Public Utilities Commission of the City and County of San Francisco

Water 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"), Water Enterprise. This filing relates to the following associated base CUSIP number(s):

SFPUC Water Enterprise: 79765R and 79771F

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,

Michael Carlin Acting General Manager 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



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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

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CITY AND COUNTY OF SAN FRANCISCO MAYOR

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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 Water 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://sfwater.org/index.aspx?page=347.

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

Series of Bonds	Purpose	Date	Final CUSIP (79765R)	Original Par	Par Outstanding (June 30, 2020)
Water Revenue Bonds – Build America Bonds (BABs), 2010 Series B ⁽³⁾	Water system improvements under Proposition E	June 17, 2010	SV2	417,720	373,420
Water Revenue Bonds, 2010 Series D	Water system improvements under Proposition E & refund previously outstanding Bonds of the SFPUC	August 4, 2010	TC3	102,725	30,990
Water Revenue Bonds – Build America Bonds (BABs), 2010 Series E ⁽³⁾	Water system improvements under Proposition E	August 4, 2010	TK5	344,200	344,200
Water Revenue Bonds – Build America Bonds (BABs), 2010 Series G ⁽³⁾	Water system improvements under Proposition E	December 22, 2010	TL3	351,470	351,470
Water Revenue Bonds, 2011 Series B	Hetch Hetchy improvements under Proposition E	August 4, 2011	WA3	28,975	1,485
Water Revenue Bonds, 2011 Series C	Water main replacement projects under Proposition E	August 4, 2011	XB0	33,595	1,620
Water Revenue Bonds, 2011 Series D	Refund previously outstanding Bonds of the SFPUC	August 4, 2011	VE6	55,465	19,135
Water Revenue Bonds, 2012 Series A	Water system improvements under Proposition E	June 7, 2012	XP9	591,610	216,540
Water Revenue Bonds, 2012 Series B	Reimbursement for litigation costs Under Proposition A	June 7, 2012	YE3	16,520	16,520

Series of Bonds	Purpose	Date	Final CUSIP (79765R)	Original Par	Par Outstanding (June 30, 2020)
Water Revenue Bonds, 2012 Series C	Refund previously outstanding Bonds of the SFPUC	June 7, 2012	XZ7	93,750	78,035
Water Revenue Bonds, 2015 Series A	Refund previously outstanding 2006A Bonds and a portion of 2009A Bonds	April 16, 2015	E96	429,600	412,380
Water Revenue Bonds, 2016 Series A	Refund portions of previously outstanding 2009A, 2009B, and 2010F Bonds	October 20, 2016	J67	763,005	763,005
Water Revenue Bonds, 2016 Series B	Refund previously outstanding 2006B and 2006C Bonds, and a portion of 2010A Bonds Refunds previously	October 20, 2016	L49	130,815	95,980
Water Revenue Bonds, 2016 Series C (Green Bonds)	outstanding Commercial Paper Notes, and Water System Improvement Program	December 14, 2016	Q51	259,350	242,755
Water Revenue Bonds, 2017 Series A (Green Bonds)	Refunds previously outstanding Commercial Paper Notes, and Water System Improvement Program	December 13, 2017	T41	121,140	121,140
Water Revenue Bonds, 2017 Series B	Water main replacement projects under Proposition E	December 13, 2017	W54	147,725	147,725
Water Revenue Bonds, 2017 Series C	Refunds previously outstanding Commercial Paper Notes, and Hetch Hetchy Water Capital Improvements	December 13, 2017	Z69	70,675	70,675

Series of Bonds	Purpose	Date	Final CUSIP (79765R)	Original Par	Par Outstanding (June 30, 2020)
Water Revenue Bonds, 2017 Series D (Green Bonds)	Refund portions of previously outstanding 2011A and 2012A Bonds.	December 28, 2017	287	350,305	348,610
Water Revenue Bonds, 2017 Series E	Refund portions of 2011C, 2011D, and 2012C Bonds	December 28, 2017	3D9	48,890	48,890
Water Revenue Bonds, 2017 Series F	Refund a portion of previously outstanding 2011B Bonds	December 28, 2017	3P2	8,705	8,705
Water Revenue Bonds, 2017 Series G (Green Bonds)	Refund a portion of previously outstanding 2011A Bonds	December 28, 2017	3W7	34,280	33,280
Water Revenue Bonds, 2019 Series A (Green Bonds)	Refund a portion of previously outstanding 2010F, 2011A, and 2012A Bonds	January 9, 2020	5B1	622,580	622,580
Water Revenue Bonds, 2019 Series B	Refund a portion of previously outstanding 2011B	January 9, 2020	5D7	16,450	16,450
Water Revenue Bonds, 2019 Series C	Refund a portion of previously outstanding 2011C	January 9, 2020	5F2	17,925	17,925
TOTAL ⁽⁴⁾				\$5,057,475	\$4,383,515

Loan Agreement	Purpose	Date	Agreement Amount	Disbursements Received (June 30, 2020)	Principal Outstanding (June 30, 2020)
Clean Water State Revolving Fund Loan and Grant D17-01001	San Francisco Westside Recycled Water Project	September 14, 2017	186,220(5)	-	73,271 ⁽⁵⁾

- * All outstanding bonds held in trust by U.S. Bank National Association (the "Trustee").
- (1) Represents outstanding indebtedness secured by a senior lien parity pledge of Net Revenues. Does not include subordinate debt.
- (2) Issued as capital appreciation bonds; represents full accreted value at maturity.
- (3) The 2010 Sub-Series B, Sub-Series E, and Sub-Series G Bonds were issued as Build America Bonds.
- (4) Total excludes Commercial Paper. The Water Enterprise maintains a \$500 million commercial paper program, which is subordinate to the outstanding revenue bonds. As of June 30, 2020, the SFPUC had approximately \$161.3 million principal amount of Water Commercial Paper Notes outstanding. The Commercial Paper Notes are secured by respective bank credit facilities, as follows: (a) a \$100 million letter of credit from Bank of America, which expires on May 19, 2021; (b) a \$200 million letter of credit from Sumitomo Mitsui, which expires on June 16, 2022 (c) a \$100 million letter of credit from Barclay's Bank PLC, which expires on July 23, 2021, and(d) a \$100 million Revolving Credit Agreement from U.S. Bank National Association, which expires on January 19, 2021; See "Subsequent Events" section for more information regarding the Water Enterprise ilterim Funding Program.
- (5) Represents the maximum possible loan amount; a portion of this loan is anticipated to be a grant (\$15 million); includes disbursements requested but not received as of June 30, 2020.

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

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

SFPUC WATER ENTERPRISE HISTORIC WHOLESALE AND RETAIL WATER SALES FOR FISCAL YEARS ENDED JUNE 30 (IN MGD)†

						2020 % of
	2016	2017	2018	2019	2020	Total
Retail customers#						
Multi-Family Residential	21.5	22.0	22.7	22.5	23.3	12.2%
Single-Family Residential	13.6	13.9	14.3	13.9	14.4	7.5%
Commercial	17.3	17.0	17.5	16.7	15.1	7.9%
Industrial	0.2	0.2	0.2	0.2	0.2	0.1%
Municipal ⁽¹⁾⁽²⁾	2.6	3.1	3.2	3.3	3.4	1.7%
Suburban Retail ⁽¹⁾	3.2	2.9	3.1	2.9	3.0	1.6%
Retail water sales	58.4	59.0	61.1	59.5	59.3	31.0%
Wholesale customers#						
California Water Service(3)	23.4	24.3	27.5	26.3	29.0	15.1%
Hayward Municipal Water	12.2	12.9	14.6	14.0	14.2	7.4%
City of Palo Alto	8.2	9.0	10.0	9.4	9.7	5.1%
City of Sunnyvale	7.8	8.1	9.5	8.8	9.4	4.9%
City of Redwood City	7.1	7.7	8.4	8.1	8.8	4.6%
Alameda County Water	6.0	6.2	7.9	7.7	7.7	4.0%
City of Mountain View	6.7	6.9	7.5	7.3	7.6	4.0%
City of Milpitas*	4.5	4.8	5.2	5.1	6.1	3.1%
City of San Jose*	4.1	4.1	4.5	4.3	4.2	2.2%
Estero Municipal						
Improvement District	3.6	3.8	4.2	4.0	4.3	2.3%
All Other Wholesale						
Customers ⁽³⁾	27.3	27.6	29.6	30.0	31.0	16.2%
Wholesale water sales	110.8 ⁽⁴⁾	115.5	128.9	125.0	131.6	69.0%
Total water sales ⁽⁵⁾	169.2	174.6	190.0	184.5	190.4	100.0%
% Change from prior year	-10.6%	2.9%	8.8%	-2.9%	4.0%	

[†] Totals may not add due to independent rounding.

⁽¹⁾ Master-metered Treasure Island water sales were included under Suburban Retail from Fiscal Year 2014-15 to 2015-16. Beginning in Fiscal Year 2016-17, they have been classified under Municipal. Current Treasure Island usage represents purchases by the Treasure Island Development Authority and various commercial, residential line items, and the master-metered amount will be reduced accordingly.

⁽²⁾ Beginning in Fiscal Year 2016-17, recycled water sales to Harding Park are included under Municipal.

⁽³⁾ From Fiscal Year 2015-16 onward, California Water Service Company, Daly City, and San Bruno, are participating in the conjunctive use groundwater program. These customers receive a bill credit for regional water system usage in-lieu of groundwater pumping. Totals reported in this table exclude water credited under the conjunctive use program.

Water Annual Disclosure Report Fiscal Year Ended June 30, 2020

- (4) Reflects decline in water sales due to declaration of a drought emergency by California Governor Jerry Brown in January 2014.
- (5) Unaccounted for in-city water was 4.3 mgd in Fiscal Year 2015-16, 5.1 mgd in Fiscal Year 2016-17, 7.6 mgd in Fiscal Year 2017-18, 8.8 mgd in Fiscal Year 2018-19, and 7.6 mgd in Fiscal Year 2019-20 as determined by comparing SFPUC Customer Service sales data with delivery data from City Distribution Division. Unaccounted for water includes water delivery system leaks and water not billed or tracked in the system (i.e., water used for firefighting, flushing water system pipes). Unaccounted for water has averaged approximately 10% of retail sales per year over the last 10 years. For Fiscal Year 2020, 7.6 mgd represents an unaccounted for water loss of approximately 4%.
- # Consumption data updated from Fiscal Year 2010-11 to 2013-14
- * Data correction between City of Milpitas, San Jose and Daly City from Fiscal Years 2008-09 to 2016-17.

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

SFPUC WATER ENTERPRISE HISTORICAL AND APPROVED PERCENTAGE INCREASES (DECREASES) IN RETAIL AND WHOLESALE WATER RATES

Fiscal Year	Retail Rates	Wholesale Rates *
2011-12	12.5 ⁽¹⁾	38.4
2012-13	12.5 ⁽¹⁾	11.4
2013-14	6.5 ⁽¹⁾	(16.4)
2014-15	12.0 ⁽²⁾	19.6
2015-16	12.0(2)	28.0
2016-17	10.0 ⁽²⁾	9.3
2017-18	7.0(2)	0.0
2018-19	7.8 ⁽³⁾	0.0
2019-20	$8.3^{(3)}$	0.0
2020-21	7.8 ⁽³⁾	$0.0^{(4)}$

^{*} Pursuant to the 25-year Water Supply Agreement ("WSA"), wholesale rates are adopted annually based on an estimate of the Wholesale Revenue Requirement.

Source: SFPUC Financial Services

⁽¹⁾ Adjustment effective July 1, 2009 through June 30, 2014.

⁽²⁾ Four-year rate increases for retail customers adopted effective July 1, 2014 through June 30, 2018.

⁽³⁾ Four-year rate increases for retail customers adopted effective July 1, 2018 through June 30, 2022 resulting in revenue requirement increases of 9% in fiscal year ending 2019, 8% in fiscal year ending 2020, and 7% in fiscal year ending 2021 and 2022.

⁽⁴⁾ There has been no rate increase for wholesale customers since July 2017.

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

User Type	Active Accounts	Billings (\$000's) ⁽¹⁾	Billings as % of Total
Multi-Family Residential Single Family Residential	42,849 110,584	\$109,461 78,329	18.4% 13.2%
Subtotal Residential	153,433	187,790	31.5%
Commercial	20,509	76,586	12.9%
Municipal Customers Industrial	1,985 81	15,901 765	2.7% 0.1%
Subtotal Non-Residential	22,575	93,252	15.7%
Suburban Retail	297	11,127	1.9%
Wholesale	78	303,340	50.9%
Total	176,383	\$595,509	100.0%

⁽¹⁾ 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 WATER 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					
Charges for Services ⁽²⁾ Retail Water Sales	\$205,482	\$225.705	\$248,136	\$261,913	\$280.609
Wholesale Water Sales ⁽¹⁷⁾	188,100	212,502	247,002	247,790	270,144
Subtotal – Water Sales	\$393,582	\$438,207	\$495,138	\$509,703	\$550,753
Rental Income ⁽³⁾	12,081	8,813	12,906	13,010	12,124
Other Revenues	11,766	11,879	15,875	17,310	18,305
Capacity Fees ⁽⁴⁾	2,087	1,432	1,720	2,368	2,169
Investing Activities ⁽⁵⁾	3,595	4,331	6,448	15,650	10,517
Total Revenues	\$423,111	\$464,662	\$532,087	\$558,041	\$593,868
OPERATING & MAINTENANCE					
EXPENSE					
Personnel Services ⁽⁶⁾	\$103,027	\$182,034	\$128,295	\$111,594	\$119,943
Contractual Services ⁽⁷⁾	13,451	10,664	14,131	13,715	14,523
Materials and Supplies ⁽⁸⁾	12,896	12,564	15,936	13,421	14,050 142,228
Depreciation Services of Other Departments ⁽⁹⁾	106,666 60,868	118,826 59,173	118,751 56,860	120,815 59,751	61,128
General/Administrative & Other (10)	17,878	38,566	36,174	37,798	46,245
Total Operating Expenses	\$314,786	\$421,827	\$370,147	\$357,094	\$398,117
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OPERATING AND INVESTMENT	\$400.005	#40.00 5	* 404.040	****	0.405.754
INCOME	\$108,325	\$42,835	\$161,940	\$200,947	\$195,751
COVERAGE CALCULATION					
Operating and Investment Income +Adjustment to Investing	\$108,325	\$42,835	\$161,940	\$200,947	\$195,751
Activities(11)	635	111	(1,245)	(4,821)	(516)
+Depreciation & Non-Cash Expenses	107,268	121,375	119,624	122,248	148,294
+Changes in Working Capital ⁽¹²⁾	(11,062)	63,520	31,060	(11,073)	(20,763)
+Appropriated Fund Balance ⁽¹³⁾	23,994	10,747	1,452	4,318	17,181
= "Net Revenue"(14),(15)	\$229,160	\$238,588	\$312,831	\$311,619	\$339,947
+Other Available Funds ⁽¹⁶⁾	162,733	155,852	186,752	221,362	241,931
Funds Available for Debt Service	\$391,893	\$394,440	\$499,583	\$532,981	\$581,878
Bond Debt Service ⁽¹⁵⁾	\$219,195	\$207,812	\$233,959	\$261,638	\$269,210
DEBT SERVICE COVERAGE(17)					
Including "Other Available Funds" (18)	1.79x	1.90x	2.14x	2.04x	2.16x
Current Basis ⁽¹⁵⁾ , ⁽¹⁸⁾	1.75x	1.15x	1.34x	1.19x	1.26x
Current Dasis (19)	1.00%	1.13X	1.348	1.19%	1.20X

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 excludes certain elements of non-operating revenue and expenses included in the Statements of Revenues, Expenses and Changes in Net Position. Examples of excluded elements are Grant Revenue, Interest Expense and Gains from Sale of Assets.

Water Annual Disclosure Report Fiscal Year Ended June 30, 2020

- (2) Increase in Fiscal Year 2019-20 resulting mainly from rate increase of 8.0%for retail customers beginning July 1, 2019 and increase in wholesale consumption.
- (3) Decrease in Rental Income for Fiscal Year 2019-20 mainly due to lease terminations and reduced royalty payments.
- (4) Decrease in Capacity Fee Revenue for Fiscal Year 2019-20 due to decrease in permits issued.
- (5) Decrease in Interest and investment income for Fiscal Year 2019-20 due to lower interest rates.
- (6) Increase in Personnel Services for Fiscal Year 2019-20 due to Pension and OPEB based on actuarial reports.
- (7) Increase in Contractual Services for Fiscal Year 2019-20 mainly due to maintenance and consulting services.
- (8) Decrease in Materials and Supplies for Fiscal Year 2019-20 primarily due for building and construction supplies.
- (9) Increase in Services of Other Departments for Fiscal Year 2019-20 attributable to an increase in water assessment fees paid to Hetchy Water.
- (10) Increase in Other operating and maintenance expenses in Fiscal Year 2019-20 due to lower capitalization from capital project spending.
- (11) Represents adjustments to show investing activities on a cash basis.
- (12) Fiscal Year 2019-20 adjustments primarily driven by adjustments relating to pension and OPEB obligations and accounts receivables and accounts payable adjusted on a cash basis.
- (13) The SFPUC budgeted and appropriated \$17.2 million of available fund balances to be used as a source of funds in Fiscal Year 2019-20. Such amount offsets Operating and Maintenance Expenses in Current Basis calculations.
- (14) "Net Revenue" is presented on a cash basis.
- (15) Partial BABs Subsidy Payments actually received by the SFPUC are reflected as reductions in Bond Debt Service and are excluded from Net Revenue. Due to Federal sequestration, the Indenture requires that such partial payments not be reflected as reductions in Bond Debt Service but rather permits an adjustment to Net Revenue. An amendment to the Indenture approved January 9, 2020, allows partial BABs Subsidy Payments to be taken into account as a credit against Bond Debt Service. Such amendment is effective
- (16) Per Indenture, in addition to current year cash flow, coverage calculation includes certain "Other Available Funds," which are not budgeted to be spent in such twelve months and legally available to pay debt service.
- (17) Coverage does not include debt service on subordinate obligations, including the Water Enterprise's share of lease payments associated with the 2009 Golden Gate COPs and debt service on Commercial Paper Notes. In addition, as a result of the prepayment of annual capital cost recovery payments to the SFPUC being treated as Revenues from the Wholesale Customers in Fiscal Year 2012-13, "Wholesale Water Sales" increased in Fiscal Year 2012-13 to approximately \$531 million. This also contributed towards "Debt Service Coverage" increasing to 2.31 times in Fiscal Year 2012-13. In Fiscal Year 2013-14, the Water Enterprise realized "Debt Service Coverage" of 3.42 times as a result of the considerably higher "Funds Available for Debt Service," the decreased debt service resulting from the defeasance of the certain Water Revenue Bonds, while also factoring in the foregone "Wholesale Water Sales" of approximately \$28.2 million due to the discharge of the Wholesale Customers' annual capital cost recovery obligation.
- (18) Unaudited. Calculated as ratio between Net Revenues over debt service on all senior lien obligations; excludes "Other Available Funds."

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

SFPUC WATER ENTERPRISE WATER SYSTEM IMPROVEMENT PROGRAM (WSIP) BUDGET AND SPENDING SUMMARY AS OF JUNE 30, 2020 (IN MILLIONS)

	Total Approved ⁽¹⁾	Expended/ Encumbered	Unencumbered Remaining Balance
Regional Projects	3,803.1	3,666	137.1
Local Projects ⁽²⁾	612.7	512	100.7
Financing Costs ⁽³⁾	372.0	372.0	0
Total [†]	\$4,787.8	\$4,550.0	\$237.8

[†]Totals may not add due to independent rounding.

- (1) Based on March 2020 revised program schedule and budget, approved by the Commission
- Local projects include \$281 million in WSIP funding to Water Supply Projects; however, these projects were transferred to the Water Enterprise Capital Improvements Program in July 2011 and have anticipated completion dates later than December 2019.
- (3) Financing Project appropriated to date

Note: Certain amounts set forth in the table are projections. Actual results may differ materially from these projections.

Source: SFPUC Financial Services

SFPUC WATER ENTERPRISE STATUS OF WSIP PROJECTS AS OF JUNE 30, 2020 (IN MILLIONS)

	Number of	f Projects	Value of I			Projects ⁽¹⁾	
Active Phase	Local Program ⁽²⁾	Regional Program	_	Local rogram		egional rogram	
Planning	0	0	\$	0	\$	0	
Design	0	1		0		35	
Bid & Award	0	0		0		0	
Construction	0	6		0		1,021	
Close-Out	0	1		0		96	
Completed	35	42		331		2,619	
Not Applicable ⁽³⁾	0	2		0		32	
Total [†]	35	52		\$331		\$3,803	

[†]Totals may not add due to independent rounding.

- (1) Project value based on the March 2020 Approved WSIP Budget plus any additional budget and schedule changes approved by the Commission as part of additional contingencies on construction contracts. Project value for various phases includes proportional allocation of approved program management budget. Projects active in multiple phases are counted in the phase with the greatest amount of project activities.
- (2) Does not include Local Water Supply Projects managed as part of the Water Enterprise Capital Improvement Program.
- (3) "Not Applicable" category is for projects that do not include construction, including the Watershed Environmental Improvement Program and the Long-Term Mitigation Endowment.

Source: SFPUC, Q4 FY2019-20 WSIP Quarterly Report, SFPUC Financial Services

SUBSEQUENT EVENTS

1. Water Revenue Bonds, Series 2020 ABCD Issuance

On September 23, 2020 the SFPUC issued its San Francisco Water Revenue Bonds, 2020 Sub-Series A (WSIP) (Green Bonds), Sub-Series B (Regional Water), Sub-Series C (Local Water), and Sub-Series D (Hetch Hetchy Water) together with an aggregate principal amount of \$346.8 million to (i) refund approximately \$230 million aggregate principal amount of commercial paper notes issued pursuant to the Water Enterprise's commercial paper program to finance or refinance a portion of the design, acquisition and construction of various capital projects in furtherance of the SFPUC's Water System Improvement Program ("WSIP") and the Hetchy Water Program and ii) to finance and refinance a portion of the design, acquisition and construction of various capital projects of benefit to the SFPUC's Water Enterprise.

2. Water Revenue Bonds, Series 2020 EFGH Issuance

On October 21, 2020 the SFPUC issued its San Francisco Water Revenue Bonds, 2020 Sub-Series E (Refunding, Federally Taxable) (Green Bonds), Sub-Series F (Refunding, Federally Taxable), Sub-Series G (Refunding, Federally Taxable), and Sub-Series H (Refunding, Federally Taxable) together with an aggregate principal of \$664 million to advance refund all or a portion of various series of the SFPUC's Outstanding Bonds.

3. Water Enterprise Interim Funding Program - Credit Providers

On July 1,2020, the SFPUC entered into its first amendment to the \$100 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 \$100 million Revolving Credit Agreement with US Bank (Series R-1), extending commitment duration to January 19, 2022.

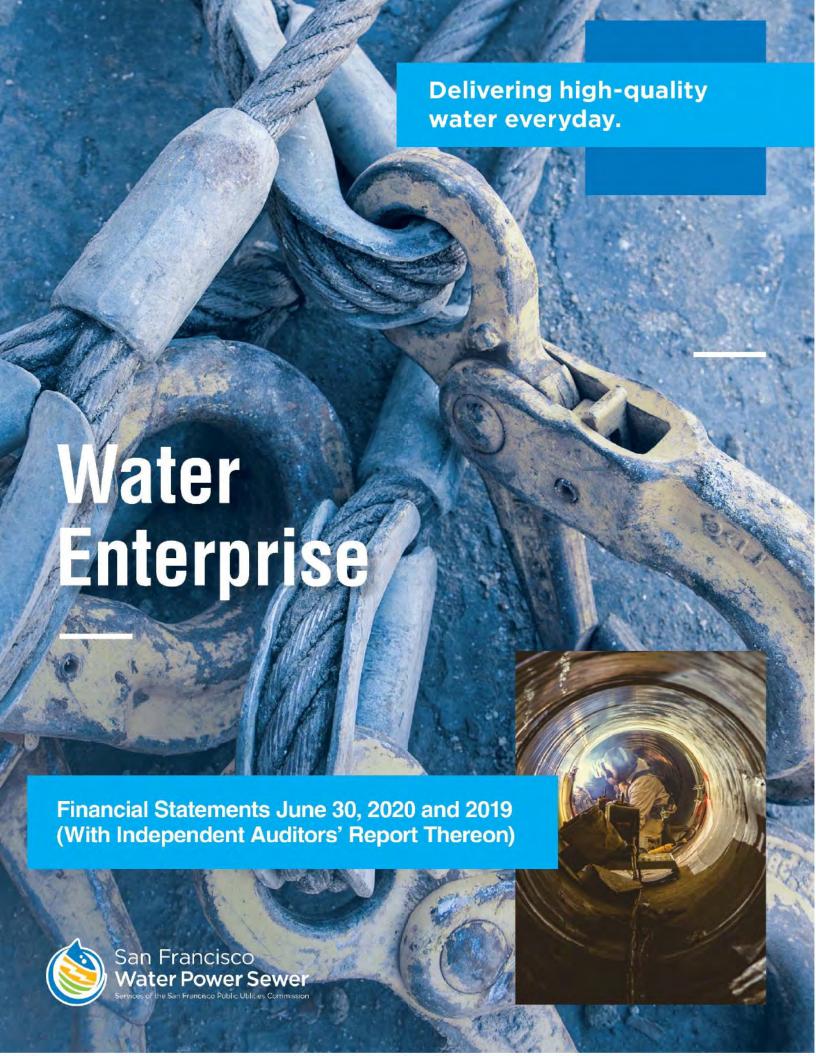


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KPMG LLP Suite 1400 55 Second Street San Francisco, CA 94105

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 Water 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 3-16 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 Water 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 (the Enterprise), Hetch Hetchy Water and Power and CleanPowerSF, and Wastewater. The Enterprise collects, transmits, treats, and distributes high-quality drinking water to a total population of approximately 2.7 million people, including retail customers in the City and wholesale customers located in San Mateo, Santa Clara, and Alameda Counties. The Enterprise sold approximately 191 million gallons of water per day in the year ended June 30, 2020. Approximately two-thirds of the water delivered by the Enterprise is to wholesale customers. Retail customers use the remaining one-third and are primarily San Francisco consumers, including residential, commercial, industrial, and governmental users. Wholesale customers include cities, water districts, one private utility, and one non-profit university. Service to these customers is provided pursuant to the 25-year Amended and Restated Water Supply Agreement (WSA), commenced on July 1, 2009, which established the basis for determining the costs of wholesale service.

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.

While the Statements of Net Position provide information about the nature and amount of resources and obligations as of 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

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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 Enterprise.

Financial Analysis

Financial Highlights for Fiscal Year 2020

- Total assets exceeded total liabilities by \$448,825.
- Net position increased by \$98,877 or 18.2% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization increased by \$141,887 or 2.6% to \$5,530,545.
- Current and other assets increased by \$96,743 or 16.0% mainly due to increased receivables from other governments and cash from operating activities.
- Operating revenues increased by \$40,960 or 7.6% to \$583,351.
- Operating expenses increased by \$41,023 or 11.5% to \$398,117.

Financial Highlights for Fiscal Year 2019

- Total assets exceeded total liabilities by \$381,783.
- Net position increased by \$52,614 or 10.7% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization increased by \$125,425 or 2.4% to \$5,388,658.
- Current and other assets decreased by \$71,821 or 10.6% mainly due to debt principal and interest repayments and Water System Improvement Program (WSIP) related capital projects spending.

Management's Discussion and Analysis (Unaudited)
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- Operating revenues increased by \$16,752 or 3.2% to \$542,391.
- Operating expenses decreased by \$13,053 or 3.5% to \$357,094.

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 \$	701,206	604,463	676,284	96,743	(71,821)
Capital assets, net of accumulated depreciation and amortization	5,530,545	5,388,658	5,263,233	141,887	125,425
Total assets	6,231,751	5,993,121	5,939,517	238,630	53,604
Deferred outflows of resources:					
Unamortized loss on refunding of debt	144,189	139,061	150,255	5,128	(11,194)
Pensions	67,084	55,465	62,062	11,619	(6,597)
Other post-employment benefits	27,583	13,142	9,122	14,441	4,020
Total deferred outflows of resources	238,856	207,668	221,439	31,188	(13,771)
Liabilities:				-	
Current liabilities:					
Revenue and capital appreciation bonds	94,080	100.899	76,665	(6,819)	24,234
Certificates of participation	2,824	2,688	2,556	136	132
Commercial paper	362,354	161,336	40,312	201,018	121,024
Other liabilities	134,563	132,251	137,576	2,312	(5,325)
Subtotal current liabilities	593,821	397,174	257,109	196,647	140,065
Long-term liabilities:					
Revenue and capital appreciation bonds	4,601,215	4,709,678	4,839,101	(108,463)	(129,423)
Certificates of participation	98,754	101,704	104,550	(2,950)	(2,846)
State revolving fund loans	73,271	2		73,271	
Other liabilities	415,865	402,782	455,341	13,083	(52,559)
Subtotal long-term liabilities	5,189,105	5,214,164	5,398,992	(25,059)	(184,828)
Total liabilities:					
Revenue and capital appreciation bonds	4,695,295	4,810,577	4,915,766	(115,282)	(105, 189)
Certificates of participation	101,578	104,392	107,106	(2,814)	(2,714)
Commercial paper	362,354	161,336	40,312	201,018	121,024
State revolving fund loans	73,271	_	_	73,271	-
Other liabilities	550,428	535,033	592,917	15,395	(57,884)
Total liabilities	5,782,926	5,611,338	5,656,101	171,588	(44,763)
Deferred inflows of resources:					
Related to pensions	34,894	33,330	15,063	1,564	18,267
Other post-employment benefits	11,772	13,983	268	(2,211)	13,715
Total deferred inflows of resources	46,666	47,313	15,331	(647)	31,982
Net position:					
Net investment in capital assets	527,856	563,457	504,476	(35,601)	58,981
Restricted for debt service	15,916	16,193	22,933	(277)	(6,740)
Restricted for capital projects	43,122	-	32,978	43,122	(32,978)
Unrestricted	54,121	(37,512)	(70,863)	91,633	33,351
Total net position \$	641,015	542,138	489,524	98,877	52,614

Net Position, Fiscal Year 2020

For the period ended June 30, 2020, the Enterprise's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$641,015. Total net position increased from prior year by

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\$98,877 or 18.2% (see Table 1). The increase in net position was the result of an increase of \$269,818 in assets and deferred outflows of resources offset by an increase of \$170,941 in liabilities and deferred inflows of resources.

Current and other assets are primarily comprised of restricted and unrestricted balances of cash, receivables for water deliveries and services, interfund receivables due from other governmental agencies, and inventory. This also includes receivables, which represent cumulative amounts due from the wholesale customers to match revenues with the Enterprise's costs of providing service (the Balancing Account), in accordance with the provisions set forth in the WSA effective July 1, 2009. Balances are applied to future year rates. As of June 30, 2020, the Enterprise owed the wholesale customers \$64,857, which was mainly due to lower water demand by the wholesale customers. This amount was recorded as a liability in accordance with the 2009 agreement. See Note 9, Water Supply Agreement, for additional details.

During the fiscal year 2020, current and other assets increased by \$96,743 or 16.0%. The increases included \$73,271 due from the State Water Resources Control Board (SWRCB) State Revolving Funds Loan relating to the SF Recycled Water project, \$18,866 in restricted and unrestricted cash and investments mainly due to higher cash collections from customers, \$4,810 in charges for services receivable mainly due to an 8% rate increase, \$1,336 in prepaid charges, advances and other receivables mainly for prepaid expenses of software licensing and membership fees, and \$351 in inventory as a result of more purchases than issuances during the fiscal year. These increases were offset by decreases of \$1,393 in interest receivable for interest allocation due to lower rates, \$390 mainly due from the Office of Economic and Workforce Development for custom work projects, \$88 due from other governments for grants relating to water efficiency, and \$20 in restricted interest and other receivables from lower federal interest subsidy receivables compared to prior year.

