, construction work in progress increased by \$113,103 or 17.3%, and land and rights-of-way increased by \$281 or 0.8%, offset by a decrease of \$137 or 4.1%, in intangible assets due to amortization. The \$281 increase in land and rights-of-way is due to jurisdictional transfer of properties between Enterprise with GSA and DPW for 1800 and 1801 Jerrold.

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Major additions to construction work in progress during the year ended June 30, 2019 include the following:

Southeast Plant Biosolids and Digester Facilities Project	\$	84,770
Southeast Plant New Headworks Grit Removal and Influent Pump Station		58,369
Southeast Plant Building 521/522 and Disinfection Upgrades		14,262
As-Needed Spot Sewer Replacement No. 37		11,134
Griffith Pump Station Improvements		10,986
Channel Tunnel/Bayside Drainage		9,989
Seismic Reliability - Phase 1		9,146
Van Ness Bus Rapid Transit Sewer Improvements		8,065
Northshore to Channel Force Main		7,983
Southeast Plant Primary and Secondary Clarifier		7,173
Mariposa Pump Station & Force Main		5,800
Southeast Plant Existing Digester Gas Handling Improvements		5,741
As-Needed Main Sewer Replacement #6		5,294
Southeast Community Center		5,187
Southeast Plant Oxygen Generation Plant 01		4,964
Various Locations Sewer Replacement #1		4,917
Oceanside Plant Condition Assessment Repairs		4,915
Westside Pump Station Reliability Improvements		4,836
Southeast 740 Digestor Gas Upgrade		4,810
Drumm & Jackson St Sewer Improvement		4,773
Various Locations Sewer Replacement #3		4,681
Public Works Filbert St and Leavenworth St Infrastructure Improvements		4,531
Public Works Various Locations No. 28 Infrastructure Improvements		4,341
Various Locations Sewer Replacement #5		4,191
Oceanside Plant Digester Gas Handling Utilization		4,157
Other project additions individually below \$4,000	_	1,957
Total	\$	296,972

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, 2019 include the following:

Southeast Plant Existing Digester Gas Handling Improvement	\$ 19,683
As-Needed Spot Sewer Replacement No. 37	11,158
Southeast Plant Oxygen Generation Plant 01	9,457
Northshore to Channel Force Main	9,330
Wastewater Crocker Amazon/Excelsior/Ingleside Districts Sewer Replacement	8,688
Southeast Plant Primary and Secondary Clarifier Upgrade	8,268
Various Locations Sewer Replacement and Pavement Renovation No. 1	7,935
Drumm & Jackson Street Sewer Improvement	7,720
Various Locations Sewer Replacement and Pavement Renovation No. 2	7,100
Sunnydale Early Implementation Project	6,262
Public Works Various Locations No. 22 Infrastructure Improvement	6,012
Public Works Polk St Infrastructure Improvement	5,582
Public Works Various Locations No. 27 Infrastructure Improvement	5,510
Hydraulic & Drainage Sewer Improvement	5,345
As-Needed Main Sewer Replacement #6	5,294
Haight-Ashbury/Tenderloin/Diamond	5,234
Various Locations Sewer Replacement and Pavement Renovation No. 4	4,908
Public Works Various Locations No. 24 Infrastructure Improvement	4,678
Public Works 25th Ave and Lowell Street Sewer Replacement	3,710
Collection Division Consolidation	3,140
Other project additions individually below \$3,000	 33,387
Total	\$ 178,401

See Note 4 for additional information about capital assets.

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Sewer System Improvement Program

The Sewer System Improvement Program (SSIP) includes three phases over 20 years to improve the existing wastewater system. In March 2016, the refined program scope and budget increased from \$6.9 billion to \$7.0 billion endorsed by the Commission along with the baseline for scope, schedule and budget for phase I, II, and III projects.

As of June 30, 2019, 25 projects or 35.7% totaling \$176 million were completed, with 21 projects in preconstruction phase, 13 projects in construction phase, and 11 projects in close-out phase. The SEP Primary and Secondary Clarifier Upgrades Project was completed on January 21, 2019 with reported project expenditures of \$32.6 million. The project is intended to upgrade the mechanical, structural, and electrical components at the primary and secondary sedimentation tanks (clarifiers) at SEP to address operational reliability and compliance with regulatory requirements for liquid treatment. The SEP 521/522 and Disinfection Upgrades (SEP Building 521 Replacement) are on-going construction. The project is reported at 96.0% completed and forecasted completion in October 2019. Program expenditures as of June 30, 2019 totaled \$913.4 million. Additional details regarding the SSIP are available at www.sfwater.org.

Capital Assets, Fiscal Year 2018

The Enterprise has capital assets of \$2,491,126, net of accumulated depreciation and amortization, invested in a broad range of utility capital assets as of June 30, 2018 (see Table 3). This amount represents an increase of \$239,426 or 10.6% 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. Facilities, improvements, machinery, and equipment increased by \$135,221, or 8.1% and construction work in progress increased by \$104,342 or 19.0%, offset by a decrease of \$137, or 4.0%, in intangible assets due to amortization.

Major additions to construction work in progress during the year ended June 30, 2018 include the following:

Southeast Plant Biosolids and Digester Facilities Project	\$ 42,997
Southeast Plant New Headworks Grit Removal and Influent Pump Station	20,323
Program Management - Land Reuse 1800 and 1801 Jerrod Avenue	17,832
Southeast Plant Building 521/522 and Disinfection Upgrades	16,428
North Point Outfall Refurbishment	11,036
Southeast Plant Existing Digester Gas Handling Improvements	10,572
Collection Division Consolidation	10,426
Wastewater As-Needed Spot Sewer Replacement #36	9,820
Channel Tunnel/Bayside Drainage	8,770
Southeast Plant Primary and Secondary Clarifier	8,500
Oceanside Plant Condition Assessment Repairs	6,319
Wastewater As-Needed Spot Sewer Replacement #35	5,868
Wastewater Crocker Amazon/Excelsior/Ingleside Districts Sewer Replacement	5,570
Various Locations Sewer Replacement #2	5,141
Griffith Pump Station Improvements	4,990
Various Sewer Replacement (Sunset)	4,066
Westside Pump Station Reliability Improvements	4,022
Other project additions individually below \$4,000	113,416
Total	\$ 306,096
	 ,

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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, 2018 include the following:

Southeast Plant Primary and Secondary Clarifier	\$ 32,667
Southeast Water Pollution Control Plant Chemical System Relocation and Facility Upgrades	21,101
Collection Division Consolidation	19,746
North Point Outfall Refurbishment	17,126
Wastewater As-Needed Spot Sewer Replacement #36	9,823
Wastewater As-Needed Spot Sewer Replacement #35	9,391
Various Sewer Replacement (Sunset)	9,161
Lake Merced Early Implementation Project	6,634
Public Works Haight Street Topography Survey	6,154
Oceanside Water Pollution Control Flare Stack and Control Upgrades	5,697
South of Market/Bernal Heights/Excelsior	5,294
Marin Street Sewer Replacement	4,558
Public Works Urbano Drive Infrastructure Improvements	4,507
Public Works Irving Street Phase 1 Infrastructure Improvements	4,306
Public Works Guerrero and Other Street Infrastructure Improvements	3,388
Masonic Avenue Sewer Improvements	3,000
Other project additions individually below \$3,000	 28,146
Total	\$ 190,699

See Note 4 for additional information about capital assets.

Sewer System Improvement Program

The Sewer System Improvement Program (SSIP) includes three phases over 20 years to improve the existing wastewater system. In March 2016, the refined program scope and budget increased from \$6.9 billion to \$7.0 billion endorsed by the Commission along with the baseline for scope, schedule and budget for phase I, II, and III projects.

As of June 30, 2018, 17 projects or 24.3% totaling \$95 million were completed, with 32 projects in preconstruction phase, 18 projects in construction phase, and 3 projects in close-out phase. The Lake Merced Green Infrastructure Project was completed on April 24, 2018 with reported project expenditures of \$6.1 million. The project is designed to manage stormwater runoff from 2.1 acres, starting at Ashton Avenue intersection and extends along eight blocks to the Lee Avenue intersection, removing 1.0 million gallons of stormwater in a typical year. The Oceanside Plant and Westside Pump Station Improvements are on-going construction with reported completion in October 2018. Program expenditures as of June 30, 2018 totaled \$712.4 million. Additional details regarding the SSIP are available at www.sfwater.org.

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Debt Administration

As of June 30, 2019, 2018, and 2017, the Enterprise's debt from revenue bonds, commercial paper, certificates of participation, and State revolving fund loans were \$2,059,742, \$1,332,933, and \$1,185,349, 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, 2019, 2018, and 2017

					2019-2018	2018-2017
	_	2019	2018	2017	Change	Change
Revenue bonds	\$	1,652,609	1,019,146	1,044,925	633,463	(25,779)
Commercial paper		291,498	262,859	111,411	28,639	151,448
Certificates of participation		27,603	28,321	29,013	(718)	(692)
State revolving fund loans		88,032	22,607	_	65,425	22,607
Total	\$	2,059,742	1,332,933	1,185,349	726,809	147,584

The increase of \$726,809 was mainly due to issuance of \$663,103 revenue bonds Series 2018 ABC, which consisted of \$594,145 par amount and \$68,958 issue premium, \$53,639 of commercial paper, and \$66,850 State revolving fund loans for the SEP Clarifier Upgrade and SEP 521/522 and Disinfection Upgrade Projects offset by \$48,111 repayment of outstanding debt and \$8,672 of premium amortizations.

Credit Ratings and Bond Insurance – As of June 30, 2019 and 2018, the Enterprise carried underlying ratings of "Aa3" 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 2019 and 2018, 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, 2019, the Enterprise had \$3,048,289 in combined debt issuance authorization from the Board of Supervisors under Proposition E, with \$2,035,459 issued against this authorization. The Enterprise has a \$750,000 authorized commercial paper program, with \$291,498 in tax-exempt commercial paper outstanding as of June 30, 2019 and \$262,859 in tax-exempt commercial paper outstanding as of June 30, 2018.

Cost of Debt Capital – The coupon interest rates on the Enterprise's outstanding revenue bonds ranged from 1.0% to 5.8%, with a blended true interest cost of 3.4%, after factoring in federal interest subsidy receipts on Build America Bonds at June 30, 2019. The 2009 Series C certificates of participation carried interest rates ranging from 2.0% to 5.0% and 2009 Series D certificates of participation carried interest rates from 6.4% to 6.5% in fiscal years 2019 and 2018, respectively. The interest rates on short-term debt ranged from 0.9% to 1.8% as of end of fiscal year 2019. The State revolving fund loans (CWSRF loans) carried interest rates ranging from 1.6% to 1.8% as of end of fiscal year 2019.

Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

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 VIIIB, 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 was completed in April 2018 and resulted in four-year wastewater rate increases from July 1, 2018 through June 30, 2022. The SFPUC Rates Schedules and Fees is available at http://sfwater.org/modules/showdocument.aspx?documentid=7743.

The following table is the Enterprise's ten-year approved average rate adjustments:

Ten-year Average	Rate Adjustments	
Effective Date	Rate	_
July 1, 2012	5.0 1 %	
July 1, 2013	5.0 ¹	
July 1, 2014	5.0 ²	
July 1, 2015	5.0 ²	
July 1, 2016	7.0 ²	
July 1, 2017	11.0 ²	¹ Four-year rate increases adopted and effective July 1, 2009.
July 1, 2018	7.0 ³	² Four-year rate increases adopted and effective July 1, 2014.
July 1, 2019	7.0 ³	³ Four-year rate increases adopted and effective July 1, 2018.
July 1, 2020	8.0 ³	
July 1, 2021	8.0 ³	

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 http://www.sfwater.org/index.aspx?page=347.

