San Francisco
Water Power Sewer
Services of the San Francisco Public Utilities Commission

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Date: May 9, 2023

To: Commissioner Newsha K. Ajami, President
Commissioner Sophie Maxwell, Vice President
Commissioner Tim Paulson
Commissioner Anthony Rivera
Commissioner Kate H. Stacy

DJH

Through: Dennis J. Herrera, General Manager

From: Nancy L. Hom, Chief Financial Officer and Assistant General Manager, Business Services

DS
NH

Subject: FY 2022-23 Q3 Audit and Performance Review Report

This memorandum summarizes the San Francisco Public Utilities Commission (SFPUC) Quarterly Audit and Performance Review (QAPR) report for the third quarter of FY 2022-23 Q3, ending March 31st, 2023.

I. Completed Audits

There were eight completed audits during the third quarter of FY 2022-23:

1. Enterprise Risk Management: Cyber Risk Assessment | January 24, 2023

   Report Summary: The SFPUC's Cyber ERM Assessment is an annual iterative review of risks, risk components, and treatments. It serves as a continuous monitoring, tracking, and identification of new and emerging risks. Due to the sensitive nature of cybersecurity, the contents of this report are confidential.

2.- 4. FY 2021-22 Audited Financial Statements (3 Reports) | January 27, 2023
   Report Link: https://tinyurl.com/mj3yce4s

   Report Summary: Third-party auditor KPMG LLP issued clean, or unqualified opinions, of the financial statements of all three enterprises. It was the auditor's independent opinion that the financial statements are accurate and free from material misstatements, and additionally noted no internal control weaknesses.

5. SSIP CS-165 Program Management Contract Audit | February 16, 2023
   Report Link: https://tinyurl.com/3ejbzu86

   Report Summary: Sjoberg Evashenk Consulting, Inc., was engaged by the Controller's Audit Division to conduct a performance audit of SFPUC's Program Management Consultant professional service contract for the Sewer System Improvement Program (Agreement Number CS-165) and evaluate whether

SFPUC's contract management practices and procedures were adequate to ensure the contractor complied with contract requirements.

Audit Findings Summary: The audit concluded that SFPUC ensured that the 15-year professional services Program Management Consultant contract with AECOM-Parsons Joint Venture was fulfilled, but improvement is necessary in its contract management practices over similar large-scale programs. SFPUC was found to have generally employed solid practices around appropriate and allowable invoicing, staying within contract limits, and approving labor hours and billing rates. However, 13 findings were identified across three broadly defined areas:

1. Contract management – oversight, policies and procedures
2. Planning – for life of contract and across task orders
3. Task order administration – appropriate use and oversight of contractors

6. Annual Comprehensive Financial Report, FY 2021-22 | February 28, 2023
Report Link: https://tinyurl.com/4vwf8jyz

Report Summary: The Annual Comprehensive Financial Report holistically details the financial activities, condition, and services for all Water, Wastewater, and Hetch Hetchy Water & Power & CleanPowerSF results. It also provides financial and statistical data, inclusive of 10 years of financial and operating metrics, with social and economic data.

7. Popular Annual Financial Report, FY 2021-22 | February 28, 2023
Report Link: https://tinyurl.com/4p8dc8z7

Report Summary: The Popular Annual Financial Report (PAFR) is a high-level summary of information from the Annual Financial Report specifically designed to be readily accessible and easily understandable to the general public and other interested parties. This year's PAFR highlights protection of watersheds; continued work to reduce carbon emissions from fossil fuels; promotion of equitable access to clean energy; expansion of wastewater infrastructure and programs to build resiliency, improve systems, and protect the environment; and serving diverse communities through racial equity and inclusivity in operations and programs.

8. Revenue Lease Audit: Crystal Springs Golf Partners, LP | March 9, 2023
Report Link: https://tinyurl.com/3sremv2h

Report Summary: Sjoberg Evashenk Consulting, Inc., was engaged by the Controller's Audit Division to conduct a contract compliance audit of Crystal Springs Golf Partners, LP (Partners) and assess how well SFPUC managed the lease agreement. The 20-year lease, which will expire in September 2037, allows Partners to operate a public golf course and related facilities on SFPUC land. The audit covered 2019 through 2021.

Audit Findings Summary: The audit found that SFPUC ensured Partners paid all rent that was due for the period of 2019 through 2021. Four findings were listed, however – in summary:

- Loss of potential interest from temporary pandemic-related rent forbearance between 2020 and 2021
- Untimely deposit of rent payments
- Lack of lease-required tracking by Partners of capital improvement expenses by applicable funding source and submission of audited financial information to SFPUC

- Lack of documentation provided by Partners to SFPUC of lease-required planned advertising activities or related costs

II. Audit Recommendation Status

As of 3/31/23, 23 audit recommendations are open for two audits: the SSIP CS-165 Program Management Contract Audit and the Crystal Springs Golf Partners, LP Revenue Lease Audit.

If you have questions, please contact me at NHom@sfwater.org or Irella Blackwood at IBlackwood@sfwater.org.

Attachment: FY 2022-23 Audit Plan, By Status

CC: Ronald P. Flynn, Deputy General Manager
Irella Blackwood, Audit Bureau Director
Sheryl Bregman, SFPUC Counsel, Office of the City Attorney

San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission

Quarterly Audit & Performance Review Report
FY 2022-23 Audit Plan, By Status
As of March 31, 2023

Status	
Completed:	15
In Progress:	8
Upcoming:	6
Total:	29

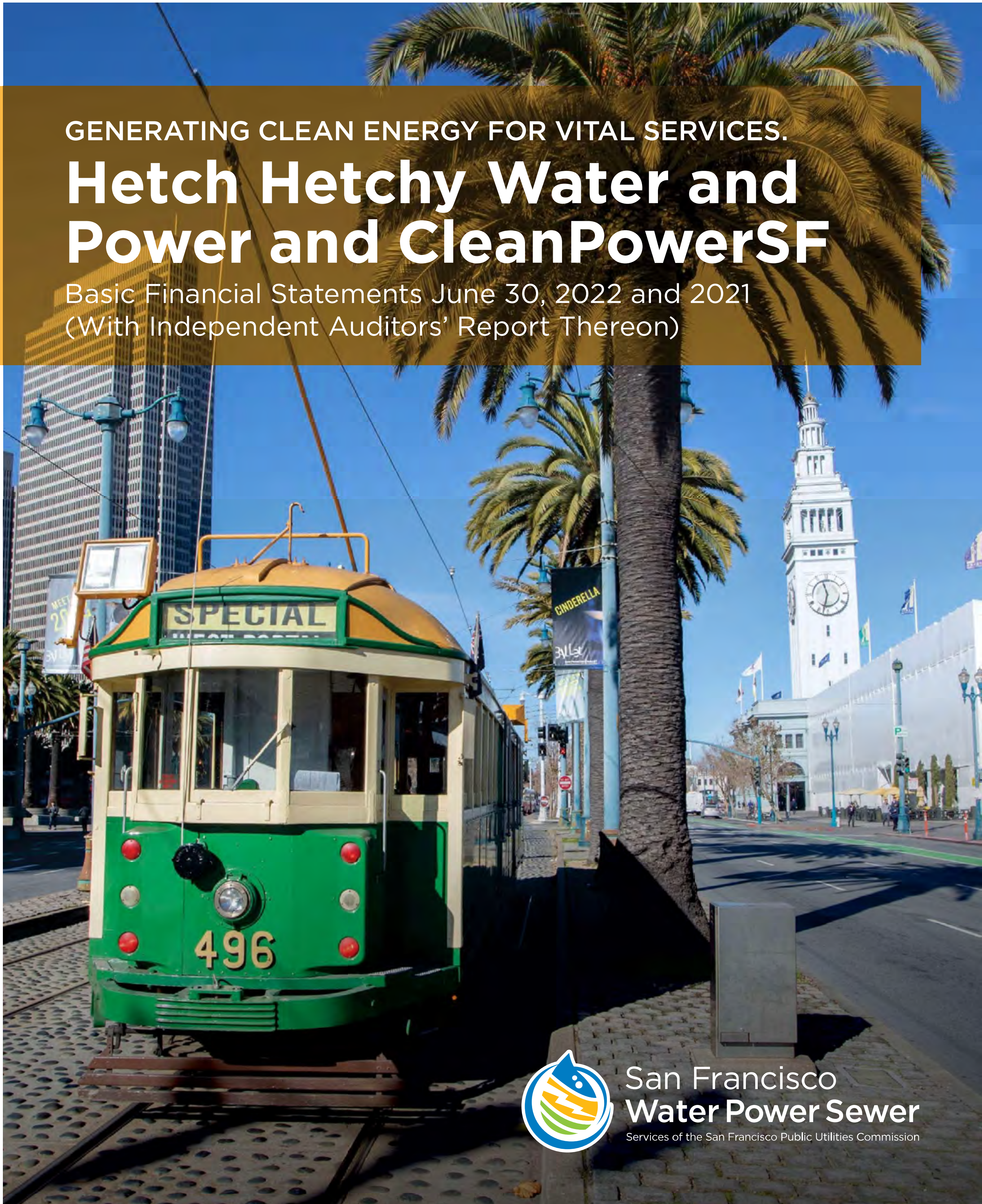
#	Quarter Status	Audit Type	Enterprise / Bureau	Audit Name	Oversight Body
1	[Updated] Completed	Financial	Water	Audited Financial Statements, FY 2021-22	SFPUC, Controller
2	[Updated] Completed	Financial	Wastewater		
3	[Updated] Completed	Financial	Hetch Hetchy Water & Power and CleanPowerSF		
4	[Updated] Completed	Financial	Business Services, Finance	Annual Comprehensive Financial Report, FY 2021-22	SFPUC, Controller
5	[Updated] Completed	Financial	Business Services, Finance	Popular Annual Financial Report, FY 2021-22	SFPUC
6	In Progress	Financial	Power	Franchise Fee Audit: Energy Center SF LLC	Controller
7	In Progress	Financial	Business Services, Finance	Wholesale Revenue Requirement: Statement of Changes in Balancing Account, FY 2020-21	BAWSCA
8	Completed	Financial	Power	Franchise Fee Audit: Pacific Gas & Electric Company	Controller
9	Completed	Financial	Water	Annual Physical Inventory Count, FY 2021-22	SFPUC, Finance
10	Completed	Financial	Wastewater		
11	Completed	Financial	Hetch Hetchy Water & Power		
12	Completed	Financial	Business Services, Finance	Post Audit, CY 2021	Controller
13	Upcoming	Financial	Power	2022 Green-e Verification Audit, SuperGreen	Center for Resource Solutions
14	Upcoming	Financial	Power	2022 Green-e Verification Audit, SuperGreen Saver	Center for Resource Solutions
15	[Updated] In Progress	Financial	Business Services, Finance	Post Audit, CY 2022	Controller
16	[Updated] In Progress	Financial	Business Services, Finance	Wholesale Revenue Requirement: Statement of Changes in Balancing Account, FY 2021-22	BAWSCA
17	In Progress	Performance	Infrastructure	Public Integrity Assessment: SOLIS Procurement	CSA, Controller
18	[Updated] Completed	Performance	Infrastructure	SSIP CS-165 Program Management Contract Audit	CSA, Controller

#	Quarter Status	Audit Type	Enterprise / Bureau	Audit Name	Oversight Body
19	In Progress	Performance	Hetch Hetchy Water & Power	Reliability Standards Compliance Audit	WECC / NERC
20	Completed	Performance	Business Services, ITS	IT / OT Network Audit	CSA, Controller
21	Completed	Performance	Power	CA Independent System Operator (CAISO) Scheduling Coordinators Self-Audit, 2020-22	CAISO
22	Upcoming	Performance	Business Services, ITS	Cybersecurity Maturity Assessment, FY 2022-23	CSA, Controller
23	**[Updated]** Upcoming	Performance	Hetch Hetchy Water & Power	Sanitary Survey, Cyber Security Assessment	TBD
24	**[Updated]** Upcoming	Performance	Hetch Hetchy Water & Power	NERC-CIP Audit	WECC / NERC
25	**[Updated]** Completed	Performance	Business Services, ITS	Enterprise Risk Management: Cyber Risk Assessment	SFPUC
26	**[Updated]** In Progress	Performance	All SFPUC	SFPUC Chapter 6 Delegated Authority Audit	BOS
27	**[Updated]** Completed	Concessions, Lease Revenue	Real Estate Services	Revenue Lease Audit: Crystal Springs Golf Partners LP	CSA, Controller
28	In Progress	Revenue Bond Oversight Committee	RBOC	SFPUC Revenue Bond Programs Audit: Phase II	RBOC
29	Upcoming	Revenue Bond Oversight Committee	RBOC	SFPUC Revenue Bond Programs Audit: Phase III	RBOC

GENERATING CLEAN ENERGY FOR VITAL SERVICES.

Hetch Hetchy Water and Power and CleanPowerSF

Basic Financial Statements June 30, 2022 and 2021
(With Independent Auditors' Report Thereon)



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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 Audit of the Financial Statements

Opinions

We have audited the financial statements of the business-type activities and each major fund of Hetch Hetchy Water and Power and CleanPowerSF (Hetch Hetchy), as of and for the years ended June 30, 2022 and 2021, and the related notes to the financial statements, which collectively comprise Hetch Hetchy's basic financial statements for the years then ended as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of Hetch Hetchy, as of June 30, 2022 and 2021, and the respective changes in financial position and cash flows thereof for the years then ended in accordance with U.S. generally accepted accounting principles.

Basis for Opinions

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of Hetch Hetchy and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Emphasis of Matter

As discussed in Note 1, the financial statements of Hetch Hetchy are intended to present the financial position, the changes in financial position, and, where applicable, cash flows of only that portion of the business-type activities and each major fund of the City and county of San Francisco, California 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 and County of San Francisco, California, as of June 30, 2022 and 2021, 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 opinions are not modified with respect to this matter.

Responsibilities of Management for the Financial Statements

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

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always

KPMG

detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards* , we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Hetch Hetchy's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the 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 January 27, 2023 on our consideration of Hetch Hetchy'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 Hetch Hetchy'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 Hetch Hetchy's internal control over financial reporting and compliance.

KPMG LLP

San Francisco, California
January 27, 2023

This section presents management's analysis of San Francisco Hetch Hetchy Water and Power and CleanPowerSF Enterprise's (Hetch Hetchy or the Enterprise) financial condition and activities as of and for fiscal years ended June 30, 2022 and 2021. 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.

In May 2016, San Francisco Public Utilities Commission (SFPUC or the Commission) launched CleanPowerSF, a Community Choice Aggregation (CCA) program into operation, pooling the electricity demands of their residents and businesses for the purpose of buying electricity on behalf of those customers. CleanPowerSF provides San Francisco with new clean energy alternatives, with its objectives to reduce greenhouse gas emissions, and to provide the City and County of San Francisco's (the City) energy consumers with renewable electricity supplies at competitive rates. The SFPUC intends CleanPowerSF to be financially independent, with ability to set rates and charges with adequate revenues, and to issue debt to support its operations and future projects. CleanPowerSF is discretely presented as a fund of the Enterprise starting fiscal year 2017.

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

SFPUC is a department of the City that is responsible for the maintenance, operation, and development of three utility enterprises: Water, Wastewater, and Hetch Hetchy. The Enterprise was established as a result of the Raker Act of 1913, which granted water and power resource rights-of-way on the Tuolumne River in Yosemite National Park and the Stanislaus National Forest to the City. The Enterprise operates the Hetch Hetchy project, which provides both electricity generation and upcountry water service; and is engaged in the collection and conveyance of approximately 85% of the regional system's water supply and in the generation and transmission of electricity.

In normal rain years, 85% of San Francisco's drinking water starts out as snow falling on 459 square miles of watershed land in Yosemite National Park and the City may supplement water supply from an additional 193 square miles of watershed in Yosemite National Park and the Stanislaus National Forest during extremely dry years. As the snow melts, it collects in the SFPUC's storage reservoirs, then flows by gravity through over 150 miles of pipelines and tunnels, it turns the turbines in three hydroelectric powerhouses, generating approximately 1.2 billion kilowatt hours of electricity per year. The electricity travels over 160 miles of transmission and distribution lines from the upcountry powerhouses to the San Francisco Bay Area.

Approximately 69% of the electricity generated by Hetchy Power was used to provide electric service to the City's municipal customers (including the San Francisco Municipal Transportation Agency, Recreation and Parks Department, the Port of San Francisco, San Francisco International Airport and its tenants, Zuckerberg San Francisco General Hospital and Trauma Center, City streetlights, Moscone Convention Center, and the

Water and Wastewater Enterprises). The remaining 31% of electricity generated was sold to CleanPowerSF and the wholesale electric market.

Hetch Hetchy

Hetch Hetchy provides reliable, high-quality water and electric energy to the City and other customers, protects watershed resources in cooperation with Federal agencies, operates and maintains facilities to a high standard of safety and reliability, and maximizes revenue opportunities within approved levels of risk.

Hetch Hetchy, a stand-alone enterprise is comprised of three funds: 1) Hetch Hetchy Water (Hetchy Water) upcountry operations and water system; 2) Hetch Hetchy Power (Hetchy Power), also referred to as the Power Enterprise, which is wholly contained within the Hetch Hetchy fund; and 3) CleanPowerSF, which is an enterprise fund to aggregate the buying power of customers within San Francisco to purchase renewable energy sources or clean power, is reported as a separate fund of Hetch Hetchy. A number of the facilities are joint assets and used for both water and power generation.

Hetchy Water

For efficiency and to streamline the coordination of upcountry water and power operations, Hetchy Water operates upcountry and joint asset facilities, managing resources in an environmentally responsible manner to a high standard of safety and reliability while meeting regulatory requirements. It is responsible for operating the Hetch Hetchy Reservoir, the main source of water for the Hetch Hetchy system. Hetchy Water operates, maintains, and improves water and power facilities, smaller dams and reservoirs, water transmission systems, power generation facilities, and power transmission assets, including transmission lines to the Newark substation. Hetchy Water delivers high-quality water from upcountry downhill to the Bay Area while optimizing the resulting generation of clean hydropower as water is transported through the system. It maintains land and properties consistent with public health and neighborhood concerns.

Hetchy Power

The core business of Hetchy Power, as a municipal department, is to provide adequate and reliable supplies of electric power to meet the electricity needs of City and County of San Francisco's customers, and to offer, when available, power for the municipal loads and agricultural pumping demands consistent with prescribed contractual obligations and federal law.

Hetchy Power's portfolio consists of hydroelectric generation, onsite solar at SFPUC and other City facilities, generation using bio-methane produced at SFPUC wastewater treatment facilities, and third-party purchases. Consistent with its commitment to the development of cleaner and greener power, and to address environmental concerns and community objectives, Hetchy Power continues to evaluate and expand its existing resource base to include additional renewables, distributed generation, demand management, and energy efficiency programs. As part of its mission and core functions, Hetchy Power provides reliable energy services at reasonable cost to customers, with attention to environmental effects and community concerns.

Hetch Hetchy Joint

A portion of Hetch Hetchy's operating budget, capital program, and assets, provides benefit to both Hetchy Power and Hetchy Water. This is commonly referred to as joint costs and joint assets. Both operating and capital costs that jointly benefit both funds are allocated 55% to Hetchy Power and 45% to Hetchy Water, as has historically been done by the SFPUC.

CleanPowerSF

CleanPowerSF is a community choice aggregation (CCA) program made possible by the 2002 passage of California Assembly Bill 117, enabling communities to purchase power on behalf of their residents and businesses and creating competition in power generation since May 2016. The core business is to provide greener electricity generation to residential and commercial consumers in San Francisco. Through CleanPowerSF, SFPUC seeks to achieve several complementary goals, including affordable and competitive electricity generation rates, a diverse electricity resource portfolio that is comprised of renewable and other clean sources of supply, and high-quality customer service. The program serves more than 380,000 customer accounts and provides San Francisco with an electricity supply from its default "Green" product that is at least 50% California State Renewables Portfolio Standard (RPS)-eligible. Additionally, CleanPowerSF offers "SuperGreen", a 100% RPS-eligible electricity supply, that is available to customers for a small additional cost. On June 1, 2022, CleanPowerSF opened enrollment for its "SuperGreen Saver" product, which provides eligible low-income ratepayers residing in Disadvantaged Communities with 100% RPS electricity at a 20% bill discount.

Overview of the Financial Statements

Hetch Hetchy's financial statements include the following:

Statements of Net Position present information on Hetch Hetchy'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 Hetch Hetchy 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 Hetch Hetchy'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 Hetch Hetchy has successfully recovered its costs through user fees and other charges. All changes in net position are reported during the period in which the underlying event giving rise to the change occurs, regardless of the timing of the related cash flows. Thus, revenues and expenses are reported in these statements from some items that will result in cash flows in future fiscal periods, such as delayed collection of operating revenues and the expenses of employee earned but unused vacation leave.

The *Statements of Cash Flows* present changes in cash and cash equivalents resulting from operational, capital financing, non-capital financing, and investing activities. These statements summarize the annual flow of cash receipts and cash payments, without consideration of the timing of the event giving rise to the obligation or receipt and exclude non-cash accounting measures of depreciation or amortization of assets.

The *Notes to Financial Statements* provide information that is essential to a full understanding of the financial statements that is not presented on the face of the financial statements.

COVID-19

On February 25, 2020, the City's 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 (a) the discontinuation or shutoff of power service for residents and businesses in the City for non-payment of power bills and (b) the imposition of late payment penalties or fees for delinquent power bills through July 11, 2020. The suspension was extended on December 8, 2020 through June 30, 2021, again on April 27, 2021 through March 31, 2022 and then again on February 22, 2022 to July 31, 2022 for shut off of power service for residential customers and to June 30, 2023 for late payment penalties. The suspension of the return of delinquent CleanPowerSF customers to Pacific Gas & Electric Company (PG&E) generation service for failure to pay CleanPowerSF charges was extended to June 30, 2022. This proclamation did not have a material effect on the operations of the Hetch Hetchy Enterprise.

Financial Analysis

Financial Highlights for Fiscal Year 2022

Hetch Hetchy

- Total assets of Hetch Hetchy exceeded total liabilities by $893,577.
- Net position increased by $43,480 or 5.5% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization, increased by $117,106 or 17.5% to $786,643.
- Operating revenues, excluding interest and investment income, and other non-operating revenues, increased by $89,276 or 22.8% to $480,447.
- Operating expenses, excluding interest expenses, other non-operating expenses, and amortization of premium, discount, and issuance costs, increased by $61,898 or 15.1% to $470,768.

Hetchy Water

- Total assets of Hetchy Water exceeded total liabilities by $276,423.
- Net position increased by $24,519 or 10.9% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization, increased by $23,526 or 13.3% to $201,007.
- Operating revenues, excluding interest and investment income, and other non-operating revenues, increased by $2,222 or 4.7% to $49,312.
- Operating expenses, excluding other non-operating expenses, increased by $1,784 or 3.5% to $52,303.

Hetchy Power

- Total assets of Hetchy Power exceeded total liabilities by $527,476.

- Net position increased by $21,718 or 4.6% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization, increased by $93,580 or 19.0% to $585,636.
- Operating revenues, excluding interest and investment income, and other non-operating revenues, increased by $36,859 or 27.0% to $173,242.
- Operating expenses, excluding interest expenses, other non-operating expenses, and amortization of premium, discount, and issuance costs, increased by $10,707 or 7.4% to $156,347.

CleanPowerSF

- Total assets of CleanPowerSF exceeded total liabilities by $89,678.
- Net position decreased by $2,757 or 3.2% during the fiscal year.
- CleanPowerSF had no capital assets, net of accumulated depreciation and amortization as of June 30, 2022.
- Operating revenues, excluding interest and investment income, and other non-operating revenues, increased by $50,195 or 24.2% to $257,893.
- Operating expenses, excluding interest expenses increased by $49,407 or 23.2% to $262,118.

Financial Highlights for Fiscal Year 2021

Hetch Hetchy

- Total assets of Hetch Hetchy exceeded total liabilities by $767,191.
- Net position increased by $16,429 or 2.1% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization, increased by $63,326 or 10.4% to $669,537.
- Operating revenues, excluding interest and investment income, and other non-operating revenues, decreased by $30,113 or 7.1% to $391,171.
- Operating expenses, excluding interest expenses, other non-operating expenses, and amortization of premium, discount, and issuance costs, increased by $19,845 or 5.1% to $408,871.

Hetchy Water

- Total assets of Hetchy Water exceeded total liabilities by $216,214.
- Net position increased by $13,630 or 6.5% during the fiscal year.

- Capital assets, net of accumulated depreciation and amortization, increased by $16,699 or 10.4% to $177,481.

- Operating revenues, excluding interest and investment income, and other non-operating revenues, increased by $12,137 or 34.7% to $47,090.

- Operating expenses, excluding other non-operating expenses, increased by $5,644 or 12.6% to $50,517.

Hetchy Power

- Total assets of Hetchy Power exceeded total liabilities by $462,136.

- Net position increased by $6,857 or 1.5% during the fiscal year.

- Capital assets, net of accumulated depreciation and amortization, increased by $46,627 or 10.5% to $492,056.

- Operating revenues, excluding interest and investment income, and other non-operating revenues, decreased by $4,488 or 3.2% to $136,383.

- Operating expenses, excluding interest expenses, other non-operating expenses, and amortization of premium, discount, and issuance costs, decreased by $2,489 or 1.7% to $145,638.

CleanPowerSF

- Total assets of CleanPowerSF exceeded total liabilities by $88,841.

- Net position decreased by $4,058 or 4.5% during the fiscal year.

- CleanPowerSF had no capital assets, net of accumulated depreciation and amortization as of June 30, 2021.

- Operating revenues, excluding interest and investment income, and other non-operating revenues, decreased by $37,762 or 15.4% to $207,698.

- Operating expenses, excluding interest expense increased by $16,690 or 8.5% to $212,716.

(Dollars in thousands, unless otherwise stated)

Financial Position

The following tables summarize Hetch Hetchy's changes in net position:

Table 1A - Consolidated Hetch Hetchy
Comparative Condensed Net Position
June 30, 2022, 2021, and 2020

	2022	Restated 2021*	2020 **	2022-2021 Change	2021-2020 Change
Total assets:					
Current and other assets	$ 500,159	469,507	441,635	30,652	27,872
Capital assets, net of accumulated depreciation and amortization	786,643	669,537	606,211	117,106	63,326
Total assets	1,286,802	1,139,044	1,047,846	147,758	91,198
Deferred outflows of resources:					
Pensions	15,731	18,133	18,238	(2,402)	(105)
Other post-employment benefits	8,069	8,719	5,452	(650)	3,267
Total deferred outflows of resources	23,800	26,852	23,690	(3,052)	3,162
Liabilities:					
Current liabilities:					
Bonds	1,966	1,928	2,115	38	(187)
Certificates of participation	427	405	384	22	21
Commercial paper	40,019	114,671	63,535	(74,652)	51,136
Other liabilities	94,550	83,058	63,178	11,492	19,880
Subtotal current liabilities	136,962	200,062	129,212	(63,100)	70,850
Long-term liabilities:					
Bonds	192,520	44,384	47,693	148,136	(3,309)
Certificates of participation	12,593	13,026	13,444	(433)	(418)
Other liabilities	51,150	114,392	98,697	(63,242)	15,695
Subtotal long-term liabilities	256,263	171,802	159,834	84,461	11,968
Total liabilities:					
Bonds	194,486	46,312	49,808	148,174	(3,496)
Certificates of participation	13,020	13,431	13,828	(411)	(397)
Commercial paper	40,019	114,671	63,535	(74,652)	51,136
Other liabilities	145,700	197,450	161,875	(51,750)	35,575
Total liabilities	393,225	371,864	289,046	21,361	82,818
Deferred inflows of resources:					
Related to pensions	82,029	3,288	10,843	78,741	(7,555)
Other post-employment benefits	7,670	6,546	3,867	1,124	2,679
Total deferred inflows of resources	89,699	9,834	14,710	79,865	(4,876)
Net position:					
Net investment in capital assets	553,169	500,547	482,986	52,622	17,561
Restricted for debt service	140	99	142	41	(43)
Restricted for capital projects	—	—	6,513	—	(6,513)
Unrestricted	274,369	283,552	278,139	(9,183)	5,413
Total net position	$ 827,678	784,198	767,780	43,480	16,418

*Restated per Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*.

**Eliminated interfund payable and receivable of $1,800 working capital loan between Hetchy Power and CleanPowerSF in fiscal year 2020.

(Dollars in thousands, unless otherwise stated)

Table 1B - Hetchy Water
Comparative Condensed Net Position
June 30, 2022, 2021, and 2020

	2022	Restated 2021*	2020	2022-2021 Change	2021-2020 Change
Total assets:					
Current and other assets	$ 109,752	98,225	92,711	11,527	5,514
Capital assets, net of accumulated depreciation and amortization	201,007	177,481	160,782	23,526	16,699
Total assets	310,759	275,706	253,493	35,053	22,213
Deferred outflows of resources:					
Pensions	6,696	7,799	7,950	(1,103)	(151)
Other post-employment benefits	3,272	3,725	2,332	(453)	1,393
Total deferred outflows of resources	9,968	11,524	10,282	(1,556)	1,242
Liabilities:					
Current liabilities	17,380	15,873	6,769	1,507	9,104
Long-term liabilities	16,956	43,623	40,441	(26,667)	3,182
Total liabilities	34,336	59,496	47,210	(25,160)	12,286
Deferred inflows of resources:					
Related to pensions	34,477	988	4,335	33,489	(3,347)
Other post-employment benefits	2,734	2,085	1,195	649	890
Total deferred inflows of resources	37,211	3,073	5,530	34,138	(2,457)
Net position:					
Net investment in capital assets	201,007	177,481	160,782	23,526	16,699
Restricted for capital projects	—	—	6,513	—	(6,513)
Unrestricted	48,173	47,180	43,740	993	3,440
Total net position	$ 249,180	224,661	211,035	24,519	13,626

*Restated per Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*.

(Dollars in thousands, unless otherwise stated)

Table 1C - Hetchy Power
Comparative Condensed Net Position
June 30, 2022, 2021, and 2020

	2022	Restated 2021*	2020	2022-2021 Change	2021-2020 Change
Total assets:					
Current and other assets	$ 260,560	249,365	228,845 **	11,195	20,520
Capital assets, net of accumulated depreciation and amortization	585,636	492,056	445,429	93,580	46,627
Total assets	846,196	741,421	674,274	104,775	67,147
Deferred outflows of resources:					
Pensions	8,183	9,531	9,716	(1,348)	(185)
Other post-employment benefits	3,999	4,552	2,850	(553)	1,702
Total deferred outflows of resources	12,182	14,083	12,566	(1,901)	1,517
Liabilities:					
Current liabilities:					
Bonds	1,966	1,928	2,115	38	(187)
Certificates of participation	427	405	384	22	21
Commercial paper	40,019	114,671	63,535	(74,652)	51,136
Other liabilities	48,549	49,450	33,218	(901)	16,232
Subtotal current liabilities	90,961	166,454	99,252	(75,493)	67,202
Long-term liabilities:					
Bonds	192,520	44,384	47,693	148,136	(3,309)
Certificates of participation	12,593	13,026	13,444	(433)	(418)
Other liabilities	22,646	55,425	54,085	(32,779)	1,340
Subtotal long-term liabilities	227,759	112,835	115,222	114,924	(2,387)
Total liabilities:					
Bonds	194,486	46,312	49,808	148,174	(3,496)
Certificates of participation	13,020	13,431	13,828	(411)	(397)
Commercial paper	40,019	114,671	63,535	(74,652)	51,136
Other liabilities	71,195	104,875	87,303	(33,680)	17,572
Total liabilities	318,720	279,289	214,474	39,431	64,815
Deferred inflows of resources:					
Related to pensions	42,138	1,207	5,298	40,931	(4,091)
Other post-employment benefits	3,342	2,548	1,461	794	1,087
Total deferred inflows of resources	45,480	3,755	6,759	41,725	(3,004)
Net position:					
Net investment in capital assets	352,162	323,066	322,204	29,096	862
Restricted for debt service	140	99	142	41	(43)
Unrestricted	141,876	149,295	143,261	(7,419)	6,034
Total net position	$ 494,178	472,460	465,607	21,718	6,853

*Restated per Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*.

**Included $1,800 working capital loan to CleanPowerSF in fiscal year 2020.

(Dollars in thousands, unless otherwise stated)

Table 1D - CleanPowerSF
Comparative Condensed Net Position
June 30, 2022, 2021, and 2020

	2022	Restated 2021*	2020	2022-2021 Change	2021-2020 Change
Total assets:					
Current and other assets	$ 129,847	121,917	121,879	7,930	38
Total assets	129,847	121,917	121,879	7,930	38
Deferred outflows of resources:					
Pensions	852	803	572	49	231
Other post-employment benefits	798	442	270	356	172
Total deferred outflows of resources	1,650	1,245	842	405	403
Liabilities:					
Current liabilities	28,621	17,735	24,991 **	10,886	(7,256)
Long-term liabilities	11,548	15,344	4,171	(3,796)	11,173
Total liabilities	40,169	33,079	29,162	7,090	3,917
Deferred inflows of resources:					
Related to pensions	5,414	1,093	1,210	4,321	(117)
Other post-employment benefits	1,594	1,913	1,211	(319)	702
Total deferred inflows of resources	7,008	3,006	2,421	4,002	585
Net position:					
Unrestricted	84,320	87,077	91,138	(2,757)	(4,061)
Total net position	$ 84,320	87,077	91,138	(2,757)	(4,061)

*Restated per Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*.

**Included $1,800 working capital loan from Hetchy Power in fiscal year 2020.

Net Position, Fiscal Year 2022

Hetch Hetchy

Hetch Hetchy's net position of $827,678 increased by $43,480 or 5.5% from prior year resulting from a net increase of $144,706 in total assets and deferred outflows of resources, offset by an increase of $101,226 in total liabilities and deferred inflows of resources (see Table 1A). Current and other assets were $500,159, a $30,652 or 6.5% increase from prior year, mainly due to net pension assets recognized in current year based on actuarial reports. Hetch Hetchy adopted GASB Statement No. 87, *Leases* and recognized right-to-use assets net of accumulated amortization of $364 and $369 in lease liabilities as of June 30, 2022. See Note 9 for additional information about the leases.

Capital assets, net of accumulated depreciation and amortization, increased by $117,106 or 17.5% to $786,643 primarily from construction and capital improvement activities for the Bay Corridor Project and the Mountain Tunnel Improvement Project. Deferred outflows of resources decreased by $3,052 due to decreases of $2,402 in pensions and $650 in other post-employment benefits (OPEB) based on actuarial reports.

Total liabilities increased by $21,361 or 5.7% to $393,225. The increases included $73,111 in outstanding debt mainly from Power 2021 Series AB revenue bonds and commercial paper issuances offset by a decrease of $51,750 in other liabilities. Deferred inflows of resources increased by $79,865 due to increases of $78,741 in relation to pensions and $1,124 in OPEB based on actuarial reports.

Hetchy Water

Hetchy Water's net position of $249,180 increased by $24,519 or 10.9% resulting from a net increase of $33,497 in total assets and deferred outflows of resources, offset by a net increase of $8,978 in total liabilities and deferred inflows of resources (see Table 1B). The increase of $11,527 in current and other assets was attributed to increases of $13,912 in net pension assets based on actuarial report, $33 in charges for services receivables due to higher consumption from Lawrence Livermore National Laboratory, $19 in interest receivables due to higher interest accrual from City's Treasury, and $8 in inventory due to more purchases than issuances during the fiscal year. The increases were offset by decreases of $2,173 in cash and investment with City Treasury mainly from higher project spending, $192 in prepaid charges, advances, and other receivables mainly due to prepayment to Turlock Irrigation District for relicensing studies, $67 decrease in due from other governments related to State grant reimbursement received for Lower Cherry Aqueduct project, and $13 decrease in lease right-to-use assets net of accumulated amortization per implementation of GASB Statement No. 87, *Leases*.

Capital assets, net of accumulated depreciation and amortization, increased by $23,526 or 13.3% to $201,007 primarily from construction and capital improvement activities for the Mountain Tunnel Improvement Project and San Joaquin Pipeline Valve and Safe Entry Improvement Project. Deferred outflows of resources decreased by $1,556 due to decreases of $1,103 in pensions and $453 in other post-employment benefits (OPEB) based on actuarial reports.

Hetchy Water's total liabilities decreased by $25,160 or 42.3% to $34,336, as explained by decreases of $26,645 in net pension liability based on actuarial estimates, $2,733 in restricted payables to vendors and contractors mainly due to lower year-end expense accruals for capital projects, $204 in OPEB obligations based on actuarial assumptions, $16 in lease liability per implementation of GASB Statement No. 87, *Leases*, and $6 in grant advance due to recognition of prior year State grant for the Rim Fire project. These decreases were offset by increases of $4,192 in unrestricted payables mainly for license and permit fees to National Park Service, $148 in employee related benefits mainly due to increase in workers' compensation, $102 in general liability based on actuarial estimates, and $2 increase in rental deposits and prepaid rent.

Deferred inflows of resources increased by $34,138 due to increases of $33,489 in relation to pensions and $649 in OPEB based on actuarial reports.

Hetchy Power

Hetchy Power's net position of $494,178 increased by $21,718 or 4.6% resulting from a net increase of $102,874 in total assets and deferred outflows of resources, offset by an increase of $81,156 in total liabilities and deferred inflows of resources (see Table 1C). Increase of $11,195 in current and other assets was attributed to increases of $17,004 in net pension assets based on actuarial report, $7,882 in prepaid charges, advances, and other receivables mainly due to collateral paid to satisfy the CAISO's financial security requirements, $3,295 in cash and investments mainly due to higher collections from billings, $76 in interest receivables due to higher interest accrual from City's Treasury, and $31 increase in Federal grants receivable mainly from the Rim Fire Project.

These increases were offset by decreases of $8,835 in charges for services receivables due to completion of billing system implementation in prior year resulting in more timely billings in current year, $7,497 in restricted interest and other receivables mainly due to decrease in vendor prepayment to PG&E for the Bay Corridor Project, $602 in due from other City departments mainly from repayment for Sustainable Energy Account, $142 in inventory due to more issuances than purchases during the fiscal year, and $17 decrease in lease right-to-use assets net of accumulated amortization per implementation of GASB Statement No. 87, *Leases*.

Capital assets, net of accumulated depreciation and amortization, increased by $93,580 or 19.0% to $585,636 primarily from construction and capital improvement activities for the Bay Corridor Project and

Mountain Tunnel Improvement Project. Deferred outflows of resources decreased by $1,901 due to decreases of $1,348 in pensions and $553 in OPEB based on actuarial reports.

Hetchy Power's total liabilities of $318,720 increased by $39,431 or 14.1%. As of June 30, 2022, outstanding debt increased by $73,111 due to $124,000 from 2021 Series AB revenue bond issuances, $63,058 from commercial paper issuance for Hetchy Power facilities, and $27,022 in bond premium from 2021 Series AB revenue bonds, offset by $140,043 in commercial paper, bonds, and certificates of participation principal repayments, and $926 in amortization of premium and discount. Other liabilities of $71,195, such as payables to vendors, employees, contractors, and other government agencies for goods and services under contractual agreements, decreased by $33,680 or 32.1%, mainly due to decreases of $32,566 in net pension liability based on actuarial estimates, $6,241 in unrestricted payables mainly from prior year wheeling charges to APX, Inc., $248 in OPEB obligations based on actuarial assumptions, $85 in general liability based on actuarial estimates, and $19 decrease in lease liability per implementation of GASB Statement No. 87, *Leases*. These decreases were offset by increases of $3,666 in restricted payables to vendors and contractors due to higher year-end expense accruals for capital projects, $868 increase in interest payable related to 2021 Series AB revenue bond issuances, $734 in unearned revenues, refunds, and other, $200 in employee related benefits mainly due to increase in workers' compensation, and $11 in due to Department of Public Works for painting of light poles. Increase of $734 in unearned revenues, refunds, and other was mainly due to increases of $458 in deposits from custom work projects, $267 in prepayments from Distributed Antenna System (DAS) program, and $60 in overpayments received from customers, offset by decreases of $48 in grant advance due to recognition of Rim Fire State grant revenue and $3 in deposits received from retail customers.

Deferred inflows of resources increased by $41,725 due to increases of $40,931 in relation to pensions and $794 in OPEB based on actuarial reports.

CleanPowerSF

CleanPowerSF's net position of $84,320 decreased by $2,757 or 3.2%, resulting from an increase of $11,092 in total liabilities and deferred inflows of resources, offset by an increase of $8,335 in total assets and deferred outflows of resources (see Table 1D). Increase in total assets of $7,930 was due to increases of $20,602 in prepaid expenses included $12,236 in collateral paid to satisfy the CAISO's financial security requirements, $5,914 from power purchase credits, and $2,452 in prepayments to PG&E for electricity purchases. Other increases included $20,438 in charges for services receivables due to pre-approved rate increases, $1,833 in net pension assets based on actuarial report, and $6 in interest receivable due to higher interest accrual from City's Treasury. These increases were offset by decreases of $34,604 in cash and investments with City Treasury mainly attributed to volatile and increased pricing in power market and $345 decrease in lease right-to-use assets net of accumulated amortization per implementation of GASB Statement No. 87, *Leases*.

Deferred outflows of resources increased by $405 due to increases of $356 in OPEB and $49 in pensions based on actuarial reports.

Total liabilities increased by $7,090 or 21.4% to $40,169, mainly explained by $7,667 increase in payables to suppliers for power purchases, $3,168 increase in unearned revenues, refunds, and other due to $2,676 grants received in advance from California Public Utilities Commission (CPUC) for the new Disadvantaged Communities Programs (DAC) and the Community Food Service Energy Efficiency program, $503 from net energy metering credits to retail and commercial customers, offset by a decrease of $11 from customer prepayments. Other increases included $228 for employee related benefits including vacation sick leave and accrued payroll mainly due to an extra day in current year-end payroll accrual when compared to prior year and $26 in general liability based on actuarial estimates. The increases were offset by decreases of $3,008 in net pension liability based on actuarial estimates, $645 in OPEB obligations based on actuarial assumptions, and $346 decrease in lease liability and interest payable per implementation of GASB Statement No. 87, *Leases*.

Deferred inflows of resources increased by $4,002 due to an increase of $4,321 in relation to pensions, offset by a decrease of $319 in OPEB based on actuarial reports.

Net Position, Fiscal Year 2021

Hetch Hetchy

Hetch Hetchy's net position of $784,209 increased by $16,429 or 2.1% from prior year resulting from an increase of $93,621 in total assets and deferred outflows of resources, offset by a net increase of $77,192 in total liabilities and deferred inflows of resources (see Table 1A). Current and other assets were $468,768, a $27,133 or 6.1% increase from prior year, driven by higher charges for services receivables from Hetchy Power. In April 2021, Hetchy Power implemented a new electric utility billing system causing billings from April to June to be delayed.

Capital assets, net of accumulated depreciation and amortization, increased by $63,326 or 10.4% to $669,537 primarily from construction and capital improvement activities, and additions of facilities, improvements, machinery, and equipment for the Bay Corridor Project and Holm Powerhouse Rehabilitation & Kirkwood Powerhouse Oil Containment Upgrades. Deferred outflows of resources increased by $3,162 due to an increase of $3,267 in other post-employment benefits (OPEB) based on actuarial reports offset by a decrease of $105 in pensions.

Total liabilities increased by $82,068 or 28.4% to $371,114. The increases included $47,243 in outstanding debt and $34,825 in other liabilities. Deferred inflows of resources decreased by $4,876 due to a decrease of $7,555 in relation to pensions offset by an increase of $2,679 in OPEB based on actuarial reports.

Hetchy Water

Hetchy Water's net position of $224,665 increased by $13,630 or 6.5% resulting from an increase of $23,381 in total assets and deferred outflows of resources, offset by a net increase of $9,751 in total liabilities and deferred inflows of resources (see Table 1B). The increase of $5,440 in current and other assets was attributed to increases of $7,423 in cash and investment with City Treasury mainly due to a $16,000 transfer from the Water Enterprise to fund upcountry projects, offset by higher project spending, $413 increase in charges for services receivables due to higher consumption from Lawrence Livermore National Laboratory, and $4 increase in inventory due to more purchases than issuances during the fiscal year. The increases were offset by decreases of $1,996 in due from other governments mainly due to prior year reimbursements received for disaster emergency recoveries related to the 2018 Moccasin Storm and $186 in interest receivables due to lower annualized interest rate. Prepaid charges, advances, and other receivables decreased by $114 due to $448 Rim Fire insurance recovery collections and $4 in amortization of the advance paid to the Recreation and Parks Department for the Civic Center Garage, offset by an increase of $338 in vendor prepayment to Turlock Irrigation District for Federal Energy Regulatory Commission (FERC) relicensing studies and California Department of Water Resources for annual dam fees. Other decreases include $104 due from the City Attorney's Office for legal services.

Capital assets, net of accumulated depreciation and amortization, increased by $16,699 or 10.4% to $177,481 primarily from construction and capital improvement activities for the Mountain Tunnel Improvement Project and Repair & Replacement Life Extension Program, and additions of facilities, improvements, machinery, and equipment. Deferred outflows of resources increased by $1,242 due to an increase of $1,393 in OPEB based on actuarial reports offset by a decrease of $151 in pensions.

Hetchy Water's total liabilities increased by $12,208 or 25.9% to $59,418, as explained by increases of $5,778 in restricted payables to vendors and contractors mainly due to higher year-end expense accruals for capital projects, $5,168 in net pension liability based on actuarial report, $3,304 in unrestricted payables mainly for license and permit fees to National Park Service, $626 in employee related benefits including workers' compensation, vacation, sick leave and accrued payroll mainly due to an extra day in current year-end payroll accrual when compared to prior year and a 3% cost of living adjustment increase in December 2020, and $4 increase in rental deposits. The increases were offset by decreases of $1,906 in OPEB obligations based on actuarial assumptions, $493 in grant advance due to recognition of Rim Fire grant revenue, $240 in payable due to the City Attorney's Office for unbilled legal services, and $33 in general liability based on actuarial estimates.

Deferred inflows of resources decreased by $2,457 due to a decrease of $3,347 in relation to pensions offset by an increase of $890 in OPEB based on actuarial reports.

Hetchy Power

Hetchy Power's net position of $472,464 increased by $6,857 or 1.5% resulting from an increase of $68,574 in total assets and deferred outflows of resources, offset by a net increase of $61,717 in total liabilities and deferred inflows of resources (see Table 1C). Increase of $20,430 in current and other assets was attributed to an increase of $16,057 in charges for services receivables, of which $15,673 was attributed to billing delays as a result of transitioning to new billing system implemented in April 2021. In addition, there was an increase of $1,051 in year-end accrual for California Independent System Operator (CAISO) Congestion Revenue Right (CRR) credits, offset by an increase of $667 in allowance for doubtful accounts due to increased past due balances as a result of the Mayor's emergency proclamation that Hetchy Power temporarily suspend collection procedures and utility shutoffs for past due accounts to help customers with financial hardship due to COVID-19. Restricted interest and other receivables increased by $11,632 mainly due to vendor prepayment to PG&E for the Bay Corridor Project.

Prepaid charges, advances, and other receivables increased by $405 mainly due to $496 increase in vendor prepayments to PG&E for electric system reliability compliance product offset by decreases of $61 in receivables for the Distributed Antenna System (DAS) program due to more payments received, $16 in custom work receivables for Sunnydale Housing Projects, and $14 in amortization of the advance paid to the Recreation and Parks Department for the Civic Center Garage. Inventory increased by $211 due to more purchases than issuances during the fiscal year. The increases were offset by $3,280 decrease in cash and investment with/outside City Treasury due primarily to increase in capital spending. Due from other City departments decreased by $2,763, attributed to the final repayments of $1,800 from CleanPowerSF for working capital loan, $506 for the Sustainable Energy Account, $331 from City Attorney's Office for legal services, $109 from Wastewater Enterprise for the Living Machine System, and $105 from the Recreation and Parks Department for Energy Efficiency Projects, offset by increases of $46 in interest receivable from Treasure Island Development Authority (TIDA) in connection of an upgraded submarine power cable for the Treasure Island to increase service capacity and $42 from the Department of Public Works for Hunters Point Shipyard Development and Transbay Folsom Street Improvement custom work projects. Other decreases include $1,377 in grants receivable due to reimbursement received for disaster emergency recoveries related to the Rim Fire and 2018 Moccasin Storm, and $455 in interest receivables due to lower annualized interest rate.

Capital assets, net of accumulated depreciation and amortization, increased by $46,627 or 10.5% to $492,056 primarily due to additions of facilities, improvements, machinery, and equipment for the Bay Corridor Project and Holm Powerhouse Rehabilitation & Kirkwood Powerhouse Oil Containment Upgrades. Deferred outflows of resources increased by $1,517 due to an increase of $1,702 in OPEB based on actuarial reports offset by a decrease of $185 in pensions.

Hetchy Power's total liabilities of $279,195 increased by $64,721 or 30.2%. As of June 30, 2021, outstanding debts increased by $47,243 and was attributable to $51,136 in commercial paper issuance for Hetchy Power facilities, offset by $2,402 in bonds and certificates of participation principal repayments, $1,272 in return of unspent bond proceeds for 2015 NCREBs, and $219 in amortization of premium and discount. Other liabilities of $104,781, such as payables to vendors, employees, contractors, and other government agencies for goods and services under contractual agreements, increased by $17,478 or 20.0%, mainly due to increases of $8,724 in unrestricted payables mainly for wheeling charges to APX Inc., $6,934 restricted payables to vendors and contractors due to higher year-end expense accruals for capital projects, $6,317 in net pension liability based on actuarial report, and $876 in employee related benefits including workers' compensation, vacation, sick leave and accrued payroll mainly due to an extra day in current year-end payroll accrual when compared to prior year and a 3% cost of living adjustment increase in December 2020. Offsetting decreases include $2,330 in OPEB obligations based on actuarial assumptions, $1,649 in unearned revenue, $1,114 in general liability based on actuarial estimates, $231 in due to City Attorney's Office for unbilled legal services, and $49 in interest payable as a result of decreased outstanding debts and lower interest rates for commercial paper. Unearned revenue decreased by $1,649 due to $1,208 in remittance of utility tax collected, $1,193 in power revenue from commercial deposits, $681 in residential allowance refund for the Alice Griffith Housing Project, and $609 in recognition of Rim Fire grants revenue received in advance, offset by increases of $1,707 in deposits from custom work projects, $200 in prepayments from DAS program, $117 in overpayments received from customers, and $18 in deposits received from retail customers and security deposits for cottage rental.

Deferred inflows of resources decreased by $3,004 due to a decrease of $4,091 in relation to pensions offset by an increase of $1,087 in OPEB based on actuarial reports.

CleanPowerSF

CleanPowerSF's net position of $87,080 decreased by $4,058 or 4.5%, resulting from a net decrease of $134 in total assets and deferred outflows of resources and a net increase of $3,924 in total liabilities and deferred inflows of resources (see Table 1D). Total assets decreased by $537 due to a $6,447 decrease in charges for services receivables attributed to an increase of $3,675 in allowance for doubtful accounts due to higher past due balances in customer power utility accounts after the Mayor's proclamation to extend the moratorium on utility shutoffs and bill collections to help customers experiencing financial hardship as a result of COVID-19. Other decreases include $2,772 in receivables mainly due to one-time customer assistance bill credits related to COVID-19 relief, $576 in prepaid charges, advances, and other receivables mainly due to lower vendor prepayments for purchased electricity and $160 in interest receivables due to lower annualized interest rate. The decreases were offset by an increase of $6,646 in cash and investment with City Treasury mainly from cash collateral received for power purchase agreement.

Deferred outflows of resources increased by $403 due to increases of $231 in pensions and $172 in OPEB based on actuarial reports.

(Dollars in thousands, unless otherwise stated)

Total liabilities of $32,501 increased by $3,339 or 11.4%, which was mainly explained by $9,000 in cash collateral received for power purchase agreement (see Note 14(a)), $1,203 in net pension liability based on actuarial report, $712 in OPEB obligations based on actuarial assumptions, and an increase of $200 in employee related benefits including vacation, sick leave and accrued payroll mainly due to an extra day in current year-end payroll accrual when compared to prior year, and a 3% cost of living adjustment increase in December 2020. Other increases in unearned revenues, refunds, and other, include $90 from net energy metering credits to retail and commercial customers, $86 from customer prepayments, and $4 from utility and electric energy surcharge tax payable. These increases were offset by decreases of $6,047 in payables to vendors and contractors mainly from lower power purchases, $1,809 due to other City departments ($1,800 final working capital loan repayment to Hetchy Power and $9 to City Attorney's Office for unbilled legal services), and $100 in general liability based on actuarial estimates.

Deferred inflows of resources increased by $585 due to an increase of $702 in OPEB based on actuarial reports offset by a decrease of $117 in relation to pensions.

Results of Operations

The following tables summarize Hetch Hetchy's revenues, expenses, and changes in net position:

Table 2A - Consolidated Hetch Hetchy
Comparative Condensed Revenues, Expenses, and Changes in Net Position
Years Ended June 30, 2022, 2021, and 2020

		2022	Restated 2021*	2020	2022-2021 Change	2021-2020 Change
Revenues:						
Charges for services	$	480,198	390,924	420,937	89,274	(30,013)
Rents and concessions		249	247	347	2	(100)
Interest and investment income (loss)		(8,219)	(157)	9,449	(8,062)	(9,606)
Other non-operating revenues		19,001	21,552	28,868	(2,551)	(7,316)
Total revenues		491,229	412,566	459,601	78,663	(47,035)
Expenses:						
Operating expenses		470,768	408,870	389,026	61,898	19,844
Interest expenses		5,630	2,000	2,809	3,630	(809)
Amortization of premium, discount, and issuance costs		192	(219)	(228)	411	9
Non-operating expenses		628	965	1,071	(337)	(106)
Total expenses		477,218	411,616	392,678	65,602	18,938
Change in net position before transfers		14,011	950	66,923	13,061	(65,973)
Transfers from the City and County of San Francisco		30,001	16,000	14,000	14,001	2,000
Transfers to the City and County of San Francisco		(532)	(532)	(32)	—	(500)
Net transfers		29,469	15,468	13,968	14,001	1,500
Change in net position		43,480	16,418	80,891	27,062	(64,473)
Net position at beginning of year		784,198	767,780	686,889	16,418	80,891
Net position at end of year	$	827,678	784,198	767,780	43,480	16,418

*Restated per Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*.

(Continued)

(Dollars in thousands, unless otherwise stated)

Table 2B - Hetchy Water
Comparative Condensed Revenues, Expenses, and Changes in Net Position
Years Ended June 30, 2022, 2021, and 2020

		2022	Restated 2021*	2020	2022-2021 Change	2021-2020 Change
Revenues:						
Charges for services	$	49,200	46,979	34,797	2,221	12,182
Rents and concessions		112	111	156	1	(45)
Interest and investment income (loss)		(2,932)	(232)	1,932	(2,700)	(2,164)
Other non-operating revenues		479	1,352	3,861	(873)	(2,509)
Total revenues		46,859	48,210	40,746	(1,351)	7,464
Expenses:						
Operating expenses		52,303	50,519	44,873	1,784	5,646
Interest expenses		1	2	—	(1)	2
Non-operating expenses		37	63	11	(26)	52
Total expenses		52,341	50,584	44,884	1,757	5,700
Change in net position before transfers		(5,482)	(2,374)	(4,138)	(3,108)	1,764
Transfers from the City and County of San Francisco		30,001	16,000	14,000	14,001	2,000
Change in net position		24,519	13,626	9,862	10,893	3,764
Net position at beginning of year		224,661	211,035	201,173	13,626	9,862
Net position at end of year	$	249,180	224,661	211,035	24,519	13,626

*Restated per Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*.

Table 2C - Hetchy Power
Comparative Condensed Revenues, Expenses, and Changes in Net Position
Years Ended June 30, 2022, 2021, and 2020

		2022	Restated 2021*	2020	2022-2021 Change	2021-2020 Change
Revenues:						
Charges for services	$	173,105	136,247	140,680	36,858	(4,433)
Rents and concessions		137	136	191	1	(55)
Interest and investment income (loss)		(4,001)	24	5,746	(4,025)	(5,722)
Other non-operating revenues		15,763	19,273	25,006	(3,510)	(5,733)
Total revenues		185,004	155,680	171,623	29,324	(15,943)
Expenses:						
Operating expenses		156,347	145,640	148,127	10,707	(2,487)
Interest expenses		5,624	1,972	2,740	3,652	(768)
Amortization of premium, discount, and issuance costs		192	(219)	(228)	411	9
Non-operating expenses		591	902	1,060	(311)	(158)
Total expenses		162,754	148,295	151,699	14,459	(3,404)
Change in net position before transfers		22,250	7,385	19,924	14,865	(12,539)
Transfers to the City and County of San Francisco		(532)	(532)	(32)	—	(500)
Change in net position		21,718	6,853	19,892	14,865	(13,039)
Net position at beginning of year		472,460	465,607	445,715	6,853	19,892
Net position at end of year	$	494,178	472,460	465,607	21,718	6,853

*Restated per Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*.

(Dollars in thousands, unless otherwise stated)

Table 2D - CleanPowerSF
Comparative Condensed Revenues, Expenses, and Changes in Net Position
Years Ended June 30, 2022, 2021, and 2020

		2022	Restated 2021*	2020	2022-2021 Change	2021-2020 Change
Revenues:						
Charges for services	$	257,893	207,698	245,460	50,195	(37,762)
Interest and investment income (loss)		(1,286)	51	1,771	(1,337)	(1,720)
Other non-operating revenues		2,759	927	1	1,832	926
Total revenues		259,366	208,676	247,232	50,690	(38,556)
Expenses:						
Operating expenses		262,118	212,711	196,026	49,407	16,685
Interest expenses		5	26	69	(21)	(43)
Total expenses		262,123	212,737	196,095	49,386	16,642
Change in net position		(2,757)	(4,061)	51,137	1,304	(55,198)
Net position at beginning of year		87,077	91,138	40,001	(4,061)	51,137
Net position at end of year	$	84,320	87,077	91,138	(2,757)	(4,061)

*Restated per Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*.

Result of Operations, Fiscal Year 2022

Hetch Hetchy

Hetch Hetchy's total revenues were $491,229, an increase of $78,663 or 19.1% over prior year (see Table 2A). Charges for services increased by $89,274 or 22.8% from prior year's revenues mainly due to higher billings from CleanPowerSF and Hetchy Power. Total expenses increased by $65,602 or 15.9% primarily from higher energy purchases due to volatile and increased pricing in power market. (See Table 2A).

Hetchy Water

Hetchy Water's total revenues were $46,859, a decrease of $1,351 or 2.8% from prior year's revenues (see Table 2B). Decrease was due to $2,700 in investment loss and a decrease of $873 from other non-operating revenues, offset by increases of $2,221 from charges for services and $1 from rents and concessions.

Charges for services were $49,200, an increase of $2,221 or 4.7% mainly due to increased water assessment fees from the Water Enterprise to fund upcountry water-related costs and higher consumption from Lawrence Livermore National Laboratory. Rents were $112, an increase of $1 or 0.9% mainly due to consumer price index adjustment. Interest and investment loss was $2,932 mainly due to unrealized losses as a result of the decline in market value of investments related to rising interest rates. Other non-operating revenues were $479, a decrease of $873 or 64.6% mainly due to $899 lower Federal and State grants revenue from the Rim Fire Projects, offset by increases of $19 in overhead charges and $7 in net gain from sale of fixed assets.

Total operating expenses, excluding interest expenses and other non-operating expenses, were $52,303, an increase of $1,784 or 3.5%. The increase was primarily due to increases of $4,275 in other operating expenses mainly due to higher capital spending, $612 in services provided by other departments mainly due to higher legal service charges from City Attorney's Office, $456 in contractual services mainly from increased engineering and management consulting services, $309 in general and administrative expenses mainly due to higher fees, licenses, and permit expenses, $277 in depreciation and amortization mainly related to additional building, structure and equipment placed in service, and $90 in material and supplies mainly from fuel and water treatment supplies. These increases were offset by a decrease of $4,235 in personnel services due to lower pension obligations based on actuarial reports.

Other non-operating expenses were $37, a decrease of $26 due to lower payments to community-based organization programs. Interest expenses were $1, a decrease of $1 due to implementation of GASB Statement No. 87, *Leases*. A transfer in of $30,001 was received from the Water Enterprise to fund various Mountain Tunnel projects.

As a result of the above activities, net position for the year ended June 30, 2022 increased by $24,519 or 10.9% compared to prior year.

Hetchy Power

Hetchy Power's total revenues were $185,004, an increase of $29,324 or 18.8% from prior year's revenues (see Table 2C). Increases included $36,858 from charges for services and $1 from rents and concessions, offset by decreases of $4,025 from interest and investment income and $3,510 from other non-operating revenues.

Charges for services were $173,105, an increase of $36,858 or 27.1%, due to $22,537 in billings from City departments such as San Francisco International Airport, Municipal Transportation Agency, and Port of San Francisco as a result of increased operation due to easing of COVID-19 restrictions and $14,980 in Congestion Revenue Right (CRR) credits from California Independent System Operator (CAISO), offset by a decrease of $659 in resale of capacity to CleanPowerSF. Rents increased slightly by $1 or 0.7% to $137 mainly due to consumer price index adjustment. Interest and investment loss was $4,001, a decrease of $4,025, mainly due to unrealized losses as a result of the decline in market value of investments related to rising interest rates.

Other non-operating revenues were $15,763, a decrease of $3,510 or 18.2%, mainly due to lower collections of $3,254 from the Power System Mitigation Project, $1,371 in Cap and Trade revenue due to decrease of 97,000 allowances or 80% sold, $1,194 in revenue from Alice Griffith Housing Project due to prior year recognition of commercial deposits, $797 in settlement revenue from prior year litigation settlement, and $335 in overhead charges, offset by an increase of $3,441 in State and Federal grants revenue from Rim Fire Project and California Utility Arrearages Relief Payment Program for unpaid bills.

Total operating expenses, excluding interest expenses, other non-operating expenses, and amortization of premium, discount, and issuance costs, increased by $10,707 or 7.4%, to $156,347. The increase was primarily due to increases of $15,559 in purchased electricity and transmission, distribution, and other power costs due to volatile and increased pricing in power market, $1,978 in depreciation and amortization mainly for buildings, facilities, machinery, and equipment related to higher capitalization of assets, $899 in contractual services mainly for management consulting and engineering services, $280 in materials and supplies mainly for electrical supplies and tools, and $116 in services provided by other departments mainly due to higher risk management costs. The increases were offset by decreases of $6,110 in personnel services due to lower pension obligations based on actuarial reports, $1,420 in general and administrative expenses mainly due to lower judgements and claims expenses, and $595 decrease in other operating expenses mainly due to higher capitalized project expenses.

Interest expenses increased by $3,652 or 185.2% mainly due to no bond interest capitalization recognized in current year resulting from the implementation of GASB Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period*. Amortization of premium and discount increased by $411 or 187.7% mainly due to costs of issuance for 2021 Series AB revenue bond.

Other non-operating expenses were $591, a decrease of $311 or 34.5% mainly due to lower payments for GoSolarSF Incentive Program. Transfer out of $532 includes $500 to General Fund for repayment of Educational Revenue Augmentation Funds and $32 to the Office of the City's Administrator for the Surety Bond Program.

As a result of the above activities, net position for the year ended June 30, 2022 increased by $21,718 or 4.6% compared to prior year.

CleanPowerSF

CleanPowerSF's total revenues were $259,366, a $50,690 or 24.3% increase over prior year (see Table 2D). Charges for services increased by $50,195 or 24.2% mainly due to increases of $44,215 in electricity sales to retail and commercial customers resulting from a 16% average rate increase, $2,831 reduction in allowance for doubtful accounts attributed to assistance received from California Utility Arrearages Relief Payment Program (CAPP) for eligible customer account arrearages, $2,817 in one-time customer assistance bill credit related to COVID-19 in prior year, and $332 from higher capacity sales to Hetchy Power. Other non-operating revenue increased by $1,832 mainly due to $2,424 Federal grants received from CAPP, offset by a decrease of $592 liquidated damage compensation received from supplier for delay of the Renewable Energy Project in prior year. Interest and investment loss was $1,286 as a result of the decline in market value of investments related to rising interest rates.

Total operating expenses, excluding interest expenses were $262,118, an increase of $49,407 or 23.2% from prior year. The increase was due to $48,749 in purchased electricity and transmission, distribution, and other power costs due to volatile and increased pricing in power market, and higher resource adequacy capacity purchases related to compliance requirements from the California Public Utilities Commission. Other operating expenses increased by $2,895 due to $2,424 grant expense recognized for CAPP when applied to customer account arrearages and $471 in operating expenses mainly for the Neighborhood Steward Program and the new Local Renewable Energy. Other increases included $1,394 in general and administrative expenses mainly due to higher judgements and claims expenses, $143 in professional and contractual services mainly from higher software licensing fee, and $7 in material and supplies mainly for data processing equipment. These increases were offset by decreases of $3,474 in personnel services due to lower pension obligations based on actuarial reports, $307 in services provided by other departments mainly due to lower labor support from Hetchy Power. Interest expenses decreased by $21 mainly due to repayment of working capital loan to Hetchy Power completed in prior year.

As a result of the above activities, net position for the year ended June 30, 2022 decreased by $2,757 or 3.2% compared to prior year.

Result of Operations, Fiscal Year 2021

Hetch Hetchy

Hetch Hetchy's total revenues were $412,566, a decrease of $47,035 or 10.2% over prior year (see Table 2A). Charges for services decreased by $30,013 or 7.1% from prior year's revenues mainly due to lower billings from CleanPowerSF and Hetchy Power. Total expenses increased by $18,927 or 4.8% primarily due to increase in California Independent System Operator (CAISO) charges for CleanPowerSF market energy purchases (See Table 2A).

Hetchy Water

Hetchy Water's total revenues were $48,210, an increase of $7,464 or 18.3% from prior year's revenues (see Table 2B). Increase was due to $12,182 from charges for services, offset by decreases of $2,509 from other non-operating revenues, $2,164 in interest and investment income, and $45 from rents and concessions.

Charges for services were $46,979, an increase of $12,182 or 35.0% mainly due to increased water assessment fees from the Water Enterprise to fund upcountry water-related costs and higher consumption from Lawrence Livermore National Laboratory. Rents were $111, a decrease of $45 or 28.8% mainly from lower cottage rental revenue. Other non-operating revenues were $1,352, a decrease of $2,509 or 65.0% mainly due to decreases of $1,510 in Federal and State grants revenue resulting from lower collections from State grants related to 2018 Moccasin Storm, $995 from prior year Rim Fire recoveries, and $4 in net gain from sale of fixed assets. Interest and investment loss was $232 mainly due to unrealized loss attributed to decrease in market value in cash and investments with City Treasury and lower interest rates.

Total operating expenses, excluding other non-operating expenses, were $50,517, an increase of $5,644 or 12.6%. The increase was attributed to $3,567 in personnel services resulting from cost of living adjustments, higher retirement contribution rates, and increased personnel and fringe benefit costs. Other increases include $773 in contractual services mainly from increased engineering and management consulting services, $733 in depreciation and amortization related to additional building, structure and equipment placed in service, $664 in services provided by other departments mainly due to higher bureau support costs and legal service charges from City Attorney's Office, and $162 in other operating expenses mainly due to higher capital spending. These increases were offset by decreases of $190 in general and administrative expenses mainly due to lower judgements and claims expenses and $65 decrease in materials and supplies mainly for water and sewage treatment supplies.

Other non-operating expenses were $63, an increase of $52 due to payments to community-based organization programs. A transfer in of $16,000 was received from the Water Enterprise to fund upcountry projects.

As a result of the above activities, net position for the year ended June 30, 2021 increased by $13,630 or 6.5% compared to prior year.

Hetchy Power

Hetchy Power's total revenues were $155,680, a decrease of $15,943 or 9.3% from prior year's revenues (see Table 2C). Decreases included $5,733 from other non-operating revenues, $5,722 from interest and investment income, $4,433 from charges for services, and $55 from rents and concessions.

Charges for services were $136,247, a decrease of $4,433 or 3.2% was attributed to a decrease of $8,362 in sales to City departments, wholesale, and Treasure Island customers due to COVID-19 related impacts and $667 increase in allowance for doubtful accounts. Receivables aging over 120 days increased significantly due to the suspension of collection efforts and moratorium on utility shutoffs in response to the COVID-19 emergency proclamation issued by the Mayor. The decrease was offset by increases of $2,537 in sales to retail customers mainly due to new affordable redevelopment housing accounts and $2,059 in resale of capacity to CleanPowerSF due to excess capacity of electric system reliability compliance product. Rents were $136, a decrease of $55 or 28.8% mainly due to lower cottage rental revenue. Interest and investment income were $24, a decrease of $5,722 or 99.6% mainly due to decreases of $4,691 in interest

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earned from lower interest rates and cash balance, unrealized loss, and $1,031 from interest accrued for Treasure Island submarine power cable in prior year.

Other non-operating revenues were $19,273, a decrease of $5,733, or 22.9%, mainly due to decreases of $5,739 from Low Carbon Fuel Standard (LCFS) credit sales revenue, attributed to less carbon fuel credit generated by San Francisco Municipal Transportation Agency, $2,574 in license fee from Transbay Cable Project due to final payment received in prior year, $1,139 in Cap and Trade revenue due to decrease of 23,000 or 16% allowance sold, and $654 decrease in fees collected from DAS program. Other decreases include $402 in State and Federal grants revenue resulting from lower collections from State grants related to 2018 Moccasin Storm and Federal grants related to Hazard Mitigation grant, $70 in Federal interest subsidy due to lower debt outstanding, $37 in damage claims revenue, and $5 in net gain from sale of fixed assets. These decreases were offset by increases of $2,921 in collection for Power System Impact Mitigation Project, $797 in settlement revenue related to litigation, $736 in commercial deposits from Alice Griffith Housing Project recognized as revenue, $259 in overhead charges, and $174 in miscellaneous revenue mainly from generation interconnection study and refunds from vendor.

Total operating expenses, excluding interest expenses, other non-operating expenses, and amortization of premium, discount, and issuance costs, decreased by $2,489 or 1.7%, to $145,638. The decrease was primarily due to $6,138 in purchased electricity and transmission, distribution, and other power costs due to lower electricity sales, $289 in services provided by other departments mainly due to lower bureau support costs, $270 in material and supplies due to lower equipment maintenance, and $96 decrease in depreciation and amortization for machinery and equipment. The decreases were offset by increases of $1,704 in general and administrative expenses mainly due to higher litigation expenses, $1,572 in other operating expenses mainly due to higher capital spending, $984 in contractual services mainly from new in-city inventory warehouse rental at Pier 23 in San Francisco, and $44 in personnel services resulting from cost of living adjustments, higher retirement contribution rates, higher pension obligations based on actuarial reports, and increased personnel and fringe benefit costs.

Interest expenses were $1,970, a decrease of $770 or 28.1% due to decrease in outstanding debt and lower interest rates for commercial paper. Amortization of premium and discount slightly decreased by $9 or 3.9% to $219.

Other non-operating expenses were $902, a decrease of $158 or 14.9% mainly due to decrease in payments for GoSolarSF Incentive Program. Transfer out of $532 includes $500 to General Fund for repayment of Educational Revenue Augmentation Funds and $32 to the Office of the City's Administrator for the Surety Bond Program.

As a result of the above activities, net position for the year ended June 30, 2021 increased by $6,857 or 1.5% compared to prior year.

CleanPowerSF

CleanPowerSF's total revenues were $208,676, a $38,556 or 15.6% decrease over prior year (see Table 2D). Charges for services decreased by $37,762 or 15.4% mainly due to a decrease of $32,077 in electricity sales to retail and commercial customers resulting from consumption decrease of 92,503 MWh or 3%, a one-time customer assistance bill credit of $2,817 related to COVID-19 utility bill relief, an increase of $2,451 in allowance for doubtful accounts, and $417 lower capacity sales to other entities. Receivables aging over 120 days increased significantly due to the suspension of collection efforts and moratorium on utility shutoffs in response to the COVID-19 emergency proclamation issued by the Mayor. Interest and investment income decreased by $1,720 or 97.1% due to unrealized loss and lower interest rates on pooled cash and investments. Other non-operating revenue increased by $926 due to liquidated damage compensation from vendor for the delay of Renewable Energy Project.

(Dollars in thousands, unless otherwise stated)

Total operating expenses, excluding interest expenses were $212,716, an increase of $16,690 or 8.5% from prior year. The increase was due to $16,219 in purchased electricity and transmission, distribution and other power costs as a result of higher prices in the CAISO market and increase in resource adequacy capacity purchases related to new compliance requirements from the California Public Utilities Commission. Other increases include $1,200 in services provided by other departments due to increased labor support from Hetchy Power and legal service charges from City Attorney's Office, and $305 increase in other operating expenses mainly from the Neighborhood Steward Program and the new Local Renewable Energy Program. These increases were offset by decreases of $529 in professional and contractual services mainly from lower management consulting services, $279 in personnel services mainly due to lower pension obligations and OPEB based on actuarial reports, $195 in general and administrative expenses mainly due to lower judgements and claims based on actuarial estimates, and $31 in material and supplies due to reduced furnishings expenses. Interest expenses were $18, a decrease of $51 or 73.9% due to lower principal outstanding from Hetchy Power working capital loan.

As a result of the above activities, net position for the year ended June 30, 2021 decreased by $4,058 or 4.5% compared to prior year.

Capital Assets

The following tables summarize Hetch Hetchy's changes in capital assets.

Table 3A - Capital Assets, Net of Accumulated Depreciation and Amortization
As of June 30, 2022, 2021, and 2020

	2022	2021	2020	2022-2021 Change	2021-2020 Change
Hetch Hetchy					
Facilities, improvements, machinery, and equipment	$ 440,460	432,916	386,560	7,544	46,356
Intangible assets	24,472	24,932	25,393	(460)	(461)
Land and rights-of-way	5,181	5,181	5,181	—	—
Construction work in progress	316,530	206,508	189,077	110,022	17,431
Total	786,643	669,537	606,211	117,106	63,326
Hetchy Water					
Facilities, improvements, machinery, and equipment	133,263	128,335	122,433	4,928	5,902
Intangible assets	10,374	10,581	10,789	(207)	(208)
Land and rights-of-way	3,232	3,232	3,232	—	—
Construction work in progress	54,138	35,333	24,328	18,805	11,005
Total	201,007	177,481	160,782	23,526	16,699
Hetchy Power					
Facilities, improvements, machinery, and equipment	307,197	304,581	264,127	2,616	40,454
Intangible assets	14,098	14,351	14,604	(253)	(253)
Land and rights-of-way	1,949	1,949	1,949	—	—
Construction work in progress	262,392	171,175	164,749	91,217	6,426
Total	$ 585,636	492,056	445,429	93,580	46,627

(Dollars in thousands, unless otherwise stated)

Capital Assets, Fiscal Year 2022

Hetch Hetchy

Hetch Hetchy has capital assets of $786,643, net of accumulated depreciation and amortization, invested in both water and power utility capital assets as of June 30, 2022 (see Table 3A). This amount represents an increase of $117,106 or 17.5%, resulting from increases of $110,022 in construction work in progress and $7,544 in facilities, improvements, machinery and equipment, offset by a decrease of $460 in amortization of intangible assets. The investment in capital assets includes land, buildings, improvements, hydropower facilities, dams, transmission lines, machinery, and equipment.

Major additions to construction work in progress, depreciable facilities, improvements, intangible assets, machinery, and equipment placed in service, including transfers of completed projects from construction work in progress, during the year ended June 30, 2022 include the following:

Table 3B - Hetch Hetchy
Major Additions to Construction Work in Progress and
Facilities, Improvements, Intangible Assets, Machinery, and Equipment Placed in Service
Year ended June 30, 2022

	Hetchy Water	Hetchy Power	2022 Total
Bay Corridor Project	$ —	46,608	46,608
Mountain Tunnel Improvement Project	16,638	20,335	36,973
Moccasin Powerhouse Rewind	—	12,368	12,368
O'Shaughnessy Dam Access & Drainage Improvements and Outlet Works	1,733	2,118	3,851
San Joaquin Pipeline Valve & Safe Entry Improvement	2,952	—	2,952
Repair and Replacement Life Extension Program	2,776	—	2,776
Intervening Facilities	—	2,758	2,758
Pier 70	—	2,739	2,739
Van Ness - Bus Rapid Transit	—	2,423	2,423
Transmission Line Clearance Mitigation	—	1,711	1,711
Other project additions individually below $1,500	5,555	19,799	25,354
Additions to Construction Work in Progress	$ 29,654	110,859	140,513
San Joaquin Pipeline Tesla Valves and Installation	$ 4,410	—	4,410
O'Shaughnessy Dam Access & Drainage Improvements - Stairs and Fall Protection	1,931	2,360	4,291
Pier 70	—	1,720	1,720
Transmission Line Clearance Mitigation	—	1,508	1,508
Other project additions individually below $1,500	4,672	14,386	19,058
Facilities, Improvements, Intangible Assets, Machinery, and Equipment Placed in Service	$ 11,013	19,974	30,987

Hetchy Water

Hetchy Water has capital assets of $201,007, net of accumulated depreciation and amortization, invested in a broad range of utility capital assets as of June 30, 2022 (see Table 3A). This amount represents an increase of $23,526 or 13.3%, primarily due to increases of $18,805 in construction work in progress and $4,928 in facilities, improvements, machinery, and equipment, offset by a decrease of $207 in amortization of intangible assets.

For the year ended June 30, 2022, Hetchy Water's major additions to construction work in progress totaled $29,654. Major depreciable facilities, improvements, intangible assets, machinery, and equipment placed in service totaled $11,013 (see Table 3B).

Hetchy Power

Hetchy Power has capital assets of $585,636, net of accumulated depreciation and amortization, invested in utility capital assets as of June 30, 2022 (see Table 3A). This amount represents an increase of $93,580 or 19.0%, primarily due to increases of $91,217 in construction work in progress and $2,616 in facilities, improvements, machinery, and equipment, offset by a decrease of $253 in amortization of intangible assets.

For the year ended June 30, 2022, Hetchy Power's major additions to construction work in progress totaled $110,859. Major depreciable facilities, improvements, intangible assets, machinery, and equipment placed in service totaled $19,974 (see Table 3B).

CleanPowerSF

CleanPowerSF had no capital assets as of June 30, 2022 and 2021.

See Note 4 for additional information about capital assets.

Capital Assets, Fiscal Year 2021

Hetch Hetchy

Hetch Hetchy has capital assets of $669,537, net of accumulated depreciation and amortization, invested in both water and power utility capital assets as of June 30, 2021 (see Table 3A). This amount represents an increase of $63,326 or 10.4%, resulting from increases of $46,356 in facilities, improvements, machinery and equipment and $17,431 in construction work in progress, offset by a decrease of $461 in amortization of intangible assets. The investment in capital assets includes land, buildings, improvements, hydropower facilities, dams, transmission lines, machinery, and equipment.

(Dollars in thousands, unless otherwise stated)

Major additions to construction work in progress, 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, 2021 include the following:

Table 3C - Hetch Hetchy
Major Additions to Construction Work in Progress and
Facilities, Improvements, Intangible Assets, Machinery, and Equipment Placed in Service
Year ended June 30, 2021

	Hetchy Water	Hetchy Power	2021 Total
Bay Corridor Project	$ —	31,556	31,556
Mountain Tunnel Improvement Project	7,744	9,465	17,209
Transmission Line Clearance Mitigation & Upgrade	—	6,176	6,176
Repair & Replacement Life Extension Program	5,188	—	5,188
Moccasin Penstock Rehabilitation and Powerhouse Rewind	—	4,374	4,374
Van Ness - Bus Rapid Transit	—	2,742	2,742
Moccasin Reservoir Security Fence	2,723	—	2,723
San Joaquin Pipeline Valve & Safe Entry Improvement	2,115	—	2,115
Treasure Island Capital Improvements	—	2,025	2,025
Other project additions individually below $2,000	4,816	13,721	18,537
Additions to Construction Work in Progress	$ 22,586	70,059	92,645
Holm Powerhouse Rehabilitation & Kirkwood Powerhouse Oil Containment Upgrades	$ —	21,920	21,920
Electrical Underground Duct Bank 23rd & Illinois South Street	—	18,133	18,133
Moccasin Reservoir Security Fence	3,549	—	3,549
Switch Yard Asset	—	3,533	3,533
San Joaquin Pipeline Rehabilitation	3,243	—	3,243
San Francisco Academy Solar Carport	—	2,657	2,657
Other project additions individually below $2,000	4,911	9,585	14,496
Facilities, Improvements, Intangible Assets, Machinery, and Equipment Placed in Service	$ 11,703	55,828	67,531

Hetchy Water

Hetchy Water has capital assets of $177,481, net of accumulated depreciation and amortization, invested in a broad range of utility capital assets as of June 30, 2021 (see Table 3A). This amount represents an increase of $16,699 or 10.4%, primarily due to increases of $11,005 in construction work in progress and $5,902 in facilities, improvements, machinery, and equipment, offset by a decrease of $208 in amortization of intangible assets.

For the year ended June 30, 2021, Hetchy Water's major additions to construction work in progress totaled $22,586. Major depreciable facilities, improvements, intangible assets, machinery, and equipment placed in service totaled $11,703 (see Table 3C).

Hetchy Power

Hetchy Power has capital assets of $492,056, net of accumulated depreciation and amortization, invested in utility capital assets as of June 30, 2021 (see Table 3A). This amount represents an increase of $46,627 or 10.5%, primarily due to increases of $40,454 in facilities, improvements, machinery, and equipment and $6,426 in construction work in progress, offset by a decrease of $253 in amortization of intangible assets.

For the year ended June 30, 2021, Hetchy Power's major additions to construction work in progress totaled $70,059. Major depreciable facilities, improvements, intangible assets, machinery, and equipment placed in service totaled $55,828 (see Table 3C).

CleanPowerSF

CleanPowerSF had no capital assets as of June 30, 2021 and 2020.

See Note 4 for additional information about capital assets.

Debt Administration

Hetch Hetchy

As of June 30, 2022, Hetch Hetchy has outstanding Certificates of Participation, Clean Renewable Energy Bonds (CREBs), Qualified Energy Conservation Bonds (QECBs), New Clean Renewable Energy Bonds (NCREBs), 2015 Series AB revenue bonds, 2021 Series AB revenue bonds, and commercial paper. The aforementioned debts are obligations of the Power Enterprise. See Hetchy Power section below for more details.

Hetchy Water

Hetchy Water did not have debt outstanding as of June 30, 2022 and 2021. Debt, including bond issuances, associated with the funding of water-related, upcountry infrastructure capital improvements is issued through the Water Enterprise, and is reflected in the Water Enterprise's financial statements.

Hetchy Power

As of June 30, 2022 and 2021, Hetchy Power had outstanding debt of $247,525 and $174,414, respectively, as shown in Table 4. More detailed information about the Hetchy Power's debt activity is presented in Notes 6, 7 and 8 to the financial statements.

CleanPowerSF

CleanPowerSF did not have any debt outstanding as of June 30, 2022 and 2021.

(Dollars in thousands, unless otherwise stated)

Table 4 - Hetchy Power
Outstanding Debt, Net of Unamortized Costs
As of June 30, 2022, 2021, and 2020

	2022	2021	2020	2022-2021 Change	2021-2020 Change
Clean Renewable Energy Bonds 2008	$ 415	823	1,231	(408)	(408)
Certificates of Participation 2009 Series C	427	838	1,235	(411)	(397)
Certificates of Participation 2009 Series D (BABs)	12,593	12,593	12,593	—	—
Qualified Energy Conservation Bonds 2011	3,138	3,687	4,229	(549)	(542)
New Clean Renewable Energy Bonds 2012	—	—	130	—	(130)
New Clean Renewable Energy Bonds 2015	1,637	1,779	3,190	(142)	(1,411)
2015 Series A Revenue Bonds	35,144	35,297	35,444	(153)	(147)
2015 Series B Revenue Bonds	3,849	4,726	5,584	(877)	(858)
2021 Series A Revenue Bonds	90,213	—	—	90,213	—
2021 Series B Revenue Bonds	60,090	—	—	60,090	—
Commercial Paper	40,019	114,671	63,535	(74,652)	51,136
Total	$ 247,525	174,414	127,171	73,111	47,243

The increase of $73,111 was mainly due to $124,000 in 2021 Series AB revenue bond issuances, $63,058 in commercial paper issuance for Hetchy Power facilities, and $27,022 in bond premium for 2021 Series AB revenue bonds, offset by $140,043 in commercial paper, bonds, and certificates of participation principal repayments, and $926 in amortization of premium and discount.

Credit Ratings and Bond Insurance – The Power Enterprise's Power Revenue Bonds have been rated "AA-" by Fitch Inc and "AA" by Standard and Poor's (S&P) as of June 30, 2022 and 2021, respectively.

In December 2020, Moody's Investors Service, ("Moody's") assigned a first-time A2 Issuer Rating to CleanPowerSF, with a stable outlook. Hetch Hetchy Water and Power contains the Power Enterprise as a separate enterprise fund, with CleanPowerSF a component unit of the Power Enterprise. CleanPowerSF is tracked and audited as a standalone fund, with financial statements, including revenues and expenses, separate and discrete from the Power Enterprise. As such, CleanPowerSF is deemed to be a separate credit from the Power Enterprise, with its own credit rating.

Debt Service Coverage – Pursuant to the Indenture, the Power Enterprise is required to collect sufficient net revenues each fiscal year, together with any Available Funds (except Bond Reserve Funds) which include unappropriated fund balances and reserves, and cash and book value of investments held by the Treasurer for the Hetchy Power, that the SFPUC reasonably expects would be available, to pay principal and interest becoming due and payable on all outstanding bonds as provided in the Indenture, less any refundable credits, at least equal to 1.25 times annual debt service for said fiscal year. The Series 2015 AB power revenue bonds represent the first series of senior lien revenue bonds of Hetchy Power. Pursuant to Power's Master Trust Indenture, senior lien debt service coverage excludes debt service on subordinate obligations, such as Hetchy Power's existing CREBS, NCREBs, and QECBs. During fiscal year 2022, the Power 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 Power Enterprise's Indenture (see Note 8).

Debt Authorization – Pursuant to Charter Section 9.107(6), the Power Enterprise can incur indebtedness upon three-fourths vote of the Board of Supervisors, for the purpose of the reconstruction or replacement of existing water facilities and electric power facilities, or combinations thereof, under the jurisdiction of the Public Utilities Commission. Pursuant to Charter Section 9.107(8), the Power Enterprise can issue revenue bonds, without voter approval, upon an affirmative vote of the Board of Supervisors, for the purpose of the acquisition, construction, installation, equipping, improvement, or rehabilitation of equipment or facilities for renewable energy and energy conservation. Pursuant to Proposition A, approved by the San Francisco voters on June 5, 2018, City Charter Section 8B.124 is amended to authorize the Power Enterprise to enter into indebtedness, including revenue bonds, notes, commercial paper or other forms of indebtedness, when authorized by ordinance approved by a two-thirds vote of the Board of Supervisors to reconstruct, replace, expand, repair, improve or construct new power facilities under the jurisdiction of SFPUC or for any other purpose of the Power Enterprise, and in compliance with City Charter Section 8B.124. Proposition A expressly prohibits the SFPUC from issuing bonds to finance the construction of power plants that generate electricity using fossil fuels or nuclear energy. As of June 30, 2022 and 2021, $163,555 and $39,555 of Hetchy Power revenue bonds were issued against existing authorization of $555,043 and $535,699, respectively.

Cost of Debt Capital – The Power Enterprise's outstanding long-term senior lien debt consists of the 2015 Series AB and 2021 Series AB Power Revenue Bonds issued in May 2015 and December 2021, respectively, which are issued under the Master Indenture and are senior in lien to all the other Enterprise's outstanding debt obligations. Coupon interest rates range from 3.0% to 5.0%. The Power Enterprise has previously issued and incurred debt service on Tax Credit Bonds and certificates of participation, which constitute subordinate obligations. Interest rates on the Tax Credit Bonds, which include QECBs and NCREBs, ranging from 1.2% to 1.5% (net of the federal tax subsidy). Certificates of participation carried interest rates ranging from 2.0% to 6.5%. The Power Enterprise's short-term debt issued under its commercial paper program has interest rates ranging from 0.1% to 1.1% and 0.1% to 0.2% during fiscal years 2022 and 2021, respectively.

Rates and Charges

Hetchy Water

Hetchy Water charges for services relates to the storage and delivery of water. Assessment fees from the Water Enterprise, which cover the water-related upcountry costs, were $45,815 and $44,149 for the years ended June 30, 2022 and 2021, respectively. In fiscal year 2023, the assessment fees will be $49,636, an increase of $3,821 or 8.3% as reflected in the fiscal year 2023 adopted budget.

Hetchy Power

Municipal Rates

Hetchy Power charges for services relates to power generation and electricity delivery to contractual and municipal customers. For municipal power services, customers are typically charged a General Use rate or Enterprise rate. Enterprise rates are charged based on projected PG&E equivalent rates by customer class. General fund department customers are mostly charged a General Use rate, a rate that is currently below cost of service. These General Use rates, however, are moving closer towards cost of service and increasing by $0.01 per kWh on an annual basis beginning July 1, 2020. The General Use rates have been adopted every two years.

On May 10, 2020, the Commission adopted two years of General Use rates effective July 1, 2020 through June 30, 2022. The adopted General Use rate for fiscal years 2022 and 2021 are $0.09877/kWh and $0.08877/kWh, respectively. The Power Enterprise has developed rates under the cost of service analysis model and completed the 2022 Power Rates Study in spring of 2022, in which General Use rates have been modernized to standard customer classes and incrementally increased to cost of service over the next few years. New rates effective fiscal year 2023 have been adopted in May 2022. The SFPUC Rates Schedules and Fees is available at https://sfpuc.org/accounts-services/water-power-and-sewer-rates.

Retail Rates

The Commission approved a new schedule of retail electric rates, fees, and charges for residential, commercial, and industrial customers where Hetch Hetchy has been designated as the power provider for retail customers to be applied to meter readings on or after July 1, 2016. Total bundled service charges for residential service rates and low-income residential service rates are calculated using the total rates, monthly, based on monthly meter reading, plus any applicable taxes.

To date, Hetchy Power has prepared service standards, developed system plans and specifications, acquired materials and equipment, and initiated construction of primary distribution facilities.

Pursuant to City and County of San Francisco Charter Section 8B.125, an independent rate study is performed at least once every five years. The rate study is undertaken to examine future revenue requirements and cost-of-service of the Power Enterprise. In fall of 2020, SFPUC engaged a consultant to perform a cost-of-service study. The informed rate setting from this study resulted in recommendation and approval by the Commission in the spring of 2022 for rates to be effective July 1, 2023. The SFPUC Rates Schedules and Fees is available at https://sfpuc.org/accounts-services/water-power-and-sewer-rates.

CleanPowerSF

CleanPowerSF began offering services in May 2016, giving residential and commercial electricity consumers in San Francisco a choice of having their electricity supplied from clean renewable sources, such as solar and wind, at competitive rates. CleanPowerSF offers two products: a "Green" product comprised of at least 50% renewable energy and a "SuperGreen" product comprised of 100% renewable energy. Most customers take service under the "Green" product rates and remaining customers have opted to upgrade to "SuperGreen" product rates. On May 25, 2021, the Commission approved a CleanPowerSF rate adjustment formula. Through Resolution 21-0085, CleanPowerSF rates formulaically adjusted, when PG&E rates changed to the lesser of no more than 5% higher than PG&E generation rates or rates that recover program costs. On September 28, 2021, the Commission approved a subsequent CleanPowerSF rate adjustment formula. Through Resolution 21-0152, CleanPowerSF rates formulaically adjusted when PG&E rates changed to the lesser of no more than 15% higher than PG&E generation rates or rates that recover program costs from November 1, 2021 to June 30, 2022.

CleanPowerSF revenues are adequate to support its own operations. CleanPowerSF is subject to Section 8B.125 of the City Charter, which requires an independent rate study to be performed at least once every five years, and the Commission sets rates and charges for the program. CleanPowerSF rates have been included in the 2022 Power Rates Study, which is completed in the spring of 2022 for rates to be effective July 1, 2023. The CleanPowerSF Rates Schedules are available at http://cleanpowersf.org/residential for residential customers and http://cleanpowersf.org/commercial for commercial customers.

Request for Information

This report is designed to provide our citizens, customers, investors, and creditors with an overview of Hetch Hetchy's finances and to demonstrate Hetch Hetchy's respective accountability for the money it receives. Questions regarding any of the information provided in this report or requests for additional 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://sfpuc.org/about-us/reports/audited-financial-statements-reports.

HETCH HETCHY WATER AND POWER AND CLEANPOWERSF

Statements of Net Position

June 30, 2022 and 2021

(In thousands)

	Hetchy Water	Hetchy Power	CleanPowerSF	2022 Total	Hetchy Water	Hetchy Power	CleanPowerSF	Restated 2021 Total*
Assets								
Current assets:								
Cash and investments with City Treasury	$ 94,190	189,641	56,234	340,065	89,373	190,719	90,838	370,930
Cash and investments outside City Treasury	1	16	—	17	1	611	—	612
Receivables:								
Charges for services (net of allowance for doubtful accounts from Hetchy Power of $1,297 and CleanPowerSF of $6,330 as of June 30, 2022; and Hetchy Power of $1,258 and CleanPowerSF of $5,485 as of June 30, 2021)	475	10,189	48,703	59,367	442	19,024	28,265	47,731
Due from other City departments, current portion	—	867	—	867	—	7,413	—	7,413
Due from other governments	512	298	—	810	579	267	—	846
Interest	40	201	61	302	21	125	55	201
Restricted interest and other receivables	—	4,303	—	4,303	—	11,800	—	11,800
Total current receivables	1,027	15,858	48,764	65,649	1,042	38,629	28,320	67,991
Prepaid charges, advances, and other receivables, current portion	216	1,911	10,550	12,677	402	2,666	2,184	5,252
Inventory	199	1,678	—	1,877	191	1,820	—	2,011
Restricted cash and investments outside City Treasury, current portion	—	5,228	—	5,228	—	153	—	153
Total current assets	95,633	214,332	115,548	425,513	91,009	234,598	121,342	446,949
Non-current assets:								
Net pension asset	13,912	17,004	1,833	32,749	—	—	—	—
Restricted cash and investments with City Treasury	—	—	—	—	6,990	5,241	—	12,231
Restricted cash and investments outside City Treasury, less current portion	—	8,824	—	8,824	—	3,690	—	3,690
Capital assets, not being depreciated and amortized	57,376	265,772	—	323,148	38,571	174,555	—	213,126
Capital assets, net of accumulated depreciation and amortization	143,631	319,864	—	463,495	138,910	317,501	—	456,411
Lease right-to-use assets, net of accumulated amortization	61	73	230	364	74	90	575	739
Prepaid charges, advances, and other receivables, less current portion	146	9,390	12,236	21,772	152	753	—	905
Due from other City departments, less current portion	—	10,937	—	10,937	—	4,993	—	4,993
Total non-current assets	215,126	631,864	14,299	861,289	184,697	506,823	575	692,095
Total assets	310,759	846,196	129,847	1,286,802	275,706	741,421	121,917	1,139,044
Deferred outflows of resources:								
Pensions	6,696	8,183	852	15,731	7,799	9,531	803	18,133
Other post-employment benefits	3,272	3,999	798	8,069	3,725	4,552	442	8,719
Total deferred outflows of resources	9,968	12,182	1,650	23,800	11,524	14,083	1,245	26,852
Liabilities								
Current liabilities:								
Accounts payable	8,454	16,668	23,526	48,648	4,262	22,909	15,859	43,030
Accrued payroll	1,098	2,684	373	4,155	1,042	2,596	291	3,929
Accrued vacation and sick leave, current portion	1,034	1,747	279	3,060	1,059	1,777	205	3,041
Accrued workers' compensation, current portion	215	400	—	615	197	378	—	575
Damage claims liability, current portion	228	358	15	601	218	409	6	633
Due to other City departments, current portion	—	380	—	380	—	369	—	369
Lease liability, current portion	3	3	232	238	16	19	345	380
Unearned revenues, refunds, and other, current portion	24	5,923	4,196	10,143	22	5,141	1,028	6,191
Bond, loan, and lease interest payable	—	1,327	—	1,327	—	459	1	460
Bonds, current portion	—	1,966	—	1,966	—	1,928	—	1,928
Certificates of participation, current portion	—	427	—	427	—	405	—	405
Commercial paper	—	40,019	—	40,019	—	114,671	—	114,671
Current liabilities payable from restricted assets	6,324	19,059	—	25,383	9,057	15,393	—	24,450
Total current liabilities	17,380	90,961	28,621	136,962	15,873	166,454	17,735	200,062
Long-term liabilities:								
Other post-employment benefits obligations	14,240	17,405	2,264	33,909	14,444	17,653	2,909	35,006
Net pension liability	—	—	—	—	26,645	32,566	3,008	62,219
Accrued vacation and sick leave, less current portion	1,135	1,850	267	3,252	1,126	1,840	195	3,161
Accrued workers' compensation, less current portion	1,013	1,850	—	2,863	923	1,740	—	2,663
Damage claims liability, less current portion	399	665	17	1,081	307	699	—	1,006
Bonds, less current portion	—	192,520	—	192,520	—	44,384	—	44,384
Lease liability, less current portion	59	72	—	131	62	75	232	369
Unearned revenues, refunds, and other, less current portion	110	804	9,000	9,914	116	852	9,000	9,968
Certificates of participation, less current portion	—	12,593	—	12,593	—	13,026	—	13,026
Total long-term liabilities	16,956	227,759	11,548	256,263	43,623	112,835	15,344	171,802
Total liabilities	34,336	318,720	40,169	393,225	59,496	279,289	33,079	371,864
Deferred inflows of resources:								
Related to pensions	34,477	42,138	5,414	82,029	988	1,207	1,093	3,288
Other post-employment benefits	2,734	3,342	1,594	7,670	2,085	2,548	1,913	6,546
Total deferred inflows of resources	37,211	45,480	7,008	89,699	3,073	3,755	3,006	9,834
Net position:								
Net investment in capital assets	201,007	352,162	—	553,169	177,481	323,066	—	500,547
Restricted for debt service	—	140	—	140	—	99	—	99
Unrestricted	48,173	141,876	84,320	274,369	47,180	149,295	87,077	283,552
Total net position	$ 249,180	494,178	84,320	827,678	224,661	472,460	87,077	784,198

*Restated per Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*.

See accompanying notes to financial statements.

HETCH HETCHY WATER AND POWER AND CLEANPOWERSF
Statements of Revenues, Expenses, and Changes in Net Position
Years ended June 30, 2022 and 2021

(In thousands)

	Hetchy Water	Hetchy Power	CleanPowerSF	2022 Total	Hetchy Water	Hetchy Power	CleanPowerSF	Restated 2021 Total*
Operating revenues:								
Charges for services	$ 49,200	173,105	257,893	480,198	46,979	136,247	207,698	390,924
Rents and concessions	112	137	—	249	111	136	—	247
Total operating revenues	49,312	173,242	257,893	480,447	47,090	136,383	207,698	391,171
Operating expenses:								
Personnel services	15,636	34,646	4,167	54,449	19,871	40,756	7,641	68,268
Contractual services	2,854	9,604	6,821	19,279	2,398	8,705	6,678	17,781
Transmission/distribution and other power costs	—	51,521	192	51,713	—	36,711	1,012	37,723
Purchased electricity	—	6,731	239,546	246,277	—	5,982	189,977	195,959
Materials and supplies	1,362	2,270	33	3,665	1,272	1,990	26	3,288
Depreciation and amortization	6,305	17,628	345	24,278	6,028	15,650	345	22,023
Services provided by other departments	3,129	6,253	3,621	13,003	2,517	6,137	3,928	12,582
General and administrative and other	23,017	27,694	7,393	58,104	18,433	29,709	3,104	51,246
Total operating expenses	52,303	156,347	262,118	470,768	50,519	145,640	212,711	408,870
Operating income (loss)	(2,991)	16,895	(4,225)	9,679	(3,429)	(9,257)	(5,013)	(17,699)
Non-operating revenues (expenses):								
Federal and state grants	450	4,924	2,424	7,798	1,349	1,483	—	2,832
Interest and investment (loss) income	(2,932)	(4,001)	(1,286)	(8,219)	(232)	24	51	(157)
Interest expenses	(1)	(5,624)	(5)	(5,630)	(2)	(1,972)	(26)	(2,000)
Amortization of premium, discount, and issuance costs	—	(192)	—	(192)	—	219	—	219
Net gain from sale of assets	7	9	—	16	—	—	—	—
Other non-operating revenues	22	10,830	335	11,187	3	17,790	927	18,720
Other non-operating expenses	(37)	(591)	—	(628)	(63)	(902)	—	(965)
Net non-operating revenues (loss)	(2,491)	5,355	1,468	4,332	1,055	16,642	952	18,649
Change in net position before transfers	(5,482)	22,250	(2,757)	14,011	(2,374)	7,385	(4,061)	950
Transfers from the City and County of San Francisco	30,001	—	—	30,001	16,000	—	—	16,000
Transfers to the City and County of San Francisco	—	(532)	—	(532)	—	(532)	—	(532)
Net transfers	30,001	(532)	—	29,469	16,000	(532)	—	15,468
Change in net position	24,519	21,718	(2,757)	43,480	13,626	6,853	(4,061)	16,418
Net position at beginning of year	224,661	472,460	87,077	784,198	211,035	465,607	91,138	767,780
Net position at end of year	$ 249,180	494,178	84,320	827,678	224,661	472,460	87,077	784,198

*Restated per Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*.

See accompanying notes to financial statements.

HETCH HETCHY WATER AND POWER AND CLEANPOWERSF
Statements of Cash Flows
Years ended June 30, 2022 and 2021

(In thousands)

	Hetchy Water	Hetchy Power	CleanPowerSF	2022 Total	Hetchy Water	Hetchy Power	CleanPowerSF	Restated 2021 Total*
Cash flows from operating activities:								
Cash received from customers, including cash deposits	$ 49,161	183,203	237,947	470,311	46,176	120,981	223,325	390,482
Cash received from tenants for rent	114	139	—	253	116	142	—	258
Cash received from miscellaneous revenues	22	7,237	335	7,594	3	13,427	927	14,357
Cash paid to employees for services	(20,430)	(40,448)	(5,828)	(66,706)	(19,597)	(40,236)	(5,344)	(65,177)
Cash paid to suppliers for goods and services	(25,726)	(107,969)	(268,958)	(402,653)	(20,950)	(81,722)	(211,735)	(314,407)
Cash paid for judgments and claims	(276)	(2,163)	(1,529)	(3,968)	(563)	(4,361)	(153)	(5,077)
Net cash provided by (used in) operating activities	2,865	39,999	(38,033)	4,831	5,185	8,231	7,020	20,436
Cash flows from non-capital and related financing activities:								
Cash received from grants	517	4,893	5,100	10,510	3,345	2,860	—	6,205
Cash received for license fees	—	3,333	—	3,333	—	3,151	—	3,151
Cash received from settlements	—	—	—	—	—	797	—	797
Cash paid for rebates, program incentives, and other	(37)	(591)	—	(628)	(63)	(902)	—	(965)
Cash paid for Hetchy Power loan interest	—	—	—	—	—	—	(235)	(235)
Transfers from the City and County of San Francisco	30,001	—	—	30,001	16,000	—	—	16,000
Transfers to the City and County of San Francisco	—	(532)	—	(532)	—	(532)	—	(532)
Net cash provided by non-capital financing activities	30,481	7,103	5,100	42,684	19,282	5,374	(235)	24,421
Cash flows from capital and related financing activities:								
Acquisition and construction of capital assets	(32,558)	(108,062)	—	(140,620)	(16,981)	(62,461)	—	(79,442)
Proceeds from sale of capital assets	7	9	—	16	—	—	—	—
Lease payments	(17)	(22)	(351)	(390)	(17)	(21)	(350)	(388)
Proceeds from bond issuance, net of premium, discount, refunding loss, and issuance costs	—	151,022	—	151,022	—	—	—	—
Principal paid on long-term debt	—	(2,333)	—	(2,333)	—	(3,674)	—	(3,674)
Proceeds from commercial paper borrowings		63,058		63,058	—	51,136	—	51,136
Principal paid on commercial paper	—	(137,710)	—	(137,710)	—	—	—	—
Interest paid on long-term debt	—	(4,695)	—	(4,695)	—	(2,970)	—	(2,970)
Interest paid on commercial paper borrowings	—	(59)	—	(59)	—	(132)	—	(132)
Issuance costs paid on long-term debt	—	(1,118)	—	(1,118)	—	—	—	—
Federal interest income subsidy	—	397	—	397	—	511	—	511
Net cash used in capital and related financing activities	(32,568)	(39,513)	(351)	(72,432)	(16,998)	(17,611)	(350)	(34,959)
Cash flows from investing activities:								
Interest Income	329	1,003	407	1,739	739	1,986	802	3,527
Proceeds from sale of investments outside City Treasury	—	7,118	—	7,118	—	3,968	—	3,968
Purchases of investments outside City Treasury	—	(7,118)	—	(7,118)	—	(3,968)	—	(3,968)
Net cash provided by investing activities	329	1,003	407	1,739	739	1,986	802	3,527
Increase (decrease) in cash and cash equivalents	1,107	8,592	(32,877)	(23,178)	8,208	(2,020)	7,237	13,425
Cash and cash equivalents:								
Beginning of year	96,276	200,265	90,764	387,305	88,068	202,285	83,527	373,880
End of year	$ 97,383	208,857	57,887	364,127	96,276	200,265	90,764	387,305
Reconciliation of cash and cash equivalents to the statements of net position:								
Cash and investments with City Treasury:								
Unrestricted	$ 94,190	189,641	56,234	340,065	89,373	190,719	90,838	370,930
Restricted	—	—	—	—	6,990	5,241	—	12,231
Add: Unrealized loss (gain) on investments with City Treasury	3,192	5,148	1,653	9,993	(88)	(149)	(74)	(311)
Cash and investments outside City Treasury:								
Unrestricted	1	16	—	17	1	611	—	612
Restricted	—	14,052	—	14,052	—	3,843	—	3,843
Cash and cash equivalents at end of year on statements of cash flows	$ 97,383	208,857	57,887	364,127	96,276	200,265	90,764	387,305

*Restated per Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*.

HETCH HETCHY WATER AND POWER AND CLEANPOWERSF

Statements of Cash Flows

Years ended June 30, 2022 and 2021

(In thousands)

	Hetchy Water	Hetchy Power	CleanPowerSF	2022 Total	Hetchy Water	Hetchy Power	CleanPowerSF	Restated 2021 Total*
Reconciliation of operating income (loss) to net cash provided by (used in) operating activities:								
Operating income (loss)	$ (2,991)	16,895	(4,225)	9,679	(3,429)	(9,257)	(5,013)	(17,699)
Adjustments to reconcile operating income (loss) to net cash provided by (used in) operating activities:								
Depreciation and amortization	6,305	17,628	345	24,278	6,028	15,650	345	22,023
Miscellaneous revenues	22	7,237	335	7,594	3	13,427	927	14,357
Provision for uncollectible accounts	—	39	845	884	—	667	3,675	4,342
Write-off of capital assets	7	648	—	655	51	8,333	—	8,384
Changes in operating assets and liabilities:								
Receivables:								
Charges for services	(33)	8,796	(21,283)	(12,520)	(413)	(16,724)	2,772	(14,365)
Prepaid charges, advances, and other	192	(344)	(20,574)	(20,726)	114	(12,172)	576	(11,482)
Due from other City departments	—	531	—	531	104	2,437	—	2,541
Inventory	(8)	142	—	134	(4)	(211)	—	(215)
Accounts payable	4,192	(6,241)	7,667	5,618	3,304	8,724	(6,047)	5,981
Accrued payroll	56	88	82	226	154	298	91	543
Other post-employment benefits obligations	898	1,099	(1,320)	677	(2,409)	(2,945)	1,242	(4,112)
Pension obligations	(5,965)	(7,291)	(569)	(13,825)	1,972	2,411	855	5,238
Accrued vacation and sick leave	(16)	(20)	146	110	539	660	109	1,308
Accrued workers' compensation	108	132	—	240	(67)	(82)	—	(149)
Damage claims liability	102	(85)	26	43	(33)	(1,114)	(100)	(1,247)
Due to other City departments	—	11	—	11	(240)	(231)	(1,592)	(2,063)
Unearned revenues, refunds, and other liabilities	(4)	734	492	1,222	(489)	(1,640)	9,180	7,051
Total adjustments	5,856	23,104	(33,808)	(4,848)	8,614	17,488	12,033	38,135
Net cash provided by (used in) operating activities	$ 2,865	39,999	(38,033)	4,831	5,185	8,231	7,020	20,436
Noncash transactions:								
Accrued capital asset costs	$ 6,324	19,059	—	25,383	9,057	15,393	—	24,450
Receivables from Wastewater	—	629	—	629	—	739	—	739
Unrealized loss (gain) on investments	3,192	5,148	1,653	9,993	(88)	(149)	(74)	(311)

*Restated per Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*.

See accompanying notes to financial statements.

(1) Description of Reporting Entity

San Francisco Hetch Hetchy Water and Power (Hetch Hetchy or the Enterprise) was established as a result of the Raker Act of 1913, which granted water and power resources rights-of-way on the Tuolumne River in Yosemite National Park and Stanislaus National Forest to the City and County of San Francisco (the City). CleanPowerSF, launched in May 2016, provides green electricity from renewable sources to residential and commercial customers in San Francisco and was reported as part of Hetch Hetchy starting fiscal year 2016. Hetch Hetchy is a stand-alone enterprise comprised of three funds, Hetchy Power (the Power Enterprise), CleanPowerSF and Hetchy Water, the portion of the Water Enterprise's operations, specifically the upcountry water supply and transmission service. Hetch Hetchy accounts for the activities of Hetch Hetchy Water and Power and is engaged in the collection and conveyance of approximately 85% of the regional system's water supply and in the generation and transmission of electricity from that resource, as well as the City Power services including energy efficiency and renewable.

Approximately 69% of the electricity generated by Hetchy Power is used to provide electric service to the City's municipal customers (including the San Francisco Municipal Transportation Agency, Recreation and Parks Department, the Port of San Francisco, the San Francisco International Airport and its tenants, Zuckerberg San Francisco General Hospital and Trauma Center, streetlights, Moscone Convention Center, and the Water and Wastewater Enterprises). The majority of the remaining 31% balance of electricity is sold to CleanPowerSF and the wholesale electric market. As a result of the 1913 Raker Act, energy produced above the City's municipal load is sold first to the Districts to cover their agricultural pumping and municipal load needs and any remaining energy is either sold to other municipalities and/or government agencies (not for resale) or sold into the CAISO. Hetch Hetchy operation is an integrated system of reservoirs, hydroelectric power plants, aqueducts, pipelines, and transmission lines.

Hetch Hetchy also purchases wholesale electric power from various energy providers that are used in conjunction with owned hydro resources to meet the power requirements of its customers. Operations and business decisions can be greatly influenced by market conditions, state and federal power matters before the California Public Utilities Commission (CPUC), the CAISO, and the Federal Energy Regulatory Commission (FERC). Therefore, Hetch Hetchy serves as the City's representative at CPUC, CAISO, and FERC forums and continues to monitor regulatory proceedings.

Until August 1, 2008, the San Francisco Public Utilities Commission (SFPUC) consisted of five members, all appointed by the Mayor. Proposition E, a City and County of San Francisco Charter Section 4.112 amendment approved by the voters in the June 3, 2008 election, terminated the terms of all five existing members of the SFPUC, 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 SFPUC, 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 SFPUC 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 Hetch Hetchy, Wastewater, and the Water Enterprises are included in the Annual Comprehensive Financial Report of the City as enterprise funds. These financial statements are intended to present only the financial position, and the changes in financial position and cash flows of only that portion of the City that is attributable to the transactions of Hetch Hetchy. They do not purport to, and do not, present fairly the financial position of the City as of June 30, 2022 and 2021, and 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).

(2) Significant Accounting Policies

(a) *Basis of Accounting and Measurement Focus*

The accounts of Hetch Hetchy are organized on the basis of proprietary fund types and are included as enterprise funds of the City. The activities of Hetch Hetchy and each fund are accounted for with a separate set of self-balancing accounts that comprise Hetch Hetchy's and each fund'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 Hetch Hetchy 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 operations are included on the Statements of Net Position, revenues are recognized when earned, and expenses are recognized when liabilities are incurred. Operating revenues are defined as charges to customers and rental income.

Hetch Hetchy applies all applicable Governmental Accounting Standards Board (GASB) pronouncements.

(b) *Cash and Cash Equivalents*

Hetch Hetchy considers its pooled deposits and investments held with the City Treasury to be demand deposits and, therefore, cash and cash equivalents for financial reporting. The City Treasury also holds non-pooled cash and investments for the Enterprise. Non-pooled restricted deposits and restricted deposits and investments held outside the City Treasury with original maturities of three months or less are considered to be cash equivalents.

(c) *Investments*

Money market funds are carried at cost, which approximates fair value. All other investments are stated at fair value based upon quoted market prices. Changes in fair value are recognized as investment gains or losses and are recorded as a component of non-operating revenues.

(d) *Inventory*

Inventory consists primarily of construction materials and maintenance supplies and is valued at average cost. Inventory is expensed as it is consumed.

(e) *Capital Assets*

Capital assets are defined as assets with an initial individual cost of more than $5 and an estimated useful life in excess of one year. Capital assets with an original acquisition date prior to July 1, 1977 are recorded in the financial statements at estimated cost, as determined by an independent professional appraisal, or at cost, if known. All subsequent acquisitions have been recorded at cost. All donated capital assets are valued at estimated fair value at the time of donation. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the related assets, which range from 1 to 100 years for equipment and 1 to 200 years for 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, Hetch Hetchy is required to capitalize intangible assets with a useful life extending beyond one reporting period. Hetch Hetchy has established a capitalization threshold of $100. GASB Statement No. 51 also requires amortization of intangible assets over the benefit period, except for certain assets having an indefinite useful life. Assets with an indefinite useful life generally provide a benefit that is not constrained by legal or contractual limitations or any other external factor and, therefore, are not amortized (see Note 4).