Capital assets, net of accumulated depreciation and amortization, increased by \$141,887 or 2.6% mainly from the property transfer of 639 Bryant Street for 2000 Marin Street and from construction and capital improvement activities. The largest portion of the Enterprise's net position of \$527,856 or 82.3% represents net investment in capital assets (see Capital Assets section of the MDA for more information), which decreased by \$35,601 or 6.3% from prior year's \$563,457; as explained by a \$177,488 increase in liabilities related to capital assets mainly from the issuance of commercial paper, offset by an increase of \$141,887 in capital assets in buildings, structures, and improvements and construction in progress mainly from assets placed into service and pending year end fixed assets entries.

Deferred outflows of resources increased by \$31,188 due to a \$14,441 increase from OPEB obligations, and \$11,619 increase relating to pensions based on actuarial reports. Unamortized loss on refunding increased by \$5,128 from the issuance of the 2010 Series ABC revenue bonds.

Total liabilities increased by \$171,588 or 3.1% which is explained by increases of \$201,018 from additional commercial paper issuances, \$73,271 in State Revolving Funds Loan payable relating to the SF Recycled Water project, \$12,913 in other post-employment benefits obligations from actuarial assumptions, \$4,464 in interest payable mainly from the issuance of 2019 Series ABC revenue bonds, \$3,068 in accrued payroll, vacation and sick leave due to more days in current year end payroll accrual compared to prior year end accrual and 3% cost of living adjustment (COLA), \$2,704 in net pension liability based on actuarial report, \$674 due to other City departments primarily for legal services provided by the City Attorney and projects performed by the Department of Public Works for Sidewalk Inspection and Repair projects, and \$28 in the Wholesale Balancing Account (see Note 9 for details). These increases were offset by decreases of \$113,253 in outstanding revenue bonds due to refunding of principal from the issuance of 2019 Series ABC revenue bonds, principal repayments and premium and discount amortization, \$4,014 in restricted and unrestricted payables mainly due to lower retained contracts payable, \$2,814 in outstanding

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certificates of participation due to repayment and amortization of premium, \$2,029 in principal of capital appreciation bonds from repayment offset by accretions, \$1,921 in unearned revenues mainly due to reduced custom work deposits, \$1,162 in workers' compensation based on actuarial estimates, \$742 in general liability based on actuarial report, and \$617 in pollution remediation liability due to additional expenditures incurred in the current year for the Lake Merced and 17th and Folsom sites (see Note 13(d) for details).

Deferred inflows of resources decreased by \$647 due to a \$2,211 decrease in OPEB obligations, offset by a \$1,564 increase relating to 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 \$542,138. Total net position increased from prior year by \$52,614 or 10.7% (see Table 1). The increase in net position was the result of an increase of \$39,833 in assets and deferred outflows of resources, coupled with a decrease of \$12,781 in liabilities and deferred inflows of resources.

Current and other assets primarily is comprised of restricted and unrestricted balances of cash, receivables for water deliveries and services, interfund receivables due from other governmental agencies, and inventory. This also includes receivables, which represent cumulative amounts due from the wholesale customers to match revenues with the Enterprise's costs of providing service (the Balancing Account), in accordance with the provisions set forth in the WSA effective July 1, 2009. Balances are applied to future year rates. As of June 30, 2019, the Enterprise owed the wholesale customers \$64,829, which was mainly due to lower water demand by the wholesale customers. This amount was recorded as a liability in accordance with the 2009 agreement. See Note 9(a), Water Supply Agreement, for additional details.

During the fiscal year 2019, current and other assets decreased by \$71,821 or 10.6%. The decreases included \$74,244 in restricted and unrestricted cash and investments mainly due to debt principal and interest repayments and capital projects spending, \$693 in restricted interest receivables mainly due to lower cash balances in capital projects funds, \$214 in state grants collections relating to high efficiency toilet installation projects, \$135 in inventory from more issuances than purchases during the fiscal year. These decreases were offset by increases of \$1,355 in interest receivable from higher interest rates, \$1,050 in prepaid charges, advances and other receivables mainly due to increases in prepaid charges for rents, software licenses and other costs, \$714 in charges for services receivable due to an increase in billing rates, and \$346 mainly due from the Department of Public Works for Mission Bay South, Hunters View and Transbay Folsom custom work projects.

Capital assets, net of accumulated depreciation and amortization, increased by \$125,425 or 2.4% from construction and capital improvement activities. The largest portion of the Enterprise's net position of \$563,457 or 105.4% represents net investment in capital assets (see Capital Assets section of the MDA for more information), which increased by \$58,981 or 11.7% from prior year's \$504,476; as explained by a \$125,425 increase in capital assets in buildings, structures, and improvements and construction in progress, offset by a \$66,444 increase in liabilities related to capital assets mainly due to issuance of commercial paper. Deferred outflows of resources decreased by \$13,771 due to an \$11,194 decrease from amortization of bond refunding loss, and \$6,597 decrease from pensions based on actuarial report, offset by a \$4,020 increase in other post-employment benefits obligations (OPEB) based on actuarial report.

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Total liabilities decreased by \$44,763 or 0.8% which is explained by decreases of \$107,903 in principal of revenue bonds, capital appreciation bonds and certificates of participation mainly due to principal repayments, \$33,574 in net pension liability based on actuarial report, \$16,897 in restricted and unrestricted payables mainly from lower WSIP project activities, \$15,565 in other post-employment benefits obligations from actuarial assumptions, \$1,893 in general liability based on actuarial report, \$621 in workers' compensation based on actuarial estimates, \$481 in interest payable, \$303 in accrued payroll, vacation and sick leave, \$117 in pollution remediation liability mainly for the Lake Merced and 17th and Folsom sites (see Note 13(d) for details), and \$96 payment to the Department of Public Works for road structure support projects. These decreases were offset by increases of \$121,024 in commercial paper from additional issuances, \$8,963 in the Wholesale Balancing Account (see Note 9(a) for details), and \$2,700 in unearned revenues mainly from BAWSCA bond surcharge.

Deferred inflows of resources increased by \$31,982 due to a \$18,267 increase relating to pension, and a \$13,715 increase in OPEB obligations 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 \$	550,753	509,703	495,138	41,050	14,565
Rents and concessions	12,124	13,010	12,906	(886)	104
Other operating revenues	20,474	19,678	17,595	796	2,083
Interest and investment income	10,517	15,650	6,448	(5,133)	9,202
Other non-operating revenues	94,734	32,399	39,064	62,335	(6,665)
Total revenues	688,602	590,440	571,151	98,162	19,289
Expenses:					-
Operating expenses	398,117	357,094	370,147	41,023	(13,053)
Interest expenses	191,246	177,998	164,001	13,248	13,997
Amortization of premium, discount, refunding loss, and issuance costs	(13,752)	(17,788)	(13,540)	4,036	(4,248)
Non-operating expenses	529	1,388	1,920	(859)	(532)
Total expenses	576,140	518,692	522,528	57,448	(3,836)
Change in net position before transfers	112,462	71,748	48,623	40,714	23,125
Transfers from the City and County of San Francisco	1,220	1,200	382	20	818
Transfers to the City and County of San Francisco	(14,805)	(20,334)	(31,368)	5,529	11,034
Net transfers	(13,585)	(19,134)	(30,986)	5,549	11,852
Change in net position	98,877	52,614	17,637	46,263	34,977
Net position at beginning of year					
Beginning of year, as previously reported	542,138	489,524	501,267	52,614	(11,743)
Cumulative effect of accounting change			(29,380) *	_	29,380
Net position at beginning of year as restated	542,138	489,524	471,887	52,614	17,637
Net position at end of year \$	641,015	542,138	489,524	98,877	52,614

^{*} 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 of \$688,602 for the year represented an increase of \$98,162 or 16.6% from prior year (see Table 2). Increases included \$62,335 from other non-operating revenues, \$41,050

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from charges for services, and \$796 from other operating revenues. These increases were offset by decreases of \$5,133 in interest and investment income, and \$886 from rents and concessions.

Charges for services were \$550,753, an increase of \$41,050 or 8.1% due to an adopted rate increase of 8.0% for retail customers beginning July 1, 2019 coupled with a 5.7% increase in consumption by wholesale customers. Rents and concessions were \$12,124, a decrease of \$886 or 6.8% mainly from termination of leases. Other operating revenues were \$20,474, an increase of \$796 or 4.0% due to an 8.0% rate increase offset by a decrease in capacity fee revenues. Interest and investment income were \$10,517, a decrease of \$5,133 or 32.8% due to lower annualized interest rates. Other non-operating revenues were \$94,734, an increase of \$62,335 or 192.4% mainly due to a one-time gain of \$63,600 from the property transfer of 639 Bryant Street for 2000 Marin Street in San Francisco, CA.

The Enterprise's total expenses were \$576,140, an increase of \$57,488 or 11.1%. Operating expenses were \$398,117, an increase of \$41,023 or 11.5% due to increases of \$21,413 in depreciation and amortization due to additional capital assets placed into service in the prior year, \$8,447 in general administrative and other mainly from reduced capitalization of buildings, structures and improvements and equipment purchases and higher capital project expenses, \$8,349 in personnel services primarily due to cost of living adjustments, pension and OPEB obligations based on actuarial reports, \$1,377 in services provided by other departments mainly from higher water assessment fees paid to Hetch Hetchy Water, \$808 in contractual services mainly from consulting and maintenance services, \$629 in materials and supplies mainly for building and construction supplies. Interest expenses increased by \$13,248 from reduced interest capitalization for capital projects. Amortization of bond premium, discount, refunding loss and issuance costs decreased by \$4,036 due to issuance of 2019 Series ABC revenue bonds which refunded 2010 Series F, 2011 Series A, 2011 Series B, 2011 Series C, and 2012 Series A bonds. Nonoperating expenses decreased by \$859 mainly from reduced rebates paid to customers.

Transfers in of \$1,220 were from the General Fund for low income assistance programs and pathway improvements to Miraloma Park. Transfers out of \$14,805 included \$14,000 to Hetch Hetchy Water to fund various upcountry capital projects, \$558 to the Arts Commission for arts enrichment, \$215 to the San Francisco Municipal Transportation Agency for water conservation projects, and \$32 to the Office of the City Administrator for the Surety Bond Program.

Results of Operations, Fiscal Year 2019

The Enterprise's total revenues of \$590,440 for the year represented an increase of \$19,289 or 3.4% from prior year (see Table 2). Increases included \$14,565 from charges for services, \$9,202 for interest and investment income, \$2,083 from other operating revenues, and \$104 from rents and concessions. These increases were offset by a decrease of \$6,665 from other non-operating revenues.

Charges for services were \$509,703, an increase of \$14,565 or 2.9% mainly due to an adopted rate increase of 9.0% for retail customers beginning July 1, 2018, offset by a decrease of 2.8% in consumption. Rents and concessions were \$13,010, an increase of \$104 or 0.8% mainly from Consumer Price Index increases. Other operating revenues were \$19,678, an increase of \$2,083 or 11.8% mainly due to a 9.0% adopted rate increase. Interest and investment income was \$15,650, an increase of \$9,202 or 142.7% mainly due to higher interest rates for pooled cash with the City Treasury and unrealized gains on investments. Other non-operating revenues were \$32,399, a decrease of \$6,665 or 17.1% mainly from a prior year settlement received of \$8,250 for the Pacific Rod and Gun Club offset by \$1,500 proceeds received in the current year for sale of land on Burnett Avenue in San Francisco.

The Enterprise's total expenses were \$518,692, a decrease of \$3,836 or 0.7%. Operating expenses were \$357,094, a decrease of \$13,053 or 3.5% due to decreases of \$16,701 in personnel services primarily

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due to pension and OPEB obligations based on actuarial reports, \$2,515 in materials and supplies mainly from prior year obsolete inventory write-offs, and \$416 in contractual services mainly from decreased construction contracts. These decreases were offset by increases of \$2,891 in services provided by other departments mainly due to increased water assessment fees paid to Hetch Hetchy Water and City Attorney legal services, \$2,064 in depreciation due to additional capital assets placed into service, and \$1,624 in general and administrative and other mainly due to lower capitalization of capital projects. Interest expenses increased by \$13,997 due to prior year issuance of 2017 Series ABC and DEFG bonds, and reduced interest capitalization for capital projects. Amortization of bond premium, discount, refunding loss, and issuance costs increased by \$4,248 mainly due to the issuance of bonds in prior year. Non-operating expenses decreased by \$532 from reduced community-based organization programs.

Transfers in of \$1,200 were from the General Fund for low income assistance programs. Transfers out of \$20,334 included \$20,000 to Hetch Hetchy Water to fund various upcountry capital projects, \$302 to the Arts Commission for arts 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	\$ 4,928,438	4,890,207	3,825,832	38,231	1,064,375
Intangible assets	4,089	5,816	7,321	(1,727)	(1,505)
Land	105,336	30,029	30,029	75,307	
Construction work in progress	492,682	462,606	1,400,051	30,076	(937,445)
Total	\$ 5,530,545	5,388,658	5,263,233	141,887	125,425

Capital Assets, Fiscal Year 2020

The Enterprise has net capital assets of \$5,530,545 invested in a broad range of utility capital assets as of June 30, 2020 (see Table 3). The investment in capital assets includes land, facilities, improvements, water treatment plants, aqueducts, water transmission, distribution mains, water storage facilities, pump stations, water reclamation facilities, machinery, and equipment. The Enterprise's net revenue and long-term debt are used to finance capital investments. Capital assets, net of accumulated depreciation and amortization, increased by \$141,887 from the prior year. Land increased by \$75,307 mainly as the result of a property transfer related to 639 Bryant Street for 2000 Marin Street completed in the fiscal year. Facilities, improvements, machinery, and equipment increased by \$38,231 mainly attributable to Sunol Corp Yard, Water Main Replacement, and Alameda Creek Watershed projects. Construction work in progress increased by \$30,076 primarily due to additions from Recycled Water project, San Andreas Pipeline replacement, and Watershed and Environmental Improvement program. Intangible assets decreased by \$1,727 due to \$2,101 amortization, offset by increases of \$374 from Microsoft SharePoint software and IBM Maximo software improvements.

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

Recycled Water Project	\$	46,912
San Andreas Pipeline No. 2 Replacement		27,817
Watershed and Environmental Improvement Program		13,117
Regional Groundwater Storage & Recovery		11,864
Calaveras Dam Replacement		11,119
Water Main Replacement - Van Ness Avenue/Market/Lombard Streets		8,120
New Water Utility Services		7,908
Sunol Long Term Improvements		7,222
San Francisco Groundwater Supply		6,647
Renew Water Utility Services		6,276
Peninsula Water System Improvements		5,922
Water Main Replacement - 16th Street		5,769
Other project additions individually below \$5,000		61,734
Total	\$	220,427
	_	

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:

Sunol Corp Yard - Administration Building	\$	32,965
Water Main Replacement - Van Ness Avenue/Market/Lombard Streets		20,692
Water Main Replacement - 16th Street		9,104
Alameda Creek Watershed Fish Passage Facilities		8,597
Sunol Corp Yard - Shop Building #1		8,543
Irving Street Pipeline		7,926
New Water Utility Services		7,908
Renew Water Utility Services		6,276
Sunol Corp Yard - Shop Building #4		5,847
Other items individually below \$5,000		70,874
Total	\$	178,732
Sunol Corp Yard - Shop Building #1 Irving Street Pipeline New Water Utility Services Renew Water Utility Services Sunol Corp Yard - Shop Building #4 Other items individually below \$5,000	\$ <u>_</u>	8,54 7,92 7,90 6,27 5,84 70,87

See Note 4 for additional information about Capital Assets.

Water System Improvement Program

The WSIP delivers capital improvements that enhance the Enterprise's ability to provide reliable, affordable, high-quality drinking water to its 27 wholesale customers and regional retail customers in Alameda, Santa Clara, and San Mateo Counties, as well as approximately 800,000 residential customers in San Francisco, in an environmentally sustainable manner. The program is structured to cost-effectively meet water quality requirements and long-term water supply objectives, as well as improve seismic and delivery reliability.

Overall, the \$4.8 billion WSIP to upgrade the City of San Francisco's regional and local drinking water systems is 99% completed with \$4.8 billion of project appropriations expended through fiscal year ended June 30, 2020. The program consists of 35 local projects located within San Francisco and 52 regional projects spread over seven different counties from the Sierra Foothills to San Francisco. As of June 30, 2020, 35 local projects were completed, and the completion date was June 3, 2020. For regional projects.

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42 are completed and the expected completion date is May 2023. Additional details regarding the WSIP are available at https://sfwater.org/index.aspx?page=115.

Capital Assets, Fiscal Year 2019

The Enterprise has net capital assets of \$5,388,658 invested in a broad range of utility capital assets as of June 30, 2019 (see Table 3). The investment in capital assets includes land, facilities, improvements, water treatment plants, aqueducts, water transmission, distribution mains, water storage facilities, pump stations, water reclamation facilities, machinery, and equipment. The Enterprise's net revenue and long-term debt are used to finance capital investments. Capital assets, net of accumulated depreciation and amortization, increased by \$125,425 from the prior year. Construction work in progress decreased by \$937,445 primarily due to capital assets placed into service. Intangible assets decreased by \$1,505 due to amortization of \$2,171 primarily relating to the SFPUC On-Line Invoicing System, Automated Water Meter Program upgrades and SFBid online contracting system, offset by increases of \$666 mainly from Water Quality Sampling and Maximo asset management software. Land was unchanged from prior year. Facilities, improvements, machinery, and equipment increased by \$1,064,375 mainly attributable to capital assets placed into service such as Calaveras Dam, WSIP Security Upgrades, and West Sunset Well Station.

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

Calaveras Dam Replacement	\$ 68,453
Recycled Water Project	25,913
Sunol Long Term Improvements	18,325
Regional Groundwater Storage & Recovery	14,677
Water Main Replacement - Van Ness Avenue/Market/Lombard Streets	9,826
Various New Water Utility Services	7,116
San Francisco Groundwater Supply	6,204
Sunol Valley Water Treatment Plant - Powdered Activated Carbon System	5,710
Various Water Utility Services Renewals	5,245
Water Main Replacement - Putnam Street/Peralta/Cortland Avenues	5,041
Other project additions individually below \$5,000	77,097
Total	\$ 243,607

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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:

Calaveras Dam Construction	\$	496,165
Calaveras Dam Spillway & Basin		369,551
Calaveras Dam Outlet System		126,044
Calaveras Dam Fish Passage		62,228
WSIP Security Systems Upgrades		17,852
West Sunset Well Station		14,098
Golden Gate Park Central Well Station		13,000
South Sunset Well Station		9,505
Sunol Valley Water Treatment Plant - Powdered Activated Carbon System		7,613
Various New Water Utility Services		7,116
Water Main Replacement - Putnam Street/Peralta/Cortland Avenues		6,914
Auxiliary Water Supply System - Columbus Avenue Pipeline		5,956
Sunset Reservoir Chemical Building		5,890
Various Water Utility Service Renewals		5,245
Water Main Replacement - Pacheco Street/10th/Castenada Avenues		5,046
Other items individually below \$5,000		31,465
Total	\$	1,183,688
	-	

See Note 4 for additional information about Capital Assets.

Water System Improvement Program

The WSIP delivers capital improvements that enhance the Enterprise's ability to provide reliable, affordable, high-quality drinking water to its 27 wholesale customers and regional retail customers in Alameda, Santa Clara, and San Mateo Counties, as well as approximately 800,000 residential customers in San Francisco, in an environmentally sustainable manner. The program is structured to cost-effectively meet water quality requirements and long-term water supply objectives, as well as improve seismic and delivery reliability.

Overall, the \$4.8 billion WSIP to upgrade the City of San Francisco's regional and local drinking water systems is 97% completed with \$4.5 billion of project appropriations expended through fiscal year ended June 30, 2019. The program consists of 35 local projects located within San Francisco and 52 regional projects spread over seven different counties from the Sierra Foothills to San Francisco. As of June 30, 2019, 34 local projects are completed, and the target completion date is December 2019. For regional projects, 42 are completed and the expected completion date is December 2021. Additional details regarding the WSIP are available at https://sfwater.org/index.aspx?page=115.

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Debt Administration

As of June 30, 2020, the Enterprise had \$5,232,498 total debt outstanding, an increase of \$156,193 over the prior year, as shown below 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	\$	4,695,295	4,808,548	4,909,041	(113,253)	(100,493)
Capital appreciation bonds		<u>-</u>	2,029	6,725	(2,029)	(4,696)
Commercial paper		362,354	161,336	40,312	201,018	121,024
Certificates of participation		101,578	104,392	107,106	(2,814)	(2,714)
State revolving fund loans		73,271	<u> </u>	_	73,271	<u> </u>
Total	\$	5,232,498	5,076,305	5,063,184	156,193	13,121
	_					

The increase of \$73,271 State revolving fund loans was for the SF Westside Recycled Water project. The decrease of \$113,253 in revenue bonds was due to decreases of \$616,975 from bond refunding, \$98,870 for bond repayment, \$27,640 in amortization of premium, and \$26,734 from refunding of premium; offset by increases of \$656,955 from issuance of 2019 Series ABC revenue bonds, and \$11 from amortization of discount. The decrease of \$2,814 in certificates of participation was as a result of \$2,688 from repayment and \$126 from amortization of premium. The decrease of \$2,029 in capital appreciation bonds was due to \$2,100 from repayment, offset by \$71 from accretions. The Enterprise had \$335,793 in tax-exempt and \$26,561 in taxable commercial paper as of June 30, 2020, and \$135,308 in tax-exempt and \$26,028 in taxable commercial paper outstanding as of June 30, 2019. The increase of \$201,018 was due to the additional issuance of \$200,485 in tax-exempt and \$533 in taxable commercial paper.

Credit Ratings and Bond Insurance – The Enterprise carried underlying ratings of "Aa2" and "AA-" from Moody's and Standard & Poor's (S&P) at June 30, 2020, and "Aa3" and "AA-" from Moody's and Standard & Poor's (S&P) at June 30, 2019, respectively.

Debt Service Coverage – Pursuant to the Amended and Restated Indenture, the Enterprise is required to collect sufficient net revenues each fiscal year, together with any Enterprise funds (except Bond Reserve Funds), which 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 Enterprise's Amended and Restated 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 approved by voters in Proposition E in November 2002. As of June 30, 2020, the Board of Supervisors has authorized the issuance of \$4,269,958 in revenue bonds under Proposition E, with \$3,464,660 issued against this authorization. The Enterprise can also incur indebtedness of up to \$1,628,000 for improvements to the water system pursuant to Proposition A that was approved by the voters in November 2002. As of June 30, 2020, \$1,348,335 of the \$1,628,000 Proposition A authorized bonds were issued. The Enterprise is also authorized to issue up to \$500,000 in commercial paper.

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Cost of Debt Capital – The Enterprise's outstanding long-term debt has coupon interest rates ranging from 1.0% to 7.0% as of June 30, 2020 and 2019. The Enterprise's short-term debt has interest rates ranging from 0.2% to 2.8% during fiscal years 2020 and 2019.

Rates and Charges

Rate Setting Process

Retail Customers

Proposition E, as approved by the voters in November 2002, amended the City Charter by adding the new Article VIIIB, entitled "Public Utilities," which changed the Commission's ability to issue new revenue bonds and set retail water rates. For the retail water rate setting, 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 rate study was completed in April 2018 and resulted in an approved four-year retail rate increase. The Commission adopted retail rates effective for four fiscal years from July 1, 2018 through June 30, 2022. SFPUC Rates Schedules and Fees is available at https://sfwater.org/modules/showdocument.aspx?documentid=7743.

Wholesale Customers

The WSA prescribes the rate setting process for the wholesale water rates. The WSA has a 25-year term, beginning on July 1, 2009, with two 5-year extension options. The WSA was amended and restated on December 11, 2018 by the SFPUC. The contract changed the rate basis by which the capital cost recovery is determined from a "utility basis" to a "cash basis," resulting in the repayment of the cost of capital over the life of the debt funding of those assets rather than the life of the asset. The WSA requires the rate be calculated and set annually and include a reconciliation between prior year revenues and expenses. Refer to Note 9 of the notes to financial statements for further discussion on the balancing account of the wholesale customers.

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

Ten-year Average Rate Adjustments

	Effective Date:	Retail		Wholesale 3
-	July 1, 2012	12.5	1	11.4
	July 1, 2013	6.5	1	(16.4)
	July 1, 2014	12.0	2	19.6
	July 1, 2015	12.0	2	28.0
	July 1, 2016	10.0	2	9.3
	July 1, 2017	7.0	2	-
	July 1, 2018	9.0	4	
	July 1, 2019	8.0	4	8
	July 1, 2020	7.0	4	- 2
	July 1, 2021	7.0	4	

- Five-year retail rate increases adopted and effective July 1, 2009.
- Four-year retail rate increases adopted and effective July 1, 2014.
- Wholesale rates adopted annually; no increase for wholesale rates effective July 1, 2017; no increase projected to June 30, 2022 from 10 Year Financial Plan.
- Four-year retail rate increases adopted and effective July 1, 2018.

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, 525 Golden Gate Avenue, 13th Floor, San Francisco, CA 94102. This report is available at https://sfwater.org/index.aspx?page=344.

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

(In thousands)			
	-	2020	2019
Assets Current assets:			
Cash and investments with City Treasury	\$	451,499	405,558
Cash and investments outside City Treasury		353	254
Receivables:			
Charges for services (net of allowance for doubtful accounts of \$2,500 as of June 30, 2020 and \$1,733 as of June 30, 2019)		59,946	55,151
Due from other City departments		250	640
Due from other governments		23	111
Interest		1,251	2,644
Restricted due from other governments Restricted interest and other receivable (net of allowance for doubtful		73,271	_
accounts of \$13 as of June 30, 2020 and \$5 as of June 30, 2019)		3,774	3,795
Total current receivables	-	138,515	62,341
Prepaid charges, advances, and other receivables, current portion		3,705	2,309
Inventory		5,777	5,426
Restricted cash and investments outside City Treasury, current portion Total current assets	-	16,638 616,487	122,512 598,400
Non-current assets:	-	,	
Restricted cash and investments with City Treasury		_	2,224
Restricted cash and investments outside City Treasury, less current portion		80,924	_
Restricted interest and other receivable (net of allowance for doubtful accounts of \$8 as of June 30, 2020 and \$9 as of June 30, 2019)		4	3
Charges for services, less current portion (net of allowance for doubtful		-	3
accounts of \$669 as of June 30, 2020 and \$662 as of June 30, 2019)		204	189
Capital assets, not being depreciated and amortized		598,697	493,314
Capital assets, net of accumulated depreciation and amortization		4,931,848	4,895,344
Prepaid charges, advances, and other receivables, less current portion Total non-current assets	-	3,587 5,615,264	3,647 5,394,721
Total assets	-	6,231,751	5,993,121
Deferred outflows of resources	-		
Unamortized loss on refunding of debt		144,189	139,061
Pensions Other post-employment benefits		67,084 27,583	55,465 13,142
Total deferred outflows of resources	-	238,856	207,668
Liabilities			
Current liabilities:			
Accounts payable		10,574	12,624
Accrued payroll Accrued vacation and sick leave, current portion		8,491 6,169	6,943 5,706
Accrued workers' compensation, current portion		1,781	1,949
Due to other City departments		674	
Damage claims liability, current portion		4,740	3,872
Unearned revenues, refunds, and other Bond and loan interest payable		18,174 42,752	20,095 38,288
Revenue bonds, current portion		94,080	98.870
Capital appreciation bonds, current portion			2,029
Certificates of participation, current portion		2,824	2,688
Commercial paper Wholesale balancing account, current portion		362,354	161,336
Current liabilities payable from restricted assets		11,257 29,951	10,859 31,915
Total current liabilities	25	593,821	397,174
Long-term liabilities:		77.00	
Other post-employment benefits obligations		163,684	150,771
Net pension liability Accrued vacation and sick leave, less current portion		178,133 5,451	175,429 4,394
Accrued variation and sick leave, less current portion Accrued workers' compensation, less current portion		7,393	8,387
Damage claims liability, less current portion		6,027	7,637
Revenue bonds, less current portion		4,601,215	4,709,678
Certificates of participation, less current portion		98,754	101,704
State revolving fund loans, less current portion Wholesale balancing account, less current portion		73,271 53,600	53.970
Pollution remediation obligation		1,577	2,194
Total long-term liabilities	-	5,189,105	5,214,164
Total liabilities	_	5,782,926	5,611,338
Deferred inflows of resources		04.004	22.222
Related to pensions Other post-employment benefits		34,894 11,772	33,330 13,983
Total deferred inflows of resources	-	46,666	47,313
Net position	-		
Net investment in capital assets		527,856	563,457
Restricted for debt service		15,916	16,193
Restricted for capital projects Unrestricted		43,122 54,121	(37,512)
Total net position	\$	641,015	542,138
	•	-	

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	\$	550,753	509,703
Rents and concessions		12,124	13,010
Capacity fees		2,169	2,368
Other revenues		18,305	17,310
Total operating revenues	1.0	583,351	542,391
Operating expenses:	,		
Personnel services		119,943	111,594
Contractual services		14,523	13,715
Materials and supplies		14,050	13,421
Depreciation and amortization		142,228	120,815
Services provided by other departments		61,128	59,751
General and administrative and other		46,245	37,798
Total operating expenses		398,117	357,094
Operating income		185,234	185,297
Non-operating revenues (expenses):			
Federal and state grants		209	200
Interest and investment income		10,517	15,650
Interest expenses		(191,246)	(177,998)
Amortization of premium, discount, refunding loss, and issuance costs		13,752	17,788
Net gain from sale of assets		63,963	2,277
Other non-operating revenues		30,562	29,922
Other non-operating expenses		(529)	(1,388)
Net non-operating expenses		(72,772)	(113,549)
Change in net position before transfers		112,462	71,748
Transfers from the City and County of San Francisco		1 220	1 200
Transfers from the City and County of San Francisco		1,220	1,200
Transfers to the City and County of San Francisco Net transfers		(14,805)	(20,334)
		(13,585)	(19,134)
Change in net position		98,877 542,138	52,614
Net position at beginning of year	4	641,015	489,524 542,138
Net position at end of year	φ	041,013	342,130

See accompanying notes to financial statements.

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

(In thousands)	2220	
Cash flows from operating activities:	2020	2019
Cash received from customers, including cash deposits	\$ 565,100	540,479
Cash received from tenants for rent	11,921	12,837
Cash paid to employees for services	(127,216)	(124,905)
Cash paid to suppliers for goods and services	(133,064)	(126,412)
Cash paid for judgments and claims	(3,976)	(5,527)
Net cash provided by operating activities	312,765	296,472
Cash flows from non-capital financing activities:		
Cash received from grants	255	456
Cash received from settlements	914	_
Cash received from miscellaneous revenues	5,771	5,955
Cash paid for rebates and program incentives	(529)	(1,388)
Transfers from the City and County of San Francisco	1,220	1,200
Transfers to the City and County of San Francisco	(14,805)	(20,334)
Net cash (used in) non-capital financing activities	(7,174)	(14,111)
Cash flows from capital and related financing activities:		
Proceeds from sale of capital assets	397	2,277
Proceeds from bond issuance, net of premium, discount, refunding loss,		
and issuance costs	613,002	
Proceeds from commercial paper borrowings	201,018	121,024
Principal paid on long-term debt	(720,633)	(79,221)
Interest paid on long-term debt	(211,864)	(230,587)
Interest paid on commercial paper	(2,010)	(1,018)
Issuance cost paid on long-term debt	(1,913)	(4)
Acquisition and construction of capital assets	(200,600)	(208,064)
Federal interest income subsidy from Build America Bonds	23,894	23,977
Net cash (used in) capital and related financing activities	(298,709)	(371,616)
Cash flows from investing activities:		
Interest income received	10,001	10,829
Proceeds from sale of investments outside City Treasury	347,361	484,965
Purchase of investments outside City Treasury	(297,633)	(514,907)
Net cash provided by (used in) investing activities	59,729	(19,113)
Increase (decrease) in cash and cash equivalents	66,611	(108,368)
Cash and cash equivalents:		
Beginning of year	479,236	587,604
End of year	545,847	479,236
Reconciliation of cash and cash equivalents to the statement of net position:		
Cash and investments with City Treasury:		
Unrestricted	451,499	405,558
Restricted	-	2,224
Less: Unrealized gain on investments with City Treasury	(3,567)	(1,584)
Cash and investments outside City Treasury:		
Unrestricted	353	254
Restricted	97,562	122,512
Less: Restricted (with maturity more than 90 days - see table in Note 3)	-	(49,728)
Cash and cash equivalents at end of year on statements of cash flows	\$ 545,847	479,236

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

Years ended June 30, 2020 and 2 (In thousands)	201	L9	
(in thousands)		2020	2019
Reconciliation of operating income to net cash provided by			
operating activities:			
Operating income	\$	185,234	185,297
Adjustments to reconcile operating income to			
net cash provided by operating activities:			
Depreciation and amortization		142,228	120,815
Provision for uncollectible accounts		781	147
Write-off of capital assets and other non-cash items		5,285	1,286
Changes in operating assets and liabilities:			
Receivables:			
Charges for services		(5,585)	(898)
Prepaid charges, advances, and other		(1,343)	(1,021)
Due from other City departments		323	(370)
Inventory		(351)	135
Accounts payable		(2,050)	(2,930)
Accrued payroll		1,548	283
Other post-employment benefits obligations		(3,739)	(5,870)
Pension obligations		(7,351)	(8,710)
Accrued vacation and sick leave		1,520	(586)
Accrued workers' compensation		(1,162)	(621)
Due to other City departments		674	(96)
Wholesale balancing account		28	8,963
Pollution remediation obligation		(617)	(117)
Damage claims liability		(742)	(1,893)
Unearned revenues, refunds, and other liabilities	_	(1,916)	2,658
Total adjustments		127,531	111,175
Net cash provided by operating activities	\$_	312,765	296,472
Noncash transactions:			
Accrued capital asset costs	\$	29,951	31,915
Land acquired through real property exchange	Ψ	63,600	-
Interfund payable		674	_
Unrealized (gain) on investments		(3,567)	(1,584)
10		(-,00.)	(2,001)

See accompanying notes to financial statements.