Statements of Net Position June 30, 2019 and 2018 (In thousands)

Assets	2019	2018
Current assets:	* 000.400	464407
Cash and investments with City Treasury Cash and investments outside City Treasury	\$ 209,109 274	164,107 262
Receivables:		202
Charges for services (net of allowance for doubtful accounts of \$2,308 in 2019		
and \$2,585 in 2018)	33,781	30,915
Due from other City departments Due from other governments	220 39,043	116 17,248
Interest	1,454	1,051
Restricted interest, other receivable, and prepaid (net of allowance for doubtful accounts of \$19		
in 2019 and \$191 in 2018)	4,720	731
Total current receivables	79,218	50,061
Prepaid charges, advances, and other receivables, current portion	128	116
Inventory Restricted cash and investments outside City Treasury	2,284 44.928	2,082 14,282
Total current assets	335,941	230,910
Non-current assets:		230,310
Restricted cash and investments with City Treasury	483,885	36,054
Restricted interest, other receivable, and prepaid (net of allowance for doubtful accounts of \$31 in 2019 and \$0 in 2018)	453	_
Charges for services, less current portion (net of allowance for doubtful accounts of \$567 in 2019		
and \$0 in 2018)	328	810
Prepaid charges, advances, and other receivables, less current portion	1,189	1,209
Capital assets, not being depreciated and amortized Capital assets, net of accumulated depreciation and amortization	804,688 1,917,116	691,304 1,799,822
Total non-current assets	3,207,659	2,529,199
Total assets	3,543,600	2,760,109
Deferred outflows of resources		, ,
Unamortized loss on refunding of debt	326	500
Pensions	26,886	29,984
Other post-employment benefits	4,669	3,264
Total deferred outflows of resources Liabilities	31,881	33,748
Current liabilities:		
Accounts payable	18,132	18,080
Accrued payroll	4,652	4,394
Accrued vacation and sick leave, current portion	4,151	3,766
Accrued workers' compensation, current portion Due to other City departments, current portion	1,031 107	1,027 109
Damage claims liability, current portion	7,013	6,376
Unearned revenues, refunds, and other	4,653	4,185
Bond and loan interest payable	18,486	11,528
Revenue bonds, current portion	22,085	21,010
Certificates of participation, current portion	711 291,498	676 262,859
Commercial paper State revolving fund loans payable, current portion	1,239	202,839
Current liabilities payable from restricted assets	42,931	48,720
Total current liabilities	416,689	383,026
Long-term liabilities:		
Other post-employment benefits obligations	53,567	59,517
Net pension liability	85,037	100,973
Accrued vacation and sick leave, less current portion Accrued workers' compensation, less current portion	3,126 4,883	2,649 4,757
Due to other City departments, less current portion	848	952
Damage claims liability, less current portion	9,355	7,690
Revenue bonds, less current portion	1,630,524	998,136
Certificates of participation, less current portion State revolving fund loans payable, less current portion	26,892 86,793	27,645 22,311
Pollution remediation obligation	7,500	4,703
Total long-term liabilities	1,908,525	1,229,333
Total liabilities	2,325,214	1,612,359
Deferred inflows of resources	,525,227	_,,
Related to pensions	16,157	7,277
Other post-employment benefits	4,967	96
Total deferred inflows of resources	21,124	7,373
Net position		
Net investment in capital assets	1,133,662	1,172,623
Restricted for debt service Restricted for capital projects	1,279 18,505	1,312
Unrestricted	75,697	_ 190
Total net position	\$ 1,229,143	1,174,125
rotal net position	Ψ 1,223,143	±,±;+,±≥0

See accompanying notes to financial statements.

Statements of Revenues, Expenses, and Changes in Net Position Years ended June 30, 2019 and 2018 (In thousands)