(g) *Construction Work in Progress*

The cost of acquisition and construction of major plant and equipment is recorded as construction work in progress. Costs of construction projects that are discontinued are recorded as expenses in the year in which the decision is made to discontinue such projects.

(h) *Capitalization of Interest*

A portion of the interest cost incurred on capital projects is capitalized on assets that require a period of time for construction or to otherwise prepare them for their intended use. Such amounts are amortized over the useful lives of the assets (see Note 4). Per the implementation of GASB Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period*, no interest was capitalized to capital assets in fiscal year 2022.

(i) *Bond Discount, Premium, and Issuance Costs*

Bond issuance costs related to prepaid insurance costs are capitalized and amortized using the effective interest method. Other bond issuance costs are expensed when incurred. Original issue bond discount or premium are offset against the related debt and are also amortized using the effective interest method.

(Dollars in thousands, unless otherwise stated)

(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 13(b)).

(l) *General Liability*

The Enterprise is self-insured for general liability and uninsurable property damage claims. Commercially uninsurable property includes assets that are underground or provide transmission and distribution. Maintained commercial coverage does not cover claims attributed to loss from earthquake, contamination, pollution remediation efforts, and other specific naturally occurring contaminants such as mold. The liability represents an estimate of the cost of all outstanding claims, including adverse loss development and estimated incurred but not reported claims (see Note 13(a)).

(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 of the Clean Renewable Energy Bonds (CREBs), the Qualified Energy Conservation Bonds (QECBs), and the New Clean Renewable Energy Bonds (NCREBs) stipulate that the first payment of excess investment earnings, if any, is required to be rebated to the federal government, no later than 60 days after the end of the fifth bond year of the agreement. Hetch Hetchy did not have any arbitrage liability as of June 30, 2022 and 2021.

(n) *Income Taxes*

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

(o) *Revenue Recognition*

Water and power revenues are based on water and power consumption and billing rates. Generally, customers are billed monthly. Revenues earned but unbilled are accrued as charges for services receivables on the Statements of Net Position. The unbilled amounts for the fiscal years ending June 30, 2022 and 2021 are as follows:

	Hetchy Water	Hetchy Power	CleanPowerSF	Total
2022	$ —	3,806	21,878	25,684
2021	—	13,823	12,600	26,423

(p) *Use of Estimates*

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

(q) *Eliminations*

Eliminations for internal activities between the Hetchy Power and CleanPowerSF are made in the Statements of Net Position. There were no activities requiring eliminations for fiscal years ended June 30, 2022 and 2021.

(r) *Accounting and Financial Reporting for Pollution Remediation Obligations*

According to GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations*, a government would have to estimate its expected outlays for pollution remediation if it knows a site is polluted and any of the following recognition triggers occur:

- Pollution poses an imminent danger to the public or environment and a government has little or no discretion to avoid fixing the problem;
- A government has violated a pollution prevention-related permit or license;
- A regulator has identified (or evidence indicates it will identify) a government as responsible (or potentially responsible) for cleaning up pollution, or for paying all or some of the cost of the cleanup;
- A government is named (or evidence indicates that it will be named) in a lawsuit to compel it to address the pollution; or
- A government begins or legally obligates itself to begin cleanup or post-cleanup activities (limited to amounts the government is legally required to complete).

As a part of ongoing operations, situations may occur requiring the removal of pollution or other hazardous material. These situations typically arise in the process of acquiring an asset, preparing an asset for its intended use, or during the Design Phase of projects under review by the project managers. Other times, pollution may arise during the implementation and construction of a major or minor capital project. Examples of pollution may include, but are not limited to, asbestos or lead paint removal; leaking of sewage in underground pipes or neighboring areas; chemical spills; removal and disposal of known toxic waste; harmful biological and chemical pollution of water; or contamination of surrounding soils by underground storage tanks (see Note 14(d)).

(s) *Leases*

Leases are defined as a contract that conveys control of the right to use another entity's underlying asset for a specified period. Hetch Hetchy is a lessee for various noncancellable leases of building and radio tower.

Short-term Leases – For leases with a maximum possible term of 12 months or less at commencement, the Enterprise recognizes lease revenue if the Enterprise is the lessor of the lease or lease expense if the Enterprise is the lessee of the lease, based on the provisions of the lease contract. Liabilities are only recognized if payments are received in advance, and receivables are only recognized if payments are received subsequent to the reporting period.

Leases other than Short-term – For all other leases (i.e. those that are not short-term), Hetch Hetchy recognizes a lease liability and intangible right-to-use lease asset as lessee leases, or lease receivable and deferred inflow of resources as lessor leases.

Measurement of Lease Amounts (Lessee) – Hetch Hetchy's lease liability is recorded at the present value of future minimum lease payments as of the date of inception. Subsequently, the lease liability is reduced by the principal portion of lease payments made. The lease asset is initially measured as the initial amount of the lease liability, less lease payments made at or before the lease commencement date, plus any initial direct costs ancillary to placing the underlying asset into service, less any lease incentives received at or before the lease commencement date. Subsequently, the lease asset is amortized into depreciation and amortization expense on a straight-line basis over the shorter of the lease term or the useful life of the underlying asset. If Hetch Hetchy is reasonably certain of exercising a purchase option contained in a lease, the lease asset will be amortized over the useful life of the underlying asset.

Measurement of Lease Amounts (Lessor) – Hetch Hetchy's lease receivable is measured at the present value of payments expected to be received during the lease term, reduced by any provision of estimated uncollectible amounts. Subsequently, the lease receivable is reduced by the principal portion of lease payments collected. The deferred inflow of resources is initially measured as the initial amount of the lease receivable, less any lease incentives paid to, or on behalf of, the lessee at or before the commencement of the lease term, plus lease payments received from the lease at or before the commencement of the lease term that related to future periods. Subsequently, the deferred inflow of resources as lease revenue on a straight-line basis over the lease term.

Key Estimates and Judgements – Key estimates and judgements include how Hetch Hetchy determines (a) the discount rate it uses to calculate the present value of the expected lease payments, (b) lease terms, (c) lease payments, and (d) materiality threshold for equipment.

- Hetch Hetchy generally uses its estimated incremental borrowing rate as the discount rate for leases unless the rate implicit in the lease. The City's incremental borrowing rate (IBR) is established using the average of Municipal Market Data (MMD) AAA benchmark interest rate index by maturity date (year 1 to 30+), plus the average credit spread based on City's Aa/AA, COP, Tax-exempt to generate the yield curve and discount rate table. The City's incremental borrowing rate for leases is based on the rate of interest it would need to pay if it issued general obligation bonds to borrow an amount equal to the lease payments under similar terms at the commencement or remeasurement date.

- The lease term includes the noncancellable period of the lease, plus any additional periods covered by either lessee or lessor unilateral option to (1) extend for which it is reasonably certain to be exercised, or (2) terminate for which it is reasonably certain not to be exercised. Periods in which both the lessee and lessor have an option to terminate (or if both parties have to agree to extend) are excluded from the lease term.

- Payments are evaluated by Hetch Hetchy to determine if they should be included in the measurement of the lease receivables or lease liabilities, including those payments that require a determination of whether they are reasonably certain of being made, such as residual value guarantees, purchase options, payments for termination penalties, and other payments.

- Equipment and other leases have a capitalization threshold of $100. 70% below market rent and/or ground leases are determined to be below market rent (BMR), excluded from lease capitalization.

(Dollars in thousands, unless otherwise stated)

Remeasurement of Lease – Hetch Hetchy monitors changes in circumstances that may require remeasurement of a lease. When certain changes occur that are expected to significantly affect the amount of the lease receivable or lease liability, the receivable or liability is remeasured and a corresponding adjustment is made to the deferred inflow of resources or lease asset, respectively.

Presentation in Statements of Net Position – Lease assets are reported with non-current assets, lease liabilities are reported with current and long-term liabilities in the Statements of Net Position.

(t) *Other Post-employment Benefits (OPEB)*

As prescribed under GASB Statement No. 75, *Accounting and Financial Reporting for Post-employment Benefits Other than Pensions*, net OPEB liability, deferred outflows/inflows of resources related to OPEB, and OPEB expense are actuarially determined on a citywide basis. Net OPEB liability is measured as the portion of the present value of projected benefit payments to be provided to current active and inactive employees attributed to those employees' past service, less the amount of the Retiree Healthcare Trust Fund investments measured at fair value (see Note 11(b)).

(u) *New Accounting Standards Adopted in Fiscal Year 2022*

1) In June 2017, the GASB issued Statement No. 87, *Leases*. GASB Statement No. 87 establishes a single model for lease accounting and requires reporting of certain lease liabilities that currently are not reported. The new standard is effective for periods beginning after June 15, 2021. The Enterprise adopted the provisions of Statement No. 87 in fiscal year 2022 (see Note 9). As a result of adoption, the cumulative effect of applying this Statement is recorded as beginning balances for the following accounts as of July 1, 2020:

		Hetchy Water	Hetchy Power	CleanPowerSF	Total 2021
Beginning balance:					
Right-to-use Assets	$	93	113	920	1,126
Lease Liability - Current		(29)	(35)	(371)	(435)
Lease Liability - Long Term		(64)	(78)	(549)	(691)
Activities:					
Accumulated Amortization		(19)	(23)	(345)	(387)
Accrued Interest Payable - Current		—	—	(1)	(1)
Lease Liability - Current		13	16	26	55
Lease Liability - Long Term		2	3	317	322
Expenses		4	4	3	11
Total:					
Right-to-use Assets		93	113	920	1,126
Accumulated Amortization		(19)	(23)	(345)	(387)
Accrued Interest Payable - Current		—	—	(1)	(1)
Lease Liability - Current		(16)	(19)	(345)	(380)
Lease Liability - Long Term		(62)	(75)	(232)	(369)
Expenses		4	4	3	11
Change to net position	$	4	4	3	11

2) In June 2018, the GASB issued Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*. GASB Statement No. 89 establishes accounting requirements for interest cost incurred before the end of construction period. The new

standard is effective for periods beginning after December 15, 2020. The Enterprise adopted the provisions of Statement No. 89 in fiscal year 2022.

3) In January 2020, the GASB issued Statement No. 92, *Omnibus 2020*. GASB Statement No. 92 addresses practice issues that have been identified during implementation and application of certain GASB Statements. The new standard is effective for periods beginning after June 15, 2021. The Enterprise adopted the provisions of Statement No. 92 in fiscal year 2022, which did not have significant effect on its financial statements.

4) In March 2020, the GASB issued Statement No. 93, *Replacement of Interbank Offered Rates (IBOR)*. The objective of this Statement is to address those and other accounting and financial reporting implications that result from the replacement of an IBOR. The new standard is effective for periods beginning after June 15, 2021. The Enterprise adopted the provisions of Statement No. 93 in fiscal year 2022, which did not have a significant effect on its financial statements.

(v) ***GASB Statements Implemented in Fiscal Year 2021***

1) In January 2017, the GASB issued Statement No. 84, *Fiduciary Activities*. GASB Statement No. 84 establishes criteria for state and local governments to identify fiduciary activities and how those activities should be reported. The new standard is effective for periods beginning after December 15, 2019. The Enterprise adopted the provisions of this Statement in fiscal year 2021, which did not have a significant effect on its financial statements.

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 adopted the provisions of this Statement in fiscal year 2021, which did not have a significant effect on its financial statements.

3) 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 adopted early the provisions of this Statement in fiscal year 2021, which did not have a significant effect on its financial statements.

4) In October 2021, the GASB issued Statement No. 98, *The Annual Comprehensive Financial Report*. GASB Statement No. 98 updates existing accounting standards by changing the name of the Comprehensive Annual Financial Report to the Annual Comprehensive Financial Report. The new standard is effective for periods ending after December 15, 2021. The Enterprise adopted the provisions of this Statement in fiscal year 2021, which did not have a significant effect on its financial statements.

(w) ***Future Implementation of New Accounting Standards***

1) In May 2019, the GASB issued Statement No. 91, *Conduit Debt Obligations*. GASB Statement No. 91 enhances the compatibility and consistency of conduit debt obligation

reporting and reporting of related transactions by State and local government issuers. The new standard is effective for periods beginning after December 15, 2021. The Enterprise will implement the provisions of Statement No. 91 in fiscal year 2023.

2) In March 2020, the GASB Issued Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*. The primary objective of this Statement is to improve financial reporting by addressing issues related to public-private and public-public partnership arrangements (PPPs). The 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.

3) In May 2020, the GASB issued Statement No. 96, *Subscription-Based Information Technology Arrangements*. This Statement provides guidance on the accounting and financial reporting for subscription-based information technology arrangements (SBITAs) by a government. The new standard is effective for periods beginning after June 15, 2022. The Enterprise will implement the provisions of Statement No. 96 in fiscal year 2023.

4) In April 2022, the GASB issued Statement No. 99, *Omnibus 2022*. This Statement enhances comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing (1) practice issues that have been identified during implementation and application of certain GASB Statements and (2) accounting and financial reporting for financial guarantees. The new standard is effective for periods beginning after June 15, 2023. The Enterprise will implement the provisions of Statement No. 99 in fiscal year 2024.

5) In June 2022, the GASB issued Statement No. 100, *Accounting Changes and Error Corrections*. This Statement enhances accounting and financial reporting requirements for accounting changes and error corrections to provide more understandable, reliable, relevant, consistent, and comparable information for making decisions or assessing accountability. The new standard is effective for periods beginning after June 15, 2023. The Enterprise will implement the provisions of Statement No. 100 in fiscal year 2024.

6) In June 2022, the GASB issued Statement No. 101, *Compensated Absences*. This Statement is to better meet the information needs of financial statement users by updating the recognition and measurement guidance for compensated absences. The new standard is effective for periods beginning after December 15, 2023. The Enterprise will implement the provisions of Statement No. 101 in fiscal year 2025.

(x) *Reclassifications*

The Hetch Hetchy Enterprise has reclassified certain amounts relating to the prior period to conform to its current period presentation. These reclassifications had no effect on previously reported changes in net position.

(3) Cash, Cash Equivalents, and Investments

Hetch Hetchy'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, which 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 Hetch Hetchy's average daily cash balances. The primary objectives of Hetch Hetchy's investment policy are consistent with the City's policy.

(Dollars in thousands, unless otherwise stated)

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 balances as of June 30, 2022 and 2021 were $14,052 and $3,843, 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. The balance as of June 30, 2022 included 2021 Series AB bond proceeds of $10,346, 2015 Series A bond proceeds of $2,194, certificates of participation proceeds of $981, 2015 Series B bond proceeds of $516, $17 held at a commercial bank in a non-interest-bearing checking account that is covered by depository insurance, and commercial paper of $15. The balance as of June 30, 2021 included 2015 Series A bond proceeds of $2,193, certificates of participation proceeds of $1,115, $612 held at a commercial bank in a non-interest-bearing checking account that is covered by depository insurance, 2015 Series B bond proceeds of $516, and commercial paper of $19.

Hetch Hetchy did not have any unrealized gain and loss in the restricted cash and investments outside City Treasury as of June 30, 2022 and 2021.

Hetch Hetchy 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.

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 following is a summary of the Hetch Hetchy restricted and unrestricted cash and investments outside City Treasury and the fair value hierarchy as of June 30, 2022 and 2021.

Hetch Hetchy Cash and Investments outside City Treasury

					Fair Value Measurements Using		
		June 30, 2022					
Investments	Credit Ratings (S&P/Moody's)	Maturities	Fair Value	Investments exempt from fair value	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Unobservable Inputs (Level 3)
Hetchy Water							
Cash and Cash Equivalents	N/A		$ 1	1		–	–
Total Cash and Investments outside City Treasury			$ 1	1	–	–	–
Hetchy Power							
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	$ 14,037	14,037	–	–	–
Cash and Cash Equivalents	N/A		15	15	–	–	–
Total Restricted Cash and Investments outside City Treasury			$ 14,052	14,052	–	–	–
Cash and Cash Equivalents	N/A		$ 16	16	–	–	–
Total Cash and Investments outside City Treasury			$ 16	16	–	–	–

(Dollars in thousands, unless otherwise stated)

Hetch Hetchy Cash and Investments outside City Treasury

Investments	Credit Ratings (S&P/Moody's)	June 30, 2021 Maturities	June 30, 2021 Fair Value	Investments exempt from fair value	Fair Value Measurements Using: Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Unobservable Inputs (Level 3)
Hetchy Water							
Cash and Cash Equivalents	N/A		$ 1	1	–	–	–
Total Cash and Cash Equivalents outside City Treasury			$ 1	1	–	–	–
Hetchy Power							
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	$ 3,824	3,824	–	–	–
Cash and Cash Equivalents	N/A		19	19	–	–	–
Total Restricted Cash and Investments outside City Treasury			$ 3,843	3,843	–	–	–
Cash and Cash Equivalents	N/A		$ 611	611	–	–	–
Total Cash and Cash Equivalents outside City Treasury			$ 611	611	–	–	–

For fiscal year 2022, proceeds from 2021 Series AB and 2015 Series AB bonds held as restricted cash and investments outside City Treasury in the amount of $13,056 were invested in U.S. Treasury Money Market with maturity date less than 90 days. For fiscal year 2021, proceeds from 2015 Series A and B bonds held as restricted cash and investments outside City Treasury in the amount of $2,709 were invested in U.S. Treasury Money Market with maturity date less than 90 days. The credit ratings of the U.S. Treasury Money Market as of June 30, 2022 and 2021 were "AAAm" by S&P and "Aaa-mf" by Moody's.

Hetch Hetchy's cash, cash equivalents, and investments are shown on the accompanying Statements of Net Position as of June 30, 2022 and 2021:

	Hetchy Water	Hetchy Power	CleanPowerSF	Total 2022
Current assets:				
Cash and investments with City Treasury	$ 94,190	189,641	56,234	340,065
Cash and investments outside City Treasury	1	16	—	17
Restricted cash and investments outside City Treasury	—	5,228	—	5,228
Non-current assets:				
Restricted cash and investments outside City Treasury	—	8,824	—	8,824
Total cash, cash equivalents, and investments	$ 94,191	203,709	56,234	354,134

	Hetchy Water	Hetchy Power	CleanPowerSF	Total 2021
Current assets:				
Cash and investments with City Treasury	$ 89,373	190,719	90,838	370,930
Cash and investments outside City Treasury	1	611	—	612
Restricted cash and investments outside City Treasury	—	153	—	153
Non-current assets:				
Restricted cash and investments with City Treasury	6,990	5,241	—	12,231
Restricted cash and investments outside City Treasury	—	3,690	—	3,690
Total cash, cash equivalents, and investments	$ 96,364	200,414	90,838	387,616

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

Fiscal years ended June 30	Investment maturities (in months): Under 1	1 to less than 6	6 to less than 12	12 to 60
2022	20.2%	14.0%	14.9%	50.9%
2021	14.5%	27.6%	29.7%	28.2%

(Dollars in thousands, unless otherwise stated)

(4) Capital Assets

Capital assets with a useful life of 50 years or greater include buildings and structures, reservoirs, dams, power stations, certain water mains and pipelines, transmission and distribution systems, tunnels, and bridges.

a) Hetch Hetchy capital assets as of June 30, 2022 and 2021 consist of the following:

	2021	Increases	Decreases	2022
Capital assets not being depreciated and amortized:				
Land and rights-of-way	$ 5,181	–	–	5,181
Intangible assets	1,437	–	–	1,437
Construction work in progress	206,508	140,513	(30,491) *	316,530
Total capital assets not being depreciated and amortized	213,126	140,513	(30,491)	323,148
Capital assets being depreciated and amortized:				
Facilities and improvements	782,963	26,982	–	809,945
Intangible assets	45,715	–	–	45,715
Machinery and equipment	144,323	4,005	(87)	148,241
Total capital assets being depreciated and amortized	973,001	30,987 *	(87)	1,003,901
Less accumulated depreciation and amortization for:				
Facilities and improvements	(405,446)	(18,285)	–	(423,731)
Intangible assets	(22,220)	(460)	–	(22,680)
Machinery and equipment	(88,924)	(5,158)	87	(93,995)
Total accumulated depreciation and amortization	(516,590)	(23,903)	87	(540,406)
Total capital assets being depreciated and amortized, net	456,411	7,084	–	463,495
Total capital assets, net	$ 669,537	147,597	(30,491)	786,643

* Decrease in construction in progress included $655 in capital project write-offs, mainly related to Hope San Francisco Project in Sunnydale and Potrero. The remaining difference of $1,151 was offset by direct additions to machinery and equipment.

	2020	Increases	Decreases	2021
Capital assets not being depreciated and amortized:				
Land and rights-of-way	$ 5,181	–	–	5,181
Intangible assets	1,437	–	–	1,437
Construction work in progress	189,077	92,645	(75,214) *	206,508
Total capital assets not being depreciated and amortized	195,695	92,645	(75,214)	213,126
Capital assets being depreciated and amortized:				
Facilities and improvements	723,182	59,781	–	782,963
Intangible assets	45,715	–	–	45,715
Machinery and equipment	136,573	7,750	–	144,323
Total capital assets being depreciated and amortized	905,470	67,531 *	–	973,001
Less accumulated depreciation and amortization for:				
Facilities and improvements	(389,294)	(16,152)	–	(405,446)
Intangible assets	(21,759)	(461)	–	(22,220)
Machinery and equipment	(83,901)	(5,023)	–	(88,924)
Total accumulated depreciation and amortization	(494,954)	(21,636)	–	(516,590)
Total capital assets being depreciated and amortized, net	410,516	45,895	–	456,411
Total capital assets, net	$ 606,211	138,540	(75,214)	669,537

* Decrease in construction work in progress is greater than increase in capital assets being depreciated explained by $8,384 in capital project write-offs, mainly related to Bay Corridor Project, Transmission and Distribution System Project, and Treasure Island Capital Improvement Project. The remaining difference of $701 was offset by direct additions to machinery and equipment.

(Dollars in thousands, unless otherwise stated)

b) Hetchy Water capital assets as of June 30, 2022 and 2021 consist of the following:

		2021	Increases	Decreases		2022
Capital assets not being depreciated and amortized:						
Land and rights-of-way	$	3,232	—	—		3,232
Intangible assets		6	—	—		6
Construction work in progress		35,333	29,654	(10,849)	*	54,138
Total capital assets not being depreciated and amortized		38,571	29,654	(10,849)		57,376
Capital assets being depreciated and amortized:						
Facilities and improvements		295,968	10,148	—		306,116
Intangible assets		20,522	—	—		20,522
Machinery and equipment		27,518	865	—		28,383
Total capital assets being depreciated and amortized		344,008	11,013 *	—		355,021
Less accumulated depreciation and amortization for:						
Facilities and improvements		(174,695)	(5,144)	—		(179,839)
Intangible assets		(9,947)	(207)	—		(10,154)
Machinery and equipment		(20,456)	(941)	—		(21,397)
Total accumulated depreciation and amortization		(205,098)	(6,292)	—		(211,390)
Total capital assets being depreciated and amortized, net		138,910	4,721	—		143,631
Total capital assets, net	$	177,481	34,375	(10,849)		201,007

* Decrease in construction in progress included $7 in capital project write-offs, mainly related to Hetchy Water's share of road improvement projects. The remaining difference of $171 was offset by direct additions to machinery and equipment.

		2020	Increases	Decreases		2021
Capital assets not being depreciated and amortized:						
Land and rights-of-way	$	3,232	—	—		3,232
Intangible assets		6	—	—		6
Construction work in progress		24,328	22,586	(11,581)	*	35,333
Total capital assets not being depreciated and amortized		27,566	22,586	(11,581)		38,571
Capital assets being depreciated and amortized:						
Facilities and improvements		284,480	11,488	—		295,968
Intangible assets		20,522	—	—		20,522
Machinery and equipment		27,303	215	—		27,518
Total capital assets being depreciated and amortized		332,305	11,703 *	—		344,008
Less accumulated depreciation and amortization for:						
Facilities and improvements		(169,874)	(4,821)	—		(174,695)
Intangible assets		(9,739)	(208)	—		(9,947)
Machinery and equipment		(19,476)	(980)	—		(20,456)
Total accumulated depreciation and amortization		(199,089)	(6,009)	—		(205,098)
Total capital assets being depreciated and amortized, net		133,216	5,694	—		138,910
Total capital assets, net	$	160,782	28,280	(11,581)		177,481

* Decrease in construction in progress included $51 in capital project write-offs, mainly related to Hetchy Water's share of road improvement projects and 2018 Moccasin Strom project. The remaining difference of $173 was offset by direct additions to machinery and equipment.

(Dollars in thousands, unless otherwise stated)

c) Hetchy Power capital assets as of June 30, 2022 and 2021 consist of the following:

	2021	Increases	Decreases	2022
Capital assets not being depreciated and amortized:				
Land and rights-of-way	$ 1,949	–	–	1,949
Intangible assets	1,431	–	–	1,431
Construction work in progress	171,175	110,859	(19,642) *	262,392
Total capital assets not being depreciated and amortized	174,555	110,859	(19,642)	265,772
Capital assets being depreciated and amortized:				
Facilities and improvements	486,995	16,834	–	503,829
Intangible assets	25,193	–	–	25,193
Machinery and equipment	116,805	3,140	(87)	119,858
Total capital assets being depreciated and amortized	628,993	19,974 *	(87)	648,880
Less accumulated depreciation and amortization for:				
Facilities and improvements	(230,751)	(13,141)	–	(243,892)
Intangible assets	(12,273)	(253)	–	(12,526)
Machinery and equipment	(68,468)	(4,217)	87	(72,598)
Total accumulated depreciation and amortization	(311,492)	(17,611)	87	(329,016)
Total capital assets being depreciated and amortized, net	317,501	2,363	–	319,864
Total capital assets, net	$ 492,056	113,222	(19,642)	585,636

* Decrease in construction in progress included $648 in capital project write-offs, mainly related to Hope San Francisco Project in Sunnydale and Potrero. The remaining difference of $980 was offset by direct additions to machinery and equipment.

	2020	Increases	Decreases	2021
Capital assets not being depreciated and amortized:				
Land and rights-of-way	$ 1,949	–	–	1,949
Intangible assets	1,431	–	–	1,431
Construction work in progress	164,749	70,059	(63,633) *	171,175
Total capital assets not being depreciated and amortized	168,129	70,059	(63,633)	174,555
Capital assets being depreciated and amortized:				
Facilities and improvements	438,702	48,293	–	486,995
Intangible assets	25,193	–	–	25,193
Machinery and equipment	109,270	7,535	–	116,805
Total capital assets being depreciated and amortized	573,165	55,828 *	–	628,993
Less accumulated depreciation and amortization for:				
Facilities and improvements	(219,420)	(11,331)	–	(230,751)
Intangible assets	(12,020)	(253)	–	(12,273)
Machinery and equipment	(64,425)	(4,043)	–	(68,468)
Total accumulated depreciation and amortization	(295,865)	(15,627)	–	(311,492)
Total capital assets being depreciated and amortized, net	277,300	40,201	–	317,501
Total capital assets, net	$ 445,429	110,260	(63,633)	492,056

* Decrease in construction work in progress is greater than increase in capital assets being depreciated explained by $8,333 in capital project write-offs, mainly related to Bay Corridor Project, Transmission and Distribution System Project, and Treasure Island Capital Improvement Project. The remaining difference of $528 was offset by direct additions to machinery and equipment.

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. Per the implementation of GASB Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period*, no interest was capitalized to construction in progress beginning in fiscal year 2022.

(Dollars in thousands, unless otherwise stated)

Interest included in the construction work in progress and total interest expense incurred during the years ended June 30, 2022 and 2021 are as follows:

Hetchy Power		2022	Restated 2021**
Interest expensed	$	5,624	1,972
Interest included in construction work in progress		— *	1,083
Total interest incurred	$	5,624	3,055

*Per the implementation of GASB Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period*.
**Restated per the implementation of GASB Statement No. 87, *Leases*.

(5) Restricted Assets

Pursuant to the Hetchy Power Trust Indenture (the "Indenture"), established in fiscal year 2015, net revenues of the Hetchy Power are pledged first to the 2015 Series AB Bonds and 2021 Series AB Bonds, and have a priority lien on the pledge of net revenues to the outstanding CREBs, QECBs, and NCREBs (the "Subordinate Obligations"). The Lease/Purchase Agreements for the Subordinate Obligations pledge the net revenues of the Hetchy Power to these bonds, and such pledge is subordinate in lien to the net revenues pledge for the 2015 Series AB Bonds and 2021 Series AB Bonds (the "Bonds" or "Bond").

In the Indenture, the SFPUC covenants and agrees that it will pay into the Revenue Fund as received all Revenues of Hetchy Power and shall be used and applied, as provided by the Indenture, solely for the purposes of operating and maintaining Hetchy Power and paying all costs, charges, and expenses in connection therewith and for the purpose of making repairs, renewals, and replacements to Hetchy Power and constructing additions, betterments, and extensions thereto.

The Indenture provides that Revenues deposited in the Revenue Fund shall be disbursed in the following order of priority:

1. The payment of operation and maintenance expenses;
2. Any priority reconstruction and replacement fund deposits;
3. Deposit in the interest account of each Bond Fund;
4. Deposit in the bond retirement account of each Bond Fund;
5. Deposit in the reserve fund;
6. (i) Payment of principal and premium, if any, and interest on any Subordinate Obligations; (ii) deposit into a reserve fund securing any Subordinate Obligations; (iii) Swap Agreement payments pursuant to Swap Agreements entered into by the SFPUC with respect to any Subordinate Obligations; and (iv) payment to any financial institution or insurance company providing any letter of credit, line of credit, or other credit or liquidity facility, including municipal bond insurance and guarantees, that secures the payment of principal or interest on any Subordinate Obligations; in each case in any order of priority within this paragraph which may be hereafter established by the SFPUC resolution;
7. Any additional reconstruction and replacement fund deposits into the reconstruction and replacement fund;
8. Any necessary or desirable capital additions or improvements to the Hetchy Power;
9. Any payment under a Take-or-Pay Power Purchase Agreement that does not constitute an operation and maintenance expense;
10. Any payment under a Swap Agreement that does not constitute a Swap Agreement payment; and
11. Any other lawful purpose of the SFPUC.

(Dollars in thousands, unless otherwise stated)

In the Indenture, the SFPUC covenants and agrees to transfer to the Trustee for deposit in the Interest Account of each applicable Bond Fund all Refundable Credits received by the SFPUC.

In accordance with the Agreements, Hetch Hetchy maintains certain restricted cash and investment balances in trust.

(a) Hetchy Water has the following restricted assets held in trust as of June 30, 2022 and 2021:

		2022	2021
Cash and investments with City Treasury:			
Hetch Hetchy bond construction fund	$	–	6,990
Total restricted assets	$	–	6,990

(b) Hetchy Power has the following restricted assets held in trust as of June 30, 2022 and 2021:

		2022	2021
Cash and investments with City Treasury:			
Hetch Hetchy bond construction fund	$	–	5,241
Cash and investments outside City Treasury:			
2009 Series C Certificates of participation - 525 Golden Gate		223	223
2009 Series D Certificates of participation - 525 Golden Gate		758	892
2015 Series A Revenue Bonds		2,194	2,193
2015 Series B Revenue Bonds		516	516
2021 Series AB Revenue Bonds		10,346	–
Commercial Paper		15	19
Total restricted cash and investments outside City Treasury		14,052	3,843
Interest and other receivables:			
Hetch Hetchy bond construction fund		4,303	11,800
Total restricted assets	$	18,355	20,884

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

(6) Short-Term Debt

Effective March 2019, under Charter Sections 9.107(6) and 9.107(8), and 2018 Proposition A, the Commission and Board of Supervisors authorized the issuance of up to $250,000 in commercial paper notes for the purpose of reconstructing, replacing, expanding, repairing or improving power facilities of Hetchy Power. Interest rates for the commercial paper ranged from 0.1% to 1.1% and 0.1% to 0.2% in fiscal years 2022 and 2021, respectively. The Enterprise had $40,019 and $114,671 commercial paper outstanding as of June 30, 2022 and 2021, respectively. The Enterprise had $209,981 and $135,329 in unused authorization as of June 30, 2022 and 2021, respectively.

In accordance with GASB Statement No. 88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*, Significant Events of default as specified in the Reimbursement Agreements include 1) non-payment, 2) material breach of warranty, representation, or other non-remedied breach of covenants as specified in the respective agreements and 3) bankruptcy, 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, 2022, there were no such events described herein.

(Dollars in thousands, unless otherwise stated)

(7) Changes in Long-Term Liabilities

a) Hetch Hetchy's long-term liability activities for the years ended June 30, 2022 and 2021 are as follows:

	Interest rate	Maturity (Calendar Year)	Restated 2021*	Additions	Reductions	2022	Due within one year
Bonds:							
Clean Renewable Energy Bonds	0.00 %	2022	$ 843	—	(422)	421	421
Qualified Energy Conservation Bonds	4.74	2027	3,687	—	(549)	3,138	555
New Clean Renewable Energy Bonds 2015	4.62	2032	1,779	—	(142)	1,637	146
2015 Series A Revenue Bonds	4.00 - 5.00	2045	32,025	—	—	32,025	—
2015 Series B Revenue Bonds	3.00 - 4.00	2026	4,550	—	(815)	3,735	850
2021 Series A Revenue Bonds	4.00 - 5.00	2052	—	74,280	—	74,280	—
2021 Series B Revenue Bonds	4.00 - 5.00	2052	—	49,720	—	49,720	—
Less issuance discount			(20)	—	14	(6)	(6)
Add issuance premiums			3,448	27,022	(934)	29,536	—
Total bonds payable			46,312	151,022	(2,848)	194,486	1,966
2009 Series C Certificates of participation (COPs)	2.00 - 5.00	2022	830	—	(405)	425	425
2009 Series C COPs issuance premiums			8	—	(6)	2	2
2009 Series D COPs (Build America)	6.36 - 6.49	2041	12,593	—	—	12,593	—
Other post-employment benefits obligations			35,006	5,135	(6,232)	33,909	—
Net pension liability			62,219	—	(62,219)	—	—
Accrued vacation and sick leave			6,202	2,869	(2,759)	6,312	3,060
Accrued workers' compensation			3,238	555	(315)	3,478	615
Damage claims liability			1,639	3,840	(3,797)	1,682	601
Due to other City departments			369	11	—	380	380
Lease liability			749	—	(380)	369	238
Unearned revenues, refunds, and other			16,159	23,113	(19,215)	20,057	10,143
Total			$ 185,324	186,545	(98,176)	273,693	17,430

	Interest rate	Maturity (Calendar Year)	2020	Additions	Reductions	Restated 2021*	Due within one year
Bonds:							
Clean Renewable Energy Bonds	0.00 %	2022	$ 1,265	—	(422)	843	422
Qualified Energy Conservation Bonds	4.74	2027	4,229	—	(542)	3,687	549
New Clean Renewable Energy Bonds 2012	4.74	2020	130	—	(130)	—	—
New Clean Renewable Energy Bonds 2015	4.62	2032	3,190	—	(1,411)	1,779	142
2015 Series A Revenue Bonds	4.00 - 5.00	2045	32,025	—	—	32,025	—
2015 Series B Revenue Bonds	3.00 - 4.00	2026	5,335	—	(785)	4,550	815
Less issuance discount			(34)	—	14	(20)	—
Add issuance premiums			3,668	—	(220)	3,448	—
Total bonds payable			49,808	—	(3,496)	46,312	1,928
2009 Series C Certificates of participation (COPs)	2.00 - 5.00	2022	1,214	—	(384)	830	405
2009 Series C COPs issuance premiums			21	—	(13)	8	—
2009 Series D COPs (Build America)	6.36 - 6.49	2041	12,593	—	—	12,593	—
Other post-employment benefits obligations			38,530	5,646	(9,170)	35,006	—
Net pension liability			49,531	28,918	(16,230)	62,219	—
Accrued vacation and sick leave			4,894	2,932	(1,624)	6,202	3,041
Accrued workers' compensation			3,387	113	(262)	3,238	575
Damage claims liability			2,886	4,843	(6,090)	1,639	633
Due to other City departments			840	—	(471)	369	369
Lease liability			1,126	—	(377)	749	380
Unearned revenues, refunds, and other			9,117	28,750	(21,708)	16,159	6,191
Total			$ 173,947	71,202	(59,825)	185,324	13,522

*Restated per Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*.

(Continued)

(Dollars in thousands, unless otherwise stated)

b) Hetchy Water's long-term liability activities for the years ended June 30, 2022 and 2021 are as follows:

	Restated 2021*	Additions	Reductions	2022	Due within one year
Other post-employment benefits obligations	$ 14,444	1,921	(2,125)	14,240	–
Net pension liability	26,645	–	(26,645)	–	–
Accrued vacation and sick leave	2,185	749	(765)	2,169	1,034
Accrued workers' compensation	1,120	233	(125)	1,228	215
Damage claims liability	525	253	(151)	627	228
Lease liability	78	–	(16)	62	3
Unearned revenues, refunds, and other	138	14	(18)	134	24
Total	$ 45,135	3,170	(29,845)	18,460	1,504

	2020	Additions	Reductions	Restated 2021*	Due within one year
Other post-employment benefits obligations	$ 16,350	1,818	(3,724)	14,444	–
Net pension liability	21,477	12,119	(6,951)	26,645	–
Accrued vacation and sick leave	1,646	1,034	(495)	2,185	1,059
Accrued workers' compensation	1,187	18	(85)	1,120	197
Damage claims liability	558	478	(511)	525	218
Due to other City departments	240	–	(240)	–	–
Lease liability	93	–	(15)	78	16
Unearned revenues, refunds, and other	627	629	(1,118)	138	22
Total	$ 42,178	16,096	(13,139)	45,135	1,512

*Restated per Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*.

c) Hetchy Power's long-term liability activities for the years ended June 30, 2022 and 2021 are as follows:

	Interest rate	Maturity (Calendar Year)	Restated 2021*	Additions	Reductions	2022	Due within one year
Bonds:							
Clean Renewable Energy Bonds	0.00 %	2022	$ 843	–	(422)	421	421
Qualified Energy Conservation Bonds	4.74	2027	3,687	–	(549)	3,138	555
New Clean Renewable Energy Bonds 2015	4.62	2032	1,779	–	(142)	1,637	146
2015 Series A Revenue Bonds	4.00 - 5.00	2045	32,025	–	–	32,025	–
2015 Series B Revenue Bonds	3.00 - 4.00	2026	4,550	–	(815)	3,735	850
2021 Series A Revenue Bonds	4.00 - 5.00	2052	–	74,280	–	74,280	–
2021 Series B Revenue Bonds	4.00 - 5.00	2052	–	49,720	–	49,720	–
Less issuance discount			(20)	–	14	(6)	(6)
Add issuance premiums			3,448	27,022	(934)	29,536	–
Total bonds payable			46,312	151,022	(2,848)	194,486	1,966
2009 Series C Certificates of participation (COPs)	2.00 - 5.00	2022	830	–	(405)	425	425
2009 Series C COPs issuance premiums			8	–	(6)	2	2
2009 Series D COPs (Build America)	6.36 - 6.49	2041	12,593	–	–	12,593	–
Other post-employment benefits obligations			17,653	2,347	(2,595)	17,405	–
Net pension liability			32,566	–	(32,566)	–	–
Accrued vacation and sick leave			3,617	1,856	(1,876)	3,597	1,747
Accrued workers' compensation			2,118	322	(190)	2,250	400
Damage claims liability			1,108	2,005	(2,090)	1,023	358
Due to other City departments			369	11	–	380	380
Lease liability			94	–	(19)	75	3
Unearned revenues, refunds, and other			5,993	8,410	(7,676)	6,727	5,923
Total			$ 123,261	165,973	(50,271)	238,963	11,204

(Dollars in thousands, unless otherwise stated)

	Interest rate	Maturity (Calendar Year)	2020	Additions	Reductions	Restated 2021*	Due within one year
Bonds:							
Clean Renewable Energy Bonds	0.00 %	2022	$ 1,265	—	(422)	843	422
Qualified Energy Conservation Bonds	4.74	2027	4,229	—	(542)	3,687	549
New Clean Renewable Energy Bonds 2012	4.74	2020	130	—	(130)	—	—
New Clean Renewable Energy Bonds 2015	4.62	2032	3,190	—	(1,411)	1,779	142
2015 Series A Revenue Bonds	4.00 - 5.00	2045	32,025	—	—	32,025	—
2015 Series B Revenue Bonds	3.00 - 4.00	2026	5,335	—	(785)	4,550	815
Less issuance discount			(34)	—	14	(20)	—
Add issuance premiums			3,668	—	(220)	3,448	—
Total bonds payable			49,808	—	(3,496)	46,312	1,928
2009 Series C Certificates of participation (COPs)	2.00 - 5.00	2022	1,214	—	(384)	830	405
2009 Series C COPs issuance premiums			21	—	(13)	8	—
2009 Series D COPs (Build America)	6.36 - 6.49	2041	12,593	—	—	12,593	—
Other post-employment benefits obligations			19,983	2,223	(4,553)	17,653	—
Net pension liability			26,249	14,812	(8,495)	32,566	—
Accrued vacation and sick leave			2,957	1,763	(1,103)	3,617	1,777
Accrued workers' compensation			2,200	95	(177)	2,118	378
Damage claims liability			2,222	4,212	(5,326)	1,108	409
Due to other City departments			600	—	(231)	369	369
Lease liability			113	—	(19)	94	19
Unearned revenues, refunds, and other			7,642	8,560	(10,209)	5,993	5,141
Total			$ 125,602	31,665	(34,006)	123,261	10,426

*Restated per Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*.

d) CleanPowerSF's long-term liability activities for the years ended June 30, 2022 and 2021 are as follows:

	Restated 2021*	Additions	Reductions	2022	Due within one year
Other post-employment benefits obligations	$ 2,909	867	(1,512)	2,264	—
Net pension liability	3,008	—	(3,008)	—	—
Accrued vacation and sick leave	400	264	(118)	546	279
Damage claims liability	6	1,582	(1,556)	32	15
Lease liability	577	—	(345)	232	232
Unearned revenues, refunds, and other	10,028	14,689	(11,521)	13,196	4,196
Total	$ 16,928	17,402	(18,060)	16,270	4,722

	2020	Additions	Reductions	Restated 2021*	Due within one year
Other post-employment benefits obligations	$ 2,197	1,605	(893)	2,909	—
Net pension liability	1,805	1,987	(784)	3,008	—
Accrued vacation and sick leave	291	135	(26)	400	205
Damage claims liability	106	153	(253)	6	6
Lease liability	920	—	(343)	577	345
Unearned revenues, refunds, and other	848	19,561	(10,381)	10,028	1,028
Total	$ 6,167	23,441	(12,680)	16,928	1,584

*Restated per Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*.

(a) *Clean Renewable Energy Bonds*

In November 2008, Hetchy Power issued $6,325 of taxable CREBs to finance the installation of solar energy equipment on City-owned facilities, including Chinatown Branch Library, Maxine Hall Medical Center, City Distribution Division Warehouse, North Point Wastewater Plant, Chinatown Public Health Center, Municipal Transportation Agency Woods, and Municipal Transportation Agency Ways and Structures. The CREBs were non-rated and privately-placed with Banc of America Leasing. The net effective interest rate on the CREBs, after the federal tax subsidy, is 0% through 2022. Hetchy Power began making principal payments in the amount of $422 on December 15, 2008 and will continue annual payments for 15 years until December 15, 2022. Funding for these payments will be guaranteed by net power revenues. Interest payments are not required, since the effective equivalent of interest on the bonds is paid in the form of federal tax credits in lieu of interest paid by the issuer.

(Dollars in thousands, unless otherwise stated)

The future annual debt service relating to the CREBs outstanding as of June 30, 2022 is as follows:

Fiscal year ending June 30:		Principal
2023	$	421
Less: Current portion		(421)
Less: Unamortized bond discount		(6)
Less: Current portion		6
Long-term portion as of June 30, 2022	$	–

(b) *Qualified Energy Conservation Bonds*

In December 2011, Hetchy Power issued $8,291 of taxable QECBs. The QECBs were issued to fund certain qualified green components for the SFPUC's 525 Golden Gate Headquarters project. The QECBs were non-rated and privately placed with Banc of America Leasing. The net effective interest rate on the QECBs, after the federal tax subsidy, is 1.2% through 2028.

The future annual debt service relating to the QECBs outstanding as of June 30, 2022 is as follows:

Fiscal years ending June 30:		Principal	Interest before subsidy	Federal interest subsidy*	Interest net of subsidy
2023	$	555	142	(100)	42
2024		562	116	(82)	34
2025		569	89	(63)	26
2026		576	62	(44)	18
2027		582	35	(24)	11
2028		294	7	(4)	3
		3,138	451	(317)	134
Less: Current portion		(555)			
Long-term portion as of June 30, 2022	$	2,583			

* The SFPUC received an IRS notice dated June 2, 2022 that the federal interest subsidy is reduced by 5.7% or a total reduction of $19 due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same after fiscal year 2023.

(c) *New Clean Renewable Energy Bonds 2012*

In April 2012, Hetchy Power issued $6,600 of taxable NCREBs. The NCREBs were issued to fund certain qualified facilities that provide clean, renewable energy at Davies Symphony Hall, City Hall, and University Mound Reservoir. The NCREBs were non-rated and privately placed with Banc of America Leasing. The net effective interest rate on the NCREBs, after the federal tax subsidy, is 1.5% through 2021. $288 and $2,523 of principal were prepaid in fiscal years 2017 and 2016, respectively. There was no prepayment thereafter. 2012 NCREBs have been fully repaid as of June 30, 2021.

(d) *New Clean Renewable Energy Bonds 2015*

In October 2015, Hetchy Power issued $4,100 of taxable 2015 NCREBs. The 2015 NCREBs were issued to fund certain qualified clean, renewable energy solar generation facilities at the Marina Middle School and the San Francisco Police Academy. The 2015 NCREBs were non-rated and privately placed with Banc of America Leasing. The net effective interest rate on the 2015 NCREBs, after the federal tax subsidy, is 1.4% through 2033. $0 and $1,272 of principal were prepaid in fiscal years 2022 and 2021, respectively.

(Dollars in thousands, unless otherwise stated)

The future annual debt service relating to the 2015 NCREBs outstanding as of June 30, 2022 is as follows:

Fiscal years ending June 30:		Principal	Interest before subsidy	Federal interest subsidy*	Interest net of subsidy
2023	$	146	74	(49)	25
2024		148	67	(44)	23
2025		150	60	(40)	20
2026		152	53	(35)	18
2027		154	47	(31)	16
2028-2032		803	122	(81)	41
2033		84	2	(1)	1
		1,637	425	(281)	144
Less: Current portion		(146)			
Long-term portion as of June 30, 2022	$	1,491			

* The SFPUC received an IRS notice dated June 2, 2022 that the federal interest subsidy is reduced by 5.7% or a total reduction of $17 due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same after fiscal year 2023.

(e) *Power Revenue Bonds 2015 Series A (Green) and Series B*

In May 2015, Hetchy Power issued tax-exempt revenue bonds, 2015 Series A (Green) in the amount of $32,025 with interest rates ranging from 4.0% to 5.0% and 2015 Series B in the amount of $7,530 with interest rates ranging from 3.0% to 4.0%. Proceeds from the bonds were used to finance reconstruction or replacement of existing facilities of the SFPUC's Hetch Hetchy project, to fund capitalized interest on the 2015 Series AB Bonds, to fund a debt service reserve account for the 2015 Series AB Bonds, and to pay costs of issuance of the 2015 Series AB bonds. The bonds were rated "A+" and "AA-" by S&P and Fitch, respectively. Final maturity for 2015 Series AB are November 1, 2045 and November 1, 2026, respectively. The true interest cost is 3.95%. As of June 30, 2022 and 2021, the outstanding principal amounts were $35,760 and $36,575, respectively.

The future annual debt service relating to the 2015 Series AB Bonds outstanding as of June 30, 2022 are as follows:

Hetchy Power - Power Revenue Bonds 2015 Series A (Green)

Fiscal years ending June 30:		Principal	Interest	Total
2023	$	—	1,593	1,593
2024		—	1,593	1,593
2025		—	1,593	1,593
2026		—	1,593	1,593
2027		830	1,576	2,406
2028-2032		5,645	7,121	12,766
2033-2037		7,205	5,522	12,727
2038-2042		9,190	3,482	12,672
2043-2046		9,155	943	10,098
		32,025	25,016	57,041
Add: Unamortized bond premium		3,119		
Long-term portion as of June 30, 2022	$	35,144		

(Dollars in thousands, unless otherwise stated)

Hetchy Power - Power Revenue Bonds 2015 Series B

Fiscal years ending June 30:		Principal	Interest	Total
2023	$	850	124	974
2024		880	93	973
2025		910	62	972
2026		945	25	970
2027		150	3	153
		3,735	307	4,042
Less: Current portion		(850)		
Add: Unamortized bond premium		114		
Long-term portion as of June 30, 2022	$	2,999		

(f) *Power Revenue Bonds 2021 Series A (Green) and Series B*

In December 2021, Hetchy Power issued tax-exempt revenue bonds, 2021 Series A (Green) in the amount of $74,280 with interest rates ranging from 4.0% to 5.0% and 2021 Series B in the amount of $49,720 with interest rates ranging from 4.0% to 5.0%. Proceeds from the bonds were used to refinance a portion of the costs of various capital projects benefiting the Power Enterprise, to fund capitalized interest on the 2021 Series AB Bonds, and to pay costs of issuance. The bonds were rated “AA” and “AA-” by S&P and Fitch, respectively. Final maturity for 2021 Series AB are November 1, 2051. The true interest cost is 2.64%. As of June 30, 2022 the outstanding principal amount was $124,000.

The future annual debt service relating to the 2021 Series AB Bonds outstanding as of June 30, 2022 are as follows:

Hetchy Power - Power Revenue Bonds 2021 Series A (Green)

Fiscal years ending June 30:		Principal	Interest	Total
2023	$	–	3,085	3,085
2024		–	3,085	3,085
2025		1,385	3,050	4,435
2026		1,455	2,979	4,434
2027		1,530	2,905	4,435
2028-2032		8,875	13,294	22,169
2033-2037		11,025	11,140	22,165
2038-2042		13,470	8,698	22,168
2043-2047		16,450	5,716	22,166
2048-2052		20,090	2,073	22,163
		74,280	56,025	130,305
Add: Unamortized bond premium		15,933		
Long-term portion as of June 30, 2022	$	90,213		

(Dollars in thousands, unless otherwise stated)

Hetchy Power - Power Revenue Bonds 2021 Series B

Fiscal years ending June 30:		Principal	Interest	Total
2023	$	–	2,045	2,045
2024		–	2,045	2,045
2025		585	2,030	2,615
2026		620	2,000	2,620
2027		650	1,969	2,619
2028-2032		3,765	9,308	13,073
2033-2037		4,755	8,363	13,118
2038-2042		5,945	7,295	13,240
2043-2047		9,900	5,920	15,820
2048-2052		23,500	2,426	25,926
		49,720	43,401	93,121
Add: Unamortized bond premium		10,370		
Long-term portion as of June 30, 2022	$	60,090		

(g) *Certificates of Participation Issued for the 525 Golden Gate Headquarters Building*

In October 2009, the City issued $167,670 in certificates of participation to fund construction of the headquarters of the SFPUC at 525 Golden Gate Avenue. The 2009 Series C certificates were issued for $38,120 and 2009 Series D for $129,550 as “Build America Bonds” (BABs) 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 Series D for the federal interest subsidy, the true interest cost averages 3.4% and 4.3% for Series C and Series D certificates, respectively.

Under the terms of a Memorandum of Understanding 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. Hetchy Power’s share is reflected on the Hetchy Power fund statements. There are no events of default stated in this memorandum of understanding.

The Power, Water, and Wastewater Enterprises have 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 service relating to the certificates of participation 2009 Series C and D outstanding as of June 30, 2022 are as follow:

Hetchy Power - Certificates of Participation 2009 Series C (Tax Exempt)

Fiscal years ending June 30:		Principal	Interest	Total
2023	$	425	10	435
Less: Current portion		(425)		
Add: Unamortized bond premium		2		
Less: Current portion		(2)		
Long-term portion as of June 30, 2022	$	–		

(Dollars in thousands, unless otherwise stated)

Hetchy Power - Certificates of Participation 2009 Series D (Taxable BABs)

Fiscal years ending June 30:		Principal	Interest before subsidy	Federal interest subsidy*	Interest net of subsidy
2023	$	–	812	(268)	544
2024		445	798	(263)	535
2025		463	769	(254)	515
2026		483	739	(244)	495
2027		503	709	(234)	475
2028-2032		2,852	3,020	(997)	2,023
2033-2037		3,514	1,995	(658)	1,337
2038-2042		4,333	727	(240)	487
			9,569	(3,158)	6,411
Long-term portion as of June 30, 2022	$	12,593			

* The SFPUC received an IRS notice dated June 2, 2022 that the federal interest subsidy is reduced by 5.7% or a total reduction of $191 due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same after fiscal year 2023.

(h) *Events of Default and Remedies*

In accordance with GASB Statement No. 88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*, significant events of default as specified in the Power Enterprise Indenture (applicable to Power Revenue Bonds and energy bonds) and the Equipment Lease/Purchase Agreement 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), declare the principal and the interest accrued thereon to be due and payable immediately. As of June 30, 2022 and 2021, there were no such events described herein.

(8) Revenue Pledge

Hetchy Power has pledged future power revenues to repay the 2008 CREBs, the 2011 QECBs, the 2012 NCREBs, and the 2015 NCREBs. Additionally, Hetchy Power has pledged future power revenues for 2015 Series AB and 2021 Series AB power revenue bonds. Proceeds from the bonds provided financing for various capital construction and facility energy efficiency projects. 2015 Series AB and 2021 Series AB power revenue bonds are payable through fiscal year 2046 and 2052, respectively, and are solely payable from net revenues of Hetchy Power on a senior lien basis to the 2008 CREBs, the 2011 QECBs, the 2012 NCREBs, and the 2015 NCREBs.

The original amount of bonds issued, total principal and interest remaining, principal and interest paid during fiscal years 2022 and 2021, applicable net revenues, and funds available for debt service are as follows:

Hetchy Power		2022	2021
Bonds issued with revenue pledge	$	182,271	64,871
Principal and interest remaining due at the end of the year		290,581	71,082
Principal and interest paid during the year*		3,928	5,368
Net revenues for the year ended June 30		54,310	10,609
Funds available for debt service		98,625	34,178

*Per Indenture, debt service for coverage is calculated using the amount of principal and interest paid during the year for the 2015 Series AB and 2021 Series AB power revenue bonds net of capitalized interest if any, which have a senior lien on power enterprise revenues; principal and interest paid during the year for the 2015 Series AB and 2021 Series AB power revenue bonds was $2,565, net of capitalized interest.

(Dollars in thousands, unless otherwise stated)

(9) Leases

Hetch Hetchy has entered into long-term leases for office space and other equipment. The terms and conditions for theses leases varies, which ranges between 1 to 75 years.

A summary of intangible right-to-use leases during the years ended June 30, 2022 and 2021 are as follows:

		2021	Increases	Decreases	Remeasurements	2022
Hetch Hetchy						
Right-to-use assets: Building/facility equipment	$	1,126	–	(58)	–	1,068
Total lease assets		1,126	–	(58)	–	1,068
Less accumulated amortization for:						
Building/facility equipment		(387)	(375)	58	–	(704)
Total accumulated amortization		(387)	(375)	58	–	(704)
Total lease assets, net	$	739	(375)	–	–	364
Hetch Water						
Right-to-use assets: Building/facility equipment	$	93	–	(26)	–	67
Total lease assets		93	–	(26)	–	67
Less accumulated amortization for:						
Building/facility equipment		(19)	(13)	26	–	(6)
Total accumulated amortization		(19)	(13)	26	–	(6)
Total lease assets, net	$	74	(13)	–	–	61
Hetch Power						
Right-to-use assets: Building/facility equipment	$	113	–	(32)	–	81
Total lease assets		113	–	(32)	–	81
Less accumulated amortization for:						
Building/facility equipment		(23)	(17)	32	–	(8)
Total accumulated amortization		(23)	(17)	32	–	(8)
Total lease assets, net	$	90	(17)	–	–	73
CleanPowerSF						
Right-to-use assets: Building/facility equipment	$	920	–	–	–	920
Total lease assets		920	–	–	–	920
Less accumulated amortization for:						
Building/facility equipment		(345)	(345)	–	–	(690)
Total accumulated amortization		(345)	(345)	–	–	(690)
Total lease assets, net	$	575	(345)	–	–	230

(Dollars in thousands, unless otherwise stated)

		2020	Increases	Decreases	Remeasurements	2021
Hetch Hetchy						
Right-to-use assets: Building/facility equipment	$	1,126	—	—	—	1,126
Total lease assets		1,126	—	—	—	1,126
Less accumulated amortization for:						
Building/facility equipment		—	(387)	—	—	(387)
Total accumulated amortization		—	(387)	—	—	(387)
Total lease assets, net	$	1,126	(387)	—	—	739
Hetch Water						
Right-to-use assets: Building/facility equipment	$	93	—	—	—	93
Total lease assets		93	—	—	—	93
Less accumulated amortization for:						
Building/facility equipment		—	(19)	—	—	(19)
Total accumulated amortization		—	(19)	—	—	(19)
Total lease assets, net	$	93	(19)	—	—	74
Hetch Power						
Right-to-use assets: Building/facility equipment	$	113	—	—	—	113
Total lease assets		113	—	—	—	113
Less accumulated amortization for:						
Building/facility equipment		—	(23)	—	—	(23)
Total accumulated amortization		—	(23)	—	—	(23)
Total lease assets, net	$	113	(23)	—	—	90
CleanPowerSF						
Right-to-use assets: Building/facility equipment	$	920	—	—	—	920
Total lease assets		920	—	—	—	920
Less accumulated amortization for:						
Building/facility equipment		—	(345)	—	—	(345)
Total accumulated amortization		—	(345)	—	—	(345)
Total lease assets, net	$	920	(345)	—	—	575

A summary of changes in the related lease liabilities during the years ended June 30, 2022 and 2021 are as follows:

Fiscal years		Beginning of year	Deductions	End of year	Due within one year
Hetch Hetchy					
2022	$	749	(380)	369	238
2021		1,126	(377)	749	380
Hetchy Water					
2022	$	78	(16)	62	3
2021		93	(15)	78	16
Hetchy Power					
2022	$	94	(19)	75	3
2021		113	(19)	94	19
CleanPowerSF					
2022	$	577	(345)	232	232
2021		920	(343)	577	345

(Dollars in thousands, unless otherwise stated)

Future annual lease payments as of the years ended June 30, 2022 and 2021 are as follows:

Hetchy Water

Fiscal years ending June 30:		Principal	Interest	Total
2023	$	3	1	4
2024		3	1	4
2025		3	1	4
2026		3	1	4
2027		3	1	4
2028-2032		17	4	21
2033-2037		18	3	21
2038-2042		12	1	13
		62	13	75
Less: Current portion		(3)		
Long-term portion as of June 30, 2022	$	59		

Hetchy Power

Fiscal years ending June 30:		Principal	Interest	Total
2023	$	3	2	5
2024		4	2	6
2025		4	1	5
2026		4	1	5
2027		4	1	5
2028-2032		20	5	25
2033-2037		23	3	26
2038-2042		13	1	14
		75	16	91
Less: Current portion		(3)		
Long-term portion as of June 30, 2022	$	72		

CleanPowerSF

Fiscal years ending June 30:		Principal	Interest	Total
2023	$	232	1	233
Less: Current portion		(232)		
Long-term portion as of June 30, 2022	$	—		

Hetchy Water

Fiscal years ending June 30:		Principal	Interest	Total
2022	$	16	2	18
2023		3	1	4
2024		3	1	4
2025		3	1	4
2026		3	1	4
2027-2031		16	5	21
2032-2036		18	3	21
2037-2041		16	1	17
		78	15	93
Less: Current portion		(16)		
Long-term portion as of June 30, 2021	$	62		

(Dollars in thousands, unless otherwise stated)

Hetchy Power

Fiscal years ending June 30:		Principal	Interest	Total
2022	$	19	2	21
2023		3	2	5
2024		4	2	6
2025		4	1	5
2026		4	1	5
2027-2031		20	6	26
2032-2036		22	3	25
2037-2041		18	1	19
		94	18	112
Less: Current portion		(19)		
Long-term portion as of June 30, 2021	$	75		

CleanPowerSF

Fiscal years ending June 30:		Principal	Interest	Total
2022	$	345	5	350
2023		232	1	233
		577	6	583
Less: Current portion		(345)		
Long-term portion as of June 30, 2021	$	232		

Variable Lease Payments – Variable lease payments, other than those payments that depend on an index or rate or are fixed in substance, are excluded from the measurement of the lease liability. Such amounts are recognized as lease expenses in the period in which the obligation for those payments is incurred.

Certain equipment or facility rental leases require Hetch Hetchy to make variable lease payments that based on usage, related to the property taxes levied on the lessor, and insurance payments made by the lessor; these amounts are generally determined annually. As of June 30, 2022, the amounts recognized as expense for variable lease payments not included in the measurement of the lease liability were $45 for Hetch Hetchy, of which $1 for Hetchy Water, $1 for Hetchy Power and $43 for CleanPowerSF. As of June 30, 2021, the amounts recognized as expense for variable lease payments not included in the measurement of the lease liability were $24 for CleanPowerSF and $0 for Hetchy Water and Hetchy Power.

(10) Other Non-Operating Revenues – Transbay Cable Construction and Licensing Fees

In 2007, the Board of Supervisors adopted the resolution to enter into two non-exclusive licenses with the Transbay Cable LLC (the Licensee) for the Transbay Cable Project. The Licensee proposed to install, operate, and maintain approximately 53 miles of high-voltage direct current transmission cable running from the City of Pittsburg to the City. The first license was a Construction License to install a 400 MW high-voltage transmission line, with a four-year term. The Licensee paid Hetchy Power $3,500 in Renewable Energy, Transmission and Grid Reliability. The Construction licensing fees were fully spent as of 2020.

The second license is an operational license for operation of the transmission line with 25-year term and an option to renew for 10 years. The Licensee agrees to pay Hetchy Power in excess of $20,000 in 10 separate installments of $2,000 annually with adjustments for inflation, as the “San Francisco Electric Reliability Payment” to implement, advance, promote, or enhance policies and projects consistent with City Energy Policies. The project came on line November 29, 2010 and cumulative revenues of $22,708 were recorded, with final payment of $2,574 received in fiscal year 2020. Per agreement, the SFPUC shall consult with Departments of Environment and Public Health, as well as community members, including the Power Plant Task Force, in developing its proposals to the Board of Supervisors on how to spend the San Francisco Electricity Reliability Payment, and shall consider specifically renewable energy, conservation, and environmental health programs, which benefit low-income, at-risk, and environmentally disadvantaged communities. The San Francisco Electricity Reliability Payment shall also be partly used for green jobs training and placement programs, which benefit low-income, at-risk, and environmentally disadvantaged communities. As of June 30, 2022, cumulative expenses of $11,136 have been incurred, with $1,525 and $1,254 in fiscal years 2022 and 2021, respectively.

(Dollars in thousands, unless otherwise stated)

(11) Employee Benefits

(a) *Pension Plan*

Retirement Plan – Hetch Hetchy participates in a cost-sharing multiple-employer defined benefit pension Plan (SFERS Plan). The SFERS Plan is administered by the San Francisco City and County Employees' Retirement System (SFERS). For purposes of measuring the net pension liability, deferred outflows/inflows of resources related to pensions, pension expense, information about the fiduciary net position of the SFERS Plan, and additions to/deductions from the SFERS Plan's fiduciary net position have been determined on the same basis as they are reported by the SFERS 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.

GASB Statement No. 68 requires that the SFERS Plan reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:

	Fiscal Year 2022	Fiscal Year 2021
Valuation Date (VD)	June 30, 2020 updated to June 30, 2021	June 30, 2019 updated to June 30, 2020
Measurement Date (MD)	June 30, 2021	June 30, 2020
Measurement Period (MP)	July 1, 2020 to June 30, 2021	July 1, 2019 to June 30, 2020

SFERS Plan – The City is an employer of the plan with a proportionate share of 94.64% as of June 30, 2021 (measurement date), 0.25% increased from prior year, and 94.39% as of June 30, 2020 (measurement date). Hetch Hetchy's allocation percentage was determined based on its employer contributions divided by the City's total employer contributions for fiscal years 2021 and 2020. Hetch Hetchy'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. Hetch Hetchy's allocation of the City's proportionate share was 1.33%, of which 0.57% for Hetchy Water, 0.69% for Hetchy Power, and 0.07% for CleanPowerSF as of June 30, 2021 (measurement date). Hetch Hetchy's allocation of the City's proportionate share was 1.22%, of which 0.52% for Hetchy Water, 0.64% for Hetchy Power, and 0.06% for CleanPowerSF as of June 30, 2020 (measurement date).

SFERS Plan Description – The Plan provides basic service retirement, disability, and death benefits based on specified percentages of defined final average monthly salary and provides annual cost-of-living adjustments (COLA) after retirement. The Plan also provides pension continuation benefits to qualified survivors. The City 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 or by writing to the San Francisco Employees' Retirement System, 1145 Market Street, 5th Floor, San Francisco, CA 94103 or by calling (415) 487-7000.

SFERS Benefits – The Retirement System provides service retirement, disability and death benefits based on specified percentages of defined final average monthly salary and annual COLA after retirement. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan. The Retirement System pays benefits according to the category of employment and the type of benefit coverage provided by the City. 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.

Funding and Contribution Policy

SFERS Plan – Contributions are made by both the City and the participating employees. Employee contributions are mandatory as required by the Charter. Employee contribution rates varied from 7.5% to 13.0% as a percentage of gross covered salary in fiscal years 2021 and 2020. 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, 2020 actuarial report, the required employer contribution rate for fiscal year 2022 range from 19.91% to 24.41%. Based on the July 1, 2019 actuarial report, the required employer contribution rate for fiscal year 2021 range from 22.40% to 26.90%.

Employer contributions and employee contributions made by the employer to the Plan are recognized when due and the employer has made a formal commitment to provide the contributions. The City's proportionate share of employer contributions recognized by the Retirement System in fiscal years ended June 30, 2021 and 2020 (measurement years) were $791,736 and $701,307, respectively. Hetch Hetchy's allocation of employer contributions were $9,644, of which $4,130 for Hetchy Water, $5,048 for Hetchy Power, and $466 for CleanPowerSF for fiscal year 2021 (measurement period). Hetch Hetchy's allocation of employer contributions were $8,243, of which $3,574 for Hetchy Water, $4,369 for Hetchy Power, and $300 for CleanPowerSF for fiscal year 2020 (measurement period).

For the year ended June 30, 2022, the City's actuarial determined contribution was $729,578. Hetch Hetchy's share was $9,766, of which $4,149 for Hetchy Water, $5,071 for Hetchy Power, and $546 for CleanPowerSF for fiscal year 2022 and will be recognized as a reduction of the net pension liability in the subsequent fiscal period.

Pension (Assets)/Liabilities, Pension Expenses, and Deferred Outflows and Inflows of Resources Related to Pensions

Fiscal Year 2022

As of June 30, 2022, the City reported net pension assets (NPA) for its proportionate share of the net pension asset of the SFERS Plan of $2,446,564. The City's net pension asset for the Plan is measured as the proportionate share of the net pension asset. The net pension asset of the SFERS Plan is measured as of June 30, 2021 (measurement date), and the total pension (asset)/liability for the SFERS Plan used to calculate the net pension (asset)/liability was determined by an actuarial valuation as of June 30, 2020 rolled forward to June 30, 2021 using standard update procedures. The City's proportion of the net pension (asset)/liability for the SFERS Plan was based on a projection of the City's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. Hetch Hetchy's allocation of the City's proportionate share of the net pension (asset)/liability for the SFERS Plan as of June 30, 2022 was ($32,749), of which ($13,912) for Hetchy Water, ($17,004) for Hetchy Power, and ($1,833) for CleanPowerSF.

For the year ended June 30, 2022, the City's recognized pension (benefit) was ($922,979), which includes Retirement Benefit Plan pension expense of $28,735. Hetch Hetchy's allocation of pension (benefit) including amortization of deferred outflows/inflows related pension items were ($4,058), of which ($1,816) for Hetchy Water, ($2,220) for Hetchy Power, and ($22) for CleanPowerSF. Pension (benefit) increased from the prior year, largely due to the amortization of deferrals.

(Dollars in thousands, unless otherwise stated)

At June 30, 2022, Hetch Hetchy's reported deferred outflows of resources and deferred inflows of resources related to pensions from the following source:

Schedules of Deferred Outflows and Inflows of Resources

		Deferred Outflows of Resources				Deferred Inflows of Resources			
Fiscal Year 2022		Hetchy Water	Hetchy Power	CleanPowerSF	Total	Hetchy Water	Hetchy Power	CleanPowerSF	Total
Pension contributions subsequent to the measurement date	$	4,149	5,071	546	9,766	–	–	–	–
Differences between expected and actual experience		1,278	1,561	168	3,007	45	56	6	107
Changes in assumptions		941	1,151	124	2,216	2,443	2,985	322	5,750
Net difference between projected and actual earnings on pension plan investments		–	–	–	–	30,223	36,939	3,982	71,144
Change in employer's proportion		328	400	14	742	1,766	2,158	1,104	5,028
Total	$	6,696	8,183	852	15,731	34,477	42,138	5,414	82,029

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		Hetchy Water	Hetchy Power	CleanPowerSF	Total
2023	$	(8,033)	(9,817)	(1,407)	(19,257)
2024		(7,470)	(9,130)	(1,278)	(17,878)
2025		(7,679)	(9,386)	(1,194)	(18,259)
2026		(8,748)	(10,693)	(1,229)	(20,670)
	$	(31,930)	(39,026)	(5,108)	(76,064)

Fiscal Year 2021

As of June 30, 2021, the City reported net pension liabilities (NPL) for its proportionate share of the net pension liability of the SFERS Plan of $5,107,270. 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 SFERS Plan is measured as of June 30, 2020 (measurement date), and the total pension liability for the SFERS Plan used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2019 rolled forward to June 30, 2020 using standard update procedures. The City's proportion of the net pension liability for the SFERS Plan was based on a projection of the City's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. Hetch Hetchy's allocation of the City's proportionate share of the net pension liability for the SFERS Plan as of June 30, 2021 was $62,219, of which $26,645 for Hetchy Water, $32,566 for Hetchy Power, and $3,008 for CleanPowerSF.

For the year ended June 30, 2021, the City's recognized pension expense was $962,576 (which includes Retirement Benefit Plan pension expense of $25,243), including amortization of deferred outflows/inflows related pension items. Hetch Hetchy's allocation of pension expense including amortization of deferred outflows/inflows related pension items were $14,883, of which $6,103 for Hetchy Water, $7,459 for Hetchy Power, and $1,321 for CleanPowerSF. Pension expense increased from the prior year, largely due to the amortization of deferrals.

(Dollars in thousands, unless otherwise stated)

At June 30, 2021, Hetch Hetchy's reported deferred outflows of resources and deferred inflows of resources related to pensions were the following:

	Schedules of Deferred Outflows and Inflows of Resources								
	Deferred Outflows of Resources				Deferred Inflows of Resources				
Fiscal Year 2021		Hetchy Water	Hetchy Power	CleanPowerSF	Total	Hetchy Water	Hetchy Power	CleanPowerSF	Total
Pension contributions subsequent to the measurement date	$	4,130	5,048	466	9,644	–	–	–	–
Differences between expected and actual experience		905	1,106	102	2,113	83	102	9	194
Changes in assumptions		1,463	1,788	165	3,416	462	564	52	1,078
Net difference between projected and actual earnings on pension plan investments		558	682	63	1,303	–	–	–	–
Change in employer's proportion		743	907	7	1,657	443	541	1,032	2,016
Total	$	7,799	9,531	803	18,133	988	1,207	1,093	3,288

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		Hetchy Water	Hetchy Power	CleanPowerSF	Total
2022	$	(115)	(141)	(472)	(728)
2023		665	812	(195)	1,282
2024		1,160	1,418	(90)	2,488
2025		971	1,187	1	2,159
	$	2,681	3,276	(756)	5,201

(Dollars in thousands, unless otherwise stated)

Actuarial Assumptions

Fiscal Year 2022

A summary of the actuarial assumptions and methods used to calculate the Total Pension Liability for SFERS Plan as of June 30, 2021 (measurement year) is provided below, including any assumptions that differ from those used in the July 1, 2020 actuarial valuation. Refer to the July 1, 2020 actuarial valuation report for a complete description of all other assumptions, which can be found on the Retirement System's website http://mysfers.org.

Key Actuarial Assumptions	SFERS Plan
Valuation Date	June 30, 2020 updated to June 30, 2021
Measurement Date	June 30, 2021
Actuarial Cost Method	Entry-Age Normal Cost
Expected Rate of Return	7.40% net of investment expenses
Municipal Bond Yield	2.21% as of June 30, 2020
	2.16% as of June 30, 2021
	Bond Buyer 20-Bond GO Index, June 25, 2020 and June 24, 2021
Inflation	2.50%
Projected Salary Increases	3.25% plus merit component based on employee classification and years of service
Discount Rate	7.40% as of June 30, 2020
	7.40% as of June 30, 2021
Administrative Expenses	0.60% of payroll as of June 30, 2020
	0.60% of payroll as of June 30, 2021

Basic COLA	Old Miscellaneous and All New Plans	Old Police & Fire, pre 7/1/75	Old Police & Fire, Charters A8.595 and A8.596	Old Police & Fire, Charters A8.559 and A8.585
June 30, 2020	2.00%	2.50%	3.10%	4.20%
June 30, 2021	2.00%	1.90%	2.50%	3.60%

Mortality rates for health Miscellaneous members were based upon adjusted PubG-2010 Employee and Retiree tables for non-annuitants and retirees, respectively. Mortality rates were then projected generationally from the base year using the MP-2019 projection scale.

The actuarial assumptions used at the June 30, 2021 measurement date was based upon the result of a demographic experience study for the period July 1, 2014 through June 30, 2019 and an economic experience study as of July 1, 2020.

(Dollars in thousands, unless otherwise stated)

Fiscal Year 2021

A summary of the actuarial assumptions and methods used to calculate the Total Pension Liability for SFERS Plan as of June 30, 2020 (measurement year) is provided below, including any assumptions that differ from those used in the July 1, 2019 actuarial valuation. Refer to the July 1, 2019 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		SFERS Plan			
Valuation Date		June 30, 2019 updated to June 30, 2020			
Measurement Date		June 30, 2020			
Actuarial Cost Method		Entry-Age Normal Cost			
Expected Rate of Return		7.40% net of pension plan investment, including inflation			
Municipal Bond Yield		3.50% as of June 30, 2019			
		2.21% as of June 30, 2020			
		Bond Buyer 20-Bond GO Index, June 27, 2019 and June 25, 2020			
Inflation		2.75%			
Projected salary increases		3.50% plus merit component based employee classification and years of service			
Discount Rate		7.40% as of June 30, 2019			
		7.40% as of June 30, 2020			
Administrative Expenses		0.60% of payroll as of June 30, 2019			
		0.60% of payroll as of June 30, 2020			
Basic COLA		Old Miscellaneous and all New Plans	Old Police & Fire Pre 7/1/75	Old Police & Fire Charters A8.595 and A8.596	Old Police & Fire Charters A8.559 and A8.585
	June 30, 2019	2.00%	2.50%	3.10%	4.20%
	June 30, 2020	2.00%	2.50%	3.10%	4.20%

For healthy annuitants, the sex distinct 2009 CalPERS healthy annuitant mortality table, adjusted 1.014 for females and 0.909 for males. For active members, the sex distinct 2009 CalPERS employee mortality tables, adjusted 0.918 for females and 0.948 for males. Rates are projected generationally from the 2009 base year using a modified version of the MP-2015 projection scale.

The actuarial assumptions used at the June 30, 2020 measurement date was based upon the result of a demographic experience study for the period July 1, 2009 through June 30, 2014 and an economic experience study as of July 1, 2019.

Discount Rate

Fiscal Year 2022

SFERS Plan – The beginning and end of year measurements are based on different assumptions and contribution methods that may result in different discount rates. The discount rate was 7.40% as of June 30, 2021 (measurement date) and June 30, 2020 (measurement date).

The discount rate used to measure the Total Pension Liability as of June 30, 2021 was 7.40%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will continue to be made at the rates specified in the Charter. Employer contributions were assumed to be made in accordance with the contribution policy in effect for July 1, 2020 actuarial valuation. That policy includes contributions equal to the employer portion of the entry age normal costs for members as of the valuation date, a payment for the expected administrative expenses, and an amortization payment on the unfunded actuarial liability.

(Dollars in thousands, unless otherwise stated)

The amortization payment is based on closed periods that vary in length depending on the source. Charter amendments prior to July 1, 2014 are amortized over 20 years. After July 1, 2014, any Charter changes to active member benefits are amortized over 15 years and changes to inactive member benefits, including Supplemental COLAs, are amortized over 5 years. The remaining unfunded actuarial liability not attributable to Charter amendments as of July 1, 2013 is amortized over a 19-year period commencing July 1, 2014. Experience gains and losses and assumption or method changes on or after July 1, 2014 are amortized over 20 years. The full amortization payment for the 2015 assumption changes is phased in over a period of 5 years. For the July 1, 2016 valuation, the increase in the unfunded actuarial liability attributable to the Supplemental COLAs granted on July 1, 2013 and July 1, 2014 are amortized over 17-years and 5-years respectively. All amortization schedules are established as a level percentage of payroll so payments increase 3.25% each year. The unfunded actuarial liability is based on an actuarial value of assets that smooths investment gains and losses over five years and a measurement of the actuarial liability that excludes the value of any future Supplemental COLAs.

While the contributions and measure of actuarial liability in the funding valuation do not anticipate any future Supplemental COLAs, the projected contributions for the determination of the discount rate include the anticipated future amortization payments on future Supplemental COLAs for current members when they are expected to be granted. For members who worked after November 6, 1996 and before Proposition C passed (Post 1997 Retirees), a Supplemental COLA is granted if the actual investment earnings during the year exceed the expected investment earnings on the actuarial value of assets. For members who did not work after November 6, 1996 and before Proposition C passed, the market value of assets must also exceed the actuarial liability at the beginning of the year for a Supplemental COLA to be granted. When a Supplemental COLA is granted, the amount depends on the amount of excess earnings and the basic COLA amount for each membership group. The large majority of members receive a 1.50% Supplemental COLA when granted.

Because the probability of a Supplemental COLA depends on the current funded level of the Retirement System for certain members, an assumption was developed as of June 30, 2021 for the probability and amount of Supplemental COLA for each future year. A full Supplemental COLA will be paid to all retired members, and their beneficiaries, who were retired effective July 1, 2021. The table below shows the net assumed Supplemental COLA for members with a 2.00% Basic COLA for sample years.

Assumed Supplemental COLA for Members with a 2.00% Basic COLA

Fiscal years	96 - Prop C	Before 11/6/96 or After Prop C
2023	0.75 %	0.70 %
2025	0.75	0.70
2027	0.75	0.60
2029	0.75	0.60
2031	0.75	0.60
2033+	0.75	0.50

The projection of benefit payments to current members for determining the discount rate includes the payment of anticipated future Supplemental COLAs.

(Dollars in thousands, unless otherwise stated)

Based on these assumptions, the Retirement System's fiduciary net position was projected to be available to make projected future benefit payments for current members for all future years. Projected benefit payments are discounted at the long-term expected return on assets of 7.40% to the extent the fiduciary net position is available to make the payments and at the municipal bond rate of 2.16% to the extent they are not available. The single equivalent rate used to determine the Total Pension Liability as of June 30, 2021 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 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.

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global Equity	37.0 %	4.2 %
Private Equity	23.0	7.9
Private Credit	10.0	5.1
Real Assets	10.0	5.1
Hedge Funds/Absolute Returns	10.0	2.9
Treasuries	8.0	0.0
Liquid Credit	5.0	2.3
Leverage	(3.0)	0.1
Total	100.0	

Fiscal Year 2021

SFERS Plan – The beginning and end of year measurements are based on different assumptions and contribution methods that may result in different discount rates. The discount rate was 7.40% as of June 30, 2020 (measurement date) and June 30, 2019 (measurement date).

The discount rate used to measure the Total Pension Liability as of the June 30, 2020 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, 2019 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.

(Continued)

(Dollars in thousands, unless otherwise stated)

For the July 1, 2016 valuation, the increase in the unfunded actuarial liability attributable to the Supplemental COLAs granted on July 1, 2013 and July 1, 2014 are amortized over 17-years and 5-years respectively. All amortization schedules are established as a level percentage of payroll, so payments increase 3.50% each year. The unfunded actuarial liability is based on an actuarial value of assets that smooths investment gains and losses over five years and a measurement of the actuarial liability that excludes the value of any future Supplemental COLAs.

While the contributions and measure of actuarial liability in the funding valuation do not anticipate any future Supplemental COLAs, the projected contributions for the determination of the discount rate include the anticipated future amortization payments on future Supplemental 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 1997 Retirees), a Supplemental COLA is granted if the actual investment earnings during the year exceed the expected investment earnings on the actuarial value of assets. For members who did not work after November 6, 1996 and before Proposition C passed, the market value of assets must also exceed the actuarial liability at the beginning of the year for a Supplemental COLA to be granted. When a Supplemental COLA is granted, the amount depends on the amount of excess earnings and the basic COLA amount for each membership group. The large majority of members receive a 1.50% Supplemental COLA when granted.

Because the probability of a Supplemental COLA depends on the current funded level of the Retirement System for certain members, an assumption was developed as of June 30, 2020 for the probability and amount of Supplemental COLA for each future year. There were no excess earnings during the fiscal year ending June 30, 2020; consequently, no Supplemental COLA will be paid effective July 1, 2020.

The table below shows the net assumed Supplemental COLA for members with a 2.00% Basic COLA for sample years.

Assumed Supplemental COLA for Members with a 2.00% Basic COLA

Fiscal years	96 - Prop C	Before 11/6/96 or After Prop C
2022	0.75 %	0.19 %
2024	0.75	0.27
2026	0.75	0.30
2028	0.75	0.33
2030	0.75	0.35
2032	0.75	0.37
2034+	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 2.21% to the extent they are not available. The single equivalent rate used to determine the Total Pension Liability as of June 30, 2020 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.

(Dollars in thousands, unless otherwise stated)

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.

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global Equity	31.0 %	4.9 %
Private Equity	18.0	7.9
Real Assets	17.0	5.7
Hedge Funds/Absolute Returns	15.0	3.0
Private Credit	10.0	4.8
Treasuries	6.0	(0.5)
Liquid Credit	3.0	2.7
Total	100.0	

Sensitivity of Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following presents Hetch Hetchy's allocation of the employer's proportionate share of the net pension liability/asset for the SFERS Plan, calculated using the discount rate, as well as what Hetch Hetchy's allocation of the employer's proportionate share of the net pension (asset)/liability would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate.

Fiscal Year 2022	Hetchy Water	Hetchy Power	CleanPowerSF	Total
1% Decrease Share of NPL @ 6.40%	$ 9,272	11,333	1,221	21,826
Share of NPA @ 7.40%	(13,912)	(17,004)	(1,833)	(32,749)
1% Increase Share of NPA @ 8.40%	(33,053)	(40,398)	(4,354)	(77,805)

Fiscal Year 2021	Hetchy Water	Hetchy Power	CleanPowerSF	Total
1% Decrease Share of NPL @ 6.40%	$ 47,111	57,580	5,318	110,009
Share of NPL @ 7.40%	26,645	32,566	3,008	62,219
1% Increase Share of NPL @ 8.40%	9,736	11,899	1,099	22,734

(b) *Other Post-Employment Benefits*

Hetch Hetchy participates in a single-employer defined benefit other post-employment plan (the Plan). The Plan is maintained by the City and is administered through the City's Health Service System. It provides post-employment medical, dental and vision insurance benefits to eligible employees, retired employees, surviving spouses, and domestic partners. Health benefit provisions are established and may be amended through negotiations between the City and the respective bargaining units. The City does not issue a separate report on its other post-employment benefit plan.

(Dollars in thousands, unless otherwise stated)

GASB Statement No. 75 requires that reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used.

San Francisco Health Service System Retiree Plan - Single-Employer	Fiscal Year 2022	Fiscal Year 2021
Valuation Date (VD)	June 30, 2020 updated to June 30, 2021	June 30, 2020
Measurement Date (MD)	June 30, 2021	June 30, 2020
Measurement Period (MP)	July 1, 2020 to June 30, 2021	July 1, 2019 to June 30, 2020

Hetch Hetchy'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, 2021 and June 30, 2020. Hetch Hetchy'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 its allocated percentage. Hetch Hetchy's proportionate share of the City's OPEB elements was 0.92%, of which 0.39% for Hetchy Water, 0.47% for Hetchy Power, and 0.06% for CleanPowerSF as of June 30, 2021 (measurement date). Hetch Hetchy's proportionate share of the City's OPEB elements was 0.92%, of which 0.38% for Hetchy Water, 0.46% for Hetchy Power, and 0.08% for CleanPowerSF as of June 30, 2020 (measurement date).

Benefits

Permanent full-time and elected employees are eligible to retire and receive post-retirement 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		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.

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 United Healthcare Dental
Vision:	Vision benefits are provided under the medical insurance plans and are administered by Vision Service Plan.

Projections of the sharing of benefit related costs are based on an established pattern of practice.

Contributions

Benefits provided under the Plan are currently paid through "pay-as-you-go" funding. Additionally, under the City Charter, active officers and employees of the City who commenced employment on or after January 10, 2009, shall contribute to the Retiree Health Care Trust Fund (Trust Fund) a percentage of compensation not to exceed 2% of pre-tax compensation. The City shall contribute 1% of compensation for officers and employees who commenced employment on or after January 10, 2009 until the City's GASB Actuary has determined that the City's portion of the Trust Fund is fully funded. At that time, the City's 1% contribution shall cease, and officers and employees will each contribute 50% of the maximum 2% of pre-tax compensation.

Starting July 1, 2016, active officers and employees of the City who commenced employment on or before January 9, 2009, shall contribute 0.25% of pre-tax compensation into the Trust Fund. Beginning on July 1st of each subsequent year, the active officers and employees of the City who commenced employment on or before January 9, 2009, shall contribute an additional 0.25% of pre-tax compensation up to a maximum of 1%. Starting July 1, 2016, the City shall contribute 0.25% of compensation into the Trust Fund for each officer and employee who commenced employment on or before January 9, 2009. Beginning on July 1st of each subsequent year, the City shall contribute an additional 0.25% of compensation, up to a maximum of 1% for each officer and employee who commenced employment on or before January 9, 2009. When the City's 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.

Fiscal Year 2022

For the fiscal year ended June 30, 2022, the City's funding was based on "pay as you go" plus a contribution of $41,841 to the Retiree Healthcare Trust Fund. The "pay as you go" portion paid by the City was $211,025 for a total contribution of $252,866 for the fiscal year ended June 30, 2022. Hetch Hetchy's proportionate share of the City's contributions for fiscal year 2022 were $2,322: $975 for Hetchy Water, $1,192 for Hetchy Power, and $155 for CleanPowerSF for fiscal year 2022 and will be recognized as a reduction of the net OPEB liability in the subsequent fiscal period.

Fiscal Year 2021

For the fiscal year ended June 30, 2021, the City's funding was based on "pay-as-you-go" plus a contribution of $39,555 to the Retiree Healthcare Trust Fund. The "pay-as-you-go" portion paid by the City was $206,439 for a total contribution of $245,994 for the fiscal year ended June 30, 2021. Hetch Hetchy's proportionate share of the City's contributions for fiscal year 2021 were $2,252: $929 for Hetchy Water, $1,136 for Hetchy Power, and $187 for CleanPowerSF.

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

Fiscal Year 2022

As of June 30, 2022, the City reported net OPEB liabilities related to the Plan of $3,691,122. Hetch Hetchy's proportionate share of the City's net OPEB liability as of June 30, 2022 was $33,909: $14,240 for Hetchy Water, $17,405 for Hetchy Power, and $2,264 for CleanPowerSF.

(Dollars in thousands, unless otherwise stated)

For the year ended June 30, 2022, the City's recognized OPEB expense was $272,001. Amortization of the City's deferred outflows and inflows is included as a component of OPEB expense. Hetch Hetchy's proportionate share of the City's OPEB expense was $3,002: $1,874 for Hetchy Water and $2,291 for Hetchy Power, offset by a decrease of $1,163 expense for CleanPowerSF.

As of June 30, 2022, Hetch Hetchy reported its proportionate share of the City's deferred outflows and inflows of resources related to OPEB from the following sources:

	Schedules of Deferred Outflows and Inflows of Resources							
	Deferred Outflows of Resources				Deferred Inflows of Resources			
	Hetchy Water	Hetchy Power	CleanPowerSF	Total	Hetchy Water	Hetchy Power	CleanPowerSF	Total
Contributions subsequent to measurement date	$ 975	1,192	155	2,322	–	–	–	–
Differences between expected and actual experience	428	523	68	1,019	2,193	2,680	348	5,221
Changes in assumptions	602	735	96	1,433	–	–	–	–
Net difference between projected and actual earnings on plan investments	–	–	–	–	269	329	43	641
Change in proportion	1,267	1,549	479	3,295	272	333	1,203	1,808
Total	$ 3,272	3,999	798	8,069	2,734	3,342	1,594	7,670

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:

	Deferred Outflows/(Inflows) of Resources			
Fiscal years	Hetchy Water	Hetchy Power	CleanPowerSF	Total
2023	$ (105)	(128)	(264)	(497)
2024	(106)	(130)	(264)	(500)
2025	(103)	(125)	(264)	(492)
2026	46	57	(167)	(64)
2027	(43)	(53)	(59)	(155)
Thereafter	(126)	(156)	67	(215)
Total	$ (437)	(535)	(951)	(1,923)

Fiscal Year 2021

As of June 30, 2021, the City reported net OPEB liabilities related to the Plan of $3,823,334. Hetch Hetchy's proportionate share of the City's net OPEB liability as of June 30, 2021 was $35,006: $14,444 for Hetchy Water, $17,653 for Hetchy Power, and $2,909 for CleanPowerSF.

For the year ended June 30, 2021, the City's recognized OPEB expense was $320,684. Amortization of the City's deferred outflows and inflows is included as a component of OPEB expense. Hetch Hetchy's proportionate share of the City's reduction of OPEB expense was $1,859: $1,480 for Hetchy Water and $1,809 for Hetchy Power, offset by an increase of $1,430 expense for CleanPowerSF.

(Dollars in thousands, unless otherwise stated)

As of June 30, 2021, Hetch Hetchy reported its proportionate share of the City's deferred outflows and inflows of resources related to OPEB from the following sources:

Schedules of Deferred Outflows and Inflows of Resources									
		Deferred Outflows of Resources				Deferred Inflows of Resources			
		Hetchy Water	Hetchy Power	CleanPowerSF	Total	Hetchy Water	Hetchy Power	CleanPowerSF	Total
Contributions subsequent to measurement date	$	929	1,136	187	2,252	–	–	–	–
Differences between expected and actual experience		524	640	106	1,270	2,070	2,529	417	5,016
Changes in assumptions		731	894	147	1,772	–	–	–	–
Net difference between projected and actual earnings on plan investments		9	12	2	23	–	–	–	–
Change in proportion		1,532	1,870	–	3,402	15	19	1,496	1,530
Total	$	3,725	4,552	442	8,719	2,085	2,548	1,913	6,546

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:

Deferred Outflows/(Inflows) of Resources					
Fiscal years		Hetchy Water	Hetchy Power	CleanPowerSF	Total
2022	$	90	110	(328)	(128)
2023		96	117	(326)	(113)
2024		94	116	(326)	(116)
2025		99	120	(326)	(107)
2026		245	299	(222)	322
Thereafter		87	106	(130)	63
Total	$	711	868	(1,658)	(79)

(Dollars in thousands, unless otherwise stated)

Actuarial Assumptions

Fiscal Year 2022

A summary of the actuarial assumptions and methods used to calculate the total OPEB liability as of June 30, 2021 (measurement date) is provided below:

Key Actuarial Assumptions	
Valuation Date	June 30, 2020, updated to June 30, 2021
Measurement Date	June 30, 2021
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 6.74% trending down to ultimate rate of 4.04% in 2075
	Medicare trend starts at 7.24% trending down to ultimate rate of 4.04% in 2075
	10-County average trend starts at 5.50% trending down to ultimate rate of 4.04% in 2075
	Vision and expenses trend remains a flat 3.0% for all years
Expected Rate of Return on Plan Assets	7.00%
Salary Increase Rate	Wage Inflation Component: 3.25%
	Additional Merit Component (dependent on years of service):
	Police: 0.50% - 7.50%
	Fire: 0.50% - 14.00%
	Muni Drivers: 0.00% - 16.00%
	Craft: 0.50% - 3.75%
	Misc: 0.30% - 5.50%
Inflation Rate	Wage Inflation: 3.25% compounded annually
	Consumer Price Inflation: 2.50% 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, 2019.

Non-Annuitants

		Adjustment Factor	
	Published Table	Male	Female
Miscellaneous	PubG-2010 Employee	0.834	0.866
Safety	PubS-2010 Employee	1.011	0.979

Healthy Retirees

		Adjustment Factor	
	Published Table	Male	Female
Miscellaneous	PubG-2010 Employee	1.031	0.977
Safety	PubS-2010 Employee	0.947	1.044

Disabled Retirees

		Adjustment Factor	
	Published Table	Male	Female
Miscellaneous	PubG-2010 Employee	1.045	1.003
Safety	PubS-2010 Employee	0.916	0.995

Beneficiaries

		Adjustment Factor	
	Published Table	Male	Female
Miscellaneous	PubG-2010 Employee	1.031	0.977
Safety	PubG-2010 Employee	1.031	0.977

The mortality rates in the base tables are projected generationally from the base year using the MP-2019 projection scale.

(Continued)

(Dollars in thousands, unless otherwise stated)

Fiscal Year 2021

A summary of the actuarial assumptions and methods used to calculate the total OPEB liability as of June 30, 2020 (measurement year) is provided below:

Key Actuarial Assumptions	
Valuation Date	June 30, 2020
Measurement Date	June 30, 2020
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 4.00% in 2022, 7.00% in 2023, trending down to ultimate rate of 4.04% in 2075
	Medicare trend starts at 1.00% in 2022, 7.50% in 2023, trending down to ultimate rate of 4.04% in 2075
	10-County average trend starts at 4.5% in 2022, 5.50% in 2023, trending down to ultimate rate of 4.04% in 2075
	Vision and expenses trend remains a flat 3.0% for all years
Expected Rate of Return on Plan Assets	7.00%
Salary Increase Rate	Wage Inflation Component: 3.25%
	Additional Merit Component (dependent on years of service):
	Police: 0.50% - 7.50%
	Fire: 0.50% - 14.00%
	Muni Drivers: 0.00% - 16.00%
	Craft: 0.50% - 3.75%
	Misc: 0.30% - 5.50%
Inflation Rate	Wage Inflation: 3.25% compounded annually
	Consumer Price Inflation: 2.50% 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, 2019.

Non-Annuitants

	Published Table	Adjustment Factor Male	Female
Miscellaneous	PubG-2010 Employee	0.834	0.866
Safety	PubS-2010 Employee	1.011	0.979

Healthy Retirees

	Published Table	Adjustment Factor Male	Female
Miscellaneous	PubG-2010 Employee	1.031	0.977
Safety	PubS-2010 Employee	0.947	1.044

Disabled Retirees

	Published Table	Adjustment Factor Male	Female
Miscellaneous	PubG-2010 Employee	1.045	1.003
Safety	PubS-2010 Employee	0.916	0.995

Beneficiaries

	Published Table	Adjustment Factor Male	Female
Miscellaneous	PubG-2010 Employee	1.031	0.977
Safety	PubG-2010 Employee	1.031	0.977

The mortality rates in the base tables are projected generationally from the base year using the MP-2019 projection scale.

(Dollars in thousands, unless otherwise stated)

Sensitivity of Liabilities to Changes in the Healthcare Cost Trend Rate and Discount Rate

The following presents Hetch Hetchy's proportionate share of the City's net OPEB liability calculated using the healthcare cost trend rate, as well as what its 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 as of June 30, 2022 and June 30, 2021:

		Hetchy Water	Hetchy Power	CleanPowerSF	2022
1% Decrease	$	12,121	14,814	1,927	28,862
Healthcare Trend		14,240	17,405	2,264	33,909
1% Increase		16,882	20,634	2,685	40,201

		Hetchy Water	Hetchy Power	CleanPowerSF	2021
1% Decrease	$	12,488	15,264	2,515	30,267
Healthcare Trend		14,444	17,653	2,909	35,006
1% Increase		16,992	20,767	3,422	41,181

Discount Rate

Fiscal Year 2022

The discount rate used to measure the Total OPEB Liability as of June 30, 2021 was 7.00%. 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 7.00% 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.

(Dollars in thousands, unless otherwise stated)

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. Large Cap	28.0 %	8.2 %
U.S. Small Cap	3.0	9.5
Developed Market Equity (non-U.S.)	15.0	8.9
Emerging Market Equity	13.0	11.0
Credit		
Bank Loans	3.0	4.4
High Yield Bonds	3.0	4.4
Emerging Market Bonds	3.0	4.3
Rate Securities		
Investment Grade Bonds	9.0	1.9
Long-term Government Bonds	4.0	3.2
Short-term Treasury Inflation-Protected Securities (TIPS)	4.0	1.5
Private Markets		
Private Equity	5.0	13.0
Core Private Real Estate	5.0	6.2
Risk Mitigating Strategies		
Global Macro	5.0	4.4
Total	100.0 %	

The following presents Hetch Hetchy's proportionate share of the City's net OPEB liability calculated using the discount rate, as well as what Hetch Hetchy'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:

	Hetchy Water	Hetchy Power	CleanPowerSF	Total
1% Decrease 6.00%	$ 16,652	20,352	2,648	39,652
Discount Rate 7.00%	14,240	17,405	2,264	33,909
1% Increase 8.00%	12,271	14,997	1,951	29,219

Fiscal Year 2021

The discount rate used to measure the total OPEB liability as of June 30, 2020 was 7.00%. 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 7.00% 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.

(Dollars in thousands, unless otherwise stated)

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. Large Cap	28.0 %	8.4 %
U.S. Small Cap	3.0	9.8
Developed Market Equity (non-U.S.)	15.0	9.6
Emerging Market Equity	13.0	11.7
Credit		
Bank Loans	3.0	4.9
High Yield Bonds	3.0	4.9
Emerging Market Bonds	3.0	4.8
Rate Securities		
Investment Grade Bonds	9.0	2.2
Long-term Government Bonds	4.0	3.1
Short-term Treasury Inflation-Protected Securities (TIPS)	4.0	1.9
Private Markets		
Private Equity	5.0	12.5
Core Private Real Estate	5.0	6.4
Risk Mitigating Strategies		
Global Macro	5.0	4.1
Total	100.0 %	

The asset allocation targets summarized above have a 20-year return estimate of 6.90%, which was weighted against a 10-year model estimating a 6.93% return, resulting in the ultimate long-term expected rate of return of 7.00%.

The following presents Hetch Hetchy's proportionate share of the City's net OPEB liability calculated using the discount rate, as well as what Hetch Hetchy'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:

	Hetchy Water	Hetchy Power	CleanPowerSF	Total
1% Decrease 6.00%	$ 16,761	20,486	3,376	40,623
Discount Rate 7.00%	14,444	17,653	2,909	35,006
1% Increase 8.00%	12,551	15,341	2,528	30,420

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

(12) Related Parties

(a) *Hetch Hetchy*

Various common costs incurred by the SFPUC are allocated among Hetch Hetchy, Water, and Wastewater Enterprises. The allocations are based on the SFPUC management's best estimate and may change from year to year depending on the activities incurred by each Enterprise and the information available. For the years ended June 30, 2022 and 2021, the SFPUC allocated $22,221 or 20.7% and $20,099 or 20.5% respectively, in administrative costs including COVID-19 Project expenses, which is presented in the financial statements under various expense categories. These costs are then allocated to Hetchy Water, Hetchy Power, and CleanPowerSF in the Hetch Hetchy financial statements, using the periodically reviewed department overhead allocation model.

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. Some City departments provide direct services such as engineering, purchasing, legal, data processing, telecommunication, and human resources to Hetch Hetchy and charge amounts designed to recover those departments' costs. These charges totaling approximately $13,003 and $12,582 for the years ended June 30, 2022 and 2021, respectively, have been included in services provided by other departments in the accompanying financial statements.

SFPUC's 75-year lease agreement with the San Francisco Recreation and Parks Department, for the use of parking spaces for its fleet of vehicles at the Civic Center Garage, commenced on February 1, 2011. Total payment under this agreement is $6,274, which was fully made as of fiscal year 2015. The expenses and prepayments among the three SFPUC Enterprises are based on 525 Golden Gate occupancy. As of June 30, 2022, Hetch Hetchy's allocable shares of expenses and prepayment were $18 and $904, respectively, and as of June 30, 2021 were $17 and $922, respectively.

(b) *Hetchy Water*

For the years ended June 30, 2022 and 2021, the SFPUC allocated $10,886 or 10.2%, and $4,585 or 4.7%, respectively, in administrative costs including COVID-19 Project expense to Hetchy Water.

The Water Enterprise purchases water from Hetchy Water. Included in the operating revenues are the water assessment fees of $45,815 and $44,149 for the years ended June 30, 2022 and 2021, respectively. The water assessment fees represent a recovery to fund upcountry, water-related costs that are not otherwise funded through Hetchy water-related revenue or Water revenue bonds.

Hetchy Water received $30,001 and $16,000 for the years ended June 30, 2022 and 2021, respectively, from the Water Enterprise to fund upcountry projects.

(c) *Hetchy Power*

For the years ended June 30, 2022 and 2021, the SFPUC allocated $8,820 or 8.2%, and $13,202 or 13.5% respectively, in administrative costs including COVID-19 Project expense to Hetchy Power.

As of June 30, 2022, and 2021, operating revenues in sales of power to departments within the City were $116,334 and $82,129, respectively.

The Water Enterprise also purchases electricity and gas from Hetchy Power. This amount totaled $11,394 and $9,790 for the years ended June 30, 2022 and 2021, respectively.

The Wastewater Enterprise purchases electricity and gas from Hetchy Power. This amount totaled $11,887 and $10,122 for the years ended June 30, 2022 and 2021, respectively.

The Low Carbon Fuel Standard (LCFS) program is a regulatory program overseen by the California Air Resources Board (CARB). The LCFS program seeks to reduce the carbon intensity of California's transportation fuel by 20% by 2030. Transportation fuel suppliers can achieve this goal by either reducing the carbon intensity of their fuels or purchasing LCFS credits from other fuel suppliers that have a lower carbon intensity. In 2017, the San Francisco Municipal Transportation Agency (SFMTA) joined the LCFS program, signing up its transit fleet of electric buses, cable cars, and light rail vehicles and generating LCFS credits. Through a Memorandum of Understanding (MOU) with SFMTA, approved by the SFPUC Commission in Resolution 17-0199, net proceeds from the sale of LCFS credits would be shared 50/50 between SFMTA and Hetchy Power. Under the MOU, Hetchy Power would take responsibility for selling the LCFS credits. In Ordinance 0199-19, the Board of Supervisors authorized Hetchy Power to establish the Low Carbon Fuel Standard Fund to account for the revenue and expenditure from the sale of LCFS credits. The Ordinance also allowed Hetchy Power to sell LCFS credits on behalf of other City agencies. As of June 30, 2022 and 2021, Hetchy Power received total payments of $2,367 and $2,362, respectively, 50% ($1,184 in fiscal year 2022 and $1,181 in fiscal year 2021) was reallocated to SFMTA and the remaining portion was reported as other non-operating revenues on the Statements of Revenues, Expenses, and Change in Net Position.

Due from other City departments was $11,804 and $12,406 for the years ended June 30, 2022 and 2021, respectively. Hetchy Power serves as the City's department for energy efficiency projects and maintains the Sustainable Energy Account (SEA) (formerly known as the Mayor's Energy Conservation Account) fund to sponsor and financially support such projects at various City departments. In this role, Hetchy Power may secure low-interest financing to supplement funds available in the SEA fund. At June 30, 2022 and 2021, projects completed or under way throughout the City amounted to $4,050 and $4,556, respectively, and are recorded as due from other government agencies.

Hetch Hetchy funded a project for the Treasure Island Development Authority and recorded a receivable in connection with an upgraded submarine power cable for the Treasure Island as due from other government agencies. This amount totaled $6,666 and $6,627 for the years ended June 30, 2022 and 2021, respectively.

(Dollars in thousands, unless otherwise stated)

As of June 30, 2022 and 2021, Hetchy Power recorded receivables of $629 and $739, respectively, due from Wastewater Enterprise for its share of costs relating to SFPUC Headquarters Living Machine System. Details of due from other City departments are as follows:

	2022	2021
Treasure Island Development Authority	$ 6,666	6,627
SEA-related project: Moscone Center	4,050	4,556
Wastewater - 525 Golden Gate Headquarters Project	629	739
San Francisco Recreation and Park	314	419
Department of Public Works	145	65
Total due from other City departments	11,804	12,406
Less: current portion	(867)	(7,413)
Long-term portion as of June 30, net	$ 10,937	4,993

As of June 30, 2022, Hetchy Power had payables in the amount of $380, of which $369 to the Port of San Francisco for Pier 70 Shoreside Power Project and $11 to the Department of Public Works for painting of light poles. As of June 30, 2021, Hetchy Power had payables of $369 to the Port of San Francisco for Pier 70 Shoreside Power Project.

(d) *CleanPowerSF*

For the years ended June 30, 2022 and 2021, the SFPUC allocated $2,515 or 2.4%, and $2,312 or 2.4%, respectively, in administrative costs to CleanPowerSF.

As of June 30, 2022, and 2021, operating revenue in sales of power to Hetchy Power were $2,332 and $1,072, respectively. Operating expenses in purchase of power from Hetchy Power were $1,589 and $2,456, respectively. Wholesale sales of energy, capacity and/or other electric power related products may be made between the CleanPowerSF and Hetchy Power, when available. CleanPowerSF and Hetchy Power transact for such products at prevailing market prices.

CleanPowerSF received program support services from Hetchy Power. This amount totaled $1,861 and $2,224 for the years ended June 30, 2022 and 2021, respectively.

(13) Risk Management

The Enterprise's Risk Management program includes both self-insured (i.e., self-retention) and insured exposures at risk. Risk assessments and purchasing of insurance coverage are collaboratively coordinated by SFPUC Enterprise 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 are generally more economical, as the SFPUC in coordination with the City Attorney's Office administers, adjusts, settles, defends, and pays claims from budgeted resources (i.e., pay-as-you-go fund). When economically more viable or when required by debt financing covenants, the Enterprise obtains commercial insurance. At least annually, the City actuarially determines general liability and workers' compensation risk exposures. The Enterprise does not maintain commercial earthquake coverage, with certain minor exceptions, such as a sub-limit for fire-sprinkler leakage due to earthquake under the SFPUC Property Insurance Program. In the past three years, there was no settlements that exceeded insurance coverage.

(Dollars in thousands, unless otherwise stated)

	Risk	Coverage Approach
(a)	General Liability	Self-Insured
(b)	Workers' Compensation	Self-Insured Through City-wide Pool
(c)	Property	Purchased Insurance and Self-Insured
(d)	Public Officials Liability	Purchased Insurance
(e)	Employment Practices Liability	Purchased Insurance
(f)	Cyber Liability	Purchased Insurance
(g)	Crime	Purchased Insurance
(h)	Electronic Data Processing	Purchased Insurance and Self-Insured
(i)	Surety Bonds	Purchased and Contractual Risk Transfer
(j)	Errors and Omissions	Purchased and Contractual Risk Transfer
(k)	Builders' Risk	Contractual Risk Transfer

(a) *General Liability*

Through coordination with the Controller's Office and City Attorney's Office, the general liability risk exposure is actuarially determined and is addressed through pay-as-you-go funding as part of the budgetary process. Associated costs and estimates are recorded as expenses as required under GAAP for financial statement purposes for both the Enterprise and the City and County of San Francisco's Annual Comprehensive Financial Report. The claim expense allocations are determined based on actuarially determined anticipated claim payments and the projected timing of disbursement.

The changes for the general liability (damage claims) for the years ended June 30, 2022 and 2021 are as follows:

Fiscal years	Beginning of year	Claims and changes in estimates	Claims paid	End of year
Hetch Hetchy				
2022	$ 1,639	3,840	(3,797)	1,682
2021	2,886	4,843	(6,090)	1,639
Hetchy Water				
2022	$ 525	253	(151)	627
2021	558	478	(511)	525
Hetchy Power				
2022	$ 1,108	2,005	(2,090)	1,023
2021	2,222	4,212	(5,326)	1,108
CleanPowerSF				
2022	$ 6	1,582	(1,556)	32
2021	106	153	(253)	6

(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.

(Dollars in thousands, unless otherwise stated)

The changes for the workers' compensation liabilities for the years ended June 30, 2022 and 2021 are as follows:

Fiscal years	Beginning of year	Claims and changes in estimates	Claims paid	End of year
Hetch Hetchy				
2022	$ 3,238	555	(315)	3,478
2021	3,387	113	(262)	3,238
Hetchy Water				
2022	$ 1,120	233	(125)	1,228
2021	1,187	18	(85)	1,120
Hetchy Power				
2022	$ 2,118	322	(190)	2,250
2021	2,200	95	(177)	2,118

*CleanPowerSF had no workers' compensation liabilities as of June 30, 2022 and 2021.

(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 is 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 (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*

An Employment Practices Liability Policy is retained to protect against employment-related claims and liabilities.

(f) *Cyber Liability*

A Cyber Liability Policy is retained to protect against cyber-related claims and liabilities.

(g) *Crime*

The Enterprise also retains a Commercial Crime Policy, in lieu of bonding its employees, to provide coverage against liabilities or losses due to third-party crime or employee fraud.

(h) *Electronic Data Processing*

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

(i) *Surety Bonds*

Bonds are required in most phases of the public utilities construction contracting process for such phases as bid, performance, and payment or maintenance. Additionally, bonds may be required in other contracts where goods or services are provided to ensure compliance with applicable terms and conditions such as warranty.

(j) *Errors and Omissions*

Errors and omissions, also known as Professional Liability, are commonly transferred through contract to the contracted professional, or retained through self insurance on a case-by-case basis depending on the size, complexity, or scope of construction or professional service contracts. Examples of such contracts are inclusive of services provided by engineers, architects, design professionals, and other licensed or certified professional service providers.

(k) *Builders' Risk*

Builders' Risk policies of insurance are required to be provided by the contractor on all construction projects for the full value of construction.

(l) *Energy Risk Management*

Similar to other electric utilities with a heavy reliance on hydroelectric generation, Hetch Hetchy is exposed to risks that could impact its ability to generate net revenues to fund operating and capital investment activities. Hydroelectric generation facilities in the Sierra Nevada are the primary source of electricity for Hetch Hetchy. For this reason, the Hetch Hetchy revenues can vary with watershed hydrology, unexpected generator outages, and market prices for energy. Given the inherent risk for all hydroelectric generation, several risk management interventions have been developed to mitigate exposure.

(m) *Enterprise Risk Management*

The Power Enterprise adopted the ISO 31000 standard for Hetchy Power and the CleanPowerSF program as the framework for implementing Enterprise Risk Management (ERM). The Enterprise utilizes this framework to systematically and proactively identify and mitigate risks that threatens its business objectives. Since not all risks are insurable or transferable contractually, the ERM program provides an additional method to manage risks and protect the Enterprise's current and expanding business allowing for increased operational resiliency and the ability to capitalize on opportunities.

(14) Commitments and Litigation

(a) *Commitments*

As of June 30, 2022 and 2021, Hetch Hetchy has outstanding commitments with third parties of $199,283 and $143,404, respectively, for various capital projects and other purchase agreements for materials and services.

Hetchy Water

To meet certain requirements of the Don Pedro Reservoir operating license, the City entered into an agreement with the Modesto Irrigation District (MID) and Turlock Irrigation District (TID) in which the Districts would be responsible for an increase in water flow releases from the reservoir in exchange for annual payments from the City, which are included in Hetchy Water's operating expenses. The payment amounts were $5,129 and $5,069 for fiscal years 2022 and 2021, respectively. The payments are to be made for the duration of the license, but may be terminated with one year's prior written notice after 2001. The City and the Districts have also agreed to monitor the fisheries in the lower Tuolumne River for the duration of the license. A maximum monitoring expense of $1,400 is to be shared between the City and the Districts over the term of the license. The City's share of the monitoring costs is 52%, while the Districts are responsible for 48% of the costs.

Hetchy Power

Wholesale Distribution Tariff (WDT) and Key Operating Agreements for Grid Access

Upon expiration of the City's previous Interconnection Agreement with PG&E, the City began taking service in 2015 under the Wholesale Distribution Tariff (WDT) for distribution service and under the CAISO Open-Access Transmission Tariff for transmission service. The FERC-regulated Wholesale Distribution Tariff is implemented by PG&E through the City specific Service Agreements and Interconnection Agreements. The terms of these agreements have been in contention since the effective date. The City continues to negotiate with PG&E and, where necessary, file complaints and protests at FERC. In September 2020, PG&E filed a revised WDT. Under the terms of the new WDT, the City would pay substantially higher rates, at least twice to potentially four times the current charges, and be required to install costly and inefficient equipment not needed for technical, safety or reliability of operations. In addition, Hetchy Power would no longer be allowed to connect to the "network" grid in the center of San Francisco; have new secondary interconnections; and/or serve any small, typically unmetered loads, such as streetlights, DAS, traffic signals, and bus shelters.

Staff prepare regular reporting to the Board of Supervisors outlining on-going disputes with PG&E over project requirements, costs and delays. During fiscal years 2022 and 2021, Hetchy Power purchased distribution services for $22,404 and $8,868, respectively, from PG&E under the terms of the Service Agreements and Interconnection Agreements that implement the WDT. The City continues to litigate and dispute these terms at FERC and in the court systems; and pursue the purchase of PG&E's electric grid in San Francisco.