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

(1) Description of Reporting Entity

The San Francisco Water Enterprise (the Enterprise) was established in 1930 under the provisions of the Charter of the City and County of San Francisco (the City). The Enterprise acquired the fully developed, mature water works for San Francisco on March 3, 1930. Since then, the City has operated and maintained the water works as the San Francisco Water Enterprise. The Board of Supervisors of the City has adopted resolutions (the Water Resolutions) providing for the issuance of various water revenue and refunding bond series. The Water Resolutions require the City to keep separate books of records and accounts of the Enterprise. The Enterprise, which consists of a system of reservoirs, storage tanks, water treatment plants, pump stations, and pipelines, is engaged in the distribution of water to San Francisco and certain suburban areas. In fiscal year 2020, the Enterprise sold approximately 69,934 million gallons, i.e., about 191 million gallons per day of water, to approximately 2.7 million people within San Francisco and certain suburban areas.

The San Francisco Public Utilities Commission (the Commission), established in 1932, is responsible for providing operational oversight of the public utility enterprises of the City, which include the Enterprise along with the City's power and sewer utilities (i.e., Hetch Hetchy Water and Power and CleanPowerSF, of which the Power Enterprise is a component, and the San Francisco Wastewater 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 Wastewater 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).

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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 and are included as 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 U.S. GAAP. Under this method, all assets and liabilities associated with its operations are included on the statement of net position; revenues are recognized when earned, and expenses are recognized when liabilities are incurred. 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 cash 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 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 on 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

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estimated useful lives of the related assets, which range from 1 to 100 years for equipment and 1 to 200 years for buildings, 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 discontinued construction projects 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 for assets that require a period of time to construct 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 is offset against the related debt and is 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 12(b)).

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(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 12(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. The arbitrage rebate liability was \$0 at June 30, 2020 and 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

Water service charges are based on water usage as determined by the Enterprise. Effective July 2013, the majority of residential and non-residential customers are billed on a monthly basis except for building and contractor customers, which are billed on a bi-monthly basis. Revenues earned but unbilled are accrued as charges for services and reflected as a receivable on the statements of net position. The unbilled amounts for the fiscal years ending June 30, 2020 and 2019 were \$29,876 and \$29,032, 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

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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 13(d)).

(s) Other Post-Employment Benefits

As prescribed under GASB 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions, net OPEB liability, deferred outflows/inflows of resources related to OPEB, and OPEB expense are actuarially determined on a citywide basis. Net OPEB liability is measured as the portion of the present value of projected benefit payments to be provided to current active and inactive employees attributed to those employees' past service, less the amount of the Retiree Healthcare Trust Fund investments measured at fair value (see Note 10(b)).

(t) New Accounting Standards Adopted in Fiscal Year 2020

In May 2020, the GASB issued Statement No. 95, Postponement of the Effective Dates of Certain Authoritative Guidance. The primary objective of this Statement is to provide temporary relief to governments and other stakeholders in light of the COVID-19 pandemic. That objective is accomplished by postponing the effective dates of certain provisions in Statements and Implementation Guides that first became effective or are scheduled to become effective for periods beginning after June 15, 2018. The Enterprise adopted the provisions of this Statement in fiscal year 2020.

(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.

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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) 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 the 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

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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.
- 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 Statements 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.

Restricted assets are held by an independent trustee outside the City's investment pool. The assets are held for the purpose of paying future interest and principal on the bonds and for eligible capital project expenditures. The current balances as of June 30, 2020 and 2019 were \$97,562 and \$122,512, respectively. The Enterprise held all investments in guaranteed investment contracts, treasury and government obligations, commercial paper, corporate bonds, and notes, as well as money market mutual funds consisting of Treasury and Government Obligations.

Funds held by the trustee established under the 2002 Amended and Restated Indentures agreements are invested in "Permitted Investments," as defined in the agreement, which includes money market funds and investment agreements. The agreement permits investment in money market funds registered under the Federal Investment Company Act of 1940 whose shares are registered under the Federal Securities Act of 1933 and have a rating by S&P of "AAAm-G," "AAAm," or "AAM," and a rating by Moody's of "Aaa," "Aa1," or "Aa2". The credit ratings of the money market

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funds invested in as of June 30, 2020 were "Aaa-mf" and "P-1" by Moody's, and "AAAm" and "A-1+" by S&P. The credit ratings of the money market funds invested in as of June 30, 2019 were "Aaa-mf" and "P-1" by Moody's, and "AAAm" and "A-1+" by S&P. Investment agreements must be with a U.S. bank or trust company that have a rating by Moody's and S&P of "A" or higher, or are guaranteed by any entity with a rating of "A" or higher, at the time the agreement is entered.

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 tables present the restricted and unrestricted cash and investments outside City Treasury as of June 30, 2020 and 2019:

Cash and	Investments	outside	City	Treasury
Casil allu	mvestments	outside	CILY	reasury

					Fair Valu	e Measuremen	ts Using
	Credit Ratings	June 30, 20	020	Investments exempt from	Quoted prices in active markets for identical assets	Significant other observable inputs	Unobservable Inputs
Investments	(S&P/Moody's)	Maturities	Fair Value	fair value	(Level 1)	(Level 2)	(Level 3)
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	84,463	84,463	_	_	_
Money Market Funds	A-1+/P-1	< 90 days	46	46		-	-
Cash and Cash Equivalents	N/A		13,053	13,053	-	-	
Total Restricted Cash and	Investments outside	de City Treasury	\$ 97,562	97,562	+2	÷	-
Cash and Cash Equivalents	N/A		353	353	9	-	_
Total Cash and Investmen	ts outside City Trea	sury	\$ 353	353		-	-

Cash and Investments outside City Treasury

					Fair Valu	e Measuremer	its Using
	Credit Ratings	June 30, 20	19	Investments exempt from	Quoted prices in active markets for identical assets	Significant other observable inputs	Unobservable Inputs
Investments	(S&P/Moody's)	Maturities	Fair Value	fair value	(Level 1)	(Level 2)	(Level 3)
Commercial Paper	A-1/P-1	October 31, 2019 \$	49,728	49,728	=	_	_
Commercial Paper	A-1+/P-1	September 10, 2019	352	352	-		· -
Commercial Paper	A-1/P-1	July 1, 2019	12,332	12,332	-	-	
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	60,061	60,061	·		-
Money Market Funds	A-1+/P-1	< 90 days	38	38	-	-	
Cash and Cash Equivalents	N/A		1	1	_	_	_
Total Restricted Cash and	Investments out	side City Treasury \$	122,512	122,512	_	_	_
Cash and Cash Equivalents	N/A		254	254	_	_	_
Total Cash and Investmen	ts outside City Tr	easury \$	254	254		_	_

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.

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The restricted cash and investments outside City Treasury as of June 30, 2020 and 2019 included an unrealized gain due to changes in fair value on commercial paper of \$0 and \$123, respectively.

Additional cash outside of the investment pool included revolving fund and cash in transit. The revolving fund has a balance of \$28 and \$28 at June 30, 2020 and 2019, respectively, which is held in a commercial bank in non-interest bearing checking accounts covered by Federal Deposit Insurance Corporation depository insurance. These accounts were established as provided by the City's Administrative Code for revolving fund needs. The cash in transit was \$325 and \$226 at June 30, 2020 and 2019, respectively.

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	\$	451,499	405,558
Cash and investments outside City Treasury		353	254
Restricted cash and investments outside City Treasury		16,638	122,512
Non-current assets:			
Restricted cash and investments with City Treasury			2,224
Restricted cash and investments outside City Treasury		80,924	=
Total cash, cash equivalents, and investments	\$	549,414	530,548

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		
	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, reservoirs, dams, treatment plants, pump stations, certain water mains and pipelines, sewer systems, tunnels, and bridges.

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

	4	2019	Increases	Decreases	2020
Capital assets not being depreciated and amortized:	Ţ				
Land	\$	30,029	75,375	(68)	105,336
Intangible assets		679	=	1-1	679
Construction work in progress		462,606	220,427	(190,351) *	492,682
Total capital assets not being depreciated and amortized	ř.	493,314	295,802	(190,419)	598,697
Capital assets being depreciated and amortized:					
Facilities and improvements		6,088,534	169,799	-	6,258,333
Intangible assets		23,123	374	-	23,497
Machinery and equipment		311,154	8,559	(713)	319,000
Total capital assets being depreciated and amortized		6,422,811	178,732	(713)	6,600,830
Less accumulated depreciation and amortization for:	Τ				
Facilities and improvements		(1,297,056)	(126,666)	-	(1,423,722)
Intangible assets		(17,986)	(2,101)		(20,087)
Machinery and equipment		(212,425)	(13,461)	713	(225,173)
Total accumulated depreciation and amortization	-	(1,527,467)	(142,228)	713	(1,668,982)
Total capital assets being depreciated and amortized, net	7	4,895,344	36,504	(E-15)	4,931,848
Total capital assets, net	\$	5,388,658	332,306	(190,419)	5,530,545

^{*} Decrease in construction work in progress includes \$5,285 in capital project write-offs, mainly related to Daly City Recycled Water, New Fuel Station, and Row Gaps projects. The remaining difference of \$6,334 is related to \$11,774 of construction work in progress transferred to land offset by \$5,440 direct additions to intangible assets and machinery and equipment.

		2018	Increases	Decreases	2019
Capital assets not being depreciated and amortized:					
Land	\$	30,029	-	-	30,029
Intangible assets		679	_	-	679
Construction work in progress		1,400,051	243,607	(1,181,052) *	462,606
Total capital assets not being depreciated and amortized		1,430,759	243,607	(1,181,052)	493,314
Capital assets being depreciated and amortized:	1				
Facilities and improvements		4,929,069	1,159,465	-	6,088,534
Intangible assets		22,457	666	-	23,123
Machinery and equipment		288,037	23,557	(440)	311,154
Total capital assets being depreciated and amortized		5,239,563	1,183,688	(440)	6,422,811
Less accumulated depreciation and amortization for:	1			-	
Facilities and improvements		(1,190,341)	(106,715)	-	(1,297,056)
Intangible assets		(15,815)	(2,171)	((17,986)
Machinery and equipment		(200,933)	(11,929)	437	(212,425)
Total accumulated depreciation and amortization	1	(1,407,089)	(120,815)	437	(1,527,467)
Total capital assets being depreciated and amortized, net	Ţ	3,832,474	1,062,873	(3)	4,895,344
Total capital assets, net	\$	5,263,233	1,306,480	(1,181,055)	5,388,658
					- 6 - 777 V

^{*} Decrease in construction work in progress includes \$1,286 in capital project write-offs, mainly related to Bay Division Pipeline Upgrade, and Local Water Conveyance/Distribution 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	\$ 191,246	177,998
Interest included in construction work in progress	27,164	53,431
Total interest incurred	\$ 218,410	231,429

(5) Restricted Assets

Pursuant to the Indentures, all revenues of the Enterprise (except amounts on deposit in the rebate fund) are irrevocably pledged to the punctual payment of debt service on the Water Revenue and Refunding Bonds. Accordingly, the revenues of the Enterprise shall not be used for any other purpose while any of its Water Revenue and Refunding Bonds are outstanding, except as expressly permitted by the Indentures. Further, all revenues shall be deposited by the City Treasurer, by instruction of the Enterprise, in special funds designated as the Water Enterprise Revenue Fund (the Water Revenue Fund), which must be maintained in the City Treasury. These funds, held at the City Treasury, are recorded in the statement of net position of the Enterprise as cash and investments. Deposits in the Water Revenue Fund, including earnings thereon, shall be appropriated, transferred, expended, or used for the following purposes pertaining to the financing, maintenance, and operation of the Enterprise in accordance with the following priority:

- 1. The payment of operation and maintenance expenses for such utility and related facilities;
- 2. The payment of pension charges and proportionate payments to such compensation and other insurance or outside reserve funds as the Enterprise may establish or the Board of Supervisors may require with respect to employees of the Enterprise:
- 3. The payment of principal, interest, reserve, sinking fund, and other mandatory funds created to secure Revenue Bonds issued by the Enterprise for the acquisition, construction, or extension of facilities owned, operated, or controlled by the Enterprise;
- 4. The payment of principal and interest on General Obligation Bonds issued by the City for the Enterprise's purposes;
- 5. Reconstruction and replacement as determined by the Enterprise or as required by any of the Enterprise's Revenue Bond ordinances duly adopted and approved; and
- 6. The acquisition of land, real property, or interest in real property for, and the acquisition, construction, enlargement, and improvement of, new and existing buildings, structures, facilities, equipment, appliances, and other property necessary or convenient to the development or improvement of such utility owned, controlled, or operated by the Enterprise; and for any other lawful purpose of the Enterprise, including the transfer of surplus funds pursuant to the Charter.

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In accordance with the Indenture, the bond financing program maintains that certain restricted cash and investment balances be held 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:			E.AleX
Water revenue bond construction fund	\$	-	2,224
Cash and investments outside City Treasury:			
1991A Capital Appreciation Bond		 -	2,576
2010B Water revenue bond fund		21,581	21,464
2010D Water revenue bond fund		2,935	2,900
2010E Water revenue bond fund		16,831	16,684
2010G Water revenue bond fund		17,691	22,652
2011A Water revenue bond fund		1	1
2011B Water revenue bond fund		670	1,022
2011C Water revenue bond fund		802	1,185
2011D Water revenue bond fund		1,981	1,957
2012A Water revenue bond fund		2,961	2,927
2012B Water revenue bond fund		807	798
2012C1 Water revenue refunding bond fund		1,181	1,167
2012C2 Water revenue refunding bond fund		3,399	3,359
2012D Water revenue refunding bond fund		7.00	2,462
2015A Water revenue refunding bond fund		1	1
2016A Water revenue refunding bond fund		-	1
2016B Water revenue refunding bond fund		1	<u></u>
2017A Water revenue bond fund		363	6,357
2017B Water revenue bond fund		4,239	11,503
2017C Water revenue bond fund		-	1,891
2017D Water revenue refunding bond fund		1	1
2019A Water revenue refunding bond fund		47	
2019B Water revenue refunding bond fund		6	_
2019C Water revenue refunding bond fund		2	
2009C Certificates of participation - 525 Golden Gate		1,816	1,796
2009D Certificates of participation - 525 Golden Gate		7,147	7,084
Commercial Paper - Tax Exempt		15	11
Commercial Paper - Taxable		31	27
Habitat reserve endowment fund		13,053	12,686
Total cash and investments outside City Treasury		97,562	122,512
Interest and other receivables:			
Water bond construction fund including capacity fee receivables		3,778	3,798
Due from other government for State Revolving Fund	5	73,271	-
Total restricted assets	\$	174,611	128,534

Restricted assets listed above as cash and investments with City Treasury are held in fund accounts within the Water Revenue Fund of the City Treasury.

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(6) Short-Term Debt

The Commission and the Board of Supervisors have authorized the issuance of up to \$500,000 in commercial paper pursuant to the voter-approved 2002 Proposition E. As of June 30, 2020 and 2019, amounts outstanding under Proposition E were \$362,354 and \$161,336, respectively. Commercial paper interest rates ranged from 0.2% to 2.8%.

With maturities up to 270 days, the Enterprise intends to maintain the program by remarketing the commercial paper upon maturity over the near-to-medium term, at which time outstanding commercial paper will likely be refunded with revenue bonds. This is being done to take advantage of the continued low interest rate environment. If the commercial paper interest rates rise to a level that exceeds these benefits, the Enterprise will refinance the commercial paper with the long-term, fixed-rate debt.

In accordance with GASB Statement No. 88, Certain Disclosures Related to Debt, Including Direct Borrowing and Direct Placements, the Enterprise had \$137,646 and \$338,664 in unused authorization as of June 30, 2020 and 2019, respectively. Significant Events of default as specified in the Reimbursement Agreements, or Revolving Credit Agreement 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 describe herein.

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(7) Changes in Long-Term Liabilities

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

	Interest	Maturity (Calendar	2019	Additions	Paduations	2020	Due within
Revenue Bonds:	rate	Year)	2019	Additions	Reductions	2020	one year
2009A revenue bonds	4.00 % - 5.25 %	2019	\$ 9,635	020	(9,635)	04	_
2009B revenue bonds	4.00 - 5.00	2019	9,635	-	(9,635)	_	_
2010A revenue bonds	2.00 - 5.00	2019	2,530	_	(2,530)	_	
2010B revenue bonds (Build America)	4.00 - 6.00	2040	384,975		(11,555)	373,420	11,920
2010D revenue refunding bonds	3.00 - 5.00	2021	47,770	_	(16,780)	30,990	17,640
2010E revenue bonds (Build America)	4.90 - 6.00	2040	344,200	1020	(10,100)	344,200	11,040
2010F revenue bonds	3.00 - 5.50	2030	23,975	_	(23,975)	-	_
2010G revenue bonds (Build America)	6.95	2050	351,470	_	(20,0.0)	351,470	_
2011A revenue bonds	4.25 - 5.00	2019	322,480	-	(322,480)	331,410	
2011B revenue bonds	3.50 - 5.00	2013	17,870	_	(16,385)	1,485	730
2011C revenue bonds	3.00 - 5.00	2041	19,475		(17,855)	1,620	795
2011C revenue bonds 2011D revenue refunding bonds	4.00 - 5.00	2028	19,475		(17,655)	19,135	195
2011D revenue rerunding bonds 2012A revenue bonds	4.00 - 5.00	2043	459,455	_	(242,915)	216,540	_
2012B revenue bonds	4.00 - 5.00	2043	16,520	- I	(242,915)	16,520	
		2031	200 P	= =	Ξ	200	_
2012C1 revenue refunding bonds	4.00		8,465			8,465	
2012C2 revenue refunding bonds	4.00 - 5.00	2032	69,570	-	40.045	69,570	_
2012D revenue refunding bonds	1.75 - 5.00	2019	12,215	-	(12,215)	440.000	44.005
2015A revenue refunding bonds	2.00 - 5.00	2036	426,380	-	(14,000)	412,380	14,635
2016A revenue refunding bonds	4.00 - 5.00	2039	763,005		(0.000)	763,005	19,955
2016B revenue refunding bonds	1.50 - 5.00	2030	104,900	_	(8,920)	95,980	14,455
2016C revenue bonds	0.87 - 4.19	2046	248,360	-	(5,605)	242,755	5,705
2017A revenue bonds	5.00	2047	121,140	-	_	121,140	_
2017B revenue bonds	5.00	2047	147,725	-	_	147,725	_
2017C revenue bonds	5.00	2047	70,675	0=0		70,675	
2017D revenue refunding bonds	2.00 - 5.00	2035	349,470	-	(860)	348,610	890
2017E revenue refunding bonds	4.00 - 5.00	2031	48,890	_	_	48,890	_
2017F revenue refunding bonds	5.00	2031	8,705	-		8,705	
2017G revenue refunding bonds	2.03 - 2.91	2024	33,780	-	(500)	33,280	500
2019A revenue refunding bonds	1.81 - 3.47	2043	-	622,580		622,580	6,855
2019B revenue refunding bonds	3.15 - 3.52	2041	-	16,450	-	16,450	-
2019C revenue refunding bonds	3.15 - 3.52	2041	~	17,925	-	17,925	_
Less issuance discount			(154)	_	11	(143)	-
Add issuance premiums			366,297	=	(54,374)	311,923	=
Total revenue bonds payable			4,808,548	656,955	(770,208)	4,695,295	94,080
1991 capital appreciation bonds	0.00	2019	2,029	71	(2,100)		
2009C certificates of participation (COPs) 2.00 - 5.00	2022	11,606	_	(2,688)	8,918	2,824
2009C COPs issuance premiums			287	-	(126)	161	- 1-
2009D COPs (Build America)	6.36 - 6.49	2041	92,499		-	92,499	_
State Revolving Funds Loan	1.00	2051	- H	73,271		73,271	_
Other post-employment benefits obligation	ns		150,771	25,253	(12,340)	163,684	_
Net pension liability			175,429	39,194	(36,490)	178,133	
Accrued vacation and sick leave			10,100	9,716	(8,196)	11,620	6,169
Accrued workers' compensation			10,336	1,065	(2,227)	9,174	1,781
Damage claims liability			11,509	709	(1,451)	10,767	4,740
Wholesale balancing account			64,829	833	(805)	64,857	11,257
Pollution remediation obligation			2,194		(617)	1,577	
Total			\$ 5,340,137	807,067	(837,248)	5,309,956	120,851

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	Interest rate	Maturity (Calendar Year)		2018	Additions	Reductions	2019	Due within one year
Revenue Bonds:	- 1010	,	-	2010	ricalitions	11000010110		00)00.
2009A revenue bonds	4.00 % - 5.25 %	2019	\$	16,885	-	(7,250)	9,635	9,635
2009B revenue bonds	4.00 - 5.00	2019		14,910	-	(5,275)	9,635	9,635
2010A revenue bonds	2.00 - 5.00	2019		3,035	-	(505)	2,530	2,530
2010B revenue bonds (Build America)	4.00 - 6.00	2040		396,190	_	(11,215)	384,975	11,555
2010D revenue refunding bonds	3.00 - 5.00	2021		63,735		(15,965)	47,770	16,780
2010E revenue bonds (Build America)	4.90 - 6.00	2040		344,200	-	_	344,200	-
2010F revenue bonds	3.00 - 5.50	2030		27,100	-	(3,125)	23,975	5,175
2010G revenue bonds (Build America)	6.95	2050		351,470	_	7.5	351,470	
2011A revenue bonds	4.25 - 5.00	2041		322,480	-		322,480	_
2011B revenue bonds	3.50 - 5.00	2041		18,315	_	(445)	17,870	700
2011C revenue bonds	3.00 - 5.00	2041		19,475	_	_	19,475	760
2011D revenue refunding bonds	4.00 - 5.00	2028		19,135	_	20	19,135	
2012A revenue bonds	4.00 - 5.00	2043		459,455	_	_	459,455	-
2012B revenue bonds	4.00 - 5.00	2043		16,520		_	16,520	
2012C1 revenue refunding bonds	4.00	2031		8,465	_	_	8,465	_
2012C2 revenue refunding bonds	4.00 - 5.00	2032		69,570	_		69,570	100
2012D revenue refunding bonds	1.75 - 5.00	2019		24,040		(11,825)	12,215	12,215
2015A revenue refunding bonds	2.00 - 5.00	2036		429,600	_	(3,220)	426,380	14,000
2016A revenue refunding bonds	4.00 - 5.00	2039		763,005	_	(5,220)	763,005	14,000
2016B revenue refunding bonds	1.50 - 5.00	2030		110,880	_	(5,980)	104,900	8,920
2016C revenue bonds	0.87 - 4.19	2046		253,885		(5,525)	248,360	5,605
2017A revenue bonds	5.00	2047		121,140	Ξ.	(5,525)	121,140	3,003
2017R revenue bonds	5.00	2047		147,725	_	_	147,725	
20176 revenue bonds	5.00	2047		70,675	1	_	70,675	
2017C revenue bonds 2017D revenue refunding bonds	2.00 - 5.00	2035		350,305		(835)	349,470	860
2017E revenue refunding bonds	4.00 - 5.00	2031		48,890			48,890	800
	5.00	2031				7		
2017F revenue refunding bonds 2017G revenue refunding bonds	2.03 - 2.91	2024		8,705 34,280	=	(500)	8,705 33,780	500
	2.03 - 2.91	2024				12		500
Less issuance discount				(166) 395,137	_	(28.840)	(154) 366,297	
Add issuance premiums			-					00.070
Total revenue bonds payable	0.00	2019		4,909,041	204	(100,493)	4,808,548	98,870
1991 capital appreciation bonds				6,725	304	(5,000)	2,029	2,029
2009C certificates of participation (COP	s) 2.00 - 5.00	2022		14,162	-	(2,556)	11,606	2,688
2009C COPs issuance premiums		2011		445	-	(158)	287	_
2009D COPs (Build America)	6.36 - 6.49	2041		92,499	0.405	(0.4.000)	92,499	-
Other post-employment benefits obligation	ons			166,336	9,125	(24,690)	150,771	
Net pension liability				209,003	25,430	(59,004)	175,429	
Accrued vacation and sick leave				10,686	10,372	(10,958)	10,100	5,706
Accrued workers' compensation				10,957	2,707	(3,328)	10,336	1,949
Damage claims liability				13,402	4,768	(6,661)	11,509	3,872
Wholesale balancing account				55,866	8,963		64,829	10,859
Pollution remediation obligation				2,311	-	(117)	2,194	
Total			\$	5,491,433	61,669	(212,965)	5,340,137	125,973

The payments of principal and interest amounts on various bonds are secured by net revenues of the Enterprise.

(a) Capital Appreciation Bonds

The capital appreciation bonds mature from November 1, 2018 and November 1, 2019. The bonds were insured by Municipal Bond Insurance Association (MBIA) and carried "Aaa" and "AAA" ratings from Moody's and S&P, respectively. In February 2009, the bonds were further reinsured by National Public Finance Guarantees Corp. (NPFGC) and carried "Baa1" and "A" ratings from Moody's and S&P, respectively. On May 29, 2013, the SFPUC transferred \$2,500 to U.S. Bank, trustee of the 1991 Series A San Francisco Water Revenue Bonds (the Bonds), for

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the purpose of replacing the debt service reserve surety policy that had been satisfying the reserve requirement of the bonds. The surety policy had been provided by NPFGC. With this transfer, the surety policy is effectively terminated. The amount deposited with the U.S. Bank will continue to satisfy the reserve requirement on the bonds. Interest on the capital appreciation bonds is due upon maturity and is recognized as annual interest expense over the life of the bonds using the interest method. The Enterprise has recognized \$2,029 of unpaid principal and interest on the capital appreciation bonds as of June 30, 2019 and has reported it as capital appreciation bonds in the accompanying statements of net position. As of June 30, 2020, the balance of unpaid principal and interest on the capital appreciation bonds is \$0.

(b) Water Revenue Bonds 2009 Series A

On April 16, 2015, the Enterprise issued \$429,600 of the 2015 Series A revenue bonds for the purpose of refunding \$431,860 of the then outstanding 2006 Series A revenue bonds and \$39,030 of the 2009 Series A revenue bonds. The 2015 bonds bear coupon rates of 2.0% and 5.0% and mature serially from 2018 to 2036. The refunded 2009 Series A bonds carried coupon rates of 5.0% and matured serially between 2023 and 2026. Although the refunding resulted in the recognition of a deferred accounting loss of \$6,168, the economic gain was \$2,559 or 6.6% of the refunded principal. The remaining 2009 Series A bonds not refunded included serial and term bonds with interest rates ranging from 4.0% to 5.3%. The Bonds mature through November 1, 2039.

A portion of the proceeds of the 2015 Series A revenue refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated April 1, 2015, to refund and legally defease a portion of the outstanding 2009 Series A bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities consisting of United States Treasury Securities - SLGS. The principal and interest on monies held by the escrow agent will be sufficient to refund and legally defease the 2009 Series A bonds maturing on November 1, 2023 to and including November 1, 2026.

A portion of the proceeds of the 2016 Series A refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated October 1, 2016, to refund and legally defease a portion of the outstanding 2009 Series A bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to refund and legally defease bonds maturing November 1, 2020 through and including November 1, 2022 and November 1, 2026 to and including November 1, 2039. As of June 30, 2020 and 2019, the principal amount of 2009 Series A bonds outstanding was \$0 and \$9,635, respectively.

(c) Water Revenue Bonds 2009 Series B

During fiscal year 2010, the Enterprise issued revenue bonds, 2009 Series B in the amount of \$412,000. The purpose of the bonds is to provide \$377,778 in new money for WSIP capital projects, with the balance applied to financing costs and a cash-funded debt service reserve. The bonds were rated "AA-" and "A1" from S&P and Moody's, respectively. The bonds include serial and term bonds with interest rates varying from 4.0% to 5.0%. The bonds mature through November 1, 2039. The 2009 Series B bonds have a true interest cost of 4.5%.

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On February 27, 2013, the Wholesale Water Customers BAWSCA made an early repayment of \$356,139 to the Enterprise. Prepayment proceeds in the amount of \$24,014 were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated February 27, 2013, to refund and legally defease a portion of the outstanding 2009 Series B bonds. This deposit, together with certain other available monies, was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities consisting of United States Treasury Securities - SLGS. The principal and interest on monies held by the escrow agent will be sufficient to partially defease a portion of the 2009 Series B bonds maturing November 1, 2013 through 2018.

A portion of the proceeds of the 2016 Series A refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated October 1, 2016, to refund and legally defease a portion of the outstanding 2009 Series B bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to refund and legally defease all of the maturities of the 2009 Series B bonds starting on November 1, 2020 and thereafter. As of June 30, 2020 and 2019, the principal amount of 2009 Series B bonds outstanding was \$0 and \$9,635, respectively.

(d) Water Revenue Bonds 2010 Series AB

In fiscal year 2010, the Enterprise issued revenue bonds, 2010 Series ABC in the combined principal amount of \$488,705. The purpose of the bonds is to refund \$14,400 of outstanding 2001 Series A revenue bonds, to provide \$58,748 in proceeds for the Advanced Meter Infrastructure System (AMI) Project and to provide \$364,757 in new money for WSIP capital projects, with the balance applied to financing costs and a cash-funded debt service reserve fund. The bonds were rated "AA-" and "Aa2" from S&P and Moody's, respectively. The bonds included serial and term bonds with interest rates ranging from 2.0% to 6.0%.

The 2010 Series A Bonds in the par amount of \$56,945 were issued as tax-exempt bonds to provide funds for the SFPUC's AMI Project and pay financing costs. The 2010 Series A bonds were issued as serial bonds with coupons ranging from 2.0% to 5.0% and have a final maturity of 2030. The Series A bonds have a true interest cost of 3.8%.

On February 27, 2013, the Wholesale Water Customers BAWSCA made an early repayment of \$356,139 to the Enterprise. Prepayment proceeds in the amount of \$11,681 were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated February 27, 2013, to refund and legally defease a portion of the outstanding 2010 Series A bonds. This deposit, together with certain other available monies, was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities consisting of United States Treasury Securities - SLGS. The principal and interest on monies held by the escrow agent will be sufficient to partially defease a portion of the 2010 Series A bonds maturing November 1, 2013 through 2018.

A portion of the proceeds of the 2016 Series B refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated October 1, 2016, to refund and legally defease a portion of the outstanding 2010 Series A bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem all of the maturities of the 2010 Series A

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bonds starting on November 1, 2020 and thereafter. As of June 30, 2020 and 2019, the principal amount of 2010 Series A bonds outstanding was \$0 and \$2,530, respectively.