Operating revenues: \$ 317,761 303,037 Rents and concessions 702 611 Capacity fees 6,877 5,786 Other revenues 5,741 5,662 Total operating revenues 331,081 315,096 Operating expenses: 80,693 91,977 Personnel services 80,693 91,977 Contractual services 19,040 16,061 Materials and supplies 9,853 9,446 Depreciation and amortization 60,033 55,591 Services provided by other departments 36,629 36,374 General and administrative and other 53,565 29,457 Total operating expenses 259,813 238,906 Operating income 71,268 76,190 Non-operating revenues (expenses): 235 - Federal and state grants 235 - Interest expenses (43,803) (24,978) Amortization of premium, refunding loss, and issuance costs (987) (3 Net (sos) from sale of assets (987) <		_	2019	2018
Rents and concessions 702 611 Capacity fees 6,877 5,786 Other revenues 5,741 5,662 Total operating revenues 331,081 315,096 Operating expenses: 80,693 91,977 Contractual services 80,693 91,977 Contractual services 19,040 16,061 Materials and supplies 9,853 9,446 Depreciation and amortization 60,033 55,591 Services provided by other departments 36,629 36,374 General and administrative and other 53,565 29,457 Total operating expenses 259,813 238,906 Operating income 71,268 76,190 Non-operating revenues (expenses): 235 - Federal and state grants 235 - Interest and investment income 20,701 2,317 Interest expenses (43,803) (24,978) Amortization of premium, refunding loss, and issuance costs 5,697 5,400 Net (loss) from transfer of assets (987	Operating revenues:			
Capacity fees 6,877 5,786 Other revenues 5,741 5,662 Total operating revenues 331,081 315,096 Operating expenses: 80,693 91,977 Personnel services 80,693 91,977 Contractual services 19,040 16,061 Materials and supplies 9,853 9,446 Depreciation and amortization 60,033 55,591 Services provided by other departments 36,629 36,374 General and administrative and other 53,565 29,457 Total operating expenses 259,813 238,906 Operating income 71,268 76,190 Non-operating revenues (expenses): 2 76,190 Federal and state grants 235 - Interest expenses (43,803) (24,978) Amortization of premium, refunding loss, and issuance costs 5,697 5,400 Net (loss) from sale of assets (987) (3) Net gain/(loss) from transfer of assets 619 - Other non-operating expenses	Charges for services	\$	317,761	303,037
Other revenues 5,741 5,662 Total operating revenues 331,081 315,096 Operating expenses: 80,693 91,977 Contractual services 19,040 16,061 Materials and supplies 9,853 9,446 Depreciation and amortization 60,033 55,591 Services provided by other departments 36,629 36,374 General and administrative and other 53,565 29,457 Total operating expenses 259,813 238,906 Operating income 71,268 76,190 Non-operating revenues (expenses): 2 76,190 Federal and state grants 235 - Interest and investment income 20,701 2,317 Interest expenses (43,803) (24,978) Amortization of premium, refunding loss, and issuance costs 5,697 5,400 Net (ioss) from sale of assets 619 - Other non-operating expenses (26) (414) Net pain/(loss) from transfer of assets 619 - Other non-operating e	Rents and concessions		702	611
Total operating revenues 331,081 315,096 Operating expenses: 80,693 91,977 Contractual services 19,040 16,061 Materials and supplies 9,853 9,446 Depreciation and amortization 60,033 55,591 Services provided by other departments 36,629 36,374 General and administrative and other 53,565 29,457 Total operating expenses 259,813 238,906 Operating income 71,268 76,190 Non-operating revenues (expenses): 25 - Federal and state grants 235 - Interest and investment income 20,701 2,317 Interest expenses (43,803) (24,978) Amortization of premium, refunding loss, and issuance costs 5,697 5,400 Net (loss) from sale of assets (987) (3) Net gain/(loss) from transfer of assets 619 - Other non-operating expenses (26) (414) Net non-operating expenses (12,254) (12,345) Cha	Capacity fees		6,877	5,786
Operating expenses: 80,693 91,977 Contractual services 19,040 16,061 Materials and supplies 9,853 9,446 Depreciation and amortization 60,033 55,591 Services provided by other departments 36,629 36,374 General and administrative and other 53,565 29,457 Total operating expenses 259,813 238,906 Operating revenues (expenses): 71,268 76,190 Non-operating revenues (expenses): 235 - Federal and state grants 235 - Interest and investment income 20,701 2,317 Interest expenses (43,803) (24,978) Amortization of premium, refunding loss, and issuance costs 5,697 5,400 Net (loss) from sale of assets (987) (3) Net gain/(loss) from transfer of assets 619 - Other non-operating expenses (26) (414) Net non-operating expenses (26) (414) Change in net position before transfers 59,014 63,845	Other revenues		5,741	5,662
Personnel services 80,693 91,977 Contractual services 19,040 16,061 Materials and supplies 9,853 9,446 Depreciation and amortization 60,033 55,991 Services provided by other departments 36,629 36,374 General and administrative and other 53,565 29,457 Total operating expenses 259,813 238,906 Operating income 71,268 76,190 Non-operating revenues (expenses): 255,813 238,906 Pederal and state grants 235 - Interest and investment income 20,701 2,317 Interest expenses (43,803) (24,978) Amortization of premium, refunding loss, and issuance costs 5,697 5,400 Net (loss) from sale of assets 619 - Other non-operating revenues 5,310 5,333 Other non-operating expenses (26) (414 Net non-operating expenses (26) (414 Net non-operating expenses (25) (26,960) Change in n	Total operating revenues	_	331,081	315,096
Contractual services 19,040 16,061 Materials and supplies 9,853 9,446 Depreciation and amortization 60,033 55,591 Services provided by other departments 36,629 36,374 General and administrative and other 53,565 29,457 Total operating expenses 259,813 238,906 Operating income 71,268 76,190 Non-operating revenues (expenses): 235 - Fedderal and state grants 235 - Interest and investment income 20,701 2,317 Interest expenses (43,803) (24,978) Amortization of premium, refunding loss, and issuance costs 5,997 5,400 Net (loss) from sale of assets (987) (3) Net gain/(loss) from transfer of assets 619 - Other non-operating expenses (26) (414) Net non-operating expenses (26) (414) Net non-operating expenses (26) (414) Change in net position before transfers 59,014 63,845	Operating expenses:	_		
Materials and supplies 9,853 9,446 Depreciation and amortization 60,033 55,591 Services provided by other departments 36,629 36,374 General and administrative and other 53,565 29,457 Total operating expenses 259,813 238,906 Operating income 71,268 76,190 Non-operating revenues (expenses): 235 — Federal and state grants 20,701 2,317 Interest and investment income 20,701 2,317 Interest expenses (43,803) (24,978) Amortization of premium, refunding loss, and issuance costs 5,697 5,400 Net (loss) from sale of assets (987) (3) Net gain/(loss) from transfer of assets (987) (3) Net gain/(loss) from transfer of assets (987) (3) Other non-operating expenses (26) (414) Net non-operating expenses (26) (414) Net non-operating expenses (26) (414) Net non-operating expenses (20,900) (20,900) </td <td>Personnel services</td> <td></td> <td>80,693</td> <td>91,977</td>	Personnel services		80,693	91,977
Depreciation and amortization 60,033 55,591 Services provided by other departments 36,629 36,374 General and administrative and other 53,565 29,457 Total operating expenses 259,813 238,906 Operating income 71,268 76,190 Non-operating revenues (expenses): Federal and state grants 235 — Interest and investment income 20,701 2,317 Interest expenses (43,803) (24,978) Amortization of premium, refunding loss, and issuance costs 5,697 5,400 Net (loss) from sale of assets (987) (3) Net gain/ (loss) from transfer of assets 619 — Other non-operating revenues 5,310 5,333 Other non-operating expenses (26) (414) Net non-operating expenses (26) (414) Change in net position before transfers 59,014 63,845 Transfers to the City and County of San Francisco (3,996) (26,960) Change in net position 55,018 36,885 Net position	Contractual services		19,040	16,061
Services provided by other departments 36,629 36,374 General and administrative and other 53,565 29,457 Total operating expenses 259,813 238,906 Operating income 71,268 76,190 Non-operating revenues (expenses): — Federal and state grants 235 — Interest and investment income 20,701 2,317 Interest expenses (43,803) (24,978) Amortization of premium, refunding loss, and issuance costs 5,697 5,400 Net (loss) from sale of assets (987) (3) Net gain/(loss) from transfer of assets 619 — Other non-operating revenues 5,310 5,333 Other non-operating expenses (26) (414) Net non-operating expenses (12,254) (12,345) Change in net position before transfers 59,014 63,845 Transfers to the City and County of San Francisco (3,996) (26,960) Change in net position 55,018 36,885 Net position at beginning of year 1,174,125 1,146	Materials and supplies		9,853	9,446
General and administrative and other 53,565 29,457 Total operating expenses 259,813 238,906 Operating income 71,268 76,190 Non-operating revenues (expenses): *** Federal and state grants 235 - Interest and investment income 20,701 2,317 Interest expenses (43,803) (24,978) Amortization of premium, refunding loss, and issuance costs 5,697 5,400 Net (loss) from sale of assets (987) (3) Net gain/(loss) from transfer of assets 619 - Other non-operating revenues 5,310 5,333 Other non-operating expenses (26) (414) Net non-operating expenses (26) (414) Net non-operating expenses (26) (412,345) Change in net position before transfers 59,014 63,845 Transfers to the City and County of San Francisco (3,996) (26,960) Change in net position 55,018 36,885 Net position at beginning of year 1,174,125 1,146,263 </td <td>Depreciation and amortization</td> <td></td> <td>60,033</td> <td>55,591</td>	Depreciation and amortization		60,033	55,591
Total operating expenses 259,813 238,906 Operating income 71,268 76,190 Non-operating revenues (expenses): - Federal and state grants 235 - Interest and investment income 20,701 2,317 Interest expenses (43,803) (24,978) Amortization of premium, refunding loss, and issuance costs 5,697 5,400 Net (loss) from sale of assets (987) (3) Net gain/(loss) from transfer of assets 619 - Other non-operating revenues 5,310 5,333 Other non-operating expenses (26) (414) Net non-operating expenses (26) (414) Net non-operating expenses (3996) (26,960) Change in net position before transfers 59,014 63,845 Transfers to the City and County of San Francisco (3,996) (26,960) Change in net position 55,018 36,885 Net position at beginning of year 1,174,125 1,146,263 Cumulative effect of accounting change due to error - (6,767) </td <td>Services provided by other departments</td> <td></td> <td>36,629</td> <td>36,374</td>	Services provided by other departments		36,629	36,374
Operating income 71,268 76,190 Non-operating revenues (expenses): 235 — Federal and state grants 20,701 2,317 Interest and investment income 20,701 2,317 Interest expenses (43,803) (24,978) Amortization of premium, refunding loss, and issuance costs 5,697 5,400 Net (loss) from sale of assets (987) (3) Net gain/(loss) from transfer of assets 619 — Other non-operating revenues 5,310 5,333 Other non-operating expenses (26) (414) Net non-operating expenses (12,254) (12,345) Change in net position before transfers 59,014 63,845 Transfers to the City and County of San Francisco (3,996) (26,960) Change in net position 55,018 36,885 Net position at beginning of year 1,174,125 1,146,263 Cumulative effect of accounting change due to error — (6,767) Cumulative effect of accounting change — (2,256) Beginning of year as restated	General and administrative and other	_	53,565	29,457
Non-operating revenues (expenses): 235 — Federal and state grants 20,701 2,317 Interest and investment income 20,701 2,317 Interest expenses (43,803) (24,978) Amortization of premium, refunding loss, and issuance costs 5,697 5,400 Net (loss) from sale of assets (987) (3) Net gain/(loss) from transfer of assets 619 — Other non-operating revenues 5,310 5,333 Other non-operating expenses (26) (414) Net non-operating expenses (12,254) (12,345) Change in net position before transfers 59,014 63,845 Transfers to the City and County of San Francisco (3,996) (26,960) Change in net position 55,018 36,885 Net position at beginning of year 1,174,125 1,146,263 Cumulative effect of accounting change due to error — (6,767) Cumulative effect of accounting change — (2,256) Beginning of year as restated 1,174,125 1,137,240	Total operating expenses		259,813	238,906
Federal and state grants 235 — Interest and investment income 20,701 2,317 Interest expenses (43,803) (24,978) Amortization of premium, refunding loss, and issuance costs 5,697 5,400 Net (loss) from sale of assets (987) (3) Net gain/(loss) from transfer of assets 619 — Other non-operating revenues 5,310 5,333 Other non-operating expenses (26) (414) Net non-operating expenses (26) (414) Change in net position before transfers 59,014 63,845 Transfers to the City and County of San Francisco (3,996) (26,960) Change in net position 55,018 36,885 Net position at beginning of year 1,174,125 1,146,263 Cumulative effect of accounting change due to error — (6,767) Cumulative effect of accounting change — (2,256) Beginning of year as restated 1,174,125 1,137,240	Operating income	_	71,268	76,190
Interest and investment income 20,701 2,317 Interest expenses (43,803) (24,978) Amortization of premium, refunding loss, and issuance costs 5,697 5,400 Net (loss) from sale of assets (987) (3) Net gain/(loss) from transfer of assets 619 - Other non-operating revenues 5,310 5,333 Other non-operating expenses (26) (414) Net non-operating expenses (12,254) (12,345) Change in net position before transfers 59,014 63,845 Transfers to the City and County of San Francisco (3,996) (26,960) Change in net position 55,018 36,885 Net position at beginning of year 1,174,125 1,146,263 Cumulative effect of accounting change due to error - (6,767) Cumulative effect of accounting change - (2,256) Beginning of year as restated 1,174,125 1,137,240	Non-operating revenues (expenses):	_		
Interest expenses (43,803) (24,978) Amortization of premium, refunding loss, and issuance costs 5,697 5,400 Net (loss) from sale of assets (987) (3) Net gain/(loss) from transfer of assets 619 — Other non-operating revenues 5,310 5,333 Other non-operating expenses (26) (414) Net non-operating expenses (12,254) (12,345) Change in net position before transfers 59,014 63,845 Transfers to the City and County of San Francisco (3,996) (26,960) Change in net position 55,018 36,885 Net position at beginning of year 1,174,125 1,146,263 Cumulative effect of accounting change due to error — (6,767) Cumulative effect of accounting change — (2,256) Beginning of year as restated 1,174,125 1,137,240	Federal and state grants		235	_
Amortization of premium, refunding loss, and issuance costs Net (loss) from sale of assets (987) Net gain/(loss) from transfer of assets Other non-operating revenues Other non-operating expenses (26) Other non-operating expenses (26) (414) Net non-operating expenses (12,254) Change in net position before transfers Transfers to the City and County of San Francisco Change in net position Change in net position S5,018 Other non-operating expenses (12,254) Other non-operating expenses (12,345) Other non-operating expenses (12,345) Other non-operating expenses (12,254) Other non-operating expenses (12,345) Other non-operating expenses (12,254) Other non-operating expenses (12,345) Other non-operating expenses (26) Other non-operating expenses (27) Other non-operating expenses (28) Other non-operating expenses (28) Other non-operating expenses (28) Other non-operating expenses (28)	Interest and investment income		20,701	2,317
Net (loss) from sale of assets(987)(3)Net gain/(loss) from transfer of assets619—Other non-operating revenues5,3105,333Other non-operating expenses(26)(414)Net non-operating expenses(12,254)(12,345)Change in net position before transfers59,01463,845Transfers to the City and County of San Francisco(3,996)(26,960)Change in net position55,01836,885Net position at beginning of year1,174,1251,146,263Cumulative effect of accounting change due to error—(6,767)Cumulative effect of accounting change—(2,256)Beginning of year as restated1,174,1251,137,240	Interest expenses		(43,803)	(24,978)
Net gain/(loss) from transfer of assets619-Other non-operating revenues5,3105,333Other non-operating expenses(26)(414)Net non-operating expenses(12,254)(12,345)Change in net position before transfers59,01463,845Transfers to the City and County of San Francisco(3,996)(26,960)Change in net position55,01836,885Net position at beginning of year1,174,1251,146,263Cumulative effect of accounting change due to error-(6,767)Cumulative effect of accounting change-(2,256)Beginning of year as restated1,174,1251,137,240	Amortization of premium, refunding loss, and issuance costs		5,697	5,400
Other non-operating revenues5,3105,333Other non-operating expenses(26)(414)Net non-operating expenses(12,254)(12,345)Change in net position before transfers59,01463,845Transfers to the City and County of San Francisco(3,996)(26,960)Change in net position55,01836,885Net position at beginning of year1,174,1251,146,263Cumulative effect of accounting change due to error-(6,767)Cumulative effect of accounting change-(2,256)Beginning of year as restated1,174,1251,137,240	Net (loss) from sale of assets		(987)	(3)
Other non-operating expenses(26)(414)Net non-operating expenses(12,254)(12,345)Change in net position before transfers59,01463,845Transfers to the City and County of San Francisco(3,996)(26,960)Change in net position55,01836,885Net position at beginning of year1,174,1251,146,263Cumulative effect of accounting change due to error—(6,767)Cumulative effect of accounting change—(2,256)Beginning of year as restated1,174,1251,137,240	Net gain/(loss) from transfer of assets		619	_
Net non-operating expenses(12,254)(12,345)Change in net position before transfers59,01463,845Transfers to the City and County of San Francisco(3,996)(26,960)Change in net position55,01836,885Net position at beginning of year1,174,1251,146,263Cumulative effect of accounting change due to error—(6,767)Cumulative effect of accounting change—(2,256)Beginning of year as restated1,174,1251,137,240	Other non-operating revenues		5,310	5,333
Change in net position before transfers59,01463,845Transfers to the City and County of San Francisco(3,996)(26,960)Change in net position55,01836,885Net position at beginning of year1,174,1251,146,263Cumulative effect of accounting change due to error–(6,767)Cumulative effect of accounting change–(2,256)Beginning of year as restated1,174,1251,137,240	Other non-operating expenses	_	(26)	(414)
Transfers to the City and County of San Francisco(3,996)(26,960)Change in net position55,01836,885Net position at beginning of year1,174,1251,146,263Cumulative effect of accounting change due to error–(6,767)Cumulative effect of accounting change–(2,256)Beginning of year as restated1,174,1251,137,240	Net non-operating expenses		(12,254)	(12,345)
Change in net position55,01836,885Net position at beginning of year1,174,1251,146,263Cumulative effect of accounting change due to error–(6,767)Cumulative effect of accounting change–(2,256)Beginning of year as restated1,174,1251,137,240	Change in net position before transfers	_	59,014	63,845
Net position at beginning of year1,174,1251,146,263Cumulative effect of accounting change due to error–(6,767)Cumulative effect of accounting change–(2,256)Beginning of year as restated1,174,1251,137,240	Transfers to the City and County of San Francisco		(3,996)	(26,960)
Cumulative effect of accounting change due to error-(6,767)Cumulative effect of accounting change-(2,256)Beginning of year as restated1,174,1251,137,240	Change in net position		55,018	36,885
Cumulative effect of accounting change-(2,256)Beginning of year as restated1,174,1251,137,240	Net position at beginning of year		1,174,125	1,146,263
Beginning of year as restated 1,174,125 1,137,240	Cumulative effect of accounting change due to error		_	(6,767)
	Cumulative effect of accounting change		_	(2,256)
Net position at end of year \$ 1,229,143 1,174,125	Beginning of year as restated	_	1,174,125	1,137,240
	Net position at end of year	\$ _	1,229,143	1,174,125

See accompanying notes to financial statements.