Western System Power Pool and other Market Purchases and Sales

Hetchy Power may purchase or sell energy and other related products (such as ancillary services, spinning reserves, resource adequacy products, and congestion revenue rights) with different market entities through the Western System Power Pool (WSPP) and the CAISO. During fiscal years 2022 and 2021, Hetchy Power purchased $4,152 and $0 of power and other related products, respectively. Sales of excess power, after meeting Hetch Hetchy's obligations, were $0 for 2022 and $469 or 110,043 MWh for 2021, respectively.

Power Purchase Agreement (PPA)

Hetchy Power (Buyer) purchases energy, capacity, and environmental attributes from a local solar photovoltaic project located at Sunset Reservoir (the facility) pursuant to the 2009 25-year PPA with SFCity1, LP, owned by Duke Energy (Seller). In November 2010, the facility commenced commercial operation and began to provide Hetchy Power energy generated by the facility.

The PPA sets the starting purchase price of generated energy at $235/MWh, increasing by 3% each year throughout the term of the agreement, and it is expected that the facility will generate 6,560 MWh per year. In fiscal year 2022, the facility generated 6,460 MWh and the rate was at $334/MWh. In the event that the facility generates more energy than expected due to better than normal meteorological conditions, the PPA requires the Buyer to purchase all the excess energy but generation in excess of 120% of expected is purchased at no cost. The PPA also requires the Seller to generate a minimum amount of energy from the facility annually. If energy production falls below 50% of expected, the Seller must provide replacement power, and if energy falls below 90% of expected, the price for energy generated is lowered. In fiscal years 2022 and 2021, purchases of energy under the Agreement were $2,225, or 6,460 MWh, and $2,127, or 6,598 MWh, respectively.

APX, Inc

Hetchy Power and CleanPowerSF participate in the California Independent System Operator (CAISO) energy markets which requires the SFPUC to have a contract with a certified Scheduling Coordinator (SC). In June 2022, CleanPowerSF renewed a 5-year contract with APX, Inc with contract amount not to exceed $134,743 to fulfill this requirement. APX, Inc provides a number of services including but not limited to an interface with the CAISO's energy scheduling portal, manage invoice payments to the CAISO and communications between the CAISO and the SFPUC, and dispatch of the Hetch Hetchy plant 24 hours a day, seven days a week. The contract also provides that APX, Inc will act as the SC for renewable generation plants under some of CleanPowerSF's Power Purchase Agreements. Hetchy Power's share was $456 and $472 as of June 30, 2022 and 2021, respectively. CleanPowerSF's share was $192 as of June 30, 2022 and 2021.

CleanPowerSF

CleanPowerSF has added multiple additional short-term and medium-term contracts with multiple counterparties pursuant to master agreements, including the WSPP Master Agreement, to purchase renewable, carbon-free and conventional energy and resource adequacy capacity. CleanPowerSF has also entered into long-term contracts for renewable energy and capacity with renewable energy developers including sPower, Terra-Gen, NextEra and EDF Renewables. These contracts have been entered to allow CleanPowerSF to meet its existing retail sales obligations, to support future retail sales from citywide enrollment into the CleanPowerSF program, and to comply with state law requiring that 65% of CleanPowerSF's RPS compliance targets be fulfilled by RPS-eligible electricity from contracts of 10 or more years. Citywide enrollment was substantively completed with the enrollment of residential accounts in April 2019. Since it began serving customers in 2016, CleanPowerSF's cumulative opt-out rate is 4.3% of all enrolled accounts. The total power purchase cost, net of wholesale sales, equaled $238,149 and $188,533 in fiscal years 2022 and 2021, respectively.

CleanPowerSF contracts with Calpine Energy Solutions to provide meter data management, billing and customer care support. Calpine is responsible for calculating and providing CleanPowerSF charges to Pacific Gas & Electric (PG&E), which in turn bills both CleanPowerSF and PG&E customers for electricity transmission, distribution, and CleanPowerSF generation services. PG&E remits payments received from customers for CleanPowerSF charges to the City. During fiscal years 2022 and 2021, amounts paid were $4,730 and $6,664, respectively.

(Continued)

CleanPowerSF Power Purchase Agreement (PPA)

In November 2021, CleanPowerSF amended an existing Renewable Power Purchase Agreement with Blythe Solar IV, LLC (seller) to purchase a storage product from the solar powered generation facility located in Blythe, California pursuant to the 20-year PPA. Under the revised agreement, the project in Blythe, California, will add batteries to the operating 62-MW solar photovoltaic power plant. The contract, including the new battery component, is for $196,399 over 20 years.

In November 2020, CleanPowerSF executed a Power and Storage Purchase Agreement to purchase solar product and storage product from a solar powered generation facility and battery storage facility located at Livermore pursuant to the 25-year PPA with IP Aramis, LLC (Seller). As of June 30, 2022 and 2021, CleanPowerSF received cash collateral of $9,000 for Development Assurance and Performance Assurance from the Seller.

CleanPowerSF Guarantee

In March 2018, CleanPowerSF entered into a five-year, $75,000 Credit Agreement with JPMorgan Chase Bank, National Association ("Bank") to provide letters of credit or loans from the Bank to guarantee certain power purchase agreement payment obligations of CleanPowerSF and to meet working capital needs, if necessary. In November 2021 the Credit Agreement was decreased (at the request of CleanPowerSF) the available amount from $75,000 to $20,000, and the stated term of the agreement was extended to March 2024. Additional changes to the agreement effected by the November 2021 Amendments include elimination of target reserve requirements, revisions to debt service coverage (allowing for a liquidity test two times in the aggregate for any consecutive four quarters) and rate-setting covenants, changes to ongoing reporting requirements to the Bank, and changes to events of default, including the addition of an event of default if CleanPowerSF's long-term unenhanced credit rating is downgraded below investment grade or suspended, withdrawn or otherwise unavailable. In May 2022 CleanPowerSF executed another amendment to its Credit Agreement to eliminate and change certain financial covenants contained in the 2018 Credit Agreement. Specifically, this Amendment eliminated the covenant of the Commission to maintain a specified debt service coverage ratio and changed such financial covenant to commit the Commission to maintain a specified level of Day Liquidity on Hand (as defined in the Credit Agreement). The Credit Agreement is secured by CleanPowerSF's net revenues; there is no pledge of, or lien on net revenues that ranks senior to the obligations under the Credit Agreement. The Bank issued letters of credit in the face amounts totaling $5,847 and $13,810 for fiscal years ending June 30, 2022 and 2021, respectively. CleanPowerSF did not draw on the Credit Agreement during fiscal years 2022 and 2021. Accordingly, the uncommitted credit capacity under the Credit Agreement was $14,153 and $61,190 during fiscal years 2022 and 2021, respectively.

Original financial covenants include that CleanPowerSF maintain a Debt Service Coverage Ratio as defined in the Credit Agreement of not less than 1.05 for each fiscal quarter, as determined for the four consecutive fiscal quarter periods ended on the last day of such fiscal quarter. As of June 30, 2021, CleanPowerSF was not in compliance with this financial covenant as calculated for the four consecutive fiscal quarters ended on such date, resulting in a covenant event of default under the Credit Agreement. In connection with subsequent amendments to the Credit Agreement, JPMorgan Chase granted a waiver of such event of default for the period ended June 30, 2021. CleanPowerSF was in compliance with other covenants and requirements of the

Credit Agreement as of June 30, 2021. CleanPowerSF was in compliance with all covenants and requirements of the Credit Agreement as amended as of June 30, 2022.

GASB Statement No. 88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements,* requires the disclosure of certain information related to debt, including unused letters of credit. Significant events of default under the Credit Agreement, include 1) non-payment, 2) material breach of warranty, representation, or other non-remedied breach of covenants as specified in the agreement and 3) bankruptcy and insolvency events, which could result in all outstanding loans under the Credit Agreement to be immediately due and payable; or the immediate termination of the Bank's commitment to issue letters of credit or make loans under the Credit Agreement.

Green Tariff and Community Solar Green Tariff Programs for Disadvantaged Communities

In June 2018. the California Public Utilities Commission (CPUC) established the Disadvantaged Communities-Green Tariff (DAC-GT) and Community Solar Green Tariff (CSGT) program to address barriers to solar adoption faced by low-income electric customers in neglected communities. The DAC-GT program provides a 20% rate discount on 100% Renewable Portfolio Standard (RPS) eligible electricity service to income-qualified customers residing in Disadvantaged Communities (DACs) as defined by the California Environmental Protection Agency's (Cal EPA). Similar to DAC-GT, the CSGT program allows primarily for the DACs to benefit from the development of solar generation projects located in their own or nearby DACs. CSGT projects must also have a local community-based sponsor that supports site selection and customer enrollment.

The CPUC approved CleanPowerSF's application to establish DAC-GT and CSGT programs in April 2021 and to receive funds to cover program administration and a portion of electricity supply costs. CleanPowerSF began enrolling customers in the DAC-GT program branded as "SuperGreen Saver" on June 1, 2022. The CSGT program is expected to start serving customers during fiscal year 2025, once CleanPowerSF is able to procure electricity from a CSGT-eligible solar project(s). As of June 30, 2022, CleanPowerSF received $1,150 from a combination of ratepayer funds and California Cap and Trade Auction proceeds.

(b) ***Litigation***

Hetch Hetchy is a defendant in various legal actions and claims that arise during the normal course of business. The final disposition of these legal actions and claims is not determinable. However, in the opinion of management, the outcome of any litigation of these matters will not have a material effect on the financial position or changes in net position of Hetch Hetchy.

(c) ***Grants***

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

(d) ***Environmental Issue***

As of June 30, 2022, and 2021, there was no pollution remediation liability recorded.

(15) Subsequent Event

(a) *Hetchy Power and CleanPowerSF - Extension on the Moratorium on Shutoff of Electric Service*

On September 13, 2022, the Commission approved to extend moratorium on shutoff of electric service for Hetchy Power residential retail customers in the City through June 30, 2023 and granted the General Manager discretion to restart severance and liens processes to multi-family residential accounts carrying balances greater than $25 which are 90 days or more past due. In addition, the temporary suspension of the return of delinquent residential CleanPowerSF customers to PG&E has also been extended through June 30, 2023.

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 the business-type activities and each major fund of Hetch Hetchy Water and Power and Clean Power (Hetch Hetchy), as of and for the year ended June 30, 2022, and the related notes to the financial statements, which collectively comprise the Hetch Hetchy's basic financial statements, and have issued our report thereon dated January 27, 2023.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered Hetch Hetchy'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 Hetch Hetchy's internal control. Accordingly, we do not express an opinion on the effectiveness of Hetch Hetchy's internal control.

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

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

Report on Compliance and Other Matters

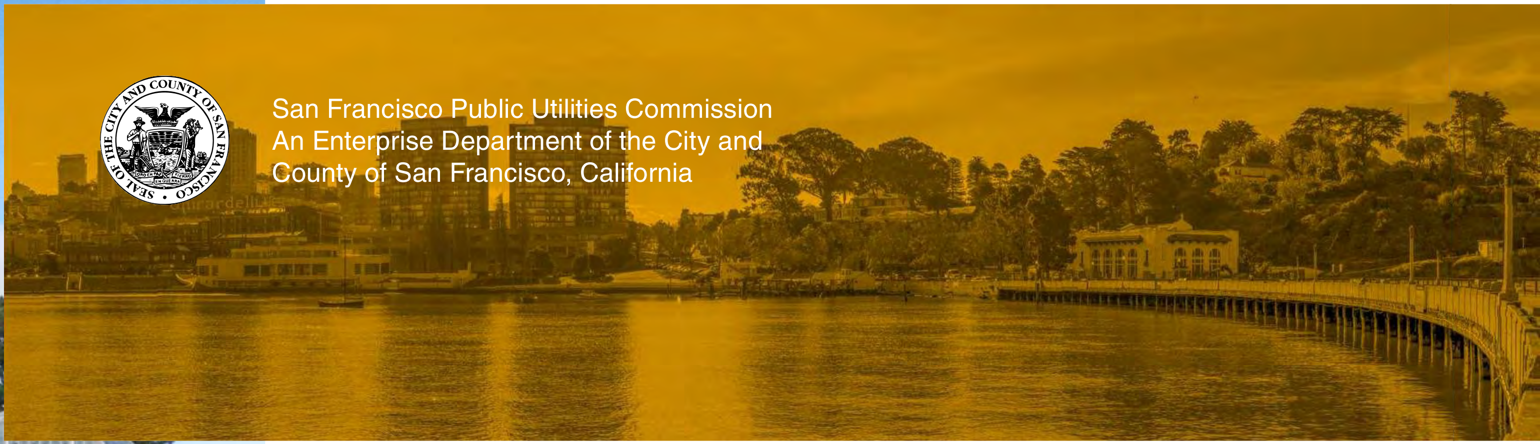
As part of obtaining reasonable assurance about whether Hetch Hetchy's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material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

Purpose of This Report

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

KPMG LLP

San Francisco, California
January 27, 2023



San Francisco Public Utilities Commission
An Enterprise Department of the City and
County of San Francisco, California

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.

Cover photo: San Francisco Embarcadero
Back photos: San Francisco Aquatic Park, Conservatory of Flowers in Golden Gate Park
Photos by: Robin Scheswohl and Sabrina Wong

Date of Publication: January 2023

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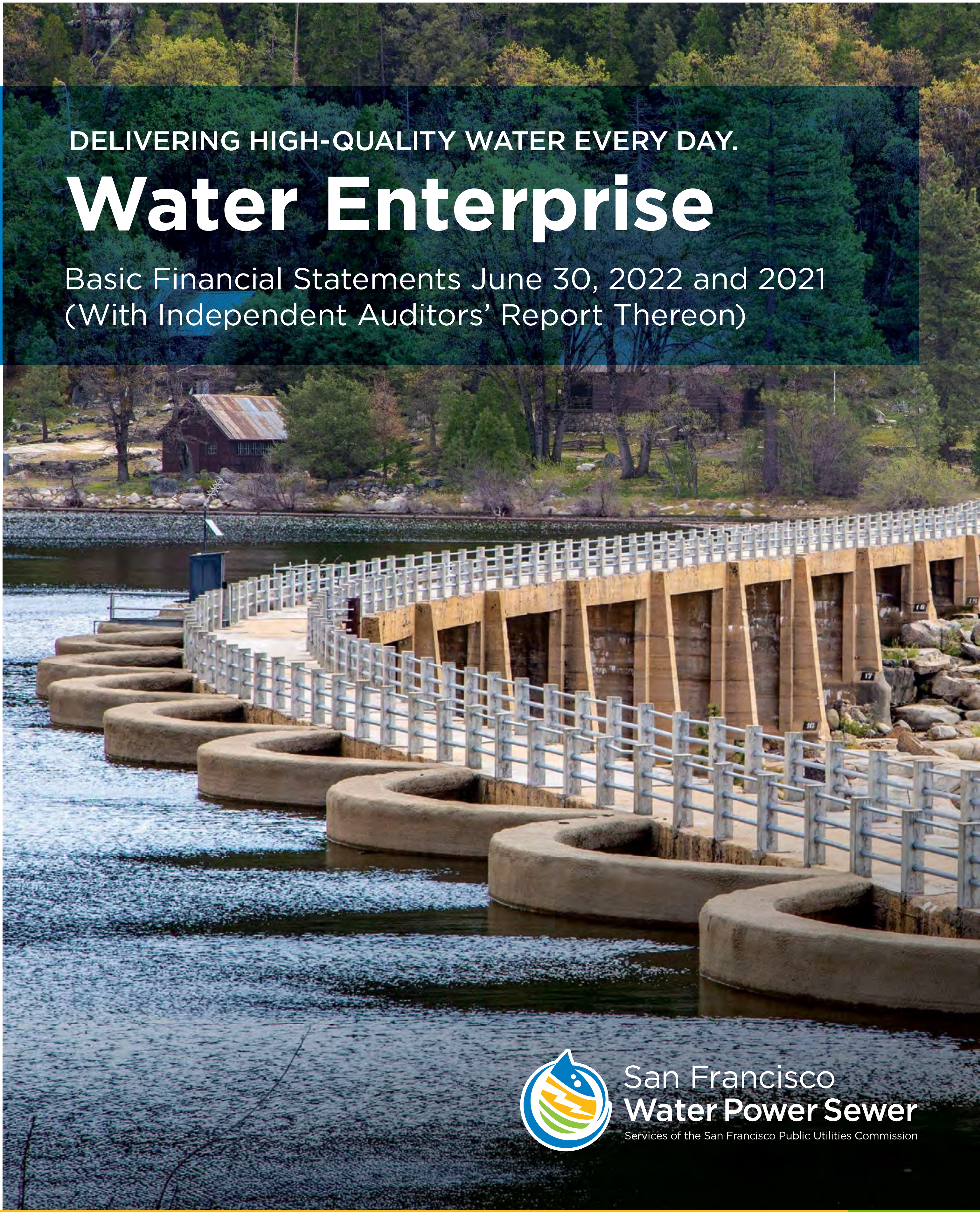
DELIVERING HIGH-QUALITY WATER EVERY DAY.

Water Enterprise

Basic Financial Statements June 30, 2022 and 2021
(With Independent Auditors' Report Thereon)



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SAN FRANCISCO WATER ENTERPRISE

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KPMG LLP
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Independent Auditors' Report

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

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of the San Francisco Water Enterprise (the Enterprise), as of and for the years ended June 30, 2022 and 2021, and the related notes to the financial statements, which collectively comprise the Enterprise's basic financial statements for the years then ended as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the financial position of the Enterprise, as of June 30, 2022 and 2021, and the changes in its financial position and its cash flows for the years then ended in accordance with U.S. generally accepted accounting principles.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Enterprise and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

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 business-type activities and each major fund of the City and county of San Francisco, California 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 and County of San Francisco, California, as of June 30, 2022 and 2021, 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.

Responsibilities of Management for the Financial Statements

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

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Enterprise's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the 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 January 27, 2023 on our consideration of the Enterprise's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Enterprise's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Enterprise's internal control over financial reporting and compliance.

KPMG LLP

San Francisco, California
January 27, 2023

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, 2022 and 2021. 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 181 million gallons of water per day in the year ended June 30, 2022. Approximately three-quarter of the water delivered by the Enterprise is to wholesale customers. Retail customers use the remaining one-quarter 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.

The *Statements of Cash Flows* present changes in cash and cash equivalents resulting from operational, capital financing, non-capital financing, and investing activities. These statements summarize the annual flow of cash receipts and cash payments, without consideration of the timing of the event giving rise to the obligation or receipt and exclude non-cash accounting measures of depreciation or amortization of assets.

The *Notes to Financial Statements* provide information that is essential to a full understanding of the financial statements that is not displayed on the face of the financial statements.

COVID-19

On February 25, 2020, the City's 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 authorized 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. The proclamation was extended on December 8, 2020 through June 30, 2021 and then again on April 27, 2021, through March 31, 2022. The suspension was extended again to July 31, 2022 for shut off of water service and to June 30, 2023 for late payment penalties. This proclamation did not have a material effect on the operations of the Water enterprise.

Financial Analysis

Financial Highlights for Fiscal Year 2022

- Total assets exceeded total liabilities by $727,275.
- Net position decreased by $17,946 or 2.8% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization increased by $29,795 or 0.5% to $5,617,594.
- Current and other assets increased by $7,239 or 0.9% mainly due to net pension asset.
- Operating revenues decreased by $9,319 or 1.6% to $573,117.
- Operating expenses decreased by $46,996 or 10.5% to $401,786.

Financial Highlights for Fiscal Year 2021

- Total assets exceeded total liabilities by $418,167.
- Net position increased by $8,502 or 1.3% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization increased by $57,254 or 1.0% to $5,587,799.

(Dollars in thousands, unless otherwise stated)

- Current and other assets increased by $31,110 or 4.4% mainly due to bond proceeds from the issuance of 2020 Series ABCD bonds.
- Operating revenues decreased by $1,739 or 0.3% to $581,612.
- Operating expenses increased by $50,726 or 12.7% to $448,843.

Financial Position

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

Table 1
Comparative Condensed Net Position
June 30, 2022, 2021, and 2020

	2022	Restated 2021*	2020	2022-2021 Change	2021-2020 Change
Total assets:					
Current and other assets	$ 793,761	786,522	701,206	7,239	85,316
Capital assets, net of accumulated depreciation and amortization	5,617,594	5,587,799	5,530,545	29,795	57,254
Total assets	6,411,355	6,374,321	6,231,751	37,034	142,570
Deferred outflows of resources:					
Unamortized loss on refunding of debt	139,481	154,991	144,189	(15,510)	10,802
Pensions	52,852	64,797	67,084	(11,945)	(2,287)
Other post-employment benefits	32,445	37,762	27,583	(5,317)	10,179
Total deferred outflows of resources	224,778	257,550	238,856	(32,772)	18,694
Liabilities:					
Current liabilities:					
Revenue bonds	125,285	108,500	94,080	16,785	14,420
Certificates of participation	3,138	2,970	2,824	168	146
Commercial paper	206,297	105,862	362,354	100,435	(256,492)
State revolving fund loans	3,283	1,667	—	1,616	1,667
Other liabilities	181,489	154,257	134,563	27,232	19,694
Subtotal current liabilities	519,492	373,256	593,821	146,236	(220,565)
Long-term liabilities:					
Revenue bonds	4,735,650	4,886,275	4,601,215	(150,625)	285,060
Certificates of participation	92,499	95,692	98,754	(3,193)	(3,062)
State revolving fund loans	118,478	105,740	73,271	12,738	32,469
Other liabilities	217,961	445,234	415,865	(227,273)	29,369
Subtotal long-term liabilities	5,164,588	5,532,941	5,189,105	(368,353)	343,836
Total liabilities:					
Revenue bonds	4,860,935	4,994,775	4,695,295	(133,840)	299,480
Certificates of participation	95,637	98,662	101,578	(3,025)	(2,916)
Commercial paper	206,297	105,862	362,354	100,435	(256,492)
State revolving fund loans	121,761	107,407	73,271	14,354	34,136
Other liabilities	399,450	599,491	550,428	(200,041)	49,063
Total liabilities	5,684,080	5,906,197	5,782,926	(222,117)	123,271
Deferred inflows of resources:					
Related to pensions	248,704	4,885	34,894	243,819	(30,009)
Leases	44,583	48,110	—	(3,527)	48,110
Other post-employment benefits	25,348	21,315	11,772	4,033	9,543
Total deferred inflows of resources	318,635	74,310	46,666	244,325	27,644
Net position:					
Net investment in capital assets	537,644	517,302	527,856	20,342	(10,554)
Restricted for debt service	14,671	45,586	15,916	(30,915)	29,670
Restricted for capital projects	—	22,319	43,122	(22,319)	(20,803)
Unrestricted	81,103	66,157	54,121	14,946	12,036
Total net position	$ 633,418	651,364	641,015	(17,946)	10,349

* Restated due to the implementation of GASB 87 - *Leases*

Net Position, Fiscal Year 2022

For the period ended June 30, 2022, the Enterprise's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by $633,418. Total net position decreased from prior year by $17,946 or 2.8% (see Table 1). The decrease in net position was the result of an increase of $22,208 in liabilities and deferred inflows of resources offset by an increase of $4,262 in assets and deferred outflows 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.

During the fiscal year 2022, current and other assets increased by $7,239 or 0.9%. The increases included $100,407 in net pension asset based on actuarial estimates, $6,276 in prepaid charges advances and other receivables mainly for a settlement from PG&E related to damages on Casitas Avenue in San Francisco, $6,267 in charges for services attributed to more billings, net of decrease in allowance for doubtful accounts due to utility arrearage relief payment received from the State as Federal pass-through from the California Water and Wastewater Arrearages Payment Program (CWWAPP), $865 in inventory due to more purchases than issuances during the fiscal year, $167 in interest, leases and other receivables due to higher interest rates, and $159 in restricted interest and other receivables. These increases were offset by decreases of $60,453 in restricted and unrestricted cash and investments mainly due to debt principal and interest payments, capital projects spending, payments for salaries and goods and services, $41,993 reimbursement from the State Water Resources Control Board (SWRCB) State Revolving Funds Loan relating to the SF Recycled Water project, $2,945 in leases receivable from the implementation of Governmental Accounting Standards Board (GASB) Statement No. 87 - *Leases*, $1,425 in lease asset from the implementation of GASB Statement No. 87 - *Leases*, $70 mainly for custom work projects due from the Department of Public Works, and $16 for a Federal grant of culvert repairs relating to the Santa Clara Unit Lightning Complex fires.

Capital assets, net of accumulated depreciation and amortization, increased by $29,795 or 0.5% mainly due to Water Main Replacement, Treasure Island Well, Serramonte Well and all other well construction, and capital improvement activities. The largest portion of the Enterprise's net position of $537,644 or 84.9% represents net investment in capital assets (see Capital Assets section of the MDA for more information), which increased by $20,342 or 3.9% from prior year's $517,302. The change was explained by an increase of $29,794 in capital assets mainly from increased buildings, structures and improvements, offset by a increase of $9,452 in liabilities related to capital assets mainly from bond principal repayment.

Deferred outflows of resources decreased by $32,772 due to decreases of $15,510 from amortization for unamortized loss on refunding, $11,945 relating to pensions based on actuarial reports, and $5,317 from OPEB obligations based on actuarial estimates.

Total liabilities decreased by $222,117 which was due to decreases of $216,417 in pensions based on actuarial report, $133,840 in outstanding revenue bonds from principal repayments, $4,656 from OPEB obligations due to actuarial report, $3,025 in certificates of participation mainly due to principal repayments, $1,381 in lease liability from the implementation of GASB Statement No. 87 - *Leases*, $757 in interest payable mainly due to lower bonds outstanding, and $654 in general liability based on actuarial report. These decreases were offset by increases of $100,435 in commercial paper from additional principal issuances, $14,354 in State Revolving Funds Loan payable due to additional loans related to the SF Westside Recycled Water project, $4,759 in restricted and unrestricted payables due to higher year end accruals as compared to prior year, $463 in accrued payroll, vacation and sick leave due to actuarial entries, $171 in unearned revenues mainly for deposits on custom work, and $145 in workers' compensation based on actuarial estimates. The Enterprise owed the wholesale customers $79,150, an increase of $18,286 which was mainly due to annual revenues from the wholesale customers exceeding their share of expenditures. This amount was recorded as a liability in accordance with the 2009 Water Supply agreement. See Note 10, Water Supply Agreement, for additional details.

Deferred inflows of resources increased by $244,325 due to an increase of $243,819 related to pensions and $4,033 from OPEB benefits based on actuarial reports, offset by a decrease of $3,527 from leases due to the implementation of GASB Statement No. 87 - *Leases*.

Net Position, Fiscal Year 2021

For the period ended June 30, 2021, the Enterprise's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by $649,517. Total net position increased from prior year by $8,502 or 1.3% (see Table 1). The increase in net position was the result of an increase of $107,058 in assets and deferred outflows, offset by a net increase of $98,556 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. They also include 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, 2021, the Enterprise owed the wholesale customers $60,864, which was mainly due to higher water demand by the wholesale customers. This amount was recorded as a liability in accordance with the 2009 agreement. See Note 10, Water Supply Agreement, for additional details.

During the fiscal year 2021, current and other assets increased by $31,110 or 4.4%. The increases included $57,567 in restricted and unrestricted cash and investments mainly due to the issuance of the 2020 Series ABCD bonds, $2,372 in prepaid charges advances and others mainly for prepaid expenses of multiple software licensing and membership fees, $209 in restricted interest and other receivables, and $160 in inventory due to more purchases than issuances during the fiscal year. The increases were offset by decreases of $23,725 from the State Water Resources Control Board (SWRCB) State Revolving Funds Loan relating to the SF Recycled Water project mainly from reimbursements received for prior year receivable, $4,470 in charges for services due to more collections than billings and an increase in allowance for doubtful accounts (allowance for doubtful accounts increased by $2,934 primarily due to the Mayor's COVID-19 proclamation suspending shutoff of water service and collection of past due accounts), $994 in interest receivable mainly due to lower interest rates and higher cash distributions than interest earnings, $7 due to cash received from other governments for grants relating to water efficiency, and $2 mainly due to collections from the Department of Public Works (DPW) for custom work projects.

Capital assets, net of accumulated depreciation and amortization, increased by $57,254 or 1.0% mainly due to San Andreas Pipeline No. 2 and San Francisco Groundwater Supply construction and capital improvement activities. The largest portion of the Enterprise's net position of $517,302 or 79.6% represents net investment in capital assets (see Capital Assets section of the MDA for more information), which decreased by $10,554 or 2.0% from prior year's $527,856. The change was explained by an increase of $67,808 in liabilities related to capital assets mainly from the issuance of 2020 Series ABCD and 2020 Series EFGH bonds, offset by an increase of $57,254 in capital assets in buildings, structures, and improvements and construction in progress from depreciation.

(Dollars in thousands, unless otherwise stated)

Deferred outflows of resources increased by $18,694 due to increases of $10,802 for unamortized loss on refunding (the result of a $27,010 increase from the issuance of 2020 Series EFGH bonds, offset by a $15,156 decrease from amortization and $1,052 from refunding of the 2010 Series D, 2011 Series D and 2012 Series C bonds), and $10,179 from OPEB obligations based on actuarial reports. These increases were offset by a $2,287 decrease relating to pensions based on actuarial reports.

Total liabilities increased by $119,022 or 2.1% which is due to increases of $299,480 in outstanding revenue bonds mainly due to the issuance of 2020 Series ABCD and 2020 Series EFGH bonds, $38,284 in net pension liability based on actuarial report, $34,136 increase in State Revolving Funds Loan payable due to additional loans relating to the SF Westside Recycled Water project, $25,956 in general liability based on actuarial report, $3,650 in accrued payroll, vacation and sick leave mainly due to actuarial estimates, 3% increase of cost of living adjustment (COLA), and more days in current year-end payroll accrual compared to prior year-end accrual, $2,921 in restricted and unrestricted payables due to higher accruals as compared to prior year mainly for the Information Technology project and 19th Ave. Infrastructure Improvement project, and $792 in unearned revenues mainly due to additional customer credit balances from overpayments. These increases were offset by decreases of $256,492 in commercial paper primarily due to refunding from the 2020 Series ABCD bonds, $14,913 in other post-employment benefits obligations from actuarial estimates, $6,557 in interest payable mainly due to refunding from the 2020 Series EFGH Bonds, $3,993 in the Wholesale Balancing Account due to higher demand from the wholesale customers (see Note 9 for details), $2,916 in certificates of participation from repayments and amortization of premium, $674 in due to other City departments from payments made for legal services provided by the City Attorney and projects performed by the Department of Public Works for Sidewalk Inspection and Repair projects, $346 in workers' compensation based on actuarial estimates, and $306 in pollution remediation liability as a result of additional expenditures incurred for the Lake Merced Pacific Rod and Gun Club and 17th and Folsom sites (see Note 13(d) for details).

Deferred inflows of resources decreased by $20,466 from a $30,009 decrease related to pensions based on actuarial reports, offset by a $9,543 increase from OPEB obligations based on actuarial reports.

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, 2022, 2021, and 2020

	2022	Restated 2021*	2020	2022-2021 Change	2021-2020 Change
Revenues:					
Charges for services	$ 539,526	550,306	550,753	(10,780)	(447)
Rents and concessions	13,765	13,735	12,124	30	1,611
Other operating revenues	19,826	18,395	20,474	1,431	(2,079)
Interest and investment (loss) income	(10,896)	1,374	10,517	(12,270)	(9,143)
Other non-operating revenues	41,871	45,874	94,734	(4,003)	(48,860)
Total revenues	604,092	629,684	688,602	(25,592)	(58,918)
Expenses:					
Operating expenses	401,786	448,782	398,117	(46,996)	50,665
Interest expenses	213,668	184,678	191,246	28,990	(6,568)
Amortization of premium, discount, refunding loss, and issuance costs	(9,875)	(7,782)	(13,752)	(2,093)	5,970
Non-operating expenses	828	2,208	529	(1,380)	1,679
Total expenses	606,407	627,886	576,140	(21,479)	51,746
Change in net position before capital contributions and transfers	(2,315)	1,798	112,462	(4,113)	(110,664)
Capital contributions	—	4,180	—	(4,180)	4,180
Transfers from the City and County of San Francisco	15,035	21,025	1,220	(5,990)	19,805
Transfers to the City and County of San Francisco	(30,666)	(16,654)	(14,805)	(14,012)	(1,849)
Capital contributions and net transfers	(15,631)	8,551	(13,585)	(24,182)	22,136
Change in net position	(17,946)	10,349	98,877	(28,295)	(88,528)
Net position at beginning of year	651,364	641,015	542,138	10,349	98,877
Net position at end of year	$ 633,418	651,364	641,015	(17,946)	10,349

* Restated due to the implementation of GASB 87 - *Leases*

Results of Operations, Fiscal Year 2022

The Enterprise's total revenues of $604,092 for the year represented a decrease of $25,592 or 4.1% from prior year (see Table 2). Decreases included $12,270 from interest and investment loss, $10,780 from charges for services, and $4,003 from other non-operating revenues. These decreases were offset by increases of $1,431 in other operating revenues, and $30 in rents and concessions.

Charges for services were $539,526, a decrease of $10,780 or 2.0% mainly due to 4.1% reduced consumption, offset by an adopted rate increase of 7.0% for retail customers beginning July 1, 2021. Rents and concessions were $13,765, an increase of $30 or 0.2% mainly due to a lease transfer fee and new tenants. Other operating revenues were $19,826, an increase of $1,431 or 7.8% mainly from increased capacity fee permits issued and a 7.0% adopted rate increase for retail customers. Interest and investment loss was $10,896, a decrease of $12,270 or 893.0% mainly due to unrealized losses as a result of the decline in market value of investments due to rising interest rates. Other non-operating revenues were $41,871, a decrease of $4,003 or 8.7% mainly due to $15,000 in State revolving fund (SRF) grant recognized in the prior year, $1,477 decrease in gain from sale of fixed assets, $292 in federal bond subsidies, offset by increases of $6,750 from a PG&E settlement and $5,929 from a water utility arrearages relief grant and $87 in other non-operating revenues.

The Enterprise's total expenses were $606,407, a decrease of $21,479 or 3.4%. Operating expenses were $401,786, a decrease of $46,996 or 10.5%, the result of decreases of $49,143 in personnel services mainly due to decreases in pension obligations based on actuarial report, $5,357 in general and administrative and other expenses due to higher judgement and claims in prior year, and $572 in contractual services mainly from other current expenses and subscriptions. These decreases were offset by increases of $3,072 in services provided by other departments mainly for higher water assessment fees paid to Hetch Hetchy Water and higher gas and electric charges paid to Hetch Hetchy Power, $2,544 in materials and supplies mainly for water treatment supplies, and $2,460 in depreciation due to additional capital assets placed into service. Interest expenses increased by $28,990 due to reduced bond interest capitalization resulting from the implementation of GASB 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period,* in fiscal year 2022. Amortization of bond premium, discount, refunding loss and issuance costs increased by $2,093 due to prior year bond issuance costs. Non-operating expenses decreased by $1,380 mainly due to prior year grant payments for water conservation.

Transfers in of $15,035 from the City included $15,030 for the Earthquake Safety and Emergency Response program, and $5 from the General Fund for low income assistance programs. Transfers out of $30,666 included $30,000 to Hetch Hetchy Water to fund various Mountain Tunnel projects, $500 to DPW for the UN Plaza Large Alternative Water Source project and purchase of capital assets, $134 for the Arts Commission for the arts enrichment fund for the new CDD Headquarters, and $32 to the Office of the City Administrator for the Enterprise's contribution to the Surety Bond Program.

Results of Operations, Fiscal Year 2021

The Enterprise's total revenues of $627,826 for the year represented a decrease of $60,776 or 8.8% from prior year (see Table 2). Decreases included $48,860 from other non-operating revenues, $10,177 from interest and investment income, $2,079 from other operating revenues, and $447 from charges for service. These decreases were offset by an increase of $787 from rents and concessions.

Charges for services were $550,306, a decrease of $447 or 0.1% mainly due to an 8.8% decrease in consumption for retail customers, and the COVID-19 emergency proclamation issued by the City's Mayor suspending collection of past due accounts, mainly resulting in a $2,945 increase in the allowance for doubtful accounts which reduced charges for services. This was offset by an adopted rate increase of 7.0%

for retail customers beginning July 1, 2020. Rents and concessions were $12,911, an increase of $787 or 6.5% mainly due to rent increases and increased royalty revenues. Other operating revenues were $18,395, a decrease of $2,079 or 10.2% due to reduced capacity fees and sale of water to other City departments as a result of the SF Health Order relating to COVID-19, offset by a 7.0% adopted rate increase. Interest and investment income was $340, a decrease of $10,177 or 96.8% mainly due to unrealized losses resulting from decreases in value of fixed income securities from the City Treasury pool and lower interest earned on cash balances. Other non-operating revenues were $45,874, a decrease of $48,860 or 51.6% mainly due to a prior year one-time gain of $63,600 from the property transfer of 2000 Marin Street and 639 Bryant Street offset by a $15,000 grant from the State of California for the SF Westside Recycle Water project in current year.

The Enterprise's total expenses were $627,875, an increase of $51,735 or 9.0%. Operating expenses were $448,843, an increase of $50,726 or 12.7%, the result of increases of $27,126 in general administrative and other mainly from judgement and claims based on actuarial estimates, $12,585 in personnel services mainly due to pension obligations based on actuarial report and a 3% cost of living adjustment, $9,107 in services provided by other departments mainly from higher water assessment fees paid to Hetch Hetchy Water, $1,805 in depreciation and amortization due to additional capital assets placed into service, and $978 in contractual services mainly from equipment maintenance. These increases were offset by a decrease of $875 in materials and supplies mainly for building and construction supplies. Interest expenses decreased by $6,640, as compared to prior year, mainly due to refunded bonds. Amortization of bond premium, discount, refunding loss and issuance costs decreased by $5,970 due to the issuance of the 2020 Series EFGH revenue bonds, which refunded 2010 Series D, 2011 Series D, 2012 Series ABC, and 2017 Series ABC revenue bonds. Non-operating expenses increased by $1,679 due to increased grants and rebates awarded for water conservation relating to the Onsite Water Reuse Grant Program and community-based services.

Transfers in of $21,025 from the City included $20,040 for the Emergency Firefighting Water System and $985 from the General Fund for Native Plant Garden project and low income assistance programs. Transfers out of $16,654 included $16,000 to Hetch Hetchy Water to fund various upcountry water projects, $622 to the Arts Commission for arts enrichment fund for the SF Recycled Water, Sunol Valley Water Improvement and Mountain Tunnel Improvement projects, and $32 to the Office of the City Administrator for the Enterprise's contribution to the Surety Bond Program. Capital contribution of $4,180 was received for water pipeline assets from the Department of Public Works in the current year.

(Dollars in thousands, unless otherwise stated)

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, 2022, 2021, and 2020

	2022	2021	2020	2022-2021 Change	2021-2020 Change
Facilities, improvements, machinery, and equipment	$ 5,056,747	4,948,186	4,928,438	108,561	19,748
Intangible assets	3,152	2,763	4,089	389	(1,326)
Land and rights-of-way	113,441	104,248	105,336	9,193	(1,088)
Construction work in progress	444,254	532,602	492,682	(88,348)	39,920
Total	$ 5,617,594	5,587,799	5,530,545	29,795	57,254

Capital Assets, Fiscal Year 2022

The Enterprise has net capital assets of $5,617,594 invested in a broad range of utility capital assets as of June 30, 2022 (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 $29,795 from the prior year. Facilities, improvements, machinery, and equipment increased by $108,561 mainly due to Water Main Replacement and Treasure Island Well projects. Land increased by $9,193 mainly from the acquisition of Oak Ridge Ranch Estates and Arroyo Hondo Estates. Construction work in progress decreased by $88,348 mainly due to Water Main Replacement and Treasure Island Well projects placed into service. Intangible assets increased by $389 mainly due to Java to Groovy Conversion software and Cross-Connection Assembly asset additions.

Major additions to construction work in progress during the year ended June 30, 2022 include the following:

SF Recycled Water Project	$ 18,684
Sunol Long Term Improvements	17,655
New Water Utility Service Facilities	8,843
Watershed Right of Way Land Acquisition	7,731
Upper Alameda Creek Filter Gallery	6,347
Regional Groundwater Storage & Recovery	5,769
Water Main Replacement - WD-2739 Castro/19th/26th Streets	5,504
Auxiliary Water Supply System - Pump Station No. 2	5,116
Other project additions individually below $5,000	99,542
Total	$ 175,191

(Dollars in thousands, unless otherwise stated)

Major land, depreciable facilities, improvements, intangible assets, machinery, and equipment placed in service, including transfers of completed projects from construction work in progress, during the year ended June 30, 2022 include the following:

Water Main Replacement - WD-2739 Castro/19th/26th Streets	$	15,666
Treasure Island Well - Civil/Electrical/I&C/Mechanical/Pipeline/Plumbing		11,656
Serramonte Well - Architectural/Structural/Well		10,977
Lake Merced Well - Civil/Electrical/I&C/Mechanical/Pipeline/Plumbing		8,851
New Water Utility Service Facilities		8,843
Colma BART Well - Architectural/Structural/Well		8,739
Serramonte Well - Civil/Electrical/I&C/Mechanical/Pipeline/Plumbing		8,351
Colma BART Well - Civil/Electrical/I&C/Mechanical/Pipeline/Plumbing		7,826
Treasure Island Well - Architectural/Structural/Well		7,646
Hickey Well - Architectural/Structural/Well		7,137
Auxiliary Water Supply System - Pipelines on 19th Ave		6,990
Linear Park Well - Architectural/Structural/Well		6,576
Water Main Replacement - WD-2616 Baker/Sutter Streets		6,567
Hickey Well - Civil/Electrical/I&C/Mechanical/Pipeline/Plumbing		6,465
Funeral Home Well - Civil/Electrical/I&C/Mechanical/Pipeline/Plumbing		6,447
Millbrae Yard Well - Civil/Electrical/I&C/Mechanical/Pipeline/Plumbing		6,086
Linear Park Well - Civil/Electrical/I&C/Mechanical/Pipeline/Plumbing		5,736
Water Main Replacement - WD-2842 Casitas/Lansdale Ave		5,423
Lake Merced Well - Architectural/Structural/Well		5,266
Other items individually below $5,000		113,430
Total	$	264,678

See Note 4 for additional information about Capital Assets.

Water System Improvement Program (WSIP)

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, 2022. 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, 2022, 35 local projects were completed. For regional projects, 47 projects are completed, the Alameda Creek Recapture, Regional Groundwater Storage and Recovery Phase 2A, Regional Groundwater Storage and Recovery Phase 2B projects are under construction, the Bioregional Habitat Restoration project is in close-out, and Long-Term Mitigation Endowment project is not applicable as it does not include construction. The expected completion date is February 2027. Additional details regarding the WSIP are available at https://sfpuc.org/construction-contracts/water-infrastructure-improvements.

(Dollars in thousands, unless otherwise stated)

Capital Assets, Fiscal Year 2021

The Enterprise has net capital assets of $5,587,799 invested in a broad range of utility capital assets as of June 30, 2021 (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 $57,524 from the prior year. Construction work in progress increased by $39,920 primarily due to additions from the SF Recycled Water project, Sunol Long Term Improvements and Regional Groundwater Storage and Recovery projects. Facilities, improvements, machinery, and equipment increased by $19,748 mainly attributable to the San Andreas Pipeline No. 2 and Water Main Replacement projects. Intangible assets decreased by $1,326 due to $1,601 in amortization, offset by $143 addition for information technology and $132 addition for automated meter reading system. Land decreased by $1,088 as the result of sale of the Wool Ranch property in the Alameda Creek Watershed and reimbursement of land costs for 2000 Marin Street, San Francisco, CA.

Major additions to construction work in progress during the year ended June 30, 2021 include the following:

SF Recycled Water Project	$	41,231
Sunol Long Term Improvements		15,516
Regional Groundwater Storage & Recovery		12,298
New Water Utility Services		7,992
San Andreas Pipeline No. 2 Replacement		7,961
Water Main Replacement - WD-2739 Castro/19th/26th Streets		7,953
Calaveras Dam Replacement		7,915
Water Main Replacement - WD-2766 Taraval Street		5,172
Auxiliary Water Supply System - Pump Station No. 2		5,135
Other project additions individually below $5,000		86,496
Total	$	197,669

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, 2021 include the following:

San Andreas Pipeline No. 2 Replacement - 4 Segments in San Bruno	$	43,340
Water Main Replacement - WD-2692 Geary Blvd/36th/48th/Point Lobos Ave		9,329
Water Main Replacement - WD-2719 22nd/Valencia St/Potrero Ave		8,004
New Water Utility Services		7,992
Alameda Creek Watershed Fish Passage Facilities		7,465
Water Main Replacement - WD-2766 Taraval Street		7,328
Water Main Replacement - WD-2793 Geary Blvd/Cleary Ct/Market St		6,655
Other items individually below $5,000		72,342
Total	$	162,455

See Note 4 for additional information about Capital Assets.

(Dollars in thousands, unless otherwise stated)

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, 2021. 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, 2021, 35 local projects were completed, and the completion date was June 3, 2020. For regional projects, 44 are completed and the expected completion date is May 2023. Additional details regarding the WSIP are available at https://sfpuc.org/construction-contracts/water-infrastructure-improvements.

Debt Administration

As of June 30, 2022, the Enterprise had $5,284,630 total debt outstanding, a decrease of $22,076 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, 2022, 2021, and 2020

		2022	2021	2020	2022-2021 Change	2021-2020 Change
Revenue bonds	$	4,860,935	4,994,775	4,695,295	(133,840)	299,480
Commercial paper		206,297	105,862	362,354	100,435	(256,492)
Certificates of participation		95,637	98,662	101,578	(3,025)	(2,916)
State revolving fund loans		121,761	107,407	73,271	14,354	34,136
Total	$	5,284,630	5,306,706	5,232,498	(22,076)	74,208

The decrease of $133,840 in revenue bonds was due to decreases of $108,500 from bond repayment, $25,349 in bond premium from amortization, offset by a $9 increase in bond discount from amortization. The $3,025 decrease of certificates of participation was due to a $2,970 decrease for principal repayment, and a $55 decrease for amortization of premium. The increase of $14,354 in State revolving funds loans was from additional reimbursement requests for the SF Westside Recycled Water project. The Enterprise had $179,600 in tax-exempt and $26,697 in taxable commercial paper as of June 30, 2022, and $79,251 in tax-exempt and $26,611 in taxable commercial paper as of June 30, 2021. The increase of $100,435 was due to additional issuances of $130,135 in tax-exempt and $86 in taxable commercial paper, offset by $29,786 from repayment of tax-exempt 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, 2022, and "Aa2" and "AA-" from Moody's and Standard & Poor's (S&P) at June 30, 2021, 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 2022 and 2021, 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, 2022, the Board of Supervisors has authorized the issuance of $4,617,099 in revenue bonds under Proposition E, with $3,898,744 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, 2022, $1,499,230 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.

Cost of Debt Capital – The Enterprise's outstanding long-term debt has coupon interest rates ranging from 0.3% to 7.0% as of June 30, 2022 and 2021. The Enterprise's short-term debt has interest rates ranging from 0.1% to 2.0% during fiscal year 2022, and 0.1% to 0.3% during fiscal year 2021.

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 rates effective July 1, 2021 for fiscal year 2022 will remain unchanged for fiscal year 2023, which are effective July 1, 2022. These rates exclude those changed by the Consumer Price Index from the Controller's Office of the City and County of San Francisco, as well as rates adjusted by the 20-City Average Construction Index (CCI) published by Engineering News-Record (ENR) Magazine. SFPUC Rates Schedules and Fees is available at https://sfpuc.org/accounts-services/water-power-and-sewer-rates.

Wholesale Customers

The WSA prescribes the rate setting process for the wholesale water rates, and 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 10 of the notes to financial statements for further discussion on the balancing account of the wholesale customers.

(Dollars in thousands, unless otherwise stated)

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

Ten-year Average Rate Adjustments

Effective Date:	Retail	Wholesale [5]
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 [3]	-
July 1, 2019	8.0 [3]	-
July 1, 2020	7.0 [3]	-
July 1, 2021	7.0 [3]	-
July 1, 2022	- [4]	15.9

[1] Five-year retail rate increases adopted and effective July 1, 2009.
[2] Four-year retail rate increases adopted and effective July 1, 2014.
[3] Four-year retail rate increases adopted and effective July 1, 2018.
[4] No retail rate increase adopted and effective July 1, 2022.
[5] Wholesale rates adopted annually; no increase for wholesale rates effective July 1, 2017 to June 30, 2022.

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://sfpuc.org/about-us/reports/audited-financial-statements-reports.

SAN FRANCISCO WATER ENTERPRISE
Statements of Net Position
June 30, 2022 and 2021
(In thousands)

	2022	Restated 2021*
Assets		
Current assets:		
Cash and investments with City Treasury	$ 460,954	483,827
Cash and investments outside City Treasury	318	301
Receivables:		
Charges for services (net of allowance for doubtful accounts of $3,915 as of June 30, 2022 and $5,445 as of June 30, 2021)	61,740	55,473
Due from other City departments	178	248
Due from other governments	—	16
Interest	399	257
Interest - Leases	884	859
Restricted due from other governments	7,553	49,546
Leases receivable, current portion	3,325	3,289
Restricted interest and other receivable (net of allowance for doubtful accounts of $146 as of June 30, 2022 and $24 as of June 30, 2021)	4,142	3,983
Total current receivables	78,221	113,671
Prepaid charges, advances, and other receivables, current portion	12,180	6,147
Inventory	6,802	5,937
Restricted cash and investments outside City Treasury, current portion	11,063	57,165
Total current assets	569,538	667,048
Non-current assets:		
Net pension asset	100,407	—
Restricted cash and investments with City Treasury	9,299	—
Restricted cash and investments outside City Treasury, less current portion	64,894	65,688
Leases receivable, less current portion	42,840	45,821
Lease asset, net of accumulated amortization	2,812	4,237
Restricted interest and other receivable (net of allowance for doubtful accounts of $8 as of June 30, 2022 and $8 as of June 30, 2021)	4	4
Charges for services, less current portion (net of allowance for doubtful accounts of $656 as of June 30, 2022 and $658 as of June 30, 2021)	207	207
Capital assets, not being depreciated and amortized	558,374	637,529
Capital assets, net of accumulated depreciation and amortization	5,059,220	4,950,270
Prepaid charges, advances, and other receivables, less current portion	3,760	3,517
Total non-current assets	5,841,817	5,707,273
Total assets	6,411,355	6,374,321
Deferred outflows of resources		
Unamortized loss on refunding of debt	139,481	154,991
Pensions	52,852	64,797
Other post-employment benefits	32,445	37,762
Total deferred outflows of resources	224,778	257,550
Liabilities		
Current liabilities:		
Accounts payable	22,852	16,183
Accrued payroll	10,495	9,845
Accrued vacation and sick leave, current portion	6,888	6,787
Accrued workers' compensation, current portion	1,700	1,694
Damage claims liability, current portion	10,191	14,400
Unearned revenues, refunds, and other	19,137	18,966
Bond, loan and lease interest payable	35,443	36,200
Lease liability, current portion	1,008	1,381
Revenue bonds, current portion	125,285	108,500
Certificates of participation, current portion	3,138	2,970
Commercial paper	206,297	105,862
State revolving fund loans, current portion	3,283	1,667
Wholesale balancing account, current portion	48,422	21,538
Current liabilities payable from restricted assets	25,353	27,263
Total current liabilities	519,492	373,256
Long-term liabilities:		
Other post-employment benefits obligations	144,115	148,771
Net pension liability	—	216,417
Lease liability, less current portion	1,855	2,863
Accrued vacation and sick leave, less current portion	6,841	7,129
Accrued workers' compensation, less current portion	7,273	7,134
Damage claims liability, less current portion	25,878	22,323
Revenue bonds, less current portion	4,735,650	4,886,275
Certificates of participation, less current portion	92,499	95,692
State revolving fund loans, less current portion	118,478	105,740
Wholesale balancing account, less current portion	30,728	39,326
Pollution remediation obligation	1,271	1,271
Total long-term liabilities	5,164,588	5,532,941
Total liabilities	5,684,080	5,906,197
Deferred inflows of resources		
Related to pensions	248,704	4,885
Leases	44,583	48,110
Other post-employment benefits	25,348	21,315
Total deferred inflows of resources	318,635	74,310
Net position		
Net investment in capital assets	537,644	517,302
Restricted for debt service	14,671	45,586
Restricted for capital projects	—	22,319
Unrestricted	81,103	66,157
Total net position	$ 633,418	651,364

* Restatement due to implementation of GASB 87 - *Leases*
See accompanying notes to financial statements.

SAN FRANCISCO WATER ENTERPRISE

Statements of Revenues, Expenses, and Changes in Net Position
Years Ended June 30, 2022 and 2021
(In thousands)

	2022	Restated 2021*
Operating revenues:		
Charges for services	$ 539,526	550,306
Rents and concessions	13,765	13,735
Capacity fees	2,163	1,326
Other revenues	17,663	17,069
Total operating revenues	573,117	582,436
Operating expenses:		
Personnel services	83,385	132,528
Contractual services	13,457	14,029
Materials and supplies	15,719	13,175
Depreciation and amortization	147,904	145,444
Services provided by other departments	73,307	70,235
General and administrative and other	68,014	73,371
Total operating expenses	401,786	448,782
Operating income	171,331	133,654
Non-operating revenues (expenses):		
Federal and state grants	5,931	14,829
Interest and investment (loss) income	(10,896)	1,374
Interest expenses	(213,668)	(184,678)
Amortization of premium, discount, refunding loss, and issuance costs	9,875	7,782
Net gain from sale of assets	1,079	2,556
Other non-operating revenues	34,861	28,489
Other non-operating expenses	(828)	(2,208)
Net non-operating expenses	(173,646)	(131,856)
Change in net position before capital contributions and transfers	(2,315)	1,798
Capital contributions	—	4,180
Transfers from the City and County of San Francisco	15,035	21,025
Transfers to the City and County of San Francisco	(30,666)	(16,654)
Capital contributions and net transfers	(15,631)	8,551
Change in net position	(17,946)	10,349
Net position at beginning of year	651,364	641,015
Net position at end of year	$ 633,418	651,364

* Restatement due to implementation of GASB 87 - *Leases*

See accompanying notes to financial statements.

SAN FRANCISCO WATER ENTERPRISE

Statements of Cash Flows

Years Ended June 30, 2022 and 2021

(In thousands)

		2022	Restated 2021*
Cash flows from operating activities:			
Cash received from customers, including cash deposits	$	563,433	570,041
Cash received from tenants for rent		15,032	12,542
Cash received from miscellaneous revenues		4,558	4,643
Cash paid to employees for services		(137,080)	(132,235)
Cash paid to suppliers for goods and services		(159,338)	(136,653)
Cash paid for judgments and claims		(2,515)	(3,969)
Net cash provided by operating activities		284,090	314,369
Cash flows from non-capital financing activities:			
Cash received from grants		5,947	14,836
Cash received from settlements		6,750	—
Cash paid for rebates and program incentives		(828)	(2,208)
Transfers from the City and County of San Francisco		15,035	21,025
Transfers to the City and County of San Francisco		(30,666)	(16,654)
Net cash (used in) provided by non-capital financing activities		(3,762)	16,999
Cash flows from capital and related financing activities:			
Proceeds from sale of capital assets		986	2,647
Proceeds from bond issuance, net of premium, discount, refunding loss, and issuance costs		—	1,000,920
Proceeds from commercial paper borrowings		130,221	16,328
Proceeds from State revolving fund loan		56,113	57,861
Principal paid on commercial paper		(29,786)	(272,820)
Principal paid on long-term debt		(111,470)	(704,344)
Interest paid on long-term debt		(213,922)	(210,276)
Interest paid on commercial paper		(212)	(348)
Issuance cost paid on long-term debt		(10)	(3,032)
Lease payment		(1,439)	(1,472)
Acquisition and construction of capital assets		(182,776)	(184,144)
Federal interest income subsidy from Build America Bonds		23,590	23,869
Net cash used in capital and related financing activities		(328,705)	(274,811)
Cash flows from investing activities:			
Interest income received		2,154	4,185
Proceeds from sale of investments outside City Treasury		398,825	323,586
Purchase of investments outside City Treasury		(398,825)	(323,586)
Net cash provided by investing activities		2,154	4,185
(Decrease) increase in cash and cash equivalents		(46,223)	60,742
Cash and cash equivalents:			
Beginning of year		606,589	545,847
End of year		560,366	606,589
Reconciliation of cash and cash equivalents to the statement of net position:			
Cash and investments with City Treasury:			
Unrestricted		460,954	483,827
Restricted		9,299	—
Add: Unrealized loss (gain) on investments with City Treasury		13,838	(392)
Cash and investments outside City Treasury:			
Unrestricted		318	301
Restricted		75,957	122,853
Cash and cash equivalents at end of year on statements of cash flows	$	560,366	606,589

* Restatement due to implementation of GASB 87 - *Leases*

SAN FRANCISCO WATER ENTERPRISE

Statements of Cash Flows

Years Ended June 30, 2022 and 2021

(In thousands)

	2022	Restated 2021*
Reconciliation of operating income to net cash provided by operating activities:		
Operating income	$ 171,331	133,654
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation and amortization	147,904	145,444
Miscellaneous revenue	4,558	4,643
Provision for uncollectible accounts	(1,410)	2,945
Write-off of capital assets and other non-cash items	4,592	3,810
Changes in operating assets and liabilities:		
Receivables:		
Charges for services	(4,734)	1,537
Prepaid charges, advances, and other	(6,543)	(2,385)
Due from other City departments	70	93
Inventory	(865)	(160)
Leases	380	(824)
Accounts payable	6,669	5,609
Accrued payroll	650	1,354
Other post-employment benefits obligations	4,694	(15,549)
Pension obligations	(61,060)	10,562
Accrued vacation and sick leave	(187)	2,296
Accrued workers' compensation	145	(346)
Due to other City departments	—	(674)
Wholesale balancing account	18,286	(3,993)
Pollution remediation obligation	—	(306)
Damage claims liability	(654)	25,956
Unearned revenues, refunds, and other liabilities	264	703
Total adjustments	112,759	180,715
Net cash provided by operating activities	$ 284,090	314,369
Noncash transactions:		
Accrued capital asset costs	$ 25,353	27,263
Unrealized loss (gain) on investments	13,838	(392)
Capital contribution	—	4,180

* Restatement due to implementation of GASB 87 - *Leases*

See accompanying notes to financial statements.

(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 2022, the Enterprise sold approximately 66,005 million gallons, i.e., about 181 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 (SFPUC or 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 SEC. 4.112 amendment approved by the voters in the June 3, 2008 election, terminated the terms of all five existing members of the Commission, changed the process for appointing new members, and set qualifications for all members. Under the amended Charter, the Mayor continues to nominate candidates to the Commission, but nominees do not take office until the Board of Supervisors votes to approve their appointments by a majority (at least six members). The amended Charter provides for staggered four-year terms for the Commission members and requires them to meet the following qualifications:

- Seat 1 must have experience in environmental policy and an understanding of environmental justice issues.
- Seat 2 must have experience in ratepayer or consumer advocacy.
- Seat 3 must have experience in project finance.
- Seat 4 must have expertise in water systems, power systems, or public utility management.
- Seat 5 is an at-large member.

The SFPUC is a department of the City, and as such, the financial operations of the Enterprise, Hetch Hetchy Water and Power and CleanPowerSF, and the Wastewater Enterprises are included in the Annual Comprehensive Financial Report of the City as enterprise funds. These financial statements are intended to present only the financial position, and the changes in financial position and cash flows of only that portion of the City that is attributable to the transactions of the Enterprise. They do not purport to, and do not, present fairly the financial position of the City as of June 30, 2022 and 2021, 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).

(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 estimated fair value at the time of donation. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the related assets, which range from 1 to 100 years for equipment and 1 to 200 years for 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 on assets that require a period of time for construction or to otherwise prepare them for their intended use. Such amounts are amortized over the useful lives of the assets (see Note 4). Per the implementation of GASB No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*, no interest was capitalized to capital assets in fiscal year 2022.

(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 13(b)).

(l) General Liability

The Enterprise is self-insured for general liability and uninsurable property damage claims. Commercially uninsurable property includes assets that are underground or provide transmission and distribution. Maintained commercial coverage does not cover claims attributed to loss from earthquake, contamination, pollution remediation efforts, and other specific naturally occurring contaminants such as mold. The liability represents an estimate of the cost of all outstanding claims, including adverse loss development and estimated incurred but not reported claims (see Note 13(a)).

(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, 2022 and 2021.

(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, 2022 and 2021 were $29,774 and $30,277, respectively.

(q) Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

(r) Accounting and Financial Reporting for Pollution Remediation Obligations

According to GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations*, a government would have to estimate its expected outlays for pollution remediation if it knows a site is polluted, and any of the following recognition triggers occur:

- 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 14(d)).

(s) Leases

Leases are defined as a contract that conveys control of the right to use another entity's underlying asset for a specified period. The Enterprise is a lessee and lessor for various noncancellable leases of land, building, equipment, vehicles, easement, etc.

Short-term Leases

For leases with a maximum possible term of 12 months or less at commencement, the Enterprise recognizes lease revenue if the Enterprise executes a lessor lease or lease expense if the Enterprise executes a lessee lease based on the provisions of the lease contract. Liabilities are only recognized if payments are received in advance, and receivables are only recognized if payments are received subsequent to the reporting period.

Leases Other Than Short-term

For all other leases (i.e. those that are not short-term) the Enterprise recognizes a lease liability and intangible right-to-use lease asset for the Enterprise as lessee leases, or lease receivable and deferred inflow of resources for the Enterprise as lessor leases.

Measurement of Lease Amounts (Lessee)
The Enterprise's lease liability is recorded at the present value of future minimum lease payments as of the date of inception. Subsequently, the lease liability is reduced by the principal portion of lease payments made. The lease asset is initially measured as the initial amount of the lease liability, less lease payments made at or before the lease commencement date, plus any initial direct costs ancillary to placing the underlying asset into service, less any lease incentives received at or before the lease commencement date. Subsequently, the lease asset is amortized into depreciation and amortization expense on a straight-line basis over the shorter of the lease term or the useful life of the underlying asset. If the Enterprise is reasonably certain of exercising a purchase option contained in a lease, the lease asset will be amortized over the useful life of the underlying asset.

Measurement of Lease Amounts (Lessor)
The Enterprise's lease receivable is measured at the present value of payments expected to be received during the lease term, reduced by any provision of estimated uncollectible amounts. Subsequently, the lease receivable is reduced by the principal portion of lease payments collected. The deferred inflow of resources is initially measured as the initial amount of the lease receivable, less any lease incentives paid to, or on behalf of, the lessee at or before the commencement of the lease term, plus lease payments received from the lease at or before the commencement of the lease term that related to future periods. Subsequently, the deferred inflow of resources as lease revenue is on a straight-line basis over the lease term.

Key Estimates and Judgements
Key estimates and judgements include how the Enterprise determines (a) the discount rate it uses to calculate the present value of the expected lease payments, (b) lease terms, (c) lease payments, and (d) materiality threshold for equipment.

- The Enterprise generally uses its estimated incremental borrowing rate as the discount rate for leases unless the rate implicit in the lease. The City's incremental borrowing rate (IBR) is established using the average of Municipal Market Data (MMD) AAA benchmark interest rate index by maturity date (year 1 to 30+), plus the average credit spread based on City's Aa/AA, COP, Tax-exempt to generate the yield curve and discount rate table. The City's incremental borrowing rate for leases is based on the rate of interest it would need to pay if it issued general obligation bonds to borrow an amount equal to the lease payments under similar terms at the commencement or remeasurement date.

- The lease term includes the noncancellable period of the lease, plus any additional periods covered by either lessee or lessor unilateral option to (1) extend for which it is reasonably certain to be exercised, or (2) terminate for which it is reasonably certain not to be exercised. Periods in which both the lessee and lessor have an option to terminate (or if both parties have to agree to extend) are excluded from the lease term.

- Payments are evaluated by the Enterprise to determine if they should be included in the measurement of the lease receivables or lease liabilities, including those payments that require a determination of whether they are reasonably certain of being made, such as residual value guarantees, purchase options, payments for termination penalties, and other payments.

- Equipment and other leases have a capitalization threshold of $100. 70% below market rent and/or ground leases are determined to be below market rent (BMR), excluded from lease capitalization.

(Dollars in thousands, unless otherwise stated)

Remeasurement of Lease
The Enterprise monitors changes in circumstances that may require remeasurement of a lease. When certain changes occur that are expected to significantly affect the amount of the lease receivable or lease liability, the receivable or liability is remeasured and a corresponding adjustment is made to the deferred inflow of resources or lease asset, respectively.

Presentation in Statement of Net Position
Lease assets are reported with non-current assets, lease liabilities are reported with current and long-term liabilities in the statement of net position.

(t) Other Post-Employment Benefits Other Than Pensions (OPEB)

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 11(b)).

(u) New Accounting Standards Adopted in Fiscal Year 2022

1) In June 2017, the GASB issued Statement No. 87, *Leases*. GASB Statement No. 87 establishes a single model for lease accounting and requires reporting of certain lease liabilities that currently are not reported. The new standard is effective for periods beginning after June 15, 2021. The Enterprise adopted the provisions of Statement No. 87 in fiscal year 2022. As a result of adoption, the cumulative effect of applying this Statement is recorded as beginning balances for the following accounts as of July 1, 2020:

	FY2021 Beginning Balance	FY2021 Activities	**Total**
Lease Receivable - Current	$ 7,293	$ (4,004)	$ 3,289
Lease Receivable - Long Term	43,419	2,402	45,821
Interest Receivable - GASB 87		859	859
Right-to-use Assets	5,399	247	5,646
Accumulated Amortization	-	(1,409)	(1,409)
Deferred Inflows - Leases	(50,712)	2,602	(48,110)
Accrued Int Payable - Current	-	(5)	(5)
Lease Liability - Current	(1,467)	86	(1,381)
Lease Liability - Long Term	(3,932)	1,069	(2,863)
Revenues	-	(1,859)	(1,859)
Expenses	-	12	12
Change to Net Position	$ -	$ (1,847)	$ (1,847)

2) In June 2018, the GASB issued Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*. GASB Statement No. 89 establishes accounting requirements for interest cost incurred before the end of construction period. The new

standard is effective for periods beginning after December 15, 2020. The Enterprise adopted the provisions of Statement No. 89 in fiscal year 2022.

3) In January 2020, the GASB issued Statement No. 92, *Omnibus 2020*. GASB Statement No. 92 addresses practice issues that have been identified during implementation and application of certain GASB Statements. The new standard is effective for periods beginning after June 15, 2021. The Enterprise adopted the provisions of Statement No. 92 in fiscal year 2022, which did not have a significant effect on its financial statements.

4) In March 2020, the GASB issued Statement No. 93, *Replacement of Interbank Offered Rates (IBOR)*. The objective of this Statement is to address those and other accounting and financial reporting implications that result from the replacement of an IBOR. The new standard is effective for periods beginning after June 15, 2021. The Enterprise adopted the provisions of Statement No. 93 in fiscal year 2022, which did not have a significant effect on its financial statements.

(v) GASB Statements Implemented in Fiscal Year 2021

1) In January 2017, the GASB issued Statement No. 84, *Fiduciary Activities*. GASB Statement No. 84 establishes criteria for state and local governments to identify fiduciary activities and how those activities should be reported. The new standard is effective for periods beginning after December 15, 2019. The Enterprise adopted the provisions of this Statement in fiscal year 2021, which did not have a significant effect on its financial statements.

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 adopted the provisions of this Statement in fiscal year 2021, which did not have a significant effect on its financial statements.

3) 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 the criteria used in determining whether a fiduciary component unit exists and clarifies financial reporting for Internal Revenue Code section 457 deferred compensation plans. The new standard is effective for periods beginning after June 15, 2021. The Enterprise adopted early the provision of Statement No. 97 in fiscal year 2021, which did not have a significant effect on its financial statements.

4) In October 2021, the GASB issued Statement No. 98, *The Annual Comprehensive Financial Report*. GASB Statement No. 98 updates existing accounting standards by changing the name of the Comprehensive Annual Financial Report to the Annual Comprehensive Financial Report. The new standard is effective for periods ending after December 15, 2021. The Enterprise adopted the provisions of this Statement in fiscal year 2021, which did not have a significant effect on its financial statements.

(w) Future Implementation of New Accounting Standards

1) In May 2019, the GASB issued Statement No. 91, *Conduit Debt Obligations*. GASB Statement No. 91 enhances the compatibility and consistency of conduit debt obligation reporting and reporting of related transactions by State and local government issuers. The new standard is effective for periods beginning after December 15, 2021. The Enterprise will implement the provisions of Statement No. 91 in fiscal year 2023.

2) In March 2020, the GASB issued Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*. The primary objective of this Statement is to improve financial reporting by addressing issues related to public-private and public-public partnership arrangements (PPPs). The 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.

3) In May 2020, the GASB issued Statement No. 96, *Subscription-Based Information Technology Arrangements*. This Statement provides guidance on the accounting and financial reporting for subscription-based information technology arrangements (SBITAs) by a government. The new standard is effective for periods beginning after June 15, 2022. The Enterprise will implement the provisions of Statement No. 96 in fiscal year 2023.

4) In April 2022, the GASB issued Statement No. 99, *Omnibus 2022*. This Statement enhances comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing (1) practice issues that have been identified during implementation and application of certain GASB Statements and (2) accounting and financial reporting for financial guarantees. The new standard is effective for periods beginning after June 15, 2023. The Enterprise will implement the provisions of Statement No. 99 in fiscal year 2024.

5) In June 2022, the GASB issued Statement No. 100, *Accounting Changes and Error Corrections*. This Statement enhances accounting and financial reporting requirements for accounting changes and error corrections to provide more understandable, reliable, relevant, consistent, and comparable information for making decisions or assessing accountability. The new standard is effective for periods beginning after June 15, 2023. The Enterprise will implement the provisions of Statement No. 100 in fiscal year 2024.

6) In June 2022, the GASB issued Statement No. 101, *Compensated Absences*. This Statement is to better meet the information needs of financial statement users by updating the recognition and measurement guidance for compensated absences. The new standard is effective for periods beginning after December 15, 2023. The Enterprise will implement the provisions of Statement No. 101 in fiscal year 2025.

(x) Reclassifications

The Enterprise has reclassified certain amounts relating to the prior period to conform to its current period presentation. These reclassifications had no effect on previously reported changes in net position.

(3) Cash, Cash Equivalents, and Investments

The Enterprise's cash, cash equivalents, and investments with the City Treasury are invested in an unrated City pool pursuant to investment policy guidelines established by the City Treasurer. The objectives of the policy guidelines are, in order of priority, preservation of capital, liquidity, and yield. The policy addresses soundness of financial institutions in which the City will deposit funds, types of investment instruments as permitted by the California Government Code, and the percentage of the portfolio that may be invested in certain instruments with longer terms to maturity. The City Treasurer allocates income from the investment of pooled cash at month-end in proportion to the Enterprise's average daily cash balances. The primary objectives of the Enterprise's investment policy are consistent with the City's policy.

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, 2022 and 2021 were $75,957 and $122,853, 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 funds invested in as of June 30, 2022 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, 2021 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.

(Dollars in thousands, unless otherwise stated)

The following tables present the restricted and unrestricted cash and investments outside City Treasury as of June 30, 2022 and 2021:

Cash and Investments outside City Treasury

		June 30, 2022			Fair Value Measurements Using		
Investments	Credit Ratings (S&P/Moody's)	Maturities	Fair Value	Investments exempt from fair value	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Unobservable Inputs (Level 3)
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	62,854	62,854	–	–	–
Money Market Funds	A-1+/P-1	< 90 days	48	48	–	–	–
Cash and Cash Equivalents	N/A		13,055	13,055	–	–	–
Total Restricted Cash and Investments outside City Treasury			$ 75,957	75,957	–	–	–
Cash and Cash Equivalents	N/A		318	318	–	–	–
Total Cash and Investments outside City Treasury			$ 318	318	–	–	–

Cash and Investments outside City Treasury

		June 30, 2021			Fair Value Measurements Using		
Investments	Credit Ratings (S&P/Moody's)	Maturities	Fair Value	Investments exempt from fair value	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Unobservable Inputs (Level 3)
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	79,973	79,973	–	–	–
Money Market Funds	A-1+/P-1	< 90 days	55	55	–	–	–
Cash and Cash Equivalents	N/A		42,825	42,825	–	–	–
Total Restricted Cash and Investments outside City Treasury			$ 122,853	122,853	–	–	–
Cash and Cash Equivalents	N/A		301	301	–	–	–
Total Cash and Investments outside City Treasury			$ 301	301	–	–	–

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, 2022 and 2021 included an unrealized gain due to changes in fair value on commercial paper of $0.

Additional cash outside of the investment pool included revolving fund and cash in transit. The revolving fund has a balance of $28 as of June 30, 2022 and 2021, 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 $290 and $273 as of June 30, 2022 and 2021, respectively.

(Dollars in thousands, unless otherwise stated)

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

	2022	2021
Current assets:		
Cash and investments with City Treasury	$ 460,954	483,827
Cash and investments outside City Treasury	318	301
Restricted cash and investments outside City Treasury	11,063	57,165
Non-current assets:		
Restricted cash and investments with City Treasury	9,299	—
Restricted cash and investments outside City Treasury	64,894	65,688
Total cash, cash equivalents, and investments	$ 546,528	606,981

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
2022	20.2%	14.0%	14.9%	50.9%
2021	14.5%	27.6%	29.7%	28.2%

(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, 2022 and 2021 consist of the following:

	2021	Increases	Decreases	2022
Capital assets not being depreciated and amortized:				
Land	$ 104,248	9,193	—	113,441
Intangible assets	679	—	—	679
Construction work in progress	532,602	175,191	(263,539) *	444,254
Total capital assets not being depreciated and amortized	637,529	184,384	(263,539)	558,374
Capital assets being depreciated and amortized:				
Facilities and improvements	6,413,238	247,453	—	6,660,691
Intangible assets	23,772	1,370	—	25,142
Machinery and equipment	326,126	6,662	(315)	332,473
Total capital assets being depreciated and amortized	6,763,136	255,485	(315)	7,018,306
Less accumulated depreciation and amortization for:				
Facilities and improvements	(1,554,515)	(134,202)	—	(1,688,717)
Intangible assets	(21,688)	(981)	—	(22,669)
Machinery and equipment	(236,663)	(11,352)	315	(247,700)
Total accumulated depreciation and amortization	(1,812,866)	(146,535)	315	(1,959,086)
Total capital assets being depreciated and amortized, net	4,950,270	108,950	—	5,059,220
Total capital assets, net	$ 5,587,799	293,334	(263,539)	5,617,594

* Decrease in construction work in progress of $8,054 includes $4,592 in capital project write offs, mainly related to Stern Grove Emergency Restoration and Lake Merced Water Level Restoration projects and $9,193 transferred to land. The remaining difference of $5,731 is mainly due to direct additions to facilities and improvements, intangible assets and machinery and equipment.

(Dollars in thousands, unless otherwise stated)

		2020	Increases	Decreases		2021
Capital assets not being depreciated and amortized:						
Land	$	105,336	–	(1,088)		104,248
Intangible assets		679	–	–		679
Construction work in progress		492,682	197,669	(157,749)	*	532,602
Total capital assets not being depreciated and amortized		598,697	197,669	(158,837)		637,529
Capital assets being depreciated and amortized:						
Facilities and improvements		6,258,333	154,905	–		6,413,238
Intangible assets		23,497	275	–		23,772
Machinery and equipment		319,000	7,275	(149)		326,126
Total capital assets being depreciated and amortized		6,600,830	162,455	(149)		6,763,136
Less accumulated depreciation and amortization for:						
Facilities and improvements		(1,423,722)	(130,793)	–		(1,554,515)
Intangible assets		(20,087)	(1,601)	–		(21,688)
Machinery and equipment		(225,173)	(11,639)	149		(236,663)
Total accumulated depreciation and amortization		(1,668,982)	(144,033)	149		(1,812,866)
Total capital assets being depreciated and amortized, net		4,931,848	18,422	–		4,950,270
Total capital assets, net	$	5,530,545	216,091	(158,837)		5,587,799

* Decrease in construction work in progress includes $3,810 in capital project write-offs, mainly related to Eastside Recycled Water and San Andreas Spillway projects. The remaining difference of $8,516 is due to direct additions to facilities and improvements, intangible assets and machinery and equipment.

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. Per the implementation of GASB Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period*, no interest was capitalized to construction in progress beginning in fiscal year 2022.

Interest included in the construction work in progress and total interest expense incurred during the years ended June 30, 2022 and 2021 are as follows:

	2022		Restated 2021	
Interest expensed	$ 213,668		184,678	**
Interest included in construction work in progress	—	*	19,461	
Total interest incurred	$ 213,668		204,139	

* Per the implementation of GASB No 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period,* no interest was capitalized to construction work in progress beginning in fiscal year 2022.

**Restated per implementation of GASB 87 - *Leases*

(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 and parity State revolving fund loans 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.

(Dollars in thousands, unless otherwise stated)

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, 2022 and 2021:

		2022	2021
Cash and investments with City Treasury:			
Water revenue bond construction fund	$	9,299	—
Cash and investments outside City Treasury:			
2010B Water revenue bond fund		21,386	21,492
2010D Water revenue bond fund		1	—
2010E Water revenue bond fund		16,304	16,299
2010G Water revenue bond fund		17,703	17,698
2011B Water revenue bond fund		—	670
2011C Water revenue bond fund		—	140
2012A Water revenue bond fund		1	1
2020A Water revenue bond fund		86	7,370
2020B Water revenue bond fund		34	3,097
2020C Water revenue bond fund		54	3,463
2020D Water reveune bond fund		38	1,513
2020F Water revenue refunding bond fund		12	12
2020G Water reveune refunding bond fund		22	22
2020H Water revenue refunding bond fund		7	7
2009C Certificates of participation - 525 Golden Gate		1,638	1,638
2009D Certificates of participation - 525 Golden Gate		5,567	6,551
Commercial Paper - Tax Exempt		14	29,793
Commercial Paper - Taxable		37	34
Habitat reserve endowment fund		13,053	13,053
Total cash and investments outside City Treasury	$	75,957	122,853
Interest and other receivables:			
Water bond construction fund including capacity fee receivables		4,146	3,987
Due from other government for State Revolving Fund		7,553	49,546
Total restricted assets	$	96,955	176,386

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.

(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, 2022 and 2021, amounts outstanding under Proposition E were $206,297 and $105,862, respectively. Commercial paper interest rates ranged from 0.1% to 2.0%.

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 $293,703 and $394,138 in unused authorization as of June 30, 2022 and 2021, 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, 2022, there were no such events describe herein.

(Dollars in thousands, unless otherwise stated)

(7) Changes in Long-Term Liabilities

Long-term liability activities for the years ended June 30, 2022 and 2021 are as follows:

	Interest rate	Maturity (Calendar Year)	Restated 2021*	Additions	Reductions	2022	Due within one year
Revenue Bonds:							
2010B revenue bonds (Build America)	4.00% – 6.00%	2040	$ 361,500	—	(12,330)	349,170	12,780
2010E revenue bonds (Build America)	4.90 – 6.00	2040	344,200	—	—	344,200	12,745
2010G revenue bonds (Build America)	6.95	2050	351,470	—	—	351,470	—
2011B revenue bonds	3.50 – 5.00	2041	755	—	(755)	—	—
2011C revenue bonds	3.00 – 5.00	2041	825	—	(825)	—	—
2015A revenue refunding bonds	2.00 – 5.00	2036	397,745	—	(15,325)	382,420	16,045
2016A revenue refunding bonds	4.00 – 5.00	2039	743,050	—	(23,315)	719,735	32,790
2016B revenue refunding bonds	1.50 – 5.00	2030	81,525	—	(10,015)	71,510	12,530
2016C revenue bonds	0.87 – 4.19	2046	237,050	—	(5,820)	231,230	5,955
2017A revenue bonds	5.00	2047	27,000	—	—	27,000	2,325
2017B revenue bonds	5.00	2047	32,930	—	—	32,930	2,835
2017C revenue bonds	5.00	2047	15,750	—	—	15,750	1,355
2017D revenue refunding bonds	2.00 – 5.00	2035	347,720	—	(925)	346,795	1,455
2017E revenue refunding bonds	4.00 – 5.00	2031	48,890	—	—	48,890	765
2017F revenue refunding bonds	5.00	2031	8,705	—	—	8,705	700
2017G revenue refunding bonds	2.03 – 2.91	2024	32,780	—	(820)	31,960	13,070
2019A revenue refunding bonds	1.81 – 3.47	2043	615,725	—	(24,405)	591,320	3,495
2019B revenue refunding bonds	3.15 – 3.52	2041	16,450	—	(65)	16,385	70
2019C revenue refunding bonds	3.15 – 3.52	2041	17,925	—	(75)	17,850	75
2020A revenue bonds	4.00 – 5.00	2050	150,895	—	—	150,895	—
2020B revenue bonds	5.00	2050	61,330	—	—	61,330	—
2020C revenue bonds	4.00	2050	85,335	—	—	85,335	—
2020D revenue bonds	3.00	2050	49,200	—	—	49,200	—
2020E revenue refunding bonds	2.83 – 2.95	2047	341,435	—	(5,900)	335,535	500
2020F revenue refunding bonds	0.26 – 3.15	2047	136,880	—	(1,425)	135,455	—
2020G revenue refunding bonds	0.26 – 3.10	2043	120,585	—	(5,820)	114,765	5,795
2020H revenue refunding bonds	0.26 – 3.15	2047	65,495	—	(680)	64,815	—
Less issuance discount			(133)	—	9	(124)	—
Add issuance premiums			301,758	—	(25,349)	276,409	—
Total revenue bonds payable			4,994,775	—	(133,840)	4,860,935	125,285
2009C certificates of participation (COPs)	2.00 – 5.00	2022	6,094	—	(2,970)	3,124	3,124
2009C COPs issuance premiums			69	—	(55)	14	14
2009D COPs (Build America)	6.36 – 6.49	2041	92,499	—	—	92,499	—
State Revolving Funds Loan	1.00	2051	107,407	14,354	—	121,761	3,283
Other post-employment benefits obligations			148,771	14,868	(19,524)	144,115	—
Lease liability			4,244	—	(1,381)	2,863	1,008
Net pension liability			216,417	—	(216,417)	—	—
Accrued vacation and sick leave			13,916	8,177	(8,364)	13,729	6,888
Accrued workers' compensation			8,828	2,793	(2,648)	8,973	1,700
Damage claims liability			36,723	452	(1,106)	36,069	10,191
Wholesale balancing account			60,864	18,633	(347)	79,150	48,422
Pollution remediation obligation			1,271	—	—	1,271	—
Total			$ 5,691,878	59,277	(386,652)	5,364,503	199,915

*Restated due to implementation of GASB 87 - *Leases*

(Dollars in thousands, unless otherwise stated)

	Interest rate	Maturity (Calendar Year)	2020	Additions	Reductions	Restated 2021*	Due within one year
Revenue Bonds:							
2010B revenue bonds (Build America)	4.00% – 6.00%	2040	$ 373,420	–	(11,920)	361,500	12,330
2010D revenue refunding bonds	3.00 – 5.00	2021	30,990	–	(30,990)	–	–
2010E revenue bonds (Build America)	4.90 – 6.00	2040	344,200	–	–	344,200	–
2010G revenue bonds (Build America)	6.95	2050	351,470	–	–	351,470	–
2011B revenue bonds	3.50 – 5.00	2041	1,485	–	(730)	755	755
2011C revenue bonds	3.00 – 5.00	2041	1,620	–	(795)	825	825
2011D revenue refunding bonds	4.00 – 5.00	2028	19,135	–	(19,135)	–	–
2012A revenue bonds	4.00 – 5.00	2043	216,540	–	(216,540)	–	–
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)	–	–
2015A revenue refunding bonds	2.00 – 5.00	2036	412,380	–	(14,635)	397,745	15,325
2016A revenue refunding bonds	4.00 – 5.00	2039	763,005	–	(19,955)	743,050	23,315
2016B revenue refunding bonds	1.50 – 5.00	2030	95,980	–	(14,455)	81,525	10,015
2016C revenue bonds	0.87 – 4.19	2046	242,755	–	(5,705)	237,050	5,820
2017A revenue bonds	5.00	2047	121,140	–	(94,140)	27,000	–
2017B revenue bonds	5.00	2047	147,725	–	(114,795)	32,930	–
2017C revenue bonds	5.00	2047	70,675	–	(54,925)	15,750	–
2017D revenue refunding bonds	2.00 – 5.00	2035	348,610	–	(890)	347,720	925
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	33,280	–	(500)	32,780	820
2019A revenue refunding bonds	1.81 – 3.47	2043	622,580	–	(6,855)	615,725	24,405
2019B revenue refunding bonds	3.15 – 3.52	2041	16,450	–	–	16,450	65
2019C revenue refunding bonds	3.15 – 3.52	2041	17,925	–	–	17,925	75
2020A revenue bonds	4.00 – 5.00	2050	–	150,895	–	150,895	–
2020B revenue bonds	5.00	2050	–	61,330	–	61,330	–
2020C revenue bonds	4.00	2050	–	85,335	–	85,335	–
2020D revenue bonds	3.00	2050	–	49,200	–	49,200	–
2020E revenue refunding bonds	2.83 – 2.95	2047	–	341,435	–	341,435	5,900
2020F revenue refunding bonds	0.26 – 3.15	2047	–	136,880	–	136,880	1,425
2020G revenue refunding bonds	0.26 – 3.10	2043	–	120,585	–	120,585	5,820
2020H revenue refunding bonds	0.26 – 3.15	2047	–	65,495	–	65,495	680
Less issuance discount			(143)	–	10	(133)	–
Add issuance premiums			311,923	73,542	(83,707)	301,758	–
Total revenue bonds payable			4,695,295	1,084,697	(785,217)	4,994,775	108,500
2009C certificates of participation (COPs)	2.00 – 5.00	2022	8,918	–	(2,824)	6,094	2,970
2009C COPs issuance premiums			161	–	(92)	69	–
2009D COPs (Build America)	6.36 – 6.49	2041	92,499	–	–	92,499	–
State Revolving Funds Loan	1.00	2051	73,271	49,546	(15,410)	107,407	1,667
Other post-employment benefits obligations			163,684	14,036	(28,949)	148,771	–
Leases			5,399	–	(1,155)	4,244	1,381
Net pension liability			178,133	93,066	(54,782)	216,417	–
Accrued vacation and sick leave			11,620	10,109	(7,813)	13,916	6,787
Accrued workers' compensation			9,174	1,912	(2,258)	8,828	1,694
Damage claims liability			10,767	27,643	(1,687)	36,723	14,400
Wholesale balancing account			64,857	–	(3,993)	60,864	21,538
Pollution remediation obligation			1,577	–	(306)	1,271	–
Total			$ 5,315,355	1,281,009	(904,486)	5,691,878	158,937

*Restated due to implementation of GASB 87 - *Leases*

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

(a) Water Revenue Bonds 2010 Series B

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, 2022 and 2021, the principal amount outstanding was $349,170 and $361,500, respectively.

(b) 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. A portion of the proceeds from 2020 Series E and 2020 Series G refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreements, dated October 1, 2020, to refund and legally defease the outstanding 2010 Series D 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 D bonds starting on November 1, 2021. As of June 30, 2022 and 2021, the principal amount of 2010 Series D bonds outstanding was $0.

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, 2022 and 2021, the principal amount of 2010 Series E bonds outstanding was $344,200.

(c) 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%.

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, 2022 and 2021, the principal amount of 2010 Series F bonds outstanding was $0.

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, 2022 and 2021, the principal amount of 2010 Series G bonds outstanding was $351,470.

(d) 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 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, 2022 and 2021, the principal amount of 2011 Series A bonds outstanding was $0.

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, 2022 and 2021, the principal amount of 2011 Series B bonds outstanding was $0 and $755, 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 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, 2022 and 2021, the principal amount of 2011 Series C bonds outstanding was $0 and $825, 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 and 2020 Series G refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreements, dated December 1, 2017 and October 1, 2020, respectively, 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, 2022 and 2021, the principal amount of 2011 Series D bonds outstanding was $0.

(e) 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, 2019 Series A, and 2020 Series E refunding bonds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreements, dated December 1, 2017, December 1, 2019, and October

1, 2020 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, 2022 and 2021, the principal amount of 2012 Series A bonds outstanding was $0.

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%. A portion of the proceeds of the 2020 Series G refunding bonds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement dated October 1, 2020 to refund and legally defease a portion of the outstanding 2012 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 2012 Series B bonds starting on November 1, 2031 and thereafter. As of June 30, 2022 and 2021, the principal amount of 2012 Series B bonds outstanding was $0.

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 and 2020 Series G refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreements dated December 1, 2017 and October 1, 2020, respectively, 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, 2025 and thereafter. As of June 30, 2022 and 2021, the principal amount of 2012 Series C bonds outstanding was $0.

(f) 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, 2022 and 2021, the principal amount of 2015 Series A bonds outstanding was $382,420 and $397,745, respectively.

(g) 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 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, 2022 and 2021, the principal amount of 2016 Series AB bonds outstanding was $791,245 and $824,575, respectively.

(h) 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, 2022 and 2021, the principal amount of 2016 Series C bonds outstanding was $231,230 and $237,050, respectively.

(i) 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%. A portion of the proceeds of the 2020 Series E refunding bonds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement dated October 1, 2020 to refund and legally defease a portion of the outstanding 2017 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 2017 Series A bonds starting on November 1, 2030 and thereafter. As of June 30, 2022 and 2021, the principal amount of 2017 Series A bonds outstanding was $27,000.

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%. A portion of the proceeds of the 2020 Series F refunding bonds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement dated October 1, 2020 to refund and legally defease a portion of the outstanding 2017 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 2017 Series B bonds starting on November 1, 2030 and thereafter. As of June 30, 2022 and 2021, the principal amount of 2017 Series B bonds outstanding was $32,930.

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%. A portion of the proceeds of the 2020 Series H refunding bonds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement dated October 1, 2020 to refund and legally defease a portion of the outstanding 2017 Series C 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 2017 Series C bonds starting on November 1, 2030 and thereafter. As of June 30, 2022 and 2021, the principal amount of 2017 Series C bonds outstanding was $15,750.

(j) 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, 2022 and 2021, the principal amount of 2017 Series DEFG bonds outstanding was $436,350 and $438,095 respectively.

(k) 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, 2022 and 2021, the principal amount of 2019 Series ABC bonds outstanding was $625,555 and $650,100, respectively.

(l) Water Revenue Bonds 2020 Series ABCD

In September 2020, the Enterprise issued tax-exempt revenue bonds, 2020 Series ABCD in the aggregate amount of $346,760. The purpose of the 2020 Series ABCD Bonds was to refund approximately $229,770 aggregate principal amount of commercial paper notes and to provide $164,632 new money for various capital projects of the Water Enterprise, and capital projects of Hetch Hetchy Water. The bonds carried “Aa2” and “AA-” ratings from Moody’s and S&P, respectively. The 2020 Series ABCD bonds include term bonds with coupons of 3.0% to 5.0% and final maturities from 2045 to 2050.

The $150,895 2020 Series A bonds were issued as tax-exempt Green Bonds to refund approximately $180,000 of commercial paper notes for WSIP capital projects. The Series A bonds were issued as term bonds with coupons of 4.0% and 5.0% and a final maturity of 2050. The 2020 Series A bonds have a true interest cost of 3.3%. As of June 30, 2022 and 2021, the principal amount of 2020 Series A bonds outstanding was $150,895.

The $61,330 Series B bonds were issued as tax-exempt bonds to provide $69,644 in new money for Water Enterprise capital projects (non-WSIP, Regional). The Series B bonds were issued as term bonds with coupons of 5.0% and have a final maturity of 2050. The Series B bonds have a true interest cost of 3.7%. As of June 30, 2022 and 2021, the principal amount of 2020 Series B bonds outstanding was $61,330.

The $85,335 Series C bonds were issued as tax-exempt bonds to provide $94,948 in new money for Water Enterprise capital projects (non-WSIP, Local). The Series C bonds were issued as term bonds with coupons of 4.0% and have a final maturity of 2050. The Series C bonds have a true interest cost of 3.0%. As of June 30, 2022 and 2021, the principal amount of 2020 Series C bonds outstanding was $85,335.

The $49,200 Series D bonds were issued as tax-exempt bonds to refund approximately $49,761 of commercial paper notes for Hetch Hetchy Water capital projects. The Series D bonds were issued as term bonds with coupons of 3.0% and a final maturity of 2050. The 2020 Series D bonds have a true interest cost of 2.7%. As of June 30, 2022 and 2021, the principal amount of 2020 Series D bonds outstanding was $49,200.

(m) Water Revenue Refunding Bonds 2020 Series EFGH

In October 2020, the Enterprise issued taxable revenue bonds, 2020 Series EFGH refunding bonds in the aggregate amount of $664,395. The 2020 Series E (WSIP, Green) bonds were issued for the purpose of refunding a portion of the outstanding 2010 Series D (WSIP) bonds maturing on and after November 1, 2020, a portion of the outstanding 2012 Series A (WSIP) bonds maturing on and after November 1, 2038, and a portion of the outstanding 2017 Series A (WSIP) bonds maturing on and after November 1, 2030.

The 2020 Series F (non-WSIP, Regional) bonds were issued for the purpose of refunding a portion of the outstanding 2017 Series B bonds maturing on or after November 1, 2030.

The 2020 Series G (non-WSIP, Local) bonds were issued for the purpose of refunding a portion of the outstanding 2010 Series D bonds maturing on or after November 1, 2020, a portion of the 2011 Series D bonds maturing on or after November 1, 2022, a portion of 2012 Series B bonds maturing on or after November 1, 2031, and a portion of 2012 Series C bonds maturing on or after November 1, 2025.

The 2020 Series H (Hetch Hetchy Water) bonds issued for the purpose of refunding a portion of the outstanding 2017 Series C bonds maturing on or after November 1, 2030.

The bonds carried “Aa2” and “AA-” ratings from Moody’s and S&P, respectively. The 2020 Series EFGH bonds include serial bonds and term bonds with interest rates varying from 0.3% to 3.1% and have a final maturity in 2047. The Series EFGH bonds have a true interest cost of 2.7%. The refunding resulted in the recognition of a deferred accounting loss of $27,010, gross debt service savings of $117,114, and an economic gain of $75,212 or 12.0% of refunded principal. As of June 30, 2022 and 2021, the principal amount of 2020 Series EFGH bonds outstanding was $650,570 and $664,395, respectively.

(n) 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, 2022. The federal interest subsidy amounts represent 35.0%, excluding sequestration, of the interest for the revenue bond 2010 Series B, E, and G.

(Dollars in thousands, unless otherwise stated)

		Principal	Interest before subsidy	Federal interest subsidy*	Interest net of subsidy
Fiscal years ending June 30:					
2023	$	125,285	203,067	(21,290)	181,777
2024		135,095	197,481	(20,841)	176,640
2025		140,485	191,563	(20,370)	171,193
2026		151,930	185,085	(19,876)	165,209
2027		157,635	177,956	(19,345)	158,611
2028-2032		892,755	770,116	(87,360)	682,756
2033-2037		1,092,025	540,947	(64,682)	476,265
2038-2042		1,037,900	295,084	(35,116)	259,968
2043-2047		464,125	145,355	(17,128)	128,227
2048-2051		387,415	40,159	(4,608)	35,551
		4,584,650	2,746,813	(310,616)	2,436,197
Less: Current portion		(125,285)			
Less: Unamortized bond discount		(124)			
Add: Unamortized bond premiums		276,409			
Long-term portion as of June 30, 2022	$	4,735,650			

* The SFPUC received an IRS notice dated June 2, 2022 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 $18,776, due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same after fiscal year 2023.

As defined in the 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).

(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 1.0% 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, 2022 and 2021 were $121,761 and $107,407, respectively. In addition, there was $15,000 of principal forgiveness.

(Dollars in thousands, unless otherwise stated)

California Clean Water State Revolving Fund Loan		Principal	Interest	Total
Fiscal years ending June 30:				
2023	$	3,283	1,142	4,425
2024		3,542	1,185	4,727
2025		3,577	1,149	4,726
2026		3,613	1,114	4,727
2027		3,649	1,077	4,726
2028-2032		18,801	4,833	23,634
2033-2037		19,760	3,874	23,634
2038-2042		20,768	2,866	23,634
2043-2047		21,827	1,806	23,633
2048-2052		22,941	692	23,633
		121,761	19,738	141,499
Less: Current portion		(3,283)		
Long-term portion as of June 30, 2022	$	118,478		

(p) Drinking Water State Revolving Fund (DWSRF) Loan

In April 2022, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a Drinking Water State Revolving Fund (DWSRF) Loan to fund the Enterprise's Mountain Tunnel Improvement Project. The DWSRF loan is in the amount of $238,219. It will bear an interest rate of 1.1% for a 30-year term, with interest payments beginning annually after the initial loan proceed draw occurs and loan principal repayment beginning one year after substantial completion of project construction. Power Enterprise is responsible for repayment for its share of SRF Loan debt service costs representing up to its allocable share of the cost of the Mountain Tunnel Project by a Memorandum of Understanding that will be executed with the Water Enterprise. The DWSRF loan is secured on a parity lien basis with the Enterprise's outstanding revenue bonds. The principal outstanding as of June 30, 2022 was $0.

(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, 2022, there was no commercial paper outstanding pursuant to this authorization and $1,499,230 of bonds had been issued in fiscal years 2006, 2010, 2012, 2021 against Prop A. The total authorization against Prop A was $1,499,230 as of June 30, 2022.

(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, 2022, the Board of Supervisors authorized the issuance of $4,617,099 in revenue bonds with $3,898,744 issued against this authorization; 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

(Dollars in thousands, unless otherwise stated)

$15,000 grant) and in April 2022, the SFPUC entered in to an Installment Sale Agreement with the State Water Resources Control Board for a Drinking Water State Revolving Fund (DWSRF) Loan to fund the Mountain Tunnel Improvement Project in the amount of $238,219. Additionally, $206,297 and $105,862 in commercial paper was outstanding pursuant to this authorization as of June 30, 2022 and 2021, 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, 2022 are as follows:

Certificates of Participation 2009 Series C (Tax-Exempt)		Principal	Interest	Total
Fiscal years ending June 30:				
2023	$	3,124	78	3,202
		3,124	78	3,202
Less: Current portion		(3,124)		
Add: Unamortized bond premiums		14		
Less: Current portion		(14)		
Long-term portion as of June 30, 2022	$	–		

(Dollars in thousands, unless otherwise stated)

Certificates of Participation 2009 Series D (Taxable)	Principal	Interest before subsidy	Federal interest subsidy *	Interest net of subsidy
Fiscal years ending June 30:				
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	3,545	5,431	(1,792)	3,639
2027	3,695	5,201	(1,716)	3,485
2028-2032	20,949	22,183	(7,321)	14,862
2033-2037	25,811	14,651	(4,835)	9,816
2038-2042	31,830	5,335	(1,761)	3,574
Total		70,285	(23,195)	47,090
Long-term portion as of June 30, 2022	$ 92,499			

* The SFPUC received an IRS notice dated June 2, 2022 that the federal interest subsidy on the 2009 Series D bonds is reduced by 5.7%, or a total reduction of $1,402, due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same after fiscal year 2023.

(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, 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, to be due and payable immediately. As of June 30, 2022, 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 2022 and 2021, applicable net revenues and funds available for debt service are as follows:

	2022	2021
Bonds issued with revenue pledge	$ 4,891,480	4,891,480
Principal and interest remaining due at the end of the year	7,472,962	7,771,993
Clean Water State Revolving Fund (CWSRF) loans with revenue pledge	121,761	107,407
Principal and interest paid during the year	279,352	248,427
Net revenues for the year ended June 30	306,918	339,046
Funds available for debt service	410,424	467,738

(Dollars in thousands, unless otherwise stated)

(9) Leases

Water Enterprise as Lessee

The Enterprise has entered into long-term leases for land, office space, communication site, data processing, machinery, and other equipment. The terms and conditions for these leases vary, which range between 1 – 75 years.

A summary of intangible right-to-use leases during the year ended June 30, 2022 and 2021 is as follows:

		Balance July 1, 2021	Increases	Decreases	Remeasurements	Balance June 30, 2022
Right-to-use assets:						
Land	$	605	-	-	-	605
Building/Facility		5,041	-	-	-	5,041
Equipment		-	-	-	-	-
Total lease assets		5,646	-	-	-	5,646
Less accumulated amortization:						
Right-to-use assets:						
Land		187	196	-	-	383
Building/Facility		1,222	1,229	-	-	2,451
Equipment		-	-	-	-	-
Total accumulated amortization		1,409	1,425	-	-	2,834
Total lease assets, net	$	4,237	(1,425)	-	-	2,812

		Balance July 1, 2020	Increases	Decreases	Remeasurements	Balance June 30, 2021
Right-to-use assets:						
Land	$	605	-	-	-	605
Building/Facility		4,794	250	(3)	-	5,041
Equipment		-	-	-	-	-
Total lease assets		5,399	250	(3)	-	5,646
Less accumulated amortization:						
Right-to-use assets:						
Land		-	187	-	-	187
Building/Facility		-	1,225	(3)	-	1,222
Equipment		-	-	-	-	-
Total accumulated amortization		-	1,412	(3)	-	1,409
Total lease assets, net	$	5,399	(1,162)	-	-	4,237

(Dollars in thousands, unless otherwise stated)

A summary of changes in the related lease liabilities during the year ended June 30, 2022 and 2021 is as follows:

		Balance July 1, 2021	Additions	Remeasurements	Deductions	Balance June 30, 2022	Amounts Due Within One Year
Water lease liabilities	$	4,244			1,381	2,863	1,008
Total	$	4,244	-	-	1,381	2,863	1,008

		Balance July 1, 2020	Additions	Remeasurements	Deductions	Balance June 30, 2021	Amounts Due Within One Year
Water lease liabilities	$	5,399			1,155	4,244	1,381
Total	$	5,399	-	-	1,155	4,244	1,381

Future annual lease payments for fiscal years 2022 and 2021 are as follows:

Year ending June 30:		Principal amount	Interest amount	Total
2023	$	1,008	42	1,050
2024		370	33	403
2025		186	29	215
2026		101	27	128
2027		103	25	128
2028-2032		436	96	532
2033-2037		446	49	495
2038-2042		213	6	219
		2,863	307	3,170
Less: Current portion		(1,008)		
Long-term portion as of June 30, 2022	$	1,855		

Year ending June 30:		Principal amount	Interest amount	Total
2022	$	1,381	58	1,439
2023		1,008	42	1,050
2024		370	33	403
2025		186	29	215
2026		101	27	128
2027-2031		455	105	560
2032-2036		436	58	494
2037-2041		307	12	319
		4,244	364	4,608
Less: Current portion		(1,381)		
Long-term portion as of June 30, 2021	$	2,863		

Variable lease payments

Variable lease payments, other than those payments that depend on an index or rate or are fixed in substance, are excluded from the measurement of the lease liability. Such amounts are recognized as lease expenses in the period in which the obligation for those payments is incurred.

Certain equipment or facility rental leases require the Enterprise to make variable lease payments that based on usage, related to the property taxes levied on the lessor, and insurance payments made by the lessor; these amounts are generally determined annually. The amounts recognized as expense for variable lease payments not included in the measurement of the lease liability were $34 and $0 during the year ended June 30, 2022 and 2021, respectively.

(Dollars in thousands, unless otherwise stated)

Water Enterprise as Lessor

The Enterprise has leased facilities, easements, communication site and equipment to various tenants. The terms and conditions for these leases vary, which range between 1- 65 years.

Variable payments include percentage of sales, payments depended on an index made by the lessee; these amounts are generally determined periodically. The Enterprise did not incur revenue related to residual value guarantees or lease termination penalties. The total amounts for lease revenue, interest revenue, and other lease-related revenues recognized during the year ended June 30, 2022 and 2021 were $2,332 and $2,976, respectively.

Principal and interest requirements to maturity for the lease receivable at June 30, 2022 and 2021 are as follows:

Year ended June 30	Principal	Interest	Total
2023	$ 3,325	$ 907	$ 4,232
2024	3,389	848	4,237
2025	3,470	804	4,274
2026	2,951	743	3,694
2027	2,619	687	3,306
2028-2032	10,827	2,777	13,604
2033-2037	10,736	1,691	12,427
2038-2042	2,258	940	3,198
2043-2047	-	998	998
2048-2052	-	1,157	1,157
2053-2057	-	1,341	1,341
2058-2062	765	789	1,554
2063-2067	1,128	675	1,803
2068-2072	1,577	513	2,090
2073+	3,120	327	3,447
	$ 46,165	$ 15,197	$ 61,362

(Dollars in thousands, unless otherwise stated)

Year ended June 30	Principal	Interest	Total
2022	$ 3,289	$ 957	$ 4,246
2023	3,285	901	4,186
2024	3,348	843	4,191
2025	3,427	800	4,227
2026	2,905	739	3,644
2027-2031	11,102	2,988	14,090
2032-2036	10,862	1,908	12,770
2037-2041	4,302	1,010	5,312
2042-2046	-	969	969
2047-2051	-	1,123	1,123
2052-2056	-	1,302	1,302
2057-2061	586	924	1,510
2062-2066	1,049	701	1,750
2067-2071	1,479	550	2,029
2072+	3,476	414	3,890
Total	$ 49,110	$ 16,129	$ 65,239

(10) 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 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 2022 and 2021, the WRR, net of adjustments, charged to such wholesale customers was $289,828 and $245,743 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 $79,150 and $60,864 for the years ended June 30, 2022 and 2021, respectively, an increase of $18,286. Refer to the compliance audit report for the final balancing account available at https://sfpuc.org/about-us/reports/audited-financial-statements-annual-financial-reports.

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 $9,532, 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.

(11) 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 Plan, and additions to/deductions from the SFERS Plan’s fiduciary net position have been determined on the same basis as they are reported by the SFERS 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.

(Dollars in thousands, unless otherwise stated)

Replacement Benefits Plan – The Replacement Benefits Plan (RBP) is a qualified excess benefit plan established in October 1989. Internal Revenue Code Section 415(m) provides for excess benefit arrangements that legally permit benefit payments above the Section 415 limits, provided that the payments are not paid from the SFERS Plan. The RBP allows the City to pay SFERS retirees any portion of the Charter-mandated retirement allowance that exceeds the annual Section 415(b) limit. The RBP plan does not meet the criteria of a qualified trust under GASB Statement No. 73 because RBP assets are subject to the claims of the employer's general creditors under federal and state law in the event of insolvency.

GASB Statements No. 68 and 73 require that the SFERS Plan and RBP reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:

Fiscal year 2022	
Valuation Date (VD)	June 30, 2020 updated to June 30, 2021
Measurement Date (MD)	June 30, 2021
Measurement Period (MP)	July 1, 2020 to June 30, 2021
Fiscal year 2021	
Valuation Date (VD)	June 30, 2019 updated to June 30, 2020
Measurement Date (MD)	June 30, 2020
Measurement Period (MP)	July 1, 2019 to June 30, 2020

The City is an employer of the plan with a proportionate share of 94.64% as of June 30, 2021 (measurement date), and 94.39% as of June 30, 2020 (measurement date), 0.25% increase from prior year. 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 2021 and 2020. The Enterprise's net pension liability/(assets), deferred outflows/inflows of resources related to pensions, amortization of deferred outflows/inflows, and pension expense is based on the Enterprise's allocated percentage. The Enterprise's allocation of the City's proportionate share was 4.27% as of June 30, 2021, and 4.21% as of June 30, 2020 (measurement dates).

Replacement Benefits Plan – The Enterprise's allocation percentage was determined based on the Enterprise's headcount (both active members and retirees) divided by the City's total headcount for fiscal year 2021. The Enterprise's total pension liability/(assets), deferred outflows/inflows of resources related to pensions, amortization of deferred outflows/inflows and pension expense is based on the Enterprise's allocated percentage. The Enterprise's allocation of the City's proportionate share was 1.85% as of June 30, 2021, and 0.64% as of June 30, 2020 (measurement dates).

SFERS 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 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 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.

SFERS Benefits – Retirement System provides service retirement, disability and death benefits based on specified percentages of defined final average monthly salary and annual cost of living adjustments (COLA) after retirement. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan. The Retirement System pays benefits according to the category of employment and the type of benefit coverage provided by the City and County. The four main categories of Plan members are:

a) Miscellaneous Non-Safety Members – staff, operational, supervisory, and all other eligible employees who are not in special membership categories.
b) Sheriff's Department and Miscellaneous Safety Members – sheriffs assuming office on and after January 7, 2012, and undersheriffs, deputized personnel of the sheriff's department, and miscellaneous safety employees hired on and after January 7, 2012.
c) Firefighter Members – firefighters and other employees whose principal duties are in fire prevention and suppression work or who occupy positions designated by law as firefighter member positions.
d) Police Members – police officers and other employees whose principal duties are in active law enforcement or who occupy positions designated by law as police member positions.

The membership groups and the related service retirement benefits are included in the Notes to the Basic Financial Statements of San Francisco Employees' Retirement System.

All members are eligible to apply for a disability retirement benefit, regardless of age, when they have 10 or more years of credited service and they sustain an injury or illness that prevents them from performing their duties. Safety members are eligible to apply for an industrial disability retirement benefit from their first day on the job if their disability is caused by an illness or injury that they receive while performing their duties.

All retired members receive a benefit adjustment each July 1, which is the Basic COLA. The majority of adjustments are determined by changes in CPI 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

SFERS Plan – Contributions are made by both the City and the participating employees. Employee contributions are mandatory as required by the Charter. Employee contribution rates varied from 7.5% to 13.0% as a percentage of gross covered salary in fiscal years 2022 and 2021. 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, 2020 actuarial report, the required employer contribution rate for fiscal year 2022 was 19.91% to 24.41%. Based on the July 1, 2019 actuarial report, the required employer contribution rate for fiscal year 2021 was 22.40% to 26.90%.

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, 2021 and 2020 (measurement period) were $791,736 and $701,307, respectively. The Enterprise's allocation of employer contributions for fiscal year 2021 and 2020 (measurement period) were $33,367 and $29,647, respectively.

For the year ended June 30, 2022, the City's actuarial determined contribution was $729,578. Water's share was $31,151 for fiscal year 2022 and will be recognized as a reduction of the net pension liability in the subsequent fiscal period.

Replacement Benefits Plan – The RBP is and will remain unfunded and the rights of any participant and beneficiary are limited to those specified in the RBP. The RBP constitutes an unsecured promise by the City to make benefit payments in the future to the extent funded by the City. The City paid $4,097 replacement benefits in the year ended June 30, 2022.

Pension Liabilities/(Asset), Pension Expenses, and Deferred Outflows and Inflows of Resources Related to Pensions

Fiscal Year 2022

As of June 30, 2022, the City reported net pension assets (NPA) for its proportionate share of the net pension (asset) of the SFERS Plan and net pension liability of RBP of $2,227 million. The City's net pension asset for the SFERS Plan is measured as the proportionate share of the net pension asset. The net pension (asset) of the SFERS Plan is measured as of June 30, 2021 (measurement date), and the total pension asset for the SFERS Plan and RBP used to calculate the net pension (asset) was determined by an actuarial valuation as of June 30, 2020 rolled forward to June 30, 2021 using standard update procedures. The City's proportion of the net pension (asset) for the SFERS Plan was based on a projection of the City's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. The Enterprise's allocation of the City's proportionate share of the net pension (asset) for the SFERS Plan and RBP as of June 30, 2022 (reporting year) was ($100,407). The Enterprise's allocation of total pension liability for the RBP as of June 30, 2022 was $4,056.

For the year ended June 30, 2022, the City's recognized pension (benefit) was ($922,979) including amortization of deferred outflow/inflow related pension items. The Enterprise's allocation of pension (benefit) including amortization of deferred outflow/inflow related pension items was ($29,908). Pension (benefit) increased from the prior year, largely due to the amortization of deferrals

As of June 30, 2022, the Enterprise reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

(Dollars in thousands, unless otherwise stated)

Fiscal Year 2022 Schedule of Deferred Outflows and Inflows of Resources

	SFERS Plan		Replacement Benefits Plan	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Pension contribution subsequent to measurement date	$ 31,151	–	–	–
Differences between expected and actual experience	9,593	343	552	–
Changes in assumptions	7,068	18,339	757	–
Net difference between projected and actual earnings on pension plan investments	–	226,935	–	–
Change in employer's proportion	3,531	1,706	200	1,381
Total	$ 51,343	247,323	1,509	1,381

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	SFERS Plan	Replacement Benefits Plan
2023	$ (57,166)	247
2024	(51,954)	52
2025	(54,608)	1
2026	(63,403)	(172)
Total	$ (227,131)	128

Fiscal Year 2021

The City reported net pension liabilities for its proportionate share of the pension liability of the Plan and RBP of $5,292,473 as of June 30, 2021. The City's net pension liability for the SFERS Plan is measured as the proportionate share of the net pension liability. The net pension liability of the SFERS Plan is measured as of June 30, 2020 (measurement date), and the total pension liability for the SFERS Plan and RBP used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2019 rolled forward to June 30, 2020 using standard update procedures. The City's proportion of the net pension liability for the SFERS Plan was based on a projection of the City's long-term share of contributions 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, 2021 was $215,240. The Enterprise's allocation of the total pension liability for the RBP as of June 30, 2021 was $1,177.

For the year ended June 30, 2021, the City's recognized pension expense was $962,576 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 $43,929. Pension expense increased from the prior year, largely due to the amortization of deferrals.