The 2010 Series B Bonds in the par amount of \$417,720 were issued as taxable Build America Bonds (with Direct Pay Subsidy) to provide \$364,757 in new money for WSIP capital projects and pay financing costs. The 2010 Series B bonds were issued as serial and term bonds with coupons ranging from 4.0% to 6.0% and have a final maturity of 2040. The Series B bonds have a true interest cost (net of federal subsidy) of 3.9%. As of June 30, 2020 and 2019, the principal amount outstanding was \$373,420 and \$384,975, respectively.

(e) Water Revenue Bonds 2010 Series DE

In July 2010, the Enterprise issued revenue bonds 2010 Series DE in the combined principal amount of \$446,925. The purpose of the bonds is to advance refund \$31,570 of outstanding 2002 Series A revenue bonds and to provide \$372,689 in new money for WSIP capital projects, with the balance applied to financing costs and a cash-funded debt service reserve fund. The bonds were rated "AA-" and "Aa2" from S&P and Moody's, respectively. The bonds included serial and term bonds with interest rates ranging from 3.0% to 6.0%.

The 2010 Series D Bonds in the par amount of \$102,725 were issued as tax-exempt bonds to provide \$72,243 in new money for WSIP capital projects and \$35,080 to advance refund a portion of outstanding 2002 Series A revenue bonds. The Series D bonds were issued as serial bonds with coupons ranging from 3.0% to 5.0% and have a final maturity of 2021. The Series D bonds have a true interest cost of 2.5%.

On February 27, 2013, the Wholesale Water Customers BAWSCA made an early repayment of \$356,139 to the Enterprise. \$12,360 of the repayment proceeds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated February 27, 2013, to refund and legally defease a portion of the outstanding 2010 Series D bonds. BAWSCA repayment funds were combined with \$165 from the 2010 Series D Capitalized Interest Account. This deposit, together with certain other available monies, was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities consisting of United States Treasury Securities - SLGS. The principal and interest on monies held by the escrow agent will be sufficient to partially defease a portion of the 2010 Series D bonds maturing November 1, 2015 through 2017. As of June 30, 2020 and 2019, the principal amount of 2010 Series D bonds outstanding was \$30,990 and \$47,770, respectively.

The 2010 Series E Bonds in the par amount of \$344,200 were issued as taxable Build America Bonds (with Direct Pay Subsidy) to provide \$300,446 in new money proceeds for WSIP capital projects. The Series E bonds were issued as serial and term bonds with coupons ranging from 4.9% to 6.0% and have a final maturity of 2040. The Series E bonds have a true interest cost (net of federal subsidy) of 3.8%. As of June 30, 2020 and 2019, the principal amount of 2010 Series E bonds outstanding was \$344,200.

(f) Water Revenue Bonds 2010 Series FG

In December 2010, the Enterprise issued revenue bonds 2010 Series FG in the combined principal amount of \$532,430. The purpose of the bonds is to provide \$437,980 in new money for WSIP capital projects, with the balance applied to financing costs and a cash-funded debt service reserve. The bonds were rated "AA-" and "Aa2" from S&P and Moody's, respectively. The bonds included serial and term bonds with interest rates ranging from 3.0% to 7.0%.

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The \$180,960 Series F bonds were issued as tax-exempt bonds to provide \$149,728 in new money for WSIP capital projects. The Series F bonds were issued as serial and term bonds with coupons ranging from 3.0% to 5.5% and have a final maturity of 2030. The Series F bonds have a true interest cost of 4.8%.

On February 27, 2013, the Wholesale Water Customers BAWSCA made an early repayment of \$356,139 to the Enterprise. \$3,646 of the repayment proceeds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated February 27, 2013, to refund and legally defease a portion of the outstanding 2010 Series F bonds. BAWSCA repayment funds were combined with \$131 from the 2010 Series F Capitalized Interest Account. This deposit, together with certain other available monies, was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities consisting of United States Treasury Securities - SLGS. The principal and interest on monies held by the escrow agent will be sufficient to partially defease a portion of the 2010 Series F bonds maturing November 1, 2017 and 2018.

A portion of the proceeds of the 2016 Series A refunding bonds and 2019 Series A refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreements, dated October 1, 2016 and December 1, 2019, respectively, to refund and legally defease a portion of the outstanding 2010 Series F bonds. These deposits, together with certain other available monies were held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to refund and legally defease all of the maturities of the 2010 Series F bonds starting on November 1, 2020 and thereafter. As of June 30, 2020 and 2019, the principal amount of 2010 Series F bonds outstanding was \$0 and \$23,975 respectively.

The \$351,470 Series G bonds were issued as taxable Build America Bonds (with Direct Pay Subsidy) to provide \$288,252 in new money for WSIP capital projects. The Series G bonds were issued as term bonds with a coupon of 7.0% and have a final maturity of 2050. The Series G bonds have a true interest cost (net of federal subsidy) of 4.5%. As of June 30, 2020 and 2019, the principal amount of 2010 Series G bonds outstanding was \$351,470.

(g) Water Revenue Bonds 2011 Series ABCD

In August 2011, the Enterprise issued revenue bonds, 2011 Series ABCD in the combined principal amount of \$720,750. The purpose of the bonds is to provide new money for WSIP capital projects, to finance Hetch Hetchy Water Improvements, and to finance the Local Water Main Replacement Projects, as well as refund \$56,670 of outstanding 2001 Series A and 2002 Series A revenue bonds, with the balance applied to financing costs and a cash-funded debt service reserve. The bonds were rated "AA-" and "Aa3" from S&P and Moody's, respectively. The bonds included serial and term bonds with interest rates varying from 3.0% to 5.0%.

The \$602,715 Series A bonds were issued as tax-exempt bonds to provide \$525,000 in new money for WSIP capital projects. The Series A bonds were issued as serial and term bonds with coupons ranging from 4.3% to 5.0% and have a final maturity of 2041. The Series A bonds have a true interest cost of 4.6%.

A portion of the proceeds of the 2017 Series D and G and 2019 Series A refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreements, dated December 1, 2017 and December 1, 2019, respectively, to refund and legally defease a portion of the outstanding 2011 Series A bonds. These deposits, together with certain other

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available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem the maturities of the 2011 Series A bonds starting on November 1, 2020 and thereafter. As of June 30, 2020 and 2019, the principal amount of 2011 Series A bonds outstanding was \$0 and \$322,480, respectively.

The \$28,975 Series B bonds were issued as tax-exempt bonds to provide \$27,710 to finance improvements to certain up-country water storage and transmission facilities under the jurisdiction of Hetch Hetchy Water and Power and CleanPowerSF. The Series B bonds were issued as serial and term bonds with coupons ranging from 3.5% to 5.0% and have a final maturity of 2041. The Series B bonds have a true interest cost of 4.5%.

On February 27, 2013, the Wholesale Water Customers BAWSCA made an early repayment of \$356,139 to the Enterprise. \$515 of the repayment proceeds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated February 27, 2013, to refund and legally defease a portion of the outstanding 2011 Series B bonds. This deposit, together with certain other available monies, was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities consisting of United States Treasury Securities - SLGS. The principal and interest on monies held by the escrow agent will be sufficient to partially defease a portion of the 2011 Series B bonds maturing November 1, 2017 through 2018.

A portion of the proceeds from the 2017 Series F and 2019 Series B refunding bonds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreements, dated December 1, 2017 and December 1, 2019, respectively, to refund and legally defease a portion of the outstanding 2011 Series B bonds. These deposits, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem the maturities of the 2011 Series B bonds starting on November 1, 2022 and thereafter. As of June 30, 2020 and 2019, the principal amount of 2011 Series B bonds outstanding was \$1,485 and \$17,870, respectively.

The \$33,595 Series C bonds were issued as tax-exempt bonds to provide \$33,772 to finance certain water main replacement projects within the City. The Series C bonds were issued as serial and term bonds with coupons ranging from 3.0% to 5.0% and have a final maturity of 2041. The Series C bonds have a true interest cost of 4.4%.

On February 27, 2013, the Wholesale Water Customers BAWSCA made an early repayment of \$356,139 to the Enterprise. \$3,824 of the repayment proceeds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated February 27, 2013, to refund and legally defease a portion of the outstanding 2011 Series C bonds. This deposit, together with certain other available monies, was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities consisting of United States Treasury Securities - SLGS. The principal and interest on monies held by the escrow agent will be sufficient to partially defease a portion of the 2011 Series C bonds maturing November 1, 2014 through 2018.

A portion of the proceeds of the 2017 Series E and 2019 Series C refunding bonds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreements, dated December 1, 2017 and December 1, 2019, respectively, to refund and legally defease a portion of the outstanding 2011 Series C bonds. These deposits, together with certain other

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available monies were held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem the maturities of the 2011 Series C bonds starting on November 1, 2022 and thereafter. As of June 30, 2020 and 2019, the principal amount of 2011 Series C bonds outstanding was \$1,620 and \$19,475, respectively.

The \$55,465 Series D bonds were issued as tax-exempt bonds to provide \$59,381 to refund, on a current basis, a portion of the 2001 Series A bonds as well as refund, on an advance basis, a portion of the 2002 Series A bonds. The Series D bonds were issued as serial bonds with coupons ranging from 4.0% to 5.0% and have a final maturity of 2028. The Series D bonds have a true interest cost of 3.8%.

A portion of the proceeds of the 2017 Series E refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated December 1, 2017, to refund and legally defease a portion of the outstanding 2011 Series D bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem the maturities of the 2011 Series D bonds starting on November 1, 2022 and thereafter. As of June 30, 2020 and 2019, the principal amount of 2011 Series D bonds outstanding was \$19,135.

(h) Water Revenue Bonds 2012 Series AB and C (C1 and C2)

In June 2012, the Enterprise issued revenue bonds, 2012 Series ABC in the combined principal amount of \$701,880. The purpose of the bonds was to provide \$530,000 of new money for WSIP capital projects, \$15,750 to reimburse the Enterprise for costs to settle litigation arising out of certain capital projects of benefit to the Enterprise, and to refund \$99,180 of outstanding 2001 Series A and 2002 Series A revenue bonds, with the balance applied to financing costs and a cash-funded debt service reserve. The bonds were rated "AA-" and "Aa3" from S&P and Moody's, respectively. The bonds included serial and term bonds with interest rates varying from 4.0% to 5.0%.

The \$591,610 Series A bonds were issued as tax-exempt bonds to provide \$530,000 in new money for WSIP capital projects. The Series A bonds were issued as serial and term bonds with coupons ranging from 4.0% to 5.0% and have a final maturity of 2043. The Series A bonds have a true interest cost of 4.3%. A portion of the proceeds of the 2017 Series D and 2019 Series A refunding bonds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreements, dated December 1, 2017 and December 1, 2019, respectively, to refund and legally defease a portion of the outstanding 2012 Series A bonds. These deposits, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem the maturities of the 2012 Series A bonds starting on November 1, 2031 and thereafter. As of June 30, 2020 and 2019, the principal amount of 2012 Series A bonds outstanding was \$216,540 and \$459,455, respectively.

The \$16,520 Series B bonds were issued as tax-exempt bonds to reimburse the Enterprise \$15,750 for costs to settle litigation arising out of certain capital projects of benefit to the Enterprise. The Series B bonds were issued as serial and term bonds with coupons ranging from 4.0% to 5.0% and have a final maturity of 2043. The Series B bonds have a true interest cost of 4.1%. As of June 30, 2020 and 2019, the principal amount of 2012 Series B bonds outstanding was \$16,520.

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The \$93,750 Series C bonds were issued as tax-exempt bonds to provide \$101,147 to refund, on a current basis, a portion of the 2001 Series A bonds as well as refund, on an advance basis, a portion of the 2002 Series A bonds. The Series C bonds were issued as serial bonds with coupons ranging from 4.0% to 5.0% and have a final maturity of 2032. The Series C bonds have a true interest cost of 3.7%. A portion of the proceeds of the 2017 Series E refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated December 1, 2017, to refund and legally defease a portion of the outstanding 2012 Series C bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem the maturities of the 2012 Series C bonds starting on November 1, 2029 and thereafter. As of June 30, 2020 and 2019, the principal amount of 2012 Series C bonds outstanding was \$78,035.

(i) Water Revenue Refunding Bonds 2012 Series D

In August 2012, the Enterprise issued tax-exempt revenue bonds, 2012 Series D in the amount of \$24,040 for the purpose of refunding the remaining portion of the outstanding 2002 Series B bonds maturing on and after November 1, 2013. The bonds carried "Aa3" and "AA-" ratings from Moody's and S&P, respectively. The 2012 Series D refunding bonds include serial bonds with interest rates ranging from 1.8% to 5.0% and have a final maturity in 2019. The Series D bonds have a true interest cost of 1.34%. Unamortized 2002 Series B bond issuance costs were \$258 at the date of the refunding. The refunding resulted in the recognition of a deferred accounting loss of \$582, \$108 gross debt service savings over the next seven-year terms, and an economic gain of \$1,397 or 5.8% of the refunded principal. As of June 30, 2020 and 2019, the principal amount of 2012 Series D bonds outstanding was \$0 and \$12,215, respectively.

(j) Water Revenue Refunding Bonds 2015 Series A

In April 2015, the Enterprise issued tax-exempt revenue bonds, 2015 Series A in the amount of \$429,600 for the purpose of refunding all the outstanding 2006 Series A bonds maturing on and after November 1, 2015 and portion of the outstanding 2009 Series A bonds maturing on and after November 1, 2023. The bonds carried "Aa3" and "AA-" ratings from Moody's and S&P, respectively. The 2015 Series A bonds include serial bonds with interest rates varying from 2.0% to 5.0% and have a final maturity in 2036. The Series A bonds have a true interest cost of 3.3%. Unamortized 2006 Series A bond issuance costs were \$1,392, and there were no unamortized bond issuance costs for 2009 Series A bonds at the date of the refunding. The refunding resulted in the recognition of a deferred accounting loss of \$25,365, gross debt service savings of \$28,148 over the next 20 two-year terms, and an economic gain of \$48,561 or 10.3% of refunded principal. As of June 30, 2020 and 2019, the principal amount of 2015 Series A bonds outstanding was \$412,380 and \$426,380, respectively.

(k) Water Revenue Refunding Bonds 2016 Series AB

In October 2016, the Enterprise issued tax-exempt revenue bonds, 2016 Series AB in the aggregate amount of \$893,820. The 2016 Series A bonds were issued for the purpose of refunding a portion of the outstanding 2009 Series A bonds maturing on and after November 1, 2020, a portion of the outstanding 2009 Series B bonds maturing on and after November 1, 2020, and a portion of the outstanding 2010 Series F bonds maturing on and after November 1, 2021. The 2016 Series B bonds were issued for the purpose of refunding, on a current basis, all the outstanding 2006 Series B and Series C bonds, and a portion of the outstanding 2010 Series A bonds maturing on and after November 1, 2020, the bonds carried "Aa3" and "AA-"

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ratings from Moody's and S&P, respectively. The 2016 Series AB bonds include serial bonds with interest rates varying from 1.5% to 5.0% and have a final maturity in 2039. The Series AB bonds have a true interest cost of 2.9%. Unamortized bond issuance costs at the date of refunding were \$145 for 2006 Series B bonds and \$54 for 2006 Series C bonds. The refunding resulted in the recognition of a deferred accounting loss of \$106,205, gross debt service savings of \$135,966, and an economic gain of \$107,152 or 11.5% of refunded principal. As of June 30, 2020 and 2019, the principal amount of 2016 Series AB bonds outstanding was \$858,985 and \$867,905, respectively.

(I) Water Revenue Bonds 2016 Series C

In December 2016, the Enterprise issued taxable bonds, 2016 Series C in the amount of \$259,350. The bonds were issued as Green Bonds. The purpose of the bonds was to refund all of the outstanding taxable commercial paper notes in the approximate amount of \$237,000, and to provide \$19,975 of new money for WSIP capital projects. The bonds carried "Aa3" and "AA-" ratings from Moody's and S&P, respectively. The 2016 Series C bonds include serial bonds with interest rates varying from 0.9% to 4.0% and have a final maturity in 2046, and two term bonds with 4.0% and 4.2% interest rates and final maturities of 2041 and 2046. The Series C bonds have a true interest cost of 3.9%. As of June 30, 2020 and 2019, the principal amount of 2016 Series C bonds outstanding was \$242,755 and \$248,360, respectively.

(m) Water Revenue Bonds 2017 Series ABC

In December 2017, the Enterprise issued tax-exempt revenue bonds, 2017 ABC in the aggregate amount of \$339,540. The purpose of the 2017 Series ABC Bonds was to refund approximately \$120,500 aggregate principal amount of commercial paper notes and to provide \$230,500 new money for WSIP capital projects, other various capital projects of the Water Enterprise, and capital projects of Hetch Hetchy Water. The bonds carried "Aa3" and "AA-" ratings from Moody's and S&P, respectively. The 2017 Series ABC bonds include serial bonds with coupon rates of 5.0% and have final maturity in 2045, and four term bonds with coupons of 5.0% and final maturities from 2045 to 2047.

The \$121,140 2017 Series A bonds were issued as tax-exempt Green Bonds to refund approximately \$60,265 of commercial paper notes and to provide \$65,500 in new money for WSIP capital projects. The Series A bonds were issued as serial and term bonds with coupons of 5.0% and a final maturity of 2047. The Series A bonds have a true interest cost of 3.8%. As of June 30, 2020 and 2019, the principal amount of 2017 Series A bonds outstanding was \$121,140.

The \$147,725 2017 Series B bonds were issued as tax-exempt bonds to provide \$150,000 in new money for Water Enterprise capital projects (non-WSIP). The Series B bonds were issued as serial and term bonds with coupons of 5.0% and have a final maturity of 2047. The Series B bonds have a true interest cost of 3.8%. As of June 30, 2020 and 2019, the principal amount of 2017 Series B bonds outstanding was \$147,725.

The \$70,675 2017 Series C bonds were issued as tax-exempt bonds to refund approximately \$60,266 of commercial paper notes and to provide \$15,000 in new money for Hetch Hetchy Water capital projects. The Series C bonds were issued as serial bonds and a term bond with coupons of 5.0% and have a final maturity of 2047. The Series C bonds have a true interest cost of 3.8%. As of June 30, 2020 and 2019, the principal amount of 2017 Series C bonds outstanding was \$70,675.

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(n) Water Revenue Refunding Bonds 2017 Series DEFG

In December 2017, the Enterprise issued tax-exempt revenue bonds, 2017 Series DEF, and taxable 2017 Series G refunding bonds in the aggregate amount of \$442,180. The 2017 Series D (WSIP, Green) bonds were issued for the purpose of refunding a portion of the outstanding 2011 Series A (WSIP) bonds maturing on and after November 1, 2022, a portion of the outstanding 2012 Series A bonds maturing on and after November 1, 2031.

The 2017 Series E bonds were issued for the purpose of refunding a portion of the outstanding 2011 Series C bonds maturing on or after November 1, 2022, a portion of the outstanding 2011 Series D bonds maturing on and after November 1, 2022, a portion of 2012 Series C1 bonds maturing on or after November 1, 2029.

The 2017 Series F bonds were issued for the purpose of refunding a portion of the outstanding 2011 Series B bonds maturing on or after November 1, 2022.

The taxable 2017 Series G (WSIP, Green) bonds were issued to refund a portion of the outstanding 2011 Series A bonds maturing on and after November 1, 2022.

The bonds carried "Aa3" and "AA-" ratings from Moody's and S&P, respectively. The 2017 Series DEFG bonds include serial bonds with interest rates varying from 2.0% to 5.0% and have a final maturity in 2035. The Series DEFG bonds have a true interest cost of 2.9%. The refunding resulted in the recognition of a deferred accounting loss of \$34,275, gross debt service savings of \$68,942, and an economic gain of \$51,698 or 10.7% of refunded principal. As of June 30, 2020 and 2019, the principal amount of 2017 Series DEFG bonds outstanding was \$439,485 and \$440,845, respectively.

(o) Water Revenue Refunding Bonds 2019 Series ABC

In January 2020, the Enterprise issued taxable revenue bonds, 2019 Series ABC refunding bonds in the aggregate amount of \$656,955. The 2019 Series A (WSIP, Green) bonds were issued for the purpose of refunding a portion of the outstanding 2010 Series F (WSIP) bonds maturing on and after November 1, 2020, a portion of the outstanding 2011 Series A (WSIP) bonds maturing on and after November 1, 2020, and a portion of the outstanding 2012 Series A (WSIP) bonds maturing on and after November 1, 2035.

The 2019 Series B (Hetch Hetchy Water) bonds were issued for the purpose of refunding a portion of the outstanding 2011 Series B bonds maturing on or after November 1, 2032,

The 2019 Series C (Local) bonds were issued for the purpose of refunding a portion of the outstanding 2011 Series C bonds maturing on or after November 1, 2032.

The bonds carried "Aa2" and "AA-" ratings from Moody's and S&P, respectively. The 2019 Series ABC bonds include serial bonds with interest rates varying from 1.8% to 3.5% and have a final maturity in 2043. The Series ABC bonds have a true interest cost of 3.3%. The refunding resulted in the recognition of a deferred accounting loss of \$17,329, gross debt service savings of \$119,827, and an economic gain of \$92,556 or 14.0% of refunded principal. As of June 30, 2020, the principal amount of 2019 Series ABC bonds outstanding was \$656,955.

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(p) Future Annual Debt Service of Revenue Bonds

The following table presents the future annual debt service relating to the revenue and refunding bonds outstanding as of June 30, 2020. The federal interest subsidy amounts represent 35.0%, excluding sequestration, of the interest for the revenue bond 2010 Series B, E, and G.

	Principal	Interest before subsidy	Federal interest subsidy*	Interest net of subsidy
Fiscal years ending June 30:				
2021	\$ 94,080	213,741	(21,828)	191,913
2022	108,025	202,998	(21,621)	181,377
2023	125,050	198,100	(21,290)	176,810
2024	130,760	192,265	(20,841)	171,424
2025	136,375	186,121	(20,370)	165,751
2026-2030	799,970	819,469	(93,682)	725,787
2031-2035	982,880	599,913	(74,984)	524,929
2036-2040	1,151,675	343,194	(47,369)	295,825
2041-2045	621,445	127,697	(22,003)	105,694
2046-2050	207,155	35,793	(9,778)	26,015
2051	26,100	907	(299)	608
	4,383,515	2,920,198	(354,065)	2,566,133
Less: Current portion	(94,080)			
Less: Unamortized bond discount	(143)			
Add: Unamortized bond premiums	311,923			
Long-term portion as of June 30, 2020	\$ 4,601,215			

^{*} The SFPUC received IRS notice dated August 27, 2020 that the federal interest subsidies on the 2010 Series B bonds, 2010 Series E bonds, and 2010 Series G bonds are reduced by 5.7%, or a total reduction of \$21,401, due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same.

As defined in the Indentures, the principal and interest of the Enterprise's revenue and refunding bonds are payable from its revenues, as well as monies deposited in certain funds and accounts pledged thereto (See Note 5).

(q) Clean Water State Revolving Fund (CWSRF) Loan and Grant

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 and Grant to fund the Enterprise's SF Westside Recycled Water Project. The CWSRF loan is in the amount of \$186,220, which includes \$15,000 of principal forgiveness, or a grant. It will bear an interest rate of 1% for a 30-year term, with loan repayment beginning one year after substantial completion of project construction. The CWSRF loan is secured on a parity lien basis with the Enterprise's outstanding revenue bonds. The principal outstanding as of June 30, 2020 and 2019 was \$73,271 and \$0, respectively.

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California Clean Water State Revolving Fund Loan		Principal	Interest	Total
Fiscal years ending June 30:	-			
2021	\$		-	- L
2022		2,106	733	2,839
2023		2,127	712	2,839
2024		2,149	690	2,839
2025		2,170	669	2,839
2026-2030		11,181	3,014	14,195
2031-2035		11,751	2,444	14,195
2036-2040		12,351	1,845	14,196
2041-2045		12,981	1,215	14,196
2046-2050		13,643	553	14,196
2051		2,812	27	2,839
Long-term portion as of June 30, 2020	\$	73,271	11,902	85,173

(r) Proposition A

On November 5, 2002, the San Francisco voters passed Proposition A, which provides for the issuance of revenue bonds and/or other forms of indebtedness by the Commission in a principal amount not to exceed \$1,628,000 to finance the acquisition and construction of improvements to the City's Water System. As of June 30, 2020, there was no commercial paper outstanding pursuant to this authorization and \$1,348,335 of bonds had been issued in fiscal years 2006, 2010, and 2012 against Prop A. The total authorization against Prop A was \$1,348,335 as of June 30, 2020.

(s) Proposition E

On November 5, 2002, the San Francisco voters passed Proposition E, which authorizes the Board of Supervisors' approval of the issuance of revenue bonds and/or other forms of indebtedness by the Commission to finance costs for the Commission's capital programs, including WSIP. As of June 30, 2020, the Board of Supervisors has authorized the issuance of \$4,269,958 in revenue bonds with \$3,464,660 issued against this authorization; and 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 and Grant to fund the Enterprise's SF Westside Recycled Water Project in the amount of \$186,220 (which includes a \$15,000 grant and \$73,271 in reimbursements requested on the loan as of June 30, 2020). Additionally, \$362,354 and \$161,336 in commercial paper was outstanding pursuant to this authorization as of June 30, 2020 and 2019, respectively.

(t) 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.

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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. It is anticipated these lease costs will be offset with reductions in costs associated with current office rental expense. There are no events of default stated in the 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 and D outstanding as of June 30, 2020 are as follows:

0.400
0.400
3,199
3,200
3,202
9,601
-

Certificates of Participation 2009 Series D (Taxable)		Principal	Interest before subsidy	Federal interest subsidy *	Interest net of subsidy
Fiscal years ending June 30:	7				
2021	\$	-	5,968	(1,970)	3,998
2022		_	5,968	(1,970)	3,998
2023			5,968	(1,970)	3,998
2024		3,267	5,864	(1,935)	3,929
2025		3,402	5,652	(1,865)	3,787
2026-2030		19,285	24,753	(8,169)	16,584
2031-2035		23,737	17,863	(5,896)	11,967
2036-2040		29,271	9,297	(3,068)	6,229
2041-2042		13,537	887	(293)	594
Total			82,220	(27,136)	55,084
Long-term portion as of June 30, 2020	\$	92,499			

^{*} 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 \$1,640, due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same.

(u) Events of Default and Remedies

In accordance with GASB Statement No. 88, Certain Disclosures Related to Debt, Including Direct Borrowing and Direct Placements. Significant Events of default as specified in the Water

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Enterprise Indenture (applicable to Water Revenue Bonds, Capital Appreciation Bonds and SRF 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, and of all Capital Appreciation bonds then outstanding, in the amount of the Accreted Value thereof, to be due and payable immediately. As of June 30, 2020, there were no such events describe 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 loans provided financing for various capital construction projects, and to refund previously issued bonds. The bonds and State Revolving Fund loans are payable solely from revenues of the Enterprise through the fiscal year ending 2051.

The original amount of revenue bonds and State Revolving Funds loan issued, 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:

85,440 4,746,890	
73,271 –	
88,886 7,727,793	
69,210 261,638	
39,947 311,619	
31,878 532,981	
	73,271 – 88,886 7,727,793 69,210 261,638 39,947 311,619

(9) Wholesale Balancing Account

Water Supply Agreement

From 1984-2009, the Enterprise provided water service pursuant to the terms of the 1984 Water Settlement Agreement and Master Water Sales Contract, which established the basis for water rates to be charged to those customers (Wholesale Customers). The Master Water Sales Contract expired on June 30, 2009. The Commission and the Wholesale Customers approved a Water Supply Agreement (WSA) effective July 1, 2009 (the contract was restated and amended by the SFPUC on December 11, 2018). The WSA has a 25-year term from July 1, 2009 with two options for five-year extensions. The existing 184 million gallons per day (mgd) Supply Assurance continues under the WSA and no increase in the Supply Assurance will be considered before December 31, 2028. During the period from 2009 to 2028, the WSA limits the quantity of water delivered to Retail Customers and Wholesale Customers from the watersheds to 265 mgd. Under the WSA, annual operating expenses, including debt service on bonds sold to finance regional system improvements and regional capital projects funded from revenues, will be allocated between Retail Customers and Wholesale Customers on the basis of proportionate annual water use. The original WSA stated the Wholesale Customers' share of net book value of existing regional assets as of June 30, 2009 would be recovered on level annual payment over the 25-year term of the WSA at an interest rate of 5.13%. The 25-year term repayment obligation was settled in February 2013. The Wholesale Customers made an early repayment to the Enterprise of the outstanding balance of \$356,139 as discussed further in the

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"BAWSCA Early Repayment" Section 5.03 of the WSA. The WSA continues much of the rate setting, accounting, and dispute resolution provisions contained in the expired contract, and has emergency and drought-pricing adjustment provisions.

Pursuant to the terms of the WSA, the Enterprise is required to establish water rates applicable to the Wholesale Customers annually. The wholesale water rates are based on an estimate of the level of revenues necessary to recoup the cost of distributing water to the Wholesale Customers in accordance with the methodology outlined in Article V of the WSA (the Wholesale Revenue Requirement (WRR), previously known as the Suburban Revenue Requirement). During fiscal years ending in 2020 and 2019, the WRR, net of adjustments, charged to such wholesale customers was \$256,280 and \$253,235, respectively. Such amounts are subject to final review by the Wholesale Customers, along with a trailing wholesale balancing account compliance audit of the WRR calculation.

Pursuant to Article VII, Section 7.02 of the WSA, the Enterprise is required to re-compute the WRR after the close of each fiscal year based on the actual costs incurred in the delivery of water to the Wholesale Customers. The difference between the wholesale revenues earned during the year and the "actual" WRR is recorded in a separate account (the Balancing Account) and represents the cumulative amount that is either owed to the Wholesale Customers (if the wholesale revenues exceed the WRR) or owed to the City (if the WRR exceeds the wholesale revenues paid). In accordance with Article VI of the WSA, the amount recorded in the Balancing Account shall earn interest at a rate equal to the average rate received by the City during the year on the invested pooled funds of the City Treasury, and shall be taken into consideration in the determination of subsequent wholesale water rates. The Enterprise owed the Wholesale Customers \$64,857 and \$64,829 for the years ended June 30, 2020 and 2019, respectively, an increase of \$28. Refer to the compliance audit report for the final balancing account available at https://sfwater.org/index.aspx?page=344.

In addition to advancing funds to acquire the pre-2009 assets as discussed previously, the Enterprise has also previously appropriated funds, advanced through rates charged to Retail Customers, for construction of capital projects that were not yet placed into service as of June 30, 2009. Wholesale Customers' share of these construction work in progress costs is calculated in accordance with the provisions in the WSA, including a 10-year repayment term and payment of annual principal and interest rate calculated at 4.0% annually. The total obligation of the Wholesale Customers to the Enterprise is estimated at \$9,542, and the level annual payment including principal and interest is approximately \$1,159. The Wholesale Customers made the first annual payment as of June 30, 2015 and will end on June 30, 2024.

(10) 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 Plan, and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by the Plan. Contributions are recognized in the period in which they are due pursuant to legal requirements. 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.

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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 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, 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 4.23% as of June 30, 2019, and 4.35% 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 (COLAs) 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 https://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.

Benefits – The Retirement System provides service retirement, disability and death benefits based on specified percentages of defined final average monthly salary and annual COLAs 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.

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Notes to Financial Statements
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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 provisions of this voter-approved proposition were challenged in the Courts. A decision by the California Courts modified the interpretation of the proposition. Effective July 1, 2012, members who retired before November 6, 1996 will receive a Supplemental COLA only when the 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 and 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 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 City 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 year ended June 30, 2019 and 2018 (measurement period) were \$607,408 and \$582,568, respectively. The Enterprise's allocation of employer contributions for fiscal year 2019 and 2018 (measurement period) were \$26,440, and \$25,922, respectively.

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

Notes to Financial Statements
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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 \$178,133.

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 \$22,296. Pension expense decreased 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:

Fiscal Year 2020 Schedule of Deferred Outflows and Inflows of Resources

	Deferred Outflows of Resources	Deferred Inflows of Resources
Pension contribution subsequent to measurement date	\$ 29,647	_
Differences between expected and actual experience	1,319	1,961
Changes in assumptions	25,333	_
Net difference between projected and actual earnings on pension plan investments	-	32,824
Change in employer's proportion	10,785	109
Total	\$ 67,084	34,894

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:

Dete	rred Outflows/(Inflows) of
	Resources
\$	11,020
	(8,610)
	(2,494)
	2,627
\$	2,543
	\$

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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 \$175,429.