Statements of Cash Flows Years ended June 30, 2019 and 2018 (In thousands)

	2019	2018
Cash flows from operating activities:	 	
Cash received from customers, including cash deposits	\$ 328,729	312,769
Cash received from tenants for rent	653	657
Cash paid to employees for services	(84,071)	(85,045)
Cash paid to suppliers for goods and services	(107,233)	(71,659)
Cash paid for judgments and claims	(367)	(2,124)
Net cash provided by operating activities	137,711	154,598
Cash flows from non-capital financing activities: Cash received from grants	212	891
Cash received from settlements	_	141
Cash received from miscellaneous revenues	897	1,181
Cash paid for rebates and program incentives	(26)	(414)
Transfers to the City and County of San Francisco	(4,510)	(26,960)
Net cash (used in) non-capital financing activities	(3,427)	(25,161)
Cash flows from capital and related financing activities: Proceeds from sale of capital assets	 	21
·	_	21
Proceeds from bond issuance, net of premium Proceeds from commercial paper berrowings	663,103 53,639	151 // 0
Proceeds from commercial paper borrowings Proceeds from State revolving fund loans	*	151,448
5	45,078	6,719
Principal paid on long-term debt Principal paid on commercial paper	(21,686) (25,000)	(20,658)
Principal paid on State revolving fund loans	(1,425)	_
Interest paid on long-term debt	(60,309)	 (45,924)
Interest paid on commercial paper	(3,646)	(1,436)
Interest paid on State revolving fund loans	(232)	(1,430)
Issuance cost paid on long-term debt	(2,801)	(208)
Acquisition and construction of capital assets	(278,006)	(258,984)
Federal interest income subsidy for Build America Bonds	4,018	4,008
•	372,733	(165,014)
Net cash provided by (used in) capital and related financing activities	 312,133	(105,014)
Cash flows from investing activities: Interest income received	12,654	1,828
Proceeds from sale of investments outside City Treasury	166,729	85,012
Purchase of investments outside City Treasury	(173,033)	(77,977)
Net cash provided by investing activities	 6,350	8,863
Increase (decrease) in cash and cash equivalents Cash and cash equivalents:	 513,367	(26,714)
Beginning of year	213,817	240,531
End of year	\$ 727,184	213,817
Reconciliation of cash and cash equivalents to the statements of net position:		
Cash and investments with City Treasury:		
Unrestricted	\$ 209,109	164,107
Restricted	483,885	36,054
Cash and investments outside City Treasury:		
Unrestricted	274	262
Restricted	44,928	14,282
Less: Restricted (with maturity more than 90 days - see table in Note 3)	(8,320)	(2,016)
Less: Unrealized (gain) loss on investments	(2,692)	1,128
Cash and cash equivalents at the end of year on	\$ 727,184	213,817
statements of cash flows	 	

Statements of Cash Flows Years ended June 30, 2019 and 2018 (In thousands)

	 2019	2018	
Reconciliation of operating income to net cash provided by			
operating activities:			
Operating income	\$ 71,268	76,190	
Adjustment to reconcile operating income to net cash	 		
provided by operating activities:			
Depreciation and amortization	60,033	55,591	
Provision for uncollectible accounts	149	(248)	
Write-off of capital assets	8,386	4,729	
Receivables:			
Charges for services	(2,674)	(1,707)	
Prepaid charges, advances, and other	508	132	
Due from other City departments	(184)	44	
Inventory	(202)	(36)	
Accounts payable	52	12,563	
Accrued payroll	258	(184)	
Other post-employment benefits obligations	(2,484)	2,423	
Pension obligations	(3,958)	2,458	
Accrued vacation and sick leave	862	466	
Accrued workers' compensation	130	204	
Due to other City departments	_	(84)	
Pollution remediation obligation	2,797	1,992	
Damage claims liability	2,302	(83)	
Unearned revenues, refunds, and other liabilities	468	148	
Total adjustments	 66,443	78,408	
Net cash provided by operating activities	\$ 137,711	154,598	
Noncash transactions:			
Accrued capital asset costs	\$ 42,931	48,720	
Interfund payable	955	1,061	
Unrealized (gain) loss on investments	(2,692)	1,128	

See accompanying notes to financial statements.

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(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 (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 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 Enterprises are included in the Comprehensive Annual 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, 2019 and 2018, the

Notes to Financial Statements
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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).

(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

Notes to Financial Statements
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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 are valued at acquisition value at the time of donation. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the related 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

Under GASB Statement No. 51, Accounting and Financial Reporting for 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, and permits. The accounting pronouncement also provides guidance on the capitalization of internally generated intangible assets, such as the development and installation of computer software by or on behalf of the reporting entity.

According to the standard, the Enterprise is required to capitalize intangible assets with a useful life extending beyond one reporting period. The Enterprise has established a capitalization threshold of \$100. GASB Statement No. 51 also requires amortization of intangible assets over the benefit period, 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) Capitalization of Interest

A portion of the interest cost incurred on capital projects is capitalized on assets that require a period of time for construction or to otherwise prepare them for their intended use. Such amounts are amortized over the useful lives of the assets (see Note 4).

(i) 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.

(j) 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.

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(k) 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 11(c)).

(I) 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 11(a)).

(m) 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. No arbitrage liability is due as of June 30, 2019 or 2018.

(n) 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.

(o) Income Taxes

As a department of a government agency, the Enterprise is exempt from both federal income taxes and California State franchise taxes.

(p) 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 bimonthly 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, 2019 and 2018 were \$13,991 and \$12,095, respectively.

(a) 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.

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(r) 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
- 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 12(d)).

(s) 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.

The provisions of GASB Statement No. 75 are effective for the Enterprise's year ended June 30, 2019 and 2018. While restatement of all prior periods was not practical because the actuarial information was not available, the cumulative effect of applying this Statement is reported as a restatement of beginning net position as of July 1, 2017 as follows:

Record Beginning Net OPEB Liability	\$ (56,870)
Record Beginning Deferred Outflows of Resources - OPEB Items	2,944
Remove Net OPEB Obligation (Change from GASB 45)	51,670
Total Cumulative Effect of Change in Accounting Principle	\$ (2,256)

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(t) Immaterial Correction of 2018 Financial Statement Amounts

The Enterprise recorded certain immaterial corrections to the 2018 financial statement to eliminate the recognition of certain capital assets that are recorded by another fund. The impact of the change was to decrease beginning position as of July 2017 by \$6,767 and increase fiscal year 2018 expenses by \$28,313.

(u) New Accounting Standard Adopted in Fiscal Year 2019

- 1) In November 2016, the GASB issued Statement No. 83, Certain Asset Retirement Obligations. GASB Statement No. 83 establishes accounting and financial reporting standards for certain asset retirement obligations (AROs). The new standard is effective for periods beginning after June 15, 2018. The Enterprise adopted the provisions of this Statement, which did not have a significant impact on its financial statements.
- 2) In March 2018, the GASB issued Statement No. 88, Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements. GASB Statement No. 88 establishes additional financial statement note disclosure requirements related to debt obligations of governments, including direct borrowings and direct placements. The new standard is effective for periods beginning after June 15, 2018. The Enterprise adopted the provisions of this Statement. Refer to Notes 6 and 7 for details.

(v) GASB Statements Implemented in Fiscal Year 2018

- 1) In June 2015, the GASB issued Statement No. 75, Accounting and Financial Reporting for Postemployment Benefit Other Than Pension Plans. GASB Statement No. 75 revises and establishes new accounting and financial reporting requirements for governments that provides their employees with other postemployment benefits other than pensions (OPEB). The new standard is effective for periods beginning after June 15, 2017. The Enterprise adopted the provisions of this Statement. Refer to Note 9(b) for details.
- 2) In March 2016, the GASB issued Statement No. 81, Irrevocable Split-Interest Agreements. GASB Statement No. 81 establishes accounting and financial reporting standards for irrevocable split-interest agreement created through trusts in which a donor irrevocably transfers resources to an intermediary. The new standard is effective for periods beginning after December 15, 2016. The Enterprise adopted the provisions of this Statement, which did not have a significant impact on its financial statements.
- 3) In March 2017, the GASB issued Statement No. 85, *Omnibus 2017*. GASB Statement No. 85 addresses practice issues identified during the implementation and application of certain GASB Statements. The new standard is effective for periods beginning after June 15, 2017. The Enterprise adopted the provisions of this Statement, which did not have a significant impact on its financial statements.
- 4) In May 2017, the GASB issued Statement No. 86, *Certain Debt Extinguishment Issues*. GASB Statement No. 86 improves accounting and financial reporting for in-substance defeasance of debt using existing resources other than proceeds of refunding debt. The new standard is effective for periods beginning after June 15, 2017. The Enterprise adopted the provisions of this Statement, which did not have a significant impact on its financial statements.

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(w) Future Implementation of New Accounting Standards

- 1) In January 2017, the GASB issued Statement No. 84, *Fiduciary Activities*. GASB Statement No. 84 establishes criteria for state and local governments to identify fiduciary activities and how those activities should be reported. The new standard is effective for periods beginning after December 15, 2018. The Enterprise will implement the provisions of Statement No. 84 in fiscal year 2020.
- 2) 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 December 15, 2019. The Enterprise will implement the provisions of Statement No. 87 in fiscal year 2021.
- 3) 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 a construction period. The new standard is effective for periods beginning after December 15, 2019. The Enterprise will implement the provisions of Statement No. 89 in fiscal year 2021.
- 4) In August 2018, the GASB issued Statement No. 90, Accounting and Financial Reporting for Majority Equity Interests. GASB Statement No. 90 provides clarification when a government should report a majority equity interest in a legally separate organization as either a component unit or an investment. The new standard is effective for periods beginning after December 15, 2018. The Enterprise will implement the provisions of Statement No. 90 in fiscal year 2020.
- 5) 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, 2020. The Enterprise will implement the provisions of Statement No. 91 in fiscal year 2022.

(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 for bond reserves is held by an independent trustee outside the City investment pool. The balances as of June 30, 2019 and 2018 were \$44,928 and \$14,282, 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 the Federal Securities

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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, 2019 and 2018.

Cash and Investments outside City Treasury

						Fair Valu	nts Using	
		June 30,	201	.9		Quoted prices in active markets for	Significant other	
Investments	Credit Ratings (S&P/Moody's)	Maturities		Fair Value	Investments exempt from fair value	identical assets (Level 1)	observable inputs (Level 2)	Unobservable Inputs (Level 3)
Commercial Paper	A-1/P-1	October 31, 2019	\$	8,320	8,320		_	_
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days		36,578	36,578	_	_	_
Money Market Funds	A-1+/P-1	< 90 days		23	23	_	_	_
Cash and Cash Equivalents	N/A			7	7	_	_	_
Total Restricted Cash and In	vestments outside	City Treasury	\$	44,928	44,928			
Cash and Cash Equivalents	N/A		-	274	274			_
Total Cash and Investments	outside City Treasu	ry	\$	274	274			

Cash and Investments outside City Treasury

						Fair Valu	nts Using	
		June 30, 2018				Quoted prices in active markets for	Significant other	
Investments	Credit Ratings (S&P/Moody's)	Maturities		Fair Value	Investments exempt from fair value	identical assets (Level 1)	observable inputs (Level 2)	Unobservable Inputs (Level 3)
U.S Agencies	AA+/Aaa	March 20, 2020	\$	2,016			2,016	
Commercial Paper	A-1+/P-1	< 90 days		8,143	8,143	_	_	_
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days		4,102	4,102	_	_	_
Money Market Funds	A-1+/P-1	< 90 days		14	14	_	_	_
Cash and Cash Equivalents	N/A			7	7	_	_	_
Total Restricted Cash and In	vestments outside	City Treasury	\$	14,282	12,266		2,016	
Cash and Cash Equivalents	N/A		-	262	262			
Total Cash and Investments o	outside City Treasu	у	\$	262	262			

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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, 2019 and 2018 included a \$21 and \$70 unrealized gain due to changes in fair values on Commercial Paper.

The Enterprise's cash, cash equivalents, and investments are shown on the accompanying statements of net position as follows:

	2019	2018
Current assets:		
Cash and investments with City Treasury	\$ 209,109	164,107
Cash and investments outside City Treasury	274	262
Restricted cash and investments outside City Treasury	44,928	14,282
Non-current assets:		
Restricted cash and investments with City Treasury	483,885	36,054
Total cash, cash equivalents, and investments	\$ 738,196	214,705

The following table shows the percentage distribution of the City's pooled investments by maturity:

	Investment maturities (in months)									
Fiscal years ended June 30	Under 1	1 to less than 6	6 to less than 12	12 to 60						
2019	17.4%	22.2%	16.3%	44.1%						
2018	14.3%	22.1%	18.5%	45.1%						

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(4) Capital Assets

Capital assets with a useful life of 50 years or greater include buildings and structures, sewers, wastewater treatment plants, pump stations, and other pipelines.