As of June 30, 2021, the Enterprise's reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

(Dollars in thousands, unless otherwise stated)

Fiscal Year 2021 Schedule of Deferred Outflows and Inflows of Resources

		SFERS Plan		Replacement Benefits Plan	
		Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Pension contribution subsequent to measurement date	$	33,367	–	–	–
Differences between expected and actual experience		7,310	674	112	–
Changes in assumptions		11,817	3,728	315	13
Net difference between projected and actual earnings on pension plan investments		4,507	–	–	–
Change in employer's proportion		6,987	54	382	416
Total	$	63,988	4,456	809	429

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		SFERS Plan	Replacement Benefits Plan
2022	$	54	109
2023		6,166	193
2024		11,286	12
2025		8,659	66
Total	$	26,165	380

Actuarial Assumptions

Fiscal Year 2022

A summary of the actuarial assumptions and methods used to calculate the Total Pension Liability/(Assets) for both SFERS Plan and RBP as of June 30, 2021 (measurement year) is provided below, including any assumptions that differ from those used in the July 1, 2020 actuarial valuation. Refer to the July 1, 2020 actuarial valuation report for a complete description of all other assumptions, which can be found on the Retirement System's website http://mysfers.org.

(Dollars in thousands, unless otherwise stated)

Key Actuarial Assumptions	SFERS Plan			
Valuation Date	June 30, 2020 updated to June 30, 2021			
Measurement Date	June 30, 2021			
Actuarial Cost Method	Entry - Age Normal Cost			
Expected Rate of Return	7.40% net of investment expenses			
Municipal Bond Yield	2.21% as of June 30, 2020			
	2.16% as of June 30, 2021			
	Bond Buyer 20-Bond GO Index, June 25, 2020 and June 24, 2021			
Inflation	2.50%			
Projected Salary Increases	3.25% plus merit component based employee classification and years of service			
Discount Rate	7.40% as of June 30, 2020			
	7.40% as of June 30, 2021			
Administrative Expenses	0.60% of payroll as of June 30, 2020			
	0.60% of payroll as of June 30, 2021			

Basic COLA	Old Miscellaneous and All New Plans	Old Police & Fire, pre 7/1/75	Old Police & Fire Charters A8.595 and A8.596	Old Police & Fire Charters A8.559 and A8.585
June 30, 2020	2.00%	2.50%	3.10%	4.20%
June 30, 2021	2.00%	1.90%	2.50%	3.60%

Key Actuarial Assumptions	Replacement Benefits Plan
Valuation Date	June 30, 2020 updated to June 30, 2021
Measurement Date	June 30, 2021
Actuarial Cost Method	Entry-Age Normal Cost
Municipal Bond Yield	2.16% as of June 30, 2021
	Bond Buyer 20-Bond GO Index, June 25, 2020 and June 24, 2021
Inflation	2.50%
Projected Salary Increases	3.25% plus merit component based employee classification and years of service
Discount Rate	2.16% as of June 30, 2021
Administrative Expenses	0.60% of payroll as of June 30, 2021

Basic COLA	Old Miscellaneous	Old Police & Fire	Old Police & Fire, Charters	Old Police & Fire, Charters
June 30, 2020	2.00%	2.50%	3.10%	4.20%
June 30, 2021	2.00%	1.90%	2.50%	3.60%

Mortality rates for health Miscellaneous members were based upon adjusted PubG-2010 Employee and Retiree tables for non-annuitants and retirees, respectively. Mortality rates were then projected generationally from the base year using the MP-2019 projection scale.

The actuarial assumptions used at the June 30, 2021 measurement date was based upon the result of a demographic experience study for the period July 1, 2014 through June 30, 2019 and an economic experience study as of July 1, 2020.

Fiscal Year 2021

A summary of the actuarial assumptions and methods used to calculate the Total Pension Liability for both SFERS Plan and RBP as of June 30, 2020 (measurement year) is provided below, including any assumptions that differ from those used in the July 1, 2019 actuarial valuation. Refer to the July 1, 2019 actuarial valuation report for a complete description of all other assumptions, which can be found on the Retirement System's website http://mysfers.org.

(Dollars in thousands, unless otherwise stated)

Key Actuarial Assumptions	SFERS Plan
Valuation Date	June 30, 2019 updated to June 30, 2020
Measurement Date	June 30, 2020
Actuarial Cost Method	Entry - Age Normal Cost
Expected Rate of Return	7.40% net of pension plan investment, including inflation
Municipal Bond Yield	3.50% as of June 30, 2019
	2.21% as of June 30, 2020
	Bond Buyer 20 - Bond GO Index, June 27, 2019 and June 25, 2020
Inflation	2.75%
Projected Salary Increases	3.50% plus merit component based employee classification and years of service
Discount Rate	7.40% as of June 30, 2019
	7.40% as of June 30, 2020
Administrative Expenses	0.60% of payroll as of June 30, 2019
	0.60% of payroll as of June 30, 2020

Basic COLA	Old Miscellaneous and All New Plans	Old Police & Fire, pre 7/1/75	Old Police & Fire Charters A8.595 and A8.596	Old Police & Fire Charters A8.559 and A8.585
June 30, 2019	2.00%	2.50%	3.10%	4.20%
June 30, 2020	2.00%	2.50%	3.10%	4.20%

Key Actuarial Assumptions	Replacement Benefits Plan
Valuation Date	June 30, 2019 updated to June 30, 2020
Measurement Date	June 30, 2020
Actuarial Cost Method	Entry - Age Normal Cost
Municipal Bond Yield	2.21% as of June 30, 2020
	Bond Buyer 20 - Bond GO Index, June 27, 2019 and June 25, 2020
Inflation	2.75%
Projected Salary Increases	3.50% plus merit component based employee classification and years of service
Discount Rate	2.21% as of June 30, 2020
Administrative Expenses	0.60% of payroll as of June 30, 2020

Basic COLA	Old Miscellaneous	Old Police & Fire	Old Police & Fire, Charters	Old Police & Fire, Charters
June 30, 2020	2.00%	2.50%	3.10%	4.20%

For healthy annuitants, the sex distinct 2009 CalPERS healthy annuitant mortality table, adjusted 1.014 for females and 0.909 for males. For active members, the sex distinct 2009 CalPERS employee mortality tables, adjusted 0.918 for females and 0.948 for males. Rates are projected generationally from the 2009 base year using a modified version of the MP-2015 projection scale.

The actuarial assumptions used at the June 30, 2020 measurement date was based upon the result of a demographic experience study for the period July 1, 2009 through June 30, 2014 and an economic experience study as of July 1, 2019.

Discount Rate

Fiscal Year 2022

SFERS Plan – The beginning and end of year measurements are based on different assumptions and contribution methods that may result in different discount rates. The discount rate was 7.40% as of June 30, 2021 (measurement date) and June 30, 2020 (measurement date).

The discount rate used to measure the Total Pension Liability as of June 30, 2021 was 7.40%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will continue to be made at the rates specified in the Charter. Employer contributions were assumed to be made in accordance with the contribution policy in effect for July 1, 2020 actuarial valuation. That policy includes contributions equal to the employer portion of the entry age normal costs for members as of the valuation date, a payment for the expected administrative expenses, and an amortization payment on the unfunded actuarial liability.

The amortization payment is based on closed periods that vary in length depending on the source. Charter amendments prior to July 1, 2014 are amortized over 20 years. After July 1, 2014, any Charter changes to active member benefits are amortized over 15 years and changes to inactive member benefits, including Supplemental COLAs, are amortized over 5 years. The remaining unfunded actuarial liability not attributable to Charter amendments as of July 1, 2013 is amortized over a 19-year period commencing July 1, 2014. Experience gains and losses and assumption or method changes on or after July 1, 2014 are amortized over 20 years. The full amortization payment for the 2015 assumption changes is phased in over a period of 5 years. For the July 1, 2016 valuation, the increase in the unfunded actuarial liability attributable to the Supplemental COLAs granted on July 1, 2013 and July 1, 2014 are amortized over 17-years and 5-years respectively. All amortization schedules are established as a level percentage of payroll so payments increase 3.25% each year. The unfunded actuarial liability is based on an actuarial value of assets that smooths investment gains and losses over five years and a measurement of the actuarial liability that excludes the value of any future Supplemental COLAs.

While the contributions and measure of actuarial liability in the funding valuation do not anticipate any future Supplemental COLAs, the projected contributions for the determination of the discount rate include the anticipated future amortization payments on future Supplemental COLAs for current members when they are expected to be granted. For members who worked after November 6, 1996 and before Proposition C passed (Post 97 Retirees), a Supplemental COLA is granted if the actual investment earnings during the year exceed the expected investment earnings on the actuarial value of assets. For members who did not work after November 6, 1996 and before Proposition C passed, the market value of assets must also exceed the actuarial liability at the beginning of the year for a Supplemental COLA to be granted. When a Supplemental COLA is granted, the amount depends on the amount of excess earnings and the basic COLA amount for each membership group. The large majority of members receive a 1.50% Supplemental COLA when granted.

Because the probability of a Supplemental COLA depends on the current funded level of the Retirement System for certain members, an assumption was developed as of June 30, 2021 for the probability and amount of Supplemental COLA for each future year. A full Supplemental COLA will be paid to all retired members, and their beneficiaries, who were retired effective July 1, 2021. The table below shows the net assumed Supplemental COLA for members with a 2.00% Basic COLA for sample years.

(Dollars in thousands, unless otherwise stated)

Assumed Supplemental COLA for Members with a 2.00% Basic COLA

Fiscal years	96 - Prop C	Before 11/6/96 or After Prop C
2023	0.75 %	0.70 %
2025	0.75	0.70
2027	0.75	0.60
2029	0.75	0.60
2031	0.75	0.60
2033+	0.75	0.50

The projection of benefit payments to current members for determining the discount rate includes the payment of anticipated future Supplemental COLAs.

Based on these assumptions, the Retirement System's fiduciary net position was projected to be available to make projected future benefit payments for current members for all future years. Projected benefit payments are discounted at the long-term expected return on assets of 7.40% to the extent the fiduciary net position is available to make the payments and at the municipal bond rate of 2.16% to the extent they are not available. The single equivalent rate used to determine the Total Pension Liability as of June 30, 2021 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 geometric long-term expected real rates of return (net of pension plan investment expense and inflation) for each major asset class are summarized in the following table.

Long- Term Expected Real Rates of Return

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global Equity	37.0 %	4.2 %
Private Equity	23.0	7.9
Private Credit	10.0	5.1
Real Assets	10.0	5.1
Hedge Funds/Absolute Return	10.0	2.9
Treasuries	8.0	0.0
Liquid Credit	5.0	2.3
Leverage	-3.0	0.1
Total	100.0	

Replacement Benefits Plan – The beginning and end of year measurements are based on different assumptions that result in different discount rates. The discount rate was 2.16% as of June 30, 2021. This reflects the yield for a 20-year, tax-exempt general obligation municipal bond with an average rating of AA/Aa or higher. The Municipal Bond Yields are the Bond Buyer 20-Year GO Index as of June 25, 2020 and June 24, 2021. These are the rates used to determine the total pension liability as of June 30, 2021.

The inflation assumption of 2.50% compounded annually was used for projecting the annual IRC Section 415(b) limitations. However, the actual IRC Section 415(b) limitations published by the IRS of $230 for 2021 was used for the 2021 measurement date.

The SFERS assumptions about Basic and Supplemental COLA previously discussed also apply to the Replacement Benefits Plan, including the impact of the State Appeals Court determination that the full funding requirement for payment of Supplemental COLA included in Proposition C was unconstitutional and the impact is accounted for as a change in benefits.

On June 30, 2022, City's membership in the RBP had a total of 350 active members and 135 retirees and beneficiaries currently receiving benefits. The Enterprise has 9 active members and 3 retirees and beneficiary currently receiving benefits.

Fiscal Year 2021

SFERS Plan – The beginning and end of year measurements are based on different assumptions and contribution methods that may result in different discount rates. The discount rate was 7.40% as of June 30, 2020 (measurement date) and June 30, 2019 (measurement date).

The discount rate used to measure the Total Pension Liability as of June 30, 2020 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, 2019 actuarial valuation. That policy includes contributions equal to the employer portion of the entry age normal costs for members as of the valuation date, a payment for the expected administrative expenses, and an amortization payment on the unfunded actuarial liability.

The amortization payment is based on closed periods that vary in length depending on the source. Charter amendments prior to July 1, 2014 are amortized over 20 years. After July 1, 2014, any Charter changes to active member benefits are amortized over 15 years and changes to inactive member benefits, including Supplemental COLAs, are amortized over 5 years. The remaining unfunded actuarial liability not attributable to Charter amendments as of July 1, 2013 is amortized over a 19-year period commencing July 1, 2014. Experience gains and losses and assumption or method changes on or after July 1, 2014 are amortized over 20 years. The full amortization payment for the 2015 assumption changes is phased in over a period of 5 years. For the July 1, 2016 valuation, the increase in the unfunded actuarial liability attributable to the Supplemental COLAs granted on July 1, 2013 and July 1, 2014 are amortized over 17-years and 5-years respectively. All amortization schedules are established as a level percentage of payroll so payments increase 3.50% each year. The unfunded actuarial liability is based on an actuarial value of assets that smooths investment gains and losses over five years and a measurement of the actuarial liability that excludes the value of any future Supplemental COLAs.

While the contributions and measure of actuarial liability in the funding valuation do not anticipate any future Supplemental COLAs, the projected contributions for the determination of the discount rate include the anticipated future amortization payments on future Supplemental 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.

(Dollars in thousands, unless otherwise stated)

Because the probability of a Supplemental COLA depends on the current funded level of the Retirement System for certain members, an assumption was developed as of June 30, 2020 for the probability and amount of Supplemental COLA for each future year. There were no excess earnings during the fiscal year ending June 30, 2020; consequently, no Supplemental COLA will be paid effective July 1, 2020. The table below shows the net assumed Supplemental COLA for members with a 2.00% Basic COLA for sample years.

Assumed Supplemental COLA for Members with a 2.00% Basic COLA

Fiscal years	96 - Prop C	Before 11/6/96 or After Prop C
2022	0.75 %	0.19 %
2024	0.75	0.27
2026	0.75	0.30
2028	0.75	0.33
2030	0.75	0.35
2032	0.75	0.37
2034+	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 2.21% to the extent they are not available. The single equivalent rate used to determine the Total Pension Liability as of June 30, 2020 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 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.

(Dollars in thousands, unless otherwise stated)

Long- Term Expected Real Rates of Return

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global Equity	31.0 %	4.9 %
Private Equity	18.0	7.9
Real Assets	17.0	5.7
Hedge Funds/Absolute Return	15.0	3.0
Private Credit	10.0	4.8
Treasuries	6.0	-0.5
Liquid Credit	3.0	2.7
Total	100.0	

Replacement Benefits Plan – The beginning and end of year measurements are based on different assumptions that result in different discount rates. The discount rate was 2.21% as of June 30, 2020. This reflects the yield for a 20-year, tax-exempt general obligation municipal bond with an average rating of AA/Aa or higher. The Municipal Bond Yields are the Bond Buyer 20-Year GO Index as of June 27, 2019 and June 25, 2020. These are the rates used to determine the total pension liability as of June 30, 2020.

The inflation assumption of 2.75% compounded annually was used for projecting the annual IRC Section 415(b) limitations. However, the actual IRC Section 415(b) limitations published by the IRS of $230 for 2020 was used for the 2020 measurement date.

The SFERS assumptions about Basic and Supplemental COLA previously discussed also apply to the Replacement Benefits Plan, including the impact of the State Appeals Court determination that the full funding requirement for payment of Supplemental COLA included in Proposition C was unconstitutional and the impact is accounted for as a change in benefits.

On June 30, 2021, City's membership in the RBP had a total of 683 active members and 105 retirees and beneficiaries currently receiving benefits. The Enterprise has 4 active members and 1 retiree and beneficiary currently receiving benefits.

Sensitivity of Proportionate Share of the Net Pension Liability (NPL)/Net Pension Assets (NPA) to Changes in the Discount Rate – The following presents the Enterprise's allocation of the employer's proportionate share of the net pension liability/(asset) for the SFERS Plan, calculated using the discount rate, as well as what the Enterprise's allocation of the employer's proportionate share of the net pension liability/(asset) would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate.

Fiscal Year 2022

Employer	1% Decrease Share of NPL @ 6.40%	Share of NPA @ 7.40%	1% Increase Share of NPA @ 8.40%
Water	$ 69,621	(104,463)	(248,184)

Fiscal Year 2021

Employer	1% Decrease Share of NPL @ 6.40%	Share of NPL @ 7.40%	1% Increase Share of NPL @ 8.40%
Water	$ 380,571	215,240	78,645

(Dollars in thousands, unless otherwise stated)

The following presents the Enterprise's allocation of the employer's proportionate share of the total pension liability for the Replacement Benefits 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 2022

Employer	1% Decrease @ 1.16%	Measurment Date @ 2.16%	1% Increase @ 3.16%
Water	$ 4,889	4,056	3,411

Fiscal Year 2021

Employer	1% Decrease @ 1.21%	Measurment Date @ 2.21%	1% Increase @ 3.21%
Water	$ 1,418	1,177	989

(b) *Other Post-Employment Benefits*

The Enterprise participates in a single-employer defined benefit other postemployment benefits plan (the Plan). The Plan is maintained by the City and is administered through the City's Health Service System. 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 - Single-Employer

	Fiscal year 2022
Valuation Date (VD)	June 30 2020, updated to June 30, 2021
Measurement Date (MD)	June 30, 2021
Measurement Period (MP)	July 1, 2020 to June 30, 2021

	Fiscal year 2021
Valuation Date (VD)	June 30, 2020
Measurement Date (MD)	June 30, 2020
Measurement Period (MP)	July 1, 2019 to June 30, 2020

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, 2021 and June 30, 2020. 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, 2021 and 2020 measurement dates were 3.90% and 3.89%, respectively.

(Dollars in thousands, unless otherwise stated)

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		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.

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

Medical:	PPO – City Health Plan (self-insured) and UHC Medicare Advantage (fully-insured)
	HMO – Kaiser (fully-insured) and Blue Shield (flex-funded)
Dental:	Delta Dental, DeltaCare USA and UnitedHealthcare Dental
Vision:	Vision benefits are provided under the medical insurance plans and are administered by Vision Service Plan.

Projections of the sharing of benefit related costs are based on an established pattern of practice.

Contributions

Benefits provided under the Plan are currently paid through "pay as you go" funding. Additionally, under the City Charter, active officers and employees of the City who commenced employment on or after January 10, 2009, shall contribute to the Retiree Health Care Trust Fund (Trust Fund) a percentage of compensation not to exceed 2% of pre-tax compensation. The City shall contribute 1% of compensation for officers and employees who commenced employment on or after January 10, 2009 until the City's GASB Actuary has determined that the City's portion of the Trust Fund is fully funded. At that time, the City's 1% contribution shall cease, and officers and employees will each contribute 50% of the maximum 2% of pre-tax compensation.

Starting July 1, 2016, active officers and employees of the City who commenced employment on or before January 9, 2009, shall contribute 0.25% of pre-tax compensation into the Trust Fund. Beginning on July 1st of each subsequent year, the active officers and employees of the City who commenced employment on or before January 9, 2009, shall contribute an additional 0.25% of pre-tax compensation up to a maximum of 1%. Starting July 1, 2016, the City shall contribute 0.25% of compensation into the Trust Fund for each officer and employee who commenced employment on or before January 9, 2009. Beginning on July 1st of each subsequent year, the City shall contribute an additional 0.25% of compensation, up to a maximum of 1% for each officer and employee who commenced employment on or before

(Dollars in thousands, unless otherwise stated)

January 9, 2009. When the City's actuary has determined that the City's portion of the Trust Fund is fully funded, the City's 1% contribution shall cease, and officers and employees will each contribute 50% of the maximum 1% of pre-tax compensation.

Additional or existing contribution requirements may be established or modified by amendment to the City's Charter.

For the fiscal years ending June 30, 2022 and 2021, funding was based on "pay-as-you-go" plus a contribution of $41,841 and $39,555 to the Retiree Healthcare Trust Fund, respectively. The "pay-as-you-go" portion paid by the City was $211,025 for a total contribution of $252,866 for the fiscal year ending June 30, 2022, and $206,439 for a total contribution of $245,994 for the fiscal year ending June 30, 2021. The Enterprise's proportionate share of the City's contributions for fiscal year 2022 was $9,873, and for fiscal year 2021 was $9,572, and will be recognized as a reduction of the net OPEB liability in the subsequent fiscal period.

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

Fiscal Year 2022

As of June 30, 2022, the City reported net OPEB liabilities related to the Plan of $3,691,122. The Enterprise's proportionate share of the City's net OPEB liability as of June 30, 2022 was $144,115.

For the year ended June 30, 2022, the City's recognized OPEB expense was $272,001. Amortization of the City's deferred outflows and inflows is included as a component of OPEB expense. The Enterprise's proportionate share of the City's OPEB expense was $14,566.

As of June 30, 2022, 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	$ 9,873	$ -
Differences between expected and actual experience	4,330	22,191
Changes in assumptions	6,091	-
Net difference between projected and actual earnings on plan investments	-	2,728
Change in Proportion	12,151	429
Total	$ 32,445	$ 25,348

(Dollars in thousands, unless otherwise stated)

Amounts reported as deferred outflows, exclusive of contributions made after the measurement date, and deferred inflows of resources will be amortized annually and recognized in OPEB expense as follows:

Year ended June 30:		
2023	$	(313)
2024		(324)
2025		(286)
2026		(263)
2027		(669)
Thereafter		(921)
Total	$	(2,776)

Fiscal Year 2021

As of June 30, 2021, the City reported net OPEB liabilities related to the Plan of $3,823,334. The Enterprise's proportionate share of the City's net OPEB liability as of June 30, 2021 was $148,771.

For the year ended June 30, 2021, the City's recognized OPEB expense was $320,684. Amortization of the City's deferred outflows and inflows is included as a component of OPEB expense. The Enterprise's proportionate share of the City's OPEB expense was a credit of $5,978.

As of June 30, 2021, 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	$ 9,572	$ -
Differences between expected and actual experience	5,394	21,315
Changes in assumptions	7,531	-
Change in Proportion	15,168	
Net difference between projected and actual earnings on plan investments	97	-
Total	$ 37,762	$ 21,315

(Dollars in thousands, unless otherwise stated)

Amounts reported as deferred outflows, exclusive of contributions made after the measurement date, and deferred inflows of resources will be amortized annually and recognized in OPEB expense as follow:

Year ended June 30:	
2022	$ 1,266
2023	1,324
2024	1,312
2025	1,351
2026	1,368
Thereafter	254
Total	$ 6,875

Actuarial Assumptions

Fiscal Year 2022

A summary of the actuarial assumptions and methods used to calculate the Total OPEB Liability as of June 30, 2021 (measurement date) is provided below:

Key Actuarial Assumptions

Valuation Date	June 30, 2021
Measurement Date	June 30, 2021
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 6.74% trending down to ultimate rate of 4.04% in 2075 Medicare trend starts at 7.24% trending down to ultimate rate of 4.04% in 2075 10-County average trend starts at 5.50% trending down to ultimate rate of 4.04% in 2075 Vision and expenses trend remains a flat 3.0% for all years
Expected Rate of Return on Plan Assets	7.00%
Salary Increase Rate	Wage Inflation Component: 3.25% Additional Merit Component (dependent on years of service): Police: 0.50% - 7.50% Fire: 0.50% - 14.00% Muni Drivers: 0.00% - 16.00% Craft: 0.50% - 3.75% Misc: 0.30% - 5.50%
Inflation Rate	Wage Inflation: 3.25% compounded annually Consumer Price Inflation: 2.50% 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, 2019.

Non-Annuitants

		Adjustment Factor	
	Published Table	**Male**	**Female**
Miscellaneous	PubG-2010 Employee	0.834	0.866
Safety	PubS-2010 Employee	1.011	0.979

Healthy Retirees

		Adjustment Factor	
	Published Table	**Male**	**Female**
Miscellaneous	PubG-2010 Employee	1.031	0.977
Safety	PubS-2010 Employee	0.947	1.044

Disabled Retirees

		Adjustment Factor	
	Published Table	**Male**	**Female**
Miscellaneous	PubG-2010 Employee	1.045	1.003
Safety	PubS-2010 Employee	0.916	0.995

Beneficiaries

		Adjustment Factor	
	Published Table	**Male**	**Female**
Miscellaneous	PubG-2010 Employee	1.031	0.977
Safety	PubG-2010 Employee	1.031	0.977

(Dollars in thousands, unless otherwise stated)

The mortality rates in the base tables are projected generationally from the base year using the MP-2019 projection scale.

Fiscal Year 2021

A summary of the actuarial assumptions and methods used to calculate the Total OPEB Liability as of June 30, 2020 (measurement date) is provided below:

Key Actuarial Assumptions

Valuation Date	June 30, 2020
Measurement Date	June 30, 2020
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 4.00% in 2022, 7.00% in 2023, trending down to ultimate rate of 4.04% in 2075 Medicare trend starts at 1.00% in 2022, 7.50% in 2023, trending down to ultimate rate of 4.04% in 2075 10-County average trend starts at 4.5% in 2022, 5.50% in 2023, trending down to ultimate rate of 4.04% in 2075 Vision and expenses trend remains a flat 3.0% for all years
Expected Rate of Return on Plan Assets	7.00%
Salary Increase Rate	Wage Inflation Component: 3.25% Additional Merit Component (dependent on years of service): Police: 0.50% - 7.50% Fire: 0.50% - 14.00% Muni Drivers: 0.00% - 16.00% Craft: 0.50% - 3.75% Misc: 0.30% - 5.50%
Inflation Rate	Wage Inflation: 3.25% compounded annually Consumer Price Inflation: 2.50% 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, 2019.

Non-Annuitants

	Published Table	Adjustment Factor Male	Female
Miscellaneous	PubG-2010 Employee	0.834	0.866
Safety	PubS-2010 Employee	1.011	0.979

Healthy Retirees

	Published Table	Adjustment Factor Male	Female
Miscellaneous	PubG-2010 Employee	1.031	0.977
Safety	PubS-2010 Employee	0.947	1.044

Disabled Retirees

	Published Table	Adjustment Factor Male	Female
Miscellaneous	PubG-2010 Employee	1.045	1.003
Safety	PubS-2010 Employee	0.916	0.995

Beneficiaries

	Published Table	Adjustment Factor Male	Female
Miscellaneous	PubG-2010 Employee	1.031	0.977
Safety	PubG-2010 Employee	1.031	0.977

The mortality rates in the base tables are projected generationally from the base year using the MP-2019 projection scale.

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:

(Dollars in thousands, unless otherwise stated)

Fiscal Year 2022

Employer		-1.00%		Healthcare Trend		1.00%
Water	$	122,667	$	144,115	$	170,851

Fiscal Year 2021

Employer		-1.00%		Healthcare Trend		1.00%
Water	$	128,633	$	148,771	$	175,020

Discount Rate

Fiscal Year 2022

The discount rate used to measure the Total OPEB Liability as of June 30, 2021 was 7.0%. Based on the assumption that plan member contributions will continue to be made at the rates specified in the Charter, it was determined that the Plan's projected fiduciary net position will be greater than or equal to the benefit payments projected for each future period. As such, the long-term expected rate of return on plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

The long-term expected rate of return on OPEB plan investments was 7.0% based on expected future returns and historical returns experienced by the Trust Fund. Expected future returns were determined based on 10-year and 20-year capital market assumptions for the Trust Fund's asset allocation. Target allocation for each major asset class and best estimates of geometric real rates of return are summarized in the following table:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return
Equities		
U.S. Large Cap	28.0%	8.2%
U.S. Small Cap	3.0%	9.5%
Developed Market Equity (non-U.S.)	15.0%	8.9%
Emerging Market Equity	13.0%	11.0%
Credit		
Bank Loans	3.0%	4.4%
High Yield Bonds	3.0%	4.4%
Emerging Market Bonds	3.0%	4.3%
Rate Securities		
Investment Grade Bonds	9.0%	1.9%
Long-term Government Bonds	4.0%	3.2%
Short-term Treasury Inflation-Protected Securities (TIPS)	4.0%	1.5%
Private Markets		
Private Equity	5.0%	13.0%
Core Private Real Estate	5.0%	6.2%
Risk Mitigating Strategies		
Global Macro	5.0%	4.4%
Total	100.0%	

(Continued)

(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 6.00%	Discount Rate 7.00%	1% Increase 8.00%
$ 168,520	$ 144,115	$ 124,181

Fiscal Year 2021

The discount rate used to measure the Total OPEB Liability as of June 30, 2020 was 7.0%. Based on the assumption that plan member contributions will continue to be made at the rates specified in the Charter, it was determined that the Plan's projected fiduciary net position will be greater than or equal to the benefit payments projected for each future period. As such, the long-term expected rate of return on plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

The long-term expected rate of return on OPEB plan investments was 7.0% based on expected future returns and historical returns experienced by the Trust Fund. Expected future returns were determined based on 10-year and 20-year capital market assumptions for the Trust Fund's asset allocation. Target allocation for each major asset class and best estimates of geometric real rates of return are summarized in the following table:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return
Equities		
U.S. Large Cap	28.0%	8.4%
U.S. Small Cap	3.0%	9.8%
Developed Market Equity (non-U.S.)	15.0%	9.6%
Emerging Market Equity	13.0%	11.7%
Credit		
Bank Loans	3.0%	4.9%
High Yield Bonds	3.0%	4.9%
Emerging Market Bonds	3.0%	4.8%
Rate Securities		
Investment Grade Bonds	9.0%	2.2%
Long-term Government Bonds	4.0%	3.1%
Short-term Treasury Inflation-Protected Securities (TIPS)	4.0%	1.9%
Private Markets		
Private Equity	5.0%	12.5%
Core Private Real Estate	5.0%	6.4%
Risk Mitigating Strategies		
Global Macro	5.0%	4.1%
Total	100.0%	

The asset allocation targets summarized above have a 20-year return estimate of 6.90%, which was weighted against a 10-year model estimating a 6.93% return, resulting in the ultimate long-term expected rate of return of 7.00%.

(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 6.00%	Discount Rate 7.00%	1% Increase 8.00%
$ 172,646	$ 148,771	$ 129,281

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

(12) Related Parties

Various common costs incurred by the Commission are allocated among the Enterprise, Hetch Hetchy Water and Power and CleanPowerSF 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 $52,769 or 49.2% and $48,374 or 49.4% were allocated to the Enterprise for the years ended June 30, 2022 and 2021, 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 $45,815 and $44,149 for the years ended June 30, 2022 and 2021, 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 $11,394 and $9,790 for the years ended June 30, 2022 and 2021, 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 $1,819 and $1,308 for the years ended June 30, 2022 and 2021, 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 2022 and 2021, the Enterprise delivered water for fire hydrant purposes totaling $8 and $7, 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 $15,951 and $16,239 for the years ended June 30, 2022 and 2021, respectively, have been included in services provided by other departments in the accompanying financial statements.

During the fiscal year ended June 30, 2022, the Enterprise transferred $30,000 to Hetch Hetchy Water to fund various Mountain Tunnel projects, $500 to the Department of Public Works for the UN Plaza Large Alternative Water Source project and purchase of capital assets, $134 to the Arts Commission for arts enrichment fund for the new CDD Headquarters, and $32 to the Office of the City Administrator for the Enterprise’s contribution to the Surety Bond Program. The Enterprise received $15,030 for the Earthquake Safety and Emergency Response program, and $5 from the General Fund for low income assistance programs.

As of June 30, 2022, the Enterprise had interfund receivables of $102 from DPW relating to custom work projects and $69 from Academy of Sciences for unpaid interdepartmental services. As of June 30, 2021, the Enterprise had $248 due from DPW for custom work projects.

The Enterprise had receivables due from the Treasure Island Development Authority for capacity fees of $195 and from the Office of Community Investment and Infrastructure for custom work projects of $7 for the year ended June 30, 2022. As of June 30, 2021, the Enterprise had no receivables due from component units.

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, 2022, the Enterprise’s allocable shares of expenses and prepayment were $44 and $3,265, respectively; and at June 30, 2021, the Enterprise’s allocable shares of expenses and prepayment were $45 and $3,309, respectively.

(13) Risk Management

The Enterprise’s Risk Management program includes both self-insured (i.e., self-retention) and insured exposures at risk. Risk assessments and purchasing of insurance coverage are collaboratively coordinated by SFPUC Risk Management and the City’s Office of Risk Management. With certain exceptions, the City and the Enterprise’s general approach is to first evaluate the exposure at risk for self-insurance. Based on this analysis, internal mitigation strategies and financing through a self-retention mechanism is generally more economical as the SFPUC in coordination with the City Attorney’s Office, administers, adjusts, settles, defends, and pays claims from budgeted resources (i.e., pay-as-you-go fund). When economically more viable or when required by debt financing covenants, the Enterprise obtains commercial insurance. At least annually, the City actuarially determines general liability and workers’ compensation risk exposures. The Enterprise does not maintain commercial earthquake coverage, with certain minor exceptions, such as a sub-limit for fire-sprinkler leakage due to earthquake under the SFPUC Property Insurance program. In the past three years, there was no settlements that exceeded insurance coverage.

(Dollars in thousands, unless otherwise stated)

	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)	Cyber Liability	Purchased Insurance
(g)	Crime	Purchased Insurance
(h)	Electronic data processing	Purchased Insurance and Self-Insured
(i)	Surety bonds	Purchased and Contractual Risk Transfer
(j)	Errors and omissions	Purchased and Contractual Risk Transfer
(k)	Builders' risk	Contractual Risk Transfer

(a) *General Liability*

Through coordination with the Controller Office and the City Attorney's Office, the general liability risk exposure is actuarially determined and is addressed through pay-as-you-go funding as part of the budgetary process. Associated costs and estimates are recorded as expenses as required under GAAP for financial statement purposes for both the Enterprise and the City and County of San Francisco's Annual Comprehensive Financial Report. The claim expense allocations are determined based on actuarially determined anticipated claim payments and the projected timing of disbursement.

The changes for the general liability (damage claims) for the years ended June 30, 2022 and 2021 are as follows:

Fiscal years		Beginning of year	Claims and changes in estimates	Claims paid	End of year
2022	$	36,723	452	(1,106)	36,069
2021		10,767	27,643	(1,687)	36,723

(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, 2022 and 2021 are as follows:

Fiscal years		Beginning of year	Claims and changes in estimates	Claims paid	End of year
2022	$	8,828	2,793	(2,648)	8,973
2021		9,174	1,912	(2,258)	8,828

(c) Property

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

(d) Public Officials Liability

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

(e) Employment Practices Liability

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

(f) Cyber Liability

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

(g) Crime

The Enterprise also retains a Commercial Crime Policy, in lieu of bonding its employees, to provide coverage against liabilities or losses due to third-party crime or employee fraud.

(h) Electronic Data Processing

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

(i) Surety Bonds

Bonds are required in most phases of the public utilities construction contracting process for such phases as bid, performance, and payment or maintenance. Additionally, bonds may be required in other contracts where goods or services are provided to ensure compliance with applicable terms and conditions such as warranty.

(j) Errors and Omissions

Errors and omissions, also known as Professional Liability, are commonly transferred through contract to the contracted professional, or retained through self-insurance on a case-by-case basis depending on the size, complexity, or scope of construction or professional service contracts. Examples of such contracts are inclusive of services provided by engineers, architects, design professionals, and other licensed or certified professional service providers.

(k) Builders' Risk

Builders' risk policies of insurance are required to be provided by the contractor on all construction projects for the full value of construction.

(14) Commitments and Litigation

(a) Commitments

As of June 30, 2022 and 2021, the Enterprise has outstanding commitments with third parties of $322,132 and $185,161, 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, 2022 and 2021, the pollution remediation liability of $1,271 related to the Pacific Rod & Gun Club site.

(15) Subsequent Events

(a) Extension Moratorium on Shutoffs

On September 13, 2022, the Commission approved to extend moratorium on shutoff of water service for residents in the City through June 30, 2023 and granted the General Manager discretion to restart severance and liens processes to multifamily residential accounts carrying balances greater than $25 which are 90 days or more past due.

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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), as of and for the year ended June 30, 2022, and the related notes to the financial statements, which collectively comprise the Enterprise's basic financial statements, and have issued our report thereon dated January 27, 2023.

Report on Internal Control Over Financial Reporting

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

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

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

Report on Compliance and Other Matters

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

Purpose of This Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the 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 entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

KPMG LLP

San Francisco, California
January 27, 2023

San Francisco Public Utilities Commission
An Enterprise Department of the City and
County of San Francisco, California

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.

Cover photo: Eleanor Dam & Reservoir
Back photos: San Francisco Aquatic Park, Hetch Hetchy Flowers
Photos by: Robin Scheswohl and Sabrina Wong

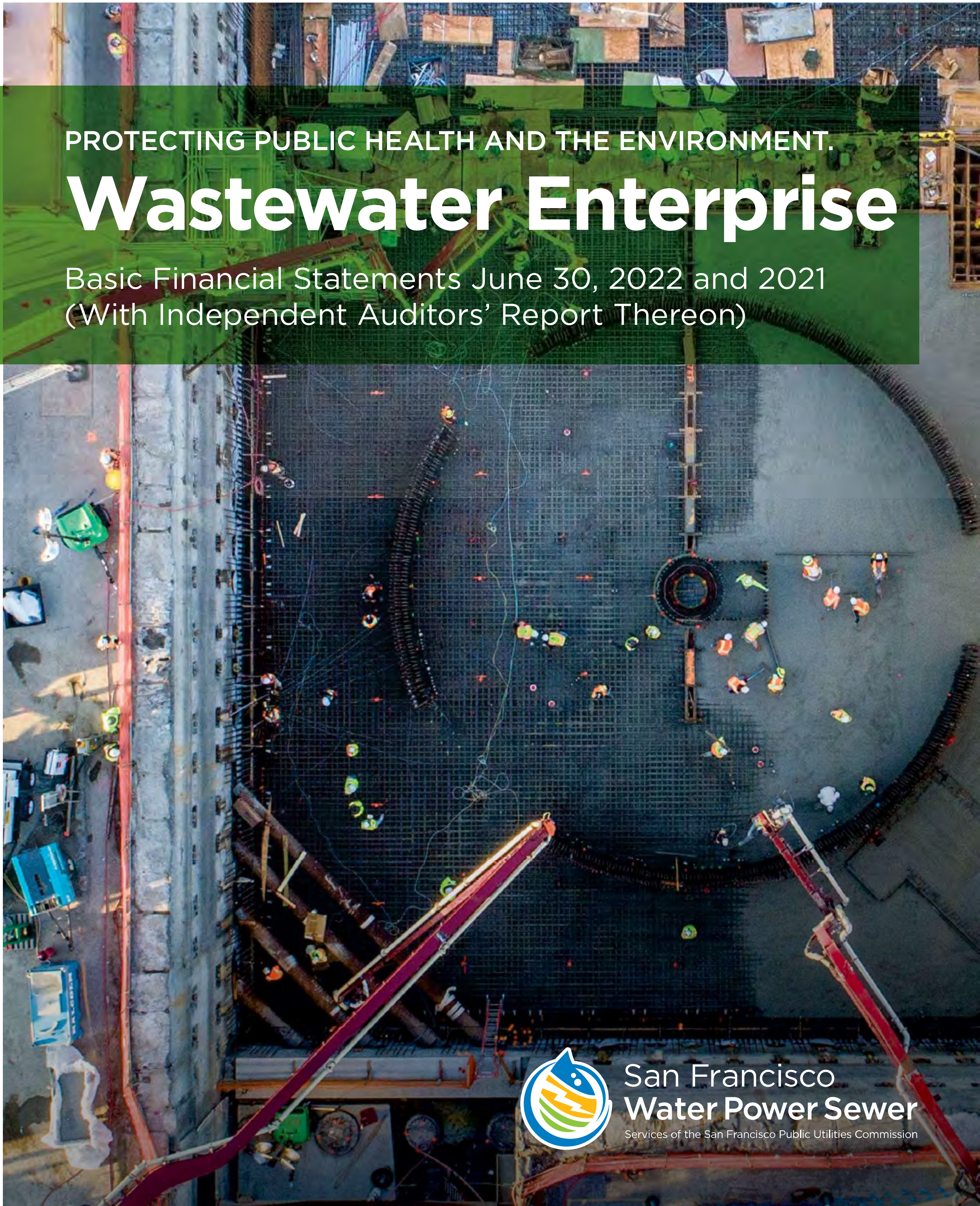
Date of Publication: January 2023

SFPUC Financial Services
525 Golden Gate Avenue, 4th Floor
San Francisco, CA 94102-3220
sfpuc.org

PROTECTING PUBLIC HEALTH AND THE ENVIRONMENT.

Wastewater Enterprise

Basic Financial Statements June 30, 2022 and 2021
(With Independent Auditors' Report Thereon)



San Francisco
Water Power Sewer
Services of the San Francisco Public Utilities Commission

SAN FRANCISCO WASTEWATER ENTERPRISE

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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 Audit of the Financial Statements

Opinion

We have audited the financial statements of the San Francisco Wastewater Enterprise (the Enterprise), as of and for the years ended June 30, 2022 and 2021, and the related notes to the financial statements, which collectively comprise the Enterprise's basic financial statements for the years then ended as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the financial position of the Enterprise, as of June 30, 2022 and 2021, and the changes in its financial position and its cash flows for the years then ended in accordance with U.S. generally accepted accounting principles.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Enterprise and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

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 business-type activities and each major fund of the City and county of San Francisco, California 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 and County of San Francisco, California, as of June 30, 2022 and 2021, 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.

Responsibilities of Management for the Financial Statements

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

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Enterprise's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the 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 January 27, 2023 on our consideration of the Enterprise's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Enterprise's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Enterprise's internal control over financial reporting and compliance.

KPMG LLP

San Francisco, California
January 27, 2023

This section presents management's analysis of the San Francisco Wastewater Enterprise's (the Enterprise) financial condition and activities as of and for the fiscal years ended June 30, 2022 and 2021. Management's Discussion and Analysis (MDA) is intended to serve as an introduction to the Enterprise's financial statements. This information should be read in conjunction with the audited financial statements that follow this section. All dollar amounts, unless otherwise noted, are expressed in thousands of dollars.

The information in this MDA is presented under the following headings:

- Organization and Business
- Overview of the Financial Statements
- COVID-19
- Financial Analysis
- Capital Assets
- Debt Administration
- Rates and Charges
- Request for Information

Organization and Business

The San Francisco Public Utilities Commission (SFPUC or the Commission) is a department of the City and County of San Francisco (the City) that is responsible for the maintenance, operation, and development of three utility enterprises: Water, Hetch Hetchy Water and Power and CleanPowerSF, and Wastewater (the Enterprise). The primary responsibility of the Enterprise is to protect the public health and the surrounding bay and ocean receiving waters by collecting, transmitting, treating, and discharging storm and sanitary flows generated in the service area. This includes 1,131 miles of combined, sanitary, and storm collection system pipes including: gravity mains, force mains, culverts, transport storage boxes, and tunnels. San Francisco is the only coastal city in California with a combined sewer system that collects both wastewater and stormwater in the same network of pipes and provides treatment to remove harmful pollutants before discharging into the San Francisco Bay and Pacific Ocean. In addition, the Enterprise serves on a contractual basis certain municipal customers located outside of the City limits, including the North San Mateo County Sanitation District No. 3, Bayshore Sanitary District, and the City of Brisbane. The Enterprise recovers costs of service through user fees based on the volume and strength of sanitary flow. As of June 30, 2022, the Enterprise serves 148,381 residential accounts, which discharge about 15.7 million units of sanitary flow per year (measured in hundreds of cubic feet, or ccf) and 26,790 non-residential accounts, which discharge about 5.3 million ccf per year. These reflected an increase of 0.7 million discharge units in non-residential accounts due to 360 increase in the number of accounts and a decrease of 0.9 million discharge units in residential accounts compared to prior year.

Overview of the Financial Statements

The Enterprise's financial statements include the following:

Statements of Net Position present information on the Enterprise's assets, deferred outflows, liabilities, and deferred inflows as of year-end, with the difference reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Enterprise is improving or worsening.

While the *Statements of Net Position* provide information about the nature and amount of resources and obligations at year-end, the *Statements of Revenues, Expenses, and Changes in Net Position* present the results of the Enterprise's operations over the course of the fiscal year and information as to how the net position changed during the year. These statements can be used as an indicator of the extent to which the Enterprise has successfully recovered its costs through user fees and other charges. All changes in net position are reported during the period in which the underlying event giving rise to the change occurs, regardless of the timing of the related cash flows. Thus, revenues and expenses are reported in these statements from some items that will result in cash flows in future fiscal periods, such as delayed collection of operating revenues and the expenses of employee earned but unused vacation leave.

The *Statements of Cash Flows* present changes in cash and cash equivalents resulting from operational, capital financing, non-capital financing, and investing activities. These statements summarize the annual flow of cash receipts and cash payments, without consideration of the timing of the event giving rise to the obligation or receipt and exclude non-cash accounting measures of depreciation or amortization of assets.

The *Notes to Financial Statements* provide information that is essential to a full understanding of the financial statements that is not displayed on the face of the financial statements.

COVID-19

On February 25, 2020, the City's 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 authorized 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. The proclamation was extended on December 8, 2020 through June 30, 2021 and then again on April 27, 2021, through to March 31, 2022. The suspension was extended again to July 31, 2022 for shut off of water service and to June 30, 2023 for late payment penalties. This proclamation did not have a material effect on the operations of the Wastewater enterprise.

Financial Analysis

Financial Highlights for Fiscal Year 2022

- Total assets of the Enterprise exceeded total liabilities by $1,447,672.
- Net position increased by $60,114 or 4.6% during the year.
- Capital assets, net of accumulated depreciation and amortization, increased by $439,601 or 12.2% to $4,046,451.
- Operating revenues increased by $41,217 or 12.6% to $368,882.
- Operating expenses decreased by $35,002 or 12.0% to $257,171.

(Dollars in thousands, unless otherwise stated)

Financial Highlights for Fiscal Year 2021

- Total assets of the Enterprise exceeded total liabilities by $1,266,577.
- Net position increased by $9,647 or 0.7% during the year.
- Capital assets, net of accumulated depreciation and amortization, increased by $544,562 or 17.8% to $3,606,850.
- Operating revenues decreased by $16,463 or 4.8% to $327,665.
- Operating expenses increased by $29,961 or 11.4% to $292,220.

Financial Position

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

Table 1
Comparative Condensed Net Position
June 30, 2022, 2021, and 2020

	2022	Restated 2021*	2020	2022-2021 Change	2021-2020 Change
Total assets:					
Current and other assets	$ 628,368	360,711	473,620	267,657	(112,909)
Capital assets, net of accumulated depreciation and amortization	4,046,451	3,606,850	3,062,288	439,601	544,562
Total assets	4,674,819	3,967,561	3,535,908	707,258	431,653
Deferred outflows of resources:					
Unamortized loss on refunding of debt	33	91	189	(58)	(98)
Pensions	25,369	30,219	30,422	(4,850)	(203)
Other post-employment benefits	12,898	15,109	10,065	(2,211)	5,044
Total deferred outflows of resources	38,300	45,419	40,676	(7,119)	4,743
Liabilities:					
Current liabilities:					
Revenue bonds	34,345	22,880	23,240	11,465	(360)
Certificates of participation	830	785	747	45	38
Commercial paper	379,157	638,518	207,939	(259,361)	430,579
State revolving fund loans	2,481	2,483	2,458	(2)	25
Other liabilities	165,139	149,357	148,585	15,782	772
Subtotal current liabilities	581,952	814,023	382,969	(232,071)	431,054
Long-term liabilities:					
Revenue bonds	1,896,908	1,567,042	1,598,493	329,866	(31,451)
Revenue notes	350,356	—	—	350,356	—
Certificates of participation	24,458	25,302	26,112	(844)	(810)
State revolving fund loans	300,178	106,076	86,091	194,102	19,985
Other liabilities	73,295	188,576	168,906	(115,281)	19,670
Subtotal long-term liabilities	2,645,195	1,886,996	1,879,602	758,199	7,394
Total liabilities:					
Revenue bonds	1,931,253	1,589,922	1,621,733	341,331	(31,811)
Revenue notes	350,356	—	—	350,356	—
Certificates of participation	25,288	26,087	26,859	(799)	(772)
Commercial paper	379,157	638,518	207,939	(259,361)	430,579
State revolving fund loans	302,659	108,559	88,549	194,100	20,010
Other liabilities	238,434	337,933	317,491	(99,499)	20,442
Total liabilities	3,227,147	2,701,019	2,262,571	526,128	438,448
Deferred inflows of resources:					
Related to pensions	114,670	2,148	16,892	112,522	(14,744)
Other post-employment benefits	8,640	7,265	4,185	1,375	3,080
Total deferred inflows of resources	123,310	9,413	21,077	113,897	(11,664)
Net position:					
Net investment in capital assets	1,092,705	1,253,789	1,183,288	(161,084)	70,501
Restricted for debt service	5,391	2,992	1,227	2,399	1,765
Restricted for capital projects	114,657	—	—	114,657	—
Unrestricted	149,909	45,767	108,421	104,142	(62,654)
Total net position	$ 1,362,662	1,302,548	1,292,936	60,114	9,612

*Restated due to the implementation of GASB 87 - *Leases*

Net Position, Fiscal Year 2022

For the year ended June 30, 2022, the Enterprise's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by $1,362,662. The Enterprise's total net position increased by $60,114 or 4.6% as a result of increases of $114,657 in restricted for capital projects, $104,142 in unrestricted net position, and $2,399 in restricted for debt service offset by a decrease of $161,084 in net investment in capital assets (see Table 1).

During the fiscal year 2022, current and other assets increased by $267,657 or 74.2%. The increase was mainly due to $182,040 in receivables from the State Water Resources Control Board (SWRCB) attributed to $202,795 aggregate new State Revolving Fund (SRF) reimbursement requests consisting of $132,000 for the Southeast Water Pollution Control Plant (SEP) Biosolids Digester Project, $64,678 for the SEP New Headworks (Grit) Replacement Project, and $6,117 for the Oceanside Plant (OSP) Digester Gas Utilization Upgrade Project, offset by $20,755 cash receipts from prior year receivables relating to the OSP Digester Gas Utilization Upgrade Project, an increase of $48,770 in net pension asset based on actuarial report and $32,650 increase in restricted and unrestricted cash and investments mainly from the issuance proceeds of tax-exempt 2021 Series AB (Green) revenue notes and 2021 Series AB revenue bonds. Other increases included $7,241 in receivables for charges for services mainly due to increased billings of $6,143, $1,098 decrease in allowance for doubtful accounts due to utility arrearage relief payment received from the State as Federal pass-through from the California Water and Wastewater Arrearages Payment Program (CWWAPP), $1,014 due from the Treasure Island Development Authority (TIDA) for capacity fees, $301 in inventory as there were more purchases than issuances during the year, $190 in capacity charges net of allowance for doubtful accounts, $118 in interest receivable, and $25 in State grant receivable for the Baker Beach reimbursement. These increases in current and other assets were offset by a decrease of $2,325 in lease assets, net of accumulated amortization, due to amortization, $1,763 in Federal interest subsidy receivable (attributed to $5,817 subsidy received offset by $4,054 subsidy accrual during the year), $324 decrease in rent receivable mainly due to $304 collection of prior year balance from the San Francisco Community College, $219 decrease in prepaid charges mainly due to $652 prior year prepaid expenses recognized in current year and $39 lease prepayments amortizations for the Civic Center Garage and the Mariposa Pump Station & Force, offset by $472 prepaid expenses in the current year, $56 decrease in interfund receivables and due from component unit consisting of $118 from the Department of Public Works (DPW) for the Mission Bay South and Hunters View Development Projects, $24 from the San Francisco Port Commission (Port), and $20 from component unit for the TIDA Replacement & Repair Project, offset by an increase of $106 in receivable from the Academy of Sciences and Office of Community Investment Infrastructure, and $5 decrease in custom work receivable.

Capital assets, net of accumulated depreciation and amortization, increased by $439,601 or 12.2% reflecting an increase in construction and capital improvement activities. The largest portion of the Enterprise's net position of $1,092,705 or 80.2%, represents net investment in capital assets (see Capital Assets section of the MDA for more information). Deferred outflows of resources decreased by $7,119 mainly due to decreases in pensions and other post-employment benefits by $4,850 and $2,211, respectively based on actuarial report and $58 amortization of the 2013 Series A bonds loss on refunding.

Total liabilities increased by $526,128 or 19.5%. As of June 30, 2022, total debt outstanding balance of $2,988,713 for revenue bonds and notes payable, certificates of participation (COP), commercial paper, and State Revolving Fund (SRF) loans, represented 92.6% of total liabilities, an increase of $625,627 or 26.5%. The increase was mainly due to $373,700 issuance of 2021 Series AB revenue bonds, consisting of $297,880 par amounts and $75,820 premiums, $350,823 issuance of 2021 Series AB revenue notes consisting of $347,465 par amounts and $3,358 premiums, $200,702 new SRF loans to finance the SEP Biosolids Digester Facilities, the SEP New Headworks Replacement, and the OSP Digester Gas Utilization Upgrade projects, and $80,639 issuance of commercial paper. These increases were offset by $340,000 retirement of commercial paper, $26,148 in debt principal repayments, $9,970 in premium amortization during the year, and $4,000 loan principal forgiveness for the SRF OSP Digester Gas Utilization Upgrade Project along with $119 unreimbursed loan claim. Other liabilities of $238,434 such as payables to vendors, contractors, and other government agencies for goods and services under contractual agreements and employees, decreased by $99,499 or 29.4%, mainly due to decreases of $103,746 in net pension liability based on actuarial report, $4,668 in general liability based on actuarial estimates, $2,314 in lease liability due to implementation of GASB 87 *Leases*, $1,588 in other post-employment benefits obligations based on actuarial report, and $110 in payable to Hetch Hetchy Power related to the 525 Golden Gate Living Machine System. These decreases were offset by increases of $7,229 in restricted and unrestricted payable due to increased vouchers, $4,184 in bond and loan interest payable due to higher outstanding debt principal, $792 in unearned revenues mainly due to $892 in customer credit balances mainly due to overpayments offset by decreases of $81 in deposits from Pacific Gas & Electric due to expenses incurred for the Cross Bore Project and $19 in liens payable, $462 in employee related benefits including vacation, workers' compensation, accrued payroll mainly due to actuarial estimates, and 3.5% increase of cost of living adjustment (COLA), and $260 in pollution remediation obligation. Deferred inflows of resources increased by $113,897 due to increases in pensions and other post-employment benefits by $112,522 and $1,375, respectively based on actuarial report.

Net Position, Fiscal Year 2021

For the year ended June 30, 2021, the Enterprise's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by $1,302,583. The Enterprise's total net position increased by $9,647 or 0.7% as a result of increases of $70,501 in net investment in capital assets and $1,765 in restricted for debt service offset by a decrease of $62,619 in unrestricted net position (see Table 1).

During the fiscal year 2021, current and other assets decreased by $118,831 or 25.1%. The decrease was mainly due to a decrease of $136,773 in restricted and unrestricted cash and investments largely attributed to increased spending for the Sewer System Improvement Program (SSIP) and debt principal and interest repayment. Other decreases included $666 in receivables for charges for services mainly due to $2,172 increase in allowance for doubtful accounts as there were more sewer charge receivables aging over 120 days attributable to the suspension of collection efforts in response to the COVID-19 emergency proclamation issued by the City Mayor. These decreases in current and other assets were offset by an increase of $17,490 in receivables from the State Water Resources Control Board (SWRCB) due to $20,755 in reimbursement receivable for disbursements claim relating to the Oceanside Plant (OSP) Digester Gas Utilization Upgrade Project offset by cash receipts of $3,265 in State Revolving Fund (SRF) reimbursement requests consisting of $2,041 for the Southeast Plant (SEP) 521/522 and Disinfection Upgrade and $1,224 for the Lake Merced Green Infrastructure projects. The other increases included $680 in prepaid charges, advances, and other receivable consisting of $546 prepayments to the San Francisco Estuary Institute, Bay Area Air Quality Management District, and Water Research Foundation, $290 in rent receivable mainly due a receivable from the San Francisco Community College, and $17 in custom work receivable offset by $173 prepaid expenses recognized to expense for the current year, $181 in inventory as there were more purchases than issuances during the year, $166 in restricted and unrestricted interest and other receivable mainly due to an increase in Federal interest subsidy receivable, and $91 increase in interfund receivables consisting of $47 from the Department of Public Works (DPW) for the Mission Bay

South and Hunters View Development Projects, $24 from the San Francisco Port Commission (Port), and $20 from the Treasure Island Development Authority (TIDA).

Capital assets, net of accumulated depreciation and amortization, increased by $544,562 or 17.8% reflecting an increase in construction and capital improvement activities. The largest portion of the Enterprise's net position of $1,253,789 or 96.3%, represents net investment in capital assets (see Capital Assets section of the MDA for more information). Deferred outflows of resources increased by $4,743 mainly due to $5,044 increase in other post-employment benefits based on actuarial report offset by $203 decrease in pensions based on actuarial report and $98 amortization of the 2013 Series A bonds loss on refunding.

Total liabilities increased by $432,491 or 19.1%. As of June 30, 2021, total outstanding balance of $2,363,086 for revenue bonds payable, commercial paper, certificates of participation, and SRF loans represented 87.7% of total liabilities, an increase of $418,006 or 21.5%. The increase was mainly due to $435,450 additional commercial paper issuance and $22,468 SRF loan to fund the OSP Digester Gas Utilization Upgrade, the SEP 521/522 and Disinfection Upgrade, and the Lake Merced Green Infrastructure projects offset by $31,316 in debt repayments and $8,596 in amortization of premium during the year. Other liabilities of $331,976 such as payables to vendors, contractors, and other government agencies for goods and services under contractual agreements and employees, increased by $14,485 or 4.6%, due to increases of $17,511 in net pension liability based on actuarial report, $3,912 in employee related benefits including vacation, workers' compensation, and accrued payroll mainly due to actuarial estimates, 3% increase of cost of living adjustment (COLA), and more days in current year-end payroll accrual compared to prior year-end accrual, $822 in general liability based on actuarial estimates, $130 in customer credit balances mainly due to overpayments, and $26 in liens payable. These increases were offset by decreases of $7,472 in other post-employment benefits obligations based on actuarial report, $145 in bond and loan interest payable due to lower outstanding debt principal and lower interest rates , $135 in restricted and unrestricted payable due to higher voucher payments than vouchers generated, and $109 in payable to Hetch Hetchy Power due to payment for the 525 Golden Gate Living Machine System, $54 decrease in deposit from Pacific Gas & Electric due to expenses incurred for the Cross Bore Project, and $1 interfund payable to City Attorney's Office. Deferred inflows of resources decreased by $11,664 due to $14,744 decrease in pensions based on actuarial report offset by $3,080 increase in other post-employment benefits based on actuarial report.

(Dollars in thousands, unless otherwise stated)

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, 2022, 2021, and 2020

	2022	Restated 2021*	2020	2022-2021 Change	2021-2020 Change
Revenues:					
Charges for services	$ 356,041	318,236	331,721	37,805	(13,485)
Rents and concessions	705	642	664	63	(22)
Other operating revenues	12,136	8,787	11,743	3,349	(2,956)
Interest and investment (loss) income	(7,087)	(1,187)	12,137	(5,900)	(13,324)
Other non-operating revenues	25,454	4,911	5,596	20,543	(685)
Total revenues	387,249	331,389	361,861	55,860	(30,472)
Expenses:					
Operating expenses	257,171	292,173	262,259	(35,002)	29,914
Interest expenses	77,743	34,944	43,216	42,799	(8,272)
Amortization of premium, refunding loss, and issuance cost	(8,422)	(8,497)	(8,647)	75	150
Non-operating expenses	482	409	52	73	357
Total expenses	326,974	319,029	296,880	7,945	22,149
Change in net position before transfers	60,275	12,360	64,981	47,915	(52,621)
Transfers from the City and County of San Francisco	—	1,440	280	(1,440)	1,160
Transfers to the City and County of San Francisco	(161)	(4,188)	(1,468)	4,027	(2,720)
Net transfers	(161)	(2,748)	(1,188)	2,587	(1,560)
Change in net position	60,114	9,612	63,793	50,502	(54,181)
Net position at beginning of year as restated	1,302,548	1,292,936	1,229,143	9,612	63,793
Net position at end of year	$ 1,362,662	1,302,548	1,292,936	60,114	9,612

*Restated due to the implementation of GASB 87 - *Leases*

Results of Operations, Fiscal Year 2022

The Enterprise's total revenues were $387,249, an increase of $55,860 or 16.9% from prior year (see Table 2). Charges for services increased by $37,805 or 11.9% mainly due to an average 8% adopted rate increase and a decrease in allowance for doubtful accounts by $1,098 as there were less sewer charge receivables aging over 120 days due to utility arrearage relief payments received from the State, offset by a sanitary flow decrease of 257,472 ccf or 1.2% from residential and non-residential customers. Other non-operating revenues increased by $20,543 mainly due to $9,302 utility arrearage relief payment received from the State as Federal pass-through from the CWWAPP, $8,000 SRF loan principal forgiveness component of the SEP Biosolids Digester Facilities Project and the OSP Digester Gas Handling Utilization Upgrade Project, $3,409 Baker Beach grant, and $4 gain from sale of assets offset by decreases of $164 in miscellaneous revenue due to less overhead recovery, redemption penalty and stormwater control plan review fees, and $8 in Federal interest subsidy. Other operating revenues increased by $3,349 or 38.1% mainly due to increases of $2,570 in capacity fees resulting from a 58.9% increase in average permit price and a 5.4% increase in permits issued attributed to new developments on Treasure Island and the City's re-opening and eliminating local restrictions on business operations, and $779 in other operating revenues to other City departments such as the Recreation & Park, Academy of Sciences, and the San Francisco

General Hospital. Rents and concessions increased by $63 or 9.8% mainly due to increases in rental income of $34 from the Sheriff Department, $22 from tenants with 3.6% consumer price index average rate increase, and $7 from a short-term tenant, Young Community Developers. Interest and investment income decreased by $5,900 or 497.1% mainly due to $5,618 increase in unrealized loss in City Treasury pooled investments attributed to the decline in market value of investments and rising interest rates and $292 decrease in interest earned from pooled cash due to lower annualized interest rate offset by $10 increase in interest earned from fiscal agent account due to increase in fiscal agent cash balances.

Total expenses were $326,974, an increase of $7,945 or 2.5% due to increases of $42,799 in interest expenses mainly due to increased outstanding bond principal balance and the implementation of Governmental Accounting Standards Board (GASB) 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*, which eliminated the capitalization of interest to capital assets beginning in fiscal year 2022, a decrease of $75 in amortization, refunding loss, and issuance cost, and $73 increase in City grants program expenses due to increased participation in the flood water management program for San Francisco properties offset by $35,002 decrease in operating expenses. The decrease of $35,002 in operating expenses was mainly due to decreases of $26,993 in personnel services due to $38,115 decrease in expenses related to GASB 68 pension adjustment offset by a 3.5% increase in cost of living adjustment (COLA) and $17,952 in general and administrative and other operating expenses mainly due to lower capital project expenses particularly for the Biosolids/Digester Project and Southeast Community Center Project, offset by increases of $3,232 in depreciation expense due to more capitalized assets put in service, $2,753 in materials and supplies mainly due to water sewage treatment supplies for Bayside Operations, $2,626 in contractual services mainly due to higher maintenance for building structures and professional and specialized services, and $1,332 in services provided by other departments mainly for electricity from Hetch Hetchy Power, water from Water Enterprise, and for facilities management services from the General Services Agency (GSA).

Net transfers of $161 included transfer out of $129 in art enrichment fund to the San Francisco Art Commission for the Westside Reliability Improvement and $32 to the Office of the City Administrator for the Surety Bond Program.

Results of Operations, Fiscal Year 2021

The Enterprise's total revenues were $331,389 a decrease of $30,472 or 8.4% from prior year (see Table 2). Charges for services decreased by $13,485 or 4.1% mainly due to a sanitary flow decrease of 2,474,116 ccf or 10.2% from residential and non-residential customers and $2,172 increase in allowance for doubtful accounts as there were more sewer charge receivables aging over 120 days attributable to the suspension of collection efforts in response to the COVID-19 emergency proclamation issued by the City Mayor offset by an average 8% adopted rate increase. Interest and investment income decreased by $13,324 or 109.8% due to lower pooled and fiscal agent cash balances, and a lower annualized interest rate. Other operating revenues decreased by $2,956 or 25.2% mainly due to decreases of $2,186 in capacity fees resulting from a 25.2% decrease in average permit price and a 7.9% decrease in permits issued as only essential construction projects were allowed due to SF Health Order related to COVID-19 and $770 in other operating revenues to other City departments such as the Real Estate, Human Services Agency, and Academy of Sciences due to the COVID-19 shelter in place order. Other non-operating revenues decreased by $685 mainly due to decreases of $667 in miscellaneous revenue largely attributed to $642 receipts from California State Parks Foundation for a project at Yosemite Slough Site in prior year, $20 in gain from sale of assets, and $22 in Federal Emergency Management Agency (FEMA) grant relating to COVID-19 offset by $27 increase in federal interest subsidy. Rents and concessions decreased by $22 or 3.3% mainly due to the COVID-19 past due rent collection suspension as approved by the Commission.

Total expenses were $318,994, an increase of $22,114 or 7.4% due to increases of $29,961 in operating expenses, $357 in City grants program expenses as there were more expenses incurred for community-based organization services, and $150 decrease in amortization, refunding loss, and issuance cost due to $230 decrease in bond premium offset by decreases of $40 in issuance cost, and $40 in refunding loss amortization offset by a decrease of $8,354 in interest expenses due to lower interest rate compared to prior year and a decrease in outstanding bond principal balance. The increase of $29,961 in operating expenses was mainly due to increases of $20,866 in general and administrative and other operating expenses mainly due to higher capital project expenses related to the SSIP Biosolids Digester Project, $9,051 in depreciation expense due to more capitalized assets put in service, $1,004 in services provided by other departments mainly for Department of Public Works general administration and building repair services, General Services Agency (GSA) facilities management services, and City risk management services, and $100 in materials and supplies mainly due to water sewage treatment supplies for Bayside Operations. These increases were offset by a decrease of $564 in personnel services mainly due to $7,873 decrease in other post-employment benefits based on actuarial report offset by increases of $4,574 in expenses related to pension due to increase in retirement contribution rates, $2,051 in salaries and fringe benefits due to a 3% increase in cost of living adjustment (COLA), and $684 in workers' compensation claims. Other decrease included $496 in contractual services mainly due to lower professional and specialized services.

Net transfers of $2,748 included transfer out of $4,000 in art enrichment fund to the San Francisco Art Commission for the Southeast Plant Biosolids Digester Facilities, 1550 Southeast Community Center, and Treasure Island Capital Improvement Projects, $156 to Recreation & Park for Crocker Amazon Park, and $32 to the Office of the City Administrator for the Surety Bond Program, offset by $1,440 transfer in from General Fund for the Sidewalk Garden Grants Project.

(Dollars in thousands, unless otherwise stated)

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, 2022, 2021, and 2020

	2022	2021	2020	2022-2021 Change	2021-2020 Change
Facilities, improvements, machinery, and equipment	$ 2,270,355	2,214,227	2,104,332	56,128	109,895
Intangible assets	7,107	7,407	3,046	(300)	4,361
Land and rights-of-way	44,572	44,572	44,572	—	—
Construction work in progress	1,724,417	1,340,644	910,338	383,773	430,306
Total	$ 4,046,451	3,606,850	3,062,288	439,601	544,562

Capital Assets, Fiscal Year 2022

The Enterprise has capital assets of $4,046,451, net of accumulated depreciation and amortization, invested in a broad range of utility capital assets as of June 30, 2022 (see Table 3). This amount represents an increase of $439,601 or 12.2% from prior fiscal year. The investment in capital assets includes land, buildings, improvements, wastewater treatment plants, sewer pipes and mains, underground transport and storage boxes, pump stations, machinery, and equipment. Construction work in progress increased by $383,773 or 28.6%. Facilities, improvements, machinery, and equipment increased by $56,128 or 2.5%. Intangible assets decreased by $300 or 4.1% due to $872 depreciation expense and $780 transfers out to non-capitalized repair and other expenses, offset by asset additions of $1,352 for the Customer Billing System Project.

Major additions to construction work in progress during the year ended June 30, 2022 include the following:

Southeast Plant Biosolids and Digester Facilities Project	$ 133,997
Southeast Plant New Headworks Grit Replacement	131,458
Southeast Community Center	30,582
Southeast Plant Power Feed and Primary Switchgear Upgrades	26,911
Wawona Area Stormwater Improvement Project	15,644
Westside Pump Station Reliability Improvements	13,895
North Shore Pump Station Wet Weather Improvements	13,366
Large Sewer Condition Improvements	11,656
As-Needed Spot Sewer Replacement Number 41 (WW-698)	9,514
Public Works 19th Avenue Infrastructure Improvements	8,782
Oceanside Plant Digester Gas Handling Utilization Upgrade	8,175
As-Needed Spot Sewer Replacement Number 40 (WW-693)	5,007
Various Locations Sewer Replacement Number 8 (WW-679)	4,927
Folsom Area Stormwater Improvement Project	4,728
Public Works 41st and 44th Avenues Infrastructure Improvements	4,676
Mariposa Dry-Weather Pump Station & Force Main Improvements	4,527
Taraval Sewer Improvements	4,401
Ocean Beach Climate Change Adaptation Project	4,301
Southeast Plant Facility-Wide Distributed Control System Upgrades	4,275
Other project additions individually below $4,000	73,857
	$ 514,679

(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, 2022 include the following:

Southeast Plant Seismic Reliability and Condition Assessment Improvements	$	23,679
Force Main Rehabilitation at Embarcadero and Jackson Streets		11,480
As-Needed Spot Sewer Replacement Number 41 (WW-698)		9,571
Combined Sewer Discharge Backflow Prevention and Monitoring		9,029
Cargo Way Sewer Box Odor Reduction		8,615
Mission Street, 16th to Cesar Chavez Streets, Brick Sewer Rehabilitation		7,783
Public Works Various Locations Number 40 Infrastructure Improvements		6,575
Various Locations Sewer Replacement Number 8 (WW-679)		5,553
Various Locations Sewer Replacement Number 6 (WW-677)		5,347
As-Needed Spot Sewer Replacement Number 40 (WW-693)		5,006
Taraval Sewer Improvements		4,401
Public Works Sunset Parkside Pavement Renovations		4,360
Oceanside Plant Egg Shaped Digester Interior Lining Rehabilitation (WW-706)		3,499
Other project additions individually below $3,000		26,181
	$	131,079

See Note 4 for additional information about capital assets.

Sewer System Improvement Program

The Sewer System Improvement Program (SSIP) is the SFPUC's wastewater capital improvement program which includes multiple projects to improve the existing wastewater system. The implementation of the SSIP projects and their associated expenditures will be phased over 20 years. In March 2016, the refined program scope and budget increased from $6.9 billion to $7.0 billion was endorsed by the Commission, referred to as the "2016 SSIP Baseline". In December 2020, the Commission approved the 2020 SSIP Baseline, increasing the budget for SSIP Phase 1 program to $3,655 million from $2,910.4 million in 2016. The SFPUC is transitioning away from the original intent of three distinct SSIP phases and instead implementing capital improvement projects as part of a rolling Ten-Year capital plan.

As of June 30, 2022, 38 projects or 54.3% totaling $373 million were completed, 7 projects in pre-construction phase, 12 projects in construction phase, and 13 projects in close-out phase. The SEP 521/522 and Disinfection Upgrades Project was completed on June 30, 2021 with reported project expenditures of $44.8 million. The major components of the project are modifications to the existing SEP 521 building to include a new Effluent Sampling Station, new DCS Control Station, and upgrade to the existing bathroom for ADA compliance, new building (SEP 522) to house electrical and hydraulic controls, among others. The Southeast Water Pollution Control Plant New Headworks Facility is on-going construction. The project is reported at 47.0% completion and forecasted final completion is on February 29, 2024. Program expenditures as of June 30, 2022 totaled $1,943.8 million. Additional details regarding the SSIP are available at https://sfpuc.org/construction-contracts/sewer-system-improvement-program.

(Dollars in thousands, unless otherwise stated)

Capital Assets, Fiscal Year 2021

The Enterprise has capital assets of $3,606,850, net of accumulated depreciation and amortization, invested in a broad range of utility capital assets as of June 30, 2021 (see Table 3). This amount represents an increase of $544,562 or 17.8% from prior fiscal year. The investment in capital assets includes land, buildings, improvements, wastewater treatment plants, sewer pipes and mains, underground transport and storage boxes, pump stations, machinery, and equipment. Construction work in progress increased by $430,306 or 47.3%. Facilities, improvements, machinery, and equipment increased by $109,895 or 5.2%, and intangible assets increased by $4,361 or 143.2% due to asset additions of $2,457 for the Operational Decision System Project and $1,904 for the Customer Billing System Project.

Major additions to construction work in progress during the year ended June 30, 2021 include the following:

Southeast Plant Biosolids and Digester Facilities Project	$ 259,938
Southeast Plant New Headworks Grit Removal and Influent Pump Station	110,472
Southeast Community Center	47,373
Southeast Plant Power Feed and Primary Switchgear Upgrades	18,881
Mariposa Pump Station & Force Main	11,031
Oceanside Plant Digester Gas Handling Utilization	8,856
Seismic Reliability - Phase 1	7,647
Public Works Various Locations Number 35 Infrastructure Improvements	7,134
As-Needed Spot Sewer Replacement Number 40	7,101
Ocean Beach Project	6,727
Force Main Rehabilitation at Embarcadero and Jackson Streets	6,615
Facility-Wide Distributed Control System Upgrade	5,998
Van Ness Bus Rapid Transit Sewer Improvements	5,482
As-Needed Spot Sewer Replacement Number 38	4,972
Public Works Various Locations Number 40 Infrastructure Improvements	4,918
Southeast Plant 062 Archimedes Screw Pump	4,697
Taraval Sewer Improvements	4,070
As-Needed Main Sewer Replacement Number 7	4,043
Other project additions individually below $4,000	93,864
	$ 619,819

(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, 2021 include the following:

Van Ness Bus Rapid Transit Sewer Improvements	$	20,665
Richmond Early Implementation Project		13,620
Geary Bus Rapid Transit Sewer Improvements		12,287
Public Works Lombard Street Infrastructure Improvements		11,794
Southeast Plant 062 Archimedes Screw Pump		10,421
Taraval Sewer Improvements		10,397
Sunset Green Infrastructure		9,932
Public Works Various Locations Number 35 Infrastructure Improvements		8,722
As-Needed Spot Sewer Replacements Number 40		7,112
Public Works Various Locations Number 39 Infrastructure Improvements		6,493
Public Works Various Locations Number 36 Infrastructure Improvements		6,056
Public Works Various Locations Number 43 Infrastructure Improvements		6,023
As-Needed Spot Sewer Replacement Number 38		4,972
Public Works Alemany Blvd Infrastructure Improvements		4,956
Beach And Sansome Street Combined Sewer Distribution Rehabilitation		4,708
Public Works Second Street Infrastructure Improvements		4,560
As-Needed Main Sewer Replacement Number 7		4,043
North Point Facility Dewatering Pump Replacement		3,725
Public Works Palou Avenue Infrastructure Improvements		3,514
Various Locations Sewer Replacements Number 7		3,429
Oceanside Plant Door Replacement		3,082
Other project additions individually below $3,000		25,763
	$	186,274

See Note 4 for additional information about capital assets.

Sewer System Improvement Program

The Sewer System Improvement Program (SSIP) includes three phases over 20 years to improve the existing wastewater system. In March 2016, the refined program scope and budget increased from $6.9 billion to $7.0 billion was endorsed by the Commission, which is now referred to as the 2016 SSIP Baseline program.

As of June 30, 2021, 37 projects or 52.9% totaling $367 million were completed, 8 projects in pre-construction phase, 18 projects in construction phase, and 7 projects in close-out phase. The OSP Condition Assessment Repairs was completed on January 29, 2021 with reported project expenditures of $11.6 million. The project includes planning, design, and environmental review of major improvements to the plant including rehabilitation of building structures, rehabilitation or replacement of mechanical and electrical equipment, and seismic retrofit of process tanks and buildings. Improvements focus on maintaining operational reliability and extending the service life of buildings that are required to remain in operation for 30 years or more. The SEP Seismic Reliability and Condition Assessment Improvements Project is on-going construction. The project is reported at 86.0% completion and forecasted final completion is on March 8, 2022. Program expenditures as of June 30, 2021 totaled $1,546.1 million. Additional details regarding the SSIP are available at https://sfpuc.org/construction-contracts/sewer-system-improvement-program.

(Dollars in thousands, unless otherwise stated)

Debt Administration

As of June 30, 2022, 2021, and 2020, the Enterprise's debt from revenue bonds, revenue notes, commercial paper, certificates of participation, and State revolving fund loans were $2,988,713, $2,363,086, and $1,945,080, respectively, as shown in Table 4. More detailed information about the Enterprise's debt activity is presented in Notes 6, 7, and 8 to the financial statements.

Table 4
Outstanding Debt, Net of Unamortized Costs
As of June 30, 2022, 2021, and 2020

		2022	2021	2020	2022-2021 Change	2021-2020 Change
Revenue bonds	$	1,931,253	1,589,922	1,621,733	341,331	(31,811)
Revenue notes		350,356	–	–	350,356	–
Commercial paper		379,157	638,518	207,939	(259,361)	430,579
Certificates of participation		25,288	26,087	26,859	(799)	(772)
State revolving fund loans		302,659	108,559	88,549	194,100	20,010
Total	$	2,988,713	2,363,086	1,945,080	625,627	418,006

The increase of $625,627 was mainly due to $373,700 Revenue Bonds 2021 Series A (SSIP/Green) and 2021 Series B (Non-SSIP) net of premium, $350,823 Revenue (Green) Notes 2021 Series AB net of premium, $200,702 aggregate new State Revolving Fund loans for the Biosolids Digester, OSP Digester Gas Utilization Upgrade, and Headworks Replacement projects, and $80,639 issuance of commercial paper, offset by $340,000 retirement of commercial paper, $26,148 repayment of outstanding debt, $9,970 of premium amortizations, and $4,119 SRF OSP debt reduction for the $4,000 loan principal forgiveness component and $119 unreimbursed loan claim.

Credit Ratings and Bond Insurance – As of June 30, 2022 and 2021, the Enterprise carried underlying ratings of "Aa2" and "AA" from Moody's and Standard & Poor's (S&P), respectively.

Debt Service Coverage – Pursuant to the Indenture for the Wastewater bonds, the Enterprise covenants to collect sufficient net revenues each fiscal year, together with any Enterprise funds (except Bond Reserve Funds) that are available for payment of debt service and are not budgeted to be expended, at least equal to 1.25 times annual debt service for said fiscal year. During fiscal years 2022 and 2021, the Enterprise's net revenues, together with fund balances available to pay debt service and not budgeted to be expended, were sufficient to meet the rate covenant requirements under the Indenture (see Note 8).

Debt Authorization – Pursuant to the Charter Section 8B.124, the Enterprise can incur indebtedness upon two-thirds vote of the Board of Supervisors. As of June 30, 2022, the Enterprise had $4,005,292 in combined debt issuance authorization from the Board of Supervisors under Proposition E, with $3,145,625 issued against this authorization. The Enterprise has a $750,000 authorized commercial paper program, with $379,157 in tax-exempt commercial paper outstanding as of June 30, 2022 and $638,518 in tax-exempt commercial paper outstanding as of June 30, 2021.

Cost of Debt Capital – The coupon interest rates on the Enterprise's outstanding revenue bonds ranged from 1.0% to 5.8%, with a blended true interest cost of 2.9%, after factoring in federal interest subsidy receipts on Build America Bonds at June 30, 2022. The 2009 Series C certificates of participation carried coupon interest rates from 2.0% to 5.0% and 2009 Series D certificates of participation carried coupon interest rates from 6.4% to 6.5% in fiscal years 2022 and 2021, respectively. The interest rates on short-term debt ranged from 0.1% to 1.4% during fiscal year 2022 and from 0.1% to 0.2% during fiscal year 2021. The State revolving fund loans (CWSRF loans) carried original interest rates ranging from 0.8% to 1.8% for a weighted average of 1.3% during fiscal year 2022. The State has elected to apply administrative service and grant charges to certain agreement repayment schedules in lieu of receiving interest payments; these charges will not affect the installment payments or increase the repayment amounts.

(Dollars in thousands, unless otherwise stated)

Rates and Charges

Rate Setting Process

Proposition E, as approved by the voters in November 2002, amended the City Charter by adding the new Article VIIIB, entitled "Public Utilities," which established the Commission's authority to issue new revenue bonds and set wastewater rates. The Commission is required to:

- Establish rates, fees, and charges based on cost of service;
- Retain an independent rate consultant to conduct cost of service studies at least every five years;
- Consider establishing new connection fees;
- Consider conservation incentives and lifeline rates;
- Adopt a rolling five-year forecast annually; and
- Establish a Rate Fairness Board.

Pursuant to the City and County of San Francisco Charter section 8B.125, an independent rate study is performed at least once every five years. In compliance with City Charter section 8B.125, a water and wastewater rate study was completed in April 2018 and resulted in four-year wastewater rate increases from July 1, 2018 through June 30, 2022. The rates effective July 1, 2021 for fiscal year 2022 will remain unchanged for fiscal year 2023, which are effective July 1, 2022. These rates exclude those changed by the Consumer Price Index from the Controller's Office of the City and County of San Francisco, as well as rates adjusted by the 20-City Average Construction Index (CCI) published by Engineering News-Record (ENR) Magazine. The SFPUC Rates Schedules and Fees is available at https://sfpuc.org/accounts-services/water-power-and-sewer-rates.

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

Ten-year Average Rate Adjustments

Effective Date	Adjustment
July 1, 2013	5.0 [1]
July 1, 2014	5.0 [2]
July 1, 2015	5.0 [2]
July 1, 2016	7.0 [2]
July 1, 2017	11.0 [2]
July 1, 2018	7.0 [3]
July 1, 2019	7.0 [3]
July 1, 2020	8.0 [3]
July 1, 2021	8.0 [3]
July 1, 2022	– [4]

[1] Four-year rate increases adopted and effective July 1, 2009.
[2] Four-year rate increases adopted and effective July 1, 2014.
[3] Four-year rate increases adopted and effective July 1, 2018.
[4] No retail rate adjustment.

Request for Information

This report is designed to provide our citizens, customers, investors, and creditors with an overview of the Enterprise's finances and to demonstrate the Enterprise's accountability for the money it receives. Questions regarding any of the information provided in this report or requests for additional financial information should be addressed to San Francisco Public Utilities Commission, Chief Financial Officer, Financial Services, 525 Golden Gate Avenue, 13th Floor, San Francisco, CA 94102.

This report is available at https://sfpuc.org/about-us/reports/audited-financial-statements-reports.

SAN FRANCISCO WASTEWATER ENTERPRISE
Statements of Net Position
June 30, 2022 and 2021
(In thousands)

	2022	Restated 2021*
Assets		
Current assets:		
Cash and investments with City Treasury	$ 285,029	281,572
Cash and investments outside City Treasury	397	366
Receivables:		
Charges for services (net of allowance for doubtful accounts of $4,273 as of June 30, 2022 and $5,369 as of June 30, 2021)	40,321	33,081
Due from other City departments	225	281
Due from other governments	25	—
Interest	314	189
Restricted due from other governments	202,795	20,755
Restricted interest, other receivable, and prepaid (net of allowance for doubtful accounts of $385 as of June 30, 2022 and $68 as of June 30, 2021)	2,301	2,841
Total current receivables	245,981	57,147
Prepaid charges, advances, and other receivables, current portion	346	877
Inventory	2,958	2,657
Restricted cash and investments outside City Treasury	15,587	298
Total current assets	550,298	342,917
Non-current assets:		
Net pension asset	48,770	—
Restricted cash and investments outside City Treasury	23,771	9,898
Restricted interest, other receivable, and prepaid (net of allowance for doubtful accounts of $29 as of June 30, 2022 and $29 as of June 30, 2021)	434	450
Lease right of use assets, net of accumulated amortization	3,597	5,922
Charges for services, less current portion (net of allowance for doubtful accounts of $567 as of June 30, 2022 and $569 as of June 30, 2021)	342	341
Prepaid charges, advances, and other receivables, less current portion	1,156	1,183
Capital assets, not being depreciated and amortized	1,772,035	1,388,262
Capital assets, net of accumulated depreciation and amortization	2,274,416	2,218,588
Total non-current assets	4,124,521	3,624,644
Total assets	4,674,819	3,967,561
Deferred outflows of resources		
Unamortized loss on refunding of debt	33	91
Pensions	25,369	30,219
Other post-employment benefits	12,898	15,109
Total deferred outflows of resources	38,300	45,419
Liabilities		
Current liabilities:		
Accounts payable	22,588	15,282
Accrued payroll	6,402	6,147
Accrued vacation and sick leave, current portion	5,479	5,811
Accrued workers' compensation, current portion	1,393	1,198
Due to other City departments, current portion	111	110
Damage claims liability, current portion	9,323	5,892
Unearned revenues, refunds, and other	6,137	5,345
Bond, loan, and lease interest payable	21,460	17,276
Revenue bonds, current portion	34,345	22,880
Certificates of participation, current portion	830	785
Commercial paper	379,157	638,518
State revolving fund loans payable, current portion	2,481	2,483
Lease liability, current portion	2,341	2,314
Current liabilities payable from restricted assets	89,905	89,982
Total current liabilities	581,952	814,023
Long-term liabilities:		
Other post-employment benefits obligations	49,123	50,711
Net pension liability	—	103,746
Accrued vacation and sick leave, less current portion	5,422	5,847
Accrued workers' compensation, less current portion	6,153	5,384
Due to other City departments, less current portion	518	629
Damage claims liability, less current portion	2,722	10,821
Revenue bonds, less current portion	1,896,908	1,567,042
Revenue notes	350,356	—
Certificates of participation, less current portion	24,458	25,302
State revolving fund loans payable, less current portion	300,178	106,076
Lease liability, less current portion	1,297	3,638
Pollution remediation obligation	8,060	7,800
Total long-term liabilities	2,645,195	1,886,996
Total liabilities	3,227,147	2,701,019
Deferred inflows of resources		
Related to pensions	114,670	2,148
Other post-employment benefits	8,640	7,265
Total deferred inflows of resources	123,310	9,413
Net position		
Net investment in capital assets	1,092,705	1,253,789
Restricted for debt service	5,391	2,992
Restricted for capital projects	114,657	—
Unrestricted	149,909	45,767
Total net position	$ 1,362,662	1,302,548

* Restatement due to implementation of GASB 87 - *Leases*

See accompanying notes to financial statements.

SAN FRANCISCO WASTEWATER ENTERPRISE

Statements of Revenues, Expenses, and Changes in Net Position
Years ended June 30, 2022 and 2021
(In thousands)

	2022	Restated 2021*
Operating revenues:		
Charges for services	$ 356,041	318,236
Rents and concessions	705	642
Capacity fees	6,280	3,710
Other revenues	5,856	5,077
Total operating revenues	368,882	327,665
Operating expenses:		
Personnel services	63,456	90,449
Contractual services	19,115	16,489
Materials and supplies	11,844	9,091
Depreciation and amortization	77,575	74,343
Services provided by other departments	39,645	38,313
General and administrative and other	45,536	63,488
Total operating expenses	257,171	292,173
Operating income	111,711	35,492
Non-operating revenues (expenses):		
Federal and state grants	20,711	—
Interest and investment (loss) income	(7,087)	(1,187)
Interest expenses	(77,743)	(34,944)
Amortization of premium, refunding loss, and issuance costs	8,422	8,497
Net gain from sale of assets	22	18
Other non-operating revenues	4,721	4,893
Other non-operating expenses	(482)	(409)
Net non-operating expenses	(51,436)	(23,132)
Change in net position before transfers	60,275	12,360
Transfers from the City and County of San Francisco	—	1,440
Transfers to the City and County of San Francisco	(161)	(4,188)
Net transfers	(161)	(2,748)
Change in net position	60,114	9,612
Net position at beginning of year	1,302,548	1,292,936
Net position at end of year	$ 1,362,662	1,302,548

* Restatement due to implementation of GASB 87 - *Leases*

See accompanying notes to financial statements.

SAN FRANCISCO WASTEWATER ENTERPRISE

Statements of Cash Flows

Years ended June 30, 2022 and 2021

(In thousands)

		2022	Restated 2021*
Cash flows from operating activities:			
Cash received from customers, including cash deposits	$	360,654	327,879
Cash received from tenants for rent		1,035	362
Cash received from miscellaneous revenues		667	831
Cash paid to employees for services		(93,897)	(90,918)
Cash paid to suppliers for goods and services		(103,998)	(126,436)
Cash paid for judgments and claims		(10,795)	(3,295)
Net cash provided by operating activities		153,666	108,423
Cash flows from non-capital financing activities:			
Cash received from grants		12,686	—
Cash paid for rebates and program incentives		(482)	(409)
Transfers from the City and County of San Francisco		—	1,440
Transfers to the City and County of San Francisco		(161)	(4,188)
Net cash provided by (used in) non-capital financing activities		12,043	(3,157)
Cash flows from capital and related financing activities:			
Proceeds from sale of capital assets		22	12
Proceeds from bond issuance, net of premium		373,700	—
Proceeds from revenue notes, net of premium		350,823	—
Proceeds from commercial paper borrowings		80,639	435,450
Proceeds from State revolving fund loans		22,544	4,811
Principal paid on long-term debt		(23,665)	(23,987)
Principal paid on commercial paper		(340,000)	(4,871)
Principal paid on State revolving fund loans		(2,483)	(2,458)
Lease payment		(2,371)	(2,371)
Interest paid on long-term debt		(69,988)	(66,654)
Interest paid on commercial paper		(614)	(484)
Interest paid on State revolving fund loans		(1,522)	(1,123)
Interest paid on revenue notes		(1,168)	—
Issuance cost paid on long-term debt		(1,490)	—
Acquisition and construction of capital assets		(516,032)	(582,841)
Federal interest income subsidy for Build America Bonds		5,818	2,297
Net cash (used in) capital and related financing activities		(125,787)	(242,219)
Cash flows from investing activities:			
Interest income received		1,335	3,169
Proceeds from sale of investments outside City Treasury		101,115	134,955
Purchase of investments outside City Treasury		(101,115)	(134,955)
Net cash provided by investing activities		1,335	3,169
Increase (decrease) in cash and cash equivalents		41,257	(133,784)
Cash and cash equivalents:			
Beginning of year		291,906	425,690
End of year	$	333,163	291,906
Reconciliation of cash and cash equivalents to the statements of net position:			
Cash and investments with City Treasury:			
Unrestricted	$	285,029	281,572
Add: Unrealized (gain) loss on investments with City Treasury		8,379	(228)
Cash and investments outside City Treasury:			
Unrestricted		397	366
Restricted		39,358	10,196
Cash and cash equivalents at the end of year on statements of cash flows	$	333,163	291,906

* Restatement due to implementation of GASB 87 - *Leases*

SAN FRANCISCO WASTEWATER ENTERPRISE

Statements of Cash Flows

Years ended June 30, 2022 and 2021

(In thousands)

		2022	Restated 2021*
Reconciliation of operating income to net cash provided by operating activities:			
Operating income	$	111,711	35,492
Adjustment to reconcile operating income to net cash provided by operating activities:			
Depreciation and amortization		77,575	74,343
Miscellaneous revenues		667	831
Provision for uncollectible accounts		(781)	2,201
Write-off of capital assets		993	4,203
Receivables:			
Charges for services		(6,143)	(1,506)
Prepaid charges, advances, and other		51	(716)
Due from other City departments		(901)	148
Inventory		(301)	(181)
Accounts payable		7,095	(4,762)
Accrued payroll		255	637
Other post-employment benefits obligations		1,998	(9,436)
Pension obligations		(35,144)	2,970
Accrued vacation and sick leave		(757)	2,744
Accrued workers' compensation		964	531
Pollution remediation obligation		260	—
Damage claims liability		(4,668)	822
Unearned revenues, refunds, and other liabilities		792	102
Total adjustments		41,955	72,931
Net cash provided by operating activities	$	153,666	108,423
Noncash transactions:			
Accrued capital asset costs	$	89,905	89,982
Interfund payable		629	739
Unrealized loss (gain) on investments		8,379	(228)

* Restatement due to implementation of GASB 87 - *Leases*

See accompanying notes to financial statements.

(1) Description of Reporting Entity

The San Francisco Wastewater Enterprise (the Enterprise), formerly known as the San Francisco Clean Water Program (the Program), was established in 1977 following the transfer of all sewage system-related assets and liabilities of the City and County of San Francisco (the City) to the Program.

In 1976, the electorate of the City approved a proposition authorizing the City to issue $240,000 in revenue bonds pursuant to the Revenue Bond Law of 1941 of the State of California for the purpose of acquiring, constructing, improving, and financing improvements to the City's municipal sewage treatment and disposal system. Since then, the City's Board of Supervisors has adopted resolutions (Wastewater Resolutions) providing for the issuance of various sewer revenue and refunding bond series. The Wastewater Resolutions require the City to keep separate books of records and accounts of the Enterprise.

The Enterprise was placed under the jurisdiction of the San Francisco Public Utilities Commission (SFPUC or the Commission) in 1996. The Commission, established in 1932, is responsible for providing operational oversight of the public utility enterprises of the City, which includes the Enterprise along with the City's power and water utilities (i.e., Hetch Hetchy Water and Power and CleanPowerSF, of which the Power Enterprise is a component, and the San Francisco Water Enterprise). The Commission is responsible for determining such matters as the rates and charges for services, approval of contracts, and organizational policy.

Until August 1, 2008, the Commission consisted of five members, all appointed by the Mayor. Proposition E, a City Charter SEC. 4.112 amendment approved by the voters in the June 3, 2008 election, terminated the terms of all five existing members of the Commission, changed the process for appointing new members, and set qualifications for all members. Under the amended Charter, the Mayor continues to nominate candidates to the Commission, but nominees do not take office until the Board of Supervisors votes to approve their appointments by a majority (at least six members). The amended Charter provides for staggered four-year terms for the Commission members and requires them to meet the following qualifications:

- Seat 1 must have experience in environmental policy and an understanding of environmental justice issues.
- Seat 2 must have experience in ratepayer or consumer advocacy.
- Seat 3 must have experience in project finance.
- Seat 4 must have expertise in water systems, power systems, or public utility management.
- Seat 5 is an at-large member.

The SFPUC is a department of the City, and as such, the financial operations of the Enterprise, Hetch Hetchy Water and Power and CleanPowerSF, and the Water Enterprises are included in the Annual Comprehensive Financial Report of the City as enterprise funds. These financial statements are intended to present only the financial position, and the changes in financial position and cash flows of only that portion of the City that is attributable to the transactions of the Enterprise. They do not purport to, and do not, present fairly the financial position of the City as of June 30, 2022 and 2021, 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).

(Continued)

(2) Significant Accounting Policies

(a) Basis of Accounting and Measurement Focus

The accounts of the Enterprise are organized on the basis of a proprietary fund type, specifically an enterprise fund of the City. The activities of this Enterprise are accounted for with a separate set of self-balancing accounts that comprise the Enterprise's assets, deferred outflows, liabilities, deferred inflows, net position, revenues, and expenses. Enterprise funds account for activities (i) that are financed with debt that is secured solely by a pledge of the net revenues from fees and charges of the activity; or (ii) that are required by laws or regulations that the activity's costs of providing services, including capital costs (such as depreciation or debt service), be recovered with fees and charges, rather than with taxes or similar revenues; or (iii) that the pricing policies of the activity establish fees and charges designed to recover its costs, including capital costs (such as depreciation or debt service).

The financial activities of the Enterprise are accounted for on a flow of economic resources measurement focus, using the accrual basis of accounting in accordance with the U.S. GAAP. Under this method, all assets and liabilities associated with operations are included on the statements of net position; revenues are recognized when earned, and expenses are recognized when liabilities are incurred. Operating revenues are defined as charges to customers, rental income, and capacity fees.

The Enterprise applies all applicable Governmental Accounting Standards Board (GASB) pronouncements.

(b) Cash and Cash Equivalents

The Enterprise considers its pooled deposits and investments held with the City Treasury to be demand deposits and, therefore, cash and cash equivalents for financial reporting. The City Treasury also holds non-pooled cash and investments for the Enterprise. Non-pooled restricted deposits and restricted deposits and investments held outside the City Treasury with original maturities of three months or less are also considered to be cash equivalents.

(c) Investments

Money market funds are carried at cost, which approximates fair value. All other investments are stated at fair value based upon quoted market prices. Changes in fair value are recognized as investment gains or losses and are recorded as a component of non-operating revenues.

(d) Inventory

Inventory consists primarily of construction materials and maintenance supplies and is valued at average cost. Inventory is expensed as it is consumed.

(e) Capital Assets

Capital assets are defined as assets with an initial individual cost of more than $5 and an estimated useful life in excess of one year. Capital assets with an original acquisition date prior to July 1, 1977 are recorded in the financial statements at estimated cost, as determined by an independent professional appraisal, or at cost, if known. All subsequent acquisitions have been recorded at cost. All donated capital assets are valued at estimated fair value at the time of donation. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the assets, which range from 1 to 100 years for equipment and 1 to 200 years for building, structures, and improvements. No depreciation or amortization is recorded in the year of acquisition, and depreciation or amortization is recorded in the year of disposal.

(f) Intangible Assets

Under GASB Statement No. 51, *Accounting and Financial Reporting for Intangible Assets*, intangible assets are defined as identifiable, non-financial assets capable of being separated, sold, transferred, or licensed, and include contractual or legal rights. Examples of intangible assets include rights-of-way easements, land use rights, water rights, licenses, and permits. The accounting pronouncement also provides guidance on the capitalization of internally generated intangible assets, such as the development and installation of computer software by or on behalf of the reporting entity.

According to the standard, the Enterprise is required to capitalize intangible assets with a useful life extending beyond one reporting period. The Enterprise has established a capitalization threshold of $100. GASB Statement No. 51 also requires amortization of intangible assets over the benefit period, except for certain assets having an indefinite useful life. Assets with an indefinite useful life generally provide a benefit that is not constrained by legal or contractual limitations or any other external factor, and therefore, are not amortized (see Note 4).

(g) Construction Work in Progress

The cost of acquisition and construction of major plant and equipment is recorded as construction work in progress. Costs of construction projects that are discontinued are recorded as an expense in the year in which the decision is made to discontinue such projects.

(h) Capitalization of Interest

A portion of the interest cost incurred on capital projects is capitalized on assets that require a period for construction or to otherwise prepare them for their intended use. Such amounts are amortized over the useful lives of the assets (see Note 4). Per the implementation of GASB No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*, no interest was capitalized to capital assets in fiscal year 2022.

(i) Bond Discount, Premium, and Issuance Costs

Bond issuance costs related to prepaid insurance costs are capitalized and amortized using the effective interest method. Other bond issuance costs are expensed when incurred. Original issue bond discount or premium are offset against the related debt and are also amortized using the effective interest method.

(j) Accrued Vacation and Sick Leave

Accrued vacation pay, which may be accumulated up to 10 weeks per employee, is charged to expense as earned. Sick leave earned subsequent to December 6, 1978 is non-vesting and may be accumulated up to six months per employee.

(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)).

(l) 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. No arbitrage liability is due as of June 30, 2022 or 2021.

(n) Refunding of Debt

Gains or losses occurring from refunding of debt prior to maturity are reported as deferred outflows and deferred inflows of resources from refunding of debt. Deferred outflows and deferred inflows of resources are recognized as a component of interest expense using the effective interest method over the remaining life of the old debt or the life of the new debt, whichever is shorter.

(o) Income Taxes

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

(p) Revenue Recognition

Sewer service charges are based on water usage as determined by the San Francisco Water Enterprise. Effective July 1, 2013, the majority of residential and non-residential customers are billed on a monthly basis except for building and contractor customers which are billed on a bi-monthly basis. Revenues earned but unbilled are accrued as charges for services and reflected as a receivable on the statements of net position. The unbilled amount for the fiscal years ending June 30, 2022 and 2021 were $15,704 and $14,175, respectively.

(q) Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

(r) Accounting and Financial Reporting for Pollution Remediation Obligations

According to GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations*, a government would have to estimate its expected outlays for pollution remediation if it knows a site is polluted and any of the following recognition triggers occur:

- 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) Leases

Leases are defined as a contract that conveys control of the right to use another entity's underlying asset for a specified period. The Enterprise is a lessee and a lessor for various noncancellable leases of land, building, equipment, vehicles, easements, etc.

Short-term Leases

For leases with a maximum possible term of 12 months or less at commencement, the Enterprise recognizes lease revenue if the Enterprise is the lessor of the lease or lease expense if the Enterprise is the lessee of the lease based on the provisions of the lease contract. Liabilities are only recognized if payments are received in advance, and receivables are only recognized if payments are received subsequent to the reporting period.

Leases Other Than Short-term

For all other leases (i.e., those that are not short-term) the Enterprise recognizes a lease liability and intangible right-to-use lease asset for the Enterprise as lessee leases, or lease receivable and deferred inflow of resources for the Enterprise as lessor leases.

Measurement of Lease Amounts (Lessee)

The Enterprise's lease liability is recorded at the present value of future minimum lease payments as of the date of inception. Subsequently, the lease liability is reduced by the principal portion of lease of payments made. The lease asset is initially measured as the initial amount of the lease liability, less lease payments made at or before the lease commencement date, plus any initial direct costs ancillary to placing the underlying asset into service, less any lease incentives received at or before the lease commencement date. Subsequently, the lease asset is amortized into depreciation and amortization expense on a straight-line basis over the shorter of the lease term or the useful life of the underlying asset. If the Enterprise is reasonably certain of exercising a purchase option contained in a lease, the lease asset will be amortized over the useful life of the underlying asset.

Measurement of Lease Amounts (Lessor)

The Enterprise's lease receivable is measured at the present value of payments expected to be received during the lease term, reduced by any provision of estimated uncollectible amounts. Subsequently, the lease receivable is reduced by the principal portion of lease payments collected. The deferred inflow or resources is initially measured as the initial amount of the lease receivable, less any lease incentives paid to, or on behalf of, the lessee at or before the commencement of the lease term, plus lease payments received from the lease at or before the commencement of the lease term that related to future periods. Subsequently, the deferred inflow of resources as lease revenue is on a straight-line basis over the lease term.

Key Estimates and Judgements

Key estimates and judgements include how the Enterprise determines (a) the discount rate it uses to calculate the present value of the expected lease payments, (b) lease terms, (c) lease payments, and (d) materiality threshold for equipment.

- The Enterprise generally uses its estimated incremental borrowing rate as the discount rate for leases unless the rate is implicit in the lease. The City's incremental borrowing rate (IBR) is established using the average of Municipal Market Data (MMD) AAA benchmark interest rate index maturity date (year 1 to 30+), plus the average credit spread based on City's Aa/AA, COP, Tax-exempt to generate the yield curve and discount rate table. The City's incremental borrowing rate for leases is based on the rate of interest it would need to pay if it issued general obligation bonds to borrow an amount equal to the lease payments under similar terms at the commencement or remeasurement date.

- The lease term includes the noncancellable period of the lease, plus any additional periods covered by either lessee or lessor unilateral option to (1) extend for which it is reasonably certain to be exercised, or (2) terminate for which it is reasonably certain not to be exercised. Periods in which both the lessee and lessor have an option to terminate (or if both parties have to agree to extend) are excluded from the lease term.

- Payments are evaluated by the Enterprise to determine if they should be included in the measurement of the lease receivables or lease liabilities, including those payments that require a determination of whether they are reasonably certain of being made, such as residual value guarantees, purchase options, payments for termination penalties, and other payments.

- Equipment and other leases have a capitalization threshold of $100. 70% below market rent and/or ground leases are determined to be below market rent (BMR), excluded from lease capitalization.

Remeasurement of Lease

The Enterprise monitors changes in circumstances that may require remeasurement of a lease. When certain changes occur that are expected to significantly affect the amount of the lease receivable or lease liability, the receivable or liability is remeasured and a corresponding adjustment is made to the deferred inflow of resources or lease asset, respectively.

(Dollars in thousands, unless otherwise stated)

Presentation in Statement of Net Position

Lease assets are reported with non-current assets, lease liabilities are reported with current and long-term liabilities in the statement of net position.

(t) Other Post-Employment Benefits Other Than Pensions (OPEB)

As prescribed under GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*, net OPEB liability, deferred outflows/inflows of resources related to OPEB, and OPEB expense are actuarially determined on a citywide basis. Net OPEB liability is measured as the portion of the present value of projected benefit payments to be provided to current active and inactive employees attributed to those employees' past service, less the amount of the Retiree Healthcare Trust Fund investments measured at fair value (see Note 10(b)).

(u) New Accounting Standard Adopted in Fiscal Year 2022

1) In June 2017, the GASB issued Statement No. 87, *Leases*. GASB Statement No. 87 establishes a single model for lease accounting and requires reporting of certain lease liabilities that currently are not reported. The new standard is effective for periods beginning after June 15, 2021. The Enterprise adopted the provisions of Statement No. 87 in fiscal year 2022 (see Note 9 for more details). As a result of adoption, the cumulative effect of applying this Statement is recorded as beginning balances for the following accounts as of July 1, 2020:

	FY 2021 Beginning Balance	FY 2021 Activities	FY 2021 Ending Balance
Right-to-use Assets	$ 8,247	$ –	$ 8,247
Accumulated Amortization	–	(2,325)	(2,325)
Accrued Interest Payable-Current	–	(5)	(5)
Lease Liability - Current	(2,487)	173	(2,314)
Lease Liability - Long-Term	(5,760)	2,122	(3,638)
Expenses	–	35	35
Change to Net Position	$ –	$ 35	$ 35

2) In June 2018, the GASB issued Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*. GASB Statement No. 89 establishes accounting requirements for interest cost incurred before the end of construction period. The new standard is effective for periods beginning after December 15, 2020. The Enterprise adopted the provisions of Statement No. 89 in fiscal year 2022.

3) In January 2020, the GASB issued Statement No. 92, *Omnibus 2020*. GASB Statement No. 92 addresses practice issues that have been identified during implementation and application of certain GASB Statements. The new standard is effective for periods beginning after June 15, 2021. The Enterprise adopted the provisions of Statement No. 92 in fiscal year 2022, which did not have significant effect on its financial statements.

4) In March 2020, the GASB issued Statement No. 93, *Replacement of Interbank Offered Rates (IBOR)*. The objective of this Statement is to address those and other accounting and financial reporting implications that result from the replacement of an IBOR. The new standard is effective for periods beginning after June 15, 2021. The Enterprise adopted the provisions of Statement No. 93 in fiscal year 2022, which did not have a significant effect on its financial statements.

(v) GASB Statement Implemented in Fiscal Year 2021

1) In January 2017, the GASB issued Statement No. 84, *Fiduciary Activities*. GASB Statement No. 84 establishes criteria for state and local governments to identify fiduciary activities and how those activities should be reported. The new standard is effective for periods beginning after December 15, 2019. The Enterprise adopted the provisions of this Statement in fiscal year 2021, which did not have a significant effect on its financial statements.

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 adopted the provisions of this Statement in fiscal year 2021, which did not have a significant effect on its financial statements.

3) 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 adopted early the provisions of Statement No. 97 in fiscal year 2021, which did not have a significant effect on its financial statements.

4) In October 2021, the GASB issued Statement No. 98, *The Annual Comprehensive Financial Report*. GASB Statement No. 98 updates existing accounting standards by changing the name of the Comprehensive Annual Financial Report to the Annual Comprehensive Financial Report. The new standard is effective for periods ending after December 15, 2021. The Enterprise adopted the provisions of this Statement in fiscal year 2021, which did not have a significant effect on its financial statements.

(w) Future Implementation of New Accounting Standards

1) In May 2019, the GASB issued Statement No. 91, *Conduit Debt Obligations*. GASB Statement No. 91 enhances the compatibility and consistency of conduit debt obligation reporting and reporting of related transactions by State and local government issuers. The new standard is effective for periods beginning after December 15, 2021. The Enterprise will implement the provisions of Statement No. 91 in fiscal year 2023.

2) In March 2020, the GASB issued Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*. The primary objective of this Statement is to improve financial reporting by addressing issues related to public-private and public-public

partnership arrangements (PPPs). The 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.

3) In May 2020, the GASB issued Statement No. 96, *Subscription-Based Information Technology Arrangements*. This Statement provides guidance on the accounting and financial reporting for subscription-based information technology arrangements (SBITAs) by a government. The new standard is effective for periods beginning after June 15, 2022. The Enterprise will implement the provisions of Statement No. 96 in fiscal year 2023.

4) In April 2022, the GASB issued Statement No. 99, *Omnibus 2022*. This Statement enhances comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing (1) practice issues that have been identified during implementation and application of certain GASB Statements and (2) accounting and financial reporting for financial guarantees. The new standard is effective for periods beginning after June 15, 2023. The Enterprise will implement the provisions of Statement No. 99 in fiscal year 2024.

5) In June 2022, the GASB issued Statement No. 100, *Accounting Changes and Error Corrections*. This Statement enhances accounting and financial reporting requirements for accounting changes and error corrections to provide more understandable, reliable, relevant, consistent, and comparable information for making decisions or assessing accountability. The new standard is effective for periods beginning after June 15, 2023. The Enterprise will implement the provisions of Statement No. 100 in fiscal year 2024.

6) In June 2022, the GASB issued Statement No. 101, *Compensated Absences*. This Statement is to better meet the information needs of financial statement users by updating the recognition and measurement guidance for compensated absences. The new standard is effective for periods beginning after December 15, 2023. The Enterprise will implement the provisions of Statement No. 101 in fiscal year 2025.

(x) Reclassifications

The Enterprise has reclassified certain amounts relating to the prior period to conform to its current period presentation. These reclassifications had no effect on previously reported changes in net position.

(3) Cash, Cash Equivalents, and Investments

The Enterprise's cash, cash equivalents, and investments with the City Treasury are invested in an unrated City pool pursuant to investment policy guidelines established by the City Treasurer. The objectives of the policy guidelines are, in order of priority, preservation of capital, liquidity, and yield. The policy addresses soundness of financial institutions in which the City will deposit funds, types of investment instruments as permitted by the California Government Code, and the percentage of the portfolio that may be invested in certain instruments with longer terms to maturity. The City Treasurer allocates income from the investment of pooled cash at month-end in proportion to the Enterprise's average daily cash balances. The primary objectives of the Enterprise's investment policy are consistent with the City's policy.

The restricted cash for bond reserves is held by an independent trustee outside the City investment pool. The balances as of June 30, 2022 and 2021 were $39,358 and $10,196, respectively. Funds held by the trustee established under the 2003 Indenture are invested in "Permitted Investments" as defined in the Indenture. "Permitted Investments" include money market funds registered under the Federal Investment Company Act of 1940 and whose shares are registered under the Federal Securities Act of 1933 and having a rating by S&P of "AAAm-G," "AAAm," or "AAm" and a rating by Moody's of "Aaa," "Aa1," or "Aa2."

(Dollars in thousands, unless otherwise stated)

The Enterprise categorizes its fair value measurements within the fair value hierarchy established by GAAP. The hierarchy is based on the valuation inputs used to measure fair value of the assets. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs. The inputs and techniques used for valuing securities are not necessarily an indication of risk associated with investing in those securities.

The following is a summary of the restricted and unrestricted cash and investments outside City Treasury and the fair value hierarchy as of June 30, 2022 and 2021.

Cash and Investments outside City Treasury

		June 30, 2022			Fair Value Measurements Using		
Investments	Credit Ratings (S&P/Moody's)	Maturities	Fair Value	Investments exempt from fair value	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Unobservable Inputs (Level 3)
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	$ 39,296	39,296	—	—	—
Money Market Funds	A-1+/P-1	< 90 days	44	44	—	—	—
Cash and Cash Equivalents	N/A		18	18	—	—	—
Total Restricted Cash and Investments outside City Treasury			$ 39,358	39,358	—	—	—
Cash and Cash Equivalents	N/A		397	397	—	—	—
Total Cash and Investments outside City Treasury			$ 397	397	—	—	—

Cash and Investments outside City Treasury

		June 30, 2021			Fair Value Measurements Using		
Investments	Credit Ratings (S&P/Moody's)	Maturities	Fair Value	Investments exempt from fair value	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Unobservable Inputs (Level 3)
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	$ 10,159	10,159	—	—	—
Money Market Funds	A-1+/P-1	< 90 days	26	26	—	—	—
Cash and Cash Equivalents	N/A		11	11	—	—	—
Total Restricted Cash and Investments outside City Treasury			$ 10,196	10,196	—	—	—
Cash and Cash Equivalents	N/A		366	366	—	—	—
Total Cash and Investments outside City Treasury			$ 366	366	—	—	—

(Dollars in thousands, unless otherwise stated)

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, 2022 and 2021 included a $0 unrealized gain due to changes in fair values on Commercial Paper.

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

	2022	2021
Current assets:		
Cash and investments with City Treasury	$ 285,029	281,572
Cash and investments outside City Treasury	397	366
Restricted cash and investments outside City Treasury	15,587	298
Non-current assets:		
Restricted cash and investments outside City Treasury	23,771	9,898
Total cash, cash equivalents, and investments	$ 324,784	292,134

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
2022	20.2%	14.0%	14.9%	50.9%
2021	14.5%	27.6%	29.7%	28.2%

(Dollars in thousands, unless otherwise stated)

(4) Capital Assets

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

Capital assets as of June 30, 2022 and 2021 consisted of the following:

	2021	Increases	Decreases	2022
Capital assets not being depreciated and amortized:				
Land and rights-of-way	$ 44,572	—	—	44,572
Intangible assets	3,046	—	—	3,046
Construction work in progress	1,340,644	514,679	(130,906) *	1,724,417
Total capital assets not being depreciated and amortized	1,388,262	514,679	(130,906)	1,772,035
Capital assets being depreciated and amortized:				
Facilities and improvements	3,599,978	129,342	—	3,729,320
Intangible assets	8,976	572	—	9,548
Machinery and equipment	102,397	1,165	(288)	103,274
Total capital assets being depreciated and amortized	3,711,351	131,079 *	(288)	3,842,142
Less accumulated depreciation and amortization for:				
Facilities and improvements	(1,412,109)	(69,879)	—	(1,481,988)
Intangible assets	(4,615)	(872)	—	(5,487)
Machinery and equipment	(76,039)	(4,500)	288	(80,251)
Total accumulated depreciation and amortization	(1,492,763)	(75,251)	288	(1,567,726)
Total capital assets being depreciated and amortized, net	2,218,588	55,828	—	2,274,416
Total capital assets, net	$ 3,606,850	570,507	(130,906)	4,046,451

* Decrease in construction work in progress is less than increase in capital assets being depreciated is explained by $1,165 direct additions to machinery and equipment offset by $992 in capital project write-offs, mainly related to the Public Works various locations infrastructure improvement projects.