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 \$17,730. 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

		Deferred Outflows of Resources	Deferred Inflows of Resources
Pension contribution subsequent to measurement date	\$	26,440	_
Differences between expected and actual experience		1,423	4,965
Changes in assumptions		27,353	_
Net difference between projected and actual earnings on pension plan investments			28,198
Change in employer's proportion		249	167
Total S	\$ _	55,465	33,330

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:

Fiscal years	Deferred Outflows/(Inflows) of Resources
2020	\$ 11,196
2021	4,923
2022	(14,428)
2023	(5,996)
Total	\$ (4,305)

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

Notes to Financial Statements June 30, 2020 and 2019

(Dollars in thousands, unless otherwise stated)

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.

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
Expected Rate of Return	7.4% net of pension plan investment, including inflation
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 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,
Basic COLA		Old Miscellaneous and All New Plans	Old Police & Fire, pre 7/1/75	Charters A8.595 and A8.596	Charters A8.559 and A8.585
	June 30, 2018	2.00%	2.50%	3.10%	4.20%
	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 https://mysfers.org.

Notes to Financial Statements June 30, 2020 and 2019

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Key Actuarial Assumptions

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

Measurement Date June 30, 2018

Actuarial Cost Method Entry - Age Normal Cost Method

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

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

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

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 COLAs for current members when they are expected to be granted. For members who worked after November 6, 1996 and before Proposition C passed (Post 97 Retirees), a Supplemental COLA is granted if the actual investment earnings during the year exceed the expected investment earnings on the actuarial value of assets. For members who did not work after November 6, 1996 and before Proposition C passed, the market value of assets must also exceed the actuarial liability at the beginning of the year for a Supplemental COLA to be granted. When a Supplemental COLA is granted, the amount depends on the amount of excess earnings and the basic COLA amount for each membership group. The large majority of members receive a 1.50% Supplemental COLA when granted.

Because the probability of a Supplemental COLA depends on the current funded level of the Retirement System for certain members, 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.

Assumed Supplemental COLA for Members with a 2.00% Basic COLA

Fiscal years	96 - Prop C	Before 11/6/96 or		
riscal years	96 - P10p C	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 is 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

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(Dollars in thousands, unless otherwise stated)

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 %
Treasuries	6.0	0.9
Liquid Credit	3.0	3.6
Private Credit	10.0	5.2
Private Equity	18.0	8.3
Real Assets	17.0	5.4
Hedge Funds/Absolute Return	15.0	3.9
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 June 30, 2018 (measurement date) and 7.50% as of 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 COLAs 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

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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

		Before 11/6/96 or		
Fiscal years	Assumption	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		

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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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

Employer	77.7	ecrease Share IPL @ 6.40%	Share of NPL @ 7.40%	1% Increase Share of NPL @ 8.40%
Water	\$	336,241	178,133	47,500
Fiscal Year 20:	19			
	1% De	ecrease Share	Share of NPL	1% Increase Share
Employer	of N	IPL@6.50%	@ 7.50%	of NPL @ 8.50%
Water	\$	328.561	175.429	48.802

(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. It 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 postemployment 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

June 30, 2018 updated to June 30, 2019
June 30, 2019
July 1, 2018 to June 30, 2019
year 2019
June 30, 2018
June 30, 2018
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 and 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, 2019 and 2018 measurement dates were 4.18% and 4.19%, 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 service
	Safety	Age 60 with 10 years of credited service Age 50 with 5 years of credited service
Disabled Retirement ²		Any age with 10 years of credited service
Terminated Vested ³		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.

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

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 on 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.

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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, 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 \$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 \$9,863, and for fiscal year 2019 was \$9,154.

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 \$163.684.

For the year ended June 30, 2020, the City's recognized OPEB expense was \$330,673. Amortization of the City's deferred inflow is included as a component of pension expense. The Enterprise's proportionate share of the City's OPEB expense was \$6,125.

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:

	Deferred Outflows of Resources			Deferred Inflows of Resources	
Contributions subsequent to measurement date		\$	9,863	\$	
Differences between expected and actual experience			6,953		11,517
Changes in assumptions			3,318		
Change in Proportion			7,449		-
Net difference between projected and actual earnings					
on plan investments			3		255
	Total	\$	27,583	\$	11,772

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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 follow:

Year ended June 30:	
2021	\$ 909
2022	909
2023	972
2024	960
2025	1,002
Thereafter	1,196
Total	\$ 5,948

Fiscal Year 2019

As of June 30, 2019, the City reported net OPEB liabilities related to the Plan of \$3,600,967. The Enterprise's proportionate share of the City's net OPEB liability as of June 30, 2019 was \$150,771.

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 pension expense. The Enterprise's proportionate share of the City's OPEB expense was \$3,284.

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:

	Deferred Outflows of Resources		Deferred Inflows of Resources		
Contributions subsequent to measurement date		\$	9,154	\$	
Differences between expected and actual experience			4		13,843
Changes in assumptions			3,988		
Net difference between projected and actual earnings on plan investments				3	140
	Total	\$	13,142	\$	13,983

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 follow:

\$	(1,693)
	(1,693)
	(1,693)
	(1,629)
	(1,643)
4.0	(1,644)
\$	(9,995)
	\$

Notes to Financial Statements June 30, 2020 and 2019 (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

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

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 flat 3.5% 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

Base mortality tables are developed by multiplying a published table by an adjustment factor developed in **Mortality Tables**

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

Gender	Adjustment Factor	Base Year
Female	1.066	2006
Male	0.942	2006

nts - 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, 2020 and 2019
(Dollars in thousands, unless otherwise stated)

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

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 flat 3.5% 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	Base Year		
Female	1.014	2009	
Male	0.909	2009	

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

Gender	Adjustment Factor	Base Year		
Female	1.066	2006		
Male	0.942	2006		

Safety Disables 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.

Notes to Financial Statements
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%	Healt	hcare Trend	1.00%
Water	\$	141,666	\$	163,684	\$ 191,022
Fiscal Yea	r 2019				
Employer		-1.00%	Healt	hcare Trend	1.00%
Water	\$	131,045	\$	150,771	\$ 175,236

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			
Treasury Inflation Protected Securities		5.0%	3.6%
Investment Grade Bonds		9.0%	3.9%
	Total	100.0%	

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%.

Notes to Financial Statements
June 30, 2020 and 2019
(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			Discount Rate		1% Increase		
6.40%		7.40%		8.40%			
\$	189,008	\$	163,684	\$	142,994		

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:

Asset Class	Target Allocation	Long-term Expected Real 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		
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 7.5%, 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 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:

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

	1% Decrease 6.40%		Discount Rate		1% Increase		
			7.40%	8.40%			
\$	173,339	\$	150,771	\$	132,306		

(11) Related Parties

Various common costs incurred by the Commission are allocated among the Enterprise, Hetch Hetchy Water and Power and CleanPowerSF Enterprise, and the Wastewater 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 including COVID-19 Project expenses of \$45,533 or 49.3% and \$42,407 or 49.6% 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 water from Hetch Hetchy Water. The amounts, totaling \$34,585 and \$33,578 for the years ended June 30, 2020 and 2019, respectively, have been included in the services provided by other departments in the accompanying financial statements.

The Enterprise purchases electricity from Hetch Hetchy Power at market rates. The amounts, totaling \$9,909 and \$9,480 for the years ended June 30, 2020 and 2019, respectively, have been included in services provided by other departments in the accompanying financial statements.

The Enterprise sold water to the Wastewater 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 charges for services in the accompanying financial statements.

Since fiscal year 2008, the Enterprise has charged City departments for water usage except for fire hydrants, which are used for general public safety. In fiscal years 2020 and 2019, the Enterprise delivered water for fire hydrant purposes totaling \$7, based on metered usage and applicable water rates, and the amount has been excluded from operating revenues in the accompanying financial statements.

A variety of City departments provide services such as engineering, purchasing, legal, data processing, telecommunications, and human resources to the Enterprise and charge amounts designed to recover those departments' costs. These charges, totaling \$16,634 and \$16,577 for the years ended June 30, 2020 and 2019, respectively, have been included in services provided by other departments in the accompanying financial statements.

During the fiscal year ended June 30, 2020, the Enterprise transferred \$14,000 to Hetch Hetchy Water to fund various upcountry capital projects, \$558 to the Arts Commission for arts enrichment, \$215 to the San Francisco Municipal Transpiration Agency for water conservation projects, and \$32 to the Office of the City Administrator for the Surety Bond Program. The Enterprise received \$1,220 from the General Fund for low income assistance programs and improvements to Miraloma Park.

As of June 30, 2020, the Enterprise has payables in the amount of \$606 to the Office of the City Attorney for legal services provided, and \$68 to the Department of Public Works for sidewalk inspection and repair projects. As of June 30, 2019, the Enterprise had \$0 in payables to other City departments.

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

SFPUC's 75-year lease agreement with the San Francisco Recreation and Park Department, for the use of parking spaces for its fleet of vehicles at the Civic Center Garage, commenced on February 1, 2011. The 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 \$45 and \$3,354, respectively; and at June 30, 2019 were \$46 and \$3,399, respectively.

(12) Risk Management

The Enterprise's Risk Management program includes both self-insured (i.e., self-retention) and insured exposures at risk. Risk assessments and purchasing of insurance coverage are collaboratively coordinated by SFPUC Risk Management and the City's Office of Risk Management. With certain exceptions, the City and the Enterprise's general approach is to first evaluate the exposure at risk for self-insurance. Based on this analysis, internal mitigation strategies and financing through a self-retention mechanism is generally more economical as the SFPUC in coordination with the City Attorney's Office administers, adjusts, settles, defends, and pays claims from budgeted resources (i.e., pay-as-you-go fund). When economically more viable or when required by debt financing covenants, the Enterprise obtains commercial insurance. At least annually, the City actuarially determines general liability and workers' compensation risk exposures. The Enterprise does not maintain commercial earthquake coverage, with certain minor exceptions, such as a sub-limit for fire-sprinkler leakage due to earthquake under the SFPUC Property Insurance program.

	Risk	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 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 are as follows:

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

Fiscal years	Beginning of year	Claims and changes in estimates	Claims paid	End of year
2020	\$ 11,509	709	(1,451)	10,767
2019	13,402	4.768	(6.661)	11.509

(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 are as follows:

Fiscal years	Beginning of year	С	laims and changes in estimates	Claims paid	E	End of year	
2020	\$ 10,336	_	1,065	(2,227)		9,174	_
2019	10,957		2,707	(3,328)		10,336	

(c) Property

The Enterprise's property risk management approach varies depending on whether the facility is currently under construction, the property is part of revenue-generating operations, the property is of high value, or is mission-critical in nature. During the course of construction, the Enterprise requires each contractor to provide its own insurance, while ensuring the full scope of work be covered with satisfactory levels to limit the Enterprise's risk exposure. Once construction is complete, the Enterprise performs an assessment to determine whether liability/loss coverage will be obtained through the commercial property policy or self-insurance. The majority of property scheduled in the insurance program is for either: (1) revenue generating facilities, (2) debt financed facilities, (3) mandated coverage to meet statutory requirements for bonding of various public officials, or (4) high-value, mission-critical property or equipment.

(d) Public Officials Liability

All Enterprise public officials with financial oversight responsibilities are provided coverage through a commercial Public Officials Liability Policy.

(e) Employment Practices Liability

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

(f) 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.

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

(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.

(13) Commitments and Litigation

(a) Commitments

As of June 30, 2020 and 2019, the Enterprise has outstanding commitments with third parties of \$208,832 and \$237,663, respectively, for various capital projects and other purchase agreements for materials and services.

(b) Grants

Grants that the Enterprise receives are subject to audit and final acceptance by the granting agency. Current and prior year costs of such grants are subject to adjustment upon audit.

(c) Litigation

The Enterprise is a defendant in various legal actions and claims that arise during the normal course of business. The final disposition of those 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.

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

(d) Environmental Issue

As of June 30, 2020 and 2019, the Enterprise recorded \$1,577 and \$2,194 in pollution remediation liability, respectively. This decrease of \$617 in pollution remediation liability in fiscal year 2020 is for expenses relating to the excavation of contaminated soil that contained polycyclic aromatic hydrocarbons from the Pacific Rod & Gun Club site in the Lake Merced area, and remediation activities for the 17th and Folsom site. As of June 30, 2020, the pollution remediation liability of \$1,577 consisted of \$1,274 for the Pacific Rod & Gun Club site, and \$303 for the 17th and Folsom site. As of June 30, 2019, the pollution remediation liability of \$2,194 consisted of \$1,291 for the Pacific Rod & Gun Club site, and \$903 for the 17th and Folsom site.

(14) Subsequent Events

(a) Water Revenue Bonds, Series 2020 ABCD Issuance

On September 23, 2020, the SFPUC issued its San Francisco Water Revenue Bonds, 2020 Sub-Series A (WSIP, Tax-exempt) (Green Bonds), Sub-Series B (Regional Water, Tax-exempt), Sub-Series C (Local Water, Tax-exempt), and Sub-Series D (Hetch Hetchy Water, Tax-exempt) together with an aggregate principal of \$346,760 to (i) refund approximately \$229,770 aggregate principal amount of commercial paper notes issued pursuant to the Water Enterprise's commercial paper program to finance or refinance a portion of the design, acquisition and construction of various capital projects in furtherance of the SFPUC's Water System Improvement Program ("WSIP") and the Hetchy Water Program and (ii) \$164,632 new money to finance a portion of the design, acquisition and construction of various capital projects of benefit to the SFPUC's Water Enterprise.

(b) Declaration of Emergency

On October 19, 2020, the SFPUC declared a departmental emergency related to the replacement and repair of fences that were damaged by the SCU Lightning Complex Fire. The emergency repair will require immediate contracting resources/facilities to begin work as soon as possible. Estimated costs are approximately \$4,500.

(c) Water Refunding Revenue Bonds, Series 2020 EFGH Issuance

On October 21, 2020, the SFPUC issued its San Francisco Water Revenue Bonds, 2020 Sub-Series E (Taxable Refunding – WSIP, Green Bonds), Sub-Series F (Taxable Refunding – Non-WSIP), Sub-Series G (Taxable Refunding – Local Water), and Sub-Series H (Taxable Refunding – Hetch Hetchy Water) in an aggregate principal amount of \$664,395 to advance refund all or a portion of various series of the SFPUC's Outstanding Bonds.



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.

San Andreas Pipeline No. 2:

Welder worker welding the inside joints of the pipeline in one of the four locations in San Bruno.

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
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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, California:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of San Francisco Water 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, 2020, 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 January 22, 2021.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Enterprise's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Enterprise's internal control. Accordingly, we do not express an opinion on the effectiveness of the Enterprise's internal control.

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 a 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 below as item 2020-001 to be a material weakness.

2020-001: Inappropriate Tone at the Top

An entity must establish and maintain an effective control environment (tone at the top) over compliance with laws, regulations, contracts and grant agreements that have a material effect on the financial statements. The control environment, which is the responsibility of executive management, helps set the tone of the organization and includes commitment towards openness, honesty, integrity, and ethical behavior, and may influence its management and employees. Enterprise management and employees are required to adhere to the ethical standards as governed in the City's code of conduct. Subsequent to the Enterprise's June 30, 2020 fiscal year-end, but prior to the date of our report, a criminal Federal complaint was filed against the Enterprise's general manager for honest services wire fraud. These alleged criminal actions against an individual responsible for compliance with laws and regulations constituted a deficiency in the control environment because they failed to set an appropriate tone at the top and demonstrated a lack commitment to integrity and ethical values as set



forth in the City's code of conduct. Although management has deemed no financial statement impact resulting from these actions, because the alleged criminal actions occurred at the executive management level, the potential for a material misstatement is more than remote. Accordingly, this deficiency constitutes a material weakness.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Enterprise's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards* and which are described above as item 2020-001.

The Enterprise's Response to Findings

Management acknowledges the identified internal control deficiency. The former general manager of the Enterprise is no longer employed with the entity or City. The Office of the City Attorney and Controller's Office have set forth a series of investigations and audits related to Public Integrity, addressing organizational functions and processes identified in the alleged criminal actions of the individual. The Enterprise has also planned a near-term series of internal assessments for organizational areas, programs and processes related to the investigations to identify areas requiring further improvements over internal control.

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.



San Francisco, California January 22, 2021

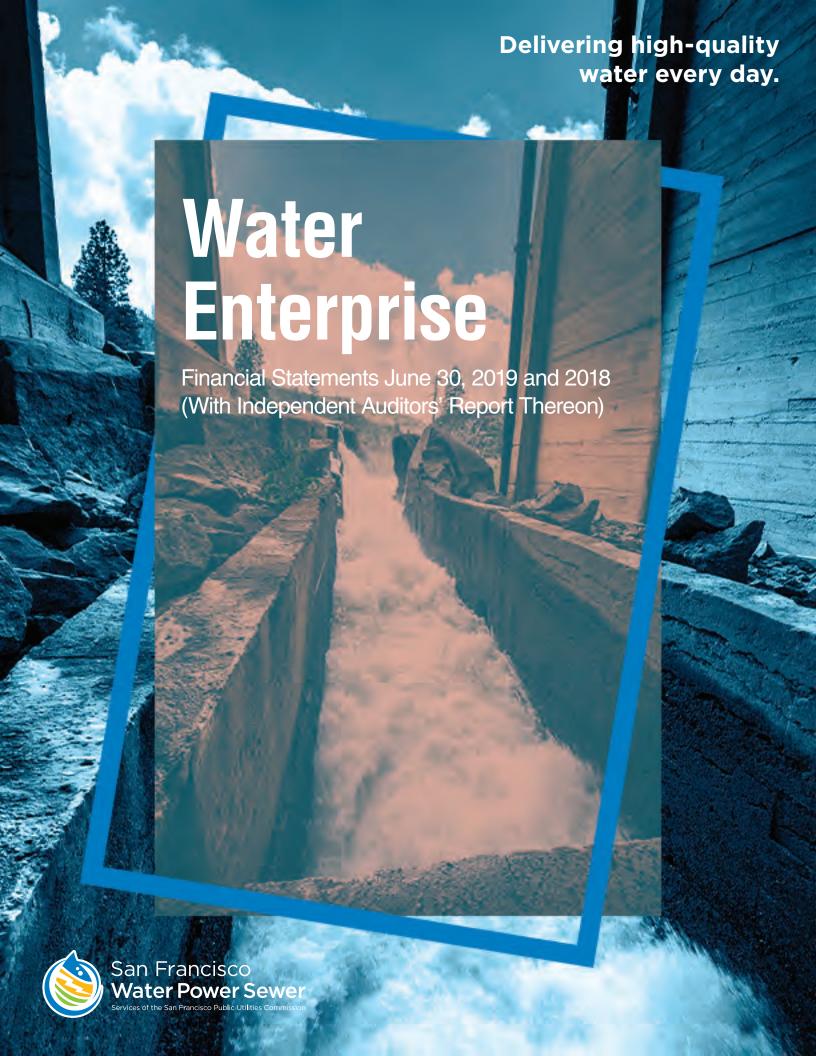


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KPMG LLP Suite 1400 55 Second Street San Francisco, CA 94105

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 Water 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 the 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.

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 9, 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.



San Francisco, California December 9, 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 Water 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 (the Enterprise), Hetch Hetchy Water and Power and CleanPowerSF, and Wastewater. The Enterprise collects, transmits, treats, and distributes high-quality drinking water to a total population of approximately 2.7 million people, including retail customers in the City and wholesale customers located in San Mateo, Santa Clara, and Alameda Counties. The Enterprise sold approximately 185 million gallons of water per day in the year ended June 30, 2019. Approximately two-thirds of the water delivered by the Enterprise is to wholesale customers. Retail customers use the remaining one-third and are primarily San Francisco consumers, including residential, commercial, industrial, and governmental users. Wholesale customers include cities, water districts, one private utility, and one non-profit university. Service to these customers is provided pursuant to the 25-year Amended and Restated Water Supply Agreement (WSA), commenced on July 1, 2009, which established the basis for determining the costs of wholesale service.

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.

While the Statements of Net Position provide information about the nature and amount of resources and obligations as of 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.

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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 exceeded total liabilities by \$381,783.
- Net position increased by \$52,614 or 10.7% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization increased by \$125,425 or 2.4% to \$5,388,658.
- Current and other assets decreased by \$71,821 or 10.6% mainly due to debt principal and interest repayments and Water System Improvement Program (WSIP) related capital projects spending.
- Operating revenues increased by \$16,752 or 3.2% to \$542,391.
- Operating expenses decreased by \$13,053 or 3.5% to \$357,094.

Financial Highlights for Fiscal Year 2018

- Total assets exceeded total liabilities by \$283,416.
- Net position decreased by \$11,743 or 2.3% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization increased by \$209,769 or 4.2% to \$5,263,233.
- Current and other assets increased by \$76,484 or 12.8% mainly due to debt issuance of the 2017 Series ABC and 2017 Series DEFG revenue bonds, offset by debt principal and interest repayments and Water System Improvement Program (WSIP) related capital projects spending.
- Operating revenues increased by \$65,308 or 14.2% to \$525,639.
- Operating expenses decreased by \$51,680 or 12.3% to \$370,147.

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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

·	2019	2018	2017	2019-2018 Change	2018-2017 Change
Total assets:					
Current and other assets \$	604,463	676,284	599,800	(71,821)	76,484
Capital assets, net of accumulated depreciation and amortization	5,388,658	5,263,233	5,053,464	125,425	209,769
Total assets	5,993,121	5,939,517	5,653,264	53,604	286,253
Deferred outflows of resources:	<u> </u>				
Unamortized loss on refunding of debt	139,061	150,255	126,805	(11,194)	23,450
Pensions	55,465	62,062	105,357	(6,597)	(43,295)
Other post-employment benefits	13,142	9,122	_	4,020	9,122
Total deferred outflows of resources	207,668	221,439	232,162	(13,771)	(10,723)
Liabilities:					
Current liabilities:					
Revenue and capital appreciation bonds	100,899	76,665	48,875	24,234	27,790
Certificates of participation	2,688	2,556	2,431	132	125
Commercial paper	161,336	40,312	145,000	121,024	(104,688)
Other liabilities	132,251	137,576	118,602	(5,325)	18,974
Subtotal current liabilities	397,174	257,109	314,908	140,065	(57,799)
Long-term liabilities:					
Revenue and capital appreciation bonds	4,709,678	4,839,101	4,512,370	(129,423)	326,731
Certificates of participation	101,704	104,550	107,291	(2,846)	(2,741)
Other liabilities	402,782	455,341	438,455	(52,559)	16,886
Subtotal long-term liabilities	5,214,164	5,398,992	5,058,116	(184,828)	340,876
Total liabilities:	<u>_</u>				
Revenue and capital appreciation bonds	4,810,577	4,915,766	4,561,245	(105, 189)	354,521
Certificates of participation	104,392	107,106	109,722	(2,714)	(2,616)
Commercial paper	161,336	40,312	145,000	121,024	(104,688)
Other liabilities	535,033	592,917	557,057	(57,884)	35,860
Total liabilities	5,611,338	5,656,101	5,373,024	(44,763)	283,077
Deferred inflows of resources:					
Related to pensions	33,330	15,063	11,135	18,267	3,928
Other post-employment benefits	13,983	268	_	13,715	268
Total deferred inflows of resources	47,313	15,331	11,135	31,982	4,196
Net position:					
Net investment in capital assets	563,457	504,476	495,868	58,981	8,608
Restricted for debt service	16,193	22,933	10,989	(6,740)	11,944
Restricted for capital projects	_	32,978	37,904	(32,978)	(4,926)
Unrestricted	(37,512)	(70,863)	(43,494)	33,351	(27,369)
Total net position \$	542,138	489,524	501,267	52,614	(11,743)

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 \$542,138. Total net position increased from prior year by \$52,614 or 10.7% (see Table 1). The increase in net position was the result of an increase of \$39,833 in assets and deferred outflows of resources, coupled with a decrease of \$12,781 in liabilities and deferred inflows of resources.

Current and other assets primarily is comprised of restricted and unrestricted balances of cash, receivables for water deliveries and services, interfund receivables due from other governmental agencies, and

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inventory. This also includes receivables, which represent cumulative amounts due from the wholesale customers to match revenues with the Enterprise's costs of providing service (the Balancing Account), in accordance with the provisions set forth in the WSA effective July 1, 2009. Balances are applied to future year rates. As of June 30, 2019, the Enterprise owed the wholesale customers \$64,829, which was mainly due to lower water demand by the wholesale customers. This amount was recorded as a liability in accordance with the 2009 agreement. See Note 9(a), Water Supply Agreement, for additional details.

During the fiscal year 2019, current and other assets decreased by \$71,821 or 10.6%. The decreases included \$74,244 in restricted and unrestricted cash and investments mainly due to debt principal and interest repayments and capital projects spending, \$693 in restricted interest receivables mainly due to lower cash balances in capital projects funds, \$214 in state grants collections relating to high efficiency toilet installation projects, \$135 in inventory from more issuances than purchases during the fiscal year. These decreases were offset by increases of \$1,355 in interest receivable from higher interest rates, \$1,050 in prepaid charges, advances and other receivables mainly due to increases in prepaid charges for rents, software licenses and other costs, \$714 in charges for services receivable due to an increase in billing rates, and \$346 mainly due from the Department of Public Works for Mission Bay South, Hunters View and Transbay Folsom custom work projects.

Capital assets, net of accumulated depreciation and amortization, increased by \$125,425 or 2.4% from construction and capital improvement activities. The largest portion of the Enterprise's net position of \$563,457 or 105.4% represents net investment in capital assets (see Capital Assets section of the MDA for more information), which increased by \$58,981 or 11.7% from prior year's \$504,476; as explained by a \$125,425 increase in capital assets in buildings, structures, and improvements and construction in progress, offset by a \$66,444 increase in liabilities related to capital assets mainly due to issuance of commercial paper. Deferred outflows of resources decreased by \$13,771 due to an \$11,194 decrease from amortization of bond refunding loss, and \$6,597 decrease from pensions based on actuarial report, offset by a \$4,020 increase in other post-employment benefits obligations (OPEB) based on actuarial report.

Total liabilities decreased by \$44,763 or 0.8% which is explained by decreases of \$107,903 in principal of revenue bonds, capital appreciation bonds and certificates of participation mainly due to principal repayments, \$33,574 in net pension liability based on actuarial report, \$16,897 in restricted and unrestricted payables mainly from lower WSIP project activities, \$15,565 in other post-employment benefits obligations from actuarial assumptions, \$1,893 in general liability based on actuarial report, \$621 in workers' compensation based on actuarial estimates, \$481 in interest payable, \$303 in accrued payroll, vacation and sick leave, \$117 in pollution remediation liability mainly for the Lake Merced and 17th and Folsom sites (see Note 13(d) for details), and \$96 payment to the Department of Public Works for road structure support projects. These decreases were offset by increases of \$121,024 in commercial paper from additional issuances, \$8,963 in the Wholesale Balancing Account (see Note 9(a) for details), and \$2,700 in unearned revenues mainly from BAWSCA bond surcharge.

Deferred inflows of resources increased by \$31,982 due to a \$18,267 increase relating to pension, and a \$13,715 increase in OPEB obligations 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 \$489,524. Total net position decreased from prior year by \$11,743 or 2.3% (see Table 1). The decrease in net position was the result of an increase of \$287,273 in

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liabilities and deferred inflows of resources, offset by an increase of \$275,530 in assets and deferred outflows of resources.

Current and other assets primarily is comprised of restricted and unrestricted balances of cash, receivables for water deliveries and services, interfund receivables due from other governmental agencies, and inventory. This also includes receivables, which represent cumulative amounts due from the wholesale customers to match revenues with the Enterprise's costs of providing service (the Balancing Account), in accordance with the provisions set forth in the WSA effective July 1, 2009. Balances are applied to future year rates. As of June 30, 2018, the Enterprise owed the wholesale customers \$55,866, which was mainly due to increased water demand by the wholesale customers that generated additional billed revenue. This amount was recorded as a liability in accordance with the 2009 agreement. See Note 9(a), Water Supply Agreement, for additional details.

During the fiscal year 2018, current and other assets increased by \$76,484 or 12.8%. The increases included \$77,707 or 14.7% in restricted and unrestricted cash and investments mainly due to debt issuance of the 2017 Series ABC bonds offset by debt principal and interest repayments and WSIP related capital projects spending, \$1,205 in interest receivable due to higher cash balance from revenue bond funds and higher annualized interest rates, \$248 in advances and other receivables mainly due to increases in custom work and property rental receivables, and \$175 in state grants receivable relating to high efficiency toilet installation projects. These increases were offset by decreases of \$1,875 in inventory due to obsolete inventory write-offs at the City Distribution Division and more issuances than purchases during the fiscal year, \$638 in charges for services receivable mainly due to a decrease in unbilled revenue accrual for wholesale customers, and \$338 due from the Office of Community Investment and Infrastructure for the Candlestick/Hunter's Point custom work projects.

Capital assets, net of accumulated depreciation and amortization, increased by \$209,769 or 4.2% from construction and capital improvement activities. The largest portion of the Enterprise's net position of \$504,476 or 103.1% represents net investment in capital assets (see Capital Assets section of the MDA for more information), which increased by \$8,608 or 1.7% from prior year's \$495,868 to \$504,476 as explained by a \$209,769 increase in capital assets in buildings, structures, and improvements and construction in progress, offset by a \$201,161 increase in liabilities related to capital assets mainly due to the issuance of the 2017 Series ABC bonds. Deferred outflows of resources decreased by \$10,723 due to a \$43,295 decrease in pensions based on actuarial report, offset by a \$23,450 increase in unamortized loss on refunding of debt from the issuance of 2017 Series DEFG bonds and \$9,122 from other postemployment benefits obligations per the implementation of GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions.

Total liabilities increased by \$283,077 or 5.3% which is explained by increases of \$351,905 in principal of revenue bonds and certificates of participation mainly due to the issuance of 2017 Series ABC bonds, \$45,006 in other post-employment benefits obligations as a result of implementation of GASB Statement No. 75, \$22,588 in restricted and unrestricted payables due to prior year activities to close out the legacy system payables, \$12,395 in the Wholesale Balancing Account (see Note 9(a) for details), \$2,664 in general liability based on actuarial report, \$2,154 in interest payable due to higher outstanding debt principal, \$1,868 in workers' compensation based on actuarial estimates, \$354 in unearned revenues mainly from additional deposits for custom work, and \$89 due to the Department of Public Works for road structure support projects. These increases were offset by decreases of \$104,688 in commercial paper due to refunding from the 2017 Series ABC and 2017 Series DEFG bonds, \$50,953 in net pension liability based on actuarial report, \$157 in pollution remediation liability mainly for the Lake Merced and 17th and Folsom sites (see Note 13(d) for details), and \$148 in accrued payroll, vacation and sick leave.

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Deferred inflows of resources increased by \$4,196 due to increases of \$3,928 relating to pension obligations and \$268 relating to other post-employment benefits obligations per the implementation of GASB Statement No. 75.

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 \$	509,703	495,138	438,207	14,565	56,931
Rents and concessions	13,010	12,906	8,813	104	4,093
Other operating revenues	19,678	17,595	13,311	2,083	4,284
Interest and investment income	15,650	6,448	4,331	9,202	2,117
Other non-operating revenues	32,399	39,064	37,405	(6,665)	1,659
Total revenues	590,440	571,151	502,067	19,289	69,084
Expenses:					
Operating expenses	357,094	370,147	421,827	(13,053)	(51,680)
Interest expenses	177,998	164,001	148,075	13,997	15,926
Amortization of premium, discount, refunding loss, and issuance costs	(17,788)	(13,540)	(9,029)	(4,248)	(4,511)
Non-operating expenses	1,388	1,920	2,607	(532)	(687)
Total expenses	518,692	522,528	563,480	(3,836)	(40,952)
Change in net position before transfers	71,748	48,623	(61,413)	23,125	110,036
Transfers from the City and County of San Francisco	1,200	382	128	818	254
Transfers to the City and County of San Francisco	(20,334)	(31,368)	(60,116)	11,034	28,748
Net transfers	(19,134)	(30,986)	(59,988)	11,852	29,002
Change in net position	52,614	17,637	(121,401)	34,977	139,038
Net position at beginning of year					
Beginning of year, as previously reported	489,524	501,267	622,668	(11,743)	(121,401)
Cumulative effect of accounting change		(29,380) *		29,380	(29,380)
Net position at beginning of year as restated	489,524	471,887	622,668	17,637	(150,781)
Net position at end of year \$	542,138	489,524	501,267	52,614	(11,743)

^{*} 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 of \$590,440 for the year represented an increase of \$19,289 or 3.4% from prior year (see Table 2). Increases included \$14,565 from charges for services, \$9,202 for interest and investment income, \$2,083 from other operating revenues, and \$104 from rents and concessions. These increases were offset by a decrease of \$6,665 from other non-operating revenues.