Capital assets as of June 30, 2019 and 2018 consisted of the following:

	2018	Increases	Decreases	2019
Capital assets not being depreciated and amortized:				
Land and rights-of-way	\$ 35,737	291	(10)	36,018
Intangible assets	3,046	_	_	3,046
Construction work in progress	652,521	296,972	(183,869)	765,624
Total capital assets not being depreciated and amortized	691,304	297,263	(183,879)	804,688
Capital assets being depreciated and amortized:				
Facilities and improvements	2,996,648	176,608	(2,029)	3,171,227
Intangible assets	4,615	_	_	4,615
Machinery and equipment	98,223	1,793	(55)	99,961
Total capital assets being depreciated and amortized:	3,099,486	178,401 *	(2,084)	3,275,803
Less accumulated depreciation and amortization for:				
Facilities and improvements	(1,231,798)	(55,422)	1,010	(1,286,210)
Intangible assets	(4,341)	(137)	_	(4,478)
Machinery and equipment	(63,525)	(4,474)	_	(67,999)
Total accumulated depreciation and amortization	(1,299,664)	(60,033)	1,010	(1,358,687)
Total capital assets being depreciated and amortized, net	1,799,822	118,368	(1,074)	1,917,116
Total capital assets, net	\$ 2,491,126	415,631	(184,953)	2,721,804

^{*} Decrease in construction work in progress is greater than increase in capital assets being depreciated is explained by \$8,386 in capital project write-offs, mainly related to the Biofuel Alternative Energy Program, Advanced Rainfall Prediction Project, and the Flood Resilience Early Projects

	2017	Increases	Decreases	2018
Capital assets not being depreciated and amortized:				
Land and rights-of-way	\$ 35,737	_	_	35,737
Intangible assets	3,046	_	_	3,046
Construction work in progress	548,179	306,096	(201,754) *	652,521
Total capital assets not being depreciated and amortized	586,962	306,096	(201,754)	691,304
Capital assets being depreciated and amortized:				
Facilities and improvements	2,806,674	189,974	_	2,996,648
Intangible assets	4,615	_	_	4,615
Machinery and equipment	97,825	725	(327)	98,223
Total capital assets being depreciated and amortized:	2,909,114	190,699 *	(327)	3,099,486
Less accumulated depreciation and amortization for:				
Facilities and improvements	(1,181,236)	(50,562)	_	(1,231,798)
Intangible assets	(4,204)	(137)	_	(4,341)
Machinery and equipment	(58,936)	(4,892)	303	(63,525)
Total accumulated depreciation and amortization	(1,244,376)	(55,591)	303	(1,299,664)
Total capital assets being depreciated and amortized, net	1,664,738	135,108	(24)	1,799,822
Total capital assets, net	\$ 2,251,700	441,204	(201,778)	2,491,126

^{*} Decrease in construction work in progress is greater than increase in capital assets being depreciated is explained by \$11,496 in capital project write-offs, mainly related to the Land Reuse 1800 Jerrold Project, Primary Sludge Handling Improvement Project, Collection System Condition Assessment Project, and the OSP Condition Assessment Repair Project.

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GASB Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 Financial Accounting Standards Board (FASB) and American Institute of Certified Public Accountants (AICPA) Pronouncements, requires that interest expense incurred during construction of assets be capitalized. Interest included in the construction work in progress and total interest expense incurred during the years ended June 30, 2019 and 2018 are as follows:

		2019	2018
Interest expensed	\$	43,803	24,978
Interest included in construction work in progress	_	27,354	22,415
Total interest incurred	\$	71,157	47,393

(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 State revolving fund loans:
- 3. The payment of bonds, parity State revolving fund loans, policy costs, and amounts due as reimbursement under any letter of credit agreement; and
- 4. Any other lawful purpose of the Enterprise.

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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, 2019 and 2018:

		2019	2018
Cash and investments with City Treasury:	-		
Wastewater revenue bond construction fund	\$	483,885	36,054
Cash and investments outside City Treasury:			
2009 Series C Certificates of Participation - 525 Golden Gate		475	461
2009 Series D Certificates of Participation - 525 Golden Gate		1,873	1,826
2010 Series A Wastewater revenue bond fund		3,609	3,531
2010 Series B Wastewater revenue bond fund		6,480	6,366
2013 Series B Wastewater revenue bond fund		2	1
2016 Series A Wastewater revenue bond fund		2	1,619
2016 Series B Wastewater revenue bond fund		_	457
2018 Series A Wastewater revenue bond fund		14,617	_
2018 Series B Wastewater revenue bond fund		12,648	_
2018 Series C Wastewater revenue bond fund		5,192	_
Commercial Paper - Tax Exempt		30	21
Total cash and investments outside City Treasury	_	44,928	14,282
Interest and other receivables:	-		
Wastewater revenue bond construction fund including capacity fee receivables		5,173	731
Total restricted assets	\$	533,986	51,067
	=		

Restricted assets listed above as cash and investments with City Treasury are held in subfund 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 has 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 \$291,498 and \$262,859 in commercial paper outstanding as of June 30, 2019 and 2018, respectively.

In accordance with GASB Statement No. 88, Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements, the Enterprise had \$458,502 and \$487,141 in unused authorization as of June 30, 2019 and 2018, 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, 2019, there were no such events described herein.

(7) Changes in Long-Term Liabilities

Long-term liability activities for the years ended June 30, 2019 and 2018 are as follows:

		Maturity					Due
	Interest rate	(Calenda Year)	r 2018	Additions	Reductions	2019	within one year
Revenue Bonds:							
2010 Series A	4.00% - 5.00%	2021	\$ 32,820	_	(7,630)	25,190	7,980
2010 Series B (Build America)	4.65 - 5.82	2040	192,515	_	_	192,515	_
2013 Series A	1.00 - 5.00	2025	71,930	_	(13,380)	58,550	14,105
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	_
2018 Series B	5.00	2043	_	185,950	_	185,950	_
2018 Series C	2.13	2048	_	179,145	_	179,145	_
For issuance premiums			81,896	68,958	(8,630)	142,224	_
Total revenue bonds payable			1,019,146	663,103	(29,640)	1,652,609	22,085
2009 Series C Certificates of Participation (COPs)	2.00 - 5.00	2022	3,745	_	(676)	3,069	711
2009 Series C COPs issuance premiums			118	_	(42)	76	_
2009 Series D COPs (Build America)	6.36 - 6.49	2041	24,458	_	_	24,458	_
State Revolving Fund Loans (CWSRF loans)	1.60 - 1.80	2050	22,607	66,850	(1,425)	88,032	1,239
Other post-employment benefits obligations			59,517	2,833	(8,783)	53,567	_
Net pension liability			100,973	12,620	(28,556)	85,037	_
Accrued vacation and sick leave			6,415	3,953	(3,091)	7,277	4,151
Accrued workers' compensation			5,784	1,944	(1,814)	5,914	1,031
Damage claims liability			14,066	4,699	(2,397)	16,368	7,013
Pollution remediation obligation			4,703	3,000	(203)	7,500	
Total			\$ 1,261,532	759,002	(76,627)	1,943,907	36,230

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	I	Maturity	у					Due
	•	Calenda	ar					within
	rate	Year)		2017	Additions	Reductions	2018	one year
Revenue Bonds:								
2010 Series A	4.00% - 5.00%	2021	\$	40,115	_	(7,295)	32,820	7,630
2010 Series B (Build America)	4.65 - 5.82	2040		192,515	_	_	192,515	_
2013 Series A	1.00 - 5.00	2025		84,650	_	(12,720)	71,930	13,380
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	_
For issuance premiums				87,660		(5,764)	81,896	
Total revenue bonds payable				1,044,925	_	(25,779)	1,019,146	21,010
2009 Series C Certificates of Participation (COPs)	2.00 - 5.00	2022		4,388	_	(643)	3,745	676
2009 Series C COPs issuance premiums				167	_	(49)	118	_
2009 Series D COPs (Build America)	6.36 - 6.49	2041		24,458	_	_	24,458	_
State Revolving Fund Loans (CWSRF loans)	1.60 - 1.80	2050		_	22,607	_	22,607	296
Other post-employment benefits obligations				51,670	10,270	(2,423)	59,517	-
Net pension liability				118,907	18,832	(36,766)	100,973	_
Accrued vacation and sick leave				5,949	4,081	(3,615)	6,415	3,766
Accrued workers' compensation				5,580	1,769	(1,565)	5,784	1,027
Damage claims liability				14,149	3,936	(4,019)	14,066	6,376
Pollution remediation obligation				2,711	2,603	(611)	4,703	
Total			\$	1,272,904	64,098	(75,470)	1,261,532	33,151

The payments of principal and interest amounts on various bonds 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. Bonds mature through October 1, 2021. The true interest cost is 2.9%. As of June 30, 2019 and 2018, the 2010 Series A bonds' principal amount outstanding was \$25,190 and \$32,820, respectively.

(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. Bonds mature through October 1, 2040. The true interest cost is 3.7%. As of June 30, 2019 and 2018, the 2010 Series B bonds' principal amount outstanding was \$192.515.

(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

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bonds maturing on and after October 1, 2013. The bonds carried "Aa3" and "AA-" ratings from Moody's and S&P, respectively. 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 have a true interest cost of 1.2%. 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. As of June 30, 2019 and 2018, the principal amount outstanding of the 2013 Series A bonds was \$58,550 and \$71,930, 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. Bonds mature through October 1, 2042. The true interest cost is 3.6%. As of June 30, 2019 and 2018, the principal amount outstanding of the 2013 Series B bonds was \$331,585.

(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. Bonds mature through October 1, 2046. The bonds have a true interest cost of 3.2%. As of June 30, 2019 and 2018, the principal amount outstanding of the 2016 Series A bonds was \$240,580.

(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. Bonds mature through October 1, 2046. The bonds have a true interest cost of 3.2%. As of June 30, 2019 and 2018, 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 pay the costs of issuing the bonds. The bonds carried ratings of "AA" and "Aa3" from S&P and Moody's, respectively. Bonds mature through October 1, 2043. The bonds have a true interest cost of 3.4%. As of June 30, 2019, the principal amount outstanding of the 2018 Series A bonds was \$229,050.

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(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. Bonds mature through October 1, 2043. The bonds have a true interest cost of 3.5%. As of June 30, 2019, the principal amount outstanding of the 2018 Series B bonds was \$185,950.

(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. Bonds mature through October 1, 2048. The Initial Mandatory Tender date of the 2018 Series C bonds is October 1, 2023. The bonds have a true interest cost of 2.2%. As of June 30, 2019, the principal amount outstanding of the 2018 Series C bonds was \$179,145.

(j) Future Annual Debt Services of Revenue and Refunding Bonds

The following table presents the future annual debt service relating to the revenue and refunding bonds outstanding as of June 30, 2019. The interest before subsidy amounts include the interest for 2010 Series A and B, 2013 Series A and B, 2016 Series A and B, and 2018 Series A, B, and C bonds. The federal interest subsidy amounts represent 35% of the interest, excluding sequestration, for the 2010 Series B revenue bonds.