	2020	Increases	Decreases	2021
Capital assets not being depreciated and amortized:				
Land and rights-of-way	$ 44,572	—	—	44,572
Intangible assets	3,046	—	—	3,046
Construction work in progress	910,338	619,819	(189,513) *	1,340,644
Total capital assets not being depreciated and amortized	957,956	619,819	(189,513)	1,388,262
Capital assets being depreciated and amortized:				
Facilities and improvements	3,419,029	180,949	—	3,599,978
Intangible assets	4,615	4,361	—	8,976
Machinery and equipment	101,595	964	(162)	102,397
Total capital assets being depreciated and amortized:	3,525,239	186,274 *	(162)	3,711,351
Less accumulated depreciation and amortization for:				
Facilities and improvements	(1,344,830)	(67,279)	—	(1,412,109)
Intangible assets	(4,615)	—	—	(4,615)
Machinery and equipment	(71,462)	(4,739)	162	(76,039)
Total accumulated depreciation and amortization	(1,420,907)	(72,018)	162	(1,492,763)
Total capital assets being depreciated and amortized, net	2,104,332	114,256	—	2,218,588
Total capital assets, net	$ 3,062,288	734,075	(189,513)	3,606,850

* Decrease in construction work in progress is greater than increase in capital assets being depreciated is explained by $4,203 in capital project write-offs, mainly related to the Watershed Storm Management Project, Operational Decision System Ph2 Project, and the Seacliff Ave Sewer Replacement-627 Project offset by $964 direct additions to machinery and equipment.

(Dollars in thousands, unless otherwise stated)

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. Per the implementation of GASB No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*, no interest was capitalized to construction in progress beginning in fiscal year 2022. Interest included in the construction work in progress and total interest expense incurred during the years ended June 30, 2022 and 2021 are as follows:

		2022	Restated 2021	
Interest expensed	$	77,743	34,944	*
Interest included in construction work in progress		—	33,420	
Total interest incurred	$	77,743	68,364	

*Restated per implementation of GASB 87 – *Leases*

(5) Restricted Assets

The Master Bond Resolution was discharged upon the issuance of the 2003 Series A Refunding Bonds. Pursuant to the Indenture, which became effective with the issuance of the 2003 Series A Refunding Bonds, all net revenues of the Enterprise (except amounts on deposit in the rebate fund) are irrevocably pledged to the punctual payment of debt service on the Wastewater revenue bonds. Accordingly, the net revenues of the Enterprise shall not be used for any other purpose while any of its revenue bonds are outstanding except as expressly permitted by the Indenture. Further, all net revenues shall be deposited by the City Treasurer, by instruction of the Enterprise, in special funds designated as the Revenue Fund, which must be maintained in the City Treasury. These funds, held at the City Treasury, are recorded in the statements of net position of the Enterprise as cash and investments. Deposits in the Revenue Fund, including earnings thereon, shall be appropriated, transferred, expended, or used for the following purposes and only in accordance with the following priority:

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

(Dollars in thousands, unless otherwise stated)

In accordance with the Indenture, the Enterprise maintains certain restricted cash and investment balances in trust. Restricted assets held in trust consisted of the following as of June 30, 2022 and 2021:

	2022	2021
Cash and investments outside City Treasury:		
2009 Series C Certificates of Participation - 525 Golden Gate	$ 433	433
2009 Series D Certificates of Participation - 525 Golden Gate	1,472	1,732
2010 Series A Wastewater revenue bond fund	—	3,592
2010 Series B Wastewater revenue bond fund	8,826	4,401
2021 Series A Wastewater revenue bond fund	24,396	—
2021 Series B Wastewater revenue bond fund	3,937	—
2021 Series A Wastewater revenue note fund	145	—
2021 Series B Wastewater revenue note fund	86	—
Commercial Paper - Tax Exempt	63	38
Total cash and investments outside City Treasury	39,358	10,196
Interest and other receivables:		
Wastewater revenue bond construction fund including capacity fee receivables	2,735	3,291
Due from other government for State Revolving Fund	202,795	20,755
	205,530	24,046
Total restricted assets	$ 244,888	34,242

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

(Dollars in thousands, unless otherwise stated)

(6) Short-Term Debt

Under the voter approved 2002 Proposition E, the Commission and Board of Supervisors authorized the issuance of up to $750,000 in commercial paper for the purpose of reconstructing, expanding, repairing, or improving the Enterprise's facilities. The Enterprise had $379,157 and $638,518 in commercial paper outstanding as of June 30, 2022 and 2021, respectively.

In accordance with GASB Statement No. 88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*, the Enterprise had $370,843 and $111,482 in unused authorization as of June 30, 2022 and 2021, respectively. Significant Events of default as specified in the Reimbursement Agreements, Revolving Credit and Term Loan Agreements, or Revolving Credit Agreements include 1) payment defaults 2) material breach of warranty, representation, or other non-remedied breach of covenants as specified in the respective agreements (not cured within applicable grace periods), and 3) bankruptcy and insolvency events, which may result in all outstanding obligations to be immediately due and payable (unless waived by the respective Bank, if applicable); or issuance of a No-Issuance Notice, reduction in credit to outstanding amount plus interest coverage, and/or termination of the respective agreement. As of June 30, 2022, there were no such events described herein.

(7) Changes in Long-Term Liabilities

Long-term liability activities for the years ended June 30, 2022 and 2021 are as follows:

	Interest rate	Maturity (Calendar Year)	Restated 2021*	Additions	Reductions	2022	Due within one year
Revenue Bonds:							
2010 Series A	4.00% - 5.00%	2021	$ 8,820	—	(8,820)	—	—
2010 Series B (Build America)	4.65 - 5.82	2040	192,515	—	—	192,515	7,280
2013 Series A	1.00 - 5.00	2025	29,595	—	(14,060)	15,535	13,090
2013 Series B	4.00 - 5.00	2042	331,585	—	—	331,585	—
2016 Series A	4.00 - 5.00	2046	240,580	—	—	240,580	—
2016 Series B	4.00 - 5.00	2046	67,820	—	—	67,820	—
2018 Series A	4.00 - 5.00	2043	229,050	—	—	229,050	7,715
2018 Series B	5.00	2043	185,950	—	—	185,950	6,260
2018 Series C	2.13	2048	179,145	—	—	179,145	—
2021 Series A	4.00 - 5.00	2051	—	260,835	—	260,835	—
2021 Series B	5.00	2051	—	37,045	—	37,045	—
For issuance premiums			124,862	75,820	(9,489)	191,193	—
Revenue Notes:							
2021 Series A - Biosolids	1.00	2025	—	218,355	—	218,355	—
2021 Series B - SEP Headworks	1.00	2026	—	129,110	—	129,110	—
For issuance premiums			—	3,358	(467)	2,891	—
Total revenue bonds & notes payable			1,589,922	724,523	(32,836)	2,281,609	34,345
2009 Series C Certificates of Participation (COPs)	2.00 - 5.00	2022	1,611	—	(785)	826	826
2009 Series C COPs issuance premiums			18	—	(14)	4	4
2009 Series D COPs (Build America)	6.36 - 6.49	2041	24,458	—	—	24,458	—
State Revolving Fund Loans (CWSRF loans)	0.80 - 1.80	2056	108,559	196,583	(2,483)	302,659	2,481
Other post-employment benefits obligations			50,711	5,466	(7,054)	49,123	—
Net pension liability			103,746	—	(103,746)	—	—
Accrued vacation and sick leave			11,658	2,895	(3,652)	10,901	5,479
Accrued workers' compensation			6,582	3,207	(2,243)	7,546	1,393
Due to other City departments			739	—	(110)	629	111
Lease liability			5,952	27	(2,341)	3,638	2,341
Damage claims liability			16,713	8,812	(13,480)	12,045	9,323
Pollution remediation obligation			7,800	260	—	8,060	—
Total			$ 1,928,469	941,773	(168,744)	2,701,498	56,303

*Restated due to implementation of GASB 87 - *Leases*

(Dollars in thousands, unless otherwise stated)

	Interest rate	Maturity (Calendar Year)	2020	Additions	Reductions	Restated 2021*	Due within one year
Revenue Bonds:							
2010 Series A	4.00% - 5.00%	2021	$ 17,210	—	(8,390)	8,820	8,820
2010 Series B (Build America)	4.65 - 5.82	2040	192,515	—	—	192,515	—
2013 Series A	1.00 - 5.00	2025	44,445	—	(14,850)	29,595	14,060
2013 Series B	4.00 - 5.00	2042	331,585	—	—	331,585	—
2016 Series A	4.00 - 5.00	2046	240,580	—	—	240,580	—
2016 Series B	4.00 - 5.00	2046	67,820	—	—	67,820	—
2018 Series A	4.00 - 5.00	2043	229,050	—	—	229,050	—
2018 Series B	5.00	2043	185,950	—	—	185,950	—
2018 Series C	2.13	2048	179,145	—	—	179,145	—
For issuance premiums			133,433	—	(8,571)	124,862	—
Total revenue bonds payable			1,621,733	—	(31,811)	1,589,922	22,880
2009 Series C Certificates of Participation (COPs)	2.00 - 5.00	2022	2,358	—	(747)	1,611	785
2009 Series C COPs issuance premiums			43	—	(25)	18	—
2009 Series D COPs (Build America)	6.36 - 6.49	2041	24,458	—	—	24,458	—
State Revolving Fund Loans (CWSRF loans)	0.80 - 1.80	2051	88,549	22,468	(2,458)	108,559	2,483
Other post-employment benefits obligations			58,183	6,609	(14,081)	50,711	—
Net pension liability			86,235	42,533	(25,022)	103,746	—
Accrued vacation and sick leave			8,914	5,406	(2,662)	11,658	5,811
Accrued workers' compensation			6,051	2,616	(2,085)	6,582	1,198
Due to other City departments			849	—	(110)	739	110
Lease liability			8,247		(2,295)	5,952	2,314
Damage claims liability			15,891	6,428	(5,606)	16,713	5,892
Pollution remediation obligation			7,800	—	—	7,800	—
Total			$ 1,929,311	86,060	(86,902)	1,928,469	41,473

*Restated due to implementation of GASB 87 - *Leases*

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

(a) Wastewater Revenue Bonds 2010 Series A

During fiscal year 2010, the Enterprise issued revenue bonds 2010 Series A in the amount of $47,050 with interest rates ranging from 4.0% to 5.0%. Proceeds from the bonds were used to redeem $50,000 in outstanding commercial paper notes, fund a cash debt service reserve fund, and pay the costs of issuing the bonds. The bonds were rated “Aa3” and “AA-” by Moody’s and S&P, respectively, at the time of issuance. Bonds mature through October 1, 2021. The true interest cost is 2.9%. As of June 30, 2022 and 2021, the 2010 Series A bonds’ principal amount outstanding was $0 and $8,820, respectively.

(b) Wastewater Revenue Bonds 2010 Series B

During fiscal year 2010, the Enterprise issued revenue bonds 2010 Series B (Federally Taxable – Build America Bonds – Direct Payment) in the amount of $192,515 with interest rates ranging from 4.7% to 5.8%. Proceeds from the bonds were used to redeem $53,500 in outstanding commercial paper notes, provide funding for capital projects in the amount of $112,429, fund a cash debt service reserve fund, and pay financing costs for the bonds. The bonds were rated “Aa3” and “AA-” by Moody’s and S&P, respectively, at the time of issuance. Bonds mature through October 1, 2040. The true interest cost is 3.7%. As of June 30, 2022 and 2021, the 2010 Series B bonds’ principal amount outstanding was $192,515.

(c) Wastewater Revenue Bonds 2013 Series A

In January 2013, the Enterprise issued tax-exempt revenue bonds 2013 Series A in the amount of $193,400 for the purpose of refunding the remaining portion of the outstanding 2003 Series A bonds maturing on and after October 1, 2013. The bonds carried “Aa3” and “AA-” ratings from Moody’s and S&P, respectively, at the time of issuance. The 2013 Series A refunding bonds include serial bonds with interest rates varying from 1.0% to 5.0% and have a final maturity in October 2025. The Series A bonds have a true interest cost of 1.2%. The 2013 Series A bonds also refunded the remaining portion of the outstanding state revolving fund loans. The refunding resulted in the recognition of a deferred accounting loss of $2,986, gross debt service savings of $35,107 over the next 13 years, and an economic gain of $32,783 or 15.4% of the refunded principal. As of June 30, 2022 and 2021, the principal amount outstanding of the 2013 Series A bonds was $15,535 and $29,595, respectively.

(d) Wastewater Revenue Bonds 2013 Series B

In February 2013, the Enterprise issued revenue bonds 2013 Series B in the amount of $331,585 with interest rates ranging from 4.0% to 5.0%. Proceeds from the bonds were used for Wastewater capital projects, pay off all outstanding Wastewater commercial paper notes, and pay the costs of issuing the bonds. The bonds were rated “Aa3” and “AA-” by Moody’s and S&P, respectively, at the time of issuance. Bonds mature through October 1, 2042. The true interest cost is 3.6%. As of June 30, 2022 and 2021, the principal amount outstanding of the 2013 Series B bonds was $331,585.

(e) Wastewater Revenue Bonds 2016 Series A

In May 2016, the Enterprise issued tax-exempt revenue bonds 2016 Series A (Green Bonds) in the amount of $240,580 with interest rates ranging from 4.0% to 5.0%. Proceeds from the bonds were used for Wastewater capital projects, to pay off $53,439 of outstanding commercial paper notes, to fund capitalized interest, and pay the costs of issuing the bonds. The bonds carried ratings of “AA” and “Aa3” from S&P and Moody’s, respectively, at the time of issuance. Bonds mature through October 1, 2046. The bonds have a true interest cost of 3.2%. As of June 30, 2022 and 2021, the principal amount outstanding of the 2016 Series A bonds was $240,580.

(f) Wastewater Revenue Bonds 2016 Series B

In May 2016, the Enterprise issued tax-exempt revenue bonds 2016 Series B in the amount of $67,820 with interest rates ranging from 4.0% to 5.0%. Proceeds from the bonds were used for Wastewater capital projects, to pay off $20,560 of outstanding commercial paper notes, to fund capitalized interest, and pay the costs of issuing the bonds. The bonds carried ratings of “AA” and “Aa3” from S&P and Moody’s, respectively, at the time of issuance. Bonds mature through October 1, 2046. The bonds have a true interest cost of 3.2%. As of June 30, 2022 and 2021, the principal amount outstanding of the 2016 Series B bonds was $67,820.

(g) Wastewater Revenue Bonds 2018 Series A

In August 2018, the Enterprise issued tax-exempt revenue bonds 2018 Series A (SSIP) (Green Bonds) in the amount of $229,050 with interest rates ranging from 4.0% to 5.0%. Proceeds from the bonds were used for Wastewater capital projects in furtherance of the SFPUC’s Sewer System Improvement Program (“SSIP”), to pay off $25,000 of outstanding commercial paper notes, to fund capitalized interest, and to pay the costs of issuing the bonds. The bonds carried ratings of “AA” and

"Aa3" from S&P and Moody's, respectively, at the time of issuance. Bonds mature through October 1, 2043. The bonds have a true interest cost of 3.4%. As of June 30, 2022 and 2021, the principal amount outstanding of the 2018 Series A bonds was $229,050.

(h) Wastewater Revenue Bonds 2018 Series B

In August 2018, the Enterprise issued tax-exempt revenue bonds 2018 Series B (Non-SSIP) in the amount of $185,950 with 5.0% interest rate. Proceeds from the bonds were used for Wastewater capital projects, to fund capitalized interest, and pay the costs of issuing the bonds. The bonds carried ratings of "AA" and "Aa3" from S&P and Moody's, respectively, at the time of issuance. Bonds mature through October 1, 2043. The bonds have a true interest cost of 3.5%. As of June 30, 2022 and 2021, the principal amount outstanding of the 2018 Series B bonds was $185,950.

(i) Wastewater Revenue Bonds 2018 Series C

In August 2018, the Enterprise issued tax-exempt revenue bonds 2018 Series C (SSIP) (Green Bonds) in the amount of $179,145 with 2.1% interest rate. Proceeds from the bonds were used for Wastewater capital projects, to fund capitalized interest, and pay the costs of issuing the bonds. The bonds carried ratings of "AA" and "Aa3" from S&P and Moody's, respectively, at the time of issuance. Bonds mature through October 1, 2048. The Initial Mandatory Tender date of the 2018 Series C bonds is October 1, 2023. The bonds have a true interest cost of 3.5%. As of June 30, 2022 and 2021, the principal amount outstanding of the 2018 Series C bonds was $179,145.

(j) Wastewater Revenue Bonds 2021 Series AB

In November 2021, the Enterprise issued tax-exempt revenue bonds, 2021 Series AB in the aggregate amount of $297,880. The purpose of the 2021 Series AB Bonds was to refund approximately $340,000 aggregate principal amount of commercial paper notes which funded various capital projects of the Wastewater Enterprise. The bonds carried "Aa2" and "AA" ratings from Moody's and S&P, respectively.

The $260,835 2021 Series A Bonds were issued as tax-exempt Green Bonds to refund approximately $296,000 of commercial paper notes for SSIP capital projects. The Series A bonds were issued as serial bonds with coupons of 4.0% and 5.0% and a final maturity of 2051. The 2021 Series A bonds have a true interest cost of 3.0%. As of June 30, 2022, the principal amount of the 2021 Series A bonds outstanding was $260,835.

The $37,045 2021 Series B bonds were issued as tax-exempt bonds to refund approximately $44,000 of commercial paper notes for Wastewater capital projects. The Series B bonds were issued as serial bonds with coupons of 5.0% and have a final maturity of 2051. The Series B bonds have a true interest cost of 3.2%. As of June 30, 2022, the principal amount of the 2021 Series B bonds outstanding was $37,045.

(k) Wastewater Revenue Notes 2021 Series AB

In November 2021, the Enterprise issued tax-exempt revenue (Green) notes, 2021 Sub-Series A and Sub-Series B together with an aggregate principal of $347,465 to finance a portion of the design, acquisition and construction of the Biosolids Digester Facility Project and Southeast Water Pollution Control Plant improvements. The SFPUC intends to pay principal of the 2021A Notes and 2021B Notes from the proceeds of one or more draws under WIFIA Loan Agreements for the Biosolids

(Dollars in thousands, unless otherwise stated)

Digester Facility Project and Southeast Treatment Plant Improvements, respectively, or from the proceeds of future obligations.

The $218,355 2021 Series A Notes were issued as tax-exempt Green Notes to fund a portion of the Biosolids Digester Facilities Project. The Series A Notes were issued with 1.0% coupons and a final maturity of 2025. The 2021 Series A Notes have a true interest cost of 0.75%. As of June 30, 2022, the principal amount of 2021 Series A Notes outstanding was $218,355.

The $129,110 2021 Series B Notes were issued as tax-exempt Green Notes to fund a portion of Southeast Water Pollution Control Plant improvements. The Series B Notes were issued with 1.0% coupons and a final maturity of 2026. The 2021 Series B Notes have a true interest cost of 0.81%. As of June 30, 2022, the principal amount of 2021 Series B Notes outstanding was $129,110.

(l) Future Annual Debt Services of Revenue Bonds and Notes and Refunding Bonds

The following table presents the future annual debt service relating to the revenue and refunding bonds and revenue notes outstanding as of June 30, 2022. The interest before subsidy amounts includes the interest for 2010 Series A and B, 2013 Series A and B, 2016 Series A and B, 2018 Series A, B, and C, 2021 Series A and B bonds, and 2021 Series A and B notes. The federal interest subsidy amounts represent 35% of the interest, excluding sequestration, for the 2010 Series B revenue bonds.

	Principal	Interest before subsidy	Federal interest subsidy*	Interest net of subsidy
Fiscal years ending June 30:				
2023	$ 34,345	79,288	(3,471)	75,817
2024	36,905	79,234	(3,356)	75,878
2025	36,935	79,083	(3,235)	75,848
2026	257,030	76,151	(3,105)	73,046
2027	169,625	72,469	(2,968)	69,501
2028-2032	233,765	325,416	(12,483)	312,933
2033-2037	295,065	259,098	(7,749)	251,349
2038-2042	367,020	181,095	(2,061)	179,034
2043-2047	404,575	96,342	—	96,342
2048-2052	252,260	22,115	—	22,115
	2,087,525	1,270,291	(38,428)	1,231,863
Less: Current portion	(34,345)			
Add: Unamortized bond premiums	194,084			
Long-term portion as of June 30, 2022	$ 2,247,264			

*The SFPUC received an IRS notice, dated June 2, 2022, that the federal interest subsidy on the 2010 Series B bonds is reduced by 5.7% through fiscal year 2030, or a total reduction of $2,323, due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same after fiscal year 2023.

(Dollars in thousands, unless otherwise stated)

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

(m) Certificates of Participation Issued for the 525 Golden Gate Avenue Headquarters Building

In October 2009, the City issued $167,670 in certificates of participation to fund the headquarters building of the SFPUC at 525 Golden Gate Avenue. The 2009 Series C were issued for $38,120 and 2009 Series D for $129,550 as "Build America Bonds" on a taxable basis under the 2009 American Recovery and Reinvestment Act. The 2009 Series C certificates carry interest rates ranging from 2.0% to 5.0% and mature on November 1, 2022. The 2009 Series D certificates carry interest rates ranging from 6.4% to 6.5% and mature on November 1, 2041. After adjusting for the federal interest subsidy, the true interest cost averages 3.4% and 4.3% for Series C and Series D, respectively.

Under the terms of a memorandum of understanding (MOU) between the City and the SFPUC dated October 1, 2009, the City conveyed the real property to the Trustee, the Bank of New York Mellon Trust Company, N.A., which was replaced by U.S. Bank in March 2014 under a property lease in exchange for the proceeds of the sale of the certificates. The Trustee has leased the property back to the City for the City's use under a project lease. The City is obligated under the project lease to pay base rental payments and other payments to the Trustee each year during the 32-year term of the project lease. The Commission makes annual base rental payments to the City for the building equal to annual debt service on the certificates. There are no events of default stated in this MOU.

Each of the three Enterprises has an ownership interest in the building equal to their projected usage of space as follows: Water (73%), Wastewater (15%), and Power (12%). Similarly, each Enterprise is responsible for a portion of the annual base rental payment based on their ownership percentages less contributed equity. The percentage share of base rental payments for the Enterprises is as follows: Water (71.4%), Wastewater (18.9%), and Power (9.7%).

The future annual debt services relating to the certificates of participation 2009 Series C outstanding as of June 30, 2022 are as follows:

Certificates of Participation 2009 Series C (Tax Exempt)	Principal	Interest	Total
Fiscal years ending June 30:			
2023	$ 826	21	847
	826	21	847
Less: Current portion	(826)		
Add: Unamortized bond premiums	4		
Less: Current portion	(4)		
Long-term portion as of June 30, 2022	$ —		

(Dollars in thousands, unless otherwise stated)

The future annual debt services relating to the certificates of participation 2009 Series D outstanding as of June 30, 2022 are as follows:

Certificates of Participation 2009 Series D (Taxable)		Principal	Interest before subsidy	Federal interest subsidy*	Interest net of subsidy
Fiscal years ending June 30:					
2023	$	—	1,578	(521)	1,057
2024		864	1,551	(512)	1,039
2025		900	1,494	(493)	1,001
2026		937	1,436	(474)	962
2027		977	1,375	(454)	921
2028-2032		5,539	5,865	(1,936)	3,929
2033-2037		6,825	3,874	(1,279)	2,595
2038-2042		8,416	1,411	(466)	945
Total			18,584	(6,135)	12,449
Long-term portion as of June 30, 2022	$	24,458			

*The SFPUC received an IRS notice dated June 2, 2022 that the federal interest subsidy on the 2009 Series D bonds is reduced by 5.7% through fiscal year 2030, or a total reduction of $371, due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same after fiscal year 2023.

(n) Lake Merced Green Infrastructure Project CWSRF Loan

In January 2016, then amended in May 2016, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a Clean Water State Revolving Fund ("CWSRF") Loan to fund the Lake Merced Green Infrastructure Project of the Sewer System Improvement Program. The aggregate amount of the CWSRF loans is $7,435. The loan bears an interest rate of 1.6% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; completion was in October 2020. The CWSRF loan is secured on a parity lien basis with the Enterprise's outstanding revenue bonds. The SFPUC has received loan disbursements to date totaling $6,116 and a construction period interest of $166 transferred to principal. As of June 30, 2022 and 2021, the principal amount outstanding of the loan was $6,112 and $6,282, respectively.

(o) Southeast Plant (SEP) 521/522 and Disinfection Upgrade Project CWSRF Loan

In September 2017, then amended in December 2017 and May 2018, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a CWSRF Loan to fund the SEP 521/522 and Disinfection Upgrade Project of the Sewer System Improvement Program. The aggregate amount of the CWSRF loans is $40,007. The loan bears an interest rate of 1.8% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; substantial completion occurred in July 2019. The CWSRF loan is secured on a parity lien basis with the Enterprise's outstanding revenue bonds. The SFPUC has received proceeds from loan disbursements to date totaling $39,741. As of June 30, 2022 and 2021, the principal amount outstanding of the loan was $37,450 and $38,512, respectively.

(p) North Point Facility Outfall Rehabilitation Project CWSRF Loan

In September 2017, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a CWSRF Loan to fund the North Point Facility Outfall Rehabilitation Project of the Sewer System Improvement Program. The aggregate amount of the CWSRF loans is $20,199. The loan bears an interest rate of 1.8% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; substantial completion occurred in February 2018. The CWSRF loans is secured on a parity lien basis with the Enterprise's outstanding revenue bonds. The SFPUC has received proceeds from loan disbursements to date totaling $17,706. As of June 30, 2022 and 2021 the principal amount outstanding of the loan was $15,710 and $16,181, respectively.

(q) Southeast Plant (SEP) Primary/Secondary Clarifier Upgrade Project CWSRF Loan

In September 2017, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a CWSRF Loan to fund the SEP Primary/Secondary Clarifier Upgrade Project of the Sewer System Improvement Program. The aggregate amount of the CWSRF loans is $34,446. The loan bears an interest rate of 0.8% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; substantial completion occurred in June 2018. The CWSRF loan is secured on a parity lien basis with the Enterprise's outstanding revenue bonds. The SFPUC has received proceeds from loan disbursements to date totaling $29,197. As of June 30, 2022 and 2021, the principal amount outstanding of the loan was $26,048 and $26,829, respectively.

(r) Oceanside Plant (OSP) Digester Gas Utilization Upgrade Project

In May 2020, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a CWSRF Loan to fund the OSP Digester Gas Utilization Upgrade Project of the Sewer System Improvement Program. The CWSRF loan is in the amount of $54,388, which includes $4,000 of principal forgiveness, or a grant. The loan bears an interest rate of 1.4% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction. The CWSRF loan is secured on a parity lien basis with the Enterprise's outstanding revenue bonds. The SFPUC has received proceeds from loan disbursements to date totaling $22,544 and a receivable for reimbursement of $6,117, which included a loan forgiveness grant of $4,000. As of June 30, 2022 and 2021, the principal amount outstanding of the loan was $24,661 and $20,755, respectively.

(s) Southeast Plant (SEP) Biosolids Digester Facilities Project

In May 2020, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a CWSRF Loan to fund the SEP Biosolids Digester Facilities Project of the Sewer System Improvement Program. The CWSRF loan is in the amount of $132,000, which includes $4,000 of principal forgiveness, or a grant. The loan bears an interest rate of 1.4% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; substantial completion is expected in May 2026. The CWSRF loan is secured on a parity lien basis with the Enterprise's outstanding revenue bonds. The SFPUC has received proceeds from loan disbursements to date totaling $0 and a receivable for reimbursement of $132,000, which includes a $4,000 loan forgiveness grant. As of June 30, 2022 and 2021, the principal amount outstanding of the loan was $128,000 and $0, respectively.

(t) Southeast Plant (SEP) New Headworks (Grit) Replacement Project

In May 2021, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a CWSRF Loan to fund the SEP New Headworks (Grit) Replacement Project of the Sewer System Improvement Program. The CWSRF loan is in the amount of $112,036. The loan bears an interest rate of 1.1% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; substantial completion is expected in March 2024. The CWSRF loan is secured on a parity lien basis with the Enterprise's outstanding revenue bonds. The SFPUC has received proceeds from loan disbursements to date totaling $0 and a receivable for reimbursement of $64,678. As of June 30, 2022 and 2021, the principal amount outstanding of the loan was $64,678 and $0, respectively.

(Dollars in thousands, unless otherwise stated)

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

The future annual debt services relating to the State Revolving Fund Loan to fund the Lake Merced Green Infrastructure Project, the North Point Facility Outfall Rehabilitation Project, the SEP Primary/Secondary Clarifier Upgrade Project, the SEP 521/522 and Disinfection Upgrade Project, the OSP Digester Gas Utilization Upgrade Project, the SEP Biosolids Digester Facilities Project, and the SEP New Headworks (Grit) Replacement Project outstanding as of June 30, 2022 are as follows:

California Clean Water State Revolving Fund Loan		Principal	Interest and Fees*	Total
Fiscal years ending June 30:				
2023	$	2,481	1,524	4,005
2024		3,192	1,824	5,016
2025		5,079	2,481	7,560
2026		5,154	2,406	7,560
2027		8,693	4,121	12,814
2028-2032		45,402	18,672	64,074
2033-2037		48,807	15,267	64,074
2038-2042		52,476	11,598	64,074
2043-2047		56,429	7,645	64,074
2048-2052		48,642	3,637	52,279
2053-2056		26,304	812	27,116
		302,659	69,987	372,646
Less: Current portion		(2,481)		
Long-term portion as of June 30, 2022	$	300,178		

* Interest and Fees included debt admin fees for the North Point Facility and SEP Clarifier Upgrade SRF loans.

(v) WIFIA Loan Agreement-Biosolids Digester Facility Project

In July 2018, the SFPUC entered into a “Water Infrastructure Finance and Innovation Act (WIFIA)” Loan Agreement (“WIFIA Loan”) with the United States Environmental Protection Agency in the amount of $699,242. The WIFIA Loan was entered into pursuant to the WIFIA statute authorized by Congress in 2014. The WIFIA Loan will fund 49% of the costs of the Wastewater Enterprise’s Biosolids Digester Facility Project plus certain eligible expenses. Payment of the WIFIA Loan will be secured by a senior lien pledge of the Wastewater Enterprise’s net revenues and is on a parity lien basis with the SFPUC’s outstanding Wastewater Revenue Bonds and Clean Water State Revolving Fund (“SRF”) Loans entered into with the California State Water Resources Control Board.

The original 2018 loan bore a fixed interest rate of 3.09% for a 35-year term, with loan repayment expected to begin in fiscal year 2026, after substantial completion of project construction. In June 2020 the SFPUC re-executed the WIFIA Loan Agreement to have a fixed interest rate of 1.45% for a 35-year term. All other terms of WIFIA Loan Agreement are unchanged.

The SFPUC has not submitted any requests for loan disbursements to date and there is no outstanding loan principal as of June 30, 2022.

(Dollars in thousands, unless otherwise stated)

(w) WIFIA Loan Agreement-Southeast Treatment Plant Improvements

In June 2020, the San Francisco Public Utilities Commission ("SFPUC") entered into a "Water Infrastructure Finance and Innovation Act (WIFIA)" Loan Agreement ("WIFIA Loan") with the United States Environmental Protection Agency in the amount of $513,862. The WIFIA Loan was entered into pursuant to the WIFIA statute authorized by Congress in 2014. The WIFIA Loan will fund 49% of the costs of the Wastewater Enterprise's SEP New Headworks Replacement Project and additional costs of the revised Biosolids Digester Facility Project plus certain eligible expenses. Payment of the WIFIA Loan will be secured by a senior lien pledge of the Wastewater Enterprise's net revenues and is on a parity lien basis with the SFPUC's outstanding Wastewater Revenue Bonds and Clean Water State Revolving Fund ("SRF") Loans entered into with the California State Water Resources Control Board. The loan will bear a fixed interest rate of 1.45% for a 35-year term, with loan repayment expected to begin in fiscal year 2025, after substantial completion of project construction. The SFPUC has not submitted any requests for loan disbursements to date and there is no outstanding loan principal as of June 30, 2022.

(x) Events of Default and Remedies

In accordance with GASB Statement No. 88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*, significant events of default as specified in the Wastewater Enterprise Indenture (applicable to Wastewater Revenue Bonds, SRF Loans, and WIFIA Loan include 1) Non-payment 2) material breach of warranty, representation, or indenture covenants (not cured within applicable grace periods), and 3) bankruptcy and insolvency events, which may result in the Trustee (upon written request by the majority of the owners (by aggregate amount of the bond obligations or of a credit provider), declaring the principal and the interest accrued thereon, to be due and payable immediately. As of June 30, 2022, there were no such events described herein.

(8) Revenue Pledge

The Enterprise has pledged future revenues to repay various revenue bonds, notes, and State Revolving Fund loans. Proceeds from the revenue bonds, revenue notes, and State Revolving Fund provided financing for various capital construction projects, and to refund previously issued bonds. The bonds, notes, and State Revolving Fund loans are payable through fiscal years 2052, 2027, and 2056, respectively, and are solely from revenues of the Enterprise.

The original amount of revenue bonds issued, revenue notes issued, and State Revolving Fund loans, total principal and interest remaining, principal and interest paid during fiscal years 2022 and 2021, applicable net revenues, and funds available for debt service are as follows:

	2022	2021
Bonds issued with revenue pledge	$ 1,964,975	1,667,095
Notes issued with revenue pledge	347,465	—
Clean Water State Revolving Fund (CWSRF) loans with revenue pledge	310,265	113,681
Principal and interest remaining due at the end of the year	3,730,462	2,578,879
Principal and interest paid during the year	86,619	82,066
Net revenues for the year ended June 30	155,504	108,399
Funds available for debt service	310,835	306,177

(Continued)

(Dollars in thousands, unless otherwise stated)

(9) Leases

The Enterprise as a lessee has entered into long-term leases for land, office space, communication site, data processing, machinery, and other equipment. The terms and conditions for these leases vary, which range between 1-75 years.

A summary of intangible right-to-use leases during the year ended June 30, 2022 and 2021 is as follows:

		Balance July 1, 2021	Increases	Decreases	Remeasurements	Balance June 30, 2022
Right-to-use assets:						
Land	$	–	–	–	–	–
Building/Facility		8,247	–	–	–	8,247
Equipment		–	–	–	–	–
Total lease assets		8,247	–	–	–	8,247
Less accumulated amortization:						
Right-to-use assets:						
Land		–	–	–	–	–
Building/Facility		2,325	2,325	–	–	4,650
Equipment		–	–	–	–	–
Total accumulated amortization		2,325	2,325	–	–	4,650
Total lease assets, net	$	5,922	(2,325)	–	–	3,597

		Balance July 1, 2020	Increases	Decreases	Remeasurements	Balance July 1, 2021
Right-to-use assets:						
Land	$	–	–	–	–	–
Building/Facility		8,247	–	–	–	8,247
Equipment		–	–	–	–	–
Total lease assets		8,247	–	–	–	8,247
Less accumulated amortization:						
Right-to-use assets:						
Land		–	–	–	–	–
Building/Facility			2,325	–	–	2,325
Equipment		–	–	–	–	–
Total accumulated amortization		–	2,325	–	–	2,325
Total lease assets, net	$	8,247	(2,325)	–	–	5,922

(Dollars in thousands, unless otherwise stated)

A summary of changes in the related lease liabilities during the year ended June 30, 2022 and 2021 is as follows:

	Balance July 1, 2021	Additions	Remeasurements	Deductions	Balance June 30, 2022	Amounts Due Within One Year
Lease liabilities	$ 5,952	–	–	2,314	3,638	2,341
Total	$ 5,952	–	–	2,314	3,638	2,341

	Balance July 1, 2020	Additions	Remeasurements	Deductions	Balance June 30, 2021	Amounts Due Within One Year
Lease liabilities	$ 8,247	–	–	2,295	5,952	2,314
Total	$ 8,247	–	–	2,295	5,952	2,314

Future annual lease payments as of June 30, 2022 and 2021 are as follows:

Year ending June 30:	Principal amount	Interest amount	Total
2023	$ 2,341	30	2,371
2024	1,297	6	1,303
2025	–	–	–
2026	–	–	–
2027	–	–	–
2028-2032	–	–	–
2033-2037	–	–	–
2038-2042	–	–	–
	3,638	36	3,674
Less: Current portion	(2,341)		
Long-term portion as of June 30, 2022	$ 1,297		

Year ending June 30:	Principal amount	Interest amount	Total
2022	$ 2,314	57	2,371
2023	2,341	30	2,371
2024	1,297	6	1,303
2025	–	–	–
2026	–	–	–
2027-2031	–	–	–
2032-2036	–	–	–
2037-2041	–	–	–
	5,952	93	6,045
Less: Current portion	(2,314)		
Long-term portion as of June 30, 2021	$ 3,638		

(Dollars in thousands, unless otherwise stated)

Variable lease payments

Variable lease payments, other than those payments that depend on an index or rate or are fixed in substance, are excluded for the measurement of the lease liability. Such amounts are recognized as lease expenses in the period in which the obligation for those payments is incurred.

Certain equipment or facility rental leases require the Enterprise to make variable lease payments that based on usage, related to the property taxes levied on the lessor, and insurance payments made by the lessor, these amounts are generally determined annually. The amounts recognized as expense for variable lease payments not included in the measurement of the lease liability were $207 and $130 during the year ended June 30, 2022 and 2021, respectively.

(10) Employee Benefits

(a) Pension Plan

The Enterprise participates in a cost-sharing multiple-employer defined benefit pension Plan (SFERS Plan). The SFERS Plan is administered by the San Francisco City and County Employees' Retirement System (SFERS). Contributions are recognized in the period in which they are due pursuant to legal requirements. For purposes of measuring the net pension liability, deferred outflows/inflows of resources related to pensions, pension expense, information about the fiduciary net position of the SFERS Plan, and additions to/deductions from the SFERS Plan's fiduciary net position have been determined on the same basis as they are reported by the SFERS Plan. Benefit payments (including refunds of employee contributions) are recognized when currently due and payable in accordance with the benefit terms. Investments are reported at fair value.

GASB Statement No. 68 requires that the SFERS Plan reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:

Fiscal year 2022	
Valuation Date (VD)	June 30, 2020 updated to June 30, 2021
Measurement Date (MD)	June 30, 2021
Measurement Period (MP)	July 1, 2020 to June 30, 2021

Fiscal year 2021	
Valuation Date (VD)	June 30, 2019 updated to June 30, 2020
Measurement Date (MD)	June 30, 2020
Measurement Period (MP)	July 1, 2019 to June 30, 2020

SFERS Plan – The City is an employer of the SFERS Plan with a proportionate share of 94.64% as of June 30, 2021 (measurement date), and 94.39% as of June 30, 2020 (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 2021 and 2020. The Enterprise's net pension liability/(asset), deferred outflows/inflows of resources related to pensions, amortization of deferred outflows/inflows, and pension expense is based on its allocated percentage. The Enterprise's allocation of the City's proportionate share was 1.99% as of June 30, 2021 and 2.03% as of June 30, 2020 (measurement dates).

Plan Description – The SFERS Plan provides basic service retirement, disability, and death benefits based on specified percentages of defined final average monthly salary and provides annual cost of living adjustments (COLA) after retirement. The SFERS Plan also provides pension continuation benefits to qualified survivors. The San Francisco City and County Charter and the Administrative Code are the authorities which establish and amend the benefit provisions and employer obligations of the SFERS Plan. The Retirement System issues a publicly available financial report that includes financial statements and required supplementary information for the SFERS Plan. That report may be obtained on the Retirement System's website http://mysfers.org or by writing to the San Francisco City and County Employees' Retirement System, 1145 Market Street, 5th Floor, San Francisco, CA 94103 or by calling (415) 487-7000.

Benefits – The Retirement System provides service retirement, disability, and death benefits based on specified percentages of defined final average monthly salary and annual COLA after retirement. Benefits and refunds are recognized when due and payable in accordance with the terms of the SFERS Plan. The Retirement System pays benefits according to the category of employment and the type of benefit coverage provided by the City and County. The four main categories of SFERS Plan members are:

a) Miscellaneous Non-Safety Members – staff, operational, supervisory, and all other eligible employees who are not in special membership categories.

b) Sheriff's Department and Miscellaneous Safety Members – Sheriffs assuming office on and after January 7, 2012, and undersheriffs, deputized personnel of the Sheriff's Department, and miscellaneous safety employees hired on and after January 7, 2012.

c) Firefighter Members – firefighters and other employees whose principal duties are in fire prevention and suppression work or who occupy positions designated by law as firefighter member positions.

d) Police Members – police officers and other employees whose principal duties are in active law enforcement or who occupy positions designated by law as police member positions.

The membership groups and the related service retirement benefits are included in the Notes to the Basic Financial Statements of San Francisco Employees' Retirement System.

All members are eligible to apply for a disability retirement benefit, regardless of age, when they have 10 or more years of credited service and they sustain an injury or illness that prevents them from performing their duties. Safety members are eligible to apply for an industrial disability retirement benefit from their first day on the job if their disability is caused by an illness or injury that they receive while performing their duties.

All retired members receive a benefit adjustment each July 1, which is the Basic COLA. The majority of adjustments are determined by changes in Consumer Price Index with increases capped at 2%. The SFERS Plan provides for a Supplemental COLA in years when there are sufficient "excess" investment earnings in the SFERS Plan. The maximum benefit adjustment each July 1 is 3.5% including the Basic COLA. Effective July 1, 2012, voters approved changes in the criteria for payment of the Supplemental COLA benefit, so that Supplemental COLAs would only be paid when the SFERS Plan is also fully funded on a market value of assets basis. Certain provisions of this voter-approved proposition were challenged in the Courts. A decision by the California Courts modified the interpretation of the proposition. Effective July 1, 2012, members who retired before November 6, 1996 will receive a Supplemental COLA only when the SFERS Plan is also fully funded on a market value of assets basis. However, the “full funding” requirement does not apply to members who retired on or after November 6, 1996 and were hired before January 7, 2012. For all members hired before January 7, 2012, all Supplemental COLAs paid to them in retirement benefits will continue into the future even where an additional Supplemental COLA is not payable in any given year. For members hired on and after January 7, 2012, a Supplemental COLA will only be paid to retirees when the SFERS Plan is fully funded on a market value of asset basis and in addition for these members, Supplemental COLAs will not be permanent adjustments to retirement benefits. That is, in years when a Supplemental COLA is not paid, all previously paid Supplemental COLAs will expire.

Funding & Contribution Policy

SFERS Plans – Contributions are made by both the City and the participating employees. Employee contributions are mandatory as required by the Charter. Employee contribution rates varied from 7.5% to 13.0% as a percentage of gross covered salary in fiscal years 2022 and 2021. Most employee groups agreed through collective bargaining for employees to contribute the full amount of the employee contributions on a pretax basis. The Enterprise is required to contribute at an actuarially determined rate. Based on the July 1, 2020 actuarial report, the required employer contribution rate for fiscal year 2022 was 19.91% to 24.41%. Based on the July 1, 2019 actuarial report, the required employer contribution rate for fiscal year 2021 was 22.40% to 26.90%.

Employer contributions and employee contributions made by the employer to the SFERS Plan are recognized when due and the employer has made a formal commitment to provide the contributions. The City’s proportionate share of employer contributions recognized by the Retirement System in fiscal years ended June 30, 2021 and 2020 (measurement periods) were $791,736 and $701,307, respectively. The Enterprise’s allocation of employer contributions for fiscal year 2021 and 2020 were $16,083 and $14,352, respectively.

For the year ended June 30, 2022, the City’s actuarial determined contribution was $729,578. Wastewater’s share was $14,543 for fiscal year 2022 and will be recognized as a reduction of the net pension liability in the subsequent fiscal period.

Pension Liabilities/(Assets), Pension Expenses, Deferred Outflows, and Inflows of Resources Related to Pensions

Fiscal Year 2022

As of June 30, 2022, the City reported net pension assets (NPA) for its proportionate share of the net pension (asset) of the SFERS Plan of $2,446,564. The City’s net pension asset for the SFERS Plan is measured as the proportionate share of the net pension asset. The net pension asset of the SFERS Plan is measured as of June 30, 2021 (measurement date), and the total pension (asset) for the SFERS Plan used to calculate the net pension (asset) was determined by an actuarial valuation as of June 30, 2020 rolled forward to June 30, 2021 using standard update procedures. The City’s proportion of the net pension (asset) for the SFERS Plan was based on a projection of the City’s long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. The Enterprise’s allocation of the City’s proportionate share of the net pension (asset) for the SFERS Plan as of June 30, 2022 was ($48,770).

(Dollars in thousands, unless otherwise stated)

For the year ended June 30, 2022, the City's recognized pension (benefit) was ($922,979), which includes Retirement Benefit Plan pension expense of $28,735. The Enterprise's allocation of pension (benefit) including amortization of deferred outflows/inflows related pension items was ($20,601).

As of June 30, 2022, the Enterprise reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

Fiscal Year 2022 Schedule of Deferred Outflows and Inflows of Resources

		Deferred Outflows of Resources	Deferred Inflows of Resources
Pension contributions subsequent to measurement date	$	14,543	—
Differences between expected and actual experience		4,479	160
Changes in assumptions		3,300	8,562
Net difference between projected and actual earnings on pension plan investments		—	105,948
Change in employer's proportion		3,047	—
Total	$	25,369	114,670

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
2023		(26,134)
2024		(23,662)
2025		(24,937)
2026		(29,111)
Total	$	(103,844)

Fiscal Year 2021

The City reported net pension liabilities for its proportionate share of the pension liability of the SFERS Plan of $5,107,270 as of June 30, 2021. The City's net pension liability for the SFERS Plan is measured as the proportionate share of the net pension liability. The net pension liability of the SFERS Plan is measured as of June 30, 2020 (measurement date), and the total pension liability for the SFERS Plan used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2019 rolled forward to June 30, 2020 using standard update procedures. The City's proportion of the net pension liability for the SFERS Plan was based on a projection of the City's long-term share of contributions 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 SFERS Plan as of June 30, 2021 was $103,746.

(Dollars in thousands, unless otherwise stated)

For the year ended June 30, 2021, the City's recognized pension expense was $962,576 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 $19,053. Pension expense increased from the prior year, largely due to the amortization of deferrals.

As of June 30, 2021, the Enterprise reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

Fiscal Year 2021 Schedule of Deferred Outflows and Inflows of Resources

		Deferred Outflows of Resources	Deferred Inflows of Resources
Pension contributions subsequent to measurement date	$	16,083	—
Differences between expected and actual experience		3,524	325
Changes in assumptions		5,696	1,797
Net difference between projected and actual earnings on pension plan investments		2,172	—
Change in employer's proportion		2,744	26
Total	$	30,219	2,148

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
2022	$	(787)
2023		3,009
2024		5,528
2025		4,238
Total	$	11,988

(Dollars in thousands, unless otherwise stated)

Actuarial Assumptions

Fiscal Year 2022

A summary of the actuarial assumptions and methods used to calculate the Total Pension Liability/(Asset) as of June 30, 2021 (measurement period) is provided below, including any assumptions that differ from those used in the July 1, 2020 actuarial valuation. Refer to the July 1, 2020 actuarial valuation report for a complete description of all other assumptions, which can be found on the Retirement System's website http://mysfers.org.

Key Actuarial Assumptions	SFERS Plan
Valuation Date	June 30, 2020 updated to June 30, 2021
Measurement Date	June 30, 2021
Actuarial Cost Method	Entry-Age Normal Cost
Expected Rate of Return	7.40% net of investment expenses
Municipal Bond Yield	2.21% as of June 30, 2020
	2.16% as of June 30, 2021
	Bond Buyer 20-Bond GO Index, June 25, 2020 and June 24, 2021
Inflation	2.50%
Projected Salary Increases	3.25% plus merit component based on employee classification and years of service
Discount Rate	7.40% as of June 30, 2020
	7.40% as of June 30, 2021
Administrative Expenses	0.60% of payroll as of June 30, 2020
	0.60% of payroll as of June 30, 2021

Basic COLA	Old Miscellaneous and All New Plans	Old Police & Fire, pre 7/1/75	Old Police & Fire Charters A8.595 and A8.596	Old Police & Fire Charters A8.559 and A8.585
June 30, 2020	2.00%	2.50%	3.10%	4.20%
June 30, 2021	2.00%	1.90%	2.50%	3.60%

Mortality rates for health Miscellaneous members were based upon adjusted PubG-2010 Employee and Retiree tables for non-annuitants and retirees, respectively. Mortality rates were then projected generationally from the base year using the MP-2019 projection scale.

The actuarial assumptions used at the June 30, 2021 measurement date was based upon the result of a demographic experience study for the period July 1, 2014 through June 30, 2019 and an economic experience as of July 1, 2020.

(Dollars in thousands, unless otherwise stated)

Fiscal Year 2021

A summary of the actuarial assumptions and methods used to calculate the Total Pension Liability as of June 30, 2020 (measurement period) is provided below, including any assumptions that differ from those used in the July 1, 2019 actuarial valuation. Refer to the July 1, 2019 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	SFERS Plan
Valuation Date	June 30, 2019 updated to June 30, 2020
Measurement Date	June 30, 2020
Actuarial Cost Method	Entry-Age Normal Cost
Expected Rate of Return	7.40% net of pension plan investment, including inflation
Municipal Bond Yield	3.50% as of June 30, 2019
	2.21% as of June 30, 2020
	Bond Buyer 20-Bond GO Index, June 27, 2019 and June 25, 2020
Inflation	2.75%
Projected Salary Increases	3.50% plus merit component based on employee classification and years of service
Discount Rate	7.40% as of June 30, 2019
	7.40% as of June 30, 2020
Administrative Expenses	0.60% of payroll as of June 30, 2019
	0.60% of payroll as of June 30, 2020

Basic COLA		Old Miscellaneous and All New Plans	Old Police & Fire, pre 7/1/75	Old Police & Fire Charters A8.595 and A8.596	Old Police & Fire Charters A8.559 and A8.585
	June 30, 2019	2.00%	2.50%	3.10%	4.20%
	June 30, 2020	2.00%	2.50%	3.10%	4.20%

For healthy annuitants, the sex distinct 2009 CalPERS healthy annuitant mortality table, adjusted 1.014 for females and 0.909 for males. For active members, the sex distinct 2009 CalPERS employee mortality tables, adjusted 0.918 for females and 0.948 for males. Rates are projected generationally from the 2009 base year using a modified version of the MP-2015 projection scale.

The actuarial assumptions used at the June 30, 2020 measurement date was based upon the result of a demographic experience study for the period July 1, 2009 through June 30, 2014 and an economic experience as of July 1, 2019.

Discount Rate

Fiscal Year 2022

SFERS Plan – The beginning and end of year measurements are based on different assumptions and contribution methods that may result in different discount rates. The discount rate was 7.40% as of the June 30, 2021 (measurement date) and June 30, 2020 (measurement date).

The discount rate used to measure the total pension liability as of June 30, 2021 was 7.40%. The projection of cash flows used to determine the discount rate assumed that SFERS plan member contributions will continue to be made at the rates specified in the Charter. Employer contributions were assumed to be made in accordance with the contribution policy in effect for July 1, 2020 actuarial valuation. That policy includes contributions equal to the employer portion of the Entry Age normal costs for members as of the valuation date, a payment for the expected administrative expenses, and an amortization payment on the unfunded actuarial liability.

(Dollars in thousands, unless otherwise stated)

The amortization payment is based on closed periods that vary in length depending on the source. Charter amendments prior to July 1, 2014 are amortized over 20 years. After July 1, 2014, any Charter changes to active member benefits are amortized over 15 years and changes to inactive member benefits, including Supplemental COLAs, are amortized over 5 years. The remaining unfunded actuarial liability not attributable to Charter amendments as of July 1, 2013 is amortized over a 19-year period commencing July 1, 2014. Experience gains and losses and assumption or method changes on or after July 1, 2014 are amortized over 20 years. The full amortization payment for the 2015 assumption changes is phased in over a period of 5 years. For the July 1, 2016 valuation, the increase in the unfunded actuarial liability attributable to the Supplemental COLAs granted on July 1, 2013 and July 1, 2014 are amortized over 17-years and 5-years, respectively. All amortization schedules are established as a level percentage of payroll so payments increase 3.25% each year. The unfunded actuarial liability is based on an actuarial value of assets that smooths investment gains and losses over five years and a measurement of the actuarial liability that excludes the value of any future Supplemental COLAs.

While the contributions and measure of actuarial liability in the funding valuation do not anticipate any future Supplemental COLAs, the projected contributions for the determination of the discount rate include the anticipated future amortization payments on future Supplemental COLAs for current members when they are expected to be granted. For members who worked after November 6, 1996 and before Proposition C passed (Post 97 Retirees), a Supplemental COLA is granted if the actual investment earnings during the year exceed the expected investment earnings on the actuarial value of assets. For members who did not work after November 6, 1996 and before Proposition C passed, the market value of assets must also exceed the actuarial liability at the beginning of the year for a Supplemental COLA to be granted. When a Supplemental COLA is granted, the amount depends on the amount of excess earnings and the basic COLA amount for each membership group. The large majority of members receive a 1.50% Supplemental COLA when granted.

Because the probability of a Supplemental COLA depends on the current funded level of the Retirement System for certain members, an assumption was developed as of June 30, 2021 for the probability and amount of Supplemental COLA for each future year. A full Supplemental COLA will be paid to all retired members, and their beneficiaries, who were retired effective July 1, 2021. The table below shows the net assumed Supplemental COLA for members with a 2.00% basic COLA for sample years.

Assumed Supplemental COLA for Members with a 2.00% Basic COLA

Fiscal years	96 - Prop C	Before 11/6/96 or After Prop C
2023	0.75 %	0.70 %
2025	0.75	0.70
2027	0.75	0.60
2029	0.75	0.60
2031	0.75	0.60
2033+	0.75	0.50

(Dollars in thousands, unless otherwise stated)

The projection of benefit payments to current members for determining the discount rate includes the payment of anticipated future Supplemental COLAs.

Based on these assumptions, the Retirement System's fiduciary net position was projected to be available to make projected future benefit payments for current members for all future years. Projected benefit payments are discounted at the long-term expected return on assets of 7.40% to the extent the fiduciary net position is available to make the payments and at the municipal bond rate of 2.16% to the extent they are not available. The single equivalent rate used to determine the total pension liability as of June 30, 2021 was 7.40%.

The long-term expected rate of return on pension plan investments was 7.40%. It was set by the Retirement Board after consideration of both expected future returns and historical returns experienced by the Retirement System. Expected future returns were determined by using a building-block method in which best-estimate ranges of expected future real rates of return were developed for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Target allocation and best estimates of geometric long-term expected real rates of return (net of pension plan investment expense and inflation) for each major asset class are summarized in the following table.

Long-Term Expected Real Rates of Return

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global Equity	37.0 %	4.2 %
Private Equity	23.0	7.9
Private Credit	10.0	5.1
Real Assets	10.0	5.1
Hedge Funds/Absolute Returns	10.0	2.9
Treasuries	8.0	0.0
Liquid Credit	5.0	2.3
Leverage	-3.0	0.1
Total	100.0	

Fiscal Year 2021

SFERS Plan – The beginning and end of year measurements are based on different assumptions and contribution methods that may result in different discount rates. The discount rate was 7.40% as of the June 30, 2020 (measurement date) and June 30, 2019 (measurement date).

The discount rate used to measure the total pension liability as of June 30, 2020 was 7.40%. The projection of cash flows used to determine the discount rate assumed that SFERS plan member contributions will continue to be made at the rates specified in the Charter. Employer contributions were assumed to be made in accordance with the contribution policy in effect for July 1, 2019 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.

(Dollars in thousands, unless otherwise stated)

The amortization payment is based on closed periods that vary in length depending on the source. Charter amendments prior to July 1, 2014 are amortized over 20 years. After July 1, 2014, any Charter changes to active member benefits are amortized over 15 years and changes to inactive member benefits, including Supplemental COLAs, are amortized over 5 years. The remaining unfunded actuarial liability not attributable to Charter amendments as of July 1, 2013 is amortized over a 19-year period commencing July 1, 2014. Experience gains and losses and assumption or method changes on or after July 1, 2014 are amortized over 20 years. The full amortization payment for the 2015 assumption changes is phased in over a period of 5 years. For the July 1, 2016 valuation, the increase in the unfunded actuarial liability attributable to the Supplemental COLAs granted on July 1, 2013 and July 1, 2014 are amortized over 17-years and 5-years, respectively. All amortization schedules are established as a level percentage of payroll so payments increase 3.50% each year. The unfunded actuarial liability is based on an actuarial value of assets that smooths investment gains and losses over five years and a measurement of the actuarial liability that excludes the value of any future Supplemental COLAs.

While the contributions and measure of actuarial liability in the funding valuation do not anticipate any future Supplemental COLAs, the projected contributions for the determination of the discount rate include the anticipated future amortization payments on future Supplemental COLA's for current members when they are expected to be granted. For members who worked after November 6, 1996 and before Proposition C passed (Post 97 Retirees), a Supplemental COLA is granted if the actual investment earnings during the year exceed the expected investment earnings on the actuarial value of assets. For members who did not work after November 6, 1996 and before Proposition C passed, the market value of assets must also exceed the actuarial liability at the beginning of the year for a Supplemental COLA to be granted. When a Supplemental COLA is granted, the amount depends on the amount of excess earnings and the basic COLA amount for each membership group. The large majority of members receive a 1.50% Supplemental COLA when granted.

Because the probability of a Supplemental COLA depends on the current funded level of the Retirement System for certain members, an assumption was developed as of June 30, 2020 for the probability and amount of Supplemental COLA for each future year. There were no excess earnings during the fiscal year ending June 30, 2020; consequently, no Supplemental COLA will be paid effective July 1, 2020. The table below shows the net assumed Supplemental COLA for members with a 2.00% basic COLA for sample years.

Assumed Supplemental COLA for Members with a 2.00% Basic COLA

Fiscal years	96 - Prop C	Before 11/6/96 or After Prop C
2022	0.75 %	0.19 %
2024	0.75	0.27
2026	0.75	0.30
2028	0.75	0.33
2030	0.75	0.35
2032	0.75	0.37
2034+	0.75	0.38

(Dollars in thousands, unless otherwise stated)

The projection of benefit payments to current members for determining the discount rate includes the payment of anticipated future Supplemental COLAs.

Based on these assumptions, the Retirement System's fiduciary net position was projected to be available to make projected future benefit payments for current members for all future years. Projected benefit payments are discounted at the long-term expected return on assets of 7.40% to the extent the fiduciary net position is available to make the payments and at the municipal bond rate of 2.21% to the extent they are not available. The single equivalent rate used to determine the total pension liability as of June 30, 2020 was 7.40%.

The long-term expected rate of return on pension plan investments was 7.40%. It was set by the Retirement Board after consideration of both expected future returns and historical returns experienced by the Retirement System. Expected future returns were determined by using a building-block method in which best-estimate ranges of expected future real rates of return were developed for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Target allocation and best estimates of geometric long-term expected real rates of return (net of pension plan investment expense and inflation) for each major asset class are summarized in the following table.

Long-Term Expected Real Rates of Return

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global Equity	31.0 %	4.9 %
Private Equity	18.0	7.9
Real Assets	17.0	5.7
Hedge Funds/Absolute Returns	15.0	3.0
Private Credit	10.0	4.8
Treasuries	6.0	-0.5
Liquid Credit	3.0	2.7
Total	100.0	

Sensitivity of Proportionate Share of the Net Pension Liability (NPL)/Net Pension Asset (NPA) to Changes in the Discount Rate – The following presents the Enterprise's allocation of the employer's proportionate share of the net pension liability/(asset) for the SFERS Plan, calculated using the discount rate, as well as what the Enterprise's allocation of the employer's proportionate share of the net pension liability/(asset) would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate.

Fiscal Year 2022

	June 30, 2021 (measurement period)		
Employer	1% Decrease Share of NPL @ 6.40%	Share of NPA @ 7.40%	1% Increase Share of NPA @ 8.40%
Wastewater	$ 32,504	(48,770)	(115,868)

Fiscal Year 2021

Employer	1% Decrease Share of NPL @ 6.40%	Share of NPL @ 7.40%	1% Increase Share of NPL @ 8.40%
Wastewater	$ 183,436	103,746	37,907

(Dollars in thousands, unless otherwise stated)

(b) Other Post-Employment Benefits

The Enterprise participates in the City's single employer defined benefit other postemployment benefits plan (the Plan). The Plan is maintained by the City and is administered through the City's Health Service System. The plan provides postemployment medical, dental and vision insurance benefits to eligible employees, retired employees, surviving spouses, and domestic partners. Health benefit provisions are established and may be amended through negotiations between the City and the respective bargaining units. The City does not issue a separate report on its other post-employment benefit plan.

GASB Statement No. 75 requires that reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used.

San Francisco Health Service System Retiree Plan - Single Employer

Fiscal year 2022	
Valuation Date (VD)	June 30, 2020, updated to June 30, 2021
Measurement Date (MD)	June 30, 2021
Measurement Period (MP)	July 1, 2020 to June 30, 2021

Fiscal year 2021	
Valuation Date (VD)	June 30, 2020
Measurement Date (MD)	June 30, 2020
Measurement Period (MP)	July 1, 2019 to June 30, 2020

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, 2021. 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, 2021 and 2020 measurement dates was 1.33%.

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	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.

(Dollars in thousands, unless otherwise stated)

[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.

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

Medical:	PPO – City Health Plan (self-insured) and UHC Medicare Advantage (fully insured) HMO – Kaiser (fully-insured) and Blue Shield (flex-funded)
Dental:	Delta Dental, DeltaCare USA, and UnitedHealthcare Dental
Vision:	Vision benefits are provided under the medical insurance plans and are administered by Vision Service Plan.

Projections of the sharing of benefit related costs are based on an established pattern of practice.

Contributions

Benefits provided under the Plan are currently paid through "pay-as-you-go" funding. Additionally, under the City Charter, active officers and employees of the City who commenced employment on or after January 10, 2009, shall contribute to the Retiree Health Care Trust Fund (Trust Fund) a percentage of compensation not to exceed 2% of pre-tax compensation. The City shall contribute 1% of compensation for officers and employees who commenced employment on or after January 10, 2009 until the City's GASB Actuary has determined that the City's portion of the Trust Fund is fully funded. At that time, the City's 1% contribution shall cease, and officers and employees will each contribute 50% of the maximum 2% of pre-tax compensation.

Starting July 1, 2016, active officers and employees of the City who commenced employment on or before January 9, 2009, shall contribute 0.25% of pre-tax compensation into the Trust Fund. Beginning on July 1st of each subsequent year, the active officers and employees of the City who commenced employment on or before January 9, 2009, shall contribute an additional 0.25% of pre-tax compensation up to a maximum of 1%. Starting July 1, 2016, the City shall contribute 0.25% of compensation into the Trust Fund for each officer and employee who commenced employment on or before January 9, 2009. Beginning on July 1st of each subsequent year, the City shall contribute an additional 0.25% of compensation, up to a maximum of 1% for each officer and employee who commenced employment on or before January 9, 2009. When the City's GASB Actuary has determined that the City's portion of the Trust Fund is fully funded, the City's 1% contribution shall cease, and officers and employees will each contribute 50% of the maximum 1% of pre-tax compensation.

Additional or existing contribution requirements may be established or modified by amendment to the City's Charter.

For the fiscal years ending June 30, 2022 and 2021, the City's funding was based on "pay-as-you-go" plus a contribution of $41,841 and $39,555 to the Retiree Healthcare Trust Fund, respectively. The "pay-as-you-go" portion paid by the City was $211,025 for a total contribution of $252,866 for the fiscal year ending June 30, 2022, and $206,439 for a total contribution of $245,994 for the fiscal year ending June 30, 2021. The Enterprise's proportionate share of the City's contributions for fiscal year 2022 was $3,365, and for fiscal year 2021 was $3,263 and will be recognized as a reduction of the net OPEB liability in the subsequent fiscal period.

(Dollars in thousands, unless otherwise stated)

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

Fiscal Year 2022

As of June 30, 2022, the City reported net OPEB liabilities related to the Plan of $3,691,122. The Enterprise's proportionate share of the City's net OPEB liability as of June 30, 2022 was $49,123.

For the year ended June 30, 2022, the City's recognized OPEB expense was $272,001. Amortization of the City's deferred outflows and inflows is included as a component of OPEB expense. The Enterprise's proportionate share of the City's OPEB expense was $5,364.

As of June 30, 2022, the Enterprise reported its proportionate share of the City's deferred outflows and inflows of resources related to OPEB from the following sources:

Wastewater	Deferred Outflows of Resources	Deferred Inflows of Resources
Contributions subsequent to measurement date	$ 3,365	$ -
Differences between expected and actual experience	1,476	7,564
Changes in assumptions	2,076	-
Net difference between projected and actual earnings on plan investments	-	930
Change in proportion	5,981	146
Total	$ 12,898	$ 8,640

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:	
2023	$ 291
2024	288
2025	301
2026	231
2027	95
Thereafter	(313)
Total	$ 893

(Dollars in thousands, unless otherwise stated)

Fiscal Year 2021

As of June 30, 2021, the City reported net OPEB liabilities related to the Plan of $3,823,334. The Enterprise's proportionate share of the City's net OPEB liability as of June 30, 2021 was $50,711.

For the year ended June 30, 2021, the City's recognized OPEB expense was $320,684. Amortization of the City's deferred outflows and inflows is included as a component of OPEB expense. The Enterprise's proportionate share of the City's OPEB expense was a credit of $6,174 to expense.

As of June 30, 2021, the Enterprise reported its proportionate share of the City's deferred outflows/inflows of resources related to OPEB from the following sources:

Wastewater	Deferred Outflows of Resources	Deferred Inflows of Resources
Contributions subsequent to measurement date	$ 3,263	$ -
Differences between expected and actual experience	1,839	7,265
Changes in assumptions	2,567	-
Net difference between projected and actual earnings on plan investments	33	-
Change in proportion	7,407	-
Total	$ 15,109	$ 7,265

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:	
2022	$ 829
2023	849
2024	846
2025	859
2026	788
Thereafter	410
Total	$ 4,581

(Dollars in thousands, unless otherwise stated)

Actuarial Assumptions

Fiscal Year 2022

A summary of the actuarial assumptions and methods used to calculate the Total OPEB Liability as of June 30, 2021 (measurement date) is provided below:

Key Actuarial Assumptions

Valuation Date	June 30, 2020, updated to June 30, 2021
Measurement Date	June 30, 2021
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 6.74% trending down to ultimate rate of 4.04% in 2075
	Medicare trend starts at 7.24% trending down to ultimate rate of 4.04% in 2075
	10-County average trend starts at 5.50% trending down to ultimate rate of 4.04% in 2075
	Vision and expenses trend remains a flat 3.0% for all years
Expected Rate of Return on Plan Assets	7.00%
Salary Increase Rate	Wage Inflation Component: 3.25%
	Additional Merit Component (dependent on years of service):
	Police: 0.50% - 7.50%
	Fire: 0.50% - 14.00%
	Muni Drivers: 0.00% - 16.00%
	Craft: 0.50% - 3.75%
	Misc.: 0.30% - 5.50%
Inflation Rate	Wage Inflation: 3.25% compounded annually
	Consumer Price Inflation: 2.50% 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, 2019.

Non-Annuitants

		Adjustment Factor	
	Published Table	Male	Female
Miscellaneous	PubG-2010 Employee	0.834	0.866
Safety	PubS-2010 Employee	1.011	0.979

Healthy Retirees

		Adjustment Factor	
	Published Table	Male	Female
Miscellaneous	PubG-2010 Employee	1.031	0.977
Safety	PubS-2010 Employee	0.947	1.044

Disabled Retirees

		Adjustment Factor	
	Published Table	Male	Female
Miscellaneous	PubG-2010 Employee	1.045	1.003
Safety	PubS-2010 Employee	0.916	0.995

Beneficiaries

		Adjustment Factor	
	Published Table	Male	Female
Miscellaneous	PubG-2010 Employee	1.031	0.977
Safety	PubG-2010 Employee	1.031	0.977

The mortality rates in the base tables are projected generationally from the base year using the MP-2019 projection scale.

(Dollars in thousands, unless otherwise stated)

Fiscal Year 2021

A summary of the actuarial assumptions and methods used to calculate the Total OPEB Liability as of June 30, 2020 (measurement date) is provided below:

Key Actuarial Assumptions

Valuation Date	June 30, 2020
Measurement Date	June 30, 2020
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 4.00% in 2022, 7.00% in 2023, trending down to ultimate rate of 4.04% in 2075 Medicare trend starts at 1.00% in 2022, 7.50% in 2023, trending down to ultimate rate of 4.04% in 2075 10-County average trend starts at 4.5% in 2022, 5.50% in 2023, trending down to ultimate rate of 4.04% in 2075 Vision and expenses trend remains a flat 3.0% for all years
Expected Rate of Return on Plan Assets	7.00%
Salary Increase Rate	Wage Inflation Component: 3.25% Additional Merit Component (dependent on years of service): Police: 0.50% - 7.50% Fire: 0.50% - 14.00% Muni Drivers: 0.00% - 16.00% Craft: 0.50% - 3.75% Misc.: 0.30% - 5.50%
Inflation Rate	Wage Inflation: 3.25% compounded annually Consumer Price Inflation: 2.50% 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, 2019.

Non-Annuitants

		Adjustment Factor	
	Published Table	**Male**	**Female**
Miscellaneous	PubG-2010 Employee	0.834	0.866
Safety	PubS-2010 Employee	1.011	0.979

Healthy Retirees

		Adjustment Factor	
	Published Table	**Male**	**Female**
Miscellaneous	PubG-2010 Employee	1.031	0.977
Safety	PubS-2010 Employee	0.947	1.044

Disabled Retirees

		Adjustment Factor	
	Published Table	**Male**	**Female**
Miscellaneous	PubG-2010 Employee	1.045	1.003
Safety	PubS-2010 Employee	0.916	0.995

Beneficiaries

		Adjustment Factor	
	Published Table	**Male**	**Female**
Miscellaneous	PubG-2010 Employee	1.031	0.977
Safety	PubG-2010 Employee	1.031	0.977

The mortality rates in the base tables are projected generationally from the base year using the MP-2019 projection scale.

(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 2022 Employer	-1.00%	Healthcare Trend	1.00%
Wastewater	$ 41,812	$ 49,123	$ 58,236

Fiscal Year 2021 Employer	-1.00%	Healthcare Trend	1.00%
Wastewater	$ 43,846	$ 50,711	$ 59,657

Discount Rate

Fiscal Year 2022

The discount rate used to measure the Total OPEB Liability as of June 30, 2021 was 7.0%. Based on the assumption that plan member contributions will continue to be made at the rates specified in the Charter, it was determined that the Plan's projected fiduciary net position will be greater than or equal to the benefit payments projected for each future period. As such, the long-term expected rate of return on plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

(Dollars in thousands, unless otherwise stated)

The long-term expected rate of return on OPEB plan investments was 7.0% based on expected future returns and historical returns experienced by the Trust Fund. Expected future returns were determined based on 10-year and 20-year capital market assumptions for the Trust Fund's asset allocation. Target allocation for each major asset class and best estimates of geometric real rates of return are summarized in the following table:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return
Equities		
U.S. Large Cap	28.0%	8.2%
U.S. Small Cap	3.0%	9.5%
Developed Market Equity (non-U.S.)	15.0%	8.9%
Emerging Market Equity	13.0%	11.0%
Credit		
Bank Loans	3.0%	4.4%
High Yield Bonds	3.0%	4.4%
Emerging Market Bonds	3.0%	4.3%
Rate Securities		
Investment Grade Bonds	9.0%	1.9%
Long-term Government Bonds	4.0%	3.2%
Short-term Treasury Inflation Protected Securities	4.0%	1.5%
Private Markets		
Private Equity	5.0%	13.0%
Core Private Real Estate	5.0%	6.2%
Risk Mitigating Strategies		
Global Macro	5.0%	4.4%
Total	100.0%	

The following presents the Enterprise's proportionate share of the City's net OPEB liability calculated using the discount rate, as well as what the Enterprise's proportionate share of the City's net OPEB liability would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate:

	June 30, 2021 (measurement period)		
Employer	1% Decrease Share of NOL @ 6.00%	Discount Rate @ 7.00%	1% Increase Share of NOL @ 8.00%
Wastewater	$ 57,442	$ 49,123	$ 42,328

Fiscal Year 2021

The discount rate used to measure the Total OPEB Liability as of June 30, 2020 was 7.0%. Based on the assumption that plan member contributions will continue to be made at the rates specified in the Charter, it was determined that the Plan's projected fiduciary net position will be greater than or equal to the benefit payments projected for each future period. As such, the long-term expected rate of return on plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

(Dollars in thousands, unless otherwise stated)

The long-term expected rate of return on OPEB plan investments was 7.0% based on expected future returns and historical returns experienced by the Trust Fund. Expected future returns were determined based on 10-year and 20-year capital market assumptions for the Trust Fund's asset allocation. Target allocation for each major asset class and best estimates of geometric real rates of return are summarized in the following table:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return
Equities		
U.S. Large Cap	28.0%	8.4%
U.S. Small Cap	3.0%	9.8%
Developed Market Equity (non-U.S.)	15.0%	9.6%
Emerging Market Equity	13.0%	11.7%
Credit		
Bank Loans	3.0%	4.9%
High Yield Bonds	3.0%	4.9%
Emerging Market Bonds	3.0%	4.8%
Rate Securities		
Investment Grade Bonds	9.0%	2.2%
Long-term Government Bonds	4.0%	3.1%
Short-term Treasury Inflation Protected Securities	4.0%	1.9%
Private Markets		
Private Equity	5.0%	12.5%
Core Private Real Estate	5.0%	6.4%
Risk Mitigating Strategies		
Global Macro	5.0%	4.1%
Total	100.0%	

The asset allocation targets summarized above have a 20-year return estimate of 6.90%, which was weighted against a 10-year model estimating a 6.93% return, resulting in the ultimate long-term expected rate of return of 7.00%.

The following presents the Enterprise's proportionate share of the City's net OPEB liability calculated using the discount rate, as well as what the Enterprise's proportionate share of the City's net OPEB liability would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate:

Employer	1% Decrease Share of NOL @ 6.00%	Discount Rate @ 7.00%	1% Increase Share of NOL @ 8.00%
Wastewater	$ 58,848	$ 50,711	$ 44,067

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

(11) Related Parties

Various common costs incurred by the Commission are allocated among the Enterprise, Hetch Hetchy Water and Power and CleanPowerSF, and the Water Enterprise. The allocations are based on the Commission management's best estimate and may change from year to year depending on the activities incurred by each Enterprise and the information available. The administrative costs of $32,212 or 30.0%, which included COVID-19 Project expenses, and $29,457 or 30.0% were allocated to the Enterprise for the years ended June 30, 2022 and 2021, respectively.

The City performs certain administrative services such as maintenance of accounting records and investment of cash for all fund groups within the City. The various funds are charged for these services based on the City's indirect cost allocation plan.

The Enterprise purchases electricity from Hetch Hetchy Power at market rates. This amount, totaling $11,887 and $10,122 for the years ended June 30, 2022 and 2021, respectively, has been included in services provided by other departments in the accompanying financial statements.

The Enterprise purchases water from Water Enterprise at retail rates. This amount, totaling $1,819 and $1,308 for the years ended June 30, 2022 and 2021, respectively, has been included in services provided by other departments in the accompanying financial statements.

The Enterprise provides sewer services to other City departments at non-residential rates established by the Commission, and through the Customer Services Bureau, bills and collects sewer service charges on behalf of the Enterprise.

The City's Department of Public Works provides certain engineering and other services to the Enterprise and charges amounts designed to recover its costs. These services are primarily related to street cleaning, engineering, building repair, and sewer repair. These amounts totaling approximately $13,099 and $15,088 for the years ended June 30, 2022 and 2021, respectively, have been included in services provided by other departments in the accompanying financial statements.

A variety of other City departments provide services such as purchasing, legal, data processing, telecommunications, and human resources to the Enterprise and charge amounts designed to recover those departments' costs. These charges totaling approximately $12,840 and $11,795 for the years ended June 30, 2022 and 2021, respectively, have been included in services provided by other departments in the accompanying financial statements.

As of June 30, 2022 and 2021, the Enterprise has payables in the amount of $629 and $739, respectively, which is associated with the SFPUC Headquarters Living Machine system. As of June 30, 2022 and 2021, the Enterprise has payable of $0 to the City Attorney's Office for legal services provided.

As of June 30, 2022, the Enterprise has interfund receivable of $224, of which $118 from DPW for custom work projects and $106 from the Academy of Sciences for sewer charges. In fiscal year 2021, the Enterprise has interfund receivable of $261, of which $237 from the DPW and $24 from the San Francisco Port for the Islais Creek Project.

As of June 30, 2022, the Enterprise has receivables due of $1,015, consisting of $1,014 from the Treasure Island Development Authority for capacity charges and $1 from the Office of Community

(Dollars in thousands, unless otherwise stated)

Investment and Infrastructure (OCII) for the Candlestick Point Project. In fiscal year 2021, the Enterprise has receivable of $20 due from OCII.

SFPUC's 75-year lease agreement with the San Francisco Recreation and Parks Department, for the use of parking spaces for its fleet of vehicles at the Civic Center Garage, commenced on February 1, 2011. Total payment under this agreement is $6,274, which was fully made as of fiscal year 2015. The expenses and prepayments among the three SFPUC Enterprises are based on 525 Golden Gate occupancy. As of June 30, 2022, the Enterprise's allocable shares of expenses and prepayment were $22 and $1,145, respectively, and as of June 30, 2021 were $21 and $1,167, respectively.

SFPUC's 30-year lease agreement with the San Francisco Port Commission, for the use of approximately 4,833 square feet of land located within Seawall Lot 345 and within the public right-of-way on Terry A. Francois Boulevard and on Illinois Street, commenced on September 1, 2018. SFPUC intends to use the premises for the reconstruction of the Mariposa Pump Station and Force Main Improvements. Total payment under this agreement is $502, which was fully made as of fiscal year 2019. As of June 30, 2022, the Enterprise's expenses and prepayment were $17 and $438, respectively, and as of June 30, 2021 were $17 and $455, 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. In the past three years, there was no settlements that exceeded insurance coverage.

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

(Dollars in thousands, unless otherwise stated)

(a) *General Liability*

Through coordination with the Controller's Office and the City Attorney's Office, the general liability risk exposure is actuarially determined and is addressed through pay-as-you-go funding as part of the budgetary process. Associated costs and estimates are recorded as expenses as required under GAAP for financial statement purposes for both the Enterprise and the City and County of San Francisco's Annual Comprehensive Financial Report. The claim expense allocations are determined based on actuarially determined anticipated claim payments and the projected timing of disbursement.

The changes for the general liability (damage claims) for the years ended June 30, 2022 and 2021 were as follows:

Fiscal years	Beginning of year	Claims	Claims paid and changes in estimates	End of year
2022	$ 16,713	8,812	(13,480)	12,045
2021	15,891	6,428	(5,606)	16,713

(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, 2022 and 2021 were as follows:

Fiscal years	Beginning of year	Claims and changes in estimates	Claims paid	End of year
2022	$ 6,582	3,207	(2,243)	7,546
2021	6,051	2,616	(2,085)	6,582

(c) *Property*

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

(d) Public Officials Liability

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

(e) Employment Practices Liability

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

(f) Cyber Liability

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

(g) Crime

The Enterprise also retains a Commercial Crime Policy, in lieu of bonding its employees, to provide coverage against liabilities or losses due to third-party crime or employee fraud.

(h) Electronic Data Processing

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

(i) Surety Bonds

Bonds are required in most phases of the public utilities construction contracting process for such phases as bid, performance, and payment or maintenance. Additionally, bonds may be required in other contracts where goods or services are provided to ensure compliance with applicable terms and conditions such as warranty.

(j) Errors and Omissions

Errors and omissions, also known as Professional Liability, are commonly transferred through contract to the contracted professional, or retained through self-insurance on a case-by-case basis depending on the size, complexity, or scope of construction or professional service contracts. Examples of such contracts are inclusive of services provided by engineers, architects, design professionals, and other licensed or certified professional service providers.

(k) Builders' Risk

Builders' risk policies of insurance are required to be provided by the contractor on all construction projects for the full value of construction.

(13) Commitments and Litigation

(a) Commitments

As of June 30, 2022 and 2021, the Enterprise has outstanding commitments with third parties of $1,037,607 and $633,255, respectively, for various capital projects and other purchase agreements for materials and services.

(b) Grants

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

(c) Litigation

The Enterprise is a defendant in various legal actions and claims that arise during the normal course of business. The final disposition of these legal actions and claims is not determinable. However, in the opinion of management, the outcome of any litigation of these matters will not have a material effect on the financial position or changes in net position of the Enterprise.

(d) Environmental Issue

As of June 30, 2022, and 2021, the Enterprise recorded $8,060 and $7,800 in pollution remediation liability, respectively. The increase of $260 in pollution remediation liability in fiscal year 2022 is due to violation penalties of $240 at the Southeast Plant for the discharge of secondary treated and disinfected wastewater and $20 at the Oceanside Plant for failure to meet the District permit condition-imposed standards relating to gas released into the atmosphere from digesters. As of June 30, 2022, the pollution remediation liability of $8,060 consisted of $7,800 for the Yosemite Creek toxic sediments and $260 aggregate violation fines at the Southeast Plant and Oceanside Plant. In fiscal year 2021, the pollution liability of $7,800 was based on cleanup cost estimates for the toxic sediments at Yosemite Creek.

(14) Subsequent Events

(a) Wastewater Revenue Bonds, Series 2022B Issuance

On July 6, 2022, the SFPUC issued its San Francisco Wastewater Revenue Bonds, 2022 Sub-Series B (Refunding) with an aggregate principal of $137,080 to refund a portion of the SFPUC's outstanding 2013 Series A and 2013 Series B Wastewater Revenue Bonds.

(b) Wastewater Interim Funding Program – Credit Providers

On July 7, 2022, the SFPUC entered into a $75 million Revolving Credit and Term Loan Agreement with TD Bank N.A. (TD Bank) (Series A-4) which expires July 6, 2027. The Series A-4 Revolving Credit and Term Loan Agreement replaced the $75 million Revolving Credit and Term Loan Agreement from the Toronto Dominion Bank which expired July 8, 2022.

(c) Fourth Extension of Shutoff, Liens, and Fines Moratorium for COVID-19 Relief

On September 13, 2022, the Commission approved to extend moratorium on shutoff of sewer service for residents in the City through June 30, 2023 and granted the General Manager discretion to restart severance and liens processes to multifamily residential accounts carrying balances greater than $25 which are 90 days or more past due.

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

The Honorable Mayor and Board of Supervisors

City and County of San Francisco: We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of San Francisco Wastewater Enterprise (the Enterprise), as of and for the year ended June 30, 2022, and the related notes to the financial statements, which collectively comprise the Enterprise's basic financial statements, and have issued our report thereon dated January 27, 2023.

Report on Internal Control Over Financial Reporting

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

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

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

Report on Compliance and Other Matters

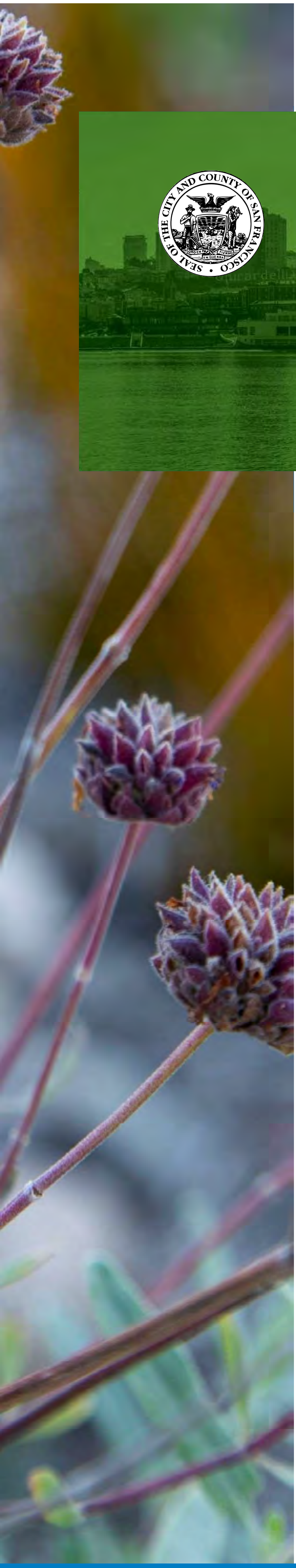
As part of obtaining reasonable assurance about whether the Enterprise's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material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

Purpose of This Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the 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 entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

KPMG LLP

San Francisco, California
January 27, 2023



San Francisco Public Utilities Commission
An Enterprise Department of the City and
County of San Francisco, California

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.

Cover photo: Sewer Microtunneling on Vicente Street
Back photos: San Francisco Aquatic Park, Flowers in Sunset Boulevard Greenway
Photos by: Robin Scheswohl and Sabrina Wong

Date of Publication: January 2023

SFPUC Financial Services
525 Golden Gate Avenue, 4th Floor
San Francisco, CA 94102-3220
sfpuc.org

Although Its Sewer System Improvement Program Management Consultant Complied With Contract Terms, the San Francisco Public Utilities Commission Should Improve Its Contract Management

San Francisco Public Utilities Commission (SFPUC)

AUDITS DIVISION

February 16, 2023

City & County of San Francisco
Office of the Controller
City Services Auditor

About the Audits Division

The City Services Auditor (CSA) was created in the Office of the Controller through an amendment to the Charter of the City and County of San Francisco (City) that voters approved in November 2003. Within CSA, the Audits Division ensures the City's financial integrity and promotes efficient, effective, and accountable government by:

- Conducting performance audits of city departments, contractors, and functions to assess efficiency and effectiveness of service delivery and business processes.
- Investigating reports received through its whistleblower hotline of fraud, waste, and abuse of city resources.
- Providing actionable recommendations to city leaders to promote and enhance accountability and improve the overall performance and efficiency of city government.

Team:
Massanda D'Johns, *Lead Audit Manager*
Serena Chen, *Audit Intern*

Consultant:

Sjoberg Evashenk Consulting, Inc.

Mark de la Rosa
Director of Audits
Office of the Controller
City and County of San Francisco
(415) 554-7574

For media inquiries, please contact con.media@sfgov.org.

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Audit Authority

This audit was conducted under the authority of the San Francisco Charter, Section 3.105 and Appendix F, which requires that CSA conduct periodic, comprehensive financial and performance audits of city departments, services, and activities.

OFFICE OF THE CONTROLLER
CITY AND COUNTY OF SAN FRANCISCO

Ben Rosenfield
Controller

Todd Rydstrom
Deputy Controller

February 16, 2023

San Francisco Public Utilities Commission
525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94102

Mr. Dennis Herrera, General Manager
San Francisco Public Utilities Commission
525 Golden Gate Avenue, 13th Floor
San Francisco, CA

Dear Commission President, Commissioners, and Mr. Herrera:

The Office of the Controller, City Services Auditor (CSA), Audits Division, presents its report of the performance audit to assess how well the San Francisco Public Utilities Commission (SFPUC) oversaw its Sewer System Improvement Program Management Services Contract (CS-165). CSA engaged Sjoberg Evashenk Consulting, Inc., (SEC) to conduct the audit, which had as its overall objective to evaluate whether SFPUC's contract management practices and procedures were adequate to ensure the contractor complied with contract requirements.

The audit concluded that SFPUC saw that the 15-year professional services Program Management Consultant (PMC) contract with AECOM-Parsons Joint Venture was fulfilled, but it needs to improve its contract management practices over similar large-scale programs. SFPUC generally employed solid practices around appropriate and allowable invoicing, staying within contract limits, and approving labor hours and billing rates. However, inadequate planning and weak oversight in its task order administration caused the contract funds to be exhausted years earlier than anticipated. Since the contract was executed in 2011, approximately 80 task orders totaling $147 million have been issued. Of this amount, $139 million (95 percent) had been spent through November 2021.

To strengthen its control environment over contract management, SFPUC needs to improve practices related to invoice approvals, use of employees as required, approval for high-value task orders, formal acceptance of PMC-submitted deliverables, document retention, meetings, and progress reports. The report discusses these findings in detail.

The report includes 15 recommendations for SFPUC to improve its contract management practices. SFPUC's response is attached as an appendix. CSA will work with SFPUC to follow up every six months on the status of the open recommendations made in this report.

CSA and SEC appreciate the assistance and cooperation of SFPUC staff involved in this audit. For questions about the report, please contact me at mark.p.delarosa@sfgov.org or 415-554-7574 or CSA at 415-554-7469.

Respectfully,

Mark de la Rosa
Director of Audits

cc: Board of Supervisors
Budget Analyst
Citizens Audit Review Board
City Attorney
Civil Grand Jury
Mayor
Public Library

City and County of San Francisco
Office of the Controller, City Services Auditor

Audit of SFPUC's Oversight of Its Sewer System Improvement Program Management Consultant

San Francisco
Water Power Sewer

August 2022

Table of Contents

Report Highlights

Audit Purpose

Sjoberg Evashenk Consulting, Inc., was engaged by the Controller's Audit Division, to conduct a performance audit of the San Francisco Public Utilities Commission's (SFPUC) Program Management Consultant (PMC) professional service contract for the Sewer System Improvement Program (SSIP) (Agreement Number CS-165) and evaluate whether SFPUC's contract management practices and procedures were adequate to ensure the contractor complied with contract requirements.

Background

In February 2011, SFPUC was directed by its Commission to procure PMC services to assist SFPUC staff with the implementation of the SSIP. In June 2011, SFPUC executed a 15-year professional services contract with AECOM-Parsons Joint Venture to serve as the PMC. The contract was issued for a total not-to-exceed amount of $150 million.

Since the contract was executed, SFPUC has issued 80 task orders totaling $147 million--of which $139 million (95 percent) had been spent as of November 2021.

Results

We found SFPUC's PMC contract generally aligned with industry practices and other similar large-scale programs and the PMC fulfilled its contractual obligations. However, SFPUC's contract management practices need improvement. Namely, SFPUC envisioned that the resources for this contract would provide PMC services for 15 years, but inadequate long-term planning and management of task order costs and resources caused contract funds to be exhausted years earlier than anticipated, as acknowledged by program management. Although SFPUC was unable to explain how the contract value was established, it is possible that the contract value was set too low. Benchmarking data indicate that procuring PMC services to support a program as large as the SSIP for $150 million is much lower than industry averages.

Although SFPUC had no written guidance to help its management or staff properly oversee and manage task order administration for the contract, SFPUC generally employed solid practices to ensure invoiced costs were appropriate and allowed under the contract's task orders and ensured that expenditures did not exceed the contract's maximum value. For instance, staff approved consultant labor hours weekly and confirmed that billing rates were correct, bills were mathematically accurate, charges aligned with efforts and services provided, and work performed was consistent with task order requirements. Still, SFPUC needs to improve its practices for invoice approvals, use of employees as required, approval for high-value task orders, formal acceptance of consultant-submitted deliverables, document retention, meetings, and progress reports.

Summary of Key Recommendations

- Ensure assumptions used to determine the expected contract value and anticipated costs of PMC services procured are supported and documented. In addition, when establishing cost estimates, consider comparing internal estimates to comparable industry and peer averages for similar services to help determine whether estimates are reasonable.
- Establish a formal, long-term plan to prioritize, track, and manage overall PMC costs across all individual task orders and prioritize resources to ensure funding remains available through the duration of the contract and is focused on the most important service needs. Regularly revisit its plan to assess whether actual contract expenditures align with the long-term plan and whether the plan needs to be revised and document any needed changes.
- Clearly specify roles and responsibilities for documentation management across SFPUC and its PMC contractor with discrete procedural steps over the life of a document, from creation to final disposition. Specify the types of documents—such as deliverables, project meeting information, and invoices—that must be maintained and where they must be maintained during the life of the project or task order.
- Memorialize meeting discussions to confirm a shared understanding of decisions reached on scope and critical budget considerations and retain related meeting documentation in contract files—such as the PMC's SharePoint site—that includes complete meeting agendas and comprehensive meeting minutes.

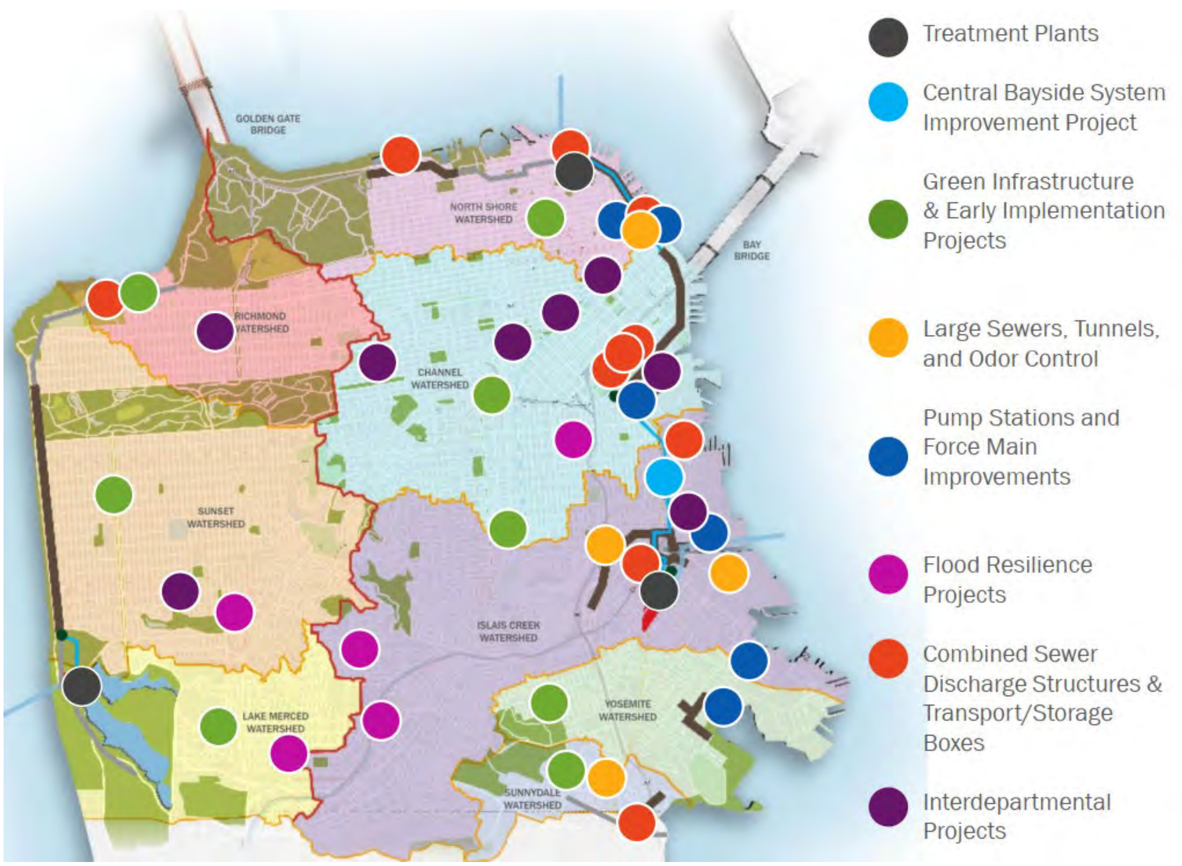
Introduction and Background

In 2011, the San Francisco Public Utilities Commission's (SFPUC) created its Sewer System Improvement Program (SSIP) to upgrade the City's aging stormwater treatment and collection systems that had not undergone repairs since the 1970s. This significant, $7 billion capital project investment over 20 years was aimed at correcting seismic deficiencies, providing environmental and health protections, and rectifying poor facility conditions among other areas. The SSIP involves staff and management across multiple SFPUC departments and contracts with external consultants, contractors, and experts, including a critical $150 million contract with a program management consultant (PMC) for the first phase of the SSIP.

Sewer System Improvement Program Phase I Projects

In 2011, SFPUC planned for a series of sewer system improvement projects that are currently projected to cost approximately $7 billion. Initially, SFPUC planned a multi-phased implementation for the SSIP with an initial Phase 1 spanning 15 years of the 20-year program timeframe—although SFPUC is moving away from the phased-approach to prioritize and implement remaining projects through its regular capital improvement budget process. Phase 1 focused on 70 projects primarily related to treatment plant improvements, though included other projects, such as ensuring regulatory compliance, enhancing process reliability and redundancy, improving plant odor control, and upgrading aging treatment plants, as shown in Exhibit 1.

EXHIBIT 1. SSIP PHASE 1 PLANNED PROJECTS AND LOCATIONS



Source: SFPUC Presentation to the Southeast Community Facility Commission on January 25, 2017 based on the 2016 baseline schedule.

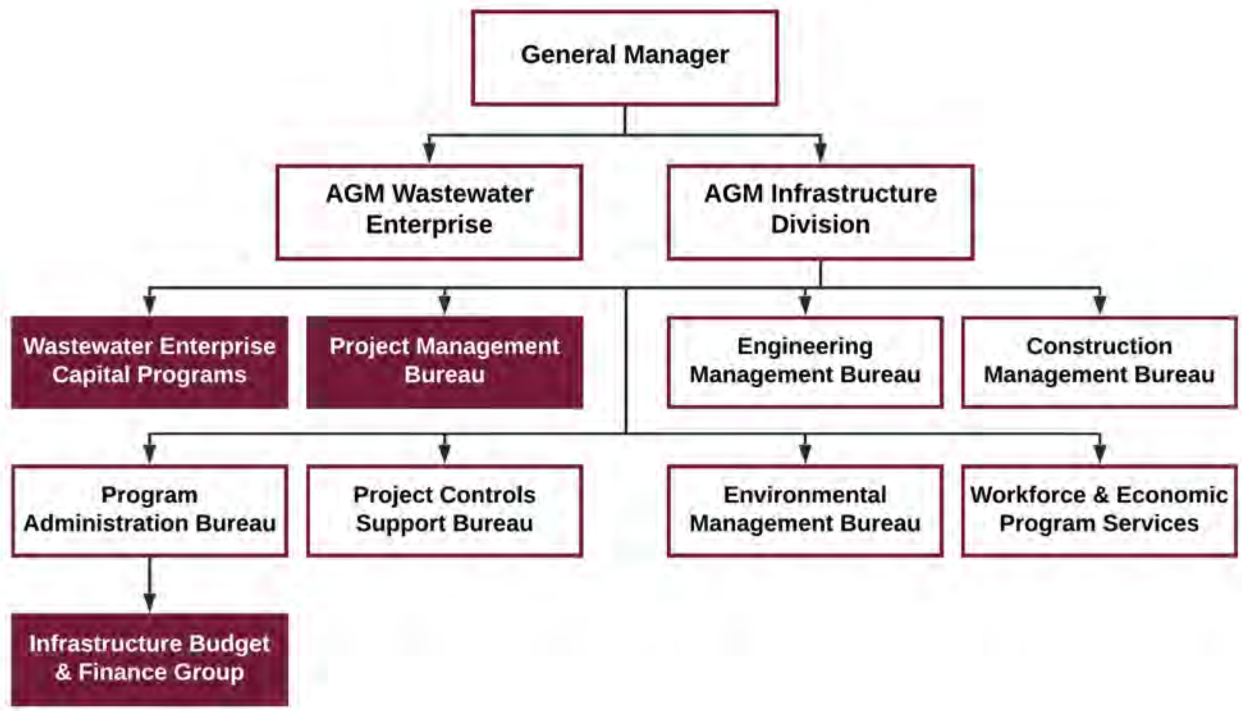
Recent approved budget estimates set the Phase 1 budget at nearly $3.7 billion—or more than half or the entire SSIP plan budget. According to a recent forecast in 2021, Phase 1 projects will require another $746.5 million for a total of $4.4 billion to complete.

To date, SFPUC has expended approximately $1.9 billion. More than 38 projects have been completed, ranging from Southeast Plant and Oceanside Plant improvements to Urban Watershed Assessment and Flood Resilience Projects.[1]

SFPUC Stakeholders Involved in Managing CS-165

Several SFPUC departments are involved with managing and administering CS-165 including those shown in Exhibit 2.

EXHIBIT 2. SFPUC ORGANIZATIONAL UNITS INVOLVED WITH CS-165: KEY STAKEHOLDERS EMPHASIZED IN RED



The key roles and responsibilities related to the task order development, review, and approval process, in addition to general contract management over budget, schedule, performance, and deliverables are described in Exhibit 3. For instance, the Wastewater Enterprise Capital Program Division is responsible for managing the SSIP and executing the PMC contract, though SFPUC's Infrastructure Division is primarily responsible for managing the PMC contract, including developing and approving task orders and revisions, overseeing contractor services, approving invoices, reviewing and accepting submitted deliverables, and evaluating contractor performance.

[1] Wastewater Enterprise Capital Improvement Program Fiscal Year (FY) 2021-22 3rd Quarter Report, issued May 31, 2022, to the SFPUC Commission.

EXHIBIT 3. KEY SFPUC DEPARTMENTS' ROLES AND RESPONSIBILITIES OVER PMC CONTRACT MANAGEMENT

WASTEWATER ENTERPRISE CAPITAL PROGRAM DIRECTOR	The Director is the Contract Manager and is responsible for CS-165, acting on behalf of SFPUC's Wastewater Enterprise. Among other responsibilities, the Director is responsible for implementing the SSIP vision, strategy, and direction; managing the program, schedule, and budget; and, providing primary communication between SFPUC Executive Leadership and the SSIP teams.
INFRASTRUCTURE BUDGET AND FINANCE GROUP (IBF)	Located within the Infrastructure Division, the Infrastructure Budget and Finance Group is responsible for reviewing and approving task orders in SOLIS, reviewing and approving PMC invoices for payment, reviewing PMC TimeLive entries, and reviewing contractor rates, among other responsibilities associated with the financial administration of the CS-165 agreement.
PROJECT MANAGEMENT BUREAU (PMB)	Provides overall management for project execution, including project work scope, schedule, and budget. During our review of SFPUC's management of the CS-165 agreement, project managers from the Project Management Bureau typically operated in the role of managing both SSIP projects, and the task orders for which PMC services were utilized.

Role of the SSIP Program Management Consultant and Its Contract Responsibilities

To assist with SSIP program development and provide technical expertise, SFPUC hired an external PMC through a joint venture between two firms—AECOM and Parsons Corporation—for 15 years at a cost of $150 million.[2] Representing just one component of SFPUC's broader SSIP program management and implementation effort, the services under the PMC agreement predominantly support SFPUC's pre-construction activities on SSIP projects. As such, the PMC contracted role was to support the City's SSIP management team with developing the program, risk management, labor and contract relations, scheduling, cost estimates, and analysis of alternate delivery mechanisms. Other contracted PMC services included validating proposed projects and providing specialized technical services. In particular, the PMC contract outlines five core service areas, or elements, defining the types of services available through task orders as depicted in Exhibit 4.

[2] Contract Number CS-165.

EXHIBIT 4. CS-165 CORE SERVICE ELEMENTS

Source: Summary of CS-165 Executed Agreement, Appendix A, Services to be Provided by Contractor, Description of Services

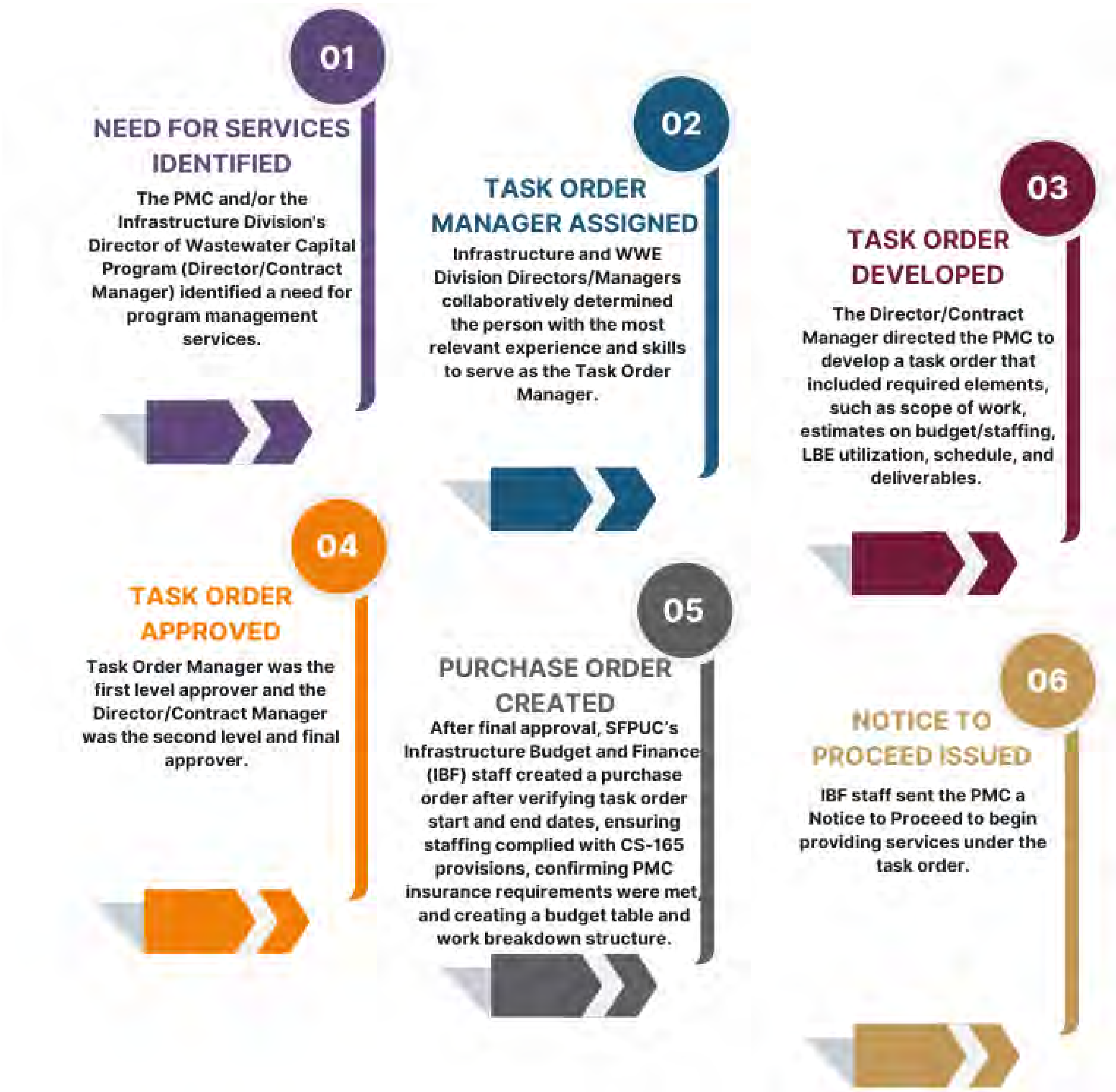
SFPUC Task Order Process Used to Assign PMC Contract Work

Once tasks that are needed under CS-165 are identified, SFPUC's Contract Manager requests that the PMC propose a detailed scope with sub tasks or activities, staffing plan, schedule, cost, and deliverables. The designated SFPUC Project Manager is the Infrastructure Division's Director of Wastewater Capital Program; for the purposes of our audit, we refer to this position as the SFPUC Contract Manager.

A task order manager—a role typically filled by a project manager or project engineer within the Infrastructure Division's Project Management Bureau—is assigned to oversee the work performed under the task order. Task order details are jointly developed with the PMC and approved by SFPUC's task order managers and Contract Manager.[3] Once approved, budget details are entered into the City and County of San Francisco's (City) payment system and the PMC can begin work once SFPUC issues a Notice to Proceed. Much of this process is captured in the San Francisco Online Invoicing System (SOLIS), which maintains pertinent transactional detail for contracts, task orders, approvals, invoices, and electronic payments. Exhibit 5 illustrates the task order flow to assign work to the PMC.

[3] If the SFPUC Contract Manager also served as the task order manager, the Infrastructure Division's Assistant General Manager provided final approval on task orders proposed.

EXHIBIT 5. TASK ORDER FLOW USED TO ASSIGN WORK TO THE PMC



Since CS-165 commenced in June 2011, SFPUC issued 80 task orders totaling $147 million--of which $139 million, or 95 percent, has been spent as of November 2021. Refer to Appendix A for a complete list of task orders under CS-165.

Scope and Methodology

Sjoberg Evashenk Consulting, Inc., was engaged by the Controller's Audit Division, to conduct a performance audit of the San Francisco Public Utilities Commission's (SFPUC) Program Management Services contract for the SSIP (Agreement No. CS-165) and evaluate whether SFPUC's contract management practices and procedures were adequate to ensure the contractor complied with contract requirements.

To meet the audit's objectives, we performed the following:

- Interviewed SFPUC Infrastructure Division management and staff in the Wastewater Capitol Program, Project Management Bureau, Budget and Finance Group, and Workforce and Economic Program Services; External Affairs Bureau; the City Attorney's Office; San Francisco Public Works; and the PMC to gain an understanding of management and oversight practices over the CS-165 contract; task order development, review, approval, and management practices; systems and tools used; documentation retained; and policies and procedures in places.

- Reviewed key CS-165 documents, including Infrastructure Division policies and procedures, PMC Program Instructions, the SSIP Program Management Plan, organization charts, CS-165 contract, task order documentation, progress reports, invoices and timesheets, PMC staff addition and substitution requests, and screenshots and extracts from SFPUC's SOLIS.

- Requested and reviewed SFPUC CS-165 solicitation documents, PMC proposal, CS-165 contract, and long-term contract plan to identify the total budget, detailed budget breakdown, and projected cost schedule. In the absence of a detailed long-term plan for spending contract resources and detailed project budget, compared actual contract expenditures to-date to the total contract amount. In addition, compared SSIP PMC costs to industry standard and peer benchmarks.

- Of the 80 task orders executed under CS-165, tested 10 regarding the development, review and approval process; appropriateness of services procured; review and approval of services and deliverables; sufficiency of meetings and progress reports; contract management and oversight activities; and performance evaluations. The 10 task orders represented 36 percent, or $53 million, of budgeted and approved CS-165 task orders, as of November 12, 2021. Selected 10 additional task orders to specifically assess the adherence of scopes of work with the contract.

- Tested 30 invoices (three invoices for each of the 10 sampled task order) to determine if SFPUC invoicing processes were followed, contractor timesheets were consistent with invoices, PMC staff additions and substitutions were reviewed and approved, PMC staff rates were consistent with the terms and rates established in the CS-165 contract, any services were billed and paid before task order Notices to Proceed, and appropriate evidence of review and approval of invoices.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Chapter 1. Although the Consultant Complied With Contract Terms, SFPUC Contract Management Needs Improvement

Implementing a capital improvement program is a complex endeavor, especially for public owners, managing a multitude of projects over several years or even decades is a significant undertaking that requires a solid program management framework to ensure all aspects of the program are delivered timely, within budget, and as intended by the owner. With many public owners relying on professional PMCs, it is imperative for the owner to ensure that the PMC is not only complying with contract terms and conditions and delivering on the program management scope areas specified by the owner, but the owner must also employ sound oversight of PMC budgets and expenses and manage related costs closely and effectively. Without close overall contract management, costs can escalate drastically and negatively impact available resources for important program management services.

For the CS-165 contract, we found that for those scope areas we reviewed, the PMC fulfilled its contractual obligations; however, there was a lack of oversight at the overall contract level as discussed in this chapter.

SSIP's Program Management Contract Scope Generally Aligned With Industry Standards

As is typical for mega-scale capital improvement programs, public owners often engage the services of a program management consultant to augment in-house staff resources and leverage expertise of program management professionals to ensure successful delivery of their program. While like *project* management for a single infrastructure project, *program* management encompasses overseeing many projects of varying size, scopes, budgets, and schedules. Program management efforts are complex and require extensive coordination and efforts from all parties involved to minimize impacts of single project schedule delays or cost overages on the overall program delivery schedule and budget.[4]

When hiring a PMC, an owner decides which program management functions to outsource and how program management responsibilities are shared or delegated. As an owner representative, the PMC is tasked with protecting the owner's best interest over the life of the program—from inception to commissioning, and often is also involved during all stages of individual construction projects that are part of the overall program.

Our high-level comparison of SFPUC's CS-165 contract with program management contracts for other large scale water programs revealed similar scope of work areas.[5] Specifically, areas covered in comparable contracts included but were not limited to overall program/project management, project controls, communications, environmental planning, permitting, and preliminary design services, which were also part of CS-165. All contracts were set up as broadly scoped, on-call contracts with specific task orders to be developed at a later point.

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[4] Construction Management Association of America (CMAA) Standards of Practice, 2021.