Charges for services were \$509,703, an increase of \$14,565 or 2.9% mainly due to an adopted rate increase of 9.0% for retail customers beginning July 1, 2018, offset by a decrease of 2.8% in consumption. Rents and concessions were \$13,010, an increase of \$104 or 0.8% mainly from Consumer Price Index increases. Other operating revenues were \$19,678, an increase of \$2,083 or 11.8% mainly due to a 9.0% adopted rate increase. Interest and investment income was \$15,650, an increase of \$9,202 or 142.7% mainly due to higher interest rates for pooled cash with the City Treasury and unrealized gains on investments. Other non-operating revenues were \$32,399, a decrease of \$6,665 or 17.1% mainly from a prior year settlement received of \$8,250 for the Pacific Rod and Gun Club offset by \$1,500 proceeds received in the current year for sale of land on Burnett Avenue in San Francisco.

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The Enterprise's total expenses were \$518,692, a decrease of \$3,836 or 0.7%. Operating expenses were \$357,094, a decrease of \$13,053 or 3.5% due to decreases of \$16,701 in personnel services primarily due to pension and OPEB obligations based on actuarial reports, \$2,515 in materials and supplies mainly from prior year obsolete inventory write-offs, and \$416 in contractual services mainly from decreased construction contracts. These decreases were offset by increases of \$2,891 in services provided by other departments mainly due to increased water assessment fees paid to Hetch Hetchy Water and City Attorney legal services, \$2,064 in depreciation due to additional capital assets placed into service, and \$1,624 in general and administrative and other mainly due to lower capitalization of capital projects. Interest expenses increased by \$13,997 due to prior year issuance of 2017 Series ABC and DEFG bonds, and reduced interest capitalization for capital projects. Amortization of bond premium, discount, refunding loss, and issuance costs increased by \$4,248 mainly due to the issuance of bonds in prior year. Non-operating expenses decreased by \$532 from reduced community based organization programs.

Transfers in of \$1,200 were from the General Fund for low income assistance programs. Transfers out of \$20,334 included \$20,000 to Hetch Hetchy Water to fund various upcountry capital projects, \$302 to the Arts Commission for arts 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 of \$571,151 for the year represented an increase of \$69,084 or 13.8% from prior year (see Table 2). Increases included \$56,931 from charges for services, \$4,284 for other operating revenues, \$4,093 for rents and concessions, \$2,117 from interest and investment income, and \$1,659 for other non-operating revenues.

Charges for services were \$495,138, an increase of \$56,931 or 13.0% is primarily due to an adopted rate increase of 7.0% for retail customers beginning July 1, 2017, and increased consumption of 11% by wholesale customers and 3% by retail customers. Rents and concessions were \$12,906, an increase of \$4,093 or 46.4% mainly due to write-off of Sunol Valley Golf lease receivable in prior year. Other operating revenues were \$17,595, an increase of \$4,284 or 32.2% due to a 7% planned rate increase and increased consumption from other City departments on water sales. Interest and investment income was \$6,448, an increase of \$2,117 or 48.9% due to higher average cash balances and higher annualized interest rates with the City Treasury. Other non-operating revenues were \$39,064, an increase of \$1,659 or 4.4% mainly due to a \$8,250 pollution remediation settlement received for the Pacific Rod and Gun Club site, offset by a \$6,591 decrease in sale of property primarily due to a one-time gain from property sold in prior year.

The Enterprise's total expenses were \$522,528, a decrease of \$40,952 or 7.3% from prior year. Operating expenses were \$370,147, a decrease of \$51,680 or 12.3% due to a \$53,739 decrease in personnel services mainly from pensions, \$2,392 in general and administrative and other expenses mainly due to increased capitalization of capital projects, \$2,313 in services by other departments mainly for lower water assessment fees paid to Hetch Hetchy Water, and \$75 in depreciation. These decreases were offset by increases of \$3,467 for contractual services mainly due to increased construction contracts, and \$3,372 in materials and supplies mainly resulting from obsolete inventory write-offs, water treatment supplies and other materials and supplies. Interest expenses increased by \$15,926, and amortization of bond premium, discount, refunding loss and issuance costs increased by \$4,511 mainly due to the issuance of the 2017 Series ABC and 2017 Series DEFG bonds. Non-operating expenses decreased by \$687 due to lower rebates for high efficiency toilets installed.

Transfers in of \$382 included \$282 from the City for Earthquake Safety and Emergency Response projects, and \$100 from the General Fund for the San Francisco War Memorial Veterans Building project. Transfers out of \$31,368 included \$30,000 to Hetch Hetchy Water to fund various upcountry capital projects, \$1,244

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to San Francisco Recreation and Park Department for Alta Plaza Park and Moscone Recreation Center projects, \$92 to San Francisco Municipal Transportation Agency for the Forest Hill Station project, 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

2018-2017
Change
(344)
2,650
3,252
204,211
209,769

Capital Assets, Fiscal Year 2019

The Enterprise has net capital assets of \$5,388,658 invested in a broad range of utility capital assets as of June 30, 2019 (see Table 3). The investment in capital assets includes land, facilities, improvements, water treatment plants, aqueducts, water transmission, distribution mains, water storage facilities, pump stations, water reclamation facilities, machinery, and equipment. The Enterprise's net revenue and long-term debt are used to finance capital investments. Capital assets, net of accumulated depreciation and amortization, increased by \$125,425 from the prior year. Construction work in progress decreased by \$937,445 primarily due to capital assets placed into service. Intangible assets decreased by \$1,505 due to amortization of \$2,171 primarily relating to the SFPUC On-Line Invoicing System, Automated Water Meter Program upgrades and SFBid online contracting system, offset by increases of \$666 mainly from Water Quality Sampling and Maximo asset management software. Land was unchanged from prior year. Facilities, improvements, machinery, and equipment increased by \$1,064,375 mainly attributable to capital assets placed into service such as Calaveras Dam, WSIP Security Upgrades, and West Sunset Well Station.

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

Calaveras Dam Replacement	\$ 68,453
Recycled Water Project	25,913
Sunol Long Term Improvements	18,325
Regional Groundwater Storage & Recovery	14,677
Water Main Replacement - Van Ness Avenue/Market/Lombard Streets	9,826
Various New Water Utility Services	7,116
San Francisco Groundwater Supply	6,204
Sunol Valley Water Treatment Plant - Powdered Activated Carbon System	5,710
Various Water Utility Services Renewals	5,245
Water Main Replacement - Putnam Street/Peralta/Cortland Avenues	5,041
Other project additions individually below \$5,000	77,097
Total	\$ 243,607

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(Dollars in thousands, unless otherwise stated)

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:

Calaveras Dam Construction	\$	496,165
Calaveras Dam Spillway & Basin		369,551
Calaveras Dam Outlet System		126,044
Calaveras Dam Fish Passage		62,228
WSIP Security Systems Upgrades		17,852
West Sunset Well Station		14,098
Golden Gate Park Central Well Station		13,000
South Sunset Well Station		9,505
Sunol Valley Water Treatment Plant - Powdered Activated Carbon System		7,613
Various New Water Utility Services		7,116
Water Main Replacement - Putnam Street/Peralta/Cortland Avenues		6,914
Auxiliary Water Supply System - Columbus Avenue Pipeline		5,956
Sunset Reservoir Chemical Building		5,890
Various Water Utility Service Renewals		5,245
Water Main Replacement - Pacheco Street/10th/Castenada Avenues		5,046
Other items individually below \$5,000	_	31,465
Total	\$	1,183,688
	-	

See Note 4 for additional information about Capital Assets.

Water System Improvement Program

The WSIP delivers capital improvements that enhance the Enterprise's ability to provide reliable, affordable, high-quality drinking water to its 27 wholesale customers and regional retail customers in Alameda, Santa Clara, and San Mateo Counties, as well as approximately 800,000 residential customers in San Francisco, in an environmentally sustainable manner. The program is structured to cost-effectively meet water quality requirements and long-term water supply objectives, as well as improve seismic and delivery reliability.

Overall, the \$4.8 billion WSIP to upgrade the City of San Francisco's regional and local drinking water systems is 97% completed with \$4.5 billion of project appropriations expended through fiscal year ended June 30, 2019. The program consists of 35 local projects located within San Francisco and 52 regional projects spread over seven different counties from the Sierra Foothills to San Francisco. As of June 30, 2019, 34 local projects are completed, and the target completion date is December 2019. For regional projects, 42 are completed and the expected completion date is December 2021. Additional details regarding the WSIP are available at https://www.sfwater.org/index.aspx?page=115.

Capital Assets, Fiscal Year 2018

The Enterprise has net capital assets of \$5,263,233 invested in a broad range of utility capital assets as of June 30, 2018 (see Table 3). The investment in capital assets includes land, facilities, improvements, water treatment plants, aqueducts, water transmission, distribution mains, water storage facilities, pump stations, water reclamation facilities, machinery, and equipment. The Enterprise's net revenue and long-term debt are used to finance capital investments. Capital assets, net of accumulated depreciation and amortization, increased by \$209,769 from the prior year. Construction work in progress increased by \$204,211 primarily due to additions from the Calaveras Dam Replacement, Recycled Water, Sunol Long Term Improvements, and Regional Groundwater Storage & Recovery projects. Land increased by \$3,252 mainly from the

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purchase of property at Rollins Road in Burlingame, California. Intangible assets increased by \$2,650 due to additions of \$3,988 mainly for software updates for the Automated Meter Reading System, offset by decreases of \$1,338 amortization mainly relating to the SFPUC On-Line Invoicing System, and the SFBid online contracting system. Facilities, improvements, machinery, and equipment decreased by \$344 mainly attributable to depreciation.

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

Calaveras Dam Replacement	\$ 143,323
Recycled Water Project	29,326
Sunol Long Term Improvements	25,355
Regional Groundwater Storage & Recovery	16,172
Rollins Road Purchase	9,241
Habitat Reserve Program	8,617
San Francisco Groundwater Supply	8,471
Irving Street Infrastructure Improvements Phase 2	7,781
Various New Water Utility Services	6,267
Other project additions individually below \$5,000	73,882
Total	\$ 328,435
Rollins Road Purchase Habitat Reserve Program San Francisco Groundwater Supply Irving Street Infrastructure Improvements Phase 2 Various New Water Utility Services Other project additions individually below \$5,000	\$ 9,241 8,617 8,471 7,781 6,267 73,882

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:

Lake Merced Well Station	\$ 17,232
Auxiliary Water Supply System - Pumping Station No. 1	15,524
Water Main Replacement - Haight/Buchanan/Ashbury Streets	8,139
Water Main Replacement - Potrero Avenue/21st to 25th Streets	7,382
Water Main Replacement - 6th/Market/Howard/Taylor Streets	7,276
Water Main Replacement - Masonic Avenue/O'Farrell/Fell Streets	6,428
Various New Water Utility Services	6,266
Auxiliary Water Supply System - Cisterns F (4 Cisterns)	5,946
Other items individually below \$5,000	46,864
Total	\$ 121,057

See Note 4 for additional information about Capital Assets.

Water System Improvement Program

The WSIP delivers capital improvements that enhance the Enterprise's ability to provide reliable, affordable, high-quality drinking water to its 27 wholesale customers and regional retail customers in Alameda, Santa Clara, and San Mateo Counties, as well as 800,000 retail customers in San Francisco, in an environmentally sustainable manner. The program is structured to cost effectively meet water quality requirements and long-term water supply objectives, as well as improve seismic and delivery reliability.

Overall, the \$4.8 billion WSIP to upgrade the City of San Francisco's regional and local drinking water systems is 96% completed with \$4.4 billion of project appropriations expended through fiscal year ended June 30, 2018. The program consists of 35 local projects located within San Francisco and 52 regional projects spread over seven different counties from the Sierra Foothills to San Francisco. As of June 30, 2018, 34 local projects are completed, and the target completion date is December 2018. For regional

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projects, 40 are completed and the expected completion date is December 2021. Additional details regarding the WSIP are available at https://www.sfwater.org/index.aspx?page=115.

Debt Administration

As of June 30, 2019, the Enterprise had \$5,076,305 total debt outstanding, an increase of \$13,121 over the prior year, as shown below 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	\$ 4,808,548	4,909,041	4,554,967	(100,493)	354,074
Capital appreciation bonds	2,029	6,725	6,278	(4,696)	447
Commercial paper	161,336	40,312	145,000	121,024	(104,688)
Certificates of participation	104,392	107,106	109,722	(2,714)	(2,616)
Total	\$ 5,076,305	5,063,184	4,815,967	13,121	247,217

The decrease of \$100,493 in revenue bonds was due to \$71,665 from bond repayment, \$28,840 from amortization of premium, and offset by \$12 from amortization of discount. The decrease of \$4,696 in capital appreciation bonds was due to \$5,000 from repayment, offset by \$304 from accretions. The decrease of \$2,714 in certificates of participation was due to \$2,556 from repayment and \$158 from amortization of premium. The Enterprise had \$135,308 in tax-exempt and \$26,028 in taxable commercial paper as of June 30, 2019, and \$25,312 in taxable and \$15,000 in tax-exempt commercial paper outstanding as of June 30, 2018.

Credit Ratings and Bond Insurance – The Enterprise carried underlying ratings of "Aa3" and "AA-" from Moody's and Standard & Poor's (S&P) at June 30, 2019 and 2018, respectively.

Debt Service Coverage – Pursuant to the Amended and Restated Indenture, the Enterprise is required to collect sufficient net revenues each fiscal year, together with any Enterprise funds (except Bond Reserve Funds), which 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 Enterprise's Amended and Restated 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 approved by voters in Proposition E in November 2002. As of June 30, 2019, the Board of Supervisors has authorized the issuance of \$4,234,873 in revenue bonds under Proposition E, with \$3,278,440 issued against this authorization. The Enterprise can also incur indebtedness of up to \$1,628,000 for improvements to the water system pursuant to Proposition A that was approved by the voters in November 2002. As of June 30, 2019, \$1,348,335 of the \$1,628,000 Proposition A authorized bonds were issued. The Enterprise is also authorized to issue up to \$500,000 in commercial paper.

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Cost of Debt Capital – The Enterprise's outstanding long-term debt has coupon interest rates ranging from 1.8% to 7.0% as of June 30, 2019 and 2018. The Enterprise's short-term debt has interest rates ranging from 0.9% to 7.0% during fiscal years 2019 and 2018.

Rates and Charges

Rate Setting Process

Retail Customers

Proposition E, as approved by the voters in November 2002, amended the City Charter by adding the new Article VIIIB, entitled "Public Utilities," which changed the Commission's ability to issue new revenue bonds and set retail water rates. For the retail water rate setting, 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 rate study was completed in April 2018 and resulted in an approved four-year retail rate increase. The Commission adopted retail rates effective for four fiscal years from July 1, 2018 through June 30, 2022. The SFPUC Rates Schedules and Fees is available at

https://sfwater.org/modules/showdocument.aspx?documentid=7743.

Wholesale Customers

The WSA prescribes the rate setting process for the wholesale water rates. The WSA has a 25-year term, beginning on July 1, 2009, with two 5-year extension options. The WSA was amended and restated on December 11, 2018 by the SFPUC. The contract changed the rate basis by which the capital cost recovery is determined from a "utility basis" to a "cash basis," resulting in the repayment of the cost of capital over the life of the debt funding of those assets rather than the life of the asset. The WSA requires the rate be calculated and set annually and include a reconciliation between prior year revenues and expenses. Refer to Note 9 of the notes to financial statements for further discussion on the balancing account of the wholesale customers.

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

Ten-year Average Rate Adjustments

Effective Date:	Retail		Wholesale ³
July 1, 2012	12.5	1	11.4
July 1, 2013	6.5	1	(16.4)
July 1, 2014	12.0	2	19.6
July 1, 2015	12.0	2	28.0
July 1, 2016	10.0	2	9.3
July 1, 2017	7.0	2	-
July 1, 2018	9.0	4	-
July 1, 2019	8.0	4	-
July 1, 2020	7.0	4	-
July 1, 2021	7.0	4	-

- ¹ Five-year retail rate increases adopted and effective July 1, 2009.
- ² Four-year retail rate increases adopted and effective July 1, 2014.
- Wholesale rates adopted annually; no increase for wholesale rates effective July 1, 2017; no increase projected through June 30, 2022 from 10 Year Financial Plan.
- Four-year retail rate increases adopted and effective July 1, 2018.

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, 525 Golden Gate Avenue, 13th Floor, San Francisco, CA 94102. This report is available at https://www.sfwater.org/index.aspx?page=347.

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

(In thousands)		
	2019	2018
Assets		
Current assets:		
Cash and investments with City Treasury	\$ 405,558	358,768
Cash and investments outside City Treasury	254	274
Receivables:		
Charges for services (net of allowance for doubtful accounts of \$1,733		
as of June 30, 2019 and \$2,211 as of June 30, 2018)	55,151	53,835
Due from other City departments	640	294
Due from other governments	111	325
Interest	2,644	1,289
Restricted interest and other receivable (net of allowance for doubtful		
accounts of \$5 as of June 30, 2019 and \$51 as of June 30, 2018)	3,795	4,491
Total current receivables	62,341	60,234
Prepaid charges, advances, and other receivables, current portion	2,309	1,435
Inventory	5,426	5,561
Restricted cash and investments outside City Treasury	122,512	143,739
Total current assets	598,400	570,011
Non-current assets:	0.004	100 011
Restricted cash and investments with City Treasury	2,224	102,011
Restricted interest and other receivable (net of allowance for doubtful	_	
accounts of \$9 as of June 30, 2019 and \$0 as of June 30, 2018)	3	_
Charges for services, less current portion (net of allowance for doubtful	400	704
accounts of \$662 as of June 30, 2019 and \$0 as of June 30, 2018)	189	791
Capital assets, not being depreciated and amortized	493,314	1,430,759
Capital assets, net of accumulated depreciation and amortization	4,895,344	3,832,474
Prepaid charges, advances, and other receivables, less current portion	3,647	3,471
Total non-current assets	5,394,721	5,369,506
Total assets	5,993,121	5,939,517
Deferred outflows of resources	120.061	150.055
Unamortized loss on refunding of debt	139,061	150,255
Pensions Other part ample mant banefits	55,465	62,062
Other post-employment benefits	13,142	9,122
Total deferred outflows of resources	207,668	221,439
Liabilities Current liabilities		
Current liabilities:	10.004	15 554
Accounts payable	12,624	15,554
Accrued payroll	6,943	6,660
Accrued vacation and sick leave, current portion	5,706	6,125
Accrued workers' compensation, current portion	1,949	2,024
Due to other City departments	2 972	96 4.656
Damage claims liability, current portion	3,872 20,095	4,656 17,395
Unearned revenues, refunds, and other		
Bond and loan interest payable	38,288	38,769
Revenue bonds, current portion	98,870	71,665
Capital appreciation bonds, current portion Certificates of participation, current portion	2,029 2,688	5,000
Commercial paper	161,336	2,556 40,312
Wholesale balancing account, current portion	10,859	40,312
Current liabilities payable from restricted assets	31,915	45,882
Total current liabilities	397,174	257,109
Long-term liabilities:	337,174	237,103
Other post-employment benefits obligations	150,771	166,336
Net pension liability	175,429	209,003
Accrued vacation and sick leave, less current portion	4,394	4,561
Accrued workers' compensation, less current portion	8,387	8,933
Damage claims liability, less current portion	7,637	8,746
Revenue bonds, less current portion	4,709,678	4,837,376
Capital appreciation bonds, less current portion	-,,,,,,,,,,	1,725
Certificates of participation, less current portion	101,704	104,550
Wholesale balancing account, less current portion	53,970	55,451
Pollution remediation obligation	2,194	2,311
Total long-term liabilities	5,214,164	5,398,992
Total liabilities	5,611,338	5,656,101
Deferred inflows of resources		
Related to pensions	33,330	15,063
Other post-employment benefits	13,983	268
Total deferred inflows of resources	47,313	15,331
Net position		
Net investment in capital assets	563,457	504,476
Restricted for debt service	16,193	22,933
Restricted for capital projects		32,978
Unrestricted	(37,512)	(70,863)
Total net position	\$ 542,138	489,524

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

	2019	2018
Operating revenues:		
Charges for services	509,703	495,138
Rents and concessions	13,010	12,906
Capacity fees	2,368	1,720
Other revenues	17,310	15,875
Total operating revenues	542,391	525,639
Operating expenses:		
Personnel services	111,594	128,295
Contractual services	13,715	14,131
Materials and supplies	13,421	15,936
Depreciation and amortization	120,815	118,751
Services provided by other departments	59,751	56,860
General and administrative and other	37,798	36,174
Total operating expenses	357,094	370,147
Operating income	185,297	155,492
Non-operating revenues (expenses):		
Federal and state grants	200	597
Interest and investment income	15,650	6,448
Interest expenses	(177,998)	(164,001)
Amortization of premium, discount, refunding loss, and issuance costs	17,788	13,540
Net gain from sale of assets	2,277	727
Other non-operating revenues	29,922	37,740
Other non-operating expenses	(1,388)	(1,920)
Net non-operating expenses	(113,549)	(106,869)
Change in net position before transfers	71,748	48,623
Transfers from the City and County of San Francisco	1,200	382
Transfers to the City and County of San Francisco	(20,334)	(31,368)
Net transfers	(19,134)	(30,986)
Change in net position	52,614	17,637
Net position at beginning of year	489,524	501,267
Cumulative effect of accounting change		(29,380)
Beginning of year as restated	489,524	471,887
Net position at end of year	542,138	489,524

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

(in thousands)		
	2019	2018
Cash flows from operating activities:	* -40 4-0	
Cash received from customers, including cash deposits	\$ 540,479	525,886
Cash received from tenants for rent	12,837	12,783
Cash paid to employees for services	(124,905)	(121,352)
Cash paid to suppliers for goods and services	(126,412)	(108,216)
Cash paid for judgments and claims	(5,527)	(2,925)
Net cash provided by operating activities	296,472	306,176
Cash flows from non-capital financing activities:	450	400
Cash received from grants	456	422
Cash received from settlements	_	8,308
Cash received from miscellaneous revenues	5,955	5,401
Cash paid for rebates and program incentives	(1,388)	(1,920)
Transfers from the City and County of San Francisco	1,200	382
Transfers to the City and County of San Francisco	(20,334)	(31,368)
Net cash (used in) non-capital financing activities	(14,111)	(18,775)
Cash flows from capital and related financing activities:		
Proceeds from sale of capital assets	2,277	3,231
Proceeds from bond issuance, net of premium, discount, refunding loss,		
and issuance costs	_	928,694
Proceeds from commercial paper borrowings	121,024	15,664
Principal paid on commercial paper	_	(120,352)
Principal paid on long-term debt	(79,221)	(527,881)
Interest paid on long-term debt	(230,587)	(278,284)
Interest paid on commercial paper	(1,018)	(830)
Issuance cost paid on long-term debt	(4)	(1,405)
Acquisition and construction of capital assets	(208,064)	(257,777)
Federal interest income subsidy from Build America Bonds	23,977	24,042
Net cash (used in) capital and related financing activities	(371,616)	(214,898)
Cash flows from investing activities:		
Interest income received	10,829	5,204
Proceeds from sale of investments outside City Treasury	484,965	485,074
Purchase of investments outside City Treasury	(514,907)	(436,878)
Net cash (used in) provided by investing activities	(19,113)	53,400
(Decrease) increase in cash and cash equivalents	(108,368)	125,903
Cash and cash equivalents:		
Beginning of year	587,604	461,701
End of year	479,236	587,604
Reconciliation of cash and cash equivalents to the statement of net position:		
Cash and investments with City Treasury:		
Unrestricted	405,558	358,768
Restricted	2,224	102,011
Cash and investments outside City Treasury:		
Unrestricted	254	274
Restricted	122,512	143,739
Less: Restricted (with maturity more than 90 days - see table in Note 3)	(49,728)	(19,786)
Less: Unrealized (gain) loss on investments	(1,584)	2,598
Cash and cash equivalents at end of year on	\$ 479,236	587,604
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	\$_	185,297	_	155,492
Adjustments to reconcile operating income to				
net cash provided by operating activities:				
Depreciation and amortization		120,815		118,751
Provision for uncollectible accounts		147		(37)
Write-off of capital assets and other non-cash items		1,286		910
Changes in operating assets and liabilities:				
Receivables:				
Charges for services		(898)		678
Prepaid charges, advances, and other		(1,021)		(224)
Due from other City departments		(370)		338
Inventory		135		1,875
Accounts payable		(2,930)		8,286
Accrued payroll		283		177
Other post-employment benefits obligations		(5,870)		6,772
Pension obligations		(8,710)		(3,730)
Accrued vacation and sick leave		(586)		(325)
Accrued workers' compensation		(621)		1,868
Due to other City departments		(96)		89
Wholesale balancing account		8,963		12,395
Pollution remediation obligation		(117)		(157)
Damage claims liability		(1,893)		2,664
Unearned revenues, refunds, and other liabilities	_	2,658		354
Total adjustments	_	111,175	_	150,684
Net cash provided by operating activities	\$_	296,472	_	306,176
Noncash transactions:				
Accrued capital asset costs	\$	31,915		45,882
Interfund payable		_		96
Unrealized (gain) loss on investments		(1,584)		2,598

See accompanying notes to financial statements.

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

(1) Description of Reporting Entity

The San Francisco Water Enterprise (the Enterprise) was established in 1930 under the provisions of the Charter of the City and County of San Francisco (the City). The Enterprise acquired the fully developed, mature water works for San Francisco on March 3, 1930. Since then, the City has operated and maintained the water works as the San Francisco Water Enterprise. The Board of Supervisors of the City has adopted resolutions (the Water Resolutions) providing for the issuance of various water revenue and refunding bond series. The Water Resolutions require the City to keep separate books of records and accounts of the Enterprise. The Enterprise, which consists of a system of reservoirs, storage tanks, water treatment plants, pump stations, and pipelines, is engaged in the distribution of water to San Francisco and certain suburban areas. In fiscal year 2019, the Enterprise sold approximately 67,319 million gallons, i.e., about 185 million gallons per day of water, to approximately 2.7 million people within San Francisco and certain suburban areas.

The San Francisco Public Utilities Commission (the Commission), established in 1932, is responsible for providing operational oversight of the public utility enterprises of the City, which include the Enterprise along with the City's power and sewer utilities (i.e., Hetch Hetchy Water and Power and CleanPowerSF, of which the Power Enterprise is a component, and the San Francisco Wastewater 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 Wastewater 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 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
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

(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 and are included as 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 U.S. GAAP. Under this method, all assets and liabilities associated with its operations are included on the statement of net position; revenues are recognized when earned, and expenses are recognized when liabilities are incurred. 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 cash 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 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 on 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

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

estimated useful lives of the related assets, which range from 1 to 100 years for equipment and 1 to 200 years for buildings, 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 discontinued construction projects 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 for assets that require a period of time to construct 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 is offset against the related debt and is 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.

(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 12(c)).

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(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 12(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. The arbitrage rebate liability was \$0 at June 30, 2019 and 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

Water service charges are based on water usage as determined by the Enterprise. Effective July 2013, the majority of residential and non-residential customers are billed on a monthly basis except for building and contractor customers, which are billed on a bi-monthly basis. Revenues earned but unbilled are accrued as charges for services and reflected as a receivable on the statements of net position. The unbilled amounts for the fiscal years ending June 30, 2019 and 2018 were \$29,032 and \$26,441, respectively.

(g) 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

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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 13(d)).

(s) Other Post-Employment Benefits

As prescribed under GASB 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	\$ (158,939)
Record Beginning Deferred Outflows of Resources - OPEB Items	8,229
Remove Net OPEB Obligation (Change from GASB 45)	121,330
Total Cumulative Effect of Change in Accounting Principle	\$ (29,380)

(t) New Accounting Standards 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.

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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.

(u) 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 10(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.

(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, 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.

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- 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.

Restricted assets are held by an independent trustee outside the City's investment pool. The assets are held for the purpose of paying future interest and principal on the bonds and for eligible capital project expenditures. The current balances as of June 30, 2019 and 2018 were \$122,512 and \$143,739, respectively. The Enterprise held all investments in guaranteed investment contracts, treasury and government obligations, commercial paper, corporate bonds, and notes, as well as money market mutual funds consisting of Treasury and Government Obligations.

Funds held by the trustee established under the 2002 Amended and Restated Indentures agreements are invested in "Permitted Investments," as defined in the agreement, which includes money market funds and investment agreements. The agreement permits investment in money market funds registered under the Federal Investment Company Act of 1940 whose shares are registered under the Federal Securities Act of 1933 and have a rating by S&P of "AAAm-G," "AAAm," or "AAAm," and a rating by Moody's of "Aaa," "Aa1," or "Aa2". The credit ratings of the money market funds invested in as of June 30, 2019 were "Aaa-mf" and "P-1" by Moody's, and "AAAm" and "A-1+" by S&P. The credit ratings of the money market funds invested in as of June 30, 2018 were "Aaa-mf" and "P-1" by Moody's, and "AAAm" and "A-1+" by S&P. Investment agreements must be with a U.S. bank or trust company that have a rating by Moody's and S&P of "A" or higher, or are guaranteed by any entity with a rating of "A" or higher, at the time the agreement is entered.

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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 tables present the restricted and unrestricted cash and investments outside City Treasury as of June 30, 2019 and 2018:

Cash and Investments outside City Treasury
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					Fair Valu	ie Measuremer	nts Using
	Credit Ratings	June 30, 20	19	Investments exempt from	Quoted prices in active markets for identical assets	Significant other observable inputs	Unobservable Inputs
Investments	(S&P/Moody's)	Maturities	Fair Value	fair value	(Level 1)	(Level 2)	(Level 3)
Commercial Paper	A-1/P-1	October 31, 2019 \$	49,728	49,728	_	_	_
Commercial Paper	A-1+/P-1	September 10, 2019	352	352	_	_	_
Commercial Paper	A-1/P-1	July 1, 2019	12,332	12,332	_	_	_
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	60,061	60,061	_	_	_
Money Market Funds	A-1+/P-1	< 90 days	38	38	_	_	_
Cash and Cash Equivalents	N/A		1	1	_	_	_
Total Restricted Cash and	l Investments out	side City Treasury \$	122,512	122,512	_	_	_
Cash and Cash Equivalents	N/A		254	254	_	_	_
Total Cash and Investmen	nts outside City Tr	easury \$	254	254			_

Cash and Investments outside City Treasury

					Fair Valu	e Measuremen	ts Using
	Credit Ratings	June 30, 20)18	Investments	Quoted prices in active markets for identical assets	Significant other observable inputs	Unobservable Inputs
Investments	(S&P/Moody's)	Maturities	Fair Value	fair value	(Level 1)	(Level 2)	(Level 3)
U.S. Agencies	AA+/Aaa	March 20, 2020	7,626	_	_	7,626	_
Commercial Paper	A-1/P-1	March 8, 2019	12,160	12,160	_	_	_
Commercial Paper	A-1+/P-1	September 26, 2018	270	270	_	_	_
Commercial Paper	A-1+/P-1	< 90 days	48,633	48,633	_	_	_
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	75,019	75,019	_	_	_
Money Market Funds	A-1+/P-1	< 90 days	31	31	_	_	_
Total Restricted Cash and	l Investments out	side City Treasury	143,739	136,113	_	7,626	_
Cash and Cash Equivalents	N/A		274	274	_	_	_
Total Cash and Investmen	nts outside City Tr	easury	274	274		_	_

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 an unrealized gain due to changes in fair value on commercial paper of \$123 and \$418, respectively.