		Principal	Interest before subsidy	Federal interest subsidy*	Interest net of subsidy
Fiscal years ending June 30:	_				
2020	\$	22,085	66,050	(3,519)	62,531
2021		23,240	64,966	(3,519)	61,447
2022		22,880	63,863	(3,519)	60,344
2023		34,345	62,496	(3,464)	59,032
2024		36,905	62,441	(3,349)	59,092
2025-2029		203,075	291,863	(14,767)	277,096
2030-2034		256,905	233,808	(10,696)	223,112
2035-2039		322,630	162,620	(5,545)	157,075
2040-2044		360,305	81,777	(526)	81,251
2045-2049		228,015	21,080	_	21,080
		1,510,385	1,110,964	(48,904)	1,062,060
Less: Current portion		(22,085)			-
Add: Unamortized bond premiums		142,224			
Long-term portion as of June 30, 2019	\$	1,630,524			

^{*} The SFPUC received IRS notice dated July 9, 2019 that the federal interest subsidy on the 2010 Series B bonds is reduced by 5.9%, or a total reduction of \$3,066, due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same.

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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).

(k) 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 mature 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 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 C outstanding as of June 30, 2019 are as follows:

Certificates of Participation 2009

Series C (Tax Exempt)	_	Principal	Interest	Total
Fiscal years ending June 30:		_		
2020	\$	711	136	847
2021		747	99	846
2022		785	61	846
2023		826	21	847
		3,069	317	3,386
Less: Current portion		(711)		
Add: Unamortized bond premiums		76		
Long-term portion as of June 30, 2019	\$	2,434		

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The future annual debt services relating to the certificates of participation 2009 Series D outstanding as of June 30, 2019 are as follows:

Certificates of Participation 2009 Series D (Taxable)		Principal	Interest before subsidy	Federal interest subsidy*	Interest net of subsidy
Fiscal years ending June 30:					
2020	\$	_	1,578	(520)	1,058
2021		_	1,578	(520)	1,058
2022		_	1,578	(520)	1,058
2023		_	1,578	(520)	1,058
2024		864	1,551	(510)	1,041
2025-2029		4,893	6,863	(2,260)	4,603
2030-2034		6,019	5,121	(1,687)	3,434
2035-2039		7,422	2,950	(971)	1,979
2040-2042		5,260	521	(172)	349
Total			23,318	(7,680)	15,638
Long-term portion as of June 30, 2019	\$_	24,458			

^{*}The SFPUC received IRS notice dated July 9, 2019 that the federal interest subsidy on the 2009 Series D bonds is reduced by 5.9%, or a total reduction of \$482, due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same.

(I) 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; substantial completion is expected by July 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 \$4,893. As of June 30, 2019 and 2018, the principal amount outstanding of the loan was \$4,893.

(m) 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 Clean Water State Revolving Fund ("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 is expected by July 2019. The CWSRF loan is secured on a parity lien basis with the Enterprise's outstanding revenue bonds. The

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SFPUC has submitted requests for loan disbursements to date totaling \$37,661. As of June 30, 2019, the principal amount outstanding of the loan was \$37,661.

(n) 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 Clean Water State Revolving Fund ("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 loan disbursements to date totaling \$17,706. As of June 30, 2019 and 2018 the principal amount outstanding of the loan was \$17,098 and \$17,714, respectively.

(o) 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 Clean Water State Revolving Fund ("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 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 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, 2019 and 2018, the principal amount outstanding of the loan was \$28,380 and \$0.

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(p) Future Annual Debt Services of State Revolving Fund Loans (CWSRF Loans)

The future annual debt services relating to the State Revolving Fund Loan to fund the Lake Merced Green Infrastructure Project, the North Point Facility Outfall Rehabilitation Project, the SEP Primary/Secondary Clarifier Upgrade Project, and the SEP 521/522 and Disinfection Upgrade Project outstanding as of June 30, 2019 are as follows:

California Clean Water State Revolving Fund Loan	า	Principal	Interest	Total
Fiscal years ending June 30:		_		_
2020	\$	1,239	787	2,026
2021		2,187	1,474	3,661
2022		2,355	1,513	3,868
2023		2,397	1,471	3,868
2024		2,439	1,428	3,867
2025-2029		12,868	6,470	19,338
2030-2034		14,061	5,277	19,338
2035-2039		15,365	3,973	19,338
2040-2044		16,790	2,548	19,338
2045-2049		16,321	991	17,312
2050-2051	_	2,010	39	2,049
		88,032	25,971	114,003
Less: Current portion		(1,239)		
Long-term portion as of June 30, 2019	\$	86,793		

(q) WIFIA Loan Agreement-Biosolids Digester Facility Project

In July 2018 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 \$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 loan will bear 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. The SFPUC has not submitted any requests for loan disbursements to date and there is no outstanding loan principal as of June 30, 2019.

(r) 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

Notes to Financial Statements
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(Dollars in thousands, unless otherwise stated)

obligations or of a credit provider), declaring the principal and the interest accrued thereon, to be due and payable immediately. As of June 30, 2019, there were no such events described herein.

(8) Revenue Pledge

The Enterprise has pledged future revenues to repay various revenue bonds. Proceeds from the revenue bonds provided financing for various capital construction projects, and to refund previously issued bonds. The bonds are payable through fiscal year 2049 and are solely from revenues of the Enterprise.

The original amount of revenue bonds issued, total principal and interest remaining, principal and interest paid during fiscal years 2019 and 2018, applicable net revenues, and funds available for debt service are as follows:

	2019	2018
Bonds issued with revenue pledge	\$ 1,667,095	1,072,950
Clean Water State Revolving Fund (CWSRF) loans with revenue pledge	89,456	_
Principal and interest remaining due at the end of the year	2,735,352	1,602,132
Principal and interest paid during the year	60,347	47,003
Net revenues for the year ended June 30	150,365	156,426
Funds available for debt service	253,646	310,022

(9) Employee Benefits

(a) Pension Plan

The Enterprise participates in a cost-sharing multiple-employer defined benefit pension Plan (the Plan). The Plan is administered by the San Francisco City and County Employees' Retirement System (SFERS). 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 Plans, and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by Cheiron, the consulting actuary for the 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 reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:

San Francisco Employees' Retirement System - Cost Sharing

Fiscal year 2019		
Valuation Date (VD)	June 30, 2017 updated to June 30, 2018	
Measurement Date (MD)	June 30, 2018	
Measurement Period (MP)	July 1, 2017 to June 30, 2018	
E:	incel year 2019	
	iscal year 2018	
Valuation Date (VD)	June 30, 2016 updated to June 30, 2017	
Measurement Date (MD)	June 30, 2017	
Measurement Period (MP)	July 1, 2016 to June 30, 2017	

Notes to Financial Statements
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The City is an employer of the Plan with a proportionate share of 94.10% as of June 30, 2018 (measurement date), and 94.07% as of June 30, 2017 (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 2018 and 2017. The Enterprise's net pension liability, 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 2.11% as of June 30, 2018 and 2.15% as of June 30, 2017 (measurement dates).

Plan Description – The 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 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 Plan. 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.

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 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 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%.

Notes to Financial Statements
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The Plan provides for a Supplemental COLA in years when there are sufficient "excess" investment earnings in the 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 Plan is also fully funded on a market value of assets basis. Certain provision 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 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 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.

Funding & Contribution Policy – Contributions are made to the basic plan 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 13.0% as a percentage of gross covered salary in fiscal years 2019 and 2018. 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, 2017 actuarial report, the required employer contribution rate for fiscal year 2019 was 18.81% to 23.31%. Based on the July 1, 2016 actuarial report, the required employer contribution rate for fiscal year 2018 was 18.96% to 23.46%.

Employer contributions and employee contributions made by the employer to the 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, 2018 and 2017 (measurement periods) were \$582,568 and \$519,073, respectively. The Enterprise's allocation of employer contributions for fiscal year 2018 and 2017 was \$12,523 and \$11,270.

Pension Liabilities, Pension Expenses, Deferred Outflows, and Inflows of Resources Related to Pensions

Fiscal Year 2019

The City reported net pension liabilities for its proportionate share of the pension liability of the Plan of \$4,030,207 as of June 30, 2019. The City's net pension liability for the Plan is measured as the proportionate share of the net pension liability. The net pension liability of the Plan is measured as of June 30, 2018 (measurement date), and the total pension liability for the Plan used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2017 rolled forward to June 30, 2018 using standard update procedures. The City's proportion of the net pension liability was based on a projection of the City's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. The

Notes to Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Enterprise's allocation of the City's proportionate share of the net pension liability for the Plan as of June 30, 2019 was \$85,037.

For the year ended June 30, 2019, the City's recognized pension expense was \$488,255 including amortization of deferred outflow/inflow related pension items. The Enterprise's allocation of pension expense including amortization of deferred outflow/inflow related pension items was \$8,858. Pension expense decreased from the prior year, largely due to the impact of actual investment earnings.

As of June 30, 2019, the Enterprise's reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

Fiscal Year 2019 Schedule of Deferred Outflows and Inflows of Resources

	I	Deferred Outflows	Deferred Inflows
		of Resources	of Resources
Pension contributions subsequent to measurement date	\$	12,816	_
Differences between expected and actual experience		690	2,407
Changes in assumptions		13,259	_
Net difference between projected and actual earnings on			
pension plan investments		_	13,669
Change in employer's proportion		121	81
Tota	\$	26,886	16,157

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:

	Deferred	
		Outflows/(Inflows)
Fiscal years		of Resources
2020	\$	5,427
2021		2,387
2022		(6,994)
2023		(2,907)
Total	\$	(2,087)

Fiscal Year 2018

The City reported net pension liabilities for its proportionate share of the pension liability of the Plan of \$4,697,129, as of June 30, 2018. The City's net pension liability for the Plan is measured as the proportionate share of the net pension liability. The net pension liability of the Plan is measured as of June 30, 2017 (measurement date), and the total pension liability for the Plan used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2016 rolled forward to June 30, 2017 using standard update procedures. The City's proportion of the net pension liability was based on a projection of the City's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. The

Notes to Financial Statements
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Enterprise's allocation of the City's proportionate share of the net pension liability for the Plan as of June 30, 2018 was \$100,973.

For the year ended June 30, 2018, the City's recognized pension expenses was \$732,895, including amortization of deferred outflow/inflow related pension items. The Enterprise's allocation of pension expense including amortization of deferred outflow/inflow related pension items was \$15,005. Pension expense decreased from the prior year, largely due to the impact of actual investment earnings.

As of June 30, 2018, the Enterprise's reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

Fiscal Year 2018 Schedule of Deferred Outflows and Inflows of Resources

	[Deferred Outflows of Resources	Deferred Inflows of Resources
Pension contribution subsequent to measurement date	\$	12,523	
Differences between expected and actual experience		937	3,048
Changes in assumptions		16,373	297
Net difference between projected and actual earnings on			
pension plan investments		_	3,767
Change in employer's proportion		151	165
Tota	I \$ _	29,984	7,277

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:

Deferred
Outflows/(Inflows)

Fiscal years	_	of Resources
2019	\$	468
2020		8,487
2021		5,391
2022		(4,162)
Total	\$	10,184

Actuarial Assumptions

Fiscal Year 2019

A summary of the actuarial assumptions and methods used to calculate the Total Pension Liability as of June 30, 2018 (measurement period) is provided below, including any assumptions that differ from those used in the July 1, 2017 actuarial valuation. Refer to the July 1, 2017 actuarial valuation report for a complete description of all other assumptions, which can be found on the Retirement System's website http://mysfers.org.

Notes to Financial Statements June 30, 2019 and 2018 (Dollars in thousands, unless otherwise stated)

Kev Actuarial Assumptions

Valuation Date June 30, 2017 updated to June 30, 2018

Measurement Date June 30, 2018

Actuarial Cost Method Entry-Age Normal Cost

Expected Rate of Return 7.50%

Municipal Bond Yield 3.58% as of June 30, 2017 3.87% as of June 30, 2018

Bond Buyer 20-Bond GO Index, June 29, 2017 and June 28, 2018

Inflation

Salary Increases 3.50% plus merit component based on employee classification and years of service

Discount Rate 7.50% as of June 30, 2017 7.50% as of June 30, 2018

0.60% of payroll as of June 30, 2017 Administrative Expenses 0.60% of payroll as of June 30, 2018

Old Police & Fire, Old Police & Fire, Old Miscellaneous and Old Police & Fire, Charters A8.595 Charters A8.559 and A8.596 All New Plans Basic COLA pre 7/1/75 and A8.585 June 30, 2017 2.00% 2.70% 3.30% 4.40% June 30, 2018 2.50% 2.00% 3.10% 4.20%

Mortality rates for active members and healthy annuitants were based upon adjusted Employee and Healthy Annuitant CalPERS mortality tables projected generationally from the 2009 base year using a modified version of the MP-2015 projection scale.