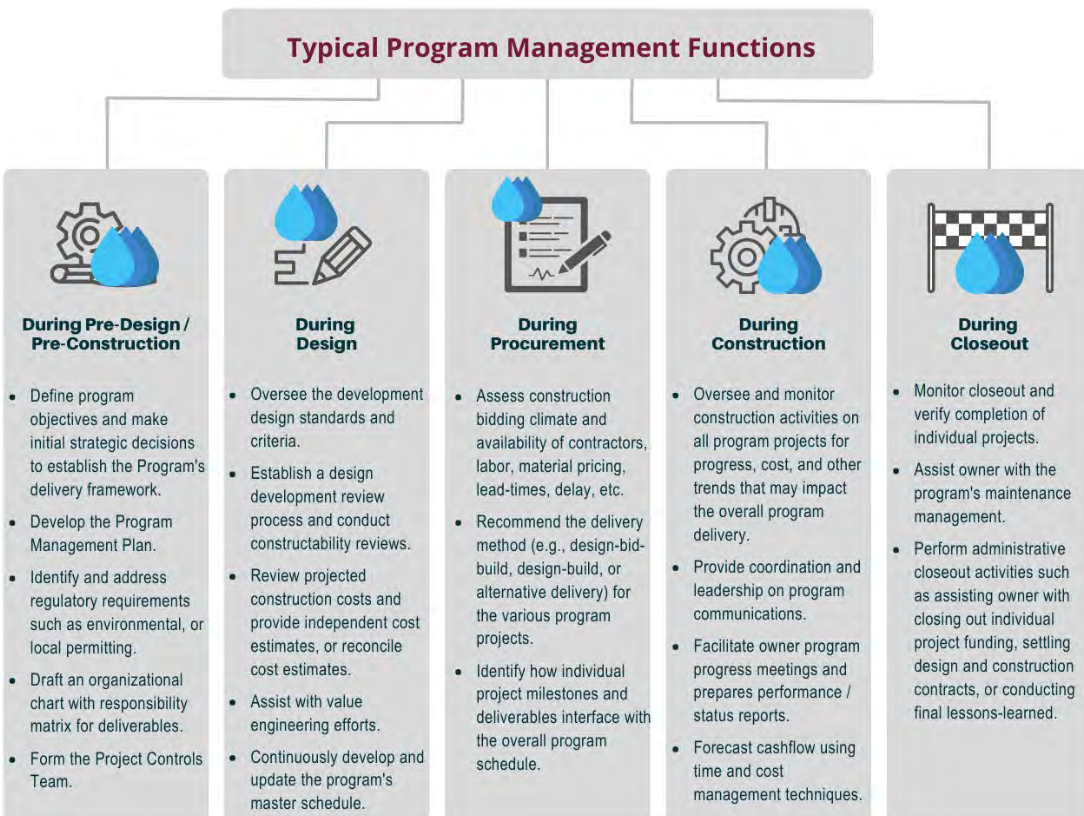
[5] Program Management Contracts used for comparison were from City of San Diego Public Utilities Department Pure Water program ($3B program), San Jose/Santa Clara Regional Wastewater Facility Capital Improvement Program ($1.4B program), and Sites Reservoir Project Authority ($4B program).

Consultant Complied With Contracted Program Management Functions

Simplified, a program management consultant integrates and coordinates activities of all parties involved with the delivery of the program, from the owner, consultants, contractors, to other agencies to ensure program objectives are fulfilled and public funds are spent effectively.[6]

When assessing SFPUC's requirements and activities performed by the PMC with leading practice, we found that the PMC contract and contract task orders issued by SFPUC were generally aligned with functions typical of a program management consultant as shown in Exhibit 6. For example, the Program Management Plan (PMP) is a key deliverable typically prepared by the PMC on behalf of the owner at the start of the program to set the program's framework and guide the delivery from inception through design, construction, and closeout. For SSIP, the PMP was a part of the first task order SFPUC issued under CS-165 and the resulting PMP completed by the PMC in 2013 contained all elements expected of such a plan such as definition of roles and responsibilities amongst both City and consultant program teams, protocols for risk management, program-wide engineering design requirements, and construction management.[7]

EXHIBIT 6. EXAMPLES OF KEY PROGRAM MANAGEMENT FUNCTIONS



Source: Auditor-generated from CMAA Standards of Practice, Chapter 11 Program Management, 2021 Edition.

[6] CMAA Standards of Practice, 2021.

[7] CMAA Standards of Practice, Chapter 11 Program Management, 2021.

As discussed in Chapter 3 of this report, we reviewed 10 of the 80 task orders issued under CS-165—accounting for 38 percent of the total PMC contract value—for program management services such as overall support, specific project technical support, or independent construction cost estimating to determine if the PMC complied with its contract obligations to provide those services. The task orders reviewed are listed in Exhibit 7. Our review found the PMC fulfilled the objectives and scopes of work for the task orders reviewed.

EXHIBIT 7. TEN TASK ORDERS ISSUED UNDER CS-165 REVIEWED

Task Order	Description	Notice to Proceed Date	Most Recent Budget Through FY 2021-22
70	Provides SFPUC with SSIP programmatic support services, such as program management and contract administration, and support for program controls, communications, climate change analysis, compliance, and other programmatic tasks as-needed.	6/30/2016	$39,120,430
72	Provides SFPUC with SSIP programmatic support services, such as labor market analysis, technical assistance and outreach support for the Contractors Assistance Center, SFPUC Wastewater Enterprise climate change coordination, technical support, and stormwater control support.	7/5/2016	$3,305,916
74	Provides SFPUC with Southeast Treatment Plan projects support, such as project management support, SharePoint and document management support, technical quality reviews, and cost estimate support.	8/22/2016	$2,642,632
76	Provides SFPUC with services in support of developing and implementing asset management activities for the SFPUC Wastewater Enterprise's facilities.	11/19/2020	$620,307
77	Provides SFPUC with services for independent construction cost estimating support for the Biosolids Digester Facility Project.	5/12/2020	$2,925,939
78	Provides SFPUC with Southeast Treatment Plan support for new projects, such as program technical support, preliminary project scoping and development, and independent technical reviews and input.	3/4/2021	$205,951
80	Provides SFPUC with SSIP Central Bayside Improvements Project support related to development and implementation of the projects. Services offered included communications and reporting support, independent technical reviews and input, and schedule and budget support.	9/7/2016	$1,291,484
85	Provides SFPUC with planning, technical, and program management support on efforts that address the improvement planning, surveying, rehabilitation, and backflow prevention for combined sewer discharge structures.	6/4/2019	$202,264
87	Provides SFPUC with support related to developing and implementing Flood Resilience Programmatic Strategies and green infrastructure projects. Some of the services provided included program technical support, preliminary project scoping and development, project alternatives analysis support, and independent technical reviews and input.	8/5/2019	$4,199,706
90	Provides SFPUC with project support services related to Land Reuse of 1800 and 1801 Jerrold Ave, and Southeast Community Center Improvements. Services provided included program technical support, communications and reporting support, schedules and budget support, and cost estimates.	7/28/2016	$1,763,613
		Total:	$56,278,242

Source: Auditor-generated from task order documentation through fiscal year 2021-22.

SFPUC's Contract Management and Oversight Practices Need Improvement

Like overall SSIP technical design and construction task and activities, owners need to appropriately oversee contracts for consultants and contractors hired to perform SSIP activities. Yet, while there are many industry guidelines on what program management should entail, there is less guidance prescribing how owners should oversee a capital improvement PMC.[8] Nonetheless, there are standard contract management practices which, if followed, could bolster a public owner's level of accountability and oversight of a PMC and better ensure services performed by the PMC align with owner expectations in addition to being within contractually agreed-upon spending limits.

As part of a framework including established policies and procedures in addition to clearly defined roles and responsibilities, contract oversight requires close management of budgets and cost, schedule, scope and changes, and quality of deliverables evidenced through a document trail demonstrating contract administration. This monitoring of a consultant's performance is critical to not just ensuring all contractual obligations are met, but also that owners are aware of and address any potential issues on the contact and on a program such as the SSIP. Specific industry objectives for contract administration include management of information and documentation including but not limited to schedule and progress reporting, budget-to-actual monitoring, keeping meeting minutes, developing cash flow projections, and ensuring all owner expectations regarding the quality of deliverables are met.[9] However, as shown in Exhibit 8, SFPUC's contract oversight practices need improvement – these areas are discussed in detail in Chapters 2 and 3 with recommendations for improvement.

EXHIBIT 8. COMPARISON OF LEADING CONTRACT OVERSIGHT PRACTICES WITH SFPUC'S SSIP PMC PRACTICES

Leading Contract Oversight Practice	SFPUC Performed	Report Section Discussed in More Detail
Watch contract budget and costs to ensure funding available over term of contract	Partial	Chapter 2
Track, approve, and document changes to contract (or task order) including budget	Partial	Chapter 2
Ensure services procured align with scope of work set forth in contract or task orders	Partial	Chapter 2
Approve task orders that include detailed information related to estimates on staffing, schedule, budget and scope of work	✓	Chapter 3
Monitor day-to-day work activities and approve timesheets	✓	Chapter 3
Verify accuracy of invoice and approving for payment	✓	Chapter 3
Formally approve and accept submitted deliverables	Partial	Chapter 3
Require adequate progress reports and status reports	Partial	Chapter 3
Maintain and retain appropriate records	Partial	Chapter 3
Complete consultant evaluations	✗	Chapter 3

Source: Leading practices developed based on guidance produced by American Water Works Association, Water Design-Build Council, and general strong control practices employed by public owners and entities in adherence with the Integrated Internal Control Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in addition to CMAA Contract Administration Guidelines issued in 2013 and Sjoberg Evashenk Consulting's proprietary Capital Infrastructure Resource Library.

[8] Program Management Institute (PMI) Publication "Program Management Outsourcing Challenges & Factors Contributing to Success", 2014.

[9] CMAA Contract Administration Guidelines issued in 2013 and Sjoberg Evashenk Consulting's proprietary Capital Infrastructure Resource Library.

Formal Policies and Procedures Were Not Developed to Guide Contract Task Order Administration, Although Certain Ad Hoc Practices Were in Place

To appropriately manage operations and its PMC contract, public owners need to operate under a set of formal policies and procedures to set expectations, ensure consistency, and provide needed control of public funds and projects. However, SFPUC had no written guidance to help its management and staff properly oversee and manage CS-165 task order administration.

However, SFPUC described its informal and ad hoc policies and procedures used to carryout day-to-day administration and management activities for CS-165 task orders—which mostly related to the administrative processing of task orders and related invoices control. For instance, informal invoicing practices included:

- ✓ SFPUC's task order manager reviews and approves weekly labor hours entered by the PMC into an automated SFPUC time tracking system based on the manager's knowledge of work activities conducted.
- ✓ SFPUC's Infrastructure Budget and Finance (IBF) group perform an administrative review to confirm billing rates and staffing agree with contract provisions, time charged agrees with the weekly systems used, invoices are mathematically accurate and not double billed, and costs are within the approved task order budget.
- ✓ SFPUC must pre-authorized all non-labor charges and those charges must and supported by underlying invoices or other documentation.
- ✓ SFPUC's task order manager performs a programmatic review verifying the amounts invoiced reasonably align with the effort expended and services provided, work performed is consistent with the task order requirements, time charged agreed with the time approved through TimeLive or manual timesheets, non-labor allowable expenses were adequately supported, and required deliverables are submitted.
- ✓ After review and acceptance, both the task order manager and the PMC Contract Manager approve the invoice.

Given the significant size and length of the $150 million PMC contract, SFPUC should have written guidance assigning key roles and responsibilities, describing expectations of performance and activities, ensuring consistencies over the life of the contract. This is especially critical since the Infrastructure Division experienced significant staffing turnover and suffered losses of institutional knowledge over the years with key leaders involved with administering CS-165 having left the SSIP and organization.

Recommendation

To strengthen its accountability over public funds and better manage the CS-165 and future PMC contracts, SFPUC should:

1. Formally adopt comprehensive policies and procedures covering all task order administration processes and requirements, including those discussed throughout this report.

Chapter 2: SFPUC Envisioned That Contract Would Provide PMC Services for 15 Years, but Inadequate Planning Caused Funds to Be Exhausted Years Earlier Than Anticipated

Strong contract oversight practices are critical for ensuring outsourced services are delivered in alignment with agency expectations and established budgets and schedules. Toward that goal, establishing a budget and controlling the use of limited contract resources to prioritize activities and ensure appropriate levels of funding will be available as needed over the life of the contract is imperative. With regard to cost management, leading industry practices involve establishing a realistic and consistent budget and ensuring the budget is controlled to provide the best, timely information to the owner.[10]

Although SFPUC established budgets and captured costs at an individual task order level, it did not manage funds overall for its PMC contract for the SSIP to ensure funds would be available over the life of the contract. In fact, SSIP management expects the $150 million contract value to be fully expended during fiscal year 2022-23—several years earlier than expected. While this situation could be partially due to the initial contract budget not aligning with industry estimates and industry-wide cost increases due to inflation, labor shortages, and supply chain issues, SFPUC could not explain how the initial contract value was estimated and should have better managed to the contract limit costs regardless of the veracity of the budget developed. Additionally, while invoices reflected correct billing rates, approved staffing, and appropriately supported labor and non-labor charges, invoices and entries in SFPUC's timekeeping system used by its consultants were inconsistently approved.

SFPUC Could Not Explain How $150 Million PMC Contract Value—Lower Than Industry Averages—Was Established

When first advertising to receive bids from external consultants for PMC services, SFPUC estimated $150 million would be needed across 15 years; however, SFPUC was unable to describe or demonstrate how that estimate was developed. Further, our review of peers and an industry study lead by the Construction Management Association of America in 2014, found that the proportion of PMC fees to SSIP program costs was lower than industry averages, which were an approximate average of 5.6 percent of a capital improvement program's total budget.

It is Unclear how Contract Value Was Established

SFPUC advertised the PMC contract in 2011 for a not-to-exceed cost of $150 million and estimated it would require 680,500 consultant hours to provide requested services in five task categories. However, no documentation exists to explain how the $150 million budget was estimated or hours necessary were calculated. In fact, SFPUC indicated that its estimated hours were only used to calculate a "blended labor rate" for scoring during the procurement process.

As is typical in the construction industry when an owner hires a PMC, services are procured based on the consultant's qualifications and not solely the consultant's cost proposal. While program owners set a general

[10] Construction Management Association of America (CMAA) Standards of Practice, 2021.

PMC budget and establish high-level scope areas as part of procurement and resulting contract documents, the final scope of work and associated budgets to deliver the desired services are often negotiated post-contract award through individual task orders—as was done by SFPUC.[11]

Based on the hour estimates in the solicitation, SFPUC appears to have initially expected that the PMC would spend approximately 47 percent of its resources on programmatic work benefitting the SSIP under tasks 1 and 2—while the PMC's remaining efforts, or 53 percent, would be spent on project-specific work under tasks 3 through 5. As shown in Exhibit 9, PMC's cost estimate for each authorized task area based on SFPUC's estimate of hours needed as well as other PMC charges totaled a combined $149.2 million. However, no further breakdown of budgeted costs or assumptions behind cost calculations was provided.

EXHIBIT 9. COMPARISON OF CS-165 SOLICITATION HOURS BY TASK AND PROPOSED HOURS AND COST BY TASK

Cost Line Item	Solicitation Hours	PMC Hours Per Proposal	PMC's Proposed Cost	Percent of Task Subtotal Cost
Task 1. Program Planning and Administration	199,000	199,000	$39,292,457	29%
Task 2. Program Implementation	135,500	105,500	$23,779,780	18%
Task 3. Project Technical Support	240,000	240,000	$47,482,616	36%
Task 4. Program Controls	66,000	66,000	$14,625,709	11%
Task 5. Pre-Construction Management and Planning	40,000	40,000	$8,252,551	6%
Task Sub Total	*680,500*	*650,500*	*$133,433,117*	*100%*
Other Direct Charges			$3,000,000	
Escalation (CPI)			$11,042,958	
Markup on Subconsultants			$1,696,761	
Total Cost Estimate	$150,000,000		$149,172,832	

Source: CS-165 Solicitation and PMC Proposal.

PMC Contract Cost Estimates Do Not Align With Industry Averages

An industry study lead by the Construction Management Association of America in 2014 noted that average PMC fees should equate to approximately 5.6 percent of the program's budget—but could increase up to as much as 18.3 percent.[12] Applying that industry average to the SSIP, total PMC fees for the entire program would have been closer to $390 million. With the most recent advertisement for the next tranche of PMC services estimating another $90 million in PMC fees needed to close out the SSIP over the next ten years, total PMC fees for the program could total $240 million, or 3.4 percent of the entire SSIP—still less than the cited industry average.[13]

Moreover, another benchmarking review conducted by the City of San Jose for their Regional Wastewater program noted even higher PMC fee amounts—ranging from 5.9 percent at the Sacramento Regional County Sanitation District to 10 percent at the Orange County Sanitation District. For instance, like SFPUC, the

[11] CMAA Owner's Guide to Construction & Program Management, 2011.

[12] CMAA Comparison of Construction Management & Program Management Fees, 2014.

[13] Total of $240 million combines the existing PMC contract fees of $150 million with the additional advertised PMC services of $90 million.

Orange County Sanitation District had a 15-year PMC contract term although its program was significantly smaller at $2 billion. Yet, the Orange County Sanitation District's PMC contract budget was $200 million—$50 million more than SFPUC.[14]

Conversely, those industry benchmarks differ though from our comparisons of SFPUC's CS-165 budget with two other water programs in California. Because the others had smaller programs than SSIP ranging from $1.4 billion to $3 billion, we annualized the amounts for comparison purposes as shown in Exhibit 10. These results show that the SSIP contract budget for PMC services seems more in line with those programs—but is still lower for a program of this size.

EXHIBIT 10. COMPARISON OF PROGRAM MANAGEMENT FEES

	SSIP	San Diego Pure Water	San Jose/Santa Clara Regional Wastewater [(A)]
Program Value	$7 Billion	$3 Billion	$1.4 Billion
Program Duration	20 Years	20 Years	10 Years
PMC Budget	$150 Million over 15 Years	$30 Million over 5 Years	$39 Million over 5 Years
Auditor-Calculated PMC Fee in relation to Program Value	2.1%	3.1%	2.8%
Auditor-Adjusted PMC Fee for Program Value	$10M / Year	$18.8M / Year	$7.8M / Year

Source: Auditor-generated from program management contracts and/or related RFQ/RFPs from entities shown in Exhibit.

Note: [(A)] The San Jose/Santa Clara program value increased PMC contract was amended at the end of Year 5 to extend to 10 years and increase the budget to $78 million, which resulted in a ratio of 5.6 percent—in line with industry benchmarks.

Regardless of whether its PMC contract budgets align with industry averages or its peers, SFPUC should be able to support its assumptions and calculations for its contracted PMC services.

SFPUC Did Not Manage Overarching CS-165 Costs Across Task Orders, and Funds Were Spent Much More Quickly Than Expected

As is common with long-term PMC contracts, SFPUC structured its CS-165 agreement to provide significant flexibility by not detailing specific budgets for expected spending categories upfront. [15] Flexibility in longer-term contracts—such as the SSIP PMC contract—is often built-in to react to changing conditions over time. This would be particularly relevant during the early years of the contract when SFPUC was initially establishing the SSIP and specific activities and services needed were being developed as the program progressed, expectations set, and site conditions assessed.[16] Yet, with the only limitation in CS-165 being that costs did not exceed the contract's $150 million threshold for services provided, budget controls must be

[14] City of San Jose Program Management Services Contract for the San Jose/Santa Clara Regional Wastewater Facility Capital Improvement Program, City Council Presentation, September 26, 2017.

[15] Other similar PMC contracts used for comparison were for San Diego Pure Water, San Jose-Santa Clara Wasterwater, Sites Project Authority, as shown in Exhibit 10.

[16] CMAA Standards of Practice, 2021.

employed to ensure resources are adequately controlled and remain available over the life of the contract. In fact, cost management is a critical component of contract administration—regardless of the industry or type of contracted service.

For example, while executed construction contracts have a maximum price or lump sum amount the contractor will get paid, the construction contractor is still required to itemize expenses within detailed categories aligned with the contract's schedule to show progress against the total contract amount. Similar for a task order-based professional services contract like CS-165, costs under unique task orders for specific scopes of work need to be rolled-up and monitored for spending against the total contract amount—just like line items on a construction contract. By not routinely consolidating task orders and reviewing spending at the contract level, budget oversight is effectively diminished and risks of contract budget overruns are significantly increased as SPFUC experienced with the CS-165 contract.[17]

No Overarching Monitoring Across Task Orders

One mechanism to control costs is to issue individual task orders authorizing specific work, activities, and deliverables to be completed. SFPUC used its task order process to define and approve smaller chunks of work for its PMC to conduct and carve out distinct budgets with related discrete tasks to manage the $150 million contract. While using individual task orders to manage services and control costs is in line with best practices, SFPUC did not adequately oversee task orders to ensure resources were prioritized and overall contract funds remained available over the contract term.

Leading practices recommend that program owners maintain visibility and control over the entire contract to monitor how the portfolio of task orders underway or completed impact the overall PMC budget and schedule. Thus, in addition to the intimate review that SFPUC's task order managers should conduct on individual budgets and the technical, specialized work performed by its PMC on the SSIP, SFPUC's contract manager must control the administrative side of the contract and intervene when existing task orders approach contract limits or may be written for work unrelated to program management.

Although it intended the $150 million PMC contract to provide SSIP support services over the entire 15-year contract period, SFPUC acknowledged that it did not establish a long-term plan to track and manage overall PMC costs across all individual task orders or prioritize resources to ensure funding remained available. Rather, SFPUC issued task orders on an informal, ad hoc basis and routinely increased budgets and scope with little oversight of the contract spend down across task orders. While this was permissible, it conflicted with best practices and the reasonable need to ensure funds lasted through the life of the contract. In addition to not sufficiently tracking or monitoring overall contract spending to ensure sufficient funds, SFPUC did not have the requisite oversight information to appropriately scale back PMC services as needed when faced with dwindling funds or alert SSIP executive sponsors governing the program that more money would be needed to provide adequate PMC oversight. Without adequate oversight, SFPUC could not determine how insufficient PMC funds impacts the scope of other SSIP contracts and activities. As of November 2021, SFPUC issued 80 task orders under its PMC contract totaling approximately $147 million—of which $139 million, or 95 percent, has been spent. SFPUC expects the full $150 million contract to be exhausted by 2023—several years earlier than its expiration date.

[17] CMAA Standards of Practice, 2021 and Sjoberg Evashenk Consulting's proprietary Capital Infrastructure Resource Library.

According to both SFPUC and the PMC, it was clear that contract funds were being expended too quickly and SFPUC acknowledged that an adequate process had not been implemented to prioritize critical tasks and plan resources. Both SFPUC and the PMC indicated that a meeting was held in fiscal year 2015-16 to discuss slowing spending and better prioritizing the remaining contract resources. While spending patterns declined in most of the subsequent years spending, the rate is still on pace to prematurely exhaust contract funds.

In recent years, SFPUC began to review planned contract expenditures more aggressively, by task order, to ensure the limited remaining contract funds were dedicated to the tasks viewed as highest priority. Unfortunately, this often meant reducing budgets and narrowing scope on task orders—potentially limiting their effectiveness overseeing the SSIP as envisioned—although, ultimately, these efforts had little impact on extending the availability of contract resources. While SFPUC should have formally communicated that funds were being exhausted to executive management earlier on in the contract, found additional resources to bridge funding gaps, or reduced scope and activities of the PMC or other areas of the program, these steps were not taken.

If individual task orders are not reviewed in relation to the complex portfolio of services provided by the PMC under CS-165 and PMC performance assessed at a global, overarching level, the risk of accelerated or over-spending of budgeted funds and performance of potentially out-of-scope services are increased. Like a single construction project where a project manager has responsibility for ensuring the project is delivered on time and on budget, the SFPUC contract manager has the same obligation over its PMC. In fact, PMC task order managers are like construction managers who serve as boots-on-the-ground overseeing the day-to-day construction work while the overarching project manager is accountable to ensure general contractors—or the PMC for the SSIP in this example—perform in accordance with contract terms.

Processes for Issuing and Revising Individual Task Orders Did Not Adequately Consider Long-Term Task Order Costs or Overall Sustainability of Contract Funding

Our review of SFPUC's oversight and management of 10 individual task orders revealed that SFPUC routinely revised task orders for additional scope of work and funding for the upcoming fiscal year on annual basis funding—although it did not adequately forecast overall task order costs against available contract resources nor did it maintain appropriate documentation of task order budget negotiations with its PMC.

Partly, this situation was due to SFPUC not establishing its initial task order budgets with full resources expected to fund all needed activities for an individual task order. Rather, SFPUC reviewed and revised task orders annually to incrementally increase scope and budget for services expected for the upcoming fiscal year. In fact, our testing of 10 task orders over the last seven years found that all but one task order had multiple budget revisions to extend services across additional years or expand scope of work resulting in fund increases from a low of 10 percent to high of 350 percent as shown in Exhibit 11.

EXHIBIT 11. COMPARISON OF INITIAL BUDGET TO MOST RECENT BUDGET FOR TEN TASK ORDERS REVIEWED

Task Order	Description	Initial Notice to Proceed Budget	Most Recent Budget as of May 2022	Percent Change
70	Program Management	$8,688,699	$39,120,431	350%
72	Project Technical Reviews	$845,100	$3,305,916	291%
74	Project Technical Reviews	$1,069,805	$2,642,632	147%
76	Asset Management	$648,856	$620,306	-4%
77	Project Cost Estimation	$812,545	$2,925,939	260%
78	Project Technical Support	$123,027	$205,951	67%
80	Project and Technical Support	$1,176,500	$1,291,484	10%
85	Projects Technical Support	$101,167	$202,264	100%
87	Program and Technical Support	$1,337,331	$4,199,706	214%
90	Project Support Services	$539,900	$1,763,613	227%
Total		$15,342,930	$ 56,278,242	267%

Source: Initial and Last Revision of Task Orders.

For each task order reviewed, SFPUC only set the initial task order budget for one or two years although it planned to have the PMC provide the requested task order service over a longer time period—thus, the budget variances noted in Exhibit 11 were not necessarily unreasonable. For example, SFPUC set an initial budget of approximately $8.7 million for general program management support services under Task Order 70 for one year although these support services would be provided over several years. Thus, the 13 task order budget revisions increasing the budget 350 percent to more than $39.1 million were mostly reasonable since SFPUC was just applying funding to the remaining time periods when SFPUC expected services to be provided. Seven of the 13 revisions, which accounted for most of the cost increase noted, were budget increases and partial encumbrances to extend the term to allow for on-going program management support services for five additional fiscal years—rather than unplanned cost overages.

Although it is not uncommon to link contract or task order budgets with a government's annual budgetary funding cycles, SFPUC did not forecast the overall estimated cost of the task orders needed or schedule for completion throughout the contract's life. This should have been done in addition to tracking annual funding commitments as part of typical contract cost management and control. This forward-looking practice would have enabled SFPUC to adequately forecast task order impacts against limited contract resources and ensure resources were spent in alignment with long-term plans and priorities.

Furthermore, we found that SFPUC retained some scope change request documentation, but generally did not retain supporting documents related to cost review or negotiations held when task orders and subsequent revisions were approved. During our in-depth review of Task Order 70 budget revisions, we found that SFPUC retained some scope change request documentation, but as discussed earlier, did not retain documentation of SFPUC's task order cost review or negotiations. For instance, the first revision for Task Order 70 added approximately $778,000 outside of the annual budget process. According to SFPUC, the revisions were due to changes in scope requested on several tasks; however, the task order revision did not describe why the budgets were being amended nor detail changes to the scope of work. There were two formal change requests related to that first revision adding some detail justifying the increases, but those documents only supported $69,000, or less than nine percent, of the $778,000 budget increase. SFPUC provided anecdotal reasons based on staff recollections for the budget revisions, but these explanations did not fully detail why additional budget were needed or what additional activities would be performed.

According to SFPUC, they use change request forms to memorialize modifications to scope or budget outside of the annual review and revision process. However, because the modification process is viewed as labor intensive for both PMC and City staff, it was not consistently followed. As such, although SFPUC task order managers indicated they reviewed proposed task order budgets for the upcoming year to determine whether the hours and staff proposed appeared to be reasonable for the requested services, SFPUC did not maintain documentation of these negotiations and generally relied on the PMC's estimates as the contracted expert. While contemporaneous discussions on scope and budget are typical in a program like the SSIP when both owner and PMC staff are co-located working side-by-side to oversee the program, some evidence of price review and negotiation should be memorialized to ensure a shared understanding of agreements reached and protect the owner against potential claims or conflicts, safeguard that the owner is getting the best value from its limited resources, and provide transparency to the process.

To better ensure funds last through the contract term and appropriate services are provided to manage the SSIP through its PMC contract, it is imperative that SFPUC diligently manage and track resources across individual task orders. This could be done by developing long-term budgets and schedules for each task order when initiated and assessing the cumulative impact of task orders on available contract resources. However, given that the contract is expected to be fully exhausted by fiscal year 2022-23, SFPUC should revisit the remaining PMC services needed to appropriately support SFPUC's efforts to manage and implement SSIP and craft reliable estimates using industry benchmarks. Once cost estimates are completed, the SFPUC should work with its accounting staff to secure additional funding as needed or make budget and scope changes to other areas of the SSIP if funding is not available.

SFPUC Spent Contract Resources on Work Questionably Related to SSIP

In addition to the lack of long-term planning and limited oversight of task order budget increases discussed earlier, SFPUC also authorized work through task orders to have its PMC perform activities that were not specifically related to the SSIP or captured in the scope of CS-165.

Specifically, there were two instances where SFPUC authorized more than $3 million in CS-165 task orders that included activities on separate SFPUC programs—namely, the Community Benefits Program and Social Impact Partnership Program. In one instance, SFPUC authorized PMC services for the development and implementation of the Community Benefits Program and Social Impact Partnership Program. In the other instance, questionable contract work activities related to the Community Benefits Program/Social Impact Partnership Program were commingled with other contract-specific activities (i.e., SFPUC's SSIP Project Labor Agreement and Job Training and Opportunities Program) making it difficult to discern what portion of the task order expenditures were related to the Community Benefits and Social Impact Partnership Programs. No other program documentation was available to help us determine funds spent on these non-SSIP programs. For example:

- **Task Order 11**—Issued in 2013, Task Order 11 required the PMC to develop and manage SFPUC's internal Community Benefits Program and assist in facilitating SFPUC contractors' Social Impact Partnership Program commitments. Some tasks assigned to the PMC in this task order included developing SFPUC's Community Benefits plan and reporting; designing an implementation strategy for SFPUC's Community Benefits Catalyst Projects; and researching, analyzing and adopting local and regional best practices for Community Benefits activities. None of this relates to the five service categories included in the CS-165 scope of work. Rather, the work defined in the task order was assisting another group within SFPUC in the development and implementation of an entirely unrelated program. For example, one of the activities under Task Order 11 involved the development of Community Benefits marketing materials, which provided descriptions of nonprofits participating in the program and detailed opportunities for contractors to work with the nonprofits, in the form of volunteer, in-kind services, and financial commitments.[18] SFPUC expended roughly $832,000 by the conclusion of Task Order 11.

- **Task Order 72**—Issued in 2016, one task under Task Order 72 requested PMC services to support SFPUC's Community Benefits Program for several activities. Some subtasks assigned to the PMC included developing resource leveraging strategies, assisting community partners and SFPUC in funding community benefit programs, and supporting SFPUC's Community Benefits Program. Like services requested under Task Order 11, these services were not discretely defined or consistent with providing development and management of a large-scale wastewater capital improvement program; rather, these services supported the development of an entirely separate program not under SFPUC Wastewater Enterprise's purview. While the task itself had a budget of nearly $2.2 million, it is not clear what portion of this $2.2 million task order was devoted to performing Community Benefits-related services due to overlapping activities related to the SSIP Project Labor Agreement (allowable services consistent with CS-165) and the Community Benefits Program. Moreover, SFPUC was unable to locate any of the deliverables related to the task and reported that SFPUC External Affairs and SSIP staff, who might otherwise be able to provide insight into these services, are no longer with the agency.

SFPUC's management felt these additional services were within CS-165's scope of work because the contract permitted "as-needed" program management tasks that included specialized tasks "at the discretion of SFPUC." However, this assertion seems invalid because that interpretation would allow SFPUC to potentially add any tasks to the contract regardless of they relate to the SSIP—the sole focus of CS-165. Although the PMC contract scope of work allows other "as-needed" program management services, these services must be consistent with the contract purpose and program area. The "as needed" services should not be considered a "catch-all" open-ended category to add ancillary activities and blur or inappropriately broaden the original intent of the contract and purpose for which it was initially solicited. In adopting this approach, SFPUC stretches the scope of professional services contracts to allow for a wide variety of services not originally contemplated when the contract was competitively solicited and awarded.

[18] These services were related to what is now referred to as the Social Impact Partnership Program, which involved private contractors pledging donated money, in-kind goods and services, and volunteer hours as part of their proposals during SFPUC's solicitation process as another means to score extra points on their proposals.

Although SFPUC Adequately Reviewed PMC Expenses to Validate Costs, Approval Protocols Need Improvement

SFPUC employed solid practices to ensure invoiced costs were appropriate and allowed under CS-165 task orders and ensured that expenditures did not exceed the contract's maximum value. For instance, staff approved consultant labor hours weekly, confirmed billing rates, ensured math accuracy, charges aligned with efforts and services provided, and work performed is consistent with task order requirements.

To determine if these practices were followed, we selected 30 invoices submitted between 2016 and 2022 for testing. We found SFPUC generally conducted thorough reviews of the costs invoiced by verifying labor hours and rates, staff charged, work effort, and non-labor charge. Invoices were reflected of correct billing rates, charged approved staff, supported non-labor charges, and were appropriately approved. Yet, we found instances where SFPUC could improve its practices over approvals—although there were no pervasive issues with the task order invoice reviews.

For instance, while most PMC labor hours were approved weekly either through SFPUC's automated system or through the manual timesheet process, there were nine instances where someone other than the task manager approved labor hours in the automated system which is inconsistent with described practices. The other approvers were mostly assistant project managers, which is low risk given that they work on the SSIP program and are likely familiar with the PMC's activities; however, there were three instances where administrative staff approved timesheets who were not designated by SFPUC to be sufficiently knowledgeable or aware of the appropriateness of PMC time charges.

Additionally, SFPUC did not follow its stated process for final approval of invoices. Specifically, in six of the 30 invoices tested, final approval from the Contract Manager or the Assistant General Manager was missing. Instead, the task order managers provided final approval. SFPUC provided explanations that senior oversight staffs' approval was not required on project-specific, technical task invoices—yet those senior SFPUC positions reviewed and approved nearly 20 other project-specific technical invoices we reviewed. Without being involved in the invoice review and approval process, the Contract Manager or Assistant General Manager may not have the requisite data to keep costs on track with approved budgets or keep visibility on the overall status and have a sense of budget status across all PMC task orders. Given the scarce contract resources remaining on CS-165, SFPUC should ensure that the designated individuals involved with approving all labor hours and invoices stay aware of and better control costs being charged.

Recommendations

To better ensure future PMC contract funds are sufficient to provide the services requested by SFPUC last the entirety of the contract term, and are adequately controlled to ensure contract resources are used in the most efficient manner for the greatest priorities, SFPUC should:

2. Ensure the assumptions used to determine the expected contract value and anticipated costs of PMC services procured are supported and documented. In addition, when establishing cost estimates, consider comparing internal estimates to comparable industry and peer averages for similar services to help determine whether estimates are reasonable.

3. Establish a formal, long-term plan to prioritize, track, and manage overall PMC costs across all individual task orders and prioritize resources to ensure funding remains available through the duration of the contract and is focused on the most important service needs. Regularly revisit its plan to assess whether actual contract expenditures align with the long-term plan and whether the plan needs to be revised and document needed changes.

4. Formally notify SFPUC executive management early on when forecasts project available contract funds will be insufficient to meet anticipated PMC service needs to determine whether additional funds can be secured to bridge gaps identified or reduce scope and activities of the PMC or other areas of the program to align with available resources.

5. Implement a process to develop long-term cost estimates, budgets, and schedules for each task order when initiated and revised and assess the cumulative long-term impact of task orders on available contract resources.

6. Retain documentation supporting task order price review and negotiation to ensure a shared understanding of agreements reached and protect the owner against potential claims or conflicts, safeguard that the owner is getting the best value from its limited resources, and provide transparency to the process.

7. Ensure designated individuals involved in approving all labor hours and invoices stay aware of and better control costs being charged.

Chapter 3: SFPUC Needs to Improve Several Aspects of Its CS-165 Task Order Administration

Contract oversight also includes monitoring contractor performance to ensure quality services and products are provided that meet owners' expectations and requested services are delivered. Industry tools used to oversee performance include review and approval of stated deliverables, regular meetings with contractors, and use of progress reporting to name a few. While SFPUC informally employed some of these tools, it needs to improve practices over the use of City employees as required, approval for high-value task orders, acceptance of PMC-submitted deliverables, document retention, meetings, and progress reports.

Task Orders Generally Include Sufficient Detail, but SFPUC Did Not Prioritize Use of City Employees or Seek Additional Approvals for High-Value Task Orders

As described in the background section of this report, SFPUC's practices to develop and approve task orders generally involved identifying a need, working collaboratively with the PMC to develop detailed scopes of work with budget estimates and deliverables, and assigning task order managers to oversee performance of services.

While SFPUC mostly did not have formal protocols guiding its administration and oversight of CS-165 task orders, we found most followed consistent practices and included sufficient detail and appropriate approvals. Specifically, based on our review of 10 task orders, all included detailed information related to estimates on staffing, schedule, and budget and most contained adequate descriptions of the scope of work and all were approved by the Task Order Manager or Director/Contract Manager. However, we found a few exceptions to the required task order development processes.

For example, Task Order 90 was increased by $67,000 to add a new subtask related to Communication Support and Community Outreach services; however, the task order revision did not detail the scope of work associated with the new subtask although the subtask was reflected in the budget information. According to SFPUC, the current Task Order Manager was not involved with the subtask and those with direct knowledge of the circumstances surrounding the creation of the subtask were no longer with SFPUC.

Also, there were two written policies related to using City employees and requiring additional approvals for high value task orders that SFPUC did not follow. Specifically, before authorizing PMC services through a task order, the Infrastructure Division's CIP procedures requires SFPUC staff to determine if the work could be done internally or by San Francisco Public Works. However, based on our review of 10 task orders, SFPUC could not demonstrate that this analysis was completed.

Similarly, the Infrastructure Division's CIP procedures stated that total task orders including modifications cannot exceed $100,000 without approval of Assistant General Manager. According to SFPUC, this policy was not followed as it was outdated. Ignoring stated policies circumvents necessary controls established to mitigate risks associated with inappropriate approval of large task orders, revisions, or expenditures.

To ensure if follows stated practice, SFPUC should memorialize its analysis of the use of City employees instead of external contractors and retain documentation in SSIP files. Further, if SFPUC feels the $100,000 threshold for obtaining Assistant General Manager approval is outdated, it should update the policy. Until then, it should follow the stated policy and retain appropriate approvals received.

Task Orders Do Not Always Clearly or Consistently Define Services

SFPUC did not clearly identify or distinguish tangible deliverables required from its PMC from other service-type requested work and labels used to categorize requested PMC work did not always accurately reflect the nature of services procured.

Our review of 10 task orders revealed several instances where task order scopes of work did not clearly specify the type of services to be provided for task activities resulting in inconsistent assignment of similar services as either work activities, as-needed services, or deliverables. For example, for one task order (Task Order 70), we found that SFPUC had classified monthly progress reports for the CS-165 contract as work activities, rather than tangible deliverables that would be submitted for review and/or approval. Auditors characterized deliverables, work activities, and as needed services as follows:

- ✓ Deliverable: A tangible product submitted to SFPUC for review, comment, and approval that is subject to retention requirements.
- ✓ Work Activity: Labor hours of service consumed to achieve a particular purpose or result.
- ✓ As-Needed Service: Unplanned work activities or deliverables that are requested and provided on an ad hoc basis.

SFPUC inconsistently applied these labels across task order services. For example, some required, tangible deliverables were labeled as work activities, which could likely result in those items not being captured as deliverables that must be stored on the PMC SharePoint and transferred to SFPUC. Without consistently and accurately defining the nature of tasks and deliverables, it is difficult for SFPUC to ensure that all required deliverables (in aggregate) associated with CS-165 have been sufficiently delivered. To reduce the risk of misclassification of deliverables that might be subject to retention requirements, SFPUC should standardize definitions for services to be provided and clearly specify in task order documentation which classification requested services fall under.

SFPUC Cannot Demonstrate It Reviewed or Accepted PMC Contract Deliverables

One key feature of contract management to best ensure an external contract complies with terms and provides requested services is for public owners to review and accept contract deliverables. Specifically, leading practices note that scope of services should include “deliverables or other tangible methods for measuring performance”.[19] Through our review of 10 task orders issued under CS-165, we identified 292 required deliverables and reviewed 45 in detail. Our review found that most were submitted (31 of 45) as required. The remaining deliverables were either still in-progress (5 of 45), cancelled (8 of 45), or unable to be located (1 of 45).

Of the deliverables that were submitted, in nearly all instances, there was no evidence of SFPUC review or formal acceptance of deliverables submitted despite language in the CS-165 contract specifying that “All

[19] Construction Management Association of America (CMAA) Owner’s Guide to Construction and Program Management, 2011.

deliverables to be provided under this Agreement will be submitted for review prior to being finalized"—although SFPUC informed us formal approval and acceptance was not required. Without some indication of review and acceptance, SFPUC cannot demonstrate that it received expected value from the contracted services and products meet the level of quality expected. Through our detailed review of 10 CS-165 task orders, most SFPUC task order managers interviewed expressed satisfaction with PMC services and deliverables; however, we were informed that the project manager working on one task order was not satisfied as subpar deliverables were submitted, leading to problems during construction on certain SSIP projects—these sentiments appeared to be general perceptions and because there were no formal protocols or responsibilities established to accept deliverables as a condition of payment, the work products submitted on the task order were not rejected and the PMC was paid.

Further, because task orders did not provide a schedule or timeline for submitting deliverables in most cases, we could not determine whether deliverables were submitted on-time.

To improve its oversight and ensure work products meet the level of quality it expects, SFPUC should ensure that it formally documents its review and acceptance of contract deliverables before paying contractors for related services. This practice should be memorialized in written policies and procedures.

SFPUC Did Not Ensure CS-165 Documentation Is Properly Maintained

According to the National Association of State Procurement Officials, public owners like SFPUC should maintain contract files containing items such as the authorizing contracts and amendments, task orders and revisions, budgets and schedules, deliverables, and progress reports—all items that help memorialize decisions made, support contract costs, and demonstrate the value of contract services.

Because SFPUC did not have the infrastructure and expertise to handle a large-scale document control requiring collaboration with internal and external stakeholders to receive, organize, and archive SSIP documents, the CS-165 agreement required the PMC to implement such a centralized system to serve as the SSIP documentation repository. However, SFPUC did not monitor its contractor to confirm critical SSIP documents or deliverables were maintained, including CS-165 documents, nor did it not clearly identify responsibilities for monitoring its contractor's document retention or clarify what needed to be stored. We looked for several CS-165 contract-related documents, and most were missing from the SharePoint folders.

File Structure Was Established as Required, but CS-165 Documents Are Not Adequately Stored

As described in the SSIP PMP, the PMC established a clear SSIP document retention structure on a SharePoint platform that included folders for both program documents and CS-165 contract documents. An example of part of the PMC SharePoint structure is shown in Exhibit 12.

EXHIBIT 12. EXAMPLE SNAPSHOT OF A PORTION OF PMC SHAREPOINT SSIP FILE STRUCTURE

FILE INDEX
Sewer System Improvement Program
Project File Folder Structure

- 4.9 Public Outreach Events
  - 4.9.1 Meetings
  - 4.9.2 Notices
  - 4.9.3 Sign-In Sheets
  - 4.9.4 Feedback Summary
  - 4.9.5 Prize Wheel
  - 4.9.6 Door to Door Canvassing
  - 4.9.7 Other Documents

5. SSIP Program Management Consultant (PMC)

- 5.1 Program Planning & Administration
  - 5.1.1 Project Authorization
  - 5.1.2 Correspondence Incoming
  - 5.1.3 Correspondence Outgoing
  - 5.1.4 Transmittals
  - 5.1.5 Meetings
    - 5.1.5.1 Agendas
    - 5.1.5.2 Meeting Minutes
  - 5.1.6 Memoranda
  - 5.1.7 Technical Memo
  - 5.1.8 Presentations
    - 5.1.8.1 Validation Presentation Material
    - 5.1.8.2 Alternative Delivery Presentations
  - 5.1.9 PMC Program Controls Reports
    - 5.1.9.1 Resource Allocation Report – Quarterly
    - 5.1.9.2 Monthly Progress Report
    - 5.1.9.3 Budget and Cumulative Expenditures by Task Order Firm – Monthly
    - 5.1.9.4 Change Request Status Report – Monthly
    - 5.1.9.5 Budget and Cumulative Expenditure Report – Weekly
    - 5.1.9.6 TimeLive Report – Weekly
    - 5.1.9.7 Detailed Task Order Revision Log – Weekly
    - 5.1.9.8 Task Order Executive Summary
    - 5.1.9.9 Resource Forecast and Actual Usage Report – Monthly
  - 5.1.10 Reference Proposals
  - 5.1.11 Miscellaneous
- 5.2 Contract Management
  - 5.2.1 PM Consultant RFP
  - 5.2.2 Proposals
  - 5.2.3 PMC Agreements/Contracts
    - 5.2.3.1 Prime Contracts
    - 5.2.3.2 Sub-Contracts & Vender Agreements
    - 5.2.3.3 Task Orders/Work Plans
    - 5.2.3.4 Sub Task Orders
    - 5.2.3.5 Other Direct Charges (ODC)
  - 5.2.4 Firms & Staff Additions
    - 5.2.4.1 Staff Addition Request
    - 5.2.4.2 Firms Addition Request
  - 5.2.5 Correspondence Incoming
  - 5.2.6 Correspondence Outgoing
  - 5.2.7 Progress Reports
    - 5.2.7.1 Community Contributions Strategy Quarterly Report
  - 5.2.8 Invoices
  - 5.2.9 Budget & Revenue Projections
  - 5.2.10 Deliverables
  - 5.2.11 Request For Deliverables
- 5.3 Quality Management

While the PMC SharePoint established folders for its CS-165 documents, it did not store complete data related to its budgets, schedules, invoices, deliverables, progress reports, or meetings. Specifically, we reviewed documentation related to CS-165 and 10 related task orders active between 2016 through 2022 and found related task order revisions, deliverables, and monthly progress reports were missing from the PMC SharePoint site as shown in Exhibit 13.

EXHIBIT 13. TESTING OF CS-165 CONTRACT DOCUMENTS LOCATED IN PMC SHAREPOINT REPOSITORY

Task Order No.	General Task Order Duration	Task Order In File	Progress Reports In File	Deliverables In File
70	June 2016 to June 2022	Partial	Partial	Partial
72	June 2016 to June 2021	Partial	Partial	Partial
74	August 2016 to June 2020	Partial	Partial	Partial
76	November 2020 to June 2022	✓	✕	✕
77	May 2020 to June 2022	✓	✕	✕
78	March 2021 to June 2022	✓	✕	Partial
80	September 2016 to June 2022	✓	Partial	✓
85	May 2019 to June 2022	✓	✕	✕
87	August 2019 to June 2022	✓	✕	✕
90	July 2016 to June 2022	✓	Partial	✕

Source: PMC SharePoint task order files reviewed on June 21, 2022.

Although task orders and progress report documentation was not always maintained in the SharePoint repository as envisioned by the file structure, SFPUC indicated that some of the information is maintained in SOLIS. However, we noted that some task order revisions and monthly progress reports were also missing in SOLIS.

Ultimately, staff had to search for documents through internal decentralized and unstructured personal files and folders spread widely across SFPUC's organization in addition to asking external contractors. Despite these efforts that required an extensive amount of time and resources, SFPUC was still unable to locate some documents, particularly those controlled and maintained by individuals no longer employed at SFPUC. Although our testing focused on CS-165 contract documentation, similar issues could likely extend more broadly to all SSIP documentation.

Responsibilities Were Not Clearly Assigned to Ensure Critical Documents Are Maintained

While the PMC was designated as the SSIP document repository by contract and required to establish a related SharePoint site in accordance with the SSIP PMP, SFPUC never assigned responsibility for ensuring all relevant documents were stored and secured on the site. In fact, there was confusion among SSIP stakeholders related to this responsibility. Some at SFPUC believed that documentation management was solely the responsibility of the PMC, while others believed it was a shared responsibility between the PMC and SFPUC.

Further, there was no comprehensive guidance for the SSIP regarding maintenance of program documentation. Although SFPUC's Infrastructure Division has policies and procedures to guide how certain SSIP documentation was to be stored, maintained, and controlled, this guidance was limited to technical engineering documents and reports. SFPUC also did not have policies or guidance addressing SSIP-related document retention more broadly or CS-165-related information such as contract administration, task orders, deliverables, and project meeting information. Without better guidance, critical documents may be lost and unavailable to access to address potential litigation, understand infrastructure specifications and details, and ensure transparency and accountability in spending public funds.

To help ensure key PMC contract documentation is adequately managed, the Infrastructure Division should more clearly specify roles and responsibilities for documentation management across SFPUC and its PMC contractor with discrete procedural steps over a document's life, from creation to final disposition. Further, the Infrastructure Division should also specify the types of documents—such as deliverables, project meeting information, and invoices—that must be maintained and where they must be maintained during the project or task order's life.

SFPUC Faces Daunting Task to Ensure All SSIP Documentation Is Properly Transferred and Archived

Although not formally memorialized, SFPUC stated all SSIP documents maintained on the PMC SharePoint must be transferred to SFPUC's internal SharePoint for archiving at critical milestones throughout the program such as the end of preconstruction on a project or the closure of a task order. According to SFPUC, this critical documentation transfer process only occurs on an ad hoc basis since SFPUC's internal SharePoint is still under development and unable to meet the storage needs as currently designed.

Moreover, because the PMC SharePoint has not been used as the centralized documentation repository as intended over the last decade since the SSIP inception, SFPUC will be challenged to sufficiently identify and locate a comprehensive universe of all SSIP documentation that must be transferred increasing the likelihood that some historical SSIP information may be lost.

SFPUC Could Not Demonstrate CS-165 Meetings Adequately Managed PMC Services

With SFPUC's decentralized approach using task order managers to implement task orders for managing large, long-term contracts, instituting regular meetings is one mechanism available to public owners to manage and monitor contractors and their performance. Given the number of SFPUC task order managers involved in CS-165 and the magnitude of each task order, regular meetings are necessary to pool information on the status across task orders and the stay abreast of PMC efforts.[20] However, while SFPUC indicated regular meetings with the PMC occurred, content discussed was often not documented and or was not sufficient to provide assurance that the agency had engaged in appropriate oversight of the contractor. Further, strong contract management practices require documenting meetings, as well as including minutes containing what was discussed, attendees, decisions and action items.

[20] At any time, CS-165 has upwards of 15 active task orders covering a wide variety of topics such as cost estimates, risk management, and technical reviews and task order managers may be among several SFPUC program areas, including the Wastewater Enterprise, Project Management Bureau, and External Affairs, as well as in the City Attorney's Office.

For instance, contract and task order status information that might be discussed in such meetings would include the status of active and planned task orders, contract and task order budget-to-actual status, contract and task order schedule and budget, PMC performance, and progress towards defined PMC goals. We were informed that the PMC and SFPUC Infrastructure Division Director/Contract Manager held bi-weekly Executive Briefing Meetings to discuss similar types of topics including PMC-specific programmatic work, including services completed, future work, funding, encumbrances, and any issues at the contract and task order level. However, SFPUC could not demonstrate that these meetings addressed critical topics such as budget-to-actual status, approved and pending expenditures, contractor or program performance, or risks and challenges facing the program based on our review of biweekly meetings held between January 2020 and March 2022.

Of the 14 bi-weekly meetings sampled, 5 meetings did not occur, and of the 9 that did take place, SFPUC was only able to provide meeting invites—no agenda or meeting minutes capturing results of the discussions. While the topics SFPUC and the PMC indicated they discussed during these meetings aligns with leading practices, no documentation exists to substantiate the practice and indicate what was discussed. Without sufficient documentation, there is little evidence to determine whether these important contract management meetings were sufficient and included important discussions and outcomes of major decisions, particularly those related to changes in budget, scope, and schedule.

To ensure sufficient oversight for large capital improvement program PMC contracts, SFPUC should memorialize meeting discussions to confirm shared understanding of decisions reached on scope and critical budget considerations. Additionally, SFPUC should retain meeting documentation in contract files—such as the PMC's SharePoint site—that includes complete meeting agendas and comprehensive meeting minutes.

SFPUC Could Improve Required Monthly Progress Reporting

Generally, the PMC complied with contract provisions requiring the submission of progress reports; although requirements were vague and did not clearly specify what information SFPUC needed or expected to be in the progress reports (e.g., requirements stipulate that progress reports should provide detailed information on the status, but do not specify the types of information to be included).

CS-165 included limited progress reporting requirements although a recent task order included marginally more detail on requirements—although it still did not specify sufficient detail for what was to be included in monthly progress reports. Specifically, Task Order 70 required progress reports to contain information related to the status and progress of all active task orders, including a summary of the current estimates and schedules; however, SFPUC reported that it had the PMC move away from this format before the most recent Director started.[21] While requiring more information than CS-165, the direction is still vague and leaves the reporting requirements to the discretion of individual project managers.

For our period of review from 2016 to 2022, the PMC generally submitted monthly progress reports along with invoices to provide support for the charges invoiced, justify labor costs, and provide high-level bullet

[21] Task Order 70 was issued a Notice to Proceed on June 30, 2016. As of Task Order 70's Revision 10, issued June 16, 2021, the requirements for monthly progress reports were shortened to "define and develop Project Manager focused reports that provide Project Managers/ Task Order Managers with timely and detailed information on the status of individual Task Orders."

points of key activities for both the current month and upcoming month. According to the SFPUC Contract Manager, the reports generally met the needs of SFPUC because the project team met with the PMC frequently and received needed information during those meetings—not through the monthly progress reports that generally lagged well behind information shared during biweekly projects meetings. Yet, because those meetings are not well-documented as discussed in the previous section, SFPUC could not fully demonstrate it adequately provided contract oversight.

Despite management's intent regarding the progress reports, our review of information contained in task order progress reports found that the reports generally lacked any sort of meaningful information that might be used as a record of progress made, justification for budget or scope changes, or contractor performance. For instance, one task order had significant changes to scope and budget. According to the Task Order Manager, at the start of the task order, SFPUC was on the verge of firing the general contractor on a large SSIP project due to major discrepancies between preliminary cost estimates and estimates at the time of bid; in fact, the project was temporarily placed on hold as a result. This led to a significantly expanded cost estimate for services procured under the task order to ensure SFPUC was provided accurate estimates. In this case, PMC services were expanded from performing cost estimate reviews to developing independent, ground up estimates. By the conclusion of the task order, the budget increased from approximately $800,000 to nearly $3 million, yet discussions around these significant developments were not captured in the monthly progress reports.

Beginning in July 2021, the PMC began to include budget, invoiced-to-date, and percentage of budget spent amounts in progress reports—all good features to help SFPUC oversee contractor performance and status; however, this information did not always appear to be accurate. While the addition of these data points represented an improvement towards providing more meaningful information on the status of task orders in the progress reports, the progress reports we were provided for the ten sampled task orders at times had errors among a number of the progress reports generated after June 2021. Specifically, in several instances, monthly progress reports generated after June 2021 reflected financial values that were inaccurate for the reporting period. For example, the progress report for Task Order 70 Task A reported an invoiced-to-date amount of $23,093,846 in July 2021, but the January 2022 progress report later reported a lower amount, a roughly $270,000 decrease. According to SFPUC, the issues auditors identified with the amounts reported in the progress reports were the result of point-in-time generation issues, where the progress reports provided to auditors were generated on a different date than the reports that would have been initially provided to SFPUC during the reporting period, though the key activities reported would still be accurate.

Further, while these reports were compliant, we identified opportunities to improve and enhance the information reported to SFPUC through these monthly progress reports to include other features such as the following:

- ✓ Current budget
- ✓ Expenses to-date
- ✓ Forecasted costs to complete tasks
- ✓ Key activities performed during the reporting period
- ✓ Summary of issues and challenges
- ✓ Potential changes to the scope of work and budget
- ✓ Status of deliverables

This information is important because it not only provides contract managers with critical performance indicators on the progress of a contract and/or task order, it also formally memorializes task order progress. This lack of critical information resulted in a general lack of project documentation regarding the progress (or lack thereof) being made on CS-165 task orders and the overall SSIP as it relates to PMC responsibilities. Moreover, it aligns with leading practices that emphasize the importance of maintaining records throughout the life of a construction project or program—from memorializing program requirements in a formal PMP to formalizing project specific protocols in a project procedures manual (PPM).[22] Most importantly, applying sound document controls could help SFPUC better manage contractor performance and formally memorialize task order progress. To better ensure SFPUC receives the information needed by management and to ensure key activities are clearly documented, SFPUC should more clearly define the elements that should be included in progress reports, establish a set format for reporting, and use information provided to better inform oversight needed of CS-165.

SFPUC Did Not Conduct Performance Evaluations

While CS-165 gives SFPUC discretion over whether to conduct contractor evaluations, the SFPUC's Infrastructure Division's Procedures Manual requires performance evaluations be completed for all multi-year consultant agreements greater than $500,000 on both an annual basis and the conclusion of the contract. Our review revealed that SFPUC has not completed annual evaluations of its $150 million PMC contract.

Specifically, there was no evidence that contract-level performance evaluations were conducted to assess the PMC's performance and for the 10 task orders reviewed, only one performance evaluation was completed. One SFPUC task order manager completed a performance evaluation assessing services provided for one out of the task order's 10 tasks, spanning a period of 10 months.[23] SFPUC management and task order managers indicated that discretion is permitted to determine if an evaluation should be completed. Moreover, according to the SFPUC Contract Manager, it was open to interpretation on whether the Infrastructure Division's Procedures Manual performance evaluation requirement applied to the PMC agreement and individual task orders.

Performance evaluations are useful for documenting contractor performance as means for the organization to better manage the existing contract, as well as keeping a record of the contractor's performance so that the organization might better consider a contractor's past performance when evaluating contractor proposals for future projects. Further, according to the Infrastructure Division's Procedures Manual, performance evaluations are a standard business practice to 1) determine if SFPUC is receiving good value and quality deliverables; 2) provide opportunities for continuous improvement; and 3) provide input in the selection process for future consultant agreements. Without regular performance evaluations, the organization foregoes the opportunity to provide meaningful feedback on a contractor's performance, as well as creates the risk that a low-performing contractor might be awarded a contract for similar services in the future.

To ensure performance evaluations are completed on a routine basis, SFPUC should require regular performance evaluations of the PMC and should also more clearly define the basis by which performance evaluations will be completed (either at the contract or task order level) in both the contract and procedure manuals.

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[22] CMAA Contract Administration Guidelines, 2013.

[23] Task Order 74: Southeast Treatment Plant Projects Support, Task J – New Southeast Lift Station.

Recommendations

To improve task order management and oversight practices as a means of ensuring quality services and products, requested services are delivered, contractor performance is sufficiently documented, and internal policies and procedures are followed, SFPUC should:

8. Memorialize its analysis of the use of City employees instead of external contractors.

9. Update the policy requiring Assistant General Manager approval for task orders over $100,000 if outdated; until then, follow the stated policy and retain appropriate approvals received.

10. Consistently apply definitions for services and deliverables and clearly specify in task order documentation which classification requested services fall under.

11. Formally document its review and acceptance of contract deliverables before paying contractors for related services.

12. Clearly specify roles and responsibilities for documentation management across SFPUC and its PMC contractor with discrete procedural steps over a document's life, from creation to final disposition. Specify the types of documents—such as deliverables, project meeting information, and invoices—that must be maintained and where they must be maintained during the project or task order's life.

13. Memorialize meeting discussions to confirm shared understanding of decisions reached on scope and critical budget considerations and retain related meeting documentation in contract files—such as the PMC's SharePoint site—that includes complete meeting agendas and comprehensive meeting minutes.

14. Clearly define the elements that should be included in progress reports, establish a set format for reporting, and use information provided to better inform oversight needed of CS-165.

15. Require regular performance evaluations of the PMC and more clearly define the basis by which performance evaluations will be completed (either at the contract or task order level).

Appendix A. SSIP PMC Contract Task Order Universe

SSIP CS-165 contract task orders, as of November 12, 2021 (amounts in millions).

#	Task Order Description	Start	End	Task Order Value
1	SSIP Program Planning and Administration	09/02/11	06/30/16	$26.10
2	Urban Watershed Assessments & Planning	10/07/11	06/30/16	$11.85
3	North Shore Redundant Force Main Constructability Review	10/18/11	06/30/16	$0.33
4	Program Controls Support	12/08/11	06/30/16	$5.97
5	Southeast Water Pollution Control Plan	12/16/11	06/30/13	$3.08
6	Document Management Support	12/16/11	06/30/14	$0.17
7	Communications and Reporting Support	08/30/12	06/30/16	$5.04
8	PM Support and Review Services – Central Bayside Project	11/27/12	06/30/16	$0.64
9	Condition Assessment and Process Performance Evaluation – North Point Facility & Oceanside Plan	04/10/12	06/30/15	$2.12
10	SharePoint Development for Wastewater Enterprise Project Development Process	07/24/12	06/30/13	$0.03
11	Community Benefit Support	02/04/13	12/30/14	$0.83
12	Comprehensive Risk Assessment and Risk Management Plan	04/10/12	06/30/14	$0.19
13	Bayshore Sanitary District Sewer Services Rate Study Support	04/11/12	06/30/16	$0.95
14	Alternative Project Delivery Systems	08/01/12	06/30/16	$0.05
15	Southeast Water Pollution Control Plant (WPCP) Centrifuge Replacement Technical Support	04/17/12	06/30/16	$0.00
16	Biosolids End-Use Market Assessment and High-Strength Waste Utilization Business Plan	02/04/13	06/30/16	$0.64
17	Riva Pilot Study	08/30/12	06/30/16	$0.13
18	Treasure Island Wastewater and Stormwater Infrastructure Evaluation Phase 1	09/13/12	06/30/16	$0.15
19	Climate Change Analysis	08/29/13	06/30/16	$0.67
20	Update to Subdivision Regulations - Sewer and Surface Conveyance Design Criteria	11/29/12	06/30/14	$0.06
21	Collection System Condition Assessment Plan	05/09/13	06/30/15	$0.75
22	Sunnydale Tunnel Supplementary Hydraulic Analysis	10/26/12	06/30/14	$0.05
23	New Southeast Water Pollution Control Plant Headworks Planning	05/09/13	06/30/16	$1.83
24	Digester Gas Storage Facility Failure Analysis	01/04/13	06/30/13	$0.02
25	Technical Support and Review of 8 Washington Development Project	12/20/12	06/30/14	$0.06
26	Green Infrastructure Early Implementation Projects	12/20/12	06/30/17	$6.09
27	Wastewater Aerobic/Anaerobic Transformations in Sewers Odor Modeling Study for Wastewater Enterprise	03/13/13	06/30/16	$0.24
28	Receiving Water Quality Modeling Study for Wastewater Enterprise	02/07/13	06/30/17	$1.37
29	Southeast Water Pollution Control Plant Program Integration	02/21/14	03/30/16	$4.10
30	Richmond Transport Tunnel Model	04/16/13	06/30/14	$0.08
31	Project Description of Biosolids Project for Environmental Permitting Process	03/25/13	12/31/13	$0.23
32	Biogas Beneficial Use Study at Southeast WPCP	04/18/13	12/30/13	$0.13
33	Biosolids Digester Facilities Needs Assessment	04/18/13	06/30/14	$0.14
34	SharePoint Development for Collection System Projects	05/09/13	06/30/15	$0.02
35	Bayside Geotechnical Support	08/03/13	06/30/16	$0.01
36	Technical Writing Support and Quality Assurance/Quality Control Review for Operations, Engineering, and Maintenance	02/12/14	06/30/16	$0.43
37	Collections System Project Management Support	12/26/13	06/30/16	$0.45
38	Technical Assistance with Outreach and Engagement for the Contractors Assistance Center	06/26/14	12/31/16	$0.58

#	Task Order Description	Start	End	Task Order Value
39	Combined Sewer Discharge (CSD)/SSIP Condition Assessment Program	04/02/14	05/01/17	$0.75
40	Southeast Plant Biosolids Digester Facilities Project (BDFP) Support	05/19/14	06/30/16	$1.30
41	SSIP Compliance	06/04/14	06/30/16	$0.79
42	Oceanside Fine Screen and Grit Removal Enhancements	06/04/14	06/30/16	$0.04
43	Oceanside Project Interface and Support	11/05/14	06/30/16	$0.43
44	Selby and Marin Outfall Structure Cover Design Proposal	07/29/14	12/31/15	$0.05
45	Communications Strategy Implementation	10/31/14	06/30/16	$0.74
46	Wet Weather Rate Analysis	11/19/14	06/30/19	$0.17
47	Sewer Lateral Improvement Guideline and Policy Review	01/15/15	06/30/19	$0.21
48	SFPUC Power Business Plan	01/21/15	06/30/16	$0.08
50(A)	Green Infrastructure Construction Training Program	03/16/15	06/30/16	$0.47
51	Construction Management Plan	05/06/15	06/30/16	$0.50
52	Collection System Interdepartmental Project Support	06/30/15	06/30/16	$0.05
53	Southeast Plant Logistics Coordination	09/16/15	06/30/16	$0.75
54	Southeast Plant Project Review and Support	09/14/15	06/30/16	$0.11
55	North Point Facility	10/14/15	06/30/17	$0.07
56	Green Infrastructure Maintenance Manual	09/16/15	06/30/16	$0.08
57	Flood Resilience for SSIP	08/10/15	06/30/16	$1.39
59(A)	Triple Bottom Line Support for SSIP	09/08/15	06/30/16	$0.08
60	Urban Watershed Assessment Incentive Programs Development	09/08/15	06/30/16	$0.15
61	Distributed Control System Upgrade Support	01/13/16	11/30/16	$0.03
63(A)	Cayuga and Wawona Stormwater Improvement Project Support	03/31/16	08/31/16	$0.07
64	Folsom Area Stormwater Improvement Project Support	03/28/16	04/30/17	$0.02
70(A)	SSIP Programmatic Support Services	06/30/16	06/30/22	$37.00
71	SSIP Programmatic Green Infrastructure Support	06/30/16	06/30/18	$0.40
72	Programmatic - WWE and Infrastructure Support	06/30/16	06/30/21	$3.31
73	Biosolids Digester Facilities Project Support	06/30/16	06/30/18	$1.72
74	Southeast Plant Projects Support	11/30/16	09/25/26	$2.57
75	Oceanside Plant/North Point Facility Projects Support	08/22/16	06/30/22	$0.63
76	Asset Management Support	11/18/20	06/30/22	$0.62
77	BDFP Independent Estimate Support	05/11/20	06/30/22	$2.93
78	Southeast Plants Projects Support	03/03/21	06/30/22	$0.12
80(A)	Central Bayside Improvement System Project Support	09/06/16	06/30/22	$1.29
81	SSIP Collection System Projects Support	08/11/16	06/29/18	$1.42
82	Stormwater Management Early Implementation Projects Support	08/29/16	06/30/22	$1.52
84(A)	Stormwater Management and Flood Resilience Projects Support	08/11/16	06/30/18	$3.39
85	CSD & Transportation/Strategies Structures Support	05/31/19	06/30/22	$0.20
86	Flood Resilience Project Support	06/04/19	06/30/22	$0.62
87	Project Strategies Green Infrastructure Capital Support	08/03/19	06/30/22	$3.07
89(A)	Technical Assistance for the City Attorney's Office	04/13/17	06/30/18	$0.02
90	Land Reuse Projects Support	07/27/16	06/30/18	$1.76
91	WWE/SSIP Advisory Support	07/24/19	06/30/21	$0.05
	80 Task Orders Total			$146.55

Source: Auditor-generated from SFPUC's SOLIS financial and supply chain management system.
Note: (A) Denotes out of sequence task order numbering, not task order missing from listing.

Appendix B. Department Response

San Francisco
Water Power Sewer
Services of the San Francisco Public Utilities Commission

525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94102
T 415.554.3155
F 415.554.3161
TTY 415.554.3488

February 6, 2023

Mark de la Rosa
Director of Audits
City Hall, Room 476
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102

Subject: San Francisco Public Utilities Commission (SFPUC) Response to Sewer System Improvement Program (SSIP) Audit

Dear Mr. de la Rosa,

Thank you for providing the SFPUC the opportunity to review the SSIP Program Audit Report and respond to its findings and recommendations.

We appreciate the time and effort spent by the staff of Sjoberg Evashenk Consulting, Inc., and the City Services Audit Division to review the SSIP Program over the last several months.

We have concurred with all fifteen audit recommendations. We are committed to incorporating these recommendations into our business practices, which will strengthen our SSIP program, operations, and administration.

Sincerely,

Dennis Herrera
General Manager

CC: Ronald Flynn, Deputy General Manager
Nancy Hom, AGM Business Services/CFO
Stephen Robinson, AGM Infrastructure
Irella Blackwood, Audit Director

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.

Recommendations and Responses

For each recommendation, the responsible agency should indicate in the column labeled Agency Response whether it concurs, does not concur, or partially concurs and provide a brief explanation. If it concurs with the recommendation, it should indicate the expected implementation date and implementation plan. If the responsible agency does not concur or partially concurs, it should provide an explanation and an alternate plan of action to address the identified issue.

Recommendation	Agency Response	CSA Use Only Status Determination*
San Francisco Public Utilities Commission should:		
1. Formally adopt comprehensive policies and procedures covering all task order administration processes and requirements, including those discussed throughout this report.	☒ Concur ☐ Do Not Concur ☐ Partially Concur Plan: Update the comprehensive policies and procedures covering all task order administration processes and requirements. Implementation Date: 6/30/2023	☒ Open ☐ Closed ☐ Contested
2. Ensure the assumptions used to determine the expected contract value and anticipated costs of PMC services procured are supported and documented. In addition, when establishing cost estimates, consider comparing internal estimates to comparable industry and peer averages for similar services to help determine whether estimates are reasonable.	☒ Concur ☐ Do Not Concur ☐ Partially Concur Plan: Document the discussions and decisions leading to budget development for future PMC procurements. Implementation Date: 6/30/2023	☒ Open ☐ Closed ☐ Contested

* Status Determination based on audit team's review of the agency's response and proposed corrective action.

Recommendation	Agency Response	CSA Use Only Status Determination*
3. Establish a formal, long-term plan to prioritize, track, and manage overall PMC costs across all individual task orders and prioritize resources to ensure funding remains available through the duration of the contract and is focused on the most important service needs. Regularly revisit its plan to assess whether actual contract expenditures align with the long-term plan and whether the plan needs to be revised and document needed changes.	☒ Concur ☐ Do Not Concur ☐ Partially Concur Plan: Establish a plan for future PMC procurements. Require maintaining meeting minutes after each annual budget review meeting that is archived in a central archival system. Integrated with recommendation #1. Implementation Date: 6/30/2023	☒ Open ☐ Closed ☐ Contested
4. Formally notify SFPUC executive management early on when forecasts project available contract funds will be insufficient to meet anticipated PMC service needs to determine whether additional funds can be secured to bridge gaps identified or reduce scope and activities of the PMC or other areas of the program to align with available resources.	☒ Concur ☐ Do Not Concur ☐ Partially Concur Same as recommendation #3	☒ Open ☐ Closed ☐ Contested
5. Implement a process to develop long-term cost estimates, budgets, and schedules for each task order when initiated and revised and assess the cumulative long-term impact of task orders on available contract resources.	☒ Concur ☐ Do Not Concur ☐ Partially Concur Same as recommendation #3	☒ Open ☐ Closed ☐ Contested

* Status Determination based on audit team's review of the agency's response and proposed corrective action.

Recommendation	Agency Response	CSA Use Only Status Determination*
6. Retain documentation supporting task order price review and negotiation to ensure a shared understanding of agreements reached and protect the owner against potential claims or conflicts, safeguard that the owner is getting the best value from its limited resources, and provide transparency to the process.	☒ Concur ☐ Do Not Concur ☐ Partially Concur Plan: Maintain archival of pertinent documentation of task order negotiation in a secure single archival system that can be accessed to provide audit trails. Integrated with recommendation #1. Implementation Date: 6/30/2023	☒ Open ☐ Closed ☐ Contested
7. Ensure designated individuals involved in approving all labor hours and invoices stay aware of and better control costs being charged.	☒ Concur ☐ Do Not Concur ☐ Partially Concur Plan: Process and Procedure has been changed. No more delegation of approvals to the administrative staff will be allowed. Only individuals involved in the project can be the designated approvers. Implementation Date: Completed 9/30/2022	☐ Open ☒ Closed ☐ Contested
8. Memorialize its analysis of the use of City employees instead of external contractors.	☒ Concur ☐ Do Not Concur ☐ Partially Concur Plan: To archive documentation when developing the staffing plan (during the RFP process) including communications with Local Union and Other City Departments. Implementation Date: 6/30/2023	☒ Open ☐ Closed ☐ Contested

* Status Determination based on audit team's review of the agency's response and proposed corrective action.

Recommendation	Agency Response	CSA Use Only Status Determination*
9. Update the policy requiring Assistant General Manager approval for task orders over $100,000 if outdated; until then, follow the stated policy and retain appropriate approvals received.	☒ Concur ☐ Do Not Concur ☐ Partially Concur Plan: Policy of requiring an AGM of Infrastructure's approval for a task order greater than $100K has been eliminated. Integrated with recommendation #1. Implementation Date: 2/28/2023	☒ Open ☐ Closed ☐ Contested
10. Consistently apply definitions for services and deliverables and clearly specify in task order documentation which classification requested services fall under.	☒ Concur ☐ Do Not Concur ☐ Partially Concur Plan: Provide clear explanation when there are deliverables type of work products versus work activities. The term deliverables can be misinterpreted as a work product such as reports that needed to be turned in at the completion of any task. Change the "Deliverables" type of billing in our invoicing system to say "Lump-sum". Integrated with recommendation #1. Implementation Date: 3/31/2023	☒ Open ☐ Closed ☐ Contested
11. Formally document its review and acceptance of contract deliverables before paying contractors for related services.	☒ Concur ☐ Do Not Concur ☐ Partially Concur Plan: See #10. In addition, for those task that have deliverables, it will require how the deliverables should be received on the task order to ensure the deliverable is formally accepted by way of signature from the deliverable recipient. Integrated with recommendation #1. Implementation Date: 2/28/2023	☒ Open ☐ Closed ☐ Contested

* Status Determination based on audit team's review of the agency's response and proposed corrective action.

Recommendation	Agency Response	CSA Use Only Status Determination*
12. Clearly specify roles and responsibilities for documentation management across SFPUC and its PMC contractor with discrete procedural steps over a document's life, from creation to final disposition. Specify the types of documents—such as deliverables, project meeting information, and invoices—that must be maintained and where they must be maintained during the project or task order's life.	☒ Concur ☐ Do Not Concur ☐ Partially Concur Plan: Previously we were using Parson's SharePoint because SFPUC did not have the technology to allow a 3rd party access. PUC now has implemented a technology that allows 3rd party access so we will be using SFPUC SharePoint for archiving documents going forward. Furthermore, we will establish standard roles and responsibility for project teams in the next PMC contract to clearly identify who should turn over the records for archiving. The archival requirement should be included in the task order during creation. Implementation Date: 6/30/2023	☒ Open ☐ Closed ☐ Contested
13. Memorialize meeting discussions to confirm shared understanding of decisions reached on scope and critical budget considerations and retain related meeting documentation in contract files—such as the PMC's SharePoint site—that includes complete meeting agendas and comprehensive meeting minutes.	☒ Concur ☐ Do Not Concur ☐ Partially Concur Plan: Ensure task order development meetings minutes are recorded to track decisions. Incorporate this as an archival requirement and clearly define who is responsible on the next PMC contract. Implementation Date: 6/30/2023	☒ Open ☐ Closed ☐ Contested
14. Clearly define the elements that should be included in progress reports, establish a set format for reporting, and use information provided to better inform oversight needed of CS-165.	☒ Concur ☐ Do Not Concur ☐ Partially Concur Plan: Will incorporate this requirement into the existing Contract Management Procedure. Implementation Date: 6/30/2023	☒ Open ☐ Closed ☐ Contested

* Status Determination based on audit team's review of the agency's response and proposed corrective action.

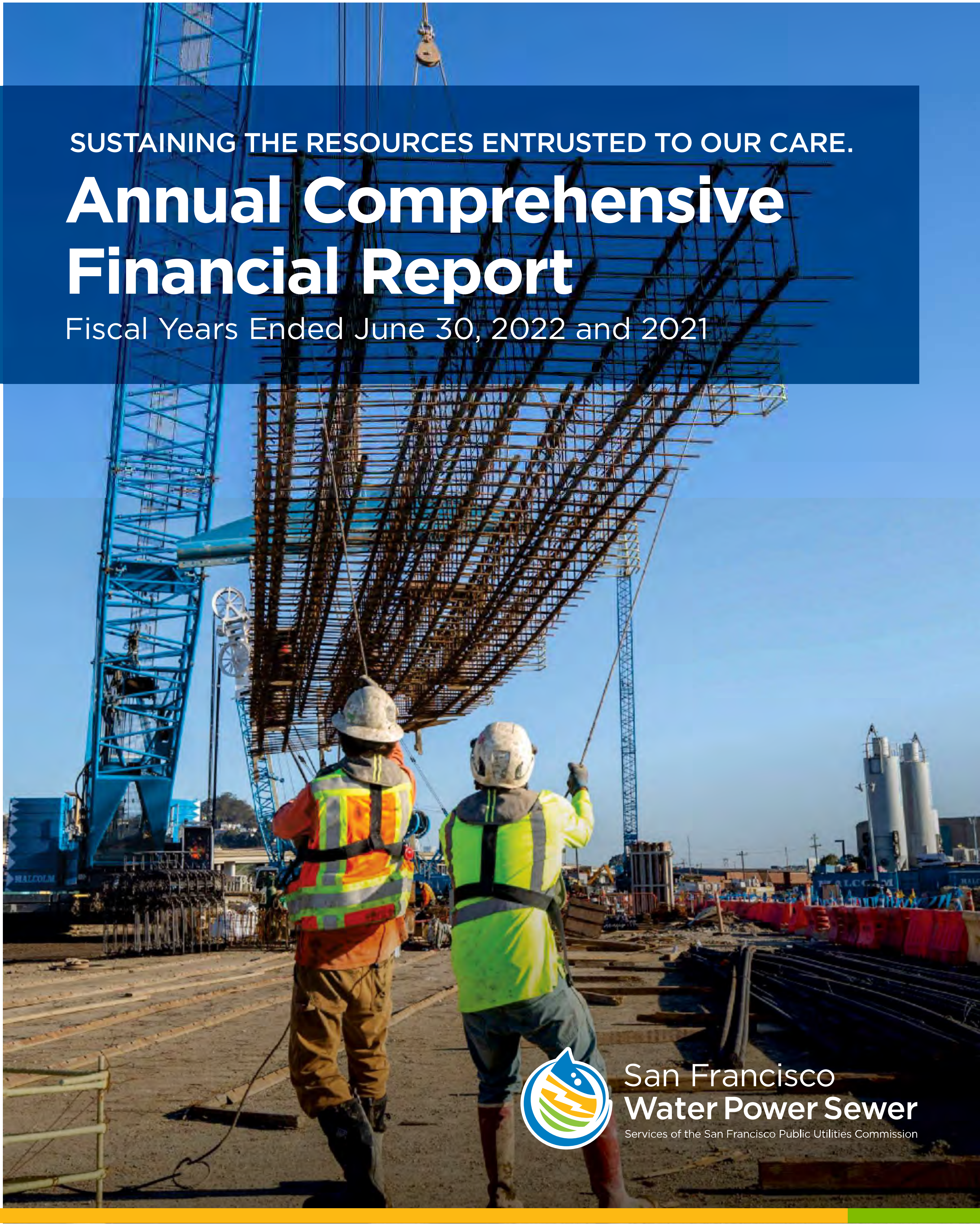
Recommendation	Agency Response	CSA Use Only Status Determination*
15. Require regular performance evaluations of the PMC and more clearly define the basis by which performance evaluations will be completed (either at the contract or task order level).	☒ Concur ☐ Do Not Concur ☐ Partially Concur Plan: Will clarify performance evaluation process and enforce annual evaluations as part of annual task order modification process. Implementation Date: 12/31/2023	☒ Open ☐ Closed ☐ Contested

* Status Determination based on audit team's review of the agency's response and proposed corrective action.

SUSTAINING THE RESOURCES ENTRUSTED TO OUR CARE.

Annual Comprehensive Financial Report

Fiscal Years Ended June 30, 2022 and 2021



San Francisco
Water Power Sewer
Services of the San Francisco Public Utilities Commission

The San Francisco Public Utilities Commission

An Enterprise Department of the City and County of
San Francisco, California

Annual Comprehensive Financial Report
For the Fiscal Years Ended
June 30, 2022 and 2021

Prepared by SFPUC Financial Services

Nancy L. Hom
Chief Financial Officer and Assistant General Manager, Business Services

The San Francisco Public Utilities Commission

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Introductory Section (Unaudited)

San Francisco Water Power Sewer

Services of the San Francisco Public Utilities Commission

SAN FRANCISCO PUBLIC UTILITIES COMMISSION
General Manager's Transmittal Letter

February 28, 2023

Dear Customers and Interested Parties,

At the SFPUC, protecting the environment and being responsible stewards of the resources entrusted to our care is vital to everything that we do. These resources include maintaining and upgrading the water, power, and wastewater systems that our customers depend on. It means supporting our communities through Customer Assistance Programs and the opening of the new Southeast Community Center in San Francisco's Bayview-Hunters Point neighborhood. It also means adapting our water, power, and wastewater systems to withstand climate change. We continue to innovate to invest in our future.

Public Power

Our power portfolio is a combination of greenhouse-gas-free hydropower that we generate through our Hetch Hetchy Power system and sustainable energy that we procure through our CleanPowerSF community choice aggregation program. We are providing cleaner, less expensive power than our investor-owned competitor, PG&E, and we are actually lowering rates for many of our customers, while PG&E has raised theirs.

We are doing that while also growing rooftop solar generation by adding a seventh public school to our portfolio of solar installation sites. As a public power utility, the SFPUC owns and operates numerous solar installations in San Francisco that collectively generate 8.5 megawatts of solar energy.

Additionally, we have added to our clean energy storage capacity by entering into new contracts. CleanPowerSF now has over 200 megawatts of battery storage under active contract and serves over 380,000 San Francisco customer accounts.

Water

Our responsible water management allows us to release water to the Tuolumne River every spring. In particular, since 2006 we have worked to make special releases to support wildlife and wetland vegetation in the ecologically important Poopenaut Valley within Yosemite National Park. This supports numerous riparian bird species and up to 17 species of bats. These special releases have occurred in six of the last 11 years.

We are also working with the U.S. Fish and Wildlife Service and our partners on the Tuolumne River on pilot habitat restoration projects for approximately 9 acres of salmon spawning habitat and 2 acres of adjacent floodplain rearing habitat. The preliminary project timeline includes grant seeking in 2023 and construction in 2024.

Biodiversity is a key factor for a healthy watershed. A healthy watershed produces high-quality drinking water and is more resilient to drought and wildfire. We are protecting our watershed one seed at a time with our Sunol Native Plant Nursery, which grows plants free from damaging pathogens for habit restoration in our watershed.

In western San Francisco, we are nearing completion of our Westside Enhanced Recycled Water Treatment Facility, which is designed to save up to 2 million gallons per day on average of drinking water that is currently used for non-drinking purposes, like irrigation.

Wastewater
We have been implementing innovative ways to reduce the burden on our unique combined sewer system that protects our bay and ocean by continuing to expand green infrastructure for stormwater management across the city.

We now capture and manage 250 million gallons of stormwater per year through green infrastructure like rain gardens, permeable pavement, rainwater harvesting systems and green roofs. In September 2021, we completed the Sunset Boulevard Greenway Project, installing 30 new rain gardens along 14 city blocks. The project is collectively expected to keep around 6 million gallons of stormwater out of our sewer system each year and reduce the total volume of stormwater entering the sewer system from the project area by 95%. The new rain gardens feature drought tolerant plants and specially engineered soils to absorb runoff from the surrounding streets.

We are also making investments across our entire wastewater system, including upgrading our treatment plants into state-of-the-art facilities that will look better, smell better, and work better for all of San Francisco.

People
Two of our most important resources are our customers and our staff. As we continue to build the utility of the future, investments in people are just as important as investments in infrastructure.

We not only introduced and then extended a moratorium on shutoffs and late fees because of the pandemic, we also secured $20 million in state and federal funding to provide bill relief to our customers.

Additionally, we are working every day to grow our ability to be the employer of choice in the utility industry. That includes a resolute focus on racial equity to continue to attract and retain the best talent. We are committed to addressing long-time systemic barriers for communities of color. The SFPUC has expanded staffing and consultant resources to advance racial equity work, and we are implementing new strategies for diversity-based recruitment for SFPUC jobs. We are also investing in developing and retaining our existing staff by broadening employee and supervisor training.

Our racial equity work extends beyond our workforce. As this fiscal year drew to a close, we were putting the finishing touches on a historic investment in our southeast neighborhoods, which are home to communities of color that, over the years, have felt a disproportionate effect from our operations.

The new Southeast Community Center opened in early fiscal year 2022-23, a landmark destination for the local community to gather, learn, play, and grow. This partnership with San Francisco's southeast communities is designed to promote residents' health; wellbeing; and cultural, educational, and financial empowerment.

We would like to express appreciation to the Mayor, Board of Supervisors, and our Commission for their continued support of our approach and achievements.

On behalf of the SFPUC, I am pleased to present the Annual Comprehensive Financial Report for the fiscal year ended June 30, 2022.

Respectfully submitted,

Dennis J. Herrera
General Manager
San Francisco Public Utilities Commission

The Reporting Entity - Profile of the San Francisco Public Utilities Commission

The **San Francisco Public Utilities Commission (SFPUC)**, an enterprise department of the City and County of San Francisco (the City), is responsible for the operation, maintenance, and development of three utility enterprises: Water, Wastewater, and Hetch Hetchy Water and Power and CleanPowerSF. We provide wholesale and retail drinking water to the San Francisco Bay Area, wastewater collection and treatment within San Francisco and three neighboring municipalities, and power to residential and commercial customers and municipal facilities.

Our Business Services, External Affairs, and Infrastructure bureaus provide support and administrative services and are funded through utility rates and charges.

Enterprises	Funds
Water	Water
Wastewater	Wastewater
Hetch Hetchy	Hetchy Water
	Hetchy Power
	CleanPowerSF

The **Water Enterprise** operates the Hetch Hetchy Regional Water System (System), a wholesale and retail drinking water supply system that serves 2.7 million customers in Alameda, Santa Clara, San Mateo, and San Francisco counties. The upcountry portion of the System begins with Hetch Hetchy Reservoir in Yosemite National Park. Impounded by O'Shaughnessy Dam, Hetch Hetchy Reservoir water passes through hydroelectric powerhouses before it enters the San Joaquin Pipelines, the Tesla Ultraviolet Treatment Facility, and the Coast Range Tunnel on its journey to the Bay Area.

The Bay Area portion of the System includes water collection, treatment, and transmission facilities from the Alameda East Portal to the wholesale service area and terminal reservoirs in San Francisco. Water storage facilities include watersheds, dams, and reservoirs such as our Calaveras, San Antonio, Crystal Springs, Pilarcitos, and San Andreas. The water treatment facilities are Tesla Ultraviolet Treatment Facility, disinfecting the Hetch Hetchy supply; Sunol Valley Water Treatment Plant, treating the water from the Calaveras and San Antonio supply as well as the stored Hetch Hetchy supply; and Harry Tracy Water Treatment Plant, treating the water from the Crystal Springs and San Andreas supply. The water transmission system in the Bay Area and Peninsula includes the Bay Division, San Andreas, Sunset Supply, and Crystal Springs pipelines. The Bay Area transmission system also includes Irvington Tunnel 1 and Tunnel 2, the Bay Tunnel, and the Crystal Springs Bypass Tunnel.

The Water Enterprise also manages water distribution in the City and the majority of the drinking water is supplied by our system, originates as snowmelt within the 459-square-mile Hetch Hetchy Watershed on the upper Tuolumne River within Yosemite National Park. This high-quality water is transported 167 miles across California solely by gravity. The Hetch Hetchy water supply is augmented with precipitation collected in the reservoirs of the Alameda Creek Watershed in Alameda County, and the Peninsula Watershed in San Mateo County. The Regional Groundwater Storage and Recovery Project, currently under construction, will provide additional dry year water supply to the System for drought management.

Water Enterprise revenue is based on retail and wholesale water rate payments from customers. Retail rates are set by the SFPUC, while wholesale rates are set by the Commission pursuant to our Water Supply Agreement with our wholesale customers.

The **Wastewater Enterprise** is responsible for the operation and maintenance of San Francisco's combined sewer system that collects, treats, and discharges once treated, sanitary sewage (toilet flushing, bathroom and kitchen sinks, showers) and stormwater runoff (rainwater falling on our roofs, sidewalks and streets within San Francisco, parts of Daly City, the Bayshore Sanitary District, Brisbane, Treasure Island, and Yerba Buena Island. This work is crucial for the protection of public health, and for the environmental safety of the San Francisco Bay and Pacific Ocean. Our combined sewer system is unique to coastal California and offers significant environmental benefits because it captures and treats both stormwater (rain runoff) and sanitary sewage from homes and businesses, and these combined flows are referred to as wastewater.

San Francisco wastewater and stormwater flows are treated at three facilities: the Southeast Treatment Plant, the Oceanside Treatment Plant, and the North Point Wet Weather Facility, the last of which is operated only in wet weather. The sewer system currently can handle up to an average of 70 million gallons per day (MGD) in dry weather and can treat up to 575 MGD in wet weather. The Wastewater Enterprise operates 27 pump stations, 36 discharge points, and massive underground transport/storage structures around the City that have storage capacity up to 200 million gallons.

We operate, clean, inspect, and maintain more than 1,000 miles of sewer pipes. We regularly monitor areas of the San Francisco shoreline for water quality where water recreation is common and provide water quality reports to the public using our 24-hour hotline, website, and e-newsletters.

The Wastewater Enterprise serves both residential and commercial accounts as well as some municipal customers. Our sewer facilities and resource recovery programs have received recognition from agencies at the state and national level, including the U.S. Environmental Protection Agency, National Association of Clean Water Agencies, and the California Water Environment Association.

In a combined sewer system, such as San Francisco's, managing stormwater is an important priority for the SFPUC and the City. We take a comprehensive approach to managing stormwater and advancing flood resilience across the City. Although no sewer system can handle the heaviest rains, we are pursuing a variety of approaches to improve the City's flood resilience in the face of increasingly intense rainstorms. The comprehensive RainReadySF Program, which is a combination of planned infrastructure improvements, coordinated City services and innovative programs, provides residents and businesses with the resources they need to reduce the risk of flooding during a major rainstorm.

The **Hetch Hetchy Water and Power and CleanPowerSF Enterprise (Hetch Hetchy)** comprises of three key components: (1) Hetch Hetchy Water (Hetchy Water), which operates and maintains the upcountry water and power facilities; (2) Hetch Hetchy Power (Hetchy Power), responsible for all power utility wholesale and retail transactions and in-City power operations; and (3) CleanPowerSF, a Community Choice Aggregation (CCA) that provides San Francisco residents and businesses with electricity supply services sourced from new and existing clean energy sources.

Hetchy Water is responsible for operating the Hetch Hetchy Reservoir, the main source of water for the Hetch Hetchy Regional Water System (System) and plays a key role in water delivery in California. Several of the Hetch Hetchy Water facilities are joint assets and are used for both water transmission and power generation and transmission. Operating and capital costs of these facilities are allocated 45% to Hetchy Water and 55% to Hetchy Power. Refer to Water Enterprise for more information on the System.

Hetchy Power is the publicly owned utility for San Francisco. The Hetchy Power System is comprised of transmission lines and some local distribution facilities. It has a generation portfolio that includes three major hydroelectric powerhouses – Holm, Kirkwood, and Moccasin – in the Sierra Nevada mountain range and 23 solar arrays in San Francisco. Hetchy Power revenue is based on retail and wholesale power-rate payments and charges collected from customers. Retail rates are set by the Commission.

Hetchy Power customers include San Francisco International Airport (SFO), libraries, police stations, City Hall, San Francisco Municipal Transportation Agency (SFMTA), San Francisco Port Authority, Treasure Island, Hunter's Point Shipyard, and the Transbay Transit Center. Hetchy Power also owns, operates, and maintains approximately 60% of the streetlights in the City. Finally, Hetchy Power provides electrical maintenance services, energy efficiency programs, and distributed generation services to our customers.

CleanPowerSF, San Francisco's CCA program, provides clean electricity supply to residents and businesses in San Francisco. Under this program, CleanPowerSF supplies customers with electricity from renewable sources like solar wind, and hydro power. Pacific Gas & Electric Company (PG&E) delivers the energy via their electrical grid. CleanPowerSF's Green product features at least 50% California Renewable Portfolio Standard (RPS) certified renewable energy, and its SuperGreen product offers 100% California RPS-certified renewable energy.

CleanPowerSF serves approximately 380,000 customer accounts in San Francisco. Collectively, Hetch Hetchy Power and CleanPowerSF meet more than 70% of the electricity demand in San Francisco with clean power.

Mission, Vision, and Values

The mission of the San Francisco Public Utilities Commission (SFPUC or the Commission) is to provide our customers with high-quality, efficient, and reliable water, power, and wastewater services in a manner that is inclusive of environmental and community interests, and sustains the resources entrusted to the SFPUC's care.

SFPUC values sustainability as a fundamental business principle, exemplified through the adoption of an agency-wide strategic sustainability plan to ingrain the values of a sustainable future into our agency's core processes. The SFPUC is a sustainable utility leader, recognized for superior levels in service, value, environmental stewardship and innovation. Most importantly we value our workforce and community as reflected in the core values adopted by our organization.

- **Communication:** Listen and communicate honestly and openly.
- **Diversity:** Valuing a workforce that reflects all manner of views, experiences, backgrounds, and talents, and recognize it is vital to the SFPUC success.
- **Equal Opportunity:** Provide opportunities to all staff to contribute and reach their potential. To achieve this, the SFPUC must be a learning organization.
- **Excellence:** Strive for personal and professional excellence, and recognize exemplary performance by seeking continuous improvement.
- **Inclusiveness:** Provide access and transparency to stakeholders and community members.
- **Respect:** Understand and appreciate the inherent value of the SFPUC's staff, customers, and community.
- **Safety:** Take the health and safety of the SFPUC's employees, customers, and communities seriously.
- **Service:** Focus on customer satisfaction, health, and safety.
- **Stewardship:** Responsibly manage the resources entrusted to the SFPUC's care.
- **Teamwork:** Support a cooperative work environment; the SFPUC team is strengthened by the diversity and contributions of its members.
- **Trust:** Act with honesty, integrity, and fairness.

Fiscal Year 2022
San Francisco Mayor and Public Utilities Commission Members

London N. Breed
Mayor

Anson Moran
President

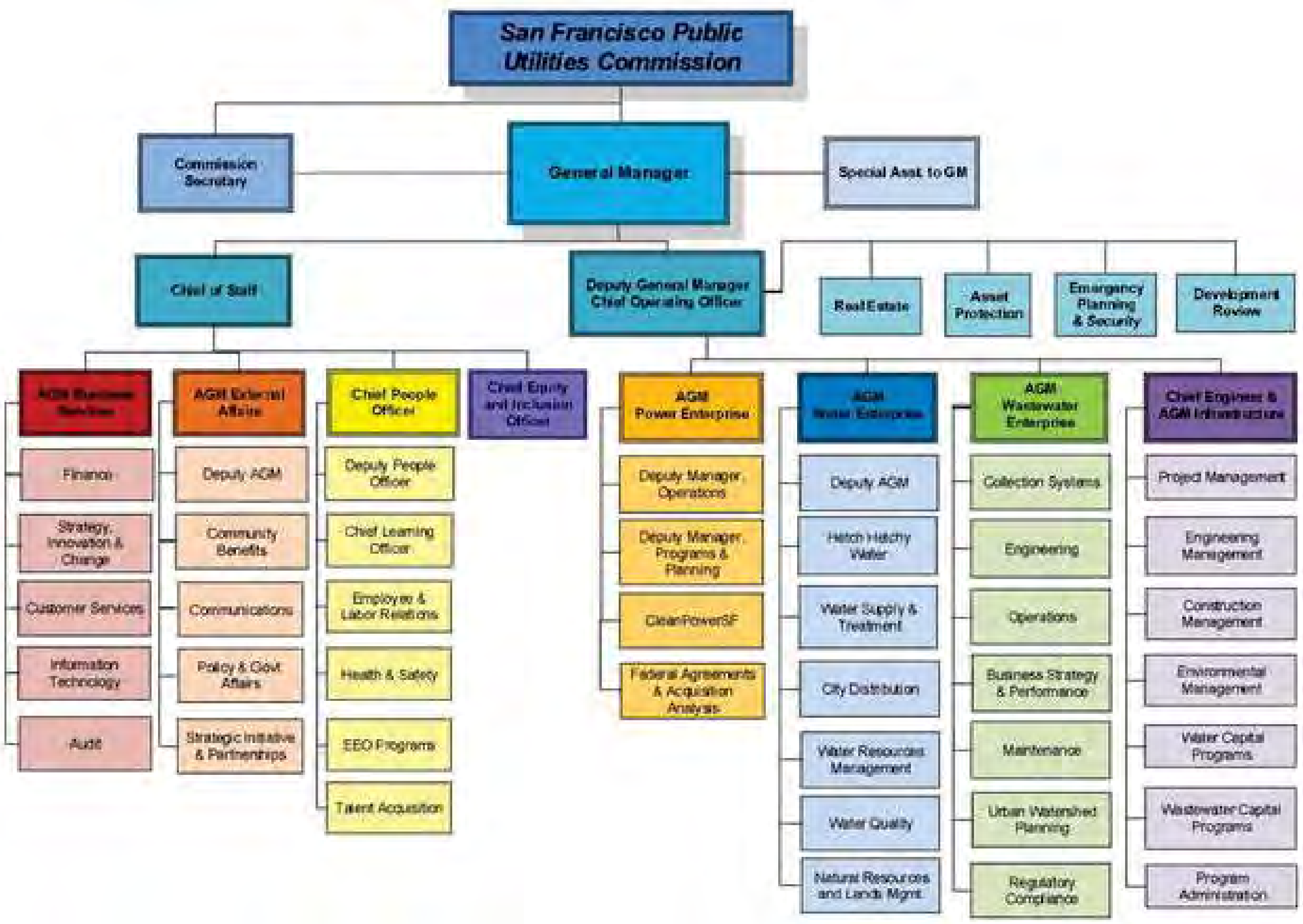
Newsha K. Ajami
Vice President

Tim Paulson
Commissioner

Sophie Maxwell
Commissioner

Ed Harrington
Commissioner
(July 2021 to January 2022)

Organizational Chart as of June 2022

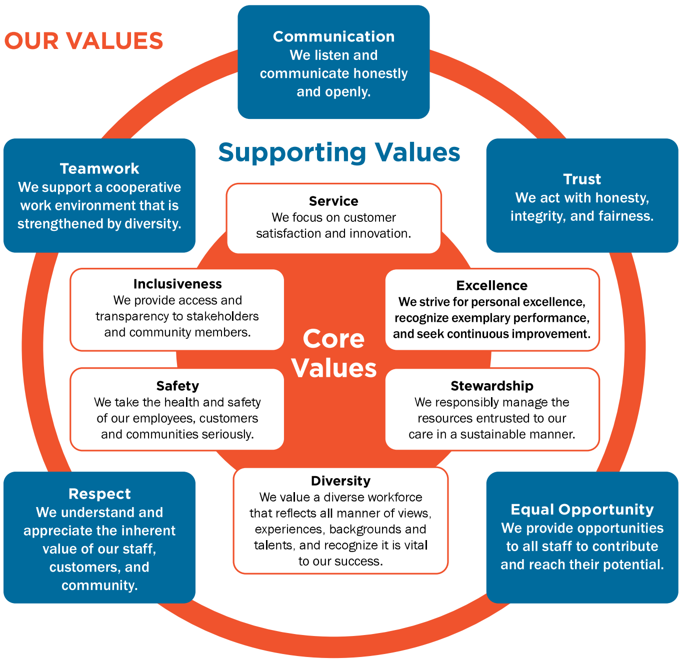


Note: AGM is Assistant General Manager, the person who leads an Enterprise or Bureau.

The Agency Strategic Plan is a high-level and future-oriented plan. The purpose is to better align the work of the Water, Wastewater and Hetch Hetchy Enterprises, set a strategic direction and identify key priorities.

The Agency Strategic Plan outlines the mission, vision and values and sets forth 6 priority goals and supporting objectives.

The goals are as follows:

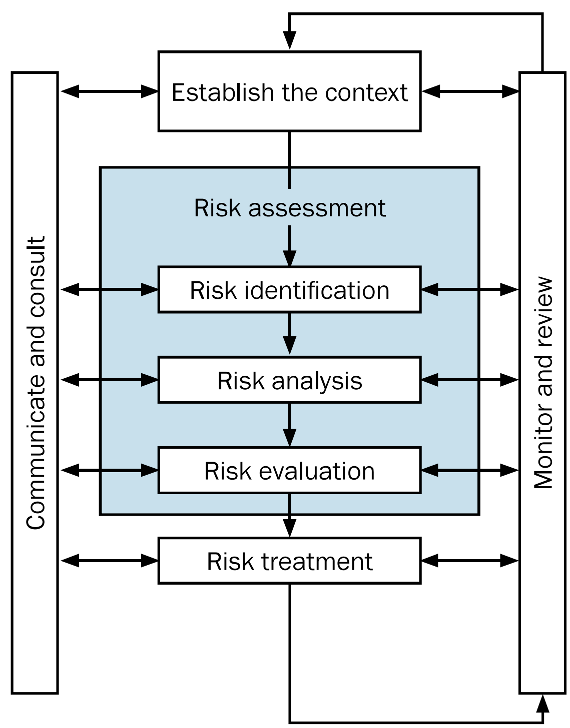


- Reliable service and assets;
- Organizational excellence;
- Effective workforce;
- Financial sustainability;
- Stakeholder and community interest; and
- Environmental stewardship.

Each Goal has one or more Executive Champions who have worked across the Enterprises, Infrastructure, and the Bureaus to develop performance measures including target and baseline metrics. There is a Lead Strategist for each of the six goal area who will carry the vision of their respective goal area will report biannually to the Goal Champions on progress of achieving the performance measures consistent with the target/baseline. At the end of the fiscal year, each Goal Champion is required to report performance measured against the target/baseline. More details of the 2020 SFPUC Strategic plan are available at https://sfpuc.org/about-us/policies-plans/agency-strategic-plan and the Performance Measures in the Operating Information section of this report.

Enterprise Risk Management Framework

The SFPUC helps ensure successful implementation of our Mission, Vision, and Values by integrating the principles of Enterprise Risk Management (ERM) into organizational culture and strategic decision making. In planning for our future, the ERM framework promotes a culture where risks are identified, assessed, prioritized, and managed to minimize threats hindering us from achieving our goals; and to maximize opportunities benefiting the SFPUC. Accountability and transparency are promoted through assignment of identified risks to owners, and routine reporting of mitigation status to senior management. The ERM framework is a continuous process that strengthens organizational structure and culture through communication and awareness. The Risk Management division provides support to the SFPUC's journey from a traditional risk management approach towards enterprise risk management – emphasizing effective management of the total cost of risk and management of risk for better outcomes.



In fiscal years 2015 and 2016 respectively, the Power Enterprise adopted and implemented the ISO 31000 standard for Enterprise Risk Management for the Hetchy Power and CleanPowerSF program. The program enables systematic and proactive identification and analysis of risks that threaten business objectives before they occur. Proper identification of risks to business objectives ensures mitigation measures can be implemented to reduce the probability of certain risks occurring or reducing negative impact. Other prior applications of ERM at the SFPUC include supporting the Strategic Plan, the Business Services Bureau, Emergency Planning and Security, and other specific PUC programs.

The SFPUC also utilizes other risk tools as part of a comprehensive risk management approach. This includes the SFPUC Purchased Insurance Program, a portfolio of insurance policies acquired to mitigate various liability risks to mission critical assets, operational and financial. Other risk management activities include contractual risk review, project specific risk assessments and advisement for the Infrastructure Project Management Bureau and Contract Management Bureau for construction, professional and general service contracts. SFPUC Risk Management also collaborates with the Office of the Administrator's City Risk Management for citywide risk management initiatives.

Risk Categories

Strategic
Trends in Economy & Society

- Stakeholders' interests
- Public support/ Ratepayer fatigue
- Competing expectations
- Economic uncertainty
- Long-term planning vs. budget limitations
- Negative media coverage
- Image and reputation

Financial
Effect of Market Forces on Financial Assets or Liabilities

- Bond rating
- Debt obligations
- Financial reporting
- Cash flow/availability
- Energy costs
- Rate fatigue

Operational
People, Processes & Systems or Controls

- HR and personnel risks
- Operations disruption (e.g. construction, utilities failure, procurement)
- IT data / infrastructure compromise
- Process / execution failure
- Environmental
- Aging infrastructure

Legal/ Regulatory
Effect of Change in Laws and Regulations

- Regulatory non-compliance with EPA, WECC/NERC, GASB, OSHA, government policy
- Compliance with the WSA and WRR
- Punitive damages, law suits

Insurable Hazards
Loss Exposures: Property, Liability or Personnel

Our property insurance policy covers select Mission Critical Power Assets for all risks (e.g. fire, flood up to $1M, terrorism, etc.) excluding specific catastrophic perils (e.g. earthquake, tsunami, war, etc.).

We have not purchased Business Interruption insurance as the property insurance 'extra expense' clause serves a similar purpose.

- Construction
- Worker injury/illness
- Third-party liability
- Physical structure damage
- Public Officials' liability
- Employment liability

Overall, the SFPUC's ERM initiatives are designed to reduce the chances of a negative outcome from occurring, lessen its impact, or transfer financial liabilities away from the organization. These initiatives can also increase opportunities and maximize the benefit from taking advantage of positive outcomes. A combination of these strategies will help lower the total cost of risk for the SFPUC and achieve both short and long-term benefits to our ratepayers.

San Francisco's Budget Process

The budget cycle for the biennial July 1 fiscal year budget begins in August and typically ends in July. The two-year fixed budget is prepared, reviewed, enacted by the Board of Supervisors, signed by the Mayor, and implemented by departments and adjusted as necessary during this period. The Board of Supervisors does not adopt a new budget for the second fiscal year of the cycle unless there are significant increases or decreases in revenues or expenditures which then reopen the budget to follow the usual budget process.

The SFPUC's two-year budget is comprised of two, single-year spending plans, which supports the ongoing mission of the SFPUC to provide its customers with high-quality, efficient, and reliable water, wastewater, and power services in a manner that is inclusive of environmental and community interests, and that sustains the resources entrusted to our care. The budget is a detailed operating plan that identifies estimated costs and results in relation to estimated revenues and represents a process through which policy decisions are deliberated, implemented, and controlled. The budget aligns funding to accomplish our long-term strategic goals and objectives, ensures funding for our operating programs, and purposefully supports the Strategic Plan targeted outcomes to ensure the appropriate application of resources to reach our goals.

Budgeting Basis

The City adopts budgets for all government funds on a budget basis relying on a current financial resources measurement focus and a modified accrual basis of accounting. The modified accrual method is a basis of accounting used with a current financial resources measurement focus. It modifies the accrual basis of accounting in two significant ways: first, revenues are only recognized when they are measurable and available; second, expenditures are recognized in the period in which the SFPUC normally liquidates the related liability rather than when the liability is first incurred, if earlier. The City Charter prohibits expending funds for which there is no legal appropriation.

Accounting Basis

The accounts of the SFPUC Enterprises are organized by proprietary fund type, specifically an enterprise fund. The activities of the Enterprises are accounted for with a separate set of self-balancing accounts that comprise the Enterprises' assets, deferred outflows of resources, liabilities, deferred inflows of resources, net position, revenues, and expenses. Enterprise funds account for activities that (1) are financed with debt secured solely by a pledge of the net revenues from fees and charges of the activity; or (2) 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 (3) that the pricing policies of the activity establish fees and charges designed to recover its costs, including capital costs.

The financial activities of each Enterprise and the year-end audited financial statements are accounted for on a flow of economic resources measurement focus, using the accrual basis of accounting. Under this method, all assets, deferred outflows of resources, liabilities, and deferred inflows of resources associated with its operations are included on the Statement of Net Position; revenues are recorded when earned, and expenses recorded when liabilities are incurred. The SFPUC Enterprises apply all applicable Governmental Accounting Standards Board (GASB) pronouncements.

Fiscal Year 2023 Operating Budgets

The SFPUC annual budgets, including debt service and cash-funded capital, as well as operation programs total $1.65 billion and $1.48 billion for fiscal years 2023 and 2022, respectively. The operating programs include regular operating costs, maintenance of utility facilities and lands, as well as support services, like management, business services, planning, regulatory compliance, communication, and planned debt service for each of the Enterprise. The budget includes a forecast of volumetric utility assumptions which incorporate the significant negative impact due to the COVID-19 pandemic and assumptions around drought impacts on revenues. The operating budget is financed by both wholesale and retail rates, service charges and non-operating revenues, including rental income and interest earnings. Of the SFPUC fiscal year 2023 $1.65 billion operating budget, the Water Enterprise accounts for $663.7 million to fund the operations and maintenance of the SFPUC water system; Wastewater Enterprise's operating budget of $406.1 million funds the operations and maintenance of the SFPUC's sewer system. Hetch Hetchy Water and Power's operating budget of $266.0 million funds the operations and maintenance of the upcountry water and power systems, including Power

Enterprise activities within the City. CleanPowerSF's operating budget of $315.7 million funds the operations and power purchases. Detailed budget information is available on our website https://sfpuc.org/about-us/reports/operating-and-capital-budgets.

Fiscal Year 2023 Capital Budgets

Our capital programs are intended to reconstruct, replace, expand, repair, or improve facilities that are under the SFPUC's jurisdiction. The capital budgets are coordinated with the Ten-Year Capital Plan and the Ten-Year Financial Plan. The issuance of revenue bonds, other forms of indebtedness, and the execution of governmental loans are provided under the San Francisco City Charter to finance our capital programs. The repayment of this indebtedness is provided through rates and service charge revenues of the SFPUC that incurs the debt and benefits from the underlying capital improvements. The budget appropriations for capital programs are coordinated with the SFPUC's Ten-Year Capital Financial Plans. The SFPUC develops stand-alone supplemental appropriations for our capital program which are coordinated with our operating budget review and approval cycle.

Total approved fiscal year 2023 capital budgets were $983.2 million, including $111.2 million for the Water Enterprise, $687.2 million for the Wastewater Enterprise, $181.1 million for Hetch Hetchy Water and Power Enterprise and $3.7 million for CleanPowerSF.

The major capital investment for the Water Enterprise includes the Water Treatment Program, which is to provide major improvements to the Sunol and Millbrae Yards such as the Sunol Valley Water Treatment Plant Ozone project. The Water Transmission Program is to provide upgrades to the transmission system including inspections and repairs, valve replacements and pump station and vault upgrades. The Regional Water Supply and Storage Program includes upgrades to structures to meet State Division of Safety of Dams requirements, and projects to increase regional water supply diversification and explore alternative methods for expanding water sources. The Water Conveyance/Distribution System Program includes funding to install, replace and renew distribution system pipelines and service connection for over 1,000 miles of drinking water mains in San Francisco.

The Wastewater Enterprise's major capital investment from the Sewer System Improvement Program (SSIP) includes the Treatment Facilities Programs, including improvements to the combined sewer transport storage and near shore combined sewer discharge structures and liquid treatments at various treatment sites. Another major SSIP project is the Stormwater Management/Flood Control Program, includes work on drainage basins, flood resilience and green infrastructure storm management program. The Collection System from the Renewal and Replacement Program (R&R) includes cleaning and inspection of large diameter sewers, transport/storage boxes and collection system discharge/overflow structures, planned and emergency repairs and replacement of structurally inadequate sewers.

The Hetch Hetchy Water and Power's major capital investment includes the Distribution Services projects, Water infrastructure program and Joint projects. The Distribution Services projects include the San Francisco Airport (SFO) Substation Improvements to plan, design, and construct needed upgrades at the substations, the Alice Griffith/Candlestick Point for the second phase of development to install the conductors in the conduits, transformers, switches, and metering equipment required for the electric distribution system. Water Infrastructure program include concept, development, design, and upgrades for operating, managing, and maintaining the Hetchy Water Infrastructure. Joint Projects between Hetchy Water and Hetchy Power includes upgrade communication system within the Moccasin compound, upgrade the dams and reservoirs to meet the Water Levels of Service and Power Operational Objectives, inspection, and repair to the mountain tunnel to assure reliability of water delivery.

The CleanPowerSF major capital investment includes the development of new renewable energy (solar photovoltaic) and battery storage projects on select SFPUC sites as well as development and implementation of new customer programs project for programs supporting demand response, electric mobility, local renewable energy generation, and building decarbonization technologies.

Ten-Year Financial Plan

The SFPUC prepares an annual updated Ten-Year Financial Plan as required by the City and County of San Francisco Charter Section 8B.123. The Ten-Year Financial Plan is a summary of projected revenues, expenditures, fund balances, and financial ratios for each enterprise over a rolling 10-year period. The Plan projections are based on current Mayor and Commission policies, goals, and objectives. For the ten year plan fiscal year 2023, these projections also include assumptions based on the pandemic economic recovery and the 2021 drought declaration. A key objective is to promote SFPUC's Strategic Plan goal of Financial Sustainability by estimating future revenue requirements and financial ratios while providing a view of resulting rates changes. Consolidating these key financial indicators into the Plan serves to inform the SFPUC's long-term planning decisions, such as the biennial operating and capital budgets, long-range capital planning and capital financing strategies.

Ten-Year Capital Plan

The SFPUC prepares an annual updated Ten-Year Capital Plan as required by the City and County of San Francisco Charter Section 3.20. The Plan is to contain a list of projects to be executed during the 10-year planning horizon, including cost estimates and schedules. Both Ten-Year Financial and Capital Plan, serve as a basis and supporting documentation for the Commission's capital budget and issuance of revenue bonds and other indebtedness to support the SFPUC capital program.