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Additional cash outside of the investment pool included revolving fund and cash in transit. The revolving fund has a balance of \$28 and \$33 at June 30, 2019 and 2018, respectively, which is held in a commercial bank in non-interest bearing checking accounts covered by Federal Deposit Insurance Corporation depository insurance. These accounts were established as provided by the City's Administrative Code for revolving fund needs. The cash in transit was \$226 and \$241 at June 30, 2019 and 2018, respectively.

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	\$	405,558	358,768
Cash and investments outside City Treasury		254	274
Restricted cash and investments outside City Treasury		122,512	143,739
Non-current assets:			
Restricted cash and investments with City Treasury		2,224	102,011
Total cash, cash equivalents, and investments	\$ \$	530,548	604,792

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

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, reservoirs, dams, treatment plants, pump stations, certain water mains and pipelines, sewer systems, tunnels, and bridges.

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

	_	2018	Increases	Decreases	2019
Capital assets not being depreciated and amortized:					
Land	\$	30,029	_	_	30,029
Intangible assets		679	_	_	679
Construction work in progress		1,400,051	243,607	(1,181,052) *	462,606
Total capital assets not being depreciated and amortized		1,430,759	243,607	(1,181,052)	493,314
Capital assets being depreciated and amortized:	-				
Facilities and improvements		4,929,069	1,159,465	_	6,088,534
Intangible assets		22,457	666	_	23,123
Machinery and equipment		288,037	23,557	(440)	311,154
Total capital assets being depreciated and amortized	-	5,239,563	1,183,688	(440)	6,422,811
Less accumulated depreciation and amortization for:	_				
Facilities and improvements		(1,190,341)	(106,715)	_	(1,297,056)
Intangible assets		(15,815)	(2,171)	_	(17,986)
Machinery and equipment		(200,933)	(11,929)	437	(212,425)
Total accumulated depreciation and amortization		(1,407,089)	(120,815)	437	(1,527,467)
Total capital assets being depreciated and amortized, net	_	3,832,474	1,062,873	(3)	4,895,344
Total capital assets, net	\$	5,263,233	1,306,480	(1,181,055)	5,388,658

^{*} Decrease in construction work in progress includes \$1,286 in capital project write-offs, mainly related to Bay Division Pipeline Upgrade, and Local Water Conveyance/Distribution projects.

		2017	Increases	Decreases	2018
Capital assets not being depreciated and amortized:		_		_	
Land	\$	26,777	5,756 *	(2,504)	30,029
Intangible assets		679	_	_	679
Construction work in progress		1,195,840	328,435	(124,224) *	1,400,051
Total capital assets not being depreciated and amortized	_	1,223,296	334,191	(126,728)	1,430,759
Capital assets being depreciated and amortized:	_				
Facilities and improvements		4,819,814	109,255	_	4,929,069
Intangible assets		18,469	3,988	_	22,457
Machinery and equipment		280,866	7,814	(643)	288,037
Total capital assets being depreciated and amortized	_	5,119,149	121,057 *	(643)	5,239,563
Less accumulated depreciation and amortization for:	_				
Facilities and improvements		(1,085,497)	(104,844)	_	(1,190,341)
Intangible assets		(14,477)	(1,338)	_	(15,815)
Machinery and equipment		(189,007)	(12,569)	643	(200,933)
Total accumulated depreciation and amortization		(1,288,981)	(118,751)	643	(1,407,089)
Total capital assets being depreciated and amortized, net	: -	3,830,168	2,306	_	3,832,474
Total capital assets, net	\$	5,053,464	336,497	(126,728)	5,263,233

^{*} Decrease in construction work in progress includes \$910 in capital project write-offs, mainly related to San Francisco Groundwater, San Joaquin Water System Improvement, and Sunol Valley Water System Improvement 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, 2019 and 2018 are as follows:

	2019	2018
Interest expensed	\$ 177,998	164,001
Interest included in construction work in progress	53,431	59,855
Total interest incurred	\$ 231,429	223,856

(5) Restricted Assets

Pursuant to the Indentures, all revenues of the Enterprise (except amounts on deposit in the rebate fund) are irrevocably pledged to the punctual payment of debt service on the Water Revenue and Refunding Bonds. Accordingly, the revenues of the Enterprise shall not be used for any other purpose while any of its Water Revenue and Refunding Bonds are outstanding, except as expressly permitted by the Indentures. Further, all revenues shall be deposited by the City Treasurer, by instruction of the Enterprise, in special funds designated as the Water Enterprise Revenue Fund (the Water Revenue Fund), which must be maintained in the City Treasury. These funds, held at the City Treasury, are recorded in the statement of net position of the Enterprise as cash and investments. Deposits in the Water Revenue Fund, including earnings thereon, shall be appropriated, transferred, expended, or used for the following purposes pertaining to the financing, maintenance, and operation of the Enterprise in accordance with the following priority:

- 1. The payment of operation and maintenance expenses for such utility and related facilities;
- 2. The payment of pension charges and proportionate payments to such compensation and other insurance or outside reserve funds as the Enterprise may establish or the Board of Supervisors may require with respect to employees of the Enterprise;
- 3. The payment of principal, interest, reserve, sinking fund, and other mandatory funds created to secure Revenue Bonds issued by the Enterprise for the acquisition, construction, or extension of facilities owned, operated, or controlled by the Enterprise;
- 4. The payment of principal and interest on General Obligation Bonds issued by the City for the Enterprise's purposes:
- 5. Reconstruction and replacement as determined by the Enterprise or as required by any of the Enterprise's Revenue Bond ordinances duly adopted and approved; and
- 6. The acquisition of land, real property, or interest in real property for, and the acquisition, construction, enlargement, and improvement of, new and existing buildings, structures, facilities, equipment, appliances, and other property necessary or convenient to the development or improvement of such utility owned, controlled, or operated by the Enterprise; and for any other lawful purpose of the Enterprise, including the transfer of surplus funds pursuant to the Charter.

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In accordance with the Indenture, the bond financing program maintains that certain restricted cash and investment balances be held 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:		
Water revenue bond construction fund	\$ 2,224	102,011
Cash and investments outside City Treasury:		
1991A Capital Appreciation Bond	2,576	2,534
2010B Water revenue bond fund	21,464	22,722
2010D Water revenue bond fund	2,900	3,711
2010E Water revenue bond fund	16,684	20,267
2010F Water revenue bond fund	_	1
2010G Water revenue bond fund	22,652	22,216
2011A Water revenue bond fund	1	2
2011B Water revenue bond fund	1,022	1,004
2011C Water revenue bond fund	1,185	1,164
2011D Water revenue bond fund	1,957	1,922
2012A Water revenue bond fund	2,927	2,960
2012B Water revenue bond fund	798	787
2012C1 Water revenue refunding bond fund	1,167	1,152
2012C2 Water revenue refunding bond fund	3,359	3,314
2012D Water revenue refunding bond fund	2,462	2,422
2015A Water revenue refunding bond fund	1	2
2016A Water revenue refunding bond fund	1	3
2016C Water revenue bond fund	_	1
2017A Water revenue bond fund	6,357	12,302
2017B Water revenue bond fund	11,503	18,687
2017C Water revenue bond fund	1,891	5,393
2017D Water revenue refunding bond fund	1	40
2017E Water revenue refunding bond fund	_	10
2017F Water revenue refunding bond fund	_	7
2017G Water revenue refunding bond fund	_	6
2009C Certificates of participation - 525 Golden Gate	1,796	1,745
2009D Certificates of participation - 525 Golden Gate	7,084	6,904
Commercial Paper - Tax Exempt	11	8
Commercial Paper - Taxable	27	23
Habitat reserve endowment fund	12,686	12,430
Total cash and investments outside City Treasury	122,512	143,739
Interest and other receivables:		
Water bond construction fund including capacity fee receivables	3,798	4,491
Total restricted assets	128,534	250,241

Restricted assets listed above as cash and investments with City Treasury are held in subfund accounts within the Water Revenue Fund of the City Treasury.

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(6) Short-Term Debt

The Commission and the Board of Supervisors have authorized the issuance of up to \$500,000 in commercial paper pursuant to the voter-approved 2002 Proposition E. As of June 30, 2019 and 2018, amounts outstanding under Proposition E were \$161,336 and \$40,312, respectively. Commercial paper interest rates ranged from 0.8% to 2.8%.

With maturities up to 270 days, the Enterprise intends to maintain the program by remarketing the commercial paper upon maturity over the near-to-medium term, at which time outstanding commercial paper will likely be refunded with revenue bonds. This is being done to take advantage of the continued low interest rate environment. If the commercial paper interest rates rise to a level that exceeds these benefits, the Enterprise will refinance the commercial paper with the long-term, fixed-rate debt.

In accordance with GASB Statement No. 88, Certain Disclosures Related to Debt, Including Direct Borrowing and Direct Placements, the Enterprise had \$338,664 and \$459,688 in unused authorization as of June 30, 2019 and 2018, respectively. Significant Events of default as specified in the Reimbursement Agreements, or Revolving Credit Agreement 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 describe herein.

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(7) Changes in Long-Term Liabilities

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

	Interest	Maturity (Calendar						Due within
	rate	Year)	:	2018	Additions	Reductions	2019	one year
Revenue Bonds:	4.00.0/ 5.05.0/	0010	•	40.005		(7.050)	0.005	0.005
2009A revenue bonds	4.00 % - 5.25 %		\$	16,885	_	(7,250)	9,635	9,635
2009B revenue bonds	4.00 - 5.00	2019		14,910	_	(5,275)	9,635	9,635
2010A revenue bonds	2.00 - 5.00	2019		3,035	_	(505)	2,530	2,530
2010B revenue bonds (Build America)	4.00 - 6.00	2040		396,190	_	(11,215)	384,975	11,555
2010D revenue refunding bonds	3.00 - 5.00	2021		63,735	_	(15,965)	47,770	16,780
2010E revenue bonds (Build America)	4.90 - 6.00	2040		344,200	_	_	344,200	_
2010F revenue bonds	3.00 - 5.50	2021		27,100	_	(3,125)	23,975	5,175
2010G revenue bonds (Build America)		2050		351,470	_	_	351,470	_
2011A revenue bonds	4.25 - 5.00	2041		322,480	_	_	322,480	_
2011B revenue bonds	3.50 - 5.00	2041		18,315	_	(445)	17,870	700
2011C revenue bonds	3.00 - 5.00	2041		19,475	_	_	19,475	760
2011D revenue refunding bonds	4.00 - 5.00	2028		19,135	_	_	19,135	_
2012A revenue bonds	4.00 - 5.00	2043	4	459,455	_	_	459,455	_
2012B revenue bonds	4.00 - 5.00	2043		16,520	_	_	16,520	_
2012C1 revenue refunding bonds	4.00	2031		8,465	_	_	8,465	_
2012C2 revenue refunding bonds	4.00 - 5.00	2032		69,570	_	_	69,570	_
2012D revenue refunding bonds	1.75 - 5.00	2019		24,040	_	(11,825)	12,215	12,215
2015A revenue refunding bonds	2.00 - 5.00	2036	4	429,600	_	(3,220)	426,380	14,000
2016A revenue refunding bonds	4.00 - 5.00	2039	-	763,005	_	_	763,005	_
2016B revenue refunding bonds	1.50 - 5.00	2030	:	110,880	_	(5,980)	104,900	8,920
2016C revenue bonds	0.87 - 4.19	2046	2	253,885	_	(5,525)	248,360	5,605
2017A revenue bonds	5.00	2047	:	121,140	_	_	121,140	_
2017B revenue bonds	5.00	2047	:	147,725	_	_	147,725	_
2017C revenue bonds	5.00	2047		70,675	_	_	70,675	_
2017D revenue refunding bonds	2.00 - 5.00	2035	;	350,305	_	(835)	349,470	860
2017E revenue refunding bonds	4.00 - 5.00	2031		48,890	_	_	48,890	_
2017F revenue refunding bonds	5.00	2031		8,705	_	_	8,705	_
2017G revenue refunding bonds	2.03 - 2.91	2024		34,280	_	(500)	33,780	500
Less issuance discount				(166)	_	12	(154)	_
Add issuance premiums				395,137	_	(28,840)	366,297	_
Total revenue bonds payable				909,041		(100,493)	4,808,548	98,870
1991 capital appreciation bonds	0.00	2019	.,.	6,725	304	(5,000)	2,029	2,029
2009C certificates of participation (COPs		2022		14,162	_	(2,556)	11,606	2,688
2009C COPs issuance premiums	, =			445	_	(158)	287	_,,,,,
2009D COPs (Build America)	6.36 - 6.49	2041		92,499	_	(200)	92,499	_
Other post-employment benefits obligation		20.2		166,336	9,125	(24,690)	150,771	_
Net pension liability	710			209,003	25,430	(59,004)	175,429	_
Accrued vacation and sick leave				10.686	10,372	(10,958)	10,100	5,706
Accrued workers' compensation				10,957	2,707	(3,328)	10,336	1,949
Damage claims liability				13,402	4,768	(6,661)	11,509	3,872
•				55,866	8,963	(6,661)	64,829	10,859
Wholesale balancing account Pollution remediation obligation				2,311	0,303	(117)	2,194	10,659
•			\$ 5.4		61,669	. 		125,973
Total			φ <u>⊃,</u> 4	491,433	01,009	(212,965)	5,340,137	120,913

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	Interest	Maturity (Calendar	,				Due within
Revenue Bonds:	rate	Year)	2017	Additions	Reductions	2018	one year
2009A revenue bonds	4.00 % - 5.25 %	2019	\$ 20,210	_	(3,325)	16,885	7,250
2009B revenue bonds	4.00 % = 5.23 %	2019	19,930	_	(5,020)	14,910	5,275
2010A revenue bonds	2.00 - 5.00	2019	3,515	_	(480)	3,035	5,275
2010A revenue bonds 2010B revenue bonds (Build America)	4.00 - 6.00	2019	407,095	_	(10,905)	396,190	11,215
,	3.00 - 5.00	2040	75,200	_	, , ,		15.965
2010D revenue refunding bonds	4.90 - 6.00	2021		_	(11,465)	63,735	15,965
2010E revenue bonds (Build America) 2010F revenue bonds	3.00 - 5.50	2040	344,200 30,335	_	(2.035)	344,200	3,125
2010F revenue bonds 2010G revenue bonds (Build America)		2021	351,470	_	(3,235)	27,100 351,470	3,125
, , ,	4.25 - 5.00	2050					_
2011A revenue bonds	4.25 - 5.00 3.50 - 5.00	2041	602,715	_	(280,235)	322,480	445
2011B revenue bonds			28,525	_	(10,210)	18,315	445
2011C revenue bonds	3.00 - 5.00	2041	30,140		(10,665)	19,475	_
2011D revenue refunding bonds	4.00 - 5.00	2028	47,165	_	(28,030)	19,135	_
2012A revenue bonds	4.00 - 5.00	2043	591,610	_	(132,155)	459,455	_
2012B revenue bonds	4.00 - 5.00	2043	16,520	_	- (45.745)	16,520	_
2012C1 revenue refunding bonds	4.00	2031	24,180	_	(15,715)	8,465	_
2012C2 revenue refunding bonds	4.00 - 5.00	2032	69,570	_	_	69,570	_
2012D revenue refunding bonds	1.75 - 5.00	2019	24,040	_	_	24,040	11,825
2015A revenue refunding bonds	2.00 - 5.00	2036	429,600	_	_	429,600	3,220
2016A revenue refunding bonds	4.00 - 5.00	2039	763,005	_		763,005	_
2016B revenue refunding bonds	1.50 - 5.00	2030	119,425	_	(8,545)	110,880	5,980
2016C revenue bonds	0.87 - 4.19	2046	259,350	_	(5,465)	253,885	5,525
2017A revenue bonds	5.00	2047	_	121,140	_	121,140	_
2017B revenue bonds	5.00	2047	_	147,725	_	147,725	_
2017C revenue bonds	5.00	2047	_	70,675	_	70,675	_
2017D revenue refunding bonds	2.00 - 5.00	2035	_	350,305	_	350,305	835
2017E revenue refunding bonds	4.00 - 5.00	2031	_	48,890	_	48,890	_
2017F revenue refunding bonds	5.00	2031	_	8,705	_	8,705	_
2017G revenue refunding bonds	2.03 - 2.91	2024	_	34,280	_	34,280	500
Less issuance discount			(181)	_	15	(166)	_
Add issuance premiums			297,348	146,975	(49,186)	395,137	
Total revenue bonds payable			4,554,967	928,695	(574,621)	4,909,041	71,665
1991 capital appreciation bonds	0.00	2019	6,278	447	_	6,725	5,000
2009C certificates of participation (COPs) 2.00 - 5.00	2022	16,593	_	(2,431)	14,162	2,556
2009C COPs issuance premiums			630	_	(185)	445	_
2009D COPs (Build America)	6.36 - 6.49	2041	92,499	_	_	92,499	_
Other post-employment benefits obligation	ns		121,330	51,778	(6,772)	166,336	_
Net pension liability			259,956	29,430	(80,383)	209,003	_
Accrued vacation and sick leave			11,011	10,202	(10,527)	10,686	6,125
Accrued workers' compensation			9,089	4,382	(2,514)	10,957	2,024
Damage claims liability			10,738	4,151	(1,487)	13,402	4,656
Wholesale balancing account			43,471	12,395	_	55,866	415
Pollution remediation obligation			2,468	_	(157)	2,311	_
Total			\$ 5,129,030	1,041,480	(679,077)	5,491,433	92,441

The payments of principal and interest amounts on various bonds are secured by net revenues of the Enterprise.

(a) Capital Appreciation Bonds

The capital appreciation bonds mature from November 1, 2018 and November 1, 2019. The bonds were insured by Municipal Bond Insurance Association (MBIA) and carried "Aaa" and "AAA" ratings from Moody's and S&P, respectively. In February 2009, the bonds were further reinsured by National Public Finance Guarantees Corp. (NPFGC) and carried "Baa1" and "A"

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ratings from Moody's and S&P, respectively. On May 29, 2013, the SFPUC transferred \$2,500 to U.S. Bank, trustee of the 1991 Series A San Francisco Water Revenue Bonds (the Bonds), for the purpose of replacing the debt service reserve surety policy that had been satisfying the reserve requirement of the bonds. The surety policy had been provided by NPFGC. With this transfer, the surety policy is effectively terminated. The amount deposited with the U.S. Bank will continue to satisfy the reserve requirement on the bonds. Interest on the capital appreciation bonds is due upon maturity and is recognized as annual interest expense over the life of the bonds using the interest method. The Enterprise has recognized \$2,029 and \$6,725 of unpaid principal and interest on the capital appreciation bonds as of June 30, 2019 and 2018, respectively, and has reported it as capital appreciation bonds in the accompanying statements of net position.

(b) Water Revenue Bonds 2009 Series A

On April 16, 2015, the Enterprise issued \$429,600 of the 2015 Series A revenue bonds for the purpose of refunding \$431,860 of the then outstanding 2006 Series A revenue bonds and \$39,030 of the 2009 Series A revenue bonds. The 2015 bonds bear coupon rates of 2.0% and 5.0% and mature serially from 2018 to 2036. The refunded 2009 Series A bonds carried coupon rates of 5.0% and matured serially between 2023 and 2026. Although the refunding resulted in the recognition of a deferred accounting loss of \$6,168, the economic gain was \$2,559 or 6.6% of the refunded principal. The remaining 2009 Series A bonds not refunded included serial and term bonds with interest rates ranging from 4.0% to 5.3%. The Bonds mature through November 1, 2039.

A portion of the proceeds of the 2015 Series A revenue refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated April 1, 2015, to refund and legally defease a portion of the outstanding 2009 Series A bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities consisting of United States Treasury Securities - SLGS. The principal and interest on monies held by the escrow agent will be sufficient to refund and legally defease the 2009 Series A bonds maturing on November 1, 2023 to and including November 1, 2026.

A portion of the proceeds of the 2016 Series A refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated October 1, 2016, to refund and legally defease a portion of the outstanding 2009 Series A bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to refund and legally defease bonds maturing November 1, 2020 through and including November 1, 2022 and November 1, 2026 to and including November 1, 2039. As of June 30, 2019 and 2018, the principal amount of 2009 Series A bonds outstanding was \$9,635 and \$16,855, respectively.

(c) Water Revenue Bonds 2009 Series B

During fiscal year 2010, the Enterprise issued revenue bonds, 2009 Series B in the amount of \$412,000. The purpose of the bonds is to provide \$377,778 in new money for WSIP capital projects, with the balance applied to financing costs and a cash-funded debt service reserve. The bonds were rated "AA-" and "A1" from S&P and Moody's, respectively. The bonds include serial and term bonds with interest rates varying from 4.0% to 5.0%. The bonds mature through November 1, 2039. The 2009 Series B bonds have a true interest cost of 4.5%.

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On February 27, 2013, the Wholesale Water Customers BAWSCA made an early repayment of \$356,139 to the Enterprise. Prepayment proceeds in the amount of \$24,014 were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated February 27, 2013, to refund and legally defease a portion of the outstanding 2009 Series B bonds. This deposit, together with certain other available monies, was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities consisting of United States Treasury Securities - SLGS. The principal and interest on monies held by the escrow agent will be sufficient to partially defease a portion of the 2009 Series B bonds maturing November 1, 2013 through 2018.

A portion of the proceeds of the 2016 Series A refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated October 1, 2016, to refund and legally defease a portion of the outstanding 2009 Series B bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to refund and legally defease all of the maturities of the 2009 Series B bonds starting on November 1, 2020 and thereafter. As of June 30, 2019 and 2018, the principal amount of 2009 Series B bonds outstanding was \$9,635 and \$14,910, respectively.

(d) Water Revenue Bonds 2010 Series AB

In fiscal year 2010, the Enterprise issued revenue bonds, 2010 Series ABC in the combined principal amount of \$488,705. The purpose of the bonds is to refund \$14,400 of outstanding 2001 Series A revenue bonds, to provide \$58,748 in proceeds for the Advanced Meter Infrastructure System (AMI) Project and to provide \$364,757 in new money for WSIP capital projects, with the balance applied to financing costs and a cash-funded debt service reserve fund. The bonds were rated "AA-" and "Aa2" from S&P and Moody's, respectively. The bonds included serial and term bonds with interest rates ranging from 2.0% to 6.0%.

The 2010 Series A Bonds in the par amount of \$56,945 were issued as tax-exempt bonds to provide funds for the SFPUC's AMI Project and pay financing costs. The 2010 Series A bonds were issued as serial bonds with coupons ranging from 2.0% to 5.0% and have a final maturity of 2030. The Series A bonds have a true interest cost of 3.8%.

On February 27, 2013, the Wholesale Water Customers BAWSCA made an early repayment of \$356,139 to the Enterprise. Prepayment proceeds in the amount of \$11,681 were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated February 27, 2013, to refund and legally defease a portion of the outstanding 2010 Series A bonds. This deposit, together with certain other available monies, was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities consisting of United States Treasury Securities - SLGS. The principal and interest on monies held by the escrow agent will be sufficient to partially defease a portion of the 2010 Series A bonds maturing November 1, 2013 through 2018.

A portion of the proceeds of the 2016 Series B refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated October 1, 2016, to refund and legally defease a portion of the outstanding 2010 Series A bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem all of the maturities of the 2010 Series A

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bonds starting on November 1, 2020 and thereafter. As of June 30, 2019 and 2018, the principal amount of 2010 Series A bonds outstanding was \$2,530 and \$3,035, respectively.

The 2010 Series B Bonds in the par amount of \$417,720 were issued as taxable Build America Bonds (with Direct Pay Subsidy) to provide \$364,757 in new money for WSIP capital projects and pay financing costs. The 2010 Series B bonds were issued as serial and term bonds with coupons ranging from 4.0% to 6.0% and have a final maturity of 2040. The Series B bonds have a true interest cost (net of federal subsidy) of 3.9%. As of June 30, 2019 and 2018, the principal amount outstanding was \$384,975 and \$396,190, respectively.

(e) Water Revenue Bonds 2010 Series DE

In July 2010, the Enterprise issued revenue bonds 2010 Series DE in the combined principal amount of \$446,925. The purpose of the bonds is to advance refund \$31,570 of outstanding 2002 Series A revenue bonds and to provide \$372,689 in new money for WSIP capital projects, with the balance applied to financing costs and a cash-funded debt service reserve fund. The bonds were rated "AA-" and "Aa2" from S&P and Moody's, respectively. The bonds included serial and term bonds with interest rates ranging from 3.0% to 6.0%.

The 2010 Series D Bonds in the par amount of \$102,725 were issued as tax-exempt bonds to provide \$72,243 in new money for WSIP capital projects and \$35,080 to advance refund a portion of outstanding 2002 Series A revenue bonds. The Series D bonds were issued as serial bonds with coupons ranging from 3.0% to 5.0% and have a final maturity of 2021. The Series D bonds have a true interest cost of 2.5%.

On February 27, 2013, the Wholesale Water Customers BAWSCA made an early repayment of \$356,139 to the Enterprise. \$12,360 of the repayment proceeds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated February 27, 2013, to refund and legally defease a portion of the outstanding 2010 Series D bonds. BAWSCA repayment funds were combined with \$165 from the 2010 Series D Capitalized Interest Account. This deposit, together with certain other available monies, was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities consisting of United States Treasury Securities - SLGS. The principal and interest on monies held by the escrow agent will be sufficient to partially defease a portion of the 2010 Series D bonds maturing November 1, 2015 through 2017. As of June 30, 2019 and 2018, the principal amount of 2010 Series D bonds outstanding was \$47,770 and \$63,735, respectively.

The 2010 Series E Bonds in the par amount of \$344,200 were issued as taxable Build America Bonds (with Direct Pay Subsidy) to provide \$300,446 in new money proceeds for WSIP capital projects. The Series E bonds were issued as serial and term bonds with coupons ranging from 4.9% to 6.0% and have a final maturity of 2040. The Series E bonds have a true interest cost (net of federal subsidy) of 3.8%. As of June 30, 2019 and 2018, the principal amount of 2010 Series E bonds outstanding was \$344,200.

(f) Water Revenue Bonds 2010 Series FG

In December 2010, the Enterprise issued revenue bonds 2010 Series FG in the combined principal amount of \$532,430. The purpose of the bonds is to provide \$437,980 in new money for WSIP capital projects, with the balance applied to financing costs and a cash-funded debt service reserve. The bonds were rated "AA-" and "Aa2" from S&P and Moody's, respectively. The bonds included serial and term bonds with interest rates ranging from 3.0% to 7.0%.

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The \$180,960 Series F bonds were issued as tax-exempt bonds to provide \$149,728 in new money for WSIP capital projects. The Series F bonds were issued as serial and term bonds with coupons ranging from 3.0% to 5.5% and have a final maturity of 2030. The Series F bonds have a true interest cost of 4.8%.

On February 27, 2013, the Wholesale Water Customers BAWSCA made an early repayment of \$356,139 to the Enterprise. \$3,646 of the repayment proceeds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated February 27, 2013, to refund and legally defease a portion of the outstanding 2010 Series F bonds. BAWSCA repayment funds were combined with \$131 from the 2010 Series F Capitalized Interest Account. This deposit, together with certain other available monies, was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities consisting of United States Treasury Securities - SLGS. The principal and interest on monies held by the escrow agent will be sufficient to partially defease a portion of the 2010 Series F bonds maturing November 1, 2017 and 2018.

A portion of the proceeds of the 2016 Series A refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated October 1, 2016, to refund and legally defease a portion of the outstanding 2010 Series F bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to refund and legally defease all of the maturities of the 2010 Series F bonds starting on November 1, 2021 and thereafter. As of June 30, 2019 and 2018, the principal amount of 2010 Series F bonds outstanding was \$23,975 and \$27,100 respectively.

The \$351,470 Series G bonds were issued as taxable Build America Bonds (with Direct Pay Subsidy) to provide \$288,252 in new money for WSIP capital projects. The Series G bonds were issued as term bonds with a coupon of 7.0% and have a final maturity of 2050. The Series G bonds have a true interest cost (net of federal subsidy) of 4.5%. As of June 30, 2019 and 2018, the principal amount of 2010 Series G bonds outstanding was \$351,470.

(g) Water Revenue Bonds 2011 Series ABCD

In August 2011, the Enterprise issued revenue bonds, 2011 Series ABCD in the combined principal amount of \$720,750. The purpose of the bonds is to provide new money for WSIP capital projects, to finance Hetch Hetchy Water Improvements, and to finance the Local Water Main Replacement Projects, as well as refund \$56,670 of outstanding 2001 Series A and 2002 Series A revenue bonds, with the balance applied to financing costs and a cash-funded debt service reserve. The bonds were rated "AA-" and "Aa3" from S&P and Moody's, respectively. The bonds included serial and term bonds with interest rates varying from 3.0% to 5.0%.

The \$602,715 Series A bonds were issued as tax-exempt bonds to provide \$525,000 in new money for WSIP capital projects. The Series A bonds were issued as serial and term bonds with coupons ranging from 4.3% to 5.0% and have a final maturity of 2041. The Series A bonds have a true interest cost of 4.6%.

A portion of the proceeds of the 2017 Series D and 2017 Series G refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated December 1, 2017, to refund and legally defease a portion of the outstanding 2011 Series A bonds. This deposit, together with certain other available monies was held by the

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escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem the maturities of the 2011 Series A bonds starting on November 1, 2022 and thereafter. As of June 30, 2019 and 2018, the principal amount of 2011 Series A bonds outstanding was \$322,480.

The \$28,975 Series B bonds were issued as tax-exempt bonds to provide \$27,710 to finance improvements to certain up-country water storage and transmission facilities under the jurisdiction of Hetch Hetchy Water and Power and CleanPowerSF. The Series B bonds were issued as serial and term bonds with coupons ranging from 3.5% to 5.0% and have a final maturity of 2041. The Series B bonds have a true interest cost of 4.5%.

On February 27, 2013, the Wholesale Water Customers BAWSCA made an early repayment of \$356,139 to the Enterprise. \$515 of the repayment proceeds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated February 27, 2013, to refund and legally defease a portion of the outstanding 2011 Series B bonds. This deposit, together with certain other available monies, was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities consisting of United States Treasury Securities - SLGS. The principal and interest on monies held by the escrow agent will be sufficient to partially defease a portion of the 2011 Series B bonds maturing November 1, 2017 through 2018.

A portion of the proceeds from the 2017 Series F refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated December 1, 2017, to refund and legally defease a portion of the outstanding 2011 Series B bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem the maturities of the 2011 Series B bonds starting on November 1, 2022 and thereafter. As of June 30, 2019 and 2018, the principal amount of 2011 Series B bonds outstanding was \$17,870 and \$18,315, respectively.

The \$33,595 Series C bonds were issued as tax-exempt bonds to provide \$33,772 to finance certain water main replacement projects within the City. The Series C bonds were issued as serial and term bonds with coupons ranging from 3.0% to 5.0% and have a final maturity of 2041. The Series C bonds have a true interest cost of 4.4%.

On February 27, 2013, the Wholesale Water Customers BAWSCA made an early repayment of \$356,139 to the Enterprise. \$3,824 of the repayment proceeds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated February 27, 2013, to refund and legally defease a portion of the outstanding 2011 Series C bonds. This deposit, together with certain other available monies, was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities consisting of United States Treasury Securities - SLGS. The principal and interest on monies held by the escrow agent will be sufficient to partially defease a portion of the 2011 Series C bonds maturing November 1, 2014 through 2018.

A portion of the proceeds of the 2017 Series E refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated December 1, 2017, to refund and legally defease a portion of the outstanding 2011 Series C bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem the maturities of the 2011 Series C bonds

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starting on November 1, 2022 and thereafter. As of June 30, 2019 and 2018, the principal amount of 2011 Series C bonds outstanding was \$19,475.

The \$55,465 Series D bonds were issued as tax-exempt bonds to provide \$59,381 to refund, on a current basis, a portion of the 2001 Series A bonds as well as refund, on an advance basis, a portion of the 2002 Series A bonds. The Series D bonds were issued as serial bonds with coupons ranging from 4.0% to 5.0% and have a final maturity of 2028. The Series D bonds have a true interest cost of 3.8%.