Fiscal Year 2018

A summary of the actuarial assumptions and methods used to calculate the Total Pension Liability as of June 30, 2017 (measurement period) is provided below, including any assumptions that differ from those used in the July 1, 2016 actuarial valuation. Refer to the July 1, 2016 actuarial valuation report for a complete description of all other assumptions, which can be found on the Retirement System's website http://mysfers.org.

Kev Actuarial Assumptions

Valuation Date June 30, 2016 updated to June 30, 2017

June 30, 2017 Measurement Date

Actuarial Cost Method Entry - Age Normal Cost Method

Expected Rate of Return 7.50%

Municipal Bond Yield 2.85% as of June 30, 2016

3.58% as of June 30, 2017

Bond Buyer 20 - Bond GO Index, June 30, 2016 and June 29, 2017

Inflation 3.25%

Salary Increases 3.75% plus merit component based on employee classification and years of service

Discount Rate 7.50% as of June 30, 2016 7.50% as of June 30, 2017

Administrative Expenses 0.60% of payroll as of June 30, 2016

0.60% of payroll as of June 30, 2017

Old Police & Fire, Charters A8.595 Old Miscellaneous and Charters A8.559 Basic COLA All New Plans pre 7/1/75 and A8.596 and A8.585 June 30, 2016 2.00% 3.30% 4.40% June 30, 2017 2.70% 4.40% 2.00% 3.30%

Mortality rates for active members and healthy annuitants were based upon adjusted Employee and Healthy Annuitant CalPERS mortality tables projected generationally from the 2009 base year using a modified version of the MP-2015 projection scale.

> 45 (Continued)

Old Police & Fire,

Old Police & Fire,

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Discount Rate

Fiscal Year 2019

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 7.50% as of the June 30, 2018 (measurement date) and June 30, 2017 (measurement date).

The discount rate used to measure the total pension liability as of June 30, 2018 was 7.50%. The projection of cash flows used to determine the discount rate assumed that 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, 2017 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. 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 3.50% 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 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 COLA's for current members when they are expected to be granted. For members who worked after November 6, 1996 and before Proposition C passed, 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 System for certain members, Cheiron developed an assumption as of June 30, 2018 for the probability and amount of Supplemental COLA for each future year. We have assumed that a full Supplemental COLA will be paid to all Post 97 Retirees effective July 1, 2018. The table below shows the net assumed Supplemental COLA for members with a 2.00% basic COLA for sample years.

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Assumed Supplemental COLA for Members with a 2.00% Basic COLA Before 11/6/96

Fiscal years	96 - Prop C	or After Prop C
2019	0.750 %	0.000 %
2022	0.750	0.290
2025	0.750	0.350
2028	0.750	0.360
2031+	0.750	0.380

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 System's fiduciary net position was projected to be available to make projected future benefit payments for current members until fiscal year end 2097 when only a portion of the projected benefit payments can be made from the projected fiduciary net position. Projected benefit payments are discounted at the long-term expected return on assets of 7.50% to the extent the fiduciary net position is available to make the payments and at the municipal bond rate of 3.87% to the extent they are not available. The single equivalent rate used to determine the total pension liability as of June 30, 2018 was 7.50%.

The long-term expected rate of return on pension plan investments was 7.50%. 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

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global Equity	31.0 %	5.4 %
Private Equity	18.0	6.6
Real Assets	17.0	4.5
Hedge Funds/Absolute Returns	15.0	3.7
Private Credit	10.0	4.6
Treasuries	6.0	0.5
Liquid Credit	3.0	3.3
Total	100.0	

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Fiscal Year 2018

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 7.50% as of the June 30, 2017 (measurement date) and June 30, 2016 (measurement date).

The discount rate used to measure the total pension liability as of June 30, 2017 was 7.50%. The projection of cash flows used to determine the discount rate assumed that 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, 2016 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. 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 3.75% 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 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 COLA's for current members when they are expected to be granted. For members who worked after November 6, 1996 and before Proposition C passed, 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 System for certain members, Cheiron developed an assumption as of the June 30, 2017 measurement date for the probability and amount of Supplemental COLA for each future year. The table below shows the net assumed Supplemental COLA for members with a 2.00% basic COLAs for sample years.

Notes to Financial Statements
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Assumed Supplemental COLA for Members with a 2.00% Basic COLA Before 11/6/96

Fiscal years	96 - Prop C	or After Prop C
2018	0.750 %	0.000 %
2023	0.750	0.290
2028	0.750	0.350
2033	0.750	0.380
2038+	0.750	0.380
· · · ·		

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 System's fiduciary net position was projected to be available to make projected future benefit payments for current members until fiscal year end 2096 when only a portion of the projected benefit payments can be made from the projected fiduciary net position. Projected benefit payments are discounted at the long-term expected return on assets of 7.50% to the extent the fiduciary net position is available to make the payments and at the municipal bond rate of 3.58% to the extent they are not available. The single equivalent rate used to determine the total pension liability as of the June 30, 2017 measurement date was 7.50%.

The long-term expected rate of return on pension plan investments was 7.50%. 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

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global Equity	40.0 %	5.3 %
Fixed Income	20.0	1.6
Private Equity	18.0	6.5
Real Assets	17.0	4.6
Hedge Funds/Absolute Returns	5.0	3.6
Total	100.0	

Sensitivity of Proportionate Share of the Net Pension Liability to Changes in the Discount Rate – The following presents the Enterprise's allocation of the employer's proportionate share of the net pension liability for the 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 would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate.

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Fiscal Year 2019

Employer		ecrease Share IPL @ 6.50%	Share of NPL @ 7.50%	1% Increase Share of NPL @ 8.50%
Wastewater	\$	159,265	85,037	23,656
Fiscal Year 201	8			
	1% De	ecrease Share	Share of NPL	1% Increase Share
Employer	of N	IPL @ 6.50%	@ 7.50%	of NPL @ 8.50%
Wastewater	\$	172,984	100,973	41,390

(b) Other Post-Employment Benefits

The Enterprise participates in the City's single employer defined benefit plan (the Plan). The 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, 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.

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

	<u> </u>		
F	Fiscal year 2019		
Valuation Date (VD)	June 30, 2018		
Measurement Date (MD)	June 30, 2018		
Measurement Period (MP)	July 1, 2017 to June 30, 2018		
Fiscal year 2018			
Valuation Date (VD)	June 30, 2016 updated to June 30, 2017		
Measurement Date (MD)	June 30, 2017		
Measurement Period (MP)	July 1, 2016 to June 30, 2017		

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, 2018. 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, 2018 and 2017 measurement dates were 1.49% and 1.60%, respectively.

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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 service¹

Age 60 with 10 years of credited service

Safety Age 50 with 5 years of credited service

Disabled Retirement² Any age with 10 years of credited service Terminated Vested³ 5 years of credited service at separation

- ¹ 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.
- ² 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.
- ³ Effective with Proposition B, passed June 3, 2008, participants hired on or after January 10, 2009 must retire within 180 days of separation in order to be eligible for retiree healthcare benefits.

Retiree healthcare benefits are administered by the San Francisco Health Service System and include the following:

Medical: PPO – City Health Plan (self-insured) and UHC Medicare Advantage

(fully insured)

HMO - Kaiser (fully-insured) and Blue Shield (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.

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.

Notes to Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Beginning on July 1st 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 1st 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 GASB 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, 2019 and 2018, the City's funding was based on "pay-as-you-go" plus a contribution of \$32,786 and \$25,839 to the Retiree Healthcare Trust Fund, respectively. The "pay-as-you-go" portion paid by the City was \$185,839 for a total contribution of \$218,625 for the fiscal year ending June 30, 2019, and \$178,019 for a total contribution of \$203,858 for the fiscal year ending June 30, 2018. The Enterprise's proportionate share of the City's contributions for fiscal year 2019 was \$3,252, and for fiscal year 2018 was \$3,264.

OPEB Liabilities, OPEB Expenses and Deferred Outflows/Inflows of Resources Related to OPEB

Fiscal Year 2019

As of June 30, 2019, the City reported net OPEB liabilities related to the Plan of \$3.6 billion. The Enterprise's proportionate share of the City's net OPEB liability as of June 30, 2019 was \$53,567.

For the year ended June 30, 2019, the City's recognized OPEB expense was \$320,332. Amortization of the City's deferred inflow is included as a component of OPEB expense. The Enterprise's proportionate share of the City's OPEB expense was \$768.

As of June 30, 2019, the Enterprise reported its proportionate share of the City's deferred outflows/inflows of resources related to OPEB from the following sources:

Wastewater	Outflows of Inflow		eferred lows of sources		
Contributions subsequent to measurement date		\$	3,252	\$	-
Differences between expected and actual experience			-		4,918
Changes in assumptions			1,417		-
Net difference between projected and actual earnings					
on plan investments			-		49
	Total	\$	4,669	\$	4,967

Notes to Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

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:		
	2020	\$
	2021	
	2022	

2022 (602) 2023 (578) 2024 (583) Thereafter (583) Total \$ (3,550)

(602) (602)

Fiscal Year 2018

As of June 30, 2018, the City reported net OPEB liabilities related to the Plan of \$3.7 billion. The Enterprise's proportionate share of the City's net OPEB liability as of June 30, 2018 was \$59,517.

For the year ended June 30, 2018, the City's recognized OPEB expense was \$355,186. Amortization of the City's deferred inflow is included as a component of OPEB expense. The Enterprise's proportionate share of the City's OPEB expense was \$5,687.

As of June 30, 2018, the Enterprise reported its proportionate share of the City's deferred outflows/inflows of resources related to OPEB from the following sources:

Wastewater	Deferred Outflows of Resources		Deferred Inflows of Resources		
Contributions subsequent to measurement date		\$	3,264	\$	-
Net difference between projected and actual earnings					
on plan investments			-		96
	Total	\$	3,264	\$	96

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 .	lune 30:	
	2019	\$ (24)
	2020	(24)
	2021	(24)
	2022	(24)
	Total	\$ (96)

Notes to Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Actuarial Assumptions

Fiscal Year 2019

A summary of the actuarial assumptions and methods used to calculate the Total OPEB Liability as of June 30, 2018 (measurement date) is provided below:

Key Actuarial Assumptions

Valuation Date June 30, 2018
Measurement Date June 30, 2018

Actuarial Cost Method
The Entry Age Actuarial Cost Method is used to measure the Plan's Total OPEB Liability

Healthcare Cost Trend Rates
Pre-Medicare trend starts at 6.50% and trends down to ultimate rate of 3.93% in 2076
Medicare trend starts at 7.50% and trends down to ultimate rate of 3.93% in 2076

10-County average trend starts at 5.90% and trends down to ultimate rate of 3.93% in 2076

Vision and expenses trend remains a flat 3.50% for all years

Expected Rate of Return on Plan Assets 7.40%
Discount Rate 7.40%

Salary Increase Rate Wage Inflation Component: 3.50%

Additional Merit Component (dependent on years of service):

Police: 1.50% - 8.00% Fire: 1.50% - 15.00% Muni Drivers: 0.00% - 15.00% Craft: 0.00% - 3.50% Misc: 0.00% - 5.25%

Inflation Rate Wage Inflation: 3.50% compounded annually

Consumer Price Inflation: 2.75% compounded annually

Mortality Tables 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, 2014.