The SFPUC Ten-Year Capital Plan for fiscal years 2023 through 2032 totals $9.9 billion. Water Enterprise is approximately $2.1 billion, including projects for the Local Water Conveyance, Local Buildings and Grounds Improvements and Regional Water Supply and Storage. Wastewater Enterprise is approximately $6.1 billion which mainly includes the Treatment Facilities, Stormwater Management/Flood Control, and the Renewal and Replacement (R&R) program projects like Sewer Improvements. Hetchy Water and Hetchy Power's is approximately $1.6 billion is to fund up-county water/power projects and power distribution services projects like SFO, Alice Griffith, Candlestick Park and Hunters Point. CleanPowerSF is approximately $74 million to fund the development of new renewable energy (solar photovoltaic) and battery storage projects.

Financial Transparency, Reporting and Auditing Process

This report was prepared by SFPUC Financial Services in conformance with the principles and standards for financial reporting set forth by the GASB and U.S. Generally Accepted Accounting Principles (GAAP). Recommended guidelines by the Government Finance Officers Association of the United States and Canada were also followed.

The SFPUC's management is responsible for both the accuracy of the data presented and the completeness and fairness of its presentation, including all disclosures. The existing comprehensive structure on internal controls in the City and SFPUC ensures that the financial statements are free of any material misstatements. This report is accurate in all material respects, and it is presented in a manner designed to set forth fairly the financial position and the results of operations of the SFPUC. The included disclosures enable the reader to gain a thorough understanding of the SFPUC's financial activities.

The SFPUC's financial statements have been audited by KPMG LLP, an independent registered public accounting firm. The goal of the independent audit was to provide reasonable assurance that the financial statements of the SFPUC for the fiscal years ended June 30, 2022 and 2021 are fairly presented in conformity with GAAP and are free of material misstatement. The independent audit involved examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statements presentation. The independent auditors rendered an unmodified "clean" opinion on the SFPUC's financial statements for the fiscal year ended June 30, 2022 since 2008. The independent auditors' report is presented as the first component of the financial section of this report. Management's Discussion and Analysis (MDA) is presented after the independent auditors' report, and provides a narrative introduction, overview, and analysis to accompany the basic financial statements. This letter of transmittal is designed to complement MDA and should be read in conjunction with it.

Financial Authority and Policies

The City is a Charter City under the California Constitution, and as a result, the Charter is the guiding document for financial authority and policies for City departments. The SFPUC is the department responsible for the maintenance, operation, and development of three utility enterprises: the Water Enterprise, the Wastewater Enterprise, and Hetch Hetchy Water and Power and CleanPowerSF Enterprise. Each of the SFPUC's enterprise funds is operated and managed as a separate financial entity and separate enterprise entity.

The SFPUC's financial policies, adopted and updated such as fund balance reserve and debt service coverage requirements are available on our website https://sfpuc.org/about-us/policies-plans/financial-plans-and-policies. The purpose and source for each of the designated reserves within its major funds of operating, capital projects, debt service, and trust are included in these guidelines which enable restricting funds for future infrastructure needs, replacement of aging facilities, bond reserves, and various operating reserves to mitigate unexpected occurrences. These reserves are critical to the SFPUC's financial strength and high bond ratings. Further, the City has a long-standing practice of recognizing and reserving for known and anticipated liabilities. The City also has established an irrevocable trust for other post-employment benefits (also known as retiree medical) and continues to make the annual requirement contribution to ensure this future obligation is funded.

Accounting Systems, Policies, and Internal Controls

In developing and maintaining the accounting systems, consideration is given by the administration as to the adequacy of internal controls. Internal controls are designed to provide reasonable, but not absolute, assurance. The SFPUC's management is responsible for establishing and maintaining a system of internal controls designed to safeguard the enterprises' assets from loss, theft, or misuse and to ensure that adequate accounting data are compiled to allow for the preparation of financial statements in accordance with GAAP. For the fiscal year ended June 30, 2022, the independent auditors noted no matters involving internal controls over financial reporting that would be considered a material weakness for Water, Wastewater and Hetch Hetchy Water and Power and CleanPowerSF.

The SFPUC's Finance Department is responsible for providing the financial services for the utility enterprises, including support for financial accounting and reporting, accounts payable, billing and collection of water, wastewater, and power charges, and other revenues. The SFPUC's financial statements and records are maintained on an enterprise basis using the accrual method of accounting to ensure the timely matching of revenues against the costs of providing services. Revenues and expenses are recorded in the period in which the revenues are earned, and the expenses are incurred.

Achievement Awards

The Government Finance Officers Association of the United States and Canada (GFOA) awarded the Certificate of Achievement for Excellence in Financial Reporting to the SFPUC for its Annual Comprehensive Financial Report for the fiscal year ended June 30, 2021. This was the 13th consecutive year that the SFPUC has achieved this prestigious award. In order to be awarded the Certificate of Achievement, a government or reporting entity must publish an easily readable and efficiently organized Annual Comprehensive Financial Report. This report must satisfy both GAAP and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. We believe our current Annual Comprehensive Financial Report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to GFOA to determine its eligibility for another certificate.

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

City and County of San Francisco
Public Utilities Commission
California

For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

June 30, 2021

Christopher P. Morrill

Executive Director/CEO

Financial Section

The San Francisco Public Utilities Commission
An Enterprise Department of the City and County of San Francisco, California

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 Audit of the Financial Statements

Opinions

We have audited the financial statements of the business-type activities and each major fund of the San Francisco Public Utilities Commission (SFPUC), as of and for the years ended June 30, 2022 and 2021, and the related notes to the financial statements, which collectively comprise SFPUC's basic financial statements for the years then ended as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and each major fund of SFPUC, as of June 30, 2022 and 2021, and the respective changes in financial position and cash flows thereof for the years then ended in accordance with U.S. generally accepted accounting principles.

Basis for Opinions

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of SFPUC and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Emphasis of Matter

As discussed in Note 1, the financial statements of SFPUC are intended to present the financial position, the changes in financial position, and, where applicable, cash flows of only that portion of the business-type activities and each major fund of the City and County of San Francisco, California that is attributable to the transactions of SFPUC. They do not purport to, and do not, present fairly the financial position of the City and County of San Francisco, California, as of June 30, 2022 and 2021, 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 opinions are not modified with respect to this matter.

Responsibilities of Management for the Financial Statements

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

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of SFPUC's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis and required supplementary information as listed in the accompanying table of contents be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the 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.

Supplementary Information

Our audits were conducted for the purpose of forming opinions on the financial statements that collectively comprise SFPUC's basic financial statements. The schedule of changes in net position – dollar and percentage change vs. prior year and schedule of changes in revenues, expenses and net position – dollar and percentage change vs. prior year are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audits of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual comprehensive financial report. The other information comprises the introductory and statistical sections but does not include the basic financial statements and our auditors' report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audits of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated February 28, 2023 on our consideration of SFPUC'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 SFPUC'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 SFPUC's internal control over financial reporting and compliance.

KPMG LLP

San Francisco, California
February 28, 2023

This section presents management's analysis of the San Francisco Public Utilities Commission's (SFPUC or the Commission) financial condition and activities as of and for the fiscal years ended June 30, 2022 and 2021. Management's Discussion and Analysis (MDA) is intended to serve as an introduction to SFPUC'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
- Fund Financial Statements
- COVID-19
- Financial Analysis
- Capital Assets
- Debt Administration
- Rates and Charges
- Request for Information

Organization and Business

The SFPUC is a department of the City that is responsible for the maintenance, operation, and development of three utility enterprises and five funds. The three utility enterprises include Water, Wastewater, and Hetch Hetchy (Hetchy Water, Hetchy Power and CleanPowerSF).

Water Enterprise

As the third largest municipal water agency in California, the Water 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 Water Enterprise sold approximately 181 million gallons of water per day in the year ended June 30, 2022. Approximately three-quarter of the water delivered by the Water Enterprise is to wholesale customers. Retail customers use the remaining one-quarter 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.

Wastewater Enterprise

The primary responsibility of the Wastewater Enterprise is to protect the public health and the surrounding bay and ocean receiving waters by collecting, transmitting, treating, and discharging storm and sanitary flows generated in the service area. This includes 1,131 miles of combined, sanitary, and storm collection system pipes including: gravity mains, force mains, culverts, transport storage boxes, and tunnels. San Francisco is the only coastal city in California with a combined sewer system that collects both wastewater and stormwater in the same network of pipes and provides treatment to remove harmful pollutants before discharging into the San Francisco Bay and Pacific Ocean. In addition, the Wastewater Enterprise serves on a contractual basis to certain municipal customers located outside of the City limits, including the North San Mateo County Sanitation District No. 3, Bayshore Sanitary District, and the City of Brisbane. The Wastewater Enterprise recovers costs of service through user fees based on the volume and strength of sanitary flow. As of June 30, 2022, the Wastewater Enterprise serves 148,381 residential accounts, which discharge about 15.7 million units of sanitary flow per year (measured in hundreds of cubic feet, or ccf) and 26,790 non-residential accounts, which discharge about 5.3 million ccf per year. These reflected an increase of 0.7 million discharge units and 360 increase in the number of accounts for non-residential and a decrease of 0.9 million discharge units and 455 increase in the number of accounts for residential, as compared to prior year.

Hetchy Water

For efficiency and to streamline the coordination of upcountry water and power operations, Hetchy Water operates upcountry and joint-asset facilities, managing resources in an environmentally responsible manner to a high standard of safety and reliability while meeting regulatory requirements. It is responsible for operating the Hetch Hetchy Reservoir, the main source of water for the Hetch Hetchy system. Hetchy Water operates, maintains, and improves water and power facilities, smaller dams and reservoirs, water transmission systems, power generation facilities, and power transmission assets, including transmission lines to the Newark substation. Hetchy Water delivers high-quality water from upcountry downhill to the Bay Area while optimizing the resulting generation of clean hydropower as water is transported through the system. It maintains land and properties consistent with public health and neighborhood concerns.

Hetchy Power

The core business of Hetchy Power, as a municipal department, is to provide adequate and reliable supplies of electric power to meet the electricity needs of City and County of San Francisco's customers, and to offer, when available, power for the municipal loads and agricultural pumping demands consistent with prescribed contractual obligations and federal law.

Hetchy Power's portfolio consists of hydroelectric generation, onsite solar at SFPUC and other City facilities, generation using bio-methane produced at SFPUC wastewater treatment facilities, and third-party purchases. Consistent with its commitment to the development of cleaner and greener power, and to address environmental concerns and community objectives, Hetchy Power continues to evaluate and expand its existing resource base to include additional renewables, distributed generation, demand management, and energy efficiency programs. As part of its mission and core functions, Hetchy Power provides reliable energy services at reasonable cost to customers, with attention to environmental effects and community concerns.

Hetch Hetchy Joint

A portion of Hetch Hetchy's operating budget, capital program, and assets, provides benefit to both Hetchy Power and Hetchy Water. This is commonly referred to as joint costs and joint assets. Both operating and capital costs that jointly benefit both funds are allocated 55% to Hetchy Power and 45% to Hetchy Water, as has historically been done by the SFPUC.

CleanPowerSF

In May 2016, SFPUC launched CleanPowerSF, a Community Choice Aggregation (CCA) program, made possible by the 2002 passage of California Assembly Bill 117, enabling communities to purchase power on behalf of their residents and businesses and creating competition in power generation since May 2016. CleanPowerSF provides San Francisco with new clean energy alternatives, with its objectives to reduce greenhouse gas emissions, and to provide the City and County of San Francisco's (the City) energy consumers with renewable electricity supplies at competitive rates. The SFPUC intends CleanPowerSF to be financially independent, with ability to set rates and charges with adequate revenues, and to issue debt to support its operations and future projects. CleanPowerSF is discretely presented as a fund of the Hetch Hetchy Water and Power and CleanPowerSF Enterprise starting fiscal year 2017.

The core business is to provide greener electricity generation to residential and commercial consumers in San Francisco. Through CleanPowerSF, SFPUC seeks to achieve several complementary goals, including affordable and competitive electricity generation rates, a diverse electricity resource portfolio that is comprised of renewable and other clean sources of supply, and high-quality customer service. The program serves more than 380,000 customer accounts and provides San Francisco with an electricity supply from its default "Green" product that is at least 50% California State Renewables Portfolio Standard (RPS)-eligible. Additionally, CleanPowerSF offers "SuperGreen", a 100% RPS-eligible electricity supply, that is available to customers for a small additional cost. On June 1, 2022, CleanPowerSF opened enrollment for its "SuperGreen Saver" product, which provides eligible low-income ratepayers residing in Disadvantaged Communities with 100% RPS electricity at a 20% bill discount.

Overview of the Financial Statements

The Department's financial statements include the following:

Statements of Net Position present information on the Department'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 Department is improving or worsening.

While the *Statements of Net Position* provide information about the nature and amount of resources and obligations at year-end, the Statements of Revenues, Expenses, and Changes in Net Position present the results of the Department'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 Department has successfully recovered its costs through user fees and other charges. All changes in net position are reported during the period in which the underlying event giving rise to the change occurs, regardless of the timing of the related cash flows. Thus, revenues and expenses are reported in these statements from some items that will result in cash flows in future fiscal periods, such as delayed collection of operating revenues and the expenses of employee earned but unused vacation leave.

The *Statements of Cash Flows* present changes in cash and cash equivalents resulting from operational, capital financing, non-capital financing, and investing activities. These statements summarize the annual flow of cash receipts and cash payments, without consideration of the timing of the event giving rise to the obligation or receipt, and exclude non-cash accounting measures of depreciation or amortization of assets.

The *Notes to Financial Statements* provide information that is essential to a full understanding of the financial statements that is not presented on the face of the financial statements.

Fund Financial Statements

The Department has five funds: Water, Wastewater, Hetchy Water, Hetchy Power, and CleanPowerSF.

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 authorized the SFPUC the temporary suspension of (a) discontinuation or shut-off of water, sewer, and power services for residents and businesses in the City for non-payment of water, sewer, and power bills, and (b) the imposition of late payment penalties or fees for delinquent water, sewer, and power bills through July 11, 2020. The suspension was extended on December 8, 2020 through June 30, 2021 again on April 27, 2021 through March 31, 2022 and then again on February 22, 2022 to July 31, 2022 for shut off and to June 30, 2023 for late payment penalties for Water Enterprise, Wastewater Enterprise, and Hetchy Power for residential accounts. The suspension of the return of delinquent CleanPowerSF customers to PG&E generation service for failure to pay CleanPowerSF charges was extended to June 30, 2022. This proclamation did not have a material effect on the operations of the SFPUC.

Financial Analysis

Financial Highlights for Fiscal Year 2022

Department-wide Business Type Activities

- Total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources by $2,823,758.
- Total assets exceeded total liabilities by $3,068,524.

- Net position increased by $85,648 or 3.1% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization, increased by $586,502 or 5.9% to $10,450,688.
- Operating revenues increased by $121,174 or 9.3% to $1,422,446.
- Operating expenses decreased by $20,100 or 1.7% to $1,129,725.

Water

- Total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources by $633,418.
- Total assets exceeded total liabilities by $727,275.
- Net position decreased by $17,946 or 2.8% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization, increased by $29,795 or 0.5% to $5,617,594.
- Current and other assets increased by $7,239 or 0.9% mainly due to net pension asset.
- Operating revenues decreased by $9,319 or 1.6% to $573,117.
- Operating expenses decreased by $46,996 or 10.5% to $401,786.

Wastewater

- Total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources by $1,362,662.
- Total assets exceeded total liabilities by $1,447,672.
- Net position increased by $60,114 or 4.6% during the year.
- Capital assets, net of accumulated depreciation and amortization, increased by $439,601 or 12.2% to $4,046,451.
- Operating revenues increased by $41,217 or 12.6% to $368,882.
- Operating expenses decreased by $35,002 or 12.0% to $257,171.

Hetchy Water

- Total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources by $249,180.
- Total assets exceeded total liabilities by $276,423.
- Net position increased by $24,519 or 10.9% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization, increased by $23,526 or 13.3% to $201,007.
- Operating revenues, excluding interest and investment income, and other non-operating revenues, increased by $2,222 or 4.7% to $49,312.
- Operating expenses, excluding other non-operating expenses, increased by $1,784 or 3.5% to $52,303.

Hetchy Power

- Total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources by $494,178.
- Total assets exceeded total liabilities by $527,476.
- Net position increased by $21,718 or 4.6% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization, increased by $93,580 or 19.0% to $585,636.
- Operating revenues, excluding interest and investment income, and other non-operating revenues, increased by $36,859 or 27.0% to $173,242.
- Operating expenses, excluding interest expenses, other non-operating expenses, and amortization of premium, discount, and issuance costs, increased by $10,707 or 7.4% to $156,347.

CleanPowerSF

- Total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources by $84,320.

- Total assets exceeded total liabilities by $89,678.
- Net position decreased by $2,757 or 3.2% during the fiscal year.
- CleanPowerSF had no capital assets, net of accumulated depreciation and amortization as of June 30, 2022.
- Operating revenues, excluding interest and investment income, and other non-operating revenues, increased by $50,195 or 24.2% to $257,893.
- Operating expenses, excluding interest expenses increased by $49,407 or 23.2% to $262,118.

Financial Highlights for Fiscal Year 2021

Department-wide Business Type Activities

- Total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources by $2,736,309.
- Total assets exceeded total liabilities by $2,451,935.
- Net position increased by $34,578 or 1.3% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization, increased by $665,142 or 7.2% to $9,864,186.
- Operating revenues decreased by $48,315 or 3.6% to $1,300,448.
- Operating expenses increased by $100,532 or 9.6% to $1,149,934.

Water

- Total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources by $649,517.
- Total assets exceeded total liabilities by $418,167.
- Net position increased by $8,502 or 1.3% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization, increased by $57,254 or 1.0% to $5,587,799.
- Current and other assets increased by $$31,110 or 4.4% mainly due to bond proceeds from the issuance of 2020 Series ABCD bonds.
- Operating revenues decreased by $1,739 or 0.3% to $581,612.
- Operating expenses increased by $50,726 or 12.7% to $448,843

Wastewater

- Total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources by $1,302,583.
- Total assets exceeded total liabilities by $1,266,577.
- Net position increased by $9,647 or 0.7% during the year.
- Capital assets, net of accumulated depreciation and amortization, increased by $544,562 or 17.8% to $3,606,850.
- Operating revenues decreased by $16,463 or 4.8% to $327,665.
- Operating expenses increased by $29,961 or 11.4% to $292,220.

Hetchy Water

- Total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources by $224,665.
- Total assets exceeded total liabilities by $216,214.
- Net position increased by $13,630 or 6.5% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization, increased by $16,699 or 10.4% to $177,481.
- Operating revenues, excluding interest and investment income, and other non-operating revenues, increased by $12,137 or 34.7% to $47,090.
- Operating expenses, excluding other non-operating expenses, increased by $5,644 or 12.6% to $50,517.

Hetchy Power

- Total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources by $472,464.
- Total assets exceeded total liabilities by $462,136.
- Net position increased by $6,857 or 1.5% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization, increased by $46,627 or 10.5% to $492,056.
- Operating revenues, excluding interest and investment income, and other non-operating revenues, decreased by $4,488 or 3.2% to $136,383.
- Operating expenses, excluding interest expenses, other non-operating expenses, and amortization of premium, discount, and issuance costs, decreased by $2,489 or 1.7% to $145,638.

CleanPowerSF

- Total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources by $87,080.
- Total assets exceeded total liabilities by $88,841.
- Net position decreased by $4,058 or 4.5% during the fiscal year.
- CleanPowerSF had no capital assets, net of accumulated depreciation and amortization, as of June 30, 2021.
- Operating revenues, excluding interest and investment income, and other non-operating revenues, decreased by $37,762 or 15.4% to $207,698.
- Operating expenses, excluding interest expense increased by $16,690 or 8.5% to $212,716.

(Dollars in thousands, unless otherwise stated)

Financial Position

Department-wide Business Type Activities

The following table summarizes the department-wide changes in net position. Detailed discussion follows for each proprietary fund.

Table 1
Business Type Activities
Comparative Condensed Net Position
June 30, 2022, 2021, and 2020

	2022*	Restated 2021*^	2020*	2022 - 2021 Change	2021 - 2020 Change
Total assets:					
Current and other assets	$ 1,921,659	1,616,001	1,615,614	305,658	387
Capital assets, net of accumulated depreciation and amortization	10,450,688	9,864,186	9,199,044	586,502	665,142
Total assets	12,372,347	11,480,187	10,814,658	892,160	665,529
Deferred outflows of resources:					
Unamortized loss on refunding of debt	139,514	155,082	144,378	(15,568)	10,704
Pensions	93,952	113,149	115,744	(19,197)	(2,595)
Other post-employment benefits	53,412	61,590	43,100	(8,178)	18,490
Total deferred outflows of resources	286,878	329,821	303,222	(42,943)	26,599
Liabilities:					
Current liabilities:					
Bonds	161,596	133,308	119,435	28,288	13,873
Certificates of participation	4,395	4,160	3,955	235	205
Commercial paper	625,473	859,051	633,828	(233,578)	225,223
State revolving fund loans	5,764	4,150	2,458	1,614	1,692
Other liabilities	441,067	386,562	346,217	54,505	40,345
Subtotal current liabilities	1,238,295	1,387,231	1,105,893	(148,936)	281,338
Long-term liabilities:					
Bonds	6,825,078	6,497,701	6,247,401	327,377	250,300
Revenue Notes	350,356	—	—	350,356	—
Certificates of participation	129,550	134,020	138,310	(4,470)	(4,290)
State revolving fund loans	418,656	211,816	159,362	206,840	52,454
Other liabilities	341,888	747,573	682,730	(405,685)	64,843
Subtotal long-term liabilities	8,065,528	7,591,110	7,227,803	474,418	363,307
Total liabilities:					
Bonds	6,986,674	6,631,009	6,366,836	355,665	264,173
Revenue Notes	350,356	—	—	350,356	—
Certificates of participation	133,945	138,180	142,265	(4,235)	(4,085)
Commercial paper	625,473	859,051	633,828	(233,578)	225,223
State revolving fund loans	424,420	215,966	161,820	208,454	54,146
Other liabilities	782,955	1,134,135	1,028,947	(351,180)	105,188
Total liabilities	9,303,823	8,978,341	8,333,696	325,482	644,645
Deferred inflows of resources:					
Related to pensions	445,403	10,321	62,629	435,082	(52,308)
Leases	44,583	48,110	—	(3,527)	48,110
Other post-employment benefits	41,658	35,126	19,824	6,532	15,302
Total deferred inflows of resources	531,644	93,557	82,453	438,087	11,104
Net position:					
Net investment in capital assets	2,183,518	2,271,638	2,194,130	(88,120)	77,508
Restricted for debt service	20,202	48,677	17,285	(28,475)	31,392
Restricted for capital projects	114,657	22,319	49,635	92,338	(27,316)
Unrestricted	505,381	395,476	440,681	109,905	(45,205)
Total net position	$ 2,823,758	2,738,110	2,701,731	85,648	36,379

^Restated due to the implementation of GASB Statement No. 87, *Leases*.
*Eliminated interfund payables and receivables of $0, $0, and $1,800 working capital loan between Hetchy Power and CleanPowerSF and $629, $739, and $847 between Wastewater and Hetchy Power for the 525 Golden Gate Avenue Headquarters construction cost in fiscal years 2022, 2021 and 2020, respectively.

(Dollars in thousands, unless otherwise stated)

The following table summarizes Water's changes in net position.

Table 1A
Proprietary Fund – Water
Comparative Condensed Net Position
June 30, 2022, 2021, and 2020

	2022	Restated 2021^	2020	2022 - 2021 Change	2021 - 2020 Change
Total assets:					
Current and other assets	$ 793,761	786,522	701,206	7,239	85,316
Capital assets, net of accumulated depreciation and amortization	5,617,594	5,587,799	5,530,545	29,795	57,254
Total assets	6,411,355	6,374,321	6,231,751	37,034	142,570
Deferred outflows of resources:					
Unamortized loss on refunding of debt	139,481	154,991	144,189	(15,510)	10,802
Pensions	52,852	64,797	67,084	(11,945)	(2,287)
Other post-employment benefits	32,445	37,762	27,583	(5,317)	10,179
Total deferred outflows of resources	224,778	257,550	238,856	(32,772)	18,694
Liabilities:					
Current liabilities:					
Revenue bonds	125,285	108,500	94,080	16,785	14,420
Certificates of participation	3,138	2,970	2,824	168	146
Commercial paper	206,297	105,862	362,354	100,435	(256,492)
State revolving fund loans	3,283	1,667	—	1,616	1,667
Other liabilities	181,489	154,257	134,563	27,232	19,694
Subtotal current liabilities	519,492	373,256	593,821	146,236	(220,565)
Long-term liabilities:					
Revenue bonds	4,735,650	4,886,275	4,601,215	(150,625)	285,060
Certificates of participation	92,499	95,692	98,754	(3,193)	(3,062)
State revolving fund loans	118,478	105,740	73,271	12,738	32,469
Other liabilities	217,961	445,234	415,865	(227,273)	29,369
Subtotal long-term liabilities	5,164,588	5,532,941	5,189,105	(368,353)	343,836
Total liabilities:					
Revenue bonds	4,860,935	4,994,775	4,695,295	(133,840)	299,480
Certificates of participation	95,637	98,662	101,578	(3,025)	(2,916)
Commercial paper	206,297	105,862	362,354	100,435	(256,492)
State revolving fund loans	121,761	107,407	73,271	14,354	34,136
Other liabilities	399,450	599,491	550,428	(200,041)	49,063
Total liabilities	5,684,080	5,906,197	5,782,926	(222,117)	123,271
Deferred inflows of resources:					
Related to pensions	248,704	4,885	34,894	243,819	(30,009)
Leases	44,583	48,110	—	(3,527)	48,110
Other post-employment benefits	25,348	21,315	11,772	4,033	9,543
Total deferred inflows of resources	318,635	74,310	46,666	244,325	27,644
Net position:					
Net investment in capital assets	537,644	517,302	527,856	20,342	(10,554)
Restricted for debt service	14,671	45,586	15,916	(30,915)	29,670
Restricted for capital projects	—	22,319	43,122	(22,319)	(20,803)
Unrestricted	81,103	66,157	54,121	14,946	12,036
Total net position	$ 633,418	651,364	641,015	(17,946)	10,349

^Restated due to the implementation of GASB Statement No. 87, *Leases*.

Water Net Position, Fiscal Year 2022

For the year ended June 30, 2022, the Water Enterprise's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by $633,418. Total net position decreased from prior year by $17,946 or 2.8% (see Table 1A). The decrease in net position was the result of an increase of $22,208 in liabilities and deferred inflows of resources offset by an increase of $4,262 in assets and deferred outflows 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.

During the fiscal year 2022, current and other assets increased by $7,239 or 0.9%. The increases included $100,407 in net pension asset based on actuarial estimates, $6,276 in prepaid charges advances and other receivables mainly for a settlement from PG&E related to damages on Casitas Avenue in San Francisco, $6,267 in charges for services attributed to more billings, net of decrease in allowance for doubtful accounts due to utility arrearage relief payment received from the State as Federal pass-through from the California Water and Wastewater Arrearages Payment Program (CWWAPP), $865 in inventory due to more purchases than issuances during the fiscal year, $167 in interest, leases and other receivables due to higher interest rates, and $159 in restricted interest and other receivables. These increases were offset by decreases of $60,453 in restricted and unrestricted cash and investments mainly due to debt principal and interest payments, capital projects spending, payments for salaries and goods and services, $41,993 reimbursement from the State Water Resources Control Board (SWRCB) State Revolving Funds Loan relating to the SF Recycled Water project, $2,945 in leases receivable from the implementation of Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*, $1,425 in lease asset from the implementation of GASB Statement No. 87, *Leases*, $70 mainly for custom work projects due from the Department of Public Works, and $16 for a Federal grant of culvert repairs relating to the Santa Clara Unit Lightning Complex fires.

Capital assets, net of accumulated depreciation and amortization, increased by $29,795 or 0.5% mainly due to Water Main Replacement, Treasure Island Well, Serramonte Well and all other well construction, and capital improvement activities. The largest portion of the Water Enterprise's net position of $537,644 or 84.9% represents net investment in capital assets (see Capital Assets section of the MDA for more information), which increased by $20,342 or 3.9% from prior year's $517,302. The change was explained by an increase of $29,794 in capital assets mainly from increased buildings, structures, and improvements, offset by a decrease of $9,452 in liabilities related to capital assets mainly from bond principal repayment.

Deferred outflows of resources decreased by $32,772 due to decreases of $15,510 from amortization for unamortized loss on refunding, $11,945 relating to pensions based on actuarial reports, and $5,317 from OPEB obligations based on actuarial estimates.

Total liabilities decreased by $222,117 which was due to decreases of $216,417 in pensions based on actuarial report, $133,840 in outstanding revenue bonds from principal repayments, $4,656 from OPEB obligations due to actuarial report, $3,025 in certificates of participation mainly due to principal repayments, $1,381 in lease liability from the implementation of GASB Statement No. 87, *Leases*, $757 in interest payable mainly due to lower bonds outstanding, and $654 in general liability based on actuarial report. These decreases were offset by increases of $100,435 in commercial paper from additional principal issuances, $14,354 in State Revolving Funds Loan payable due to additional loans related to the SF Westside Recycled Water project, $4,759 in restricted and unrestricted payables due to higher year end accruals as compared to prior year, $463 in accrued payroll, vacation and sick leave due to actuarial entries, $171 in unearned revenues mainly for deposits on custom work, and $145 in workers' compensation based on actuarial estimates. The Water Enterprise owed the wholesale customers $79,150, an increase of $18,286 which was mainly due to annual revenues from the wholesale customers exceeding their share of expenditures. This amount was recorded as a liability in accordance with the 2009 Water Supply agreement. See Note 11, Water Supply Agreement, for additional details.

Deferred inflows of resources increased by $244,325 due to an increase of $243,819 related to pensions and $4,033 from OPEB benefits based on actuarial reports, offset by a decrease of $3,527 from leases due to the implementation of GASB Statement No. 87, *Leases*.

Water Net Position, Fiscal Year 2021

For the year ended June 30, 2021, the Water Enterprise's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by $649,517. Total net position increased from prior year by $8,502 or 1.3% (see Table 1A). The increase in net position was the result of an increase of $107,058 in assets and deferred outflows, offset by a net increase of $98,556 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. They also include receivables, which represent cumulative amounts due from the wholesale customers to match revenues with the Water 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, 2021, the Water Enterprise owed the wholesale customers $60,864, which was mainly due to higher water demand by the wholesale customers. This amount was recorded as a liability in accordance with the 2009 agreement. See Note 11, Water Supply Agreement, for additional details.

During the fiscal year 2021, current and other assets increased by $31,110 or 4.4%. The increases included $57,567 in restricted and unrestricted cash and investments mainly due to the issuance of the 2020 Series ABCD bonds, $2,372 in prepaid charges advances and others mainly for prepaid expenses of multiple software licensing and membership fees, $209 in restricted interest and other receivables, and $160 in inventory due to more purchases than issuances during the fiscal year. The increases were offset by decreases of $23,725 from the State Water Resources Control Board (SWRCB) State Revolving Funds Loan relating to the SF Recycled Water project mainly from reimbursements received for prior year receivable, $4,470 in charges for services due to more collections than billings and an increase in allowance for doubtful accounts (allowance for doubtful accounts increased by $2,934 primarily due to the Mayor's COVID-19 proclamation suspending shutoff of water service and collection of past due accounts), $994 in interest receivable mainly due to lower interest rates and higher cash distributions than interest earnings, $7 due to cash received from other governments for grants relating to water efficiency, and $2 mainly due to collections from the Department of Public Works (DPW) for custom work projects.

Capital assets, net of accumulated depreciation and amortization, increased by $57,254 or 1.0% mainly due to San Andreas Pipeline No. 2 and San Francisco Groundwater Supply construction and capital improvement activities. The largest portion of the Water Enterprise's net position of $517,302 or 79.6% represents net investment in capital assets (see Capital Assets section of the MDA for more information), which decreased by $10,554 or 2.0% from prior year's $527,856. The change was explained by an increase of $67,808 in liabilities related to capital assets mainly from the issuance of 2020 Series ABCD and 2020 Series EFGH bonds, offset by an increase of $57,254 in capital assets in buildings, structures, and improvements and construction in progress from depreciation.

Deferred outflows of resources increased by $18,694 due to increases of $10,802 for unamortized loss on refunding (the result of a $27,010 increase from the issuance of 2020 Series EFGH bonds, offset by a $15,156 decrease from amortization and $1,052 from refunding of the 2010 Series D, 2011 Series D and 2012 Series C bonds), and $10,179 from OPEB obligations based on actuarial reports. These increases were offset by a $2,287 decrease relating to pensions based on actuarial reports.

Total liabilities increased by $119,022 or 2.1% which is due to increases of $299,480 in outstanding revenue bonds mainly due to the issuance of 2020 Series ABCD and 2020 Series EFGH bonds, $38,284 in net pension liability based on actuarial report, $34,136 increase in State Revolving Funds Loan payable due to additional loans relating to the SF Westside Recycled Water project, $25,956 in general liability based on actuarial report, $3,650 in accrued payroll, vacation and sick leave mainly due to actuarial estimates, 3% increase of cost of living adjustment (COLA), and more days in current year-end payroll accrual compared to prior year-end accrual, $2,921 in restricted and unrestricted payables due to higher accruals as compared to prior year mainly for the Information Technology project and 19th

Ave. Infrastructure Improvement project, and $792 in unearned revenues mainly due to additional customer credit balances from overpayments. These increases were offset by decreases of $256,492 in commercial paper primarily due to refunding from the 2020 Series ABCD bonds, $14,913 in other post-employment benefits obligations from actuarial estimates, $6,557 in interest payable mainly due to refunding from the 2020 Series EFGH Bonds, $3,993 in the Wholesale Balancing Account due to higher demand from the wholesale customers (see Note 11 for details), $2,916 in certificates of participation from repayments and amortization of premium, $674 in due to other City departments from payments made for legal services provided by the City Attorney and projects performed by the Department of Public Works for Sidewalk Inspection and Repair projects, $346 in workers' compensation based on actuarial estimates, and $306 in pollution remediation liability as a result of additional expenditures incurred for the Lake Merced Pacific Rod and Gun Club and 17th and Folsom sites (see Note 16(d) for details).

Deferred inflows of resources decreased by $20,466 from a $30,009 decrease related to pensions based on actuarial reports, offset by a $9,543 increase from OPEB obligations based on actuarial reports.

(Dollars in thousands, unless otherwise stated)

The following table summarizes Wastewater's changes in net position.

Table 1B
Proprietary Fund – Wastewater
Comparative Condensed Net Position
June 30, 2022, 2021, and 2020

	2022	Restated 2021^	2020	2022 - 2021 Change	2021 - 2020 Change
Total assets:					
Current and other assets	$ 628,368	360,711	473,620	267,657	(112,909)
Capital assets, net of accumulated depreciation and amortization	4,046,451	3,606,850	3,062,288	439,601	544,562
Total assets	4,674,819	3,967,561	3,535,908	707,258	431,653
Deferred outflows of resources:					
Unamortized loss on refunding of debt	33	91	189	(58)	(98)
Pensions	25,369	30,219	30,422	(4,850)	(203)
Other post-employment benefits	12,898	15,109	10,065	(2,211)	5,044
Total deferred outflows of resources	38,300	45,419	40,676	(7,119)	4,743
Liabilities:					
Current liabilities:					
Revenue bonds	34,345	22,880	23,240	11,465	(360)
Certificates of participation	830	785	747	45	38
Commercial paper	379,157	638,518	207,939	(259,361)	430,579
State revolving fund loans	2,481	2,483	2,458	(2)	25
Other liabilities	165,139	149,357	148,585	15,782	772
Subtotal current liabilities	581,952	814,023	382,969	(232,071)	431,054
Long-term liabilities:					
Revenue bonds	1,896,908	1,567,042	1,598,493	329,866	(31,451)
Revenue notes	350,356	—	—	350,356	—
Certificates of participation	24,458	25,302	26,112	(844)	(810)
State revolving fund loans	300,178	106,076	86,091	194,102	19,985
Other liabilities	73,295	188,576	168,906	(115,281)	19,670
Subtotal long-term liabilities	2,645,195	1,886,996	1,879,602	758,199	7,394
Total liabilities:					
Revenue bonds	1,931,253	1,589,922	1,621,733	341,331	(31,811)
Revenue notes	350,356	—	—	350,356	—
Certificates of participation	25,288	26,087	26,859	(799)	(772)
Commercial paper	379,157	638,518	207,939	(259,361)	430,579
State revolving fund loans	302,659	108,559	88,549	194,100	20,010
Other liabilities	238,434	337,933	317,491	(99,499)	20,442
Total liabilities	3,227,147	2,701,019	2,262,571	526,128	438,448
Deferred inflows of resources:					
Related to pensions	114,670	2,148	16,892	112,522	(14,744)
Other post-employment benefits	8,640	7,265	4,185	1,375	3,080
Total deferred inflows of resources	123,310	9,413	21,077	113,897	(11,664)
Net position:					
Net investment in capital assets	1,092,705	1,253,789	1,183,288	(161,084)	70,501
Restricted for debt service	5,391	2,992	1,227	2,399	1,765
Restricted for capital projects	114,657	—	—	114,657	—
Unrestricted	149,909	45,767	108,421	104,142	(62,654)
Total net position	$ 1,362,662	1,302,548	1,292,936	60,114	9,612

^Restated due to the implementation of GASB Statement No. 87, *Leases*

Wastewater Net Position, Fiscal Year 2022

For the year ended June 30, 2022, the Wastewater Enterprise's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by $1,362,662. The Wastewater Enterprise's total net position increased by $60,114 or 4.6% as a result of increases of $114,657 in restricted for capital projects, $104,142 in unrestricted net position, and $2,399 in restricted for debt service offset by a decrease of $161,084 in net investment in capital assets (see Table 1B).

During the fiscal year 2022, current and other assets increased by $267,657 or 74.2%. The increase was mainly due to $182,040 in receivables from the State Water Resources Control Board (SWRCB) attributed to $202,795 aggregate new State Revolving Fund (SRF) reimbursement requests consisting of $132,000 for the Southeast Water Pollution Control Plant (SEP) Biosolids Digester Project, $64,678 for the SEP New Headworks (Grit) Replacement Project, and $6,117 for the Oceanside Plant (OSP) Digester Gas Utilization Upgrade Project, offset by $20,755 cash receipts from prior year receivables relating to the OSP Digester Gas Utilization Upgrade Project, an increase of $48,770 in net pension asset based on actuarial report and $32,650 increase in restricted and unrestricted cash and investments mainly from the issuance proceeds of tax-exempt 2021 Series AB (Green) revenue notes and 2021 Series AB revenue bonds. Other increases included $7,241 in receivables for charges for services mainly due to increased billings of $6,143, $1,098 decrease in allowance for doubtful accounts due to utility arrearage relief payment received from the State as Federal pass-through from the California Water and Wastewater Arrearages Payment Program (CWWAPP), $1,014 due from the Treasure Island Development Authority (TIDA) for capacity fees, $301 in inventory as there were more purchases than issuances during the year, $190 in capacity charges net of allowance for doubtful accounts, $118 in interest receivable, and $25 in State grant receivable for the Baker Beach reimbursement. These increases in current and other assets were offset by a decrease of $2,325 in lease assets, net of accumulated amortization, due to amortization, $1,763 in Federal interest subsidy receivable (attributed to $5,817 subsidy received offset by $4,054 subsidy accrual during the year), $324 decrease in rent receivable mainly due to $304 collection of prior year balance from the San Francisco Community College, $219 decrease in prepaid charges mainly due to $652 prior year prepaid expenses recognized in current year and $39 lease prepayments amortizations for the Civic Center Garage and the Mariposa Pump Station & Force, offset by $472 prepaid expenses in the current year, $56 decrease in interfund receivables and due from component unit consisting of $118 from the Department of Public Works (DPW) for the Mission Bay South and Hunters View Development Projects, $24 from the San Francisco Port Commission (Port), and $20 from component unit for the TIDA Replacement & Repair Project, offset by an increase of $106 in receivable from the Academy of Sciences and Office of Community Investment Infrastructure, and $5 decrease in custom work receivable.

Capital assets, net of accumulated depreciation and amortization, increased by $439,601 or 12.2% reflecting an increase in construction and capital improvement activities. The largest portion of the Wastewater Enterprise's net position of $1,092,705 or 80.2%, represents net investment in capital assets (see Capital Assets section of the MDA for more information). Deferred outflows of resources decreased by $7,119 mainly due to decreases in pensions and other post-employment benefits by $4,850 and $2,211, respectively based on actuarial report and $58 amortization of the 2013 Series A bonds loss on refunding.

Total liabilities increased by $526,128 or 19.5%. As of June 30, 2022, total debt outstanding balance of $2,988,713 for revenue bonds and notes payable, certificates of participation (COP), commercial paper, and State Revolving Fund (SRF) loans, represented 92.6% of total liabilities, an increase of $625,627 or 26.5%. The increase was mainly due to $373,700 issuance of 2021 Series AB revenue bonds, consisting of $297,880 par amounts and $75,820 premiums, $350,823 issuance of 2021 Series AB revenue notes consisting of $347,465 par amounts and $3,358 premiums, $200,702 new SRF loans to finance the SEP Biosolids Digester Facilities, the SEP New Headworks Replacement, and the OSP Digester Gas Utilization Upgrade projects, and $80,639 issuance of commercial paper. These increases were offset by $340,000 retirement of commercial paper, $26,148 in debt principal repayments, $9,970 in premium amortization during the year, and $4,000 loan principal forgiveness for the SRF OSP Digester Gas Utilization Upgrade Project along with $119 unreimbursed loan claim. Other liabilities of $238,434 such as payables to vendors, contractors, and other government agencies for goods and services under contractual agreements and employees, decreased by $99,499 or 29.4%, mainly due to decreases of $103,746 in net pension liability based on actuarial report, $4,668 in general liability based on actuarial estimates, $2,314 in lease liability due to implementation of GASB Statement No. 87, *Leases*,

$1,588 in other post-employment benefits obligations based on actuarial report, and $110 in payable to Hetch Hetchy Power related to the 525 Golden Gate Living Machine System. These decreases were offset by increases of $7,229 in restricted and unrestricted payable due to increased vouchers, $4,184 in bond and loan interest payable due to higher outstanding debt principal, $792 in unearned revenues mainly due to $892 in customer credit balances mainly due to overpayments offset by decreases of $81 in deposits from Pacific Gas & Electric due to expenses incurred for the Cross Bore Project and $19 in liens payable, $462 in employee related benefits including vacation, workers' compensation, accrued payroll mainly due to actuarial estimates, and 3.5% increase of cost of living adjustment (COLA), and $260 in pollution remediation obligation.

Deferred inflows of resources increased by $113,897 due to increases in pensions and other post-employment benefits by $112,522 and $1,375, respectively based on actuarial report.

Wastewater Net Position, Fiscal Year 2021

For the year ended June 30, 2021, the Wastewater Enterprise's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by $1,302,583. The Wastewater Enterprise's total net position increased by $9,647 or 0.7% as a result of increases of $70,501 in net investment in capital assets and $1,765 in restricted for debt service offset by a decrease of $62,619 in unrestricted net position (see Table 1B).

During the fiscal year 2021, current and other assets decreased by $118,831 or 25.1%. The decrease was mainly due to a decrease of $136,773 in restricted and unrestricted cash and investments largely attributed to increased spending for the Sewer System Improvement Program (SSIP) and debt principal and interest repayment. Other decreases included $666 in receivables for charges for services mainly due to $2,172 increase in allowance for doubtful accounts as there were more sewer charge receivables aging over 120 days attributable to the suspension of collection efforts in response to the COVID-19 emergency proclamation issued by the City Mayor. These decreases in current and other assets were offset by an increase of $17,490 in receivables from the State Water Resources Control Board (SWRCB) due to $20,755 in reimbursement receivable for disbursements claim relating to the Oceanside Plant (OSP) Digester Gas Utilization Upgrade Project offset by cash receipts of $3,265 in State Revolving Fund (SRF) reimbursement requests consisting of $2,041 for the Southeast Plant (SEP) 521/522 and Disinfection Upgrade and $1,224 for the Lake Merced Green Infrastructure projects. The other increases included $680 in prepaid charges, advances, and other receivable consisting of $546 prepayments to the San Francisco Estuary Institute, Bay Area Air Quality Management District, and Water Research Foundation, $290 in rent receivable mainly due a receivable from the San Francisco Community College, and $17 in custom work receivable offset by $173 prepaid expenses recognized to expense for the current year, $181 in inventory as there were more purchases than issuances during the year, $166 in restricted and unrestricted interest and other receivable mainly due to an increase in Federal interest subsidy receivable, and $91 increase in interfund receivables consisting of $47 from the Department of Public Works (DPW) for the Mission Bay South and Hunters View Development Projects, $24 from the San Francisco Port Commission (Port), and $20 from the Treasure Island Development Authority (TIDA).

Capital assets, net of accumulated depreciation and amortization, increased by $544,562 or 17.8% reflecting an increase in construction and capital improvement activities. The largest portion of the Wastewater Enterprise's net position of $1,253,789 or 96.3%, represents net investment in capital assets (see Capital Assets section of the MDA for more information). Deferred outflows of resources increased by $4,743 mainly due to $5,044 increase in other post-employment benefits based on actuarial report offset by $203 decrease in pensions based on actuarial report and $98 amortization of the 2013 Series A bonds loss on refunding.

Total liabilities increased by $432,491 or 19.1%. As of June 30, 2021, total outstanding balance of $2,363,086 for revenue bonds payable, commercial paper, certificates of participation, and SRF loans represented 87.7% of total liabilities, an increase of $418,006 or 21.5%. The increase was mainly due to $435,450 additional commercial paper issuance and $22,468 SRF loan to fund the OSP Digester Gas Utilization Upgrade, the SEP 521/522 and Disinfection Upgrade, and the Lake Merced Green Infrastructure projects offset by $31,316 in debt repayments and $8,596 in amortization of premium during the year. Other liabilities of $331,976 such as payables to vendors, contractors, and other government agencies for goods and services under contractual agreements and employees, increased by $14,485 or 4.6%, due to increases of $17,511 in net pension liability based on actuarial report, $3,912 in employee related benefits including vacation, workers' compensation, and accrued payroll mainly due to actuarial estimates, 3% increase of cost of living adjustment (COLA), and more days in current year-end payroll accrual compared to prior year-end accrual, $822 in general liability based on actuarial estimates, $130 in customer credit balances mainly due to overpayments, and $26 in liens payable. These increases were offset by decreases of $7,472 in other post-employment benefits obligations based on actuarial report, $145 in bond and loan interest payable due to lower outstanding debt principal and lower interest rates, $135 in restricted and unrestricted payable due to higher voucher payments than vouchers generated, and $109 in payable to Hetch Hetchy Power due to payment for the 525 Golden Gate Living Machine System, $54 decrease in deposit from PG&E due to expenses incurred for the Cross Bore Project, and $1 interfund payable to City Attorney's Office. Deferred inflows of resources decreased by $11,664 due to $14,744 decrease in pensions based on actuarial report offset by $3,080 increase in other post-employment benefits based on actuarial report.

(Dollars in thousands, unless otherwise stated)

The following table summarizes Hetchy Water's changes in net position.

Table 1C – A
Proprietary Fund – Hetchy Water
Comparative Condensed Net Position
June 30, 2022, 2021, and 2020

	2022	Restated 2021^	2020	2022 - 2021 Change	2021 - 2020 Change
Total assets:					
Current and other assets	$ 109,752	98,225	92,711	11,527	5,514
Capital assets, net of accumulated depreciation and amortization	201,007	177,481	160,782	23,526	16,699
Total assets	310,759	275,706	253,493	35,053	22,213
Deferred outflows of resources:					
Pensions	6,696	7,799	7,950	(1,103)	(151)
Other post-employment benefits	3,272	3,725	2,332	(453)	1,393
Total deferred outflows of resources	9,968	11,524	10,282	(1,556)	1,242
Liabilities:					
Current liabilities	17,380	15,873	6,769	1,507	9,104
Long-term liabilities	16,956	43,623	40,441	(26,667)	3,182
Total liabilities	34,336	59,496	47,210	(25,160)	12,286
Deferred inflows of resources:					
Related to pensions	34,477	988	4,335	33,489	(3,347)
Other post-employment benefits	2,734	2,085	1,195	649	890
Total deferred inflows of resources	37,211	3,073	5,530	34,138	(2,457)
Net position:					
Net investment in capital assets	201,007	177,481	160,782	23,526	16,699
Restricted for capital projects	—	—	6,513	—	(6,513)
Unrestricted	48,173	47,180	43,740	993	3,440
Total net position	$ 249,180	224,661	211,035	24,519	13,626

^Restated due to the implementation of GASB Statement No. 87, Leases.

Hetchy Water Net Position, Fiscal Year 2022

Hetchy Water's net position of $249,180 increased by $24,519 or 10.9% resulting from a net increase of $33,497 in total assets and deferred outflows of resources, offset by a net increase of $8,978 in total liabilities and deferred inflows of resources (see Table 1C-A). The increase of $11,527 in current and other assets was attributed to increases of $13,912 in net pension assets based on actuarial report, $33 in charges for services receivables due to higher consumption from Lawrence Livermore National Laboratory, $19 in interest receivables due to higher interest accrual from City's Treasury, and $8 in inventory due to more purchases than issuances during the fiscal year. The increases were offset by decreases of $2,173 in cash and investment with City Treasury mainly from higher project spending, $192 in prepaid charges, advances, and other receivables mainly due to prepayment to Turlock Irrigation District for relicensing studies, $67 decrease in due from other governments related to State grant reimbursement received for Lower Cherry Aqueduct project, and $13 decrease in lease right-to-use assets net of accumulated amortization per implementation of GASB Statement No. 87, *Leases*.

Capital assets, net of accumulated depreciation and amortization, increased by $23,526 or 13.3% to $201,007 primarily from construction and capital improvement activities for the Mountain Tunnel Improvement Project and San Joaquin Pipeline Valve and Safe Entry Improvement Project. Deferred outflows of resources decreased by $1,556 due to decreases of $1,103 in pensions and $453 in other post-employment benefits (OPEB) based on actuarial reports.

Hetchy Water's total liabilities decreased by $25,160 or 42.3% to $34,336, as explained by decreases of $26,645 in net pension liability based on actuarial estimates, $2,733 in restricted payables to vendors and contractors mainly due to lower year-end expense accruals for capital projects, $204 in OPEB obligations based on actuarial assumptions, $16 in lease liability per implementation of GASB Statement No. 87, Leases, and $6 in grant advance due to recognition of prior year State grant for the Rim Fire project. These decreases were offset by increases of $4,192 in unrestricted payables mainly for license and permit fees to National Park Service, $148 in employee related benefits mainly due to increase in workers' compensation, $102 in general liability based on actuarial estimates, and $2 increase in rental deposits and prepaid rent.

Deferred inflows of resources increased by $34,138 due to increases of $33,489 in relation to pensions and $649 in OPEB based on actuarial reports.

Hetchy Water Net Position, Fiscal Year 2021

Hetchy Water's net position of $224,665 increased by $13,630 or 6.5% resulting from an increase of $23,381 in total assets and deferred outflows of resources, offset by a net increase of $9,751 in total liabilities and deferred inflows of resources (see Table 1C-A). The increase of $5,440 in current and other assets was attributed to increases of $7,423 in cash and investment with City Treasury mainly due to a $16,000 transfer from the Water Enterprise to fund upcountry projects, offset by higher project spending, $413 increase in charges for services receivables due to higher consumption from Lawrence Livermore National Laboratory, and $4 increase in inventory due to more purchases than issuances during the fiscal year. The increases were offset by decreases of $1,996 in due from other governments mainly due to prior year reimbursements received for disaster emergency recoveries related to the 2018 Moccasin Storm and $186 in interest receivables due to lower annualized interest rate. Prepaid charges, advances, and other receivables decreased by $114 due to $448 Rim Fire insurance recovery collections and $4 in amortization of the advance paid to the Recreation and Parks Department for the Civic Center Garage, offset by an increase of $338 in vendor prepayment to Turlock Irrigation District for Federal Energy Regulatory Commission (FERC) relicensing studies and California Department of Water Resources for annual dam fees. Other decreases include $104 due from the City Attorney's Office for legal services.

Capital assets, net of accumulated depreciation and amortization, increased by $16,699 or 10.4% to $177,481 primarily from construction and capital improvement activities for the Mountain Tunnel Improvement Project and Repair & Replacement Life Extension Program, and additions of facilities, improvements, machinery, and equipment. Deferred outflows of resources increased by $1,242 due to an increase of $1,393 in OPEB based on actuarial reports offset by a decrease of $151 in pensions.

Hetchy Water's total liabilities increased by $12,208 or 25.9% to $59,418, as explained by increases of $5,778 in restricted payables to vendors and contractors mainly due to higher year-end expense accruals for capital projects, $5,168 in net pension liability based on actuarial report, $3,304 in unrestricted payables mainly for license and permit fees to National Park Service, $626 in employee related benefits including workers' compensation, vacation, sick leave and accrued payroll mainly due to an extra day in current year-end payroll accrual when compared to prior year and a 3% cost of living adjustment increase in December 2020, and $4 increase in rental deposits. The increases were offset by decreases of $1,906 in OPEB obligations based on actuarial assumptions, $493 in grant advance due to recognition of Rim Fire grant revenue, $240 in payable due to the City Attorney's Office for unbilled legal services, and $33 in general liability based on actuarial estimates.

(Dollars in thousands, unless otherwise stated)

Deferred inflows of resources decreased by $2,457 due to a decrease of $3,347 in relation to pensions offset by an increase of $890 in OPEB based on actuarial reports.

The following table summarizes Hetchy Power's changes in net position.

Table 1C – B
Proprietary Fund – Hetchy Power
Comparative Condensed Net Position
June 30, 2022, 2021, and 2020

	2022	Restated 2021^	2020	2022 - 2021 Change	2021 - 2020 Change
Total assets:					
Current and other assets	$ 260,560	249,365	228,845 *	11,195	20,520
Capital assets, net of accumulated depreciation and amortization	585,636	492,056	445,429	93,580	46,627
Total assets	846,196	741,421	674,274	104,775	67,147
Deferred outflows of resources:					
Pensions	8,183	9,531	9,716	(1,348)	(185)
Other post-employment benefits	3,999	4,552	2,850	(553)	1,702
Total deferred outflows of resources	12,182	14,083	12,566	(1,901)	1,517
Liabilities:					
Current liabilities:					
Bonds	1,966	1,928	2,115	38	(187)
Certificates of participation	427	405	384	22	21
Commercial paper	40,019	114,671	63,535	(74,652)	51,136
Other liabilities	48,549	49,450	33,218	(901)	16,232
Subtotal current liabilities	90,961	166,454	99,252	(75,493)	67,202
Long-term liabilities:					
Bonds	192,520	44,384	47,693	148,136	(3,309)
Certificates of participation	12,593	13,026	13,444	(433)	(418)
Other liabilities	22,646	55,425	54,085	(32,779)	1,340
Subtotal long-term liabilities	227,759	112,835	115,222	114,924	(2,387)
Total liabilities:					
Bonds	194,486	46,312	49,808	148,174	(3,496)
Certificates of participation	13,020	13,431	13,828	(411)	(397)
Commercial paper	40,019	114,671	63,535	(74,652)	51,136
Other liabilities	71,195	104,875	87,303	(33,680)	17,572
Total liabilities	318,720	279,289	214,474	39,431	64,815
Deferred inflows of resources:					
Related to pensions	42,138	1,207	5,298	40,931	(4,091)
Other post-employment benefits	3,342	2,548	1,461	794	1,087
Total deferred inflows of resources	45,480	3,755	6,759	41,725	(3,004)
Net position:					
Net investment in capital assets	352,162	323,066	322,204	29,096	862
Restricted for debt service	140	99	142	41	(43)
Unrestricted	141,876	149,295	143,261	(7,419)	6,034
Total net position	$ 494,178	472,460	465,607	21,718	6,853

^Restated due to the implementation of GASB Statement No. 87, *Leases*.
* Included $1,800 working capital loan to CleanPowerSF in fiscal year 2020.

Hetchy Power Net Position, Fiscal Year 2022

Hetchy Power's net position of $494,178 increased by $21,718 or 4.6% resulting from a net increase of $102,874 in total assets and deferred outflows of resources, offset by an increase of $81,156 in total liabilities and deferred inflows of resources (see Table 1C-B). Increase of $11,195 in current and other assets was attributed to increases of $17,004 in net pension assets based on actuarial report, $7,882 in prepaid charges, advances, and other receivables mainly due to collateral paid to satisfy the CAISO's financial security requirements, $3,295 in cash and investments mainly due to higher collections from billings, $76 in interest receivables due to higher interest accrual from City's Treasury, and $31 increase in Federal grants receivable mainly from the Rim Fire Project.

These increases were offset by decreases of $8,835 in charges for services receivables due to completion of billing system implementation in prior year resulting in more timely billings in current year, $7,497 in restricted interest and other receivables mainly due to decrease in vendor prepayment to PG&E for the Bay Corridor Project, $602 in due from other City departments mainly from repayment for Sustainable Energy Account, $142 in inventory due to more issuances than purchases during the fiscal year, and $17 decrease in lease right-to-use assets net of accumulated amortization per implementation of GASB Statement No. 87, *Leases*.

Capital assets, net of accumulated depreciation and amortization, increased by $93,580 or 19.0% to $585,636 primarily from construction and capital improvement activities for the Bay Corridor Project and Mountain Tunnel Improvement Project. Deferred outflows of resources decreased by $1,901 due to decreases of $1,348 in pensions and $553 in OPEB based on actuarial reports.

Hetchy Power's total liabilities of $318,720 increased by $39,431 or 14.1%. As of June 30, 2022, outstanding debt increased by $73,111 due to $124,000 from 2021 Series AB revenue bond issuances, $63,058 from commercial paper issuance for Hetchy Power facilities, and $27,022 in bond premium from 2021 Series AB revenue bonds, offset by $140,043 in commercial paper, bonds, and certificates of participation principal repayments, and $926 in amortization of premium and discount. Other liabilities of $71,195, such as payables to vendors, employees, contractors, and other government agencies for goods and services under contractual agreements, decreased by $33,680 or 32.1%, mainly due to decreases of $32,566 in net pension liability based on actuarial estimates, $6,241 in unrestricted payables mainly from prior year wheeling charges to APX, Inc., $248 in OPEB obligations based on actuarial assumptions, $85 in general liability based on actuarial estimates, and $19 decrease in lease liability and interest payable per implementation of GASB Statement No. 87, *Leases*. These decreases were offset by increases of $3,666 in restricted payables to vendors and contractors due to higher year-end expense accruals for capital projects, $868 increase in interest payable related to 2021 Series AB revenue bond issuances, $734 in unearned revenues, refunds, and other, $200 in employee related benefits mainly due to increase in workers' compensation, and $11 in due to Department of Public Works for painting of light poles. Increase of $734 in unearned revenues, refunds, and other was mainly due to increases of $458 in deposits from custom work projects, $267 in prepayments from Distributed Antenna System (DAS) program, and $60 in overpayments received from customers, offset by decreases of $48 in grant advance due to recognition of Rim Fire State grant revenue and $3 in deposits received from retail customers.

Deferred inflows of resources increased by $41,725 due to increases of $40,931 in relation to pensions and $794 in OPEB based on actuarial reports.

Hetchy Power Net Position, Fiscal Year 2021

Hetchy Power's net position of $472,464 increased by $6,857 or 1.5% resulting from an increase of $68,574 in total assets and deferred outflows of resources, offset by a net increase of $61,717 in total liabilities and deferred inflows of resources (see Table 1C-B). Increase of $20,430 in current and other assets was attributed to an increase of $16,057 in charges for services receivables, of which $15,673 was attributed to billing delays as a result of transitioning to new billing system implemented in April 2021. In addition, there was an increase of $1,051 in year-end accrual for California Independent System Operator (CAISO) Congestion Revenue Right (CRR) credits, offset by an increase of $667 in allowance for doubtful accounts due to increased past due balances as a result of the Mayor's emergency proclamation that Hetchy Power temporarily suspend collection procedures and utility shutoffs for past due accounts to help customers with financial hardship due to COVID-19. Restricted interest and other receivables increased by $11,632 mainly due to vendor prepayment to PG&E for the Bay Corridor Project.

Prepaid charges, advances, and other receivables increased by $405 mainly due to $496 increase in vendor prepayments to PG&E for electric system reliability compliance product offset by decreases of $61 in receivables for the Distributed Antenna System (DAS) program due to more payments received, $16 in custom work receivables for Sunnydale Housing Projects, and $14 in amortization of the advance paid to the Recreation and Parks Department for the Civic Center Garage. Inventory increased by $211 due to more purchases than issuances during the fiscal year. The increases were offset by $3,280 decrease in cash and investment with/outside City Treasury due primarily to increase in capital spending. Due from other City departments decreased by $2,763, attributed to the final repayments of $1,800 from CleanPowerSF for working capital loan, $506 for the Sustainable Energy Account, $331 from City Attorney's Office for legal services, $109 from Wastewater Enterprise for the Living Machine System, and $105 from the Recreation and Parks Department for Energy Efficiency Projects, offset by increases of $46 in interest receivable from Treasure Island Development Authority (TIDA) in connection of an upgraded submarine power cable for the Treasure Island to increase service capacity and $42 from the Department of Public Works for Hunters Point Shipyard Development and Transbay Folsom Street Improvement custom work projects. Other decreases include $1,377 in grants receivable due to reimbursement received for disaster emergency recoveries related to the Rim Fire and 2018 Moccasin Storm, and $455 in interest receivables due to lower annualized interest rate.

Capital assets, net of accumulated depreciation and amortization, increased by $46,627 or 10.5% to $492,056 primarily due to additions of facilities, improvements, machinery, and equipment for the Bay Corridor Project and Holm Powerhouse Rehabilitation and Kirkwood Powerhouse Oil Containment Upgrades. Deferred outflows of resources increased by $1,517 due to an increase of $1,702 in OPEB based on actuarial reports offset by a decrease of $185 in pensions.

Hetchy Power's total liabilities of $279,195 increased by $64,721 or 30.2%. As of June 30, 2021, outstanding debts increased by $47,243 and was attributable to $51,136 in commercial paper issuance for Hetchy Power facilities, offset by $2,402 in bonds and certificates of participation principal repayments, $1,272 in return of unspent bond proceeds for 2015 NCREBs, and $219 in amortization of premium and discount. Other liabilities of $104,781, such as payables to vendors, employees, contractors, and other government agencies for goods and services under contractual agreements, increased by $17,478 or 20.0%, mainly due to increases of $8,724 in unrestricted payables mainly for wheeling charges to APX Inc., $6,934 restricted payables to vendors and contractors due to higher year-end expense accruals for capital projects, $6,317 in net pension liability based on actuarial report, and $876 in employee related benefits including workers' compensation, vacation, sick leave and accrued payroll mainly due to an extra day in current year-end payroll accrual when compared to prior year and a 3% cost of living adjustment increase in December 2020. Offsetting decreases include $2,330 in OPEB obligations based on actuarial assumptions, $1,649 in unearned revenue, $1,114 in general liability based on actuarial estimates, $231 in due to City Attorney's Office for unbilled legal services, and $49 in interest payable as a result of decreased outstanding debts and lower interest rates for commercial paper. Unearned revenue decreased by $1,649 due to $1,208 in remittance of utility tax collected, $1,193 in power revenue from commercial deposits, $681 in residential allowance refund for the Alice Griffith Housing Project, and $609 in recognition of Rim Fire grants revenue received in advance, offset by increases of $1,707 in deposits from custom work projects, $200 in prepayments from DAS program, $117 in overpayments received from customers, and $18 in deposits received from retail customers and security deposits for cottage rental.

Deferred inflows of resources decreased by $3,004 due to a decrease of $4,091 in relation to pensions offset by an increase of $1,087 in OPEB based on actuarial reports.

(Dollars in thousands, unless otherwise stated)

The following table summarizes CleanPowerSF's changes in net position.

Table 1C – C
Proprietary Fund – CleanPowerSF
Comparative Condensed Net Position
June 30, 2022, 2021, and 2020

	2022	Restated 2021^	2020	2022 - 2021 Change	2021 - 2020 Change
Total assets:					
Current and other assets	$ 129,847	121,917	121,879	7,930	38
Total assets	129,847	121,917	121,879	7,930	38
Deferred outflows of resources:					
Pensions	852	803	572	49	231
Other post-employment benefits	798	442	270	356	172
Total deferred outflows of resources	1,650	1,245	842	405	403
Liabilities:					
Current liabilities	28,621	17,735	24,991 *	10,886	(7,256)
Long-term liabilities	11,548	15,344	4,171	(3,796)	11,173
Total liabilities	40,169	33,079	29,162	7,090	3,917
Deferred inflows of resources:					
Related to pensions	5,414	1,093	1,210	4,321	(117)
Other post-employment benefits	1,594	1,913	1,211	(319)	702
Total deferred inflows of resources	7,008	3,006	2,421	4,002	585
Net position:					
Unrestricted	84,320	87,077	91,138	(2,757)	(4,061)
Total net position	$ 84,320	87,077	91,138	(2,757)	(4,061)

^Restated due to the implementation of GASB Statement No. 87, *Leases*.
*Included $1,800 working capital loan from Hetchy Power in fiscal year 2020.

CleanPowerSF Net Position, Fiscal Year 2022

CleanPowerSF's net position of $84,320 decreased by $2,757 or 3.2%, resulting from an increase of $11,092 in total liabilities and deferred inflows of resources, offset by an increase of $8,335 in total assets and deferred outflows of resources (see Table 1C-C). Increase in total assets of $7,930 was due to increases of $20,602 in prepaid expenses included $12,236 in collateral paid to satisfy the CAISO's financial security requirements, $5,914 from power purchase credits, and $2,452 in prepayments to PG&E for electricity purchases. Other increases included $20,438 in charges for services receivables due to pre-approved rate increases, $1,833 in net pension assets based on actuarial report, and $6 in interest receivable due to higher interest accrual from City's Treasury. These increases were offset by decreases of $34,604 in cash and investments with City Treasury mainly attributed to volatile and increased pricing in power market and $345 decrease in lease right-to-use assets net of accumulated amortization per implementation of GASB Statement No. 87, *Leases*.

Deferred outflows of resources increased by $405 due to increases of $356 in OPEB and $49 in pensions based on actuarial reports.

Total liabilities increased by $7,090 or 21.4% to $40,169, mainly explained by $7,667 increase in payables to suppliers for power purchases, $3,168 increase in unearned revenues, refunds, and other due to $2,676 grants received in advance from California Public Utilities Commission (CPUC) for the new Disadvantaged Communities Programs (DAC) and the Community Food Service Energy Efficiency program, $503 from net energy metering credits to retail and commercial customers, offset by a decrease of $11 from customer prepayments. Other increases included $228 for employee related benefits including vacation sick leave and accrued payroll mainly due to an extra day in current year-end payroll accrual when compared to prior year and $26 in general liability based on actuarial estimates. The increases were offset by decreases of $3,008 in net pension liability based on actuarial estimates, $645 in OPEB obligations based on actuarial assumptions, and $346 decrease in lease liability and interest payable per implementation of GASB Statement No. 87, *Leases*.

Deferred inflows of resources increased by $4,002 due to an increase of $4,321 in relation to pensions, offset by a decrease of $319 in OPEB based on actuarial reports.

CleanPowerSF Net Position, Fiscal Year 2021

CleanPowerSF's net position of $87,080 decreased by $4,058 or 4.5%, resulting from a net decrease of $134 in total assets and deferred outflows of resources and a net increase of $3,924 in total liabilities and deferred inflows of resources (see Table 1C-C). Total assets decreased by $537 due to a $6,447 decrease in charges for services receivables attributed to an increase of $3,675 in allowance for doubtful accounts due to higher past due balances in customer power utility accounts after the Mayor's proclamation to extend the moratorium on utility shutoffs and bill collections to help customers experiencing financial hardship as a result of COVID-19. Other decreases include $2,772 in receivables mainly due to one-time customer assistance bill credits related to COVID-19 relief, $576 in prepaid charges, advances, and other receivables mainly due to lower vendor prepayments for purchased electricity and $160 in interest receivables due to lower annualized interest rate. The decreases were offset by an increase of $6,646 in cash and investment with City Treasury mainly from cash collateral received for power purchase agreement.

Deferred outflows of resources increased by $403 due to increases of $231 in pensions and $172 in OPEB based on actuarial reports.

Total liabilities of $32,501 increased by $3,339 or 11.4%, which was mainly explained by $9,000 in cash collateral received for power purchase agreement (see Note 16(a)), $1,203 in net pension liability based on actuarial report, $712 in OPEB obligations based on actuarial assumptions, and an increase of $200 in employee related benefits including vacation, sick leave and accrued payroll mainly due to an extra day in current year-end payroll accrual when compared to prior year, and a 3% cost of living adjustment increase in December 2020. Other increases in unearned revenues, refunds, and other, include $90 from net energy metering credits to retail and commercial customers, $86 from customer prepayments, and $4 from utility and electric energy surcharge tax payable. These increases were offset by decreases of $6,047 in payables to vendors and contractors mainly from lower power purchases, $1,809 due to other City departments ($1,800 final working capital loan repayment to Hetchy Power and $9 to City Attorney's Office for unbilled legal services), and $100 in general liability based on actuarial estimates.

Deferred inflows of resources increased by $585 due to an increase of $702 in OPEB based on actuarial reports offset by a decrease of $117 in relation to pensions.

(Dollars in thousands, unless otherwise stated)

Results of Operations

Department-wide Business Type Activities

The following table summarizes the department-wide revenues, expenses, and changes in net position. Detailed discussion follows for each proprietary fund.

Table 2
Business Type Activities
Comparative Condensed Revenues, Expenses, and Changes in Net Position
Years ended June 30, 2022, 2021, and 2020

	2022	Restated 2021^	2020	2022 - 2021 Change	2021 - 2020 Change
Revenues:					
Charges for services	$ 1,375,765	1,259,466	1,303,411	116,299	(43,945)
Rents and concessions	14,719	14,624	13,135	95	1,489
Other operating revenues	31,962	27,182	32,217	4,780	(5,035)
Interest and investment income/(loss)	(26,202)	30	32,103	(26,232)	(32,073)
Net gain from transfer of assets	—	—	—	—	—
Other non-operating revenues	86,326	72,337	129,198	13,989	(56,861)
Total revenues	1,482,570	1,373,639	1,510,064	108,931	(136,425)
Expenses:					
Operating expenses	1,129,725	1,149,825	1,049,402	(20,100)	100,423
Interest expenses	297,041	221,622	237,271	75,419	(15,649)
Amortization of premium, discount, refunding loss, and issuance costs	(18,105)	(16,498)	(22,627)	(1,607)	6,129
Non-operating expenses	1,938	3,582	1,652	(1,644)	1,930
Total expenses	1,410,599	1,358,531	1,265,698	52,068	92,833
Change in net position before transfers and capital contributions	71,971	15,108	244,366	56,863	(229,258)
Capital contributions	—	4,180	—	(4,180)	4,180
Transfers from the City and County of San Francisco	45,036	38,465	15,500	6,571	22,965
Transfers to the City and County of San Francisco	(31,359)	(21,374)	(16,305)	(9,985)	(5,069)
Net capital contributions and transfers	13,677	21,271	(805)	(7,594)	22,076
Change in net position	85,648	36,379	243,561	49,269	(207,182)
Net position at beginning of year	2,738,110	2,701,731	2,458,170	36,379	243,561
Net position at end of year	$ 2,823,758	2,738,110	2,701,731	85,648	36,379

^Restated due to the implementation of GASB Statement No. 87, *Leases*.

(Dollars in thousands, unless otherwise stated)

The following table summarizes Water's revenues, expenses, and changes in net position.

Table 2A
Proprietary Fund – Water
Comparative Condensed Revenues, Expenses, and Changes in Net Position
Years ended June 30, 2022, 2021, and 2020

	2022	Restated 2021^	2020	2022 - 2021 Change	2021 - 2020 Change
Revenues:					
Charges for services	$ 539,526	550,306	550,753	(10,780)	(447)
Rents and concessions	13,765	13,735	12,124	30	1,611
Other operating revenues	19,826	18,395	20,474	1,431	(2,079)
Interest and investment income/(loss)	(10,896)	1,374	10,517	(12,270)	(9,143)
Other non-operating revenues	41,871	45,874	94,734	(4,003)	(48,860)
Total revenues	604,092	629,684	688,602	(25,592)	(58,918)
Expenses:					
Operating expenses	401,786	448,782	398,117	(46,996)	50,665
Interest expenses	213,668	184,678	191,246	28,990	(6,568)
Amortization of premium, discount, refunding loss, and issuance costs	(9,875)	(7,782)	(13,752)	(2,093)	5,970
Non-operating expenses	828	2,208	529	(1,380)	1,679
Total expenses	606,407	627,886	576,140	(21,479)	51,746
Change in net position before transfers and capital contributions	(2,315)	1,798	112,462	(4,113)	(110,664)
Capital contributions	—	4,180	—	(4,180)	4,180
Transfers from the City and County of San Francisco	15,035	21,025	1,220	(5,990)	19,805
Transfers to the City and County of San Francisco	(30,666)	(16,654)	(14,805)	(14,012)	(1,849)
Net capital contributions and transfers	(15,631)	8,551	(13,585)	(24,182)	22,136
Change in net position	(17,946)	10,349	98,877	(28,295)	(88,528)
Net position at beginning of year	651,364	641,015	542,138	10,349	98,877
Net position at end of year	$ 633,418	651,364	641,015	(17,946)	10,349

^Restated due to the implementation of GASB Statement No. 87, *Leases*.

Water Results of Operations, Fiscal Year 2022

The Water Enterprise's total revenues of $604,092 for the year represented a decrease of $25,592 or 4.1% from prior year (see Table 2A). Decreases included $12,270 from interest and investment loss, $10,780 from charges for services, and $4,003 from other non-operating revenues. These decreases were offset by increases of $1,431 in other operating revenues, and $30 in rents and concessions.

Charges for services were $539,526, a decrease of $10,780 or 2.0% mainly due to 4.1% reduced consumption, offset by an adopted rate increase of 7.0% for retail customers beginning July 1, 2021. Rents and concessions were $13,765, an increase of $30 or 0.2% mainly due to a lease transfer fee and new tenants. Other operating revenues were $19,826, an increase of $1,431 or 7.8% mainly from increased capacity fee permits issued and a 7.0% adopted rate increase for retail customers. Interest and investment loss was $10,896, a decrease of $12,270 or 893.0% mainly due to unrealized losses as a result of the decline in market value of investments due to rising interest rates. Other non-operating revenues were $41,871, a decrease of $4,003 or 8.7% mainly due to $15,000 in State revolving fund (SRF) grant recognized in the prior year, $1,477 decrease in gain from sale of fixed assets, $292 in federal bond subsidies, offset by increases of $6,750 from a PG&E settlement and $5,929 from a water utility arrearages relief grant and $87 in other non-operating revenues.

The Water Enterprise's total expenses were $606,407, a decrease of $21,479 or 3.4%. Operating expenses were $401,786, a decrease of $46,996 or 10.5%, the result of decreases of $49,143 in personnel services mainly due to decreases in pension obligations based on actuarial report, $5,357 in general and administrative and other expenses due to higher judgement and claims in prior year, and $572 in contractual services mainly from other current expenses and subscriptions. These decreases were offset by increases of $3,072 in services provided by other departments mainly for higher water assessment fees paid to Hetch Hetchy Water and higher gas and electric charges paid to Hetch Hetchy Power, $2,544 in materials and supplies mainly for water treatment supplies, and $2,460 in depreciation due to additional capital assets placed into service. Interest expenses increased by $28,990 due to reduced bond interest capitalization resulting from the implementation of GASB Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period*, in fiscal year 2022. Amortization of bond premium, discount, refunding loss and issuance costs increased by $2,093 due to prior year bond issuance costs. Non-operating expenses decreased by $1,380 mainly due to prior year grant payments for water conservation.

Transfers in of $15,035 from the City included $15,030 for the Earthquake Safety and Emergency Response program, and $5 from the General Fund for low income assistance programs. Transfers out of $30,666 included $30,000 to Hetch Hetchy Water to fund various Mountain Tunnel projects, $500 to DPW for the UN Plaza Large Alternative Water Source project and purchase of capital assets, $134 for the Arts Commission for the arts enrichment fund for the new CDD Headquarters, and $32 to the Office of the City Administrator for the Water Enterprise's contribution to the Surety Bond Program.

Water Results of Operations, Fiscal Year 2021

The Water Enterprise's total revenues of $627,826 for the year represented a decrease of $60,776 or 8.8% from prior year (see Table 2A). Decreases included $48,860 from other non-operating revenues, $10,177 from interest and investment income, $2,079 from other operating revenues, and $447 from charges for service. These decreases were offset by an increase of $787 from rents and concessions.

Charges for services were $550,306, a decrease of $447 or 0.1% mainly due to an 8.8% decrease in consumption for retail customers, and the COVID-19 emergency proclamation issued by the City's Mayor suspending collection of past due accounts, mainly resulting in a $2,945 increase in the allowance for doubtful accounts which reduced charges for services. This was offset by an adopted rate increase of 7.0% for retail customers beginning July 1, 2020. Rents and concessions were $12,911, an increase of $787 or 6.5% mainly due to rent increases and increased royalty revenues. Other operating revenues were $18,395, a decrease of $2,079 or 10.2% due to reduced capacity fees and sale of water to other City departments as a result of the SF Health Order relating to COVID-19, offset by a 7.0% adopted rate increase. Interest and investment income was $340, a decrease of $10,177 or 96.8% mainly due to unrealized losses resulting from decreases in value of fixed income securities from the City Treasury pool and lower interest earned on cash balances. Other non-operating revenues were $45,874, a decrease of $48,860 or 51.6% mainly due to a prior year one-time gain of $63,600 from the property transfer of 2000 Marin Street and 639 Bryant Street offset by a $15,000 grant from the State of California for the SF Westside Recycle Water project in current year.

The Water Enterprise's total expenses were $627,875, an increase of $51,735 or 9.0%. Operating expenses were $448,843, an increase of $50,726 or 12.7%, the result of increases of $27,126 in general administrative and other mainly from judgement and claims based on actuarial estimates, $12,585 in personnel services mainly due to pension obligations based on actuarial report and a 3% cost of living adjustment, $9,107 in services provided by other departments mainly from higher water assessment fees paid to Hetch Hetchy Water, $1,805 in depreciation and amortization due to additional capital assets placed into service, and $978 in contractual services mainly from equipment maintenance. These increases were offset by a decrease of $875 in materials and supplies mainly for building and construction supplies. Interest expenses decreased by $6,640, as compared to prior year, mainly due to refunded bonds. Amortization of bond premium, discount, refunding loss and issuance costs decreased by $5,970 due to the issuance of the 2020 Series EFGH revenue bonds, which refunded 2010 Series D, 2011 Series D, 2012 Series ABC, and 2017 Series ABC revenue bonds. Non-operating expenses increased by $1,679 due to increased grants and rebates awarded for water conservation relating to the Onsite Water Reuse Grant Program and community-based services.

Transfers in of $21,025 from the City included $20,040 for the Emergency Firefighting Water System and $985 from the General Fund for Native Plant Garden project and low income assistance programs. Transfers out of $16,654 included $16,000 to Hetch Hetchy Water to fund various upcountry water projects, $622 to the Arts Commission for arts enrichment fund for the SF Recycled Water, Sunol Valley Water Improvement and Mountain Tunnel Improvement projects, and $32 to the Office of the City Administrator for the Water Enterprise's contribution to the Surety Bond Program. Capital contribution of $4,180 was received for water pipeline assets from the Department of Public Works in the current year.

(Dollars in thousands, unless otherwise stated)

The following table summarizes Wastewater's revenues, expenses, and changes in net position.

Table 2B
Proprietary Fund – Wastewater
Comparative Condensed Revenues, Expenses, and Changes in Net Position
Years ended June 30, 2022, 2021, and 2020

	2022	Restated 2021^	2020	2022 - 2021 Change	2021 - 2020 Change
Revenues:					
Charges for services	$ 356,041	318,236	331,721	37,805	(13,485)
Rents and concessions	705	642	664	63	(22)
Other operating revenues	12,136	8,787	11,743	3,349	(2,956)
Ir Interest and investment income/(loss)	(7,087)	(1,187)	12,137	(5,900)	(13,324)
Other non-operating revenues	25,454	4,911	5,596	20,543	(685)
Total revenues	387,249	331,389	361,861	55,860	(30,472)
Expenses:					
Operating expenses	257,171	292,173	262,259	(35,002)	29,914
Interest expenses	77,743	34,944	43,216	42,799	(8,272)
Amortization of premium, refunding loss, and issuance costs	(8,422)	(8,497)	(8,647)	75	150
Non-operating expenses	482	409	52	73	357
Total expenses	326,974	319,029	296,880	7,945	22,149
Change in net position before transfers	60,275	12,360	64,981	47,915	(52,621)
Transfers from the City and County of San Francisco	—	1,440	280	(1,440)	1,160
Transfers to the City and County of San Francisco	(161)	(4,188)	(1,468)	4,027	(2,720)
Net transfers	(161)	(2,748)	(1,188)	2,587	(1,560)
Change in net position	60,114	9,612	63,793	50,502	(54,181)
Net position at beginning of year	1,302,548	1,292,936	1,229,143	9,612	63,793
Net position at end of year	$ 1,362,662	1,302,548	1,292,936	60,114	9,612

^Restated due to the implementation of GASB Statement No. 87, *Leases*.

Wastewater Results of Operations, Fiscal Year 2022

The Wastewater Enterprise's total revenues were $387,249, an increase of $55,860 or 16.9% from prior year (see Table 2B). Charges for services increased by $37,805 or 11.9% mainly due to an average 8% adopted rate increase and a decrease in allowance for doubtful accounts by $1,098 as there were less sewer charge receivables aging over 120 days due to utility arrearage relief payments received from the State, offset by a sanitary flow decrease of 257,472 ccf or 1.2% from residential and non-residential customers. Other non-operating revenues increased by $20,543 mainly due to $9,302 utility arrearage relief payment received from the State as Federal pass-through from the CWWAPP, $8,000 SRF loan principal forgiveness component of the SEP Biosolids Digester Facilities Project and the OSP Digester Gas Handling Utilization Upgrade Project, $3,409 Baker Beach grant, and $4 gain from sale of assets offset by decreases of $164 in miscellaneous revenue due to less overhead recovery, redemption penalty and stormwater control plan review fees, and $8 in Federal interest subsidy. Other operating revenues increased by $3,349 or 38.1% mainly due to increases of $2,570 in capacity fees resulting from a 58.9% increase in average permit price and a 5.4% increase in permits issued attributed to new developments on Treasure Island and the City's re-opening and eliminating local restrictions on business operations, and $779 in other operating revenues to other City departments such as the Recreation & Park, Academy of Sciences, and the San Francisco General Hospital. Rents and concessions increased by $63 or 9.8% mainly due to increases in rental income of $34 from the Sheriff Department, $22 from tenants with 3.6% consumer price index average rate increase, and $7 from a short-term tenant, Young Community Developers. Interest and investment income decreased by $5,900 or 497.1% mainly due to $5,618 increase in unrealized loss in City Treasury pooled investments attributed to the decline in market value of investments and rising interest rates and $292 decrease in interest earned from pooled cash due to lower annualized interest rate offset by $10 increase in interest earned from fiscal agent account due to increase in fiscal agent cash balances.

Total expenses were $326,974, an increase of $7,945 or 2.5% due to increases of $42,799 in interest expenses mainly due to increased outstanding bond principal balance and the implementation of Governmental Accounting Standards Board (GASB) Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*, which eliminated the capitalization of interest to capital assets beginning in fiscal year 2022, a decrease of $75 in amortization, refunding loss, and issuance cost, and $73 increase in City grants program expenses due to increased participation in the flood water management program for San Francisco properties offset by $35,002 decrease in operating expenses. The decrease of $35,002 in operating expenses was mainly due to decreases of $26,993 in personnel services due to $38,115 decrease in expenses related to GASB 68 pension adjustment offset by a 3.5% increase in cost of living adjustment (COLA) and $17,952 in general and administrative and other operating expenses mainly due to lower capital project expenses particularly for the Biosolids/Digester Project and Southeast Community Center Project, offset by increases of $3,232 in depreciation expense due to more capitalized assets put in service, $2,753 in materials and supplies mainly due to water sewage treatment supplies for Bayside Operations, $2,626 in contractual services mainly due to higher maintenance for building structures and professional and specialized services, and $1,332 in services provided by other departments mainly for electricity from Hetch Hetchy Power, water from Water Enterprise, and for facilities management services from the General Services Agency (GSA).

Net transfers of $161 included transfer out of $129 in art enrichment fund to the San Francisco Art Commission for the Westside Reliability Improvement and $32 to the Office of the City Administrator for the Surety Bond Program.

Wastewater Results of Operations, Fiscal Year 2021

The Wastewater Enterprise's total revenues were $331,389 a decrease of $30,472 or 8.4% from prior year (see Table 2B). Charges for services decreased by $13,485 or 4.1% mainly due to a sanitary flow decrease of 2,474,116 ccf or 10.2% from residential and non-residential customers and $2,172 increase in allowance for doubtful accounts as there were more sewer charge receivables aging over 120 days attributable to the suspension of collection efforts in response to the COVID-19 emergency proclamation issued by the City Mayor offset by an average 8% adopted rate increase. Interest and investment income decreased by $13,324 or 109.8% due to lower pooled and fiscal agent cash balances, and a lower annualized interest rate. Other operating revenues decreased by $2,956 or 25.2% mainly due to decreases of $2,186 in capacity fees resulting from a 25.2% decrease in average permit price and a 7.9% decrease in permits issued as only essential construction projects were allowed due to SF Health Order related to COVID-19 and $770 in other operating revenues to other City departments such as the Real Estate, Human Services Agency, and Academy of Sciences due to the COVID-19 shelter in place order. Other non-operating revenues decreased by $685 mainly due to decreases of $667 in miscellaneous revenue largely attributed to $642 receipts from California State Parks Foundation for a project at Yosemite Slough Site in prior year, $20 in gain from sale of assets, and $22 in Federal Emergency Management Agency (FEMA) grant relating to COVID-19 offset by $27 increase in federal interest subsidy. Rents and concessions decreased by $22 or 3.3% mainly due to the COVID-19 past due rent collection suspension as approved by the Commission.

Total expenses were $318,994, an increase of $22,114 or 7.4% due to increases of $29,961 in operating expenses, $357 in City grants program expenses as there were more expenses incurred for community-based organization services, and $150 decrease in amortization, refunding loss, and issuance cost due to $230 decrease in bond premium offset by decreases of $40 in issuance cost, and $40 in refunding loss amortization offset by a decrease of $8,354 in interest expenses due to lower interest rate compared to prior year and a decrease in outstanding bond principal balance. The increase of $29,961 in operating expenses was mainly due to increases of $20,866 in general and administrative and other operating expenses mainly due to higher capital project expenses related to the SSIP Biosolids Digester Project, $9,051 in depreciation expense due to more capitalized assets put in service, $1,004 in services provided by other departments mainly for Department of Public Works general administration and building repair services, General Services Agency (GSA) facilities management services, and City risk management services, and $100 in materials and supplies mainly due to water sewage treatment supplies for Bayside Operations. These increases were offset by a decrease of $564 in personnel services mainly due $7,873 decrease in other post-employment benefits based on actuarial report offset by increases of $4,574 in expenses related to pension due to increase in retirement contribution rates, $2,051 in salaries and fringe benefits due to a 3% increase in cost of living adjustment (COLA), and $684 in workers' compensation claims. Other decrease included $496 in contractual services mainly due to lower professional and specialized services.

(Dollars in thousands, unless otherwise stated)

Net transfers of $2,748 included transfer out of $4,000 in art enrichment fund to the San Francisco Art Commission for the Southeast Plant Biosolids Digester Facilities, 1550 Southeast Community Center, and Treasure Island Capital Improvement Projects, $156 to Recreation and Park for Crocker Amazon Park, and $32 to the Office of the City Administrator for the Surety Bond Program, offset by $1,440 transfer in from General Fund for the Sidewalk Garden Grants Project.

The following table summarizes Hetchy Water's revenues, expenses, and changes in net position.

Table 2C – A
Proprietary Fund – Hetchy Water
Comparative Condensed Revenues, Expenses, and Changes in Net Position
Years ended June 30, 2022, 2021, and 2020

		2022	Restated 2021^	2020	2022 - 2021 Change	2021 - 2020 Change
Revenues:						
Charges for services	$	49,200	46,979	34,797	2,221	12,182
Rents and concessions		112	111	156	1	(45)
Interest and investment income/(loss)		(2,932)	(232)	1,932	(2,700)	(2,164)
Other non-operating revenues		479	1,352	3,861	(873)	(2,509)
Total revenues		46,859	48,210	40,746	(1,351)	7,464
Expenses:						
Operating expenses		52,303	50,519	44,873	1,784	5,646
Interest expenses		1	2	—	(1)	2
Non-operating expenses		37	63	11	(26)	52
Total expenses		52,341	50,584	44,884	1,757	5,700
Change in net position before transfers		(5,482)	(2,374)	(4,138)	(3,108)	1,764
Transfers from the City and County of San Francisco		30,001	16,000	14,000	14,001	2,000
Change in net position		24,519	13,626	9,862	10,893	3,764
Net position at beginning of year		224,661	211,035	201,173	13,626	9,862
Net position at end of year	$	249,180	224,661	211,035	24,519	13,626

^Restated due to the implementation of GASB Statement No. 87, *Leases*.

Hetchy Water Results of Operations, Fiscal Year 2022

Hetchy Water's total revenues were $46,859, a decrease of $1,351 or 2.8% from prior year's revenues (see Table 2C-A). Decrease was due to $2,700 in investment loss and a decrease of $873 from other non-operating revenues, offset by increases of $2,221 from charges for services and $1 from rents and concessions.

Charges for services were $49,200, an increase of $2,221 or 4.7% mainly due to increased water assessment fees from the Water Enterprise to fund upcountry water-related costs and higher consumption from Lawrence Livermore National Laboratory. Rents were $112, an increase of $1 or 0.9% mainly due to consumer price index adjustment. Interest and investment loss was $2,932 mainly due to unrealized losses as a result of the decline in market value of investments related to rising interest rates. Other non-operating revenues were $479, a decrease of $873 or 64.6% mainly due to $899 lower Federal and State grants revenue from the Rim Fire Projects, offset by increases of $19 in overhead charges and $7 in net gain from sale of fixed assets.

Total operating expenses, excluding interest expenses and other non-operating expenses, were $52,303, an increase of $1,784 or 3.5%. The increase was primarily due to increases of $4,275 in other operating expenses mainly due to higher capital spending, $612 in services provided by other departments mainly due to higher legal service charges from City Attorney's Office, $456 in contractual services mainly from increased engineering and management consulting services, $309 in general and administrative expenses mainly due to higher fees, licenses, and permit expenses, $277 in depreciation and amortization mainly related to additional building, structure and equipment placed in service, and $90 in material and supplies mainly from fuel and water treatment supplies. These increases were offset by a decrease of $4,235 in personnel services due to lower pension obligations based on actuarial reports.

Other non-operating expenses were $37, a decrease of $26 due to lower payments to community-based organization programs. Interest expenses were $1, a decrease of $1 due to implementation of GASB Statement No. 87, *Leases*. A transfer in of $30,001 was received from the Water Enterprise to fund various Mountain Tunnel projects.

As a result of the above activities, net position for the year ended June 30, 2022 increased by $24,519 or 10.9% compared to prior year.

Hetchy Water Results of Operations, Fiscal Year 2021

Hetchy Water's total revenues were $48,210, an increase of $7,464 or 18.3% from prior year's revenues (see Table 2C-A). Increase was due to $12,182 from charges for services, offset by decreases of $2,509 from other non-operating revenues, $2,164 in interest and investment income, and $45 from rents and concessions.

Charges for services were $46,979, an increase of $12,182 or 35.0% mainly due to increased water assessment fees from the Water Enterprise to fund upcountry water-related costs and higher consumption from Lawrence Livermore National Laboratory. Rents were $111, a decrease of $45 or 28.8% mainly from lower cottage rental revenue. Other non-operating revenues were $1,352, a decrease of $2,509 or 65.0% mainly due to decreases of $1,510 in Federal and State grants revenue resulting from lower collections from State grants related to 2018 Moccasin Storm, $995 from prior year Rim Fire recoveries, and $4 in net gain from sale of fixed assets. Interest and investment loss was $232 mainly due to unrealized loss attributed to decrease in market value in cash and investments with City Treasury and lower interest rates.

Total operating expenses, excluding other non-operating expenses, were $50,517, an increase of $5,644 or 12.6%. The increase was attributed to $3,567 in personnel services resulting from cost of living adjustments, higher retirement contribution rates, and increased personnel and fringe benefit costs. Other increases include $773 in contractual services mainly from increased engineering and management consulting services, $733 in depreciation and amortization related to additional building, structure and equipment placed in service, $664 in services provided by other departments mainly due to higher bureau support costs and legal service charges from City Attorney's Office, and $162 in other operating expenses mainly due to higher capital spending. These increases were offset by decreases of $190 in general and administrative expenses mainly due to lower judgements and claims expenses and $65 decrease in materials and supplies mainly for water and sewage treatment supplies.

Other non-operating expenses were $63, an increase of $52 due to payments to community-based organization programs. A transfer in of $16,000 was received from the Water Enterprise to fund upcountry projects.

As a result of the above activities, net position for the year ended June 30, 2021 increased by $13,630 or 6.5% compared to prior year.

(Dollars in thousands, unless otherwise stated)

The following table summarizes Hetchy Power's revenues, expenses, and changes in net position.

Table 2C – B
Proprietary Fund – Hetchy Power
Comparative Condensed Revenues, Expenses, and Changes in Net Position
Years ended June 30, 2022, 2021, and 2020

	2022	Restated 2021^	2020	2022 - 2021 Change	2021 - 2020 Change
Revenues:					
Charges for services	$ 173,105	136,247	140,680	36,858	(4,433)
Rents and concessions	137	136	191	1	(55)
Interest and investment income/(loss)	(4,001)	24	5,746	(4,025)	(5,722)
Other non-operating revenues	15,763	19,273	25,006	(3,510)	(5,733)
Total revenues	185,004	155,680	171,623	29,324	(15,943)
Expenses:					
Operating expenses	156,347	145,640	148,127	10,707	(2,487)
Interest expenses	5,624	1,972	2,740	3,652	(768)
Amortization of premium, discount, and issuance costs	192	(219)	(228)	411	9
Non-operating expenses	591	902	1,060	(311)	(158)
Total expenses	162,754	148,295	151,699	14,459	(3,404)
Change in net position before transfers	22,250	7,385	19,924	14,865	(12,539)
Transfers to the City and County of San Francisco	(532)	(532)	(32)	—	(500)
Change in net position	21,718	6,853	19,892	14,865	(13,039)
Net position at beginning of year	472,460	465,607	445,715	6,853	19,892
Net position at end of year	$ 494,178	472,460	465,607	21,718	6,853

^Restated due to the implementation of GASB Statement No. 87, *Leases*.

Hetchy Power Results of Operations, Fiscal Year 2022

Hetchy Power's total revenues were $185,004, an increase of $29,324 or 18.8% from prior year's revenues (see Table 2C-B). Increases included $36,858 from charges for services and $1 from rents and concessions, offset by decreases of $4,025 from interest and investment income and $3,510 from other non-operating revenues.

Charges for services were $173,105, an increase of $36,858 or 27.1%, due to $22,537 in billings from City departments such as San Francisco International Airport, Municipal Transportation Agency, and Port of San Francisco as a result of increased operation due to easing of COVID-19 restrictions and $14,980 in Congestion Revenue Right (CRR) credits from California Independent System Operator (CAISO), offset by a decrease of $659 in resale of capacity to CleanPowerSF. Rents increased slightly by $1 or 0.7% to $137 mainly due to consumer price index adjustment. Interest and investment loss was $4,001, a decrease of $4,025, mainly due to unrealized losses as a result of the decline in market value of investments related to rising interest rates.

Other non-operating revenues were $15,763, a decrease of $3,510 or 18.2%, mainly due to lower collections of $3,254 from the Power System Mitigation Project, $1,371 in Cap and Trade revenue due to decrease of 97,000 allowances or 80% sold, $1,194 in revenue from Alice Griffith Housing Project due to prior year recognition of commercial deposits, $797 in settlement revenue from prior year litigation settlement, and $335 in overhead charges, offset by an increase of $3,441 in State and Federal grants revenue from Rim Fire Project and California Utility Arrearages Relief Payment Program for unpaid bills.

Total operating expenses, excluding interest expenses, other non-operating expenses, and amortization of premium, discount, and issuance costs, increased by $10,707 or 7.4%, to $156,347. The increase was primarily due to increases of $15,559 in purchased electricity and transmission, distribution, and other power costs due to volatile and increased pricing in power market, $1,978 in depreciation and amortization mainly for buildings, facilities, machinery, and equipment related to higher capitalization of assets, $899 in contractual services mainly for management consulting and engineering services, $280 in materials and supplies mainly for electrical supplies and tools, and $116 in services provided by other departments mainly due to higher risk management costs. The increases were offset by decreases of $6,110 in personnel services due to lower pension obligations based on actuarial reports, $1,420 in general and administrative expenses mainly due to lower judgements and claims expenses, and $595 decrease in other operating expenses mainly due to higher capitalized project expenses.

Interest expenses increased by $3,652 or 185.2% mainly due to no bond interest capitalization recognized in current year resulting from the implementation of GASB Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period*. Amortization of premium and discount increased by $411 or 187.7% mainly due to costs of issuance for 2021 Series AB revenue bond.

Other non-operating expenses were $591, a decrease of $311 or 34.5% mainly due to lower payments for GoSolarSF Incentive Program. Transfer out of $532 includes $500 to General Fund for repayment of Educational Revenue Augmentation Funds and $32 to the Office of the City's Administrator for the Surety Bond Program.

As a result of the above activities, net position for the year ended June 30, 2022 increased by $21,718 or 4.6% compared to prior year.

Hetchy Power Results of Operations, Fiscal Year 2021

Hetchy Power's total revenues were $155,680, a decrease of $15,943 or 9.3% from prior year's revenues (see Table 2C-B). Decreases included $5,733 from other non-operating revenues, $5,722 from interest and investment income, $4,433 from charges for services, and $55 from rents and concessions.

Charges for services were $136,247, a decrease of $4,433 or 3.2% was attributed to a decrease of $8,362 in sales to City departments, wholesale, and Treasure Island customers due to COVID-19 related impacts and $667 increase in allowance for doubtful accounts. Receivables aging over 120 days increased significantly due to the suspension of collection efforts and moratorium on utility shutoffs in response to the COVID-19 emergency proclamation issued by the Mayor. The decrease was offset by increases of $2,537 in sales to retail customers mainly due to new affordable redevelopment housing accounts and $2,059 in resale of capacity to CleanPowerSF due to excess capacity of electric system reliability compliance product. Rents were $136, a decrease of $55 or 28.8% mainly due to lower cottage rental revenue. Interest and investment income were $24, a decrease of $5,722 or 99.6% mainly due to decreases of $4,691 in interest earned from lower interest rates and cash balance, unrealized loss, and $1,031 from interest accrued for Treasure Island submarine power cable in prior year.

Other non-operating revenues were $19,273, a decrease of $5,733 or 22.9%, mainly due to decreases of $5,739 from Low Carbon Fuel Standard (LCFS) credit sales revenue attributed to less carbon fuel credit generated by San Francisco Municipal Transportation Agency, $2,574 in license fee from Transbay Cable Project due to final payment received in prior year, $1,139 in Cap and Trade revenue due to decrease of 23,000 or 16% allowance sold, and $654 decrease in fees collected from DAS program. Other decreases include $402 in State and Federal grants revenue resulting from lower collections from State grants related to 2018 Moccasin Storm and Federal grants related to Hazard Mitigation grant, $70 in Federal interest subsidy due to lower debt outstanding, $37 in damage claims revenue, and $5 in net gain from sale of fixed assets. These decreases were offset by increases of $2,921 in collection for Power System Impact Mitigation Project, $797 in settlement revenue related to litigation, $736 in commercial deposits from Alice Griffith Housing Project recognized as revenue, $259 in overhead charges, and $174 in miscellaneous revenue mainly from generation interconnection study and refunds from vendor.

Total operating expenses, excluding interest expenses, other non-operating expenses, and amortization of premium, discount, and issuance costs, decreased by $2,489 or 1.7%, to $145,638. The decrease was primarily due to $6,138 in purchased electricity and transmission, distribution, and other power costs due to lower electricity sales, $289 in services provided by other departments mainly due to lower bureau support costs, $270 in material and supplies due to lower equipment maintenance, and $96 decrease in depreciation and amortization for machinery and equipment. The decreases were offset by increases of $1,704 in general and administrative expenses mainly due to higher litigation expenses, $1,572 in other operating expenses mainly due to higher capital spending, $984 in contractual services mainly from new in-city inventory warehouse rental at Pier 23 in San Francisco, and $44 in personnel services resulting from cost of living adjustments, higher retirement contribution rates, higher pension obligations based on actuarial reports, and increased personnel and fringe benefit costs.

(Dollars in thousands, unless otherwise stated)

Interest expenses were $1,970, a decrease of $770 or 28.1% due to decrease in outstanding debt and lower interest rates for commercial paper. Amortization of premium and discount slightly decreased by $9 or 3.9% to $219.

Other non-operating expenses were $902, a decrease of $158 or 14.9% mainly due to decrease in payments for GoSolarSF Incentive Program. Transfer out of $532 includes $500 to General Fund for repayment of Educational Revenue Augmentation Funds and $32 to the Office of the City's Administrator for the Surety Bond Program.

As a result of the above activities, net position for the year ended June 30, 2021 increased by $6,857 or 1.5% compared to prior year.

The following table summarizes CleanPowerSF's revenues, expenses, and changes in net position.

Table 2C – C
Proprietary Fund – CleanPowerSF
Comparative Condensed Revenues, Expenses, and Changes in Net Position
Years ended June 30, 2022, 2021, and 2020

	2022	Restated 2021^	2020	2022 - 2021 Change	2021 - 2020 Change
Revenues:					
Charges for services	$ 257,893	207,698	245,460	50,195	(37,762)
Interest and investment income/(loss)	(1,286)	51	1,771	(1,337)	(1,720)
Other non-operating revenues	2,759	927	1	1,832	926
Total revenues	259,366	208,676	247,232	50,690	(38,556)
Expenses:					
Operating expenses	262,118	212,711	196,026	49,407	16,685
Interest expenses	5	26	69	(21)	(43)
Total expenses	262,123	212,737	196,095	49,386	16,642
Change in net position	(2,757)	(4,061)	51,137	1,304	(55,198)
Net position at beginning of year	87,077	91,138	40,001	(4,061)	51,137
Net position at end of year	$ 84,320	87,077	91,138	(2,757)	(4,061)

^Restated due to the implementation of GASB Statement No. 87, *Leases*.

CleanPowerSF Results of Operations, Fiscal Year 2022

CleanPowerSF's total revenues were $259,366, a $50,690 or 24.3% increase over prior year (see Table 2C-C). Charges for services increased by $50,195 or 24.2% mainly due to increases of $44,215 in electricity sales to retail and commercial customers resulting from a 16% average rate increase, $2,831 reduction in allowance for doubtful accounts attributed to assistance received from California Utility Arrearages Relief Payment Program (CAPP) for eligible customer account arrearages, $2,817 in one-time customer assistance bill credit related to COVID-19 in prior year, and $332 from higher capacity sales to Hetchy Power. Other non-operating revenue increased by $1,832 mainly due to $2,424 Federal grants received from CAPP, offset by a decrease of $592 liquidated damage compensation received from supplier for delay of the Renewable Energy Project in prior year. Interest and investment loss was $1,286 as a result of the decline in market value of investments related to rising interest rates.

Total operating expenses, excluding interest expenses were $262,118, an increase of $49,407 or 23.2% from prior year. The increase was due to $48,749 in purchased electricity and transmission, distribution, and other power costs due to volatile and increased pricing in power market, and higher resource adequacy capacity purchases related to compliance requirements from the California Public Utilities Commission. Other operating expenses increased by $2,895 due to $2,424 grant expense recognized for CAPP when applied to customer account arrearages and $471 in operating expenses mainly for the Neighborhood Steward Program and the new Local Renewable Energy. Other increases included $1,394 in general and administrative expenses mainly due to higher judgements and claims expenses, $143 in professional and contractual services mainly from higher software licensing fee, and $7 in material and supplies mainly for data processing equipment. These increases were offset by decreases of $3,474 in personnel services due to lower pension obligations based on actuarial reports, $307 in services provided by other departments mainly due to lower labor support from Hetchy Power. Interest expenses decreased by $21 mainly due to repayment of working capital loan to Hetchy Power completed in prior year.

As a result of the above activities, net position for the year ended June 30, 2022 decreased by $2,757 or 3.2% compared to prior year.

CleanPowerSF Results of Operations, Fiscal Year 2021

CleanPowerSF's total revenues were $208,676, a $38,556 or 15.6% decrease over prior year (see Table 2C-C). Charges for services decreased by $37,762 or 15.4% mainly due to a decrease of $32,077 in electricity sales to retail and commercial customers resulting from consumption decrease of 92,503 MWh or 3%, a one-time customer assistance bill credit of $2,817 related to COVID-19 utility bill relief, an increase of $2,451 in allowance for doubtful accounts, and $417 lower capacity sales to other entities. Receivables aging over 120 days increased significantly due to the suspension of collection efforts and moratorium on utility shutoffs in response to the COVID-19 emergency proclamation issued by the Mayor. Interest and investment income decreased by $1,720 or 97.1% due to unrealized loss and lower interest rates on pooled cash and investments. Other non-operating revenue increased by $926 due to liquidated damage compensation from vendor for the delay of Renewable Energy Project.

Total operating expenses, excluding interest expenses, were $212,716, an increase of $16,690 or 8.5% from prior year. The increase was due to $16,219 in purchased electricity and transmission, distribution, and other power costs as a result of higher prices in the CAISO market and increase in resource adequacy capacity purchases related to new compliance requirements from the California Public Utilities Commission. Other increases include $1,200 in services provided by other departments due to increased labor support from Hetchy Power and legal service charges from City Attorney's Office, and $305 increase in other operating expenses mainly from the Neighborhood Steward Program and the new Local Renewable Energy Program. These increases were offset by decreases of $529 in professional and contractual services mainly from lower management consulting services, $279 in personnel services mainly due to lower pension obligations and OPEB based on actuarial reports, $195 in general and administrative expenses mainly due to lower judgements and claims based on actuarial estimates, and $31 in material and supplies due to reduced furnishings expenses. Interest expenses were $18, a decrease of $51 or 73.9% due to lower principal outstanding from Hetchy Power working capital loan.

As a result of the above activities, net position for the year ended June 30, 2021 decreased by $4,058 or 4.5% compared to prior year.

(Dollars in thousands, unless otherwise stated)

Capital Assets

Department-wide Business Type Activities

The following table summarizes the department-wide changes in capital assets. Detailed discussion follows for each proprietary fund.

Business Type Activities
Capital Assets, Net of Accumulated Depreciation and Amortization
As of June 30, 2022, 2021, and 2020

	2022	2021	2020	2022 - 2021 Change	2021 - 2020 Change
Facilities, improvements, machinery, and equipment	$ 7,767,562	7,595,329	7,419,330	172,233	175,999
Intangible assets	34,731	35,102	32,528	(371)	2,574
Land and rights-of-way	163,194	154,001	155,089	9,193	(1,088)
Construction work in progress	2,485,201	2,079,754	1,592,097	405,447	487,657
Total	$ 10,450,688	9,864,186	9,199,044	586,502	665,142

The following table summarizes Water's changes in capital assets.

Table 3A
Proprietary Fund – Water
Capital Assets, Net of Accumulated Depreciation and Amortization
As of June 30, 2022, 2021, and 2020

	2022	2021	2020	2022 - 2021 Change	2021 - 2020 Change
Facilities, improvements, machinery, and equipment	$ 5,056,747	4,948,186	4,928,438	108,561	19,748
Intangible assets	3,152	2,763	4,089	389	(1,326)
Land and rights-of-way	113,441	104,248	105,336	9,193	(1,088)
Construction work in progress	444,254	532,602	492,682	(88,348)	39,920
Total	$ 5,617,594	5,587,799	5,530,545	29,795	57,254

Water Capital Assets, Fiscal Year 2022

The Water Enterprise has net capital assets of $5,617,594 invested in a broad range of utility capital assets as of June 30, 2022 (see Table 3A). 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 Water Enterprise's net revenue and long term debt are used to finance capital investments. Capital assets, net of accumulated depreciation and amortization, increased by $29,795 from the prior year. Facilities, improvements, machinery, and equipment increased by $108,561 mainly due to Water Main Replacement and Treasure Island Well projects. Land increased by $9,193 mainly from the acquisition of Oak Ridge Ranch Estates and Arroyo Hondo Estates. Construction work in progress decreased by $88,348 mainly due to Water Main Replacement and Treasure Island Well projects placed into service. Intangible assets increased by $389 mainly due to Java to Groovy Conversion software and Cross-Connection Assembly asset additions.

Major additions to construction work in progress during the year ended June 30, 2022 include the following:

SF Recycled Water Project	$ 18,684
Sunol Long Term Improvements	17,655
New Water Utility Services	8,843
Watershed Right of Way Land Acquisition	7,731
Upper Alameda Creek Filter Gallery	6,347
Regional Groundwater Storage & Recovery	5,769
Water Main Replacement - WD-2739 Castro/19th/26th Streets	5,504
Auxiliary Water Supply System - Pump Station Number 2	5,116
Other project additions individually below $5,000	99,542
Total	$ 175,191

(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, 2022 include the following:

Water Main Replacement - WD-2739 Castro/19th/26th Streets	$	15,666
Treasure Island Well - Civil/Electrical/I&C/Mechanical/Pipeline/Plumbing		11,656
Serramonte Well - Architectural/Structural/Well		10,977
Lake Merced Well - Civil/Electrical/I&C/Mechanical/Pipeline/Plumbing		8,851
New Water Utility Service Facilities		8,843
Colma BART Well - Architectural/Structural/Well		8,739
Serramonte Well - Civil/Electrical/I&C/Mechanical/Pipeline/Plumbing		8,351
Colma BART Well - Civil/Electrical/I&C/Mechanical/Pipeline/Plumbing		7,826
Treasure Island Well - Architectural/Structural/Well		7,646
Hickey Well - Architectural/Structural/Well		7,137
Auxiliary Water Supply System - Pipelines on 19th Ave		6,990
Linear Park Well - Architectural/Structural/Well		6,576
Water Main Replacement - WD-2616 Baker/Sutter Streets		6,567
Hickey Well - Civil/Electrical/I&C/Mechanical/Pipeline/Plumbing		6,465
Funeral Home Well - Civil/Electrical/I&C/Mechanical/Pipeline/Plumbing		6,447
Millbrae Yard Well - Civil/Electrical/I&C/Mechanical/Pipeline/Plumbing		6,086
Linear Park Well - Civil/Electrical/I&C/Mechanical/Pipeline/Plumbing		5,736
Water Main Replacement - WD-2842 Casitas/Lansdale Ave		5,423
Lake Merced Well - Architectural/Structural/Well		5,266
Other items individually below $5,000		113,430
Total	$	264,678

See Note 4 for additional information about capital assets.

Water System Improvement Program (WSIP)

The WSIP delivers capital improvements that enhance the Water 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, 2022. 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, 2022, 35 local projects were completed. For regional projects, 47 projects are completed, the Alameda Creek Recapture, Regional Groundwater Storage and Recovery Phase 2A, Regional Groundwater Storage and Recovery Phase 2B projects are under construction, the Bioregional Habitat Restoration project is in close-out, and Long-Term Mitigation Endowment project is not applicable as it does not include construction. The expected completion date is February 2027. Additional details regarding the WSIP are available https://sfpuc.org/construction-contracts/water-infrastructure-improvements.

Water Capital Assets, Fiscal Year 2021

The Water Enterprise has net capital assets of $5,587,799 invested in a broad range of utility capital assets as of June 30, 2021 (see Table 3A). 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 Water Enterprise's net revenue and long term debt are used to finance capital investments. Capital assets, net of accumulated depreciation and amortization, increased by $57,524 from the prior year. Construction work in progress increased by $39,920 primarily due to additions from the SF Recycled Water project, Sunol Long Term Improvements and Regional Groundwater Storage and Recovery projects. Facilities, improvements, machinery, and equipment increased by $19,748 mainly attributable to the San Andreas Pipeline Number 2 and Water Main Replacement projects. Intangible assets decreased by $1,326 due to $1,601 in amortization, offset by $143 addition for information technology and $132 addition for automated meter reading system. Land decreased by $1,088 as the result of sale of the Wool Ranch property in the Alameda Creek Watershed and reimbursement of land costs for 2000 Marin Street, San Francisco, CA.

(Dollars in thousands, unless otherwise stated)

Major additions to construction work in progress during the year ended June 30, 2021 include the following:

SF Recycled Water Project	$	41,231
Sunol Long Term Improvements		15,516
Regional Groundwater Storage & Recovery		12,298
New Water Utility Services		7,992
San Andreas Pipeline Number 2 Replacement		7,961
Water Main Replacement - WD-2739 Castro/19th/26th Streets		7,953
Calaveras Dam Replacement		7,915
Water Main Replacement - WD-2766 Taraval Street		5,172
Auxiliary Water Supply System - Pump Station Number 2		5,135
Other project additions individually below $5,000		86,496
Total	$	197,669

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, 2021 include the following:

San Andreas Pipeline Number 2 Replacement - 4 Segments in San Bruno	$	43,340
Water Main Replacement - WD-2692 Geary Blvd/36th/48th/Point Lobos Ave		9,329
Water Main Replacement - WD-2719 22nd/Valencia St./Potrero Ave		8,004
New Water Utility Services		7,992
Alameda Creek Watershed Fish Passage Facilities		7,465
Water Main Replacement - WD-2766 Taraval Street		7,328
Water Main Replacement - WD-2793 Geary Blvd/Cleary Ct./Market St.		6,655
Other items individually below $5,000		72,342
Total	$	162,455

See Note 4 for additional information about capital assets.