A portion of the proceeds of the 2017 Series E refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated December 1, 2017, to refund and legally defease a portion of the outstanding 2011 Series D bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem the maturities of the 2011 Series D bonds starting on November 1, 2022 and thereafter. As of June 30, 2019 and 2018, the principal amount of 2011 Series D bonds outstanding was \$19,135.

(h) Water Revenue Bonds 2012 Series AB and C (C1 and C2)

In June 2012, the Enterprise issued revenue bonds, 2012 Series ABC in the combined principal amount of \$701,880. The purpose of the bonds was to provide \$530,000 of new money for WSIP capital projects, \$15,750 to reimburse the Enterprise for costs to settle litigation arising out of certain capital projects of benefit to the Enterprise, and to refund \$99,180 of outstanding 2001 Series A and 2002 Series A revenue bonds, with the balance applied to financing costs and a cash-funded debt service reserve. The bonds were rated "AA-" and "Aa3" from S&P and Moody's, respectively. The bonds included serial and term bonds with interest rates varying from 4.0% to 5.0%.

The \$591,610 Series A bonds were issued as tax-exempt bonds to provide \$530,000 in new money for WSIP capital projects. The Series A bonds were issued as serial and term bonds with coupons ranging from 4.0% to 5.0% and have a final maturity of 2043. The Series A bonds have a true interest cost of 4.3%. A portion of the proceeds of the 2017 Series D refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated December 1, 2017, to refund and legally defease a portion of the outstanding 2012 Series A bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem the maturities of the 2012 Series A bonds starting on November 1, 2031 and thereafter. As of June 30, 2019 and 2018, the principal amount of 2012 Series A bonds outstanding was \$459,455.

The \$16,520 Series B bonds were issued as tax-exempt bonds to reimburse the Enterprise \$15,750 for costs to settle litigation arising out of certain capital projects of benefit to the Enterprise. The Series B bonds were issued as serial and term bonds with coupons ranging from 4.0% to 5.0% and have a final maturity of 2043. The Series B bonds have a true interest cost of 4.1%. As of June 30, 2019 and 2018, the principal amount of 2012 Series B bonds outstanding was \$16,520.

The \$93,750 Series C bonds were issued as tax-exempt bonds to provide \$101,147 to refund, on a current basis, a portion of the 2001 Series A bonds as well as refund, on an advance basis, a portion of the 2002 Series A bonds. The Series C bonds were issued as serial bonds with

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coupons ranging from 4.0% to 5.0% and have a final maturity of 2032. The Series C bonds have a true interest cost of 3.7%. A portion of the proceeds of the 2017 Series E refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated December 1, 2017, to refund and legally defease a portion of the outstanding 2012 Series C bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem the maturities of the 2012 Series C bonds starting on November 1, 2029 and thereafter. As of June 30, 2019 and 2018, the principal amount of 2012 Series C bonds outstanding was \$78,035.

(i) Water Revenue Refunding Bonds 2012 Series D

In August 2012, the Enterprise issued tax-exempt revenue bonds, 2012 Series D in the amount of \$24,040 for the purpose of refunding the remaining portion of the outstanding 2002 Series B bonds maturing on and after November 1, 2013. The bonds carried "Aa3" and "AA-" ratings from Moody's and S&P, respectively. The 2012 Series D refunding bonds include serial bonds with interest rates ranging from 1.8% to 5.0% and have a final maturity in 2019. The Series D bonds have a true interest cost of 1.34%. Unamortized 2002 Series B bond issuance costs were \$258 at the date of the refunding. The refunding resulted in the recognition of a deferred accounting loss of \$582, \$108 gross debt service savings over the next seven-year terms, and an economic gain of \$1,397 or 5.8% of the refunded principal. As of June 30, 2019 and 2018, the principal amount of 2012 Series D bonds outstanding was \$12,215 and \$24,040, respectively.

(i) Water Revenue Refunding Bonds 2015 Series A

In April 2015, the Enterprise issued tax-exempt revenue bonds, 2015 Series A in the amount of \$429,600 for the purpose of refunding all the outstanding 2006 Series A bonds maturing on and after November 1, 2015 and portion of the outstanding 2009 Series A bonds maturing on and after November 1, 2023. The bonds carried "Aa3" and "AA-" ratings from Moody's and S&P, respectively. The 2015 Series A bonds include serial bonds with interest rates varying from 2.0% to 5.0% and have a final maturity in 2036. The Series A bonds have a true interest cost of 3.3%. Unamortized 2006 Series A bond issuance costs were \$1,392, and there were no unamortized bond issuance costs for 2009 Series A bonds at the date of the refunding. The refunding resulted in the recognition of a deferred accounting loss of \$25,365, gross debt service savings of \$28,148 over the next 20 two-year terms, and an economic gain of \$48,561 or 10.3% of refunded principal. As of June 30, 2019 and 2018, the principal amount of 2015 Series A bonds outstanding was \$426,380 and \$429,600.

(k) Water Revenue Refunding Bonds 2016 Series AB

In October 2016, the Enterprise issued tax-exempt revenue bonds, 2016 Series AB in the aggregate amount of \$893,820. The 2016 Series A bonds were issued for the purpose of refunding a portion of the outstanding 2009 Series A bonds maturing on and after November 1, 2020, a portion of the outstanding 2009 Series B bonds maturing on and after November 1, 2020, and a portion of the outstanding 2010 Series F bonds maturing on and after November 1, 2021. The 2016 Series B bonds were issued for the purpose of refunding, on a current basis, all the outstanding 2006 Series B and Series C bonds, and a portion of the outstanding 2010 Series A bonds maturing on and after November 1, 2020, the bonds carried "Aa3" and "AA-" ratings from Moody's and S&P, respectively. The 2016 Series AB bonds include serial bonds with interest rates varying from 1.5% to 5.0% and have a final maturity in 2039. The Series AB

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bonds have a true interest cost of 2.9%. Unamortized bond issuance costs at the date of refunding were \$145 for 2006 Series B bonds and \$54 for 2006 Series C bonds. The refunding resulted in the recognition of a deferred accounting loss of \$106,205, gross debt service savings of \$135,966, and an economic gain of \$107,152 or 11.5% of refunded principal. As of June 30, 2019 and 2018, the principal amount of 2016 Series AB bonds outstanding was \$867,905 and \$873,885, respectively.

(I) Water Revenue Bonds 2016 Series C

In December 2016, the Enterprise issued taxable bonds, 2016 Series C in the amount of \$259,350. The bonds were issued as Green Bonds. The purpose of the bonds was to refund all of the outstanding taxable commercial paper notes in the approximate amount of \$237,000, and to provide \$19,975 of new money for WSIP capital projects. The bonds carried "Aa3" and "AA-" ratings from Moody's and S&P, respectively. The 2016 Series C bonds include serial bonds with interest rates varying from 0.9% to 4.0% and have a final maturity in 2046, and two term bonds with 4.0% and 4.2% interest rates and final maturities of 2041 and 2046. The Series C bonds have a true interest cost of 3.9%. As of June 30, 2019 and 2018, the principal amount of 2016 Series C bonds outstanding was \$248,360 and \$253,885, respectively.

(m) Water Revenue Bonds 2017 Series ABC

In December 2017, the Enterprise issued tax-exempt revenue bonds, 2017 ABC in the aggregate amount of \$339,540. The purpose of the 2017 Series ABC Bonds was to refund approximately \$120,500 aggregate principal amount of commercial paper notes and to provide \$230,500 new money for WSIP capital projects, other various capital projects of the Water Enterprise, and capital projects of Hetch Hetchy Water. The bonds carried "Aa3" and "AA-" ratings from Moody's and S&P, respectively. The 2017 Series ABC bonds include serial bonds with coupon rates of 5.0% and have final maturity in 2045, and four term bonds with coupons of 5.0% and final maturities from 2045 to 2047.

The \$121,140 2017 Series A bonds were issued as tax-exempt Green Bonds to refund approximately \$60,265 of commercial paper notes and to provide \$65,500 in new money for WSIP capital projects. The Series A bonds were issued as serial and term bonds with coupons of 5.0% and a final maturity of 2047. The Series A bonds have a true interest cost of 3.8%. As of June 30, 2019 and 2018, the principal amount of 2017 Series A bonds outstanding was \$121,140.

The \$147,725 2017 Series B bonds were issued as tax-exempt bonds to provide \$150,000 in new money for Water Enterprise capital projects (non-WSIP). The Series B bonds were issued as serial and term bonds with coupons of 5.0% and have a final maturity of 2047. The Series B bonds have a true interest cost of 3.8%. As of June 30, 2019 and 2018, the principal amount of 2017 Series B bonds outstanding was \$147,725.

The \$70,675 2017 Series C bonds were issued as tax-exempt bonds to refund approximately \$60,266 of commercial paper notes and to provide \$15,000 in new money for Hetch Hetchy Water capital projects. The Series C bonds were issued as serial bonds and a term bond with coupons of 5.0% and have a final maturity of 2047. The Series C bonds have a true interest cost of 3.8%. As of June 30, 2019 and 2018, the principal amount of 2017 Series C bonds outstanding was \$70,675.

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(n) Water Revenue Refunding Bonds 2017 Series DEFG

In December 2017, the Enterprise issued tax-exempt revenue bonds, 2017 Series DEF, and taxable 2017 Series G refunding bonds in the aggregate amount of \$442,180. The 2017 Series D (WSIP, Green) bonds were issued for the purpose of refunding a portion of the outstanding 2011 Series A (WSIP) bonds maturing on and after November 1, 2022, a portion of the outstanding 2012 Series A bonds maturing on and after November 1, 2031.

The 2017 Series E bonds were issued for the purpose of refunding a portion of the outstanding 2011 Series C bonds maturing on or after November 1, 2022, a portion of the outstanding 2011 Series D bonds maturing on and after November 1, 2022, a portion of 2012 Series C1 bonds maturing on or after November 1, 2029.

The 2017 Series F bonds were issued for the purpose of refunding a portion of the outstanding 2011 Series B bonds maturing on or after November 1, 2022.

The taxable 2017 Series G (WSIP, Green) bonds were issued to refund a portion of the outstanding 2011 Series A bonds maturing on and after November 1, 2022.

The bonds carried "Aa3" and "AA-" ratings from Moody's and S&P, respectively. The 2017 Series DEFG bonds include serial bonds with interest rates varying from 2.0% to 5.0% and have a final maturity in 2035. The Series DEFG bonds have a true interest cost of 2.9%. The refunding resulted in the recognition of a deferred accounting loss of \$34,275, gross debt service savings of \$68,942, and an economic gain of \$51,698 or 10.7% of refunded principal. As of June 30, 2019 and 2018, the principal amount of 2017 Series DEGF bonds outstanding was \$440,845 and \$442,180, respectively.

(o) Clean Water State Revolving Fund (CWSRF) Loan and Grant

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 and Grant to fund the Enterprise's SF Westside Recycled Water Project. The CWSRF loan is in the amount of \$186,220, which includes \$15,000 of principal forgiveness, or a grant. It will bear an interest rate of 1% for a 30-year term, with loan repayment beginning one year after substantial completion of project construction. The CWSRF loan is secured on a parity lien basis with the Enterprise's outstanding revenue bonds. The principal outstanding as of June 30, 2019 and 2018 was \$0.

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(p) Future Annual Debt Service of Revenue Bonds

The following table presents the future annual debt service relating to the revenue and refunding bonds outstanding as of June 30, 2019. The federal interest subsidy amounts represent 35.0%, excluding sequestration, of the interest for the revenue bond 2010 Series B, E, and G.

		Principal	Interest before subsidy	Federal interest subsidy*	Interest net of subsidy
Fiscal years ending June 30:	_				
2020	\$	98,870	220,490	(21,967)	198,523
2021		108,390	215,835	(21,782)	194,053
2022		113,425	210,701	(21,575)	189,126
2023		121,410	205,321	(21,245)	184,076
2024		127,045	199,560	(20,797)	178,763
2025-2029		741,450	895,838	(96,322)	799,516
2030-2034		924,770	686,973	(79,359)	607,614
2035-2039		1,111,740	427,123	(53,263)	373,860
2040-2044		809,430	171,220	(25,476)	145,744
2045-2049		234,830	48,739	(12,313)	36,426
2050-2051		51,045	3,588	(1,182)	2,406
		4,442,405	3,285,388	(375,281)	2,910,107
Less: Current portion		(98,870)			
Less: Unamortized bond discount		(154)			
Add: Unamortized bond premiums	_	366,297			
Long-term portion as of June 30, 2019	\$	4,709,678			

^{*} The SFPUC received IRS notice dated July 26, 2019 that the federal interest subsidies on the 2010 Series B bonds, 2010 Series E bonds, and 2010 Series G bonds are reduced by 5.9%, or a total reduction of \$23,530, due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same.

As defined in the Indentures, the principal and interest of the Enterprise's revenue and refunding bonds are payable from its revenues, as well as monies deposited in certain funds and accounts pledged thereto (See Note 5).

(q) Proposition A

On November 5, 2002, the San Francisco voters passed Proposition A, which provides for the issuance of revenue bonds and/or other forms of indebtedness by the Commission in a principal amount not to exceed \$1,628,000 to finance the acquisition and construction of improvements to the City's Water System. As of June 30, 2019, there was no commercial paper outstanding pursuant to this authorization and \$1,348,335 of bonds had been issued in fiscal years 2006, 2010, and 2012; and 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 and Grant to fund the Enterprise's SF Westside Recycled Water Project in the amount of \$186,220 (which includes a \$15,000 grant) against Prop A. The total authorization against Prop A was \$1,348,335 as of June 30, 2019.

(r) Proposition E

On November 5, 2002, the San Francisco voters passed Proposition E, which authorizes the Board of Supervisors' approval of the issuance of revenue bonds and/or other forms of indebtedness by the Commission to finance costs for the Commission's capital programs, including WSIP. As of June 30, 2019, the Board of Supervisors has authorized the issuance of

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\$4,234,873 in revenue bonds with \$3,278,440 issued against this authorization. Additionally, \$161,336 and \$40,312 in commercial paper was outstanding pursuant to this authorization as of June 30, 2019 and 2018, respectively.

(s) 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. It is anticipated these lease costs will be offset with reductions in costs associated with current office rental expense. There are no events of default stated in the 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 and D 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	\$	2,688	513	3,201
2021		2,824	375	3,199
2022		2,970	230	3,200
2023	_	3,124	78	3,202
	_	11,606	1,196	12,802
Less: Current portion		(2,688)		
Add: Unamortized bond premiums		287		
Long-term portion as of June 30, 2019	\$_	9,205		

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Certificates of Participation 2009 Series D (Taxable)		Principal	Interest before subsidy	Federal interest subsidy *	Interest net of subsidy
Fiscal years ending June 30:	-	-		•	
2020	\$	_	5,968	(1,966)	4,002
2021		_	5,968	(1,966)	4,002
2022		_	5,968	(1,966)	4,002
2023		_	5,968	(1,966)	4,002
2024		3,267	5,864	(1,931)	3,933
2025-2029		18,507	25,954	(8,548)	17,406
2030-2034		22,762	19,369	(6,379)	12,990
2035-2039		28,071	11,157	(3,674)	7,483
2040-2042		19,892	1,972	(649)	1,323
Total	-		88,188	(29,045)	59,143
Long-term portion as of June 30, 2019	\$	92,499			

^{*} The SFPUC received IRS notice dated July 26, 2019 that the federal interest subsidy on the 2009 Series D bonds is reduced by 5.9%, or a total reduction of \$1,821, due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same.

(t) Events of Default and Remedies

In accordance with GASB Statement No. 88, *Certain Disclosures Related to Debt, Including Direct Borrowing and Direct Placements*. Significant Events of default as specified in the Water Enterprise Indenture (applicable to Water Revenue Bonds, Capital Appreciation Bonds and SRF 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 theron, and of all Capital Appreciation bonds then outstanding, in the amount of the Accreted Value thereof, to be due and payable immediately. As of June 30, 2019, there were no such events describe 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 solely from revenues of the Enterprise through the fiscal year ending 2051.

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 \$	4,746,890	4,760,930
Principal and interest remaining due at the end of the year	7,727,793	8,023,429
Principal and interest paid during the year	261,638	233,959
Net revenues for the year ended June 30	311,619	312,831
Funds available for debt service	532,981	499,583

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(9) Wholesale Balancing Account

Water Supply Agreement

From 1984-2009, the Enterprise provided water service pursuant to the terms of the 1984 Water Settlement Agreement and Master Water Sales Contract, which established the basis for water rates to be charged to those customers (Wholesale Customers). The Master Water Sales Contract expired on June 30, 2009. The Commission and the Wholesale Customers approved a Water Supply Agreement (WSA) effective July 1, 2009 (the contract was restated and amended by the SFPUC on December 11, 2018). The WSA has a 25-year term from July 1, 2009 with two options for five-year extensions. The existing 184 million gallons per day (mgd) Supply Assurance continues under the WSA and no increase in the Supply Assurance will be considered before December 31, 2028. During the period from 2009 to 2028, the WSA limits the quantity of water delivered to Retail Customers and Wholesale Customers from the watersheds to 265 mgd. Under the WSA, annual operating expenses, including debt service on bonds sold to finance regional system improvements and regional capital projects funded from revenues, will be allocated between Retail Customers and Wholesale Customers on the basis of proportionate annual water use. The original WSA stated the Wholesale Customers' share of net book value of existing regional assets as of June 30, 2009 would be recovered on level annual payment over the 25-year term of the WSA at an interest rate of 5.13%. The 25-year term repayment obligation was settled in February 2013. The Wholesale Customers made an early repayment to the Enterprise of the outstanding balance of \$356,139 as discussed further in the "BAWSCA Early Repayment" Section Note 9(b), of this report. The WSA continues much of the rate setting, accounting, and dispute resolution provisions contained in the expired contract, and has emergency and drought-pricing adjustment provisions.

Pursuant to the terms of the WSA, the Enterprise is required to establish water rates applicable to the Wholesale Customers annually. The wholesale water rates are based on an estimate of the level of revenues necessary to recoup the cost of distributing water to the Wholesale Customers in accordance with the methodology outlined in Article V of the WSA (the Wholesale Revenue Requirement (WRR), previously known as the Suburban Revenue Requirement). During fiscal years ending in 2019 and 2018, the WRR, net of adjustments, charged to such wholesale customers was \$253,235 and \$248,085, respectively. Such amounts are subject to final review by the Wholesale Customers, along with a trailing wholesale balancing account compliance audit of the WRR calculation.

Pursuant to Article VII, Section 7.02 of the WSA, the Enterprise is required to re-compute the WRR after the close of each fiscal year based on the actual costs incurred in the delivery of water to the Wholesale Customers. The difference between the wholesale revenues earned during the year and the "actual" WRR is recorded in a separate account (the Balancing Account) and represents the cumulative amount that is either owed to the Wholesale Customers (if the wholesale revenues exceed the WRR) or owed to the City (if the WRR exceeds the wholesale revenues paid). In accordance with Article VI of the WSA, the amount recorded in the Balancing Account shall earn interest at a rate equal to the average rate received by the City during the year on the invested pooled funds of the City Treasury, and shall be taken into consideration in the determination of subsequent wholesale water rates. The Enterprise owed the Wholesale Customers \$64,829 and \$55,866 for the years ended June 30, 2019 and 2018, respectively, an increase of \$8,963. Refer to the compliance audit report for the final balancing account available at https://www.sfwater.org/index.aspx?page=345.

In addition to advancing funds to acquire the pre-2009 assets as discussed previously, the Enterprise has also previously appropriated funds, advanced through rates charged to Retail Customers, for construction of capital projects that were not yet placed into service as of June 30, 2009. Wholesale

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Customers' share of these construction work in progress costs is calculated in accordance with the provisions in the WSA, including a 10-year repayment term and payment of annual principal and interest rate calculated at 4.0% annually. The total obligation of the Wholesale Customers to the Enterprise is estimated at \$9,542, and the level annual payment including principal and interest is approximately \$1,159. The Wholesale Customers made the first annual payment as of June 30, 2015, and will end on June 30, 2024.

(10) 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
	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 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 4.35% as of June 30, 2018, and 4.45% 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 (COLAs) 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

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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 COLAs 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 provisions of this voter-approved proposition were challenged in the Courts. A decision by the California Courts modified the interpretation of the proposition. Effective July 1, 2012, members who retired before November 6, 1996 will receive a Supplemental COLA only when the 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.

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Funding and 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 City 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 year ended June 30, 2018 and 2017 (measurement period) were \$582,568 and \$519,073, respectively. The Enterprise's allocation of employer contributions for fiscal year 2018 and 2017 (measurement period) were \$25,922, and \$24,638, respectively.

Pension Liabilities, Pension Expenses, and 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 Enterprise's allocation of the City's proportionate share of the net pension liability for the Plan as of June 30, 2019 was \$175,429.

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 \$17,730. Pension expense decreased from the prior year, largely due to the impact of actual investment earnings.

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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

	-	eferred Outflows of Resources	Deferred Inflows of Resources
Pension contribution subsequent to measurement date	\$ <u> </u>	26,440	_
Differences between expected and actual experience		1,423	4,965
Changes in assumptions		27,353	_
Net difference between projected and actual earnings on pension plan investments		_	28,198
Change in employer's proportion		249	167
Total \$	\$ <u> </u>	55,465	33,330

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) of	
Fiscal years	Resources	
2020	\$ 11,196	
2021	4,923	
2022	(14,428)	
2023	(5,996)	
Total	\$ (4,305)	

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 Enterprise's allocation of the City's proportionate share of the net pension liability for the Plan as of June 30, 2018 was \$209,003.

For the year ended June 30, 2018, the City's recognized pension expense 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 \$22,240. Pension expense decreased from the prior year, largely due to the impact of actual investment earnings.

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

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	\$	25,922	
Differences between expected and actual experience		1,939	6,310
Changes in assumptions		33,889	614
Net difference between projected and actual earnings on			
pension plan investments		_	7,797
Change in employer's proportion		312	342
Total	\$ -	62,062	15,063

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) o	
Fiscal years	Resources	
2019	\$ 969	
2020	17,568	
2021	11,157	
2022	(8,617)	
Total	\$ 21,077	

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)

Key Actuarial Assumptions

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

Measurement Date June 30, 2018

Entry - Age Normal Cost Method **Actuarial Cost Method**

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

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

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.

Key Actuarial Assumptions

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

Measurement Date June 30, 2017

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

0.60% of payroll as of June 30, 2016 Administrative Expenses 0.60% of payroll as of June 30, 2017

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

Notes to Financial Statements
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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.

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 June 30, 2018 (measurement date) and 7.50% as of 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 COLAs 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

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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

Before 11/6/96 or

Fiscal years	96 - Prop C	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	

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

The discount rate used to measure the total pension liability as of June 30, 2017 measurement date was 7.50%. The projection of cash flows used to determine the discount rate assumed that

Notes to Financial Statements
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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 COLAs 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, 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 COLA for sample years.

Assumed Supplemental COLA for Members with a 2.00% Basic COLA

		Before 11/6/96 or
Fiscal years	96 - Prop C	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

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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 Ra	te 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.

Fiscal Year 2019

	1% Decrease	Share Share of N	PL 1% Increase Share
Employer	of NPL @ 6	.50% @ 7.50%	of NPL @ 8.50%
Water	\$ 3	328,561 175,4	429 48,802

Fiscal Year 2018

	1% D	ecrease snare	Share of NPL	1% increase snare
Employer	of N	PL @ 6.50%	@ 7.50%	of NPL @ 8.50%
Water	\$	358,055	209,003	85,673

(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. It

Notes to Financial Statements
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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 postemployment 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 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 years ended June 30, 2018 and 2017. 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 4.19% and 4.47%, respectively.

Benefits

Permanent full-time and elected employees are eligible to retire and receive postretirement health insurance benefits when they are eligible for retirement benefits from the City and County of San Francisco's Retirement System. The eligibility requirements are as follows:

Normal Retirement	Miscellaneous	Age 50 with 20 years of credited service ¹
		Age 60 with 10 years of credited service
	Safety	Age 50 with 5 years of credited service
Disabled Retirement ²		Any age with 10 years of credited service
Terminated Vested ³		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.

Notes to Financial Statements June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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)
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

Dental:

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, 2019 and 2018, 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 \$9,154, and for fiscal year 2018 was \$9,122.

Notes to Financial Statements
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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 \$3,600,967. The Enterprise's proportionate share of the City's net OPEB liability as of June 30, 2019 was \$150,771.

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 pension expense. The Enterprise's proportionate share of the City's OPEB expense was \$3,284.

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:

	Deferred Outflows of Resources		Deferred Inflows of Resources		
Contributions subsequent to measurement date	;	\$	9,154	\$	-
Differences between expected and actual experience			-		13,843
Changes in assumptions			3,988		-
Net difference between projected and actual earnings on plan investments			-		140
	Total	\$	13,142	\$	13,983

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 follow:

Year	ended	June	30:
------	-------	------	-----

2020	\$ (1,693)
2021	(1,693)
2022	(1,693)
2023	(1,629)
2024	(1,643)
Thereafter	(1,644)
Total	\$ (9,995)

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 \$166,336.

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 pension expense. The Enterprise's proportionate share of the City's OPEB expense was \$15,894.

Notes to Financial Statements
June 30, 2019 and 2018
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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:

	Deferred Defer Outflows of Inflow Resources Resou		ws of		
Contributions subsequent to measurement date		\$	9,122	\$	-
Net difference between projected and actual earnings					
on plan investments			-		268
	Total	\$	9,122	\$	268

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:	
2019	\$ (67)
2020	(67)
2021	(67)
2022	 (67)
Total	\$ (268)

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 flat 3.5% 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

	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

 ${\it Safety\ Disables\ \underline{Annuitants\ -\ CalPERS\ industrial\ disability\ mortality\ table\ without\ scale\ BB\ projection}}$

	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 year) is provided below:

Key Actuarial Assumptions

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

Measurement Date June 30, 2017

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 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 Assets 7.50% **Discount Rate** 7.50%

Salary Increase Rate 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

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

Notes to Financial Statements
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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
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Employer		-1.00%	Healthcare Trend		1.00%	
Water	\$	131,045	\$	150,771	\$ 175,236	

Fiscal Year 2018

Employer	-1.00%		Healthcare Trend		1.00%	
Water	\$	145,162	\$	166,336	\$ 192,510	

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:

Land-term

Asset Class	Target Allocation	Expected Real 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		
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 7.5%, 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
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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			Discount Rate	1% Increase		
6.40%		7.40%			8.40%	
\$	173,339	\$	150,771	\$	132,306	

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:

		20-year Expected
Asset Class	Target Allocation	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			Share of NOL @	1% Increase Share		
of NOL @ 6.50%		7.50%		of NOL @ 8.50%		
\$	190.549	\$	166.336	\$	146.479	

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(11) Related Parties

Various common costs incurred by the Commission are allocated among the Enterprise, Hetch Hetchy Water and Power and CleanPowerSF Enterprise, and the Wastewater 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 \$42,407 or 49.6% and \$42,392 or 50.7% 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 water from Hetch Hetchy Water. The amounts, totaling \$33,578 and \$32,600 for the years ended June 30, 2019 and 2018, respectively, have been included in the services provided by other departments in the accompanying financial statements.

The Enterprise purchases electricity from Hetch Hetchy Power at market rates. The amounts, totaling \$9,480 and \$9,047 for the years ended June 30, 2019 and 2018, respectively, have been included in services provided by other departments in the accompanying financial statements.

The Enterprise sold water to the Wastewater 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 charges for services in the accompanying financial statements.

Since fiscal year 2008, the Enterprise has charged City departments for water usage except for fire hydrants, which are used for general public safety. In fiscal years 2019 and 2018, the Enterprise delivered water for fire hydrant purposes totaling \$7 and \$13, respectively, based on metered usage and applicable water rates, and the amount has been excluded from operating revenues in the accompanying financial statements.

A variety of City departments provide services such as engineering, purchasing, legal, data processing, telecommunications, and human resources to the Enterprise and charge amounts designed to recover those departments' costs. These charges, totaling \$16,577 and \$15,213 for the years ended June 30, 2019 and 2018, respectively, have been included in services provided by other departments in the accompanying financial statements.

During the fiscal year ended June 30, 2019, the Enterprise transferred \$20,000 to Hetch Hetchy Water to fund various upcountry capital projects, \$302 to the Arts Commission for arts enrichment funding for the SF Groundwater Supply project, and \$32 to the Office of the City Administrator for the Surety Bond Program. The Enterprise received \$1,200 from the City for low income assistance programs for water rates.

As of June 30, 2019 and 2018, the Enterprise has payables in the amount of \$0 and \$96 to the Department of Public Works for Road Structure Support projects, respectively.

SFPUC's 75-year lease agreement with the San Francisco Recreation and Park Department, for the use of parking spaces for its fleet of vehicles at the Civic Center Garage, commenced on February 1, 2011. The 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 \$46 and \$3,399, respectively; and at June 30, 2018 were \$45 and \$3,445, respectively.

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(12) Risk Management

The Enterprise's Risk Management program includes both self-insured (i.e., self-retention) and insured exposures at risk. Risk assessments and purchasing of insurance coverage are collaboratively coordinated by SFPUC Risk Management and the City's Office of Risk Management. With certain exceptions, the City and the Enterprise's general approach is to first evaluate the exposure at risk for self-insurance. Based on this analysis, internal mitigation strategies and financing through a self-retention mechanism is generally more economical as the SFPUC in coordination with the City Attorney's Office administers, adjusts, settles, defends, and pays claims from budgeted resources (i.e., pay-as-you-go fund). When economically more viable or when required by debt financing covenants, the Enterprise obtains commercial insurance. At least annually, the City actuarially determines general liability and workers' compensation risk exposures. The Enterprise does not maintain commercial earthquake coverage, with certain minor exceptions, such as a sub-limit for fire-sprinkler leakage due to earthquake under the SFPUC Property Insurance program.

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

(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 are as follows:

Fiscal years	Beginning of year	Claims and chan in estimates	ges Claims paid	End of year
2019	\$ 13,402	4,768	(6,661)	11,509
2018	10,738	4,151	1 (1,487)	13,402

(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

Notes to Financial Statements
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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.

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

Fiscal years		Beginning of year	Claims and changes in estimates	Claims paid	End of year
2019	- \$ -	10,957	2,707	(3,328)	10,336
2018		9.089	4.382	(2.514)	10.957

(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.

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(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.

(13) Commitments and Litigation

(a) Commitments

As of June 30, 2019 and 2018, the Enterprise has outstanding commitments with third parties of \$237,663 and \$290,923, respectively, for various capital projects and other purchase agreements for materials and services.

(b) Grants

Grants that the Enterprise receives are subject to audit and final acceptance by the granting agency. Current and prior year costs of such grants are subject to adjustment upon audit.

(c) Litigation

The Enterprise is a defendant in various legal actions and claims that arise during the normal course of business. The final disposition of those 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 \$2,194 and \$2,311 in pollution remediation liability, respectively. This decrease of \$117 in pollution remediation liability in fiscal year 2019 is for expenses relating to the excavation of contaminated soil that contained polycyclic aromatic hydrocarbons from the Pacific Rod & Gun Club site in the Lake Merced area, and remediation activities for the 17th and Folsom site. As of June 30, 2019, the pollution remediation liability of \$2,194 consisted of \$1,291 for the Pacific Rod & Gun Club site, and \$903 for the 17th and Folsom site. As of June 30, 2018, the pollution remediation liability of \$2,311 consisted of \$1,375 for the Pacific Rod & Gun Club site, and \$936 for the 17th and Folsom site.

(14) Subsequent Events

(a) Purchase of Watershed Property in Alameda County

On July 23, 2019, the Commission approved the purchase of 787 acres of agricultural land commonly known as the Wool Ranch in the unincorporated Town of Sunol, Alameda County for \$9,650. Acquisition of watershed lands upstream and downstream of SFPUC reservoirs will protect source water quality and native species and their habitats.

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(b) Water Revenue Bonds Rating Change

On November 25, 2019, Moody's Investors Services Inc. (Moody's) raised its long-term rating on the Water Revenue Bonds from "Aa3" to "Aa2" with a "stable" outlook.



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 Water 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 9, 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.

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

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

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the 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 no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.



Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the 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, California December 9, 2019

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.

Eleanor Dam

Watershed Keepers testing the outlet valves for Eleanor Dam.

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.

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