 $Non-Annuita\underline{nt} - CalPERS \ employee \ mortality \ tables \ without \ scale \ BB \ projection$

Gender	Adjustment Factor	Base Year
Female	0.918	2009
Male	0.948	2009

 $Healthy\,Annu\underline{itants}\,\hbox{-}\,CalPERS\,healthy\,annuitant\,mortality\,table\,without\,scale\,BB\,projection$

Gender	Adjustment Factor	Base Year
Female	1.014	2009
Male	0.909	2009

 $\underline{\text{Miscellaneous Disabled Annuitants-RP-2014 Disabled Ret}} \\ \underline{\text{Tables without MP-2014 projection}}$

Gender	Adjustment Factor	Base Year
Female	1.066	2006
Male	0.942	2006

Safety Disabled Annuitants - CalPERS industrial disability mortality table without scale BB projection

	Adjustment	
Gender	Factor	Base Year
Female	0.983	2009
Male	0.909	2009

The mortality rates in the base tables are projected generationally from the base year using the modified version of the MP-2015 projection scale. The scale was modified using the Society of Actuaries' model implementation tool with rates converging to the ultimate rate in 2017 (instead of 2029) and an ultimate rate of improvement of 0.85% (instead of 1.00%) up to age 85 decreasing to 0.70% (instead of 0.85%) at age 95.

Notes to Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Fiscal Year 2018

A summary of the actuarial assumptions and methods used to calculate the Total OPEB Liability as of June 30, 2017 (measurement date) is provided below:

Key Actuarial Assumptions

Valuation Date

June 30, 2016 updated to June 30, 2017

Measurement Date

June 30, 2017

Actuarial Cost Method

Salary increase Rate

The Entry Age Actuarial Cost Method is used to measure the Plan's Total OPEB Liability

Healthcare Cost Trend Rates

Pre-Medicare trend starts at 7.25% and trends down to ultimate rate of 4.5% Medicare trend starts at 7.0% and trends down to ultimate rate of 4.5%

10-County average trend starts at 6.0% and trends down to ultimate rate of 4.5%

Expected Rate of Return on Plan Asse

Discount Rate

7.50% 7.50%

Wage Inflation Component: 3.50%

Additional Merit Component (dependent on years of service):

Police: 0.00% - 8.00% Fire: 0.00% - 15.00% Muni Drivers: 0.00% - 15.00%

Craft: 0.00% - 3.50% Misc: 0.00% - 5.25%

Inflation Rate

Wage Inflation: 3.50% compounded annually

Consumer Price Inflation: 3.00% compounded annually

Mortality Tables

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, 2014.

Non-Annuitant - CalPERS employee mortality tables without scale BB projection

	Adjustment	
Gender	Factor	Base Year
Female	0.918	2009
Male	0.948	2009

Healthy Annuitants - CalPERS healthy annuitant mortality table without scale BB projection

	Adjustment	
Gender	Factor	Base Year
Female	1.014	2009
Male	0.909	2009

Miscellaneous Disable Annuitants - RP-2014 Disabled Retiree Tables without MP-2014 projection

	Adjustment	
Gender	Factor	Base Year
Female	1.066	2006
Male	0.942	2006

Safety Disables Annuitants - CalPERS industrial disability mortality table without scale BB projection

	Adjustment	
Gender	Factor	Base Year
Female	0.983	2009
Male	0.909	2009

Notes to Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

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 2019							
Employer		-1.00%	Healt	hcare Trend	1.00%		
Wastewater	\$	46,558	\$	53,567	\$	62,259	
Fiscal Year 2018							
Employer		-1.00%	Healt	hcare Trend		1.00%	
Wastewater	\$	51,941	\$	59,517	\$	68,883	

Discount Rate

Fiscal Year 2019

The discount rate used to measure the Total OPEB Liability as of June 30, 2018 was 7.4%. 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 7.4% 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 are summarized in the following table:

		Long-term
	Target	Expected Real
Asset Class	Allocation	Rate of Return
Equities		
U.S. Equities	41.0%	7.3%
Developed Market Equity (non-U.S.)	20.0%	7.1%
Emerging Market Equity	16.0%	9.4%
Credit		
High Yield Bonds	3.0%	5.4%
Bank Loans	3.0%	5.0%
Emerging Market Bonds	3.0%	4.9%
Rate Securities		
Investment Grade Bonds	9.0%	3.6%
Treasury Inflation Protected Securities	5.0%	3.3%
Total	100.0%	

The asset allocation targets summarized above have a 20-year return estimate of 7.5%, which was weighted against a 10-year model estimating a 6.3% return, resulting in the ultimate long-term expected rate of return of 7.4%.

Notes to Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

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:

1% Decrease Share			iscount Rate @	1%	Increase Share
of NOL @ 6.40%		7.40%		of	NOL @ 8.40%
\$	61,585	\$	53,567	\$	47,006

Fiscal Year 2018

The discount rate used to measure the Total OPEB Liability as of June 30, 2017 was 7.5%. 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 7.5% 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 are summarized in the following table:

Asset Class	Target Allocation	20-year Expected Return
U.S. Equities	41.0%	7.3%
Developed Market Equity (non-U.S.)	20.0%	7.1%
Emerging Market Equity	16.0%	9.4%
High Yield Bonds	3.0%	5.4%
Bank Loans	3.0%	5.0%
Emerging Market Bonds	3.0%	5.4%
Treasury Inflation Protected Securities	5.0%	3.3%
Investment Grade Bonds	9.0%	3.6%
Total	100.0%	_

The asset allocation targets summarized above have a 20-year return estimate of 7.75%, which was weighted against a 10-year model estimating a 6.59% return, resulting in the ultimate long-term expected rate of return of 7.5%.

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:

1% Decrease Share			scount Rate @	1% Increase Share	
of NOL @ 6.50%		7.50%		of NOL @	8.50%
\$	68,181	\$	59,517	\$	52,412

Notes to Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

(10) 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 \$25,658 or 30.0% and \$26,473 or 31.6% were allocated to the Enterprise for the years ended June 30, 2019 and 2018, 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 \$10,907 and \$10,195 for the years ended June 30, 2019 and 2018, 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 \$1,266 and \$1,073 for the years ended June 30, 2019 and 2018, 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 Department, 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 \$13,884 and \$14,417 for the years ended June 30, 2019 and 2018, 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 \$10,571 and \$10,689 for the years ended June 30, 2019 and 2018, respectively, have been included in services provided by other departments in the accompanying financial statements.

As of June 30, 2019 and 2018, the Enterprise has payables in the amount of \$955 and \$1,061, respectively, which is associated with the SFPUC Headquarters Living Machine system.

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, 2019, the Enterprise's allocable shares of expenses and prepayment were \$21 and \$1,210, respectively, and as of June 30, 2018 were \$23 and \$1,231, 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.

Notes to Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

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, 2019, the Enterprise's expenses and prepayment were \$14 and \$488, respectively.

(11) 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-yougo 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.

Primary Risks	Typical Coverage Approach
General liability	Self-Insured
Property	Purchased Insurance and Self-Insured
Electronic data processing	Purchased Insurance and Self-Insured
Workers' compensation	Self-Insured through Citywide Pool
Other Risks	Typical Coverage Approach
Surety bonds	Purchased and Contractually Transferred
Errors and omissions	Combination of Self-Insured and Contractual Risk Transfer
Professional liability	Combination of Self-Insured and Contractual Risk Transfer
Public officials liability	Purchased Insurance
Employment practices liability	Purchased Insurance
Builders' risk	Contractually Transferred
Crime	Purchased Insurance

Notes to Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

(a) General Liability

Through coordination with the Controller 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 booked as expenses as required under GAAP for financial statement purposes for both the Enterprise and the City and County of San Francisco's Comprehensive Annual 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, 2019 and 2018 were as follows:

Fiscal years	Beginning of year		Claims and changes in estimates	Claims paid	End of year
2019	\$	14,066	4,699	(2,397)	16,368
2018		14,149	3,936	(4.019)	14,066

(b) Property and Electronic Data Processing

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. The Electronic Data Processing policy protects selected high-value electronic property in case of damage or loss.

(c) 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.

Notes to Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

The changes in the liabilities for workers' compensation for the years ended June 30, 2019 and 2018 were as follows:

		inning of year	Claims and changes in estimates		Claims paid	End of year
2019	\$	5,784		1,944	(1,814)	5,914
2018		5,580		1,769	(1,565)	5,784

(d) 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.

(e) Errors and Omissions, Professional Liability

Errors and omissions and 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.

(f) Public Officials Liability, Employment Practices Liability

All Enterprise public officials with financial oversight responsibilities are provided coverage through a commercial Public Officials Liability Policy. An Employment Practices Liability Policy is retained to protect against employment-related claims and liabilities.

(g) 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.

(h) 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.

(12) Commitments and Litigation

(a) Commitments

As of June 30, 2019 and 2018, the Enterprise has outstanding commitments with third parties of \$269,132 and \$226,025, 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.

Notes to Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

(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, 2019 and 2018, the Enterprise recorded \$7,500 and \$4,703 in pollution remediation liability, respectively. This increase of \$2,797 in pollution remediation liability in fiscal year 2019 is due to increase in cleanup cost estimates of \$3,000 for the toxic sediments at Yosemite Creek offset by remediation cost payment of \$203 for the Southeast Wastewater Treatment Plant hazardous materials. As of June 30, 2019, the pollution remediation liability of \$7,500 represents estimated cleanup costs for the Yosemite Creek toxic sediments. As of June 30, 2018, the pollution remediation liability of \$4,703 consisted of \$4,500 for the Yosemite Creek toxic sediments and \$203 for the Southeast Wastewater Treatment Plant hazardous materials.



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.

Islais Creek Crossing Temporary Bypass Pipe Project

Exploring soil conditions in order to build a replacement pipe.

如果您需要中文翻譯,請致電: (415) 554-3289.

Si necesita una traducción o asistencia en español llame al: (415) 554-3289.

525 Golden Gate Avenue, 4th Floor San Francisco, CA 94102-3220 sfwater.org









KPMG LLP Suite 1400 55 Second Street San Francisco, CA 94105

Independent Auditors' 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

The Honorable Mayor and Board of Supervisors City and County of San Francisco

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of San Francisco Wastewater Enterprise (the Enterprise), an enterprise fund of the City and County of San Francisco, California (the City), which comprise the statement of net position as of June 30, 2019, and the related statements of revenues, expenses, and changes in net position, and cash flows for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated December 23, 2019.

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) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Enterprise's internal control. Accordingly, we do not express an opinion on the effectiveness of the Enterprise's internal control.

Our consideration of internal control was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that have not been identified. However, as described below, we did identify a certain deficiency in internal control that we consider to be material weakness.

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. We consider the deficiency described below as item 2019-001 to be a material weakness.

2019-001: Incorrect Recognition of Construction in Progress

An entity must establish and maintain effective internal control over financial reporting and on compliance with provisions of laws, regulations, contracts, and grant agreements that have a material effect on the financial statements. The Enterprise entered into an agreement with another City agency (the Agency) in fiscal year 2016 to fund a new facility for the Agency in exchange for the Enterprise to expand their operations into an existing facility owned by the Agency. During the years ended June 30, 2018 and 2017, the Enterprise incorrectly recorded building improvement and constructions costs in their financial records as construction in progress instead of expensing such costs in operating expenses on the Statements of Revenues, Expenses, and Changes in Net Position, resulting in an overstatement of net position and understatement of changes in net position. The error described is a due to lack of adequate oversight and communication amongst the



Enterprise and the Agency. The error resulted in amounts incorrectly capitalized as construction in progress during the years ended June 30, 2018 and 2017.

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 determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards* and which are described above as item 2019-001.

The Enterprise's Response to Findings

Management acknowledges the identified control deficiency and has implemented additional internal controls to further strengthen the control environment supporting inter-agency construction costs, inclusive of adequate oversight and communication.

The Enterprise's response to the findings identified in our audit is described previously. The Enterprise's response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on the response.

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 Enterprise'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 Enterprise's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

KPMG LLP

San Francisco January 30, 2020