Water System Improvement Program (WSIP)

The WSIP delivers capital improvements that enhance the Water 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, 2021. 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, 2021, 35 local projects were completed, and the completion date was June 3, 2020. For regional projects, 44 are completed and the expected completion date is May 2023. Additional details regarding the WSIP are available at https://sfpuc.org/construction-contracts/water-infrastructure-improvements.

(Dollars in thousands, unless otherwise stated)

The following table summarizes Wastewater's changes in capital assets.

Table 3B
Proprietary Fund – Wastewater
Capital Assets, Net of Accumulated Depreciation and Amortization
As of June 30, 2022, 2021, and 2020

	2022	2021	2020	2022 - 2021 Change	2021 - 2020 Change
Facilities, improvements, machinery, and equipment	$ 2,270,355	2,214,227	2,104,332	56,128	109,895
Intangible assets	7,107	7,407	3,046	(300)	4,361
Land and rights-of-way	44,572	44,572	44,572	—	—
Construction work in progress	1,724,417	1,340,644	910,338	383,773	430,306
Total	$ 4,046,451	3,606,850	3,062,288	439,601	544,562

Wastewater Capital Assets, Fiscal Year 2022

The Wastewater Enterprise has capital assets of $4,046,451, net of accumulated depreciation and amortization, invested in a broad range of utility capital assets as of June 30, 2022 (see Table 3B). This amount represents an increase of $439,601 or 12.2% from prior fiscal year. The investment in capital assets includes land, buildings, improvements, wastewater treatment plants, sewer pipes and mains, underground transport and storage boxes, pump stations, machinery, and equipment. Construction work in progress increased by $383,773 or 28.6%. Facilities, improvements, machinery, and equipment increased by $56,128 or 2.5%. Intangible assets decreased by $300 or 4.1% due to $872 depreciation expense and $780 transfers out to non-capitalized repair and other expenses, offset by asset additions of $1,352 for the Customer Billing System.

Major additions to construction work in progress during the year ended June 30, 2022 include the following:

Southeast Plant Biosolids and Digester Facilities Project	$ 133,997
Southeast Plant New Headworks Grit Replacement	131,458
Southeast Community Center	30,582
Southeast Plant Power Feed and Primary Switchgear Upgrades	26,911
Wawona Area Stormwater Improvement Project	15,644
Westside Pump Station Reliability Improvements	13,895
North Shore Pump Station Wet Weather Improvements	13,366
Large Sewer Condition Improvements	11,656
As-Needed Spot Sewer Replacement Number 41 (WW-698)	9,514
Public Works 19th Avenue Infrastructure Improvements	8,782
Oceanside Plant Digester Gas Handling Utilization Upgrade	8,175
As-Needed Spot Sewer Replacement Number 40 (WW-693)	5,007
Various Locations Sewer Replacement Number 8 (WW-679)	4,927
Folsom Area Stormwater Improvement Project	4,728
Public Works 41st and 44th Avenues Infrastructure Improvements	4,676
Mariposa Dry-Weather Pump Station & Force Main Improvements	4,527
Taraval Sewer Improvements	4,401
Ocean Beach Climate Change Adaptation Project	4,301
Southeast Plant Facility-Wide Distributed Control System Upgrades	4,275
Other project additions individually below $4,000	73,857
Total	$ 514,679

(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, 2022 include the following:

Southeast Plant Seismic Reliability and Condition Assessment Improvements	$ 23,679
Force Main Rehabilitation at Embarcadero and Jackson Streets	11,480
As-Needed Spot Sewer Replacement Number 41 (WW-698)	9,571
Combined Sewer Discharge Backflow Prevention and Monitoring	9,029
Cargo Way Sewer Box Odor Reduction	8,615
Mission Street, 16th to Cesar Chavez Streets, Brick Sewer Rehabilitation	7,783
Public Works Various Locations Number 40 Infrastructure Improvements	6,575
Various Locations Sewer Replacement Number 8 (WW-679)	5,553
Various Locations Sewer Replacement Number 6 (WW-677)	5,347
As-Needed Spot Sewer Replacement Number 40 (WW-693)	5,006
Taraval Sewer Improvements	4,401
Public Works Sunset Parkside Pavement Renovations	4,360
Oceanside Plant Egg Shaped Digester Interior Lining Rehabilitation (WW-706)	3,499
Other project additions individually below $3,000	26,181
Total	$ 131,079

See Note 4 for additional information about capital assets.

Sewer System Improvement Program (SSIP)

The Sewer System Improvement Program (SSIP) is the Wastewater Enterprise's capital improvement program which includes multiple projects to improve the existing wastewater system. The implementation of the SSIP projects and their associated expenditures will be phased over 20 years. In March 2016, the refined program scope and budget increased from $6.9 billion to $7.0 billion was endorsed by the Commission, referred to as the "2016 SSIP Baseline". In December 2020, the Commission approved the 2020 SSIP Baseline, increasing the budget for SSIP Phase 1 program to $3,655 million from $2,910.4 million in 2016. The SFPUC is transitioning away from the original intent of three distinct SSIP phases and instead implementing capital improvement projects as part of a rolling Ten-Year capital plan.

As of June 30, 2022, 38 projects or 54.3% totaling $373 million were completed, 7 projects in pre-construction phase, 12 projects in construction phase, and 13 projects in close-out phase. The SEP 521/522 and Disinfection Upgrades Project was completed on June 30, 2021 with reported project expenditures of $44.8 million. The major components of the project are modifications to the existing SEP 521 building to include a new Effluent Sampling Station, new DCS Control Station, and upgrade to the existing bathroom for ADA compliance, new building (SEP 522) to house electrical and hydraulic controls, among others. The Southeast Water Pollution Control Plant New Headworks Facility is on-going construction. The project is reported at 47.0% completion and forecasted final completion is on February 29, 2024. Program expenditures as of June 30, 2022 totaled $1,943.8 million. Additional details regarding the SSIP are available at https://sfpuc.org/construction-contracts/sewer-system-improvement-program.

Wastewater Capital Assets, Fiscal Year 2021

The Wastewater Enterprise has capital assets of $3,606,850, net of accumulated depreciation and amortization, invested in a broad range of utility capital assets as of June 30, 2021 (see Table 3B). This amount represents an increase of $544,562 or 17.8% from prior fiscal year. The investment in capital assets includes land, buildings, improvements, wastewater treatment plants, sewer pipes and mains, underground transport and storage boxes, pump stations, machinery, and equipment. Construction work in progress increased by $430,306 or 47.3%. Facilities, improvements, machinery, and equipment increased by $109,895 or 5.2%, and intangible assets increased by $4,361 or 143.2% due to asset additions of $2,457 for the Operational Decision System Project and $1,904 for the Customer Billing System Project.

(Dollars in thousands, unless otherwise stated)

Major additions to construction work in progress during the year ended June 30, 2021 include the following:

Southeast Plant Biosolids and Digester Facilities Project	$ 259,938
Southeast Plant New Headworks Grit Removal and Influent Pump Station	110,472
Southeast Community Center	47,373
Southeast Plant Power Feed and Primary Switchgear Upgrades	18,881
Mariposa Pump Station & Force Main	11,031
Oceanside Plant Digester Gas Handling Utilization	8,856
Seismic Reliability - Phase 1	7,647
Public Works Various Locations Number 35 Infrastructure Improvements	7,134
As-Needed Spot Sewer Replacement Number 40	7,101
Ocean Beach Project	6,727
Force Main Rehabilitation at Embarcadero and Jackson Streets	6,615
Facility-Wide Distributed Control System Upgrade	5,998
Van Ness Bus Rapid Transit Sewer Improvements	5,482
As-Needed Spot Sewer Replacement No. 38	4,972
Public Works Various Locations Number 40 Infrastructure Improvements	4,918
Southeast Plant 062 Archimedes Screw Pump	4,697
Taraval Sewer Improvements	4,070
As-Needed Main Sewer Replacement Number 7	4,043
Other project additions individually below $4,000	93,864
Total	$ 619,819

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, 2021 include the following:

Van Ness Bus Rapid Transit Sewer Improvements	$ 20,665
Richmond Early Implementation Project	13,620
Geary Bus Rapid Transit Sewer Improvements	12,287
Public Works Lombard Street Infrastructure Improvements	11,794
Southeast Plant 062 Archimedes Screw Pump	10,421
Taraval Sewer Improvements	10,397
Sunset Green Infrastructure	9,932
Public Works Various Locations Number 35 Infrastructure Improvements	8,722
As Needed Spot Sewer Replacement Number 40	7,112
Public Works Various Locations Number 39 Infrastructure Improvements	6,493
Public Works Various Locations Number 36 Infrastructure Improvements	6,056
Public Works Various Locations Number 43 Infrastructure Improvements	6,023
As Needed Spot Sewer Replacement Number 38	4,972
Public Works Alemany Blvd Infrastructure Improvements	4,956
Beach and Sansome Street Combined Sewer Distribution Rehabilitation	4,708
Public Works Second Street Infrastructure Improvements	4,560
As Needed Main Sewer Replacement Number 7	4,043
North Point Facility Dewatering Pump Replacement	3,725
Public Works Palou Avenue Infrastructure Improvements	3,514
Various Locations Sewer Replacement Number 7	3,429
Oceanside Plant Door Replacement	3,082
Other project additions individually below $3,000	25,763
Total	$ 186,274

See Note 4 for additional information about capital assets.

(Dollars in thousands, unless otherwise stated)

Sewer System Improvement Program

The Sewer System Improvement Program (SSIP) includes three phases over 20 years to improve the existing wastewater system. In March 2016, the refined program scope and budget increased from $6.9 billion to $7.0 billion was endorsed by the Commission, which is now referred to as the 2016 SSIP Baseline program.

As of June 30, 2021, 37 projects or 52.9% totaling $367 million were completed, 8 projects in pre-construction phase, 18 projects in construction phase, and 7 projects in close-out phase. The OSP Condition Assessment Repairs was completed on January 29, 2021 with reported project expenditures of $11.6 million. The project includes planning, design, and environmental review of major improvements to the plant including rehabilitation of building structures, rehabilitation or replacement of mechanical and electrical equipment, and seismic retrofit of process tanks and buildings. Improvements focus on maintaining operational reliability and extending the service life of buildings that are required to remain in operation for 30 years or more. The SEP Seismic Reliability and Condition Assessment Improvements Project is on-going construction. The project is reported at 86.0% completion and forecasted final completion is on March 8, 2022. Program expenditures as of June 30, 2021 totaled $1,546.1 million. Additional details regarding the SSIP are available at https://sfpuc.org/construction-contracts/sewer-system-improvement-program.

The following table summarizes Hetchy Water's changes in capital assets.

Table 3C – A
Proprietary Fund – Hetchy Water
Capital Assets, Net of Accumulated Depreciation and Amortization
As of June 30, 2022, 2021, and 2020

		2022	2021	2020	2022 - 2021 Change	2021 - 2020 Change
Facilities, improvements, machinery, and equipment	$	133,263	128,335	122,433	4,928	5,902
Intangible assets		10,374	10,581	10,789	(207)	(208)
Land and rights-of-way		3,232	3,232	3,232	—	—
Construction work in progress		54,138	35,333	24,328	18,805	11,005
Total	$	201,007	177,481	160,782	23,526	16,699

Hetchy Water Capital Assets, Fiscal Year 2022

Hetchy Water has capital assets of $201,007, net of accumulated depreciation and amortization, invested in a broad range of utility capital assets as of June 30, 2022 (see Table 3C-A). This amount represents an increase of $23,526 or 13.3%, primarily due to increases of $18,805 in construction work in progress and $4,928 in facilities, improvements, machinery, and equipment, offset by a decrease of $207 in amortization of intangible assets.

For the year ended June 30, 2022, Hetchy Water's major additions to construction work in progress totaled $29,654. Major depreciable facilities, improvements, intangible assets, machinery, and equipment placed in service totaled $11,013 (see Table 3D).

See Note 4 for additional information about capital assets.

Hetchy Water Capital Assets, Fiscal Year 2021

Hetchy Water has capital assets of $177,481, net of accumulated depreciation and amortization, invested in a broad range of utility capital assets as of June 30, 2021 (see Table 3C-A). This amount represents an increase of $16,699 or 10.4%, primarily due to increases of $11,005 in construction work in progress and $5,902 in facilities, improvements, machinery, and equipment, offset by a decrease of $208 in amortization of intangible assets.

For the year ended June 30, 2021, Hetchy Water's major additions to construction work in progress totaled $22,586. Major depreciable facilities, improvements, intangible assets, machinery, and equipment placed in service totaled $11,703 (see Table 3E).

See Note 4 for additional information about capital assets.

(Dollars in thousands, unless otherwise stated)

The following table summarizes Hetchy Power's changes in capital assets.

Table 3C – B
Proprietary Fund – Hetchy Power
Capital Assets, Net of Accumulated Depreciation and Amortization
As of June 30, 2022, 2021, and 2020

	2022	2021	2020	2022 - 2021 Change	2021 - 2020 Change
Facilities, improvements, machinery, and equipment	$ 307,197	304,581	264,127	2,616	40,454
Intangible assets	14,098	14,351	14,604	(253)	(253)
Land and rights-of-way	1,949	1,949	1,949	—	—
Construction work in progress	262,392	171,175	164,749	91,217	6,426
Total	$ 585,636	492,056	445,429	93,580	46,627

Hetchy Power Capital Assets, Fiscal Year 2022

Hetchy Power has capital assets of $585,636, net of accumulated depreciation and amortization, invested in utility capital assets as of June 30, 2022 (see Table 3C-B). This amount represents an increase of $93,580 or 19.0%, primarily due to increases of $91,217 in construction work in progress and $2,616 in facilities, improvements, machinery, and equipment, offset by a decrease of $253 in amortization of intangible assets.

For the year ended June 30, 2022, Hetchy Power's major additions to construction work in progress totaled $110,859. Major depreciable facilities, improvements, intangible assets, machinery, and equipment placed in service totaled $19,974 (see Table 3D).

See Note 4 for additional information about capital assets.

Hetchy Power Capital Assets, Fiscal Year 2021

Hetchy Power has capital assets of $492,056, net of accumulated depreciation and amortization, invested in utility capital assets as of June 30, 2021 (see Table 3C-B). This amount represents an increase of $46,627 or 10.5%, primarily due to increases of $40,454 in facilities, improvements, machinery, and equipment and $6,426 in construction work in progress, offset by a decrease of $253 in amortization of intangible assets.

For the year ended June 30, 2021, Hetchy Power's major additions to construction work in progress totaled $70,059. Major depreciable facilities, improvements, intangible assets, machinery, and equipment placed in service totaled $55,828 (see Table 3E).

See Note 4 for additional information about capital assets.

CleanPowerSF Capital Assets

CleanPowerSF had no capital assets as of June 30, 2022 and 2021.

See Note 4 for additional information about capital assets.

(Dollars in thousands, unless otherwise stated)

Major additions to construction work in progress, depreciable facilities, improvements, intangible assets, machinery, and equipment placed in service, including transfers of completed projects from construction work in progress, during the years ended June 30, 2022 and 2021 include the following:

Table 3D
Proprietary Funds – Hetchy Water and Hetchy Power
Major Additions to Construction Work in Progress and Facilities, Improvements, Intangible Assets, Machinery, and Equipment Placed in Service
Year ended June 30, 2022

	Hetchy Water	Hetchy Power	2022 Total
Bay Corridor Project	$ —	46,608	46,608
Mountain Tunnel Improvement Project	16,638	20,335	36,973
Moccasin Powerhouse Rewind	—	12,368	12,368
O'Shaughnessy Dam Access & Drainage Improvements and Outlet Works	1,733	2,118	3,851
San Joaquin Pipeline Valve & Safe Entry Improvement	2,952	—	2,952
Repair and Replacement Life Extension Program	2,776	—	2,776
Intervening Facilities	—	2,758	2,758
Pier 70	—	2,739	2,739
Van Ness - Bus Rapid Transit	—	2,423	2,423
Transmission Line Clearance Mitigation	—	1,711	1,711
Other project additions individually below $1,500	5,555	19,799	25,354
Additions to Construction Work in Progress	$ 29,654	110,859	140,513
San Joaquin Pipeline Tesla Valves and Installation	$ 4,410	—	4,410
O'Shaughnessy Dam Access & Drainage Improvements - Stairs and Fall Protection	1,931	2,360	4,291
Pier 70	—	1,720	1,720
Transmission Line Clearance Mitigation	—	1,508	1,508
Other project additions individually below $1,500	4,672	14,386	19,058
Facilities, Improvements, Intangible Assets, Machinery, and Equipment Placed in Service	$ 11,013	19,974	30,987

(Dollars in thousands, unless otherwise stated)

Table 3E
Proprietary Funds – Hetchy Water and Hetchy Power
Major Additions to Construction Work in Progress and Facilities, Improvements, Intangible Assets, Machinery, and Equipment Placed in Service
Year ended June 30, 2021

	Hetchy Water	Hetchy Power	2021 Total
Bay Corridor Project	$ —	31,556	31,556
Mountain Tunnel Improvement Project	7,744	9,465	17,209
Transmission Line Clearance Mitigation & Upgrade	—	6,176	6,176
Repair & Replacement Life Extension Program	5,188	—	5,188
Moccasin Penstock Rehabilitation and Powerhouse Rewind	—	4,374	4,374
Van Ness - Bus Rapid Transit	—	2,742	2,742
Moccasin Reservoir Security Fence	2,723	—	2,723
San Joaquin Pipeline Valve & Safe Entry Improvement	2,115	—	2,115
Treasure Island Capital Improvements	—	2,025	2,025
Other project additions individually below $2,000	4,816	13,721	18,537
Additions to Construction Work in Progress	$ 22,586	70,059	92,645
Holm Powerhouse Rehabilitation & Kirkwood Powerhouse Oil Containment Upgrades	$ —	21,920	21,920
Electrical Underground Duct Bank 23rd & Illinois South Street	—	18,133	18,133
Moccasin Reservoir Security Fence	3,549	—	3,549
Switch Yard Asset	—	3,533	3,533
San Joaquin Pipeline Rehabilitation	3,243	—	3,243
San Francisco Academy Solar Carport	—	2,657	2,657
Other project additions individually below $2,000	4,911	9,585	14,496
Facilities, Improvements, Intangible Assets, Machinery, and Equipment Placed in Service	$ 11,703	55,828	67,531

Debt Administration

Department-wide Business Type Activities

The following table summarizes the department-wide outstanding debt, net of unamortized costs, discount, and premium. Detailed discussion follows for each proprietary fund.

Table 4
Business Type Activities
Outstanding Debt, Net of Unamortized Costs
As of June 30, 2022, 2021, and 2020

	2022	2021	2020	2022 - 2021 Change	2021 - 2020 Change
Revenue bonds	$ 6,986,674	6,631,009	6,366,836	355,665	264,173
Revenue notes	350,356	—	—	350,356	—
Commercial paper	625,473	859,051	633,828	(233,578)	225,223
Certificates of participation	133,945	138,180	142,265	(4,235)	(4,085)
State revolving fund loans	424,420	215,966	161,820	208,454	54,146
Total	$ 8,520,868	7,844,206	7,304,749	676,662	539,457

Water Debt Administration

As of June 30, 2022, the Water Enterprise had $5,284,630 total debt outstanding, a decrease of $22,076 over the prior year, as shown below in Table 4A. More detailed information about the Water Enterprise's debt activity is presented in Notes 6, 7, 8 and 9 to the financial statements.

(Dollars in thousands, unless otherwise stated)

Table 4A
Proprietary Fund – Water
Outstanding Debt, Net of Unamortized Costs
As of June 30, 2022, 2021, and 2020

	2022	2021	2020	2022 - 2021 Change	2021 - 2020 Change
Revenue bonds	$ 4,860,935	4,994,775	4,695,295	(133,840)	299,480
Commercial paper	206,297	105,862	362,354	100,435	(256,492)
Certificates of participation	95,637	98,662	101,578	(3,025)	(2,916)
State revolving fund loans	121,761	107,407	73,271	14,354	34,136
Total	$ 5,284,630	5,306,706	5,232,498	(22,076)	74,208

The decrease of $133,840 in revenue bonds was due to decreases of $108,500 from bond repayment, $25,349 in bond premium from amortization, offset by a $9 increase in bond discount from amortization. The $3,025 decrease of certificates of participation was due to a $2,970 decrease for principal repayment, and a $55 decrease for amortization of premium. The increase of $14,354 in State revolving funds loans was from additional reimbursement requests for the SF Westside Recycled Water project. The Water Enterprise had $179,600 in tax-exempt and $26,697 in taxable commercial paper as of June 30, 2022, and $79,251 in tax-exempt and $26,611 in taxable commercial paper as of June 30, 2021. The increase of $100,435 was due to additional issuances of $130,135 in tax-exempt and $86 in taxable commercial paper, offset by $29,786 from repayment of tax-exempt commercial paper.

Credit Ratings and Bond Insurance – The Water Enterprise carried underlying ratings of "Aa2" and "AA-" from Moody's and Standard & Poor's (S&P) at June 30, 2022, and "Aa2" and "AA-" from Moody's and Standard & Poor's (S&P) at June 30, 2021, respectively.

Debt Service Coverage – Pursuant to the Amended and Restated Indenture, the Water Enterprise is required to collect sufficient net revenues each fiscal year, together with any Water 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 2022 and 2021, the Water 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 Water Enterprise's Amended and Restated Indenture (see Note 9).

Debt Authorization – Pursuant to the Charter Section 8B.124, the Water 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, 2022, the Board of Supervisors has authorized the issuance of $4,617,099 in revenue bonds under Proposition E, with $3,898,744 issued against this authorization. The Water 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, 2022, $1,499,230 of the $1,628,000 Proposition A authorized bonds were issued. The Water Enterprise is also authorized to issue up to $500,000 in commercial paper.

Cost of Debt Capital – The Water Enterprise's outstanding long-term debt has coupon interest rates ranging from 0.3% to 7.0% as of June 30, 2022 and 2021. The Water Enterprise's short-term debt has interest rates ranging from 0.1% to 2.0% during fiscal year 2022, and 0.1% to 0.3% during fiscal year 2021.

Wastewater Debt Administration

As of June 30, 2022, 2021, and 2020, the Wastewater Enterprise's debt from revenue bonds, revenue notes, commercial paper, certificates of participation, and State revolving fund loans were $2,988,713, $2,363,086, and $1,945,080, respectively, as shown in Table 4B. More detailed information about the Wastewater Enterprise's debt activity is presented in Notes 6, 7, 8 and 9 to the financial statements.

(Dollars in thousands, unless otherwise stated)

Table 4B
Proprietary Fund – Wastewater
Outstanding Debt, Net of Unamortized Costs
As of June 30, 2022, 2021, and 2020

	2022	2021	2020	2022 - 2021 Change	2021 - 2020 Change
Revenue bonds	$ 1,931,253	1,589,922	1,621,733	341,331	(31,811)
Revenue notes	350,356	—	—	350,356	—
Commercial paper	379,157	638,518	207,939	(259,361)	430,579
Certificates of participation	25,288	26,087	26,859	(799)	(772)
State revolving fund loans	302,659	108,559	88,549	194,100	20,010
Total	$ 2,988,713	2,363,086	1,945,080	625,627	418,006

The increase of $625,627 was mainly due to $373,700 Revenue Bonds 2021 Series A (SSIP/Green) and 2021 Series B (Non-SSIP) net of premium, $350,823 Revenue (Green) Notes 2021 Series AB net of premium, $200,702 aggregate new State Revolving Fund loans for the Biosolids Digester, OSP Digester Gas Utilization Upgrade, and Headworks Replacement projects, and $80,639 issuance of commercial paper, offset by $340,000 retirement of commercial paper, $26,148 repayment of outstanding debt, $9,970 of premium amortizations, and $4,119 SRF OSP debt reduction for the $4,000 loan principal forgiveness component and $119 unreimbursed loan claim.

Credit Ratings and Bond Insurance – As of June 30, 2022 and 2021, the Wastewater Enterprise carried underlying ratings of "Aa2" and "AA" from Moody's and Standard & Poor's (S&P), respectively.

Debt Service Coverage – Pursuant to the Indenture for the Wastewater bonds, the Wastewater Enterprise covenants to collect sufficient net revenues each fiscal year, together with any Wastewater Enterprise funds (except Bond Reserve Funds) that are available for payment of debt service and are not budgeted to be expended, at least equal to 1.25 times annual debt service for said fiscal year. During fiscal years 2022 and 2021, the Wastewater Enterprise's net revenues, together with fund balances available to pay debt service and not budgeted to be expended, were sufficient to meet the rate covenant requirements under the Indenture (see Note 9).

Debt Authorization – Pursuant to the Charter Section 8B.124, the Wastewater Enterprise can incur indebtedness upon two-thirds vote of the Board of Supervisors. As of June 30, 2022, the Wastewater Enterprise had $4,005,292 in combined debt issuance authorization from the Board of Supervisors under Proposition E, with $3,145,625 issued against this authorization. The Wastewater Enterprise has a $750,000 authorized commercial paper program, with $379,157 in tax-exempt commercial paper outstanding as of June 30, 2022 and $638,518 in tax-exempt commercial paper outstanding as of June 30, 2021.

Cost of Debt Capital – The coupon interest rates on the Wastewater Enterprise's outstanding revenue bonds ranged from 1.0% to 5.8%, with a blended true interest cost of 2.9%, after factoring in federal interest subsidy receipts on Build America Bonds on June 30, 2022. The 2009 Series C certificates of participation carried coupon interest rates from 2.0% to 5.0% and 2009 Series D certificates of participation carried coupon interest rates from 6.4% to 6.5% in fiscal years 2022 and 2021, respectively. The interest rates on short-term debt ranged from 0.1% to 1.4% during fiscal year 2022 and from 0.1% to 0.2% during fiscal year 2021. The State revolving fund loans (CWSRF loans) carried original interest rates ranging from 0.8% to 1.8% for a weighted average of 1.3% during fiscal year 2022. The State has elected to apply administrative service and grant charges to certain agreement repayment schedules in lieu of receiving interest payments; these charges will not affect the installment payments or increase the repayment amounts.

Hetchy Water Debt Administration

Hetchy Water did not have debt outstanding as of June 30, 2022 and 2021. Debt, including bond issuances, associated with the funding of water-related, upcountry infrastructure capital improvements is issued through the Water Enterprise, and is reflected in the Water Enterprise's financial statements.

(Dollars in thousands, unless otherwise stated)

Hetchy Power Debt Administration

As of June 30, 30, 2022 and 2021, Hetchy Power had outstanding debt of $247,525 and $174,414, respectively, as shown in Table 4C. More detailed information about the Hetchy Power's debt activity is presented in Notes 6, 7 8 and 9 to the financial statements.

Table 4C
Proprietary Fund – Hetchy Power
Outstanding Debt, Net of Unamortized Costs
As of June 30, 2022, 2021, and 2020

	2022	2021	2020	2022 - 2021 Change	2021 - 2020 Change
Clean Renewable Energy Bonds 2008	$ 415	823	1,231	(408)	(408)
Certificates of Participation 2009 Series C	427	838	1,235	(411)	(397)
Certificates of Participation 2009 Series D (BABs)	12,593	12,593	12,593	—	—
Qualified Energy Conservation Bonds 2011	3,138	3,687	4,229	(549)	(542)
New Clean Renewable Energy Bonds 2012	—	—	130	—	(130)
New Clean Renewable Energy Bonds 2015	1,637	1,779	3,190	(142)	(1,411)
2015 Series A Revenue Bonds	35,144	35,297	35,444	(153)	(147)
2015 Series B Revenue Bonds	3,849	4,726	5,584	(877)	(858)
2021 Series A Revenue Bonds	90,213	—	—	90,213	—
2021 Series B Revenue Bonds	60,090	—	—	60,090	—
Commercial Paper	40,019	114,671	63,535	(74,652)	51,136
Total	$ 247,525	174,414	127,171	73,111	47,243

The increase of $73,111 was mainly due to $124,000 in 2021 Series AB revenue bond issuances, $63,058 in commercial paper issuance for Hetchy Power facilities, and $27,022 in bond premium for 2021 Series AB revenue bonds, offset by $140,043 in commercial paper, bonds, and certificates of participation principal repayments, and $926 in amortization of premium and discount.

Credit Ratings and Bond Insurance – The Power Enterprise's Power Revenue Bonds have been rated "AA-" by Fitch Inc and "AA" by Standard and Poor's (S&P) as of June 30, 2022 and 2021, respectively.

In December 2020, Moody's Investors Service, ("Moody's") assigned a first-time A2 Issuer Rating to CleanPowerSF, with a stable outlook. Hetch Hetchy Water and Power contains the Power Enterprise as a separate enterprise fund, with CleanPowerSF a component unit of the Power Enterprise. CleanPowerSF is tracked and audited as a standalone fund, with financial statements, including revenues and expenses, separate and discrete from the Power Enterprise. As such, CleanPowerSF is deemed to be a separate credit from the Power Enterprise, with its own credit rating.

Debt Service Coverage – Pursuant to the Indenture, the Power Enterprise is required to collect sufficient net revenues each fiscal year, together with any Available Funds (except Bond Reserve Funds) which include unappropriated fund balances and reserves, and cash and book value of investments held by the Treasurer for the Hetchy Power, that the SFPUC reasonably expects would be available, to pay principal and interest becoming due and payable on all outstanding bonds as provided in the Indenture, less any refundable credits, at least equal to 1.25 times annual debt service for said fiscal year. The Series 2015 AB power revenue bonds represent the first series of senior lien revenue bonds of Hetchy Power. Pursuant to Power's Master Trust Indenture, senior lien debt service coverage excludes debt service on subordinate obligations, such as Hetchy Power's existing CREBS, NCREBs, and QECBs. During fiscal year 2022, the Power 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 Power Enterprise's Indenture (see Note 9).

Debt Authorization – Pursuant to Charter Section 9.107(6), the Power Enterprise can incur indebtedness upon three-fourths vote of the Board of Supervisors, for the purpose of the reconstruction or replacement of existing water facilities and electric power facilities, or combinations thereof, under the jurisdiction of the Public Utilities Commission. Pursuant to Charter Section 9.107(8), the Power Enterprise can issue revenue bonds, without voter approval, upon an affirmative vote of the Board of Supervisors, for the purpose of the acquisition, construction, installation, equipping, improvement, or rehabilitation of equipment or facilities for renewable energy and energy conservation. Pursuant to Proposition A, approved by the San Francisco voters on June 5, 2018, City Charter Section 8B.124 is amended to authorize the Power Enterprise to enter into indebtedness, including revenue bonds, notes, commercial paper or other forms of indebtedness, when authorized by ordinance approved by a two-thirds vote of the Board of Supervisors to reconstruct, replace, expand, repair, improve or construct new power facilities under the jurisdiction of SFPUC or for any other purpose of the Power Enterprise, and in compliance with City Charter Section 8B.124. Proposition A expressly prohibits the SFPUC from issuing bonds to finance the construction of power plants that generate electricity using fossil fuels or nuclear energy. As of June 30, 2022 and 2021, $163,555 and $39,555 of Hetchy Power revenue bonds were issued against existing authorization of $555,043 and $535,699, respectively.

Cost of Debt Capital – The Power Enterprise's outstanding long-term senior lien debt consists of the 2015 Series AB and 2021 Series AB Power Revenue Bonds issued in May 2015 and December 2021, respectively, which are issued under the Master Indenture and are senior in lien to all the other Power Enterprise's outstanding debt obligations. Coupon interest rates range from 3.0% to 5.0%. The Power Enterprise has previously issued and incurred debt service on Tax Credit Bonds and certificates of participation, which constitute subordinate obligations. Interest rates on the Tax Credit Bonds, which include QECBs and NCREBs, ranging from 1.2% to 1.5% (net of the federal tax subsidy). Certificates of participation carried interest rates ranging from 2.0% to 6.5%. The Power Enterprise's short-term debt issued under its commercial paper program has interest rates ranging from 0.1% to 1.1% and 0.1% to 0.2% during fiscal years 2022 and 2021, respectively.

CleanPowerSF Debt Administration

CleanPowerSF did not have debt outstanding as of June 30, 2022 and 2021.

Rates and Charges

Water and Wastewater Enterprises

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 and wastewater rates. The Commission is required to:

- Establish rates, fees, and charges based on cost of service;
- Retain an independent rate consultant to conduct cost of service studies at least every five years;
- Consider establishing new connection fees;
- Consider conservation incentives and lifeline rates;
- Adopt a rolling five-year forecast annually; and
- Establish a Rate Fairness Board.

Pursuant to the City and County of San Francisco Charter Section 8B.125, an independent rate study is performed at least once every five years. In compliance with City Charter section 8B.125, a rate study was completed in April 2018 and resulted in an approved four-year water and wastewater rate increase from July 1, 2018 through June 30, 2022. The rates effective July 1, 2021 for fiscal year 2022 will remain unchanged for fiscal year 2023, which are effective July 1, 2022. These rates exclude those changed by the Consumer Price Index from the Controller's Office of the City and County of San Francisco, as well as rates adjusted by the 20-City Average Construction Index (CCI) published by Engineering News-Record (ENR) Magazine. The SFPUC Rates Schedules and Fees is available at https://sfpuc.org/accounts-services/water-power-and-sewer-rates.

Water Enterprise 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 11 of the notes to financial statements for further discussion on the balancing account of the wholesale customers.

(Dollars in thousands, unless otherwise stated)

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

Ten-year Average Rate Adjustments		
Effective date	**Retail**	**Wholesale[5]**
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 [3]	—
July 1, 2019	8.0 [3]	—
July 1, 2020	7.0 [3]	—
July 1, 2021	7.0 [3]	—
July 1, 2022	— [4]	15.9

[1] Five-year retail rate increases adopted and effective July 1, 2009.
[2] Four-year retail rate increases adopted and effective July 1, 2014.
[3] Four-year retail rate increases adopted and effective July 1, 2018.
[4] No retal rate increase adopted and effective July 1, 2022.
[5] Wholesale rates adopted annually; no increase for wholesale rates effective July 1, 2017 to June 30, 2022.

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

Ten-year Average Rate Adjustments	
Effective Date	**Rate**
July 1, 2013	5.0 [1] %
July 1, 2014	5.0 [2]
July 1, 2015	5.0 [2]
July 1, 2016	7.0 [2]
July 1, 2017	11.0 [2]
July 1, 2018	7.0 [3]
July 1, 2019	7.0 [3]
July 1, 2020	8.0 [3]
July 1, 2021	8.0 [3]
July 1, 2022	— [4]

[2] Four-year rate increases adopted and effective July 1, 2014.
[3] Four-year rate increases adopted and effective July 1, 2018.
[4] No retail rate adjustment.

Hetchy Water

Hetchy Water charges for services relates to the storage and delivery of water. Assessment fees from the Water Enterprise, which cover the water-related upcountry costs, were $45,815 and $44,149 for the years ended June 30, 2022 and 2021, respectively. In fiscal year 2023, the assessment fees will be $49,636, an increase of $3,821 or 8.3% as reflected in the fiscal year 2023 adopted budget.

Hetchy Power

Municipal Rates

Hetchy Power charges for services relates to power generation and electricity delivery to contractual and municipal customers. For municipal power services, customers are typically charged a General Use rate or Enterprise rate. Enterprise rates are charged based on projected PG&E equivalent rates by customer class. General fund department customers are mostly charged a General Use rate, a rate that is currently below cost of service. These General Use rates, however, are moving closer towards cost of service and increasing by $0.01 per kWh on an annual basis beginning July 1, 2020. The General Use rates have been adopted every two years.

On May 10, 2020, the Commission adopted two years of General Use rates effective July 1, 2020 through June 30, 2022. The adopted General Use rate for fiscal years 2022 and 2021 are $0.09877/kWh and $0.08877/kWh, respectively.

The Power Enterprise has developed rates under the cost of service analysis model and completed the 2022 Power Rates Study in spring of 2022, in which General Use rates have been modernized to standard customer classes and incrementally increased to cost of service over the next few years. New rates effective fiscal year 2023 have been adopted in May 2022. The SFPUC Rates Schedules and Fees is available at https://sfpuc.org/accounts-services/water-power-and-sewer-rates.

Retail Rates

The Commission approved a new schedule of retail electric rates, fees, and charges for residential, commercial, and industrial customers where Hetch Hetchy has been designated as the power provider for retail customers to be applied to meter readings on or after July 1, 2016. Total bundled service charges for residential service rates and low-income residential service rates are calculated using the total rates, monthly, based on monthly meter reading, plus any applicable taxes.

To date, Hetchy Power has prepared service standards, developed system plans and specifications, acquired materials and equipment, and initiated construction of primary distribution facilities.

Pursuant to City and County of San Francisco Charter Section 8B.125, an independent rate study is performed at least once every five years. The rate study is undertaken to examine future revenue requirements and cost-of-service of the Power Enterprise. In fall 2020, SFPUC engaged a consultant to perform a cost-of-service study. The informed rate setting from this study resulted in recommendation and approval by the Commission in the spring of 2022 for rates to be effective July 1, 2023. The SFPUC Rates Schedules and Fees is available at https://sfpuc.org/accounts-services/water-power-and-sewer-rates.

CleanPowerSF

CleanPowerSF began offering services in May 2016, giving residential and commercial electricity consumers in San Francisco a choice of having their electricity supplied from clean renewable sources, such as solar and wind, at competitive rates. CleanPowerSF offers two products: a "Green" product comprised of at least 48% renewable energy and a "SuperGreen" product comprised of 100% renewable energy. Most customers take service under the "Green" product rates and remaining customers have opted to upgrade to "SuperGreen" product rates. On May 25, 2021, Commission approved a CleanPowerSF rate adjustment formula. Through Resolution 21-0085 CleanPowerSF rates will be formulaically adjusted, when PG&E rates change to the lesser of no more than 5% higher than PG&E generation rates or rates that recover program costs. On September 28, 2021, the Commission approved a subsequent CleanPowerSF rate adjustment formula. Through Resolution 21-0152, CleanPowerSF rates formulaically adjusted when PG&E rates changed to the lesser of no more than 15% higher than PG&E generation rates or rates that recover program costs from November 1, 2021 to June 30, 2022.

CleanPowerSF revenues are adequate to support its own operations. CleanPowerSF is subject to Section 8B.125 of the City Charter, which requires an independent rate study to be performed at least once every five years, and the Commission sets rates and charges for the program. CleanPowerSF rates have been included in the 2022 Power Rates Study, which is completed in the spring of 2022 for rates to be effective July 1, 2023. The CleanPowerSF Rates Schedules are available at http://cleanpowersf.org/residential for residential customers and http://cleanpowersf.org/commercial for commercial customers.

Request for Information

This report is designed to provide our citizens, customers, investors, and creditors with an overview of the SFPUC's finances and to demonstrate the Department'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://sfpuc.org/about-us/reports/audited-financial-statements-reports.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Statements of Net Position
Proprietary Funds
June 30, 2022 and 2021
(In thousands)

	Business Type Activities – Proprietary Funds													
	Water		Wastewater		Hetchy Water		Hetchy Power		CleanPowerSF		Eliminations		SFPUC Total	
Assets	2022	Restated 2021^	2022	Restated 2021^	2022	Restated 2021^	2022	Restated 2021^	2022	Restated 2021^	2022	2021	2022	Restated 2021^
Current assets:														
Cash and investments with City Treasury	$ 460,954	483,827	285,029	281,572	94,190	89,373	189,641	190,719	56,234	90,838	—	—	1,086,048	1,136,329
Cash and investments outside City Treasury	318	301	397	366	1	1	16	611	—	—	—	—	732	1,279
Receivables:														
Charges for services (net of allowance for doubtful accounts of $3,915, $4,273, $0, $1,297, and $6,330 in 2022 and $5,445, $5,369, $0, $1,258, and $5,485 in 2021)	61,740	55,473	40,321	33,081	475	442	10,189	19,024	48,703	28,265	—	—	161,428	136,285
Due from other City departments, current portion	178	248	225	281	—	—	867	7,413	—	—	(111) A	(110) B	1,159	7,832
Due from other governments	—	16	25	—	512	579	298	267	—	—	—	—	835	862
Interest	399	257	314	189	40	21	201	125	61	55	—	—	1,015	647
Interest-Leases	884	859	—	—	—	—	—	—	—	—	—	—	884	859
Restricted due from other governments	7,553	49,546	202,795	20,755	—	—	—	—	—	—	—	—	210,348	70,301
Leases receivable, current portion	3,325	3,289	—	—	—	—	—	—	—	—	—	—	3,325	3,289
Restricted interest and other receivable (net of allowance for doubtful accounts of $146, $385, $0, $0 and $0 in 2022 and $24, $68, $0, $0 and $0 in 2021)	4,142	3,983	2,301	2,841	—	—	4,303	11,800	—	—	—	—	10,746	18,624
Total current receivables	78,221	113,671	245,981	57,147	1,027	1,042	15,858	38,629	48,764	28,320	(111)	(110)	389,740	238,699
Prepaid charges, advances, and other receivables, current portion	12,180	6,147	346	877	216	402	1,911	2,666	10,550	2,184	—	—	25,203	12,276
Inventory	6,802	5,937	2,958	2,657	199	191	1,678	1,820	—	—	—	—	11,637	10,605
Restricted cash and investments outside City Treasury, current portion	11,063	57,165	15,587	298	—	—	5,228	153	—	—	—	—	31,878	57,616
Total current assets	569,538	667,048	550,298	342,917	95,633	91,009	214,332	234,598	115,548	121,342	(111)	(110)	1,545,238	1,456,804
Non-current assets:														
Net pension asset	100,407	—	48,770	—	13,912	—	17,004	—	1,833	—	—	—	181,926	—
Restricted cash and investments with City Treasury	9,299	—	—	—	—	6,990	—	5,241	—	—	—	—	9,299	12,231
Restricted cash and investments outside City Treasury, less current portion	64,894	65,688	23,771	9,898	—	—	8,824	3,690	—	—	—	—	97,489	79,276
Leases receivable, less current portion	42,840	45,821	—	—	—	—	—	—	—	—	—	—	42,840	45,821
Restricted interest and other receivable, and prepaid (net of allowance for doubtful accounts of $8, $29, $0, $0, and $0 in 2022 and $8, $29, $0, $0, and $0 in 2021)	4	4	434	450	—	—	—	—	—	—	—	—	438	454
Lease assets, net of accumulated amortization	2,812	4,237	3,597	5,922	61	74	73	90	230	575	—	—	6,773	10,898
Charges for services, less current portion (net of allowance for doubtful accounts of $656, $567, $0, $0, and $0 in 2022 and $658, $569 $0, $0, and $0 in 2021)	207	207	342	341	—	—	—	—	—	—	—	—	549	548
Prepaid charges, advances, and other receivables, less current portion	3,760	3,517	1,156	1,183	146	152	9,390	753	12,236	—	—	—	26,688	5,605
Capital assets, not being depreciated and amortized	558,374	637,529	1,772,035	1,388,262	57,376	38,571	265,772	174,555	—	—	—	—	2,653,557	2,238,917
Capital assets, net of accumulated depreciation and amortization	5,059,220	4,950,270	2,274,416	2,218,588	143,631	138,910	319,864	317,501	—	—	—	—	7,797,131	7,625,269
Due from other City departments, less current portion	—	—	—	—	—	—	10,937	4,993	—	—	(518) A	(629) B	10,419	4,364
Total non-current assets	5,841,817	5,707,273	4,124,521	3,624,644	215,126	184,697	631,864	506,823	14,299	575	(518)	(629)	10,827,109	10,023,383
Total assets	6,411,355	6,374,321	4,674,819	3,967,561	310,759	275,706	846,196	741,421	129,847	121,917	(629)	(739)	12,372,347	11,480,187
Deferred outflows of resources														
Unamortized loss on refunding of debt	139,481	154,991	33	91	—	—	—	—	—	—	—	—	139,514	155,082
Pensions	52,852	64,797	25,369	30,219	6,696	7,799	8,183	9,531	852	803	—	—	93,952	113,149
Other post-employment benefits	32,445	37,762	12,898	15,109	3,272	3,725	3,999	4,552	798	442	—	—	53,412	61,590
Total deferred outflows of resources	$ 224,778	257,550	38,300	45,419	9,968	11,524	12,182	14,083	1,650	1,245	—	—	286,878	329,821

(Continued)

A. Included interfund payables and interfund receivables for fiscal year 2022 of $629 between Wastewater and Hetchy Power for the 525 Golden Gate Avenue Headquarters construction costs.
B. Included interfund payables and interfund receivables for fiscal year 2021 of $739 between Wastewater and Hetchy Power for the 525 Golden Gate Avenue Headquarters construction costs.
^Restated due to the implementation of GASB Statement No. 87, *Leases*.

See accompanying notes to basic financial statements.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Statements of Net Position
Proprietary Funds
June 30, 2022 and 2021
(In thousands)

	Business Type Activities – Proprietary Funds													
	Water		Wastewater		Hetchy Water		Hetchy Power		CleanPowerSF		Eliminations		SFPUC Total	
	2022	Restated 2021^	2022	Restated 2021^	2022	Restated 2021^	2022	Restated 2021^	2022	Restated 2021^	2022	2021	2022	Restated 2021^
Liabilities														
Current liabilities:														
Accounts payable $	22,852	16,183	22,588	15,282	8,454	4,262	16,668	22,909	23,526	15,859	—	—	94,088	74,495
Accrued payroll	10,495	9,845	6,402	6,147	1,098	1,042	2,684	2,596	373	291	—	—	21,052	19,921
Accrued vacation and sick leave, current portion	6,888	6,787	5,479	5,811	1,034	1,059	1,747	1,777	279	205	—	—	15,427	15,639
Accrued workers' compensation, current portion	1,700	1,694	1,393	1,198	215	197	400	378	—	—	—	—	3,708	3,467
Due to other City departments, current portion	—	—	111	110	—	—	380	369	—	—	(111) C	(110) D	380	369
Damage claims liability, current portion	10,191	14,400	9,323	5,892	228	218	358	409	15	6	—	—	20,115	20,925
Unearned revenues, refunds, and other, current portion	19,137	18,966	6,137	5,345	24	22	5,923	5,141	4,196	1,028	—	—	35,417	30,502
Bond, loan and lease interest payable	35,443	36,200	21,460	17,276	—	—	1,327	459	—	1	—	—	58,230	53,936
Bonds, current portion	125,285	108,500	34,345	22,880	—	—	1,966	1,928	—	—	—	—	161,596	133,308
Certificates of participation, current portion	3,138	2,970	830	785	—	—	427	405	—	—	—	—	4,395	4,160
Commercial paper	206,297	105,862	379,157	638,518	—	—	40,019	114,671	—	—	—	—	625,473	859,051
State revolving funds loans payable, current portion	3,283	1,667	2,481	2,483	—	—	—	—	—	—	—	—	5,764	4,150
Lease liability, current portion	1,008	1,381	2,341	2,314	3	16	3	19	232	345	—	—	3,587	4,075
Wholesale balancing account, current portion	48,422	21,538	—	—	—	—	—	—	—	—	—	—	48,422	21,538
Current liabilities payable from restricted assets	25,353	27,263	89,905	89,982	6,324	9,057	19,059	15,393	—	—	—	—	140,641	141,695
Total current liabilities	519,492	373,256	581,952	814,023	17,380	15,873	90,961	166,454	28,621	17,735	(111)	(110)	1,238,295	1,387,231
Long-term liabilities:														
Other post-employment benefits obligations	144,115	148,771	49,123	50,711	14,240	14,444	17,405	17,653	2,264	2,909	—	—	227,147	234,488
Net pension liability	—	216,417	—	103,746	—	26,645	—	32,566	—	3,008	—	—	—	382,382
Accrued vacation and sick leave, less current portion	6,841	7,129	5,422	5,847	1,135	1,126	1,850	1,840	267	195	—	—	15,515	16,137
Accrued workers' compensation, less current portion	7,273	7,134	6,153	5,384	1,013	923	1,850	1,740	—	—	—	—	16,289	15,181
Due to other City departments, less current portion	—	—	518	629	—	—	—	—	—	—	(518) C	(629) D	—	—
Damage claims liability, less current portion	25,878	22,323	2,722	10,821	399	307	665	699	17	—	—	—	29,681	34,150
Unearned revenues, refunds, and other, less current portion	—	—	—	—	110	116	804	852	9,000	9,000	—	—	9,914	9,968
Bonds, less current portion	4,735,650	4,886,275	1,896,908	1,567,042	—	—	192,520	44,384	—	—	—	—	6,825,078	6,497,701
Revenue Notes, less current portion	—	—	350,356	—	—	—	—	—	—	—	—	—	350,356	—
Certificates of participation, less current portion	92,499	95,692	24,458	25,302	—	—	12,593	13,026	—	—	—	—	129,550	134,020
State revolving funds loans payable, less current portion	118,478	105,740	300,178	106,076	—	—	—	—	—	—	—	—	418,656	211,816
Lease liability, less current portion	1,855	2,863	1,297	3,638	59	62	72	75	—	232	—	—	3,283	6,870
Wholesale balancing account, less current portion	30,728	39,326	—	—	—	—	—	—	—	—	—	—	30,728	39,326
Pollution remediation obligations	1,271	1,271	8,060	7,800	—	—	—	—	—	—	—	—	9,331	9,071
Total long-term liabilities	5,164,588	5,532,941	2,645,195	1,886,996	16,956	43,623	227,759	112,835	11,548	15,344	(518)	(629)	8,065,528	7,591,110
Total liabilities	5,684,080	5,906,197	3,227,147	2,701,019	34,336	59,496	318,720	279,289	40,169	33,079	(629)	(739)	9,303,823	8,978,341
Deferred inflows of resources														
Related to pensions	248,704	4,885	114,670	2,148	34,477	988	42,138	1,207	5,414	1,093	—	—	445,403	10,321
Leases	44,583	48,110	—	—	—	—	—	—	—	—	—	—	44,583	48,110
Other post-employment benefits	25,348	21,315	8,640	7,265	2,734	2,085	3,342	2,548	1,594	1,913	—	—	41,658	35,126
Total deferred inflows of resources	318,635	74,310	123,310	9,413	37,211	3,073	45,480	3,755	7,008	3,006	—	—	531,644	93,557
Net position														
Net investment in capital assets	537,644	517,302	1,092,705	1,253,789	201,007	177,481	352,162	323,066	—	—	—	—	2,183,518	2,271,638
Restricted for debt service	14,671	45,586	5,391	2,992	—	—	140	99	—	—	—	—	20,202	48,677
Restricted for capital projects	—	22,319	114,657	—	—	—	—	—	—	—	—	—	114,657	22,319
Unrestricted	81,103	66,157	149,909	45,767	48,173	47,180	141,876	149,295	84,320	87,077	—	—	505,381	395,476
Total net position $	633,418	651,364	1,362,662	1,302,548	249,180	224,661	494,178	472,460	84,320	87,077	—	—	2,823,758	2,738,110

C. Included interfund payables and interfund receivables for fiscal year 2022 of $629 between Wastewater and Hetchy Power for the 525 Golden Gate Avenue Headquarters construction costs.
D. Included interfund payables and interfund receivables for fiscal year 2021 of $739 between Wastewater and Hetchy Power for the 525 Golden Gate Avenue Headquarters construction costs.
^Restated due to the implementation of GASB Statement No. 87, *Leases*.

See accompanying notes to basic financial statements.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Statements of Revenues, Expenses, and Changes in Net Position
Proprietary Funds
June 30, 2022 and 2021
(In thousands)

	Business Type Activities – Proprietary Funds											
	Water		Wastewater		Hetchy Water		Hetchy Power		CleanPowerSF		SFPUC Total	
	2022	Restated 2021^	2022	Restated 2021^	2022	Restated 2021^	2022	Restated 2021^	2022	Restated 2021^	2022	Restated 2021^
Operating revenues:												
Charges for services	$ 539,526	550,306	356,041	318,236	49,200	46,979	173,105	136,247	257,893	207,698	1,375,765	1,259,466
Rents and concessions	13,765	13,735	705	642	112	111	137	136	—	—	14,719	14,624
Capacity fees	2,163	1,326	6,280	3,710	—	—	—	—	—	—	8,443	5,036
Other revenues	17,663	17,069	5,856	5,077	—	—	—	—	—	—	23,519	22,146
Total operating revenues	573,117	582,436	368,882	327,665	49,312	47,090	173,242	136,383	257,893	207,698	1,422,446	1,301,272
Operating expenses:												
Personnel services	83,385	132,528	63,456	90,449	15,636	19,871	34,646	40,756	4,167	7,641	201,290	291,245
Contractual services	13,457	14,029	19,115	16,489	2,854	2,398	9,604	8,705	6,821	6,678	51,851	48,299
Transmission/distribution and other power costs	—	—	—	—	—	—	51,521	36,711	192	1,012	51,713	37,723
Purchased electricity	—	—	—	—	—	—	6,731	5,982	239,546	189,977	246,277	195,959
Materials and supplies	15,719	13,175	11,844	9,091	1,362	1,272	2,270	1,990	33	26	31,228	25,554
Depreciation and amortization	147,904	145,444	77,575	74,343	6,305	6,028	17,628	15,650	345	345	249,757	241,810
Services provided by other departments	73,307	70,235	39,645	38,313	3,129	2,517	6,253	6,137	3,621	3,928	125,955	121,130
General and administrative and other	68,014	73,371	45,536	63,488	23,017	18,433	27,694	29,709	7,393	3,104	171,654	188,105
Total operating expenses	401,786	448,782	257,171	292,173	52,303	50,519	156,347	145,640	262,118	212,711	1,129,725	1,149,825
Operating income (loss)	171,331	133,654	111,711	35,492	(2,991)	(3,429)	16,895	(9,257)	(4,225)	(5,013)	292,721	151,447
Non-operating revenues (expenses):												
Federal and state grants	5,931	14,829	20,711	—	450	1,349	4,924	1,483	2,424	—	34,440	17,661
Interest and investment income (loss)	(10,896)	1,374	(7,087)	(1,187)	(2,932)	(232)	(4,001)	24	(1,286)	51	(26,202)	30
Interest expenses	(213,668)	(184,678)	(77,743)	(34,944)	(1)	(2)	(5,624)	(1,972)	(5)	(26)	(297,041)	(221,622)
Amortization of premium, discount, refunding loss, and issuance costs	9,875	7,782	8,422	8,497	—	—	(192)	219	—	—	18,105	16,498
Net gain from sale of assets	1,079	2,556	22	18	7	—	9	—	—	—	1,117	2,574
Other non-operating revenues	34,861	28,489	4,721	4,893	22	3	10,830	17,790	335	927	50,769	52,102
Other Non-operating expenses	(828)	(2,208)	(482)	(409)	(37)	(63)	(591)	(902)	—	—	(1,938)	(3,582)
Net non-operating revenues (expenses)	(173,646)	(131,856)	(51,436)	(23,132)	(2,491)	1,055	5,355	16,642	1,468	952	(220,750)	(136,339)
Change in net position before capital contributions and transfers	(2,315)	1,798	60,275	12,360	(5,482)	(2,374)	22,250	7,385	(2,757)	(4,061)	71,971	15,108
Capital contributions	—	4,180	—	—	—	—	—	—	—	—	—	4,180
Transfers from the City and County of San Francisco	15,035	21,025	—	1,440	30,001	16,000	—	—	—	—	45,036	38,465
Transfers to the City and County of San Francisco	(30,666)	(16,654)	(161)	(4,188)	—	—	(532)	(532)	—	—	(31,359)	(21,374)
Net capital contributions and transfers	(15,631)	8,551	(161)	(2,748)	30,001	16,000	(532)	(532)	—	—	13,677	21,271
Change in net position	(17,946)	10,349	60,114	9,612	24,519	13,626	21,718	6,853	(2,757)	(4,061)	85,648	36,379
Net position at beginning of year	651,364	641,015	1,302,548	1,292,936	224,661	211,035	472,460	465,607	87,077	91,138	2,738,110	2,701,731
Net position at end of year	$ 633,418	651,364	1,362,662	1,302,548	249,180	224,661	494,178	472,460	84,320	87,077	2,823,758	2,738,110

^Restated due to the implementation of GASB Statement No. 87, *Leases*.
See accompanying notes to basic financial statements.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Statements of Cash Flows
Proprietary Funds
Years ended June 30, 2022 and 2021
(In thousands)

	Water		Wastewater		Hetchy Water		Hetchy Power		CleanPowerSF		SFPUC Total	
	2022	Restated 2021^	2022	Restated 2021^	2022	Restated 2021^	2022	Restated 2021^	2022	Restated 2021^	2022	Restated 2021^
Cash flows from operating activities:												
Cash received from customers, including cash deposits $	563,433	570,041	360,654	327,879	49,161	46,176	183,203	120,981	237,947	223,325	1,394,398	1,288,402
Cash received from tenants for rent	15,032	12,542	1,035	362	114	116	139	142	—	—	16,320	13,162
Cash received from miscellaneous revenues	4,558	4,643	667	831	22	3	7,237	13,427	335	927	12,819	19,831
Cash paid to employees for services	(137,080)	(132,235)	(93,897)	(90,918)	(20,430)	(19,597)	(40,448)	(40,236)	(5,828)	(5,344)	(297,683)	(288,330)
Cash paid to suppliers for goods and services	(159,338)	(136,653)	(103,998)	(126,436)	(25,726)	(20,950)	(107,969)	(81,722)	(268,958)	(211,735)	(665,989)	(577,496)
Cash paid for judgments and claims	(2,515)	(3,969)	(10,795)	(3,295)	(276)	(563)	(2,163)	(4,361)	(1,529)	(153)	(17,278)	(12,341)
Net cash provided by (used in) operating activities	284,090	314,369	153,666	108,423	2,865	5,185	39,999	8,231	(38,033)	7,020	442,587	443,228
Cash flows from non-capital financing activities:												
Cash received from grants	5,947	14,836	12,686	—	517	3,345	4,893	2,860	5,100	—	29,143	21,041
Cash received from settlements	6,750	—	—	—	—	—	—	797	—	—	6,750	797
Cash received from license fees	—	—	—	—	—	—	3,333	3,151	—	—	3,333	3,151
Cash paid for rebates, program incentives, and other	(828)	(2,208)	(482)	(409)	(37)	(63)	(591)	(902)	—	—	(1,938)	(3,582)
Cash paid for Hetchy Power loan interest	—	—	—	—	—	—	—	—	—	(235)	—	(235)
Transfers from the City and County of San Francisco	15,035	21,025	—	1,440	30,001	16,000	—	—	—	—	45,036	38,465
Transfers to the City and County of San Francisco	(30,666)	(16,654)	(161)	(4,188)	—	—	(532)	(532)	—	—	(31,359)	(21,374)
Net cash provided by (used in) non-capital financing activities	(3,762)	16,999	12,043	(3,157)	30,481	19,282	7,103	5,374	5,100	(235)	50,965	38,263
Cash flows from capital and related financing activities:												
Proceeds from sale of capital assets	986	2,647	22	12	7	—	9	—	—	—	1,024	2,659
Proceeds from bond issuance, net of premium, discount, refunding loss, and issuance costs	—	1,000,920	373,700	—	—	—	151,022	—	—	—	524,722	1,000,920
Proceeds from revenue notes issuance, net of premium	—	—	350,823	—	—	—	—	—	—	—	350,823	—
Proceeds from commercial paper borrowings	130,221	16,328	80,639	435,450	—	—	63,058	51,136	—	—	273,918	502,914
Proceeds from State revolving fund loans	56,113	57,861	22,544	4,811	—	—	—	—	—	—	78,657	62,672
Principal paid on commercial paper	(29,786)	(272,820)	(340,000)	(4,871)	—	—	(137,710)	—	—	—	(507,496)	(277,691)
Principal paid on long-term debt	(111,470)	(704,344)	(23,665)	(23,987)	—	—	(2,333)	(3,674)	—	—	(137,468)	(732,005)
Principal paid on state revolving fund loans	—	—	(2,483)	(2,458)	—	—	—	—	—	—	(2,483)	(2,458)
Interest paid on commercial paper	(212)	(348)	(614)	(484)	—	—	(59)	(132)	—	—	(885)	(964)
Interest paid on long-term debt	(213,922)	(210,276)	(69,988)	(66,654)	—	—	(4,695)	(2,970)	—	—	(288,605)	(279,900)
Interest paid on state revolving fund loans	—	—	(1,522)	(1,123)	—	—	—	—	—	—	(1,522)	(1,123)
Interest paid revenue notes	—	—	(1,168)	—	—	—	—	—	—	—	(1,168)	—
Issuance costs paid on long-term debt	(10)	(3,032)	(1,490)	—	—	—	(1,118)	—	—	—	(2,618)	(3,032)
Acquisition and construction of capital assets	(182,776)	(184,144)	(516,032)	(582,841)	(32,558)	(16,981)	(108,062)	(62,461)	—	—	(839,428)	(846,427)
Lease payment	(1,439)	(1,472)	(2,371)	(2,371)	(17)	(17)	(22)	(21)	(351)	(350)	(4,200)	(4,231)
Federal interest income subsidy	23,590	23,869	5,818	2,297	—	—	397	511	—	—	29,805	26,677
Net cash used in capital and related financing activities	(328,705)	(274,811)	(125,787)	(242,219)	(32,568)	(16,998)	(39,513)	(17,611)	(351)	(350)	(526,924)	(551,989)
Cash flows from investing activities:												
Interest income received	2,154	4,185	1,335	3,169	329	739	1,003	1,986	407	802	5,228	10,881
Proceeds from sale of investment outside City Treasury	398,825	323,586	101,115	134,955	—	—	7,118	3,968	—	—	507,058	462,509
Purchase of investments outside City Treasury	(398,825)	(323,586)	(101,115)	(134,955)	—	—	(7,118)	(3,968)	—	—	(507,058)	(462,509)
Net cash provided by investing activities	2,154	4,185	1,335	3,169	329	739	1,003	1,986	407	802	5,228	10,881
Increase (decrease) in cash and cash equivalents	(46,223)	60,742	41,257	(133,784)	1,107	8,208	8,592	(2,020)	(32,877)	7,237	(28,144)	(59,617)
Cash and cash equivalents:												
Beginning of year	606,589	545,847	291,906	425,690	96,276	88,068	200,265	202,285	90,764	83,527	1,285,800	1,345,417
End of year $	560,366	606,589	333,163	291,906	97,383	96,276	208,857	200,265	57,887	90,764	1,257,656	1,285,800
Reconciliation of cash and cash equivalents to the statements of net position:												
Cash and investments with City Treasury:												
Unrestricted $	460,954	483,827	285,029	281,572	94,190	89,373	189,641	190,719	56,234	90,838	1,086,048	1,136,329
Restricted	9,299	—	—	—	—	6,990	—	5,241	—	—	9,299	12,231
Add: Unrealized (loss)/gain on investments with City Treasury	13,838	(392)	8,379	(228)	3,192	(88)	5,148	(149)	1,653	(74)	32,210	(931)
Cash and investments outside City Treasury:												
Unrestricted	318	301	397	366	1	1	16	611	—	—	732	1,279
Restricted	75,957	122,853	39,358	10,196	—	—	14,052	3,843	—	—	129,367	136,892
Cash and cash equivalents at end of year on statements of cash flows $	560,366	606,589	333,163	291,906	97,383	96,276	208,857	200,265	57,887	90,764	1,257,656	1,285,800

Business Type Activities – Proprietary Funds

^Restated due to the implementation of GASB Statement No. 87, *Leases*.
See accompanying notes to basic financial statements

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Statements of Cash Flows
Proprietary Funds
Years ended June 30, 2022 and 2021
(In thousands)

	Business Type Activities – Proprietary Funds											
	Water		Wastewater		Hetchy Water		Hetchy Power		CleanPowerSF		SFPUC Total	
	2022	Restated 2021^	2022	Restated 2021^	2022	Restated 2021^	2022	Restated 2021^	2022	Restated 2021^	2022	Restated 2021^
Reconciliation of operating income (loss) to net cash provided by (used in) operating activities:												
Operating income (loss)	$ 171,331	133,654	111,711	35,492	(2,991)	(3,429)	16,895	(9,257)	(4,225)	(5,013)	292,721	151,447
Adjustments to reconcile operating income (loss) to net cash provided by (used in) operating activities:												
Depreciation and amortization	147,904	145,444	77,575	74,343	6,305	6,028	17,628	15,650	345	345	249,757	241,810
Miscellaneous revenues	4,558	4,643	667	831	22	3	7,237	13,427	335	927	12,819	19,831
Provision for uncollectible accounts	(1,410)	2,945	(781)	2,201	—	—	39	667	845	3,675	(1,307)	9,488
Write-off of capital assets and other non-cash items	4,592	3,810	993	4,203	7	51	648	8,333	—	—	6,240	16,397
Changes in operating assets and liabilities:												
Receivables:												
Charges for services	(4,734)	1,537	(6,143)	(1,506)	(33)	(413)	8,796	(16,724)	(21,283)	2,772	(23,397)	(14,334)
Due from other City departments	70	93	(901)	148	—	104	531	2,437	—	—	(300)	2,782
Prepaid charges, advances, and other	(6,543)	(2,385)	51	(716)	192	114	(344)	(12,172)	(20,574)	576	(27,218)	(14,583)
Inventory	(865)	(160)	(301)	(181)	(8)	(4)	142	(211)	—	—	(1,032)	(556)
Accounts payable	6,669	5,609	7,095	(4,762)	4,192	3,304	(6,241)	8,724	7,667	(6,047)	19,382	6,828
Accrued payroll	650	1,354	255	637	56	154	88	298	82	91	1,131	2,534
Other post-employment benefits obligations	4,694	(15,549)	1,998	(9,436)	898	(2,409)	1,099	(2,945)	(1,320)	1,242	7,369	(29,097)
Pension obligations	(61,060)	10,562	(35,144)	2,970	(5,965)	1,972	(7,291)	2,411	(569)	855	(110,029)	18,770
Leases	380	(824)	—	—	—	—	—	—	—	—	380	(824)
Accrued vacation and sick leave	(187)	2,296	(757)	2,744	(16)	539	(20)	660	146	109	(834)	6,348
Accrued workers' compensation	145	(346)	964	531	108	(67)	132	(82)	—	—	1,349	36
Due to other City departments	—	(674)	—	—	—	(240)	11	(231)	—	(1,592)	11	(2,737)
Wholesale balancing account	18,286	(3,993)	—	—	—	—	—	—	—	—	18,286	(3,993)
Damage claims liability	(654)	25,956	(4,668)	822	102	(33)	(85)	(1,114)	26	(100)	(5,279)	25,531
Unearned revenues, refunds, and other liabilities	264	703	792	102	(4)	(489)	734	(1,640)	492	9,180	2,278	7,856
Pollution remediation obligations	—	(306)	260	—	—	—	—	—	—	—	260	(306)
Total adjustments	112,759	180,715	41,955	72,931	5,856	8,614	23,104	17,488	(33,808)	12,033	149,866	291,781
Net cash provided by (used in) operating activities	$ 284,090	314,369	153,666	108,423	2,865	5,185	39,999	8,231	(38,033)	7,020	442,587	443,228
Noncash transactions:												
Accrued capital asset costs	$ 25,353	27,263	89,905	89,982	6,324	9,057	19,059	15,393	—	—	140,641	141,695
Interfund payables	—	—	629	739	—	—	—	—	—	—	629	739
Interfund receivables	—	—	—	—	—	—	629	739	—	—	629	739
Unrealized loss/(gain) on investments	13,838	(392)	8,379	(228)	3,192	(88)	5,148	(149)	1,653	(74)	32,210	(931)
Capital contributions	—	4,180	—	—	—	—	—	—	—	—	—	4,180

^Restated due to the implementation of GASB Statement No. 87, *Leases*.
See accompanying notes to basic financial statements.

(1) Description of Reporting Entity

The San Francisco Public Utilities Commission (SFPUC or the Commission), established in 1932, is responsible for providing operational oversight of the public utility enterprises of the City, which include the Water, Wastewater, Hetchy Water and Power and CleanPowerSF. 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 and County of San Francisco Charter Section 4.112 amendment approved by the voters in the June 3, 2008 election, terminated the terms of all five existing members of the Commission, changed the process for appointing new members, and set qualifications for all members. Under the amended Charter, the Mayor continues to nominate candidates to the Commission, but nominees do not take office until the Board of Supervisors votes to approve their appointments by a majority (at least six members). The amended Charter provides for staggered four year terms for the Commission members and requires them to meet the following qualifications:

- Seat 1 must have experience in environmental policy and an understanding of environmental justice issues.
- Seat 2 must have experience in ratepayer or consumer advocacy.
- Seat 3 must have experience in project finance.
- Seat 4 must have expertise in water systems, power systems, or public utility management.
- Seat 5 is an at-large member.

The SFPUC is a department of the City, and as such, the financial operations of the Water Enterprise, the Wastewater Enterprise, and Hetchy Water and Hetchy Power and CleanPowerSF (Hetch Hetchy) are included in the Annual Comprehensive Financial Report of the City as enterprise funds. These financial statements are intended to present only the financial position, and the changes in financial position and cash flows of only the portion of the City that is attributable to the transactions of the enterprises. They do not purport to, and do not, present fairly the financial position of the City as of June 30, 2022 and 2021, 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).

Water Enterprise

The San Francisco Water Enterprise was established in 1930 under the provisions of the Charter of the City and County of San Francisco (the City). The Water 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 Water Enterprise. The Water 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 2022, the Water Enterprise sold approximately 66,005 million gallons, i.e., about 181 million gallons per day of water, to approximately 2.7 million people within San Francisco and certain suburban areas.

Wastewater Enterprise

The San Francisco Wastewater Enterprise, formerly known as the San Francisco Clean Water Program (the Program), was established in 1977 following the transfer of all sewage system related assets and liabilities of the City to the Program.

In 1976, the electorate of the City approved a proposition authorizing the City to issue $240,000 in revenue bonds pursuant to the Revenue Bond Law of 1941 of the State of California for the purpose of acquiring, constructing, improving, and financing improvements to the City's municipal sewage treatment and disposal system. Since then, the City's Board of Supervisors has adopted resolutions (Wastewater Resolutions) providing for the issuance of various sewer revenue and refunding bond series. The Wastewater Resolutions require the City to keep separate books of records and accounts of the Wastewater Enterprise.

Hetch Hetchy

San Francisco Hetch Hetchy Water and Power (Hetch Hetchy) was established as a result of the Raker Act of 1913, which granted water and power resources rights-of-way on the Tuolumne River in Yosemite National Park and Stanislaus National Forest to the City and County of San Francisco (the City). CleanPowerSF, launched in May 2016, provides green electricity from renewable sources to residential and commercial customers in San Francisco and was reported as part of Hetch Hetchy starting fiscal year 2016. Hetch Hetchy is a stand-alone enterprise comprised of three funds, Hetchy Power (aka the Power Enterprise), CleanPowerSF and Hetchy Water, the portion of the Water Enterprise's operations, specifically the upcountry water supply and transmission service. Hetch Hetchy accounts for the activities of Hetch Hetchy Water and Power and is engaged in the collection and conveyance of approximately 85% of the regional system's water supply and in the generation and transmission of electricity from that resource, as well as the City Power services including energy efficiency and renewable.

Approximately 69% of the electricity generated by Hetchy Power is used to provide electric service to the City's municipal customers (including the San Francisco Municipal Transportation Agency, Recreation and Parks Department, the Port of San Francisco, the San Francisco International Airport and its tenants, Zuckerberg San Francisco General Hospital and Trauma Center, streetlights, Moscone Convention Center, and the Water and Wastewater Enterprises). The majority of the remaining 31% balance of electricity is sold to CleanPowerSF and the wholesale electric market. As a result of the 1913 Raker Act, energy produced above the City's municipal load is sold first to the Districts to cover their agricultural pumping and municipal load needs and any remaining energy is either sold to other municipalities and/or government agencies (not for resale) or sold into the CAISO. Hetch Hetchy operation is an integrated system of reservoirs, hydroelectric power plants, aqueducts, pipelines, and transmission lines.

Hetch Hetchy also purchases wholesale electric power from various energy providers that are used in conjunction with owned hydro resources to meet the power requirements of its customers. Operations and business decisions can be greatly influenced by market conditions, state and federal power matters before the California Public Utilities Commission (CPUC), the CAISO, and the Federal Energy Regulatory Commission (FERC). Therefore, Hetch Hetchy serves as the City's representative at CPUC, CAISO, and FERC forums and continues to monitor regulatory proceedings.

(2) Significant Accounting Policies

(a) Basis of Accounting and Measurement Focus – Fund Financial Statements

The accounts of Water, Wastewater, Hetchy Water, Hetchy Power and CleanPowerSF are organized on the basis of a proprietary fund type and are included as enterprise funds of the City. The activities are accounted for with a separate set of self balancing accounts that comprise the funds' 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 Water, Wastewater, Hetchy Water, Hetchy Power and CleanPowerSF 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 statements of net position; revenues are recognized when earned, and expenses are recognized when liabilities are incurred. Water and Wastewater Enterprises' operating revenues are defined as charges to customers, rental income, capacity fees and other revenues while Hetchy Water, Hetchy Power and CleanPowerSF's operating revenues are defined as charges to customers and rental incomes. Operating expenses include the costs of delivering services, administrative expenses, and depreciation and amortization on capital assets. Revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

The SFPUC applies all applicable Governmental Accounting Standards Board (GASB) pronouncements.

(b) Cash and Cash Equivalents

The SFPUC considers its pooled deposits and investments held with the City Treasury to be demand deposits and, therefore, cash and cash equivalents for financial reporting. The City Treasury also holds non-pooled cash and investments for the SFPUC. Non-pooled restricted deposits and restricted deposits and investments held outside the City Treasury with original maturities of three months or less are also considered to be cash equivalents.

(c) Investments

Money market funds are carried at cost, which approximates fair value. All other investments are stated at fair value based upon quoted market prices. Changes in fair value are recognized as investment gains or losses and are recorded as a component of non-operating revenues.

(d) Inventory

Inventory consists primarily of construction materials and maintenance supplies and is valued at average cost. Inventory is expensed as it is consumed.

(e) Capital Assets

Capital assets are defined as assets with an initial individual cost of more than $5 and an estimated useful life in excess of one year. Capital assets with an original acquisition date prior to July 1, 1977 are recorded in the financial statements at estimated cost, as determined by an independent professional appraisal, or at cost, if known. All subsequent acquisitions have been recorded at cost. All donated capital assets are valued at estimated fair value at the time of donation. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the related assets, which range from 1 to 100 years for equipment and 1 to 200 years for 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 SFPUC is required to capitalize intangible assets with a useful life extending beyond one reporting period. The SFPUC 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 expenses in the year in which the decision is made to discontinue such projects.

(h) Capitalization of Interest

A portion of the interest cost incurred on capital projects is capitalized on assets that require a period of time for construction or to otherwise prepare them for their intended use. Such amounts are amortized over the useful lives of the assets (see Note 4). Per the implementation of GASB Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period*, no interest was capitalized to capital assets in fiscal year 2022.

(i) Bond Discount, Premium, and Issuance Costs

Bond issuance costs related to prepaid insurance costs are capitalized and amortized using the effective interest method. Other bond issuance costs are expensed when incurred. Original issue bond discount or premium are offset against the related debt and are also amortized using the effective interest method.

(j) Accrued Vacation and Sick Leave

Accrued vacation pay, which may be accumulated up to ten 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 SFPUC 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 15(b)).

(l) General Liability

The SFPUC 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 15(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 SFPUC did not have arbitrage rebate liability as of June 30, 2022 and 2021.

(Dollars in thousands, unless otherwise stated)

(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 SFPUC is exempt from both federal income taxes and California State franchise taxes.

(p) Revenue Recognition

Charges for water, wastewater, and power services are based on usage. Effective July 1, 2013, the majority of residential and non-residential customers are billed on a monthly basis except for building and contractor customers which are billed on a bi-monthly basis by the Water and Wastewater Enterprises. Hetchy Water, Hetchy Power and CleanPowerSF revenues are based on consumption and billing rates. Generally, customers are billed monthly. 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, 2022 and 2021 are as follow:

Fiscal Years Ending June 30		Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
2022	$	29,774	15,704	—	3,806	21,878	71,162
2021		30,277	14,175	—	13,823	12,600	70,875

(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) Eliminations

Eliminations for internal activities between Wastewater, Hetchy Power and CleanPowerSF are made in the Statements of Net Position. There were activities requiring eliminations during the fiscal years ended June 30, 2022 and June 30, 2021 between Wastewater and Hetchy Power.

(s) Accounting and Financial Reporting for Pollution Remediation Obligations

According to GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations*, a government would have to estimate its expected outlays for pollution remediation if it knows a site is polluted, and any of the following recognition triggers occur:

- Pollution poses an imminent danger to the public or environment and a government has little or no discretion to avoid fixing the problem;
- A government has violated a pollution prevention-related permit or license;
- A regulator has identified (or evidence indicates it will identify) a government as responsible (or potentially responsible) for cleaning up pollution, or for paying all or some of the cost of the cleanup;

- A government is named (or evidence indicates that it will be named) in a lawsuit to compel it to address the pollution; or
  A government begins or legally obligates itself to begin cleanup or post-cleanup activities limited to amounts the government is legally required to complete).

As a part of ongoing operations, situations may occur requiring the removal of pollution or other hazardous material. These situations typically arise in the process of acquiring an asset, preparing an asset for its intended use, or during the design phase of projects under review by the project managers. Other times, pollution may arise during the implementation and construction of a major or minor capital project. Examples of pollution may include, but are not limited to: asbestos or lead paint removal; leaking of sewage in underground pipes or neighboring areas, chemical spills, removal and disposal of known toxic waste, harmful biological and chemical pollution of water, or contamination of surrounding soils by underground storage tanks (see Note 16(d)).

(t) Leases

Leases are defined as a contract that conveys control of the right to use another entity's underlying asset for a specified period. The SFPUC is a lessee and a lessor for various noncancellable leases of land, building, equipment, vehicles, easements, and etc.

Short-term Leases - For leases with a maximum possible term of 12 months or less at commencement, the Enterprise recognizes lease revenue if the Enterprise is the lessor of the lease or lease expense if the Enterprise is the lessee of the lease, based on the provisions of the lease contract. Liabilities are only recognized if payments are received in advance, and receivables are only recognized if payments are received subsequent to the reporting period.

Leases other than Short-term - For all other leases (i.e., those that are not short-term), SFPUC recognizes a lease liability and intangible right-to-use lease asset as lessee leases, or lease receivable and deferred inflow of resources as lessor leases.

Measurement of Lease Amounts (Lessee) - The SFPUC's lease liability is recorded at the present value of future minimum lease payments as of the date of inception. Subsequently, the lease liability is reduced by the principal portion of lease payments made. The lease asset is initially measured as the initial amount of the lease liability, less lease payments made at or before the lease commencement date, plus any initial direct costs ancillary to placing the underlying asset into service, less any lease incentives received at or before the lease commencement date. Subsequently, the lease asset is amortized into depreciation and amortization expense on a straight-line basis over the shorter of the lease term or the useful life of the underlying asset. If SFPUC is reasonably certain of exercising a purchase option contained in a lease, the lease asset will be amortized over the useful life of the underlying asset.

Measurement of Lease Amounts (Lessor) - The SFPUC's lease receivable is measured at the present value of payments expected to be received during the lease term, reduced by any provision of estimated uncollectible amounts. Subsequently, the lease receivable is reduced by the principal portion of lease payments collected. The deferred inflow or resources is initially measured as the initial amount of the lease receivable, less any lease incentives paid to, or on behalf of, the lessee at or before the commencement of the lease term, plus lease payments received from the lease at or before the commencement of the lease term that related to future periods. Subsequently, the deferred inflow of resources as lease revenue on a straight-line basis over the lease term.

Key Estimates and Judgements - Key estimates and judgements include how the SFPUC determines (a) the discount rate it uses to calculate the present value of the expected lease payments, (b) lease terms, (c) lease payments, and (d) materiality threshold for equipment.

- The SFPUC generally uses its estimated incremental borrowing rate as the discount rate for leases unless the rate implicit in the lease. The City's incremental borrowing rate (IBR) is established using the average of Municipal Market Data (MMD) AAA benchmark interest rate index by maturity date (year 1 to 30+), plus the average credit spread based on City's Aa/AA, COP, Tax-exempt to generate the yield curve and discount rate table. The City's incremental borrowing rate for leases is based on the rate of interest it would need to pay if it issued general obligation bonds to borrow an amount equal to the lease payments under similar terms at the commencement or remeasurement date.
- The lease term includes the noncancellable period of the lease, plus any additional periods covered by either lessee or lessor unilateral option to (1) extend for which it is reasonably certain to be exercised, or (2) terminate for which it is reasonably certain not to be exercised. Periods in which both the lessee and lessor have an option to terminate (or if both parties have to agree to extend) are excluded from the lease term.
- Payments are evaluated by the SFPUC to determine if they should be included in the measurement of the lease receivables or lease liabilities, including those payments that require a determination of whether they are reasonably certain of being made, such as residual value guarantees, purchase options, payments for termination penalties, and other payments.
- Equipment and other leases have a capitalization threshold of $100. 70% below market rent and/or ground leases are determined to be below market rent (BMR), excluded from lease capitalization

Remeasurement of Lease - The SFPUC monitors changes in circumstances that may require remeasurement of a lease. When certain changes occur that are expected to significantly affect the amount of the lease receivable or lease liability, the receivable or liability is remeasured and a corresponding adjustment is made to the deferred inflow of resources or lease asset, respectively.

Presentation in Statements of Net Position - Lease assets are reported with non-current assets, lease liabilities are reported with current and long-term liabilities in the Statements of Net Position.

(u) Other Post-employment Benefits (OPEB)

As prescribed under GASB Statement No. 75, *Accounting and Financial Reporting for Post-employment 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 13(b)).

(v) New Accounting Standards Adopted in Fiscal Year 2022

1) In June 2017, the GASB issued Statement No. 87, *Leases*. GASB Statement No. 87 establishes a single model for lease accounting and requires reporting of certain lease liabilities that currently are not reported. The new standard is effective for periods beginning after June 15, 2021. The SFPUC adopted the provisions of Statement No. 87 in fiscal year 2022 (see Note 10).

(Dollars in thousands, unless otherwise stated)

As a result of adoption, the cumulative effect of applying this Statement is recorded as beginning balances for the following accounts as of July 1, 2020:

	Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
Beginning Balance FY2021:						
Lease Receivable - Current	$ 7,293	—	—	—	—	7,293
Lease Receivable - Non-Current	43,419	—	—	—	—	43,419
Interest Receivable - GASB 87	—	—	—	—	—	—
Deferred Inflows - Leases	(50,712)	—	—	—	—	(50,712)
Right-to-use Assets	5,399	8,247	93	113	920	14,772
Accumulated Amortization	—	—	—	—	—	—
Accrued Interest Payable - Current	—	—	—	—	—	—
Lease Liability - Current	(1,467)	(2,487)	(29)	(35)	(371)	(4,389)
Lease Liability - Long Term	(3,932)	(5,760)	(64)	(78)	(549)	(10,383)
Changes to Net Position:	—	—	—	—	—	—
Activities FY2021:						
Lease Receivable - Current	(4,004)	—	—	—	—	(4,004)
Lease Receivable - Non-Current	2,402	—	—	—	—	2,402
Interest Receivable - GASB 87	859	—	—	—	—	859
Deferred Inflows - Leases	2,602	—	—	—	—	2,602
Right-to-use Assets	247	—	—	—	—	247
Accumulated Amortization	(1,409)	(2,325)	(19)	(23)	(345)	(4,121)
Accrued Interest Payable - Current	(5)	(5)	—	—	(1)	(11)
Lease Liability - Current	86	173	13	16	26	314
Lease Liability - Long Term	1,069	2,122	2	3	317	3,513
Changes to Net Position:	1,847	(35)	(4)	(4)	(3)	1,801
Ending Balance FY2021:						
Lease Receivable - Current	3,289	—	—	—	—	3,289
Lease Receivable - Non-Current	45,821	—	—	—	—	45,821
Interest Receivable - GASB 87	859	—	—	—	—	859
Deferred Inflows - Leases	(48,110)	—	—	—	—	(48,110)
Right-to-use Assets	5,646	8,247	93	113	920	15,019
Accumulated Amortization	(1,409)	(2,325)	(19)	(23)	(345)	(4,121)
Accrued Interest Payable	(5)	(5)	—	—	(1)	(11)
Lease Liability - Current	(1,381)	(2,314)	(16)	(19)	(345)	(4,075)
Lease Liability - Long Term	(2,863)	(3,638)	(62)	(75)	(232)	(6,870)
Revenues	(1,859)	—	—	—	—	(1,859)
Expenses	12	35	4	4	3	58
Changes in Net Position FY2021:	$ (1,847)	35	4	4	3	(1,801)

2) In June 2018, the GASB issued Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*. GASB Statement No. 89 establishes accounting requirements for interest cost incurred before the end of construction period. The new standard is effective for periods beginning after December 15, 2020. The SFPUC adopted the provisions of Statement No. 89 in fiscal year 2022.

3) In January 2020, the GASB issued Statement No. 92, *Omnibus 2020*. GASB Statement No. 92 addresses practice issues that have been identified during implementation and application of certain GASB Statements. The new standard is effective for periods beginning after June 15, 2021. The SFPUC adopted the provisions of Statement No. 92 in fiscal year 2022, which did not have a significant effect on its financial statements.

4) In March 2020, the GASB issued Statement No. 93, *Replacement of Interbank Offered Rates (IBOR)*. The objective of this Statement is to address those and other accounting and financial reporting implications that result from the replacement of an IBOR. The new standard is effective for periods beginning after June 15, 2021. The SFPUC adopted the provisions of Statement No. 93 in fiscal year 2022, which did not have a significant effect on its financial statements.

(w) GASB Statements Implemented in Fiscal Year 2021

1) In January 2017, the GASB issued Statement No. 84, *Fiduciary Activities*. GASB Statement No. 84 establishes criteria for state and local governments to identify fiduciary activities and how those activities should be reported. The new standard is effective for periods beginning after December 15, 2019. The SFPUC adopted the provisions of this Statement in fiscal year 2021, which did not have a significant effect on its financial statements.

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 SFPUC adopted the provisions of this Statement in fiscal year 2021, which did not have a significant effect on its financial statements.

3) 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 the criteria used in determining whether a fiduciary component unit exists and clarifies financial reporting for Internal Revenue Code section 457 deferred compensation plans. The new standard is effective for periods beginning after June 15, 2021. The SFPUC adopted early the provision of Statement No. 97 in fiscal year 2021, which did not have a significant effect on its financial statements.

4) In October 2021, the GASB issued Statement No. 98, *The Annual Comprehensive Financial Report*. GASB Statement No. 98 updates existing accounting standards by changing the name of the Comprehensive Annual Financial Report to the Annual Comprehensive Financial Report. The new standard is effective for periods ending after December 15, 2021. The SFPUC adopted the provisions of this Statement in fiscal year 2021, which did not have a significant effect on its financial statements.

(x) Future Implementation of New Accounting Standards

1) In May 2019, the GASB issued Statement No. 91, *Conduit Debt Obligations*. GASB Statement No. 91 enhances the compatibility and consistency of conduit debt obligation reporting and reporting of related transactions by State and local government issuers. The new standard is effective for periods beginning after December 15, 2021. The SFPUC will implement the provisions of Statement No. 91 in fiscal year 2023.

2) In March 2020, the GASB Issued Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*. The primary objective of this Statement is to improve financial reporting by addressing issues related to public-private and public-public partnership arrangements (PPPs). The new standard is effective for periods beginning after June 15, 2022. The SFPUC will implement the provisions of Statement No. 94 in fiscal year 2023.

3) In May 2020, the GASB issued Statement No. 96, *Subscription-Based Information Technology Arrangements*. This Statement provides guidance on the accounting and financial reporting for

subscription-based information technology arrangements (SBITAs) by a government. The new standard is effective for periods beginning after June 15, 2022. The SFPUC will implement the provisions of Statement No. 96 in fiscal year 2023.

4) In April 2022, the GASB issued Statement No. 99, *Omnibus 2022*. This Statement enhances comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing (1) practice issues that have been identified during implementation and application of certain GASB Statements and (2) accounting and financial reporting for financial guarantees. The new standard is effective for periods beginning after June 15, 2023. The SFPUC will implement the provisions of Statement No. 99 in fiscal year 2024.

5) In June 2022, the GASB issued Statement No. 100, *Accounting Changes and Error Corrections*. This Statement enhances accounting and financial reporting requirements for accounting changes and error corrections to provide more understandable, reliable, relevant, consistent, and comparable information for making decisions or assessing accountability. The new standard is effective for periods beginning after June 15, 2023. The SFPUC will implement the provisions of Statement No. 100 in fiscal year 2024.

6) In June 2022, the GASB issued Statement No. 101, *Compensated Absences*. This Statement is to better meet the information needs of financial statement users by updating the recognition and measurement guidance for compensated absences.. The new standard is effective for periods beginning after December 15, 2023. The SFPUC will implement the provisions of Statement No. 101 in fiscal year 2025.

(y) Reclassifications

The SFPUC has reclassified certain amounts relating to the prior period to conform to its current period presentation. These reclassifications had no effect on previously reported changes in net position.

(3) Cash, Cash Equivalents, and Investments

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 SFPUC's average daily cash balances. The primary objectives of SFPUC's investment policy are consistent with the City's policy.

The SFPUC 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.

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.

(Dollars in thousands, unless otherwise stated)

Department-wide Business Type Activities

Department-wide restricted and unrestricted cash and investments outside City Treasury as of June 30, 2022 and 2021 consist of the following:

SFPUC's Cash and Investments outside City Treasury

Investments	Credit Ratings (S&P/Moody's)	June 30, 2022 Maturities	Fair Value	Investments exempt from fair value	Fair Value Measurements Using: Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Unobservable Inputs (Level 3)
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	$ 116,187	116,187	—	—	—
Money Market Funds	A-1+/P-1	< 90 days	92	92	—	—	—
Cash and Cash Equivalents	N/A		13,088	13,088	—	—	—
Total Restricted Cash and Investments outside City Treasury			$ 129,367	129,367	—	—	—
Cash and Cash Equivalents	N/A		732	732	—	—	—
Total Cash and Investments outside City Treasury			$ 732	732	—	—	—

SFPUC's Cash and Investments outside City Treasury

Investments	Credit Ratings (S&P/Moody's)	June 30, 2021 Maturities	Fair Value	Investments exempt from fair value	Fair Value Measurements Using: Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Unobservable Inputs (Level 3)
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	$ 93,956	93,956	—	—	—
Money Market Funds	A-1+/P-1	< 90 days	81	81	—	—	—
Cash and Cash Equivalents	N/A		42,855	42,855	—	—	—
Total Restricted Cash and Investments outside City Treasury			$ 136,892	136,892	—	—	—
Cash and Cash Equivalents	N/A		1,279	1,279	—	—	—
Total Cash and Investments outside City Treasury			$ 1,279	1,279	—	—	—

Department-wide cash, cash equivalents, and investments are shown on the accompanying statements of net position as follows:

	2022	2021
Current assets:		
Cash and investments with City Treasury	$ 1,086,048	1,136,329
Cash and investments outside City Treasury	732	1,279
Restricted cash and investments outside City Treasury	31,878	57,616
Non-current assets:		
Restricted cash and investments with City Treasury	9,299	12,231
Restricted cash and investments outside City Treasury	97,489	79,276
Total cash, cash equivalents, and investments	$ 1,225,446	1,286,731

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

Fiscal Years ended June 30	Investment maturities (in months): Under 1	1 to less than 6	6 to less than 12	12 to 60
2022	20.2%	14.0%	14.9%	50.9%
2021	14.5%	27.6%	29.7%	28.2%

Water Enterprise

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, 2022 and 2021 were $75,957 and $122,853, respectively. The Water 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.

(Dollars in thousands, unless otherwise stated)

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 funds invested in as of June 30, 2022 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, 2021 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 following tables present the Water Enterprise's restricted and unrestricted cash and investments outside City Treasury as of June 30, 2022 and 2021:

Water's Cash and Investments outside City Treasury

Investments	Credit Ratings (S&P/Moody's)	June 30, 2022 Maturities	Fair Value	Investments exempt from fair value	Fair Value Measurements Using: Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Unobservable Inputs (Level 3)
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	$ 62,854	62,854	—	—	—
Money Market Funds	A-1+/P-1	< 90 days	48	48	—	—	—
Cash and Cash Equivalents	N/A		13,055	13,055	—	—	—
Total Restricted Cash and Investments outside City Treasury			$ 75,957	75,957	—	—	—
Cash and Cash Equivalents	N/A		318	318	—	—	—
Total Cash and Investments outside City Treasury			$ 318	318	—	—	—

Water's Cash and Investments outside City Treasury

Investments	Credit Ratings (S&P/Moody's)	June 30, 2021 Maturities	Fair Value	Investments exempt from fair value	Fair Value Measurements Using: Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Unobservable Inputs (Level 3)
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	$ 79,973	79,973	—	—	—
Money Market Funds	A-1+/P-1	< 90 days	55	55	—	—	—
Cash and Cash Equivalents	N/A		42,825	42,825	—	—	—
Total Restricted Cash and Investments outside City Treasury			$ 122,853	122,853	—	—	—
Cash and Cash Equivalents	N/A		301	301	—	—	—
Total Cash and Investments outside City Treasury			$ 301	301	—	—	—

The restricted cash and investments outside City Treasury as of June 30, 2022 and 2021 included an unrealized gain due to changes in fair value on commercial paper of $0.

Additional cash outside of the investment pool included revolving fund and cash in transit. The revolving fund has a balance of $28 as of June 30, 2022 and 2021, 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 $290 and $273 as of June 30, 2022 and 2021, respectively.

(Dollars in thousands, unless otherwise stated)

The Water Enterprise's cash, cash equivalents, and investments are shown on the accompanying Statements of Net Position as follows:

		2022	2021
Current assets:			
Cash and investments with City Treasury	$	460,954	483,827
Cash and investments outside City Treasury		318	301
Restricted cash and investments outside City Treasury		11,063	57,165
Non-current assets:			
Restricted cash and investments with City Treasury		9,299	—
Restricted cash and investments outside City Treasury		64,894	65,688
Total cash, cash equivalents, and investments	$	546,528	606,981

Wastewater Enterprise

The restricted cash for bond reserves is held by an independent trustee outside the City investment pool. The balances as of June 30, 2022 and 2021 were $39,358 and $10,196, respectively. Funds held by the trustee established under the 2003 Indenture are invested in "Permitted Investments" as defined in the Indenture. "Permitted Investments" include money market funds registered under the Federal Investment Company Act of 1940 and whose shares are registered under the Federal Securities Act of 1933 and having a rating by S&P of "AAAm-G," "AAAm," or "AAm" and a rating by Moody's of "Aaa," "Aa1," or "Aa2."

The following tables present the Wastewater Enterprise's restricted and unrestricted cash and investments outside City Treasury as of June 30, 2022 and 2021:

Wastewater's Cash and Investments outside City Treasury

Investments	Credit Ratings (S&P/Moody's)	June 30, 2022 Maturities		June 30, 2022 Fair Value	Investments exempt from fair value	Fair Value Measurements Using: Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Unobservable Inputs (Level 3)
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	$	39,296	39,296	—	—	—
Money Market Funds	A-1+/P-1	< 90 days		44	44	—	—	—
Cash and Cash Equivalents	N/A			18	18	—	—	—
Total Restricted Cash and Investments outside City Treasury			$	39,358	39,358	—	—	—
Cash and Cash Equivalents	N/A			397	397	—	—	—
Total Cash and Investments outside City Treasury			$	397	397	—	—	—

Wastewater's Cash and Investments outside City Treasury

Investments	Credit Ratings (S&P/Moody's)	June 30, 2021 Maturities		June 30, 2021 Fair Value	Investments exempt from fair value	Fair Value Measurements Using: Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Unobservable Inputs (Level 3)
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	$	10,159	10,159	—	—	—
Money Market Funds	A-1+/P-1	< 90 days		26	26	—	—	—
Cash and Cash Equivalents	N/A			11	11	—	—	—
Total Restricted Cash and Investments outside City Treasury			$	10,196	10,196	—	—	—
Cash and Cash Equivalents	N/A			366	366	—	—	—
Total Cash and Investments outside City Treasury			$	366	366	—	—	—

The restricted cash and investments outside City Treasury as of June 30, 2022 and 2021 included a $0 unrealized gain due to changes in fair values on Commercial Paper.

(Dollars in thousands, unless otherwise stated)

The Wastewater Enterprise's cash, cash equivalents, and investments are shown on the accompanying Statements of Net Position as follows:

		2022	2021
Current assets:			
Cash and investments with City Treasury	$	285,029	281,572
Cash and investments outside City Treasury		397	366
Restricted cash and investments outside City Treasury		15,587	298
Non-current assets:			
Restricted cash and investments outside City Treasury		23,771	9,898
Total cash, cash equivalents, and investments	$	324,784	292,134

Hetch Hetchy (Hetchy Water, Hetchy Power and CleanPowerSF)

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 balances as of June 30, 2022 and 2021 were $14,052 and $3,843, respectively. Hetch Hetchy 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. The balance as of June 30, 2022 included 2021 Series AB bond proceeds of $10,346, 2015 Series A bond proceeds of $2,194, certificates of participation proceeds of $981, 2015 Series B bond proceeds of $516, $17 held at a commercial bank in a non-interest-bearing checking account that is covered by depository insurance, and commercial paper of $15. The balance as of June 30, 2021 included 2015 Series A bond proceeds of $2,193, certificates of participation proceeds of $1,115, $612 held at a commercial bank in a non-interest-bearing checking account that is covered by depository insurance, 2015 Series B bond proceeds of $516, and commercial paper of $19.

Hetch Hetchy did not have any unrealized gain and loss in the restricted cash and investments outside City Treasury as of June 30, 2022 and 2021.

For fiscal year 2022, proceeds from 2021 Series AB and 2015 Series AB bonds held as restricted cash and investments outside City Treasury in the amount of $13,056 were invested in U.S. Treasury Money Market with maturity date less than 90 days. For fiscal year 2021, proceeds from 2015 Series A and B bonds held as restricted cash and investments outside City Treasury in the amount of $2,709 were invested in U.S. Treasury Money Market with maturity date less than 90 days. The credit ratings of the U.S. Treasury Money Market as of June 30, 2022 and 2021 were "AAAm" by S&P and "Aaa-mf" by Moody's.

The following tables present the Hetch Hetchy restricted and unrestricted cash and investments outside City Treasury as of June 30, 2022 and 2021:

Hetchy Water and Hetchy Power's Cash and Investments outside City Treasury

Investments	Credit Ratings (S&P/Moody's)	June 30, 2022 Maturities		Fair Value	Investments exempt from fair value	Fair Value Measurements Using: Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Unobservable Inputs (Level 3)
Hetchy Water								
Cash and Cash Equivalents	N/A		$	1	1	—	—	—
Total Cash and Investments outside City Treasury			$	1	1	—	—	—
Hetchy Power								
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	$	14,037	14,037	—	—	—
Cash and Cash Equivalents	N/A			15	15	—	—	—
Total Restricted Cash and Investments outside City Treasury			$	14,052	14,052	—	—	—
Cash and Cash Equivalents	N/A			16	16	—	—	—
Total Cash and Investments outside City Treasury			$	16	16	—	—	—

(Dollars in thousands, unless otherwise stated)

Hetchy Water and Hetchy Power's Cash and Investments outside City Treasury

Investments	Credit Ratings (S&P/Moody's)	June 30, 2021 Maturities	Fair Value	Investments exempt from fair value	Fair Value Measurements Using: Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Unobservable Inputs (Level 3)
Hetchy Water							
Cash and Cash Equivalents	N/A		$ 1	1	—	—	—
Total Cash and Investments outside City Treasury			$ 1	1	—	—	—
Hetchy Power							
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	$ 3,824	3,824	—	—	—
Cash and Cash Equivalents	N/A		19	19	—	—	—
Total Restricted Cash and Investments outside City Treasury			$ 3,843	3,843	—	—	—
Cash and Cash Equivalents	N/A		611	611	—	—	—
Total Cash and Investments outside City Treasury			$ 611	611	—	—	—

Hetch Water and Hetchy Power and CleanPowerSF cash, cash equivalents, and investments as of June 30, 2022 and 2021 are shown on the accompanying Statements of Net Position as follows:

	Hetchy Water	Hetchy Power	CleanPowerSF	Total 2022
Current assets:				
Cash and investments with City Treasury	$ 94,190	189,641	56,234	340,065
Cash and investments outside City Treasury	1	16	—	17
Restricted cash and investments outside City Treasury	—	5,228	—	5,228
Non-current assets:				
Restricted cash and investments outside City Treasury	—	8,824	—	8,824
Total cash, cash equivalents, and investments	$ 94,191	203,709	56,234	354,134

	Hetchy Water	Hetchy Power	CleanPowerSF	Total 2021
Current assets:				
Cash and investments with City Treasury	$ 89,373	190,719	90,838	370,930
Cash and investments outside City Treasury	1	611	—	612
Restricted cash and investments outside City Treasury	—	153	—	153
Non-current assets:				
Restricted cash and investments with City Treasury	6,990	5,241	—	12,231
Restricted cash and investments outside City Treasury	—	3,690	—	3,690
Total cash, cash equivalents, and investments	$ 96,364	200,414	90,838	387,616

(Dollars in thousands, unless otherwise stated)

(4) Capital Assets

Department-wide Business Type Activities

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, transmission and distributions systems, tunnels, and bridges.

Department-wide capital assets as of June 30, 2022 and 2021 consist of the following:

	2021	Increases	Decreases	2022
Capital assets not being depreciated and amortized:				
Land and rights-of-way	$ 154,001	9,193	—	163,194
Intangible assets	5,162	—	—	5,162
Construction work in progress	2,079,754	830,383	(424,936) *	2,485,201
Total capital assets not being depreciated and amortized	2,238,917	839,576	(424,936)	2,653,557
Capital assets being depreciated and amortized:				
Facilities and improvements	10,796,179	403,777	—	11,199,956
Intangible assets	78,463	1,942	—	80,405
Machinery and equipment	572,846	11,832	(690)	583,988
Total capital assets being depreciated and amortized	11,447,488	417,551 *	(690)	11,864,349
Less accumulated depreciation and amortization for:				
Facilities and improvements	(3,372,070)	(222,366)	—	(3,594,436)
Intangible assets	(48,523)	(2,313)	—	(50,836)
Machinery and equipment	(401,626)	(21,010)	690	(421,946)
Total accumulated depreciation and amortization	(3,822,219)	(245,689)	690	(4,067,218)
Total capital assets being depreciated and amortized, net	7,625,269	171,862	—	7,797,131
Total capital assets, net	$ 9,864,186	1,011,438	(424,936)	10,450,688

*Decrease in construction work in progress is greater than increase in capital assets being depreciated is mainly explained by $9,193 transferred to land for Water, $6,239 in capital project writeoffs for Water, Wastewater Hetchy Water and Hetchy Power, offset by $8,047 mainly related to direct additions to facilities and improvements, intangible assets and machinery and equipment.

	2020	Increases	Decreases	2021
Capital assets not being depreciated and amortized:				
Land and rights-of-way	$ 155,089	—	(1,088)	154,001
Intangible assets	5,162	—	—	5,162
Construction work in progress	1,592,097	910,133	(422,476) *	2,079,754
Total capital assets not being depreciated and amortized	1,752,348	910,133	(423,564)	2,238,917
Capital assets being depreciated and amortized:				
Facilities and improvements	10,400,544	395,635	—	10,796,179
Intangible assets	73,827	4,636	—	78,463
Machinery and equipment	557,168	15,989	(311)	572,846
Total capital assets being depreciated and amortized	11,031,539	416,260 *	(311)	11,447,488
Less accumulated depreciation and amortization for:				
Facilities and improvements	(3,157,846)	(214,224)	—	(3,372,070)
Intangible assets	(46,461)	(2,062)	—	(48,523)
Machinery and equipment	(380,536)	(21,401)	311	(401,626)
Total accumulated depreciation and amortization	(3,584,843)	(237,687)	311	(3,822,219)
Total capital assets being depreciated and amortized, net	7,446,696	178,573	—	7,625,269
Total capital assets, net	$ 9,199,044	1,088,706	(423,564)	9,864,186

*Decrease in construction work in progress is greater than increase in capital assets being depreciated is mainly explained by $16,397 in capital project writeoffs for Water, Wastewater Hetchy Water and Hetchy Power offset by $10,181 mainly related to direct additions to facilities and improvements, intangible assets and machinery and equipment.

(Dollars in thousands, unless otherwise stated)

Water Capital Assets – Water's capital assets as of June 30, 2022 and 2021 consist of the following:

	2021	Increases	Decreases	2022
Capital assets not being depreciated and amortized:				
Land	$ 104,248	9,193	—	113,441
Intangible assets	679	—	—	679
Construction work in progress	532,602	175,191	(263,539) *	444,254
Total capital assets not being depreciated and amortized	637,529	184,384	(263,539)	558,374
Capital assets being depreciated and amortized:				
Facilities and improvements	6,413,238	247,453	—	6,660,691
Intangible assets	23,772	1,370	—	25,142
Machinery and equipment	326,126	6,662	(315)	332,473
Total capital assets being depreciated and amortized	6,763,136	255,485	(315)	7,018,306
Less accumulated depreciation and amortization for:				
Facilities and improvements	(1,554,515)	(134,202)	—	(1,688,717)
Intangible assets	(21,688)	(981)	—	(22,669)
Machinery and equipment	(236,663)	(11,352)	315	(247,700)
Total accumulated depreciation and amortization	(1,812,866)	(146,535)	315	(1,959,086)
Total capital assets being depreciated and amortized, net	4,950,270	108,950	—	5,059,220
Total capital assets, net	$ 5,587,799	293,334	(263,539)	5,617,594

*Decrease in construction work in progress of $8,054 includes $4,592 in capital project write offs, mainly related to Stern Grove Emergency Restoration and Lake Merced Water Level Restoration projects and $9,193 transferred to land. The remaining difference of $5,731 is mainly due to direct additions to facilities and improvements, intangible assets and machinery and equipment.

	2020	Increases	Decreases	2021
Capital assets not being depreciated and amortized:				
Land	$ 105,336	—	(1,088)	104,248
Intangible assets	679	—	—	679
Construction work in progress	492,682	197,669	(157,749) *	532,602
Total capital assets not being depreciated and amortized	598,697	197,669	(158,837)	637,529
Capital assets being depreciated and amortized:				
Facilities and improvements	6,258,333	154,905	—	6,413,238
Intangible assets	23,497	275	—	23,772
Machinery and equipment	319,000	7,275	(149)	326,126
Total capital assets being depreciated and amortized	6,600,830	162,455	(149)	6,763,136
Less accumulated depreciation and amortization for:				
Facilities and improvements	(1,423,722)	(130,793)	—	(1,554,515)
Intangible assets	(20,087)	(1,601)	—	(21,688)
Machinery and equipment	(225,173)	(11,639)	149	(236,663)
Total accumulated depreciation and amortization	(1,668,982)	(144,033)	149	(1,812,866)
Total capital assets being depreciated and amortized, net	4,931,848	18,422	—	4,950,270
Total capital assets, net	$ 5,530,545	216,091	(158,837)	5,587,799

*Decrease in construction work in progress includes $3,810 in capital project write-offs, mainly related to Eastside Recycled Water and San Andreas Spillway projects. The remaining differences of $8,516 is due to direct additions to facilities and improvements, intangible assets and machinery and equipment.

(Dollars in thousands, unless otherwise stated)

Wastewater Capital Assets – Wastewater's capital assets as of June 30, 2022 and 2021 consist of the following:

	2021	Increases	Decreases	2022
Capital assets not being depreciated and amortized:				
Land and rights-of-way	$ 44,572	—	—	44,572
Intangible assets	3,046	—	—	3,046
Construction work in progress	1,340,644	514,679	(130,906) *	1,724,417
Total capital assets not being depreciated and amortized	1,388,262	514,679	(130,906)	1,772,035
Capital assets being depreciated and amortized:				
Facilities and improvements	3,599,978	129,342	—	3,729,320
Intangible assets	8,976	572	—	9,548
Machinery and equipment	102,397	1,165	(288)	103,274
Total capital assets being depreciated and amortized	3,711,351	131,079 *	(288)	3,842,142
Less accumulated depreciation and amortization for:				
Facilities and improvements	(1,412,109)	(69,879)	—	(1,481,988)
Intangible assets	(4,615)	(872)	—	(5,487)
Machinery and equipment	(76,039)	(4,500)	288	(80,251)
Total accumulated depreciation and amortization	(1,492,763)	(75,251)	288	(1,567,726)
Total capital assets being depreciated and amortized, net	2,218,588	55,828	—	2,274,416
Total capital assets, net	$ 3,606,850	570,507	(130,906)	4,046,451

*Decrease in construction work in progress is greater than increase in capital assets being depreciated is explained by $1,165 in direct additions to machinery and equipment offset by $992 in capital project write-offs, mainly related to Public Works various locations infrastructure improvement projects.

	2020	Increases	Decreases	2021
Capital assets not being depreciated and amortized:				
Land and rights-of-way	$ 44,572	—	—	44,572
Intangible assets	3,046	—	—	3,046
Construction work in progress	910,338	619,819	(189,513) *	1,340,644
Total capital assets not being depreciated and amortized	957,956	619,819	(189,513)	1,388,262
Capital assets being depreciated and amortized:				
Facilities and improvements	3,419,029	180,949	—	3,599,978
Intangible assets	4,615	4,361	—	8,976
Machinery and equipment	101,595	964	(162)	102,397
Total capital assets being depreciated and amortized	3,525,239	186,274 *	(162)	3,711,351
Less accumulated depreciation and amortization for:				
Facilities and improvements	(1,344,830)	(67,279)	—	(1,412,109)
Intangible assets	(4,615)	—	—	(4,615)
Machinery and equipment	(71,462)	(4,739)	162	(76,039)
Total accumulated depreciation and amortization	(1,420,907)	(72,018)	162	(1,492,763)
Total capital assets being depreciated and amortized, net	2,104,332	114,256	—	2,218,588
Total capital assets, net	$ 3,062,288	734,075	(189,513)	3,606,850

*Decrease in construction work in progress is greater than increase in capital assets being depreciated is explained by $4,203 in capital project write-offs, mainly related to the Watershed Storm Management Project, Operational Decision System Ph 2 Project, and the Seacliff Ave Sewer Replacement-627 Project offset by $964 direct additions to machinery and equipment.

(Dollars in thousands, unless otherwise stated)

Hetchy Water Capital Assets – Hetchy Water's capital assets as of June 30, 2022 and 2021 consist of the following:

	2021	Increases	Decreases	2022
Capital assets not being depreciated and amortized:				
Land and rights-of-way	$ 3,232	—	—	3,232
Intangible assets	6	—	—	6
Construction work in progress	35,333	29,654	(10,849) *	54,138
Total capital assets not being depreciated and amortized	38,571	29,654	(10,849)	57,376
Capital assets being depreciated and amortized:				
Facilities and improvements	295,968	10,148	—	306,116
Intangible assets	20,522	—	—	20,522
Machinery and equipment	27,518	865	—	28,383
Total capital assets being depreciated and amortized	344,008	11,013 *	—	355,021
Less accumulated depreciation and amortization for:				
Facilities and improvements	(174,695)	(5,144)	—	(179,839)
Intangible assets	(9,947)	(207)	—	(10,154)
Machinery and equipment	(20,456)	(941)	—	(21,397)
Total accumulated depreciation and amortization	(205,098)	(6,292)	—	(211,390)
Total capital assets being depreciated and amortized, net	138,910	4,721	—	143,631
Total capital assets, net	$ 177,481	34,375	(10,849)	201,007

*Decrease in construction work in progress included $7 in capital project write-offs, mainly related to Hetchy Water's share of road improvement projects. The remaining difference of $171 is due to direct add additions to machinery and equipment.

	2020	Increases	Decreases	2021
Capital assets not being depreciated and amortized:				
Land and rights-of-way	$ 3,232	—	—	3,232
Intangible assets	6	—	—	6
Construction work in progress	24,328	22,586	(11,581) *	35,333
Total capital assets not being depreciated and amortized	27,566	22,586	(11,581)	38,571
Capital assets being depreciated and amortized:				
Facilities and improvements	284,480	11,488	—	295,968
Intangible assets	20,522	—	—	20,522
Machinery and equipment	27,303	215	—	27,518
Total capital assets being depreciated and amortized	332,305	11,703 *	—	344,008
Less accumulated depreciation and amortization for:				
Facilities and improvements	(169,874)	(4,821)	—	(174,695)
Intangible assets	(9,739)	(208)	—	(9,947)
Machinery and equipment	(19,476)	(980)	—	(20,456)
Total accumulated depreciation and amortization	(199,089)	(6,009)	—	(205,098)
Total capital assets being depreciated and amortized, net	133,216	5,694	—	138,910
Total capital assets, net	$ 160,782	28,280	(11,581)	177,481

*Decrease in construction work in progress included $51 in capital project write-offs, mainly related to Hetchy Water's share of road improvement projects and 2018 Moccasin Storm Project. The remaining difference of $173 was offset by direct additions to machinery and equipment.

(Dollars in thousands, unless otherwise stated)

Hetchy Power Capital Assets – Hetchy Power's capital assets as of June 30, 2022 and 2021 consist of the following:

	2021	Increases	Decreases	2022
Capital assets not being depreciated and amortized:				
Land and rights-of-way	$ 1,949	—	—	1,949
Intangible assets	1,431	—	—	1,431
Construction work in progress	171,175	110,859	(19,642) *	262,392
Total capital assets not being depreciated and amortized	174,555	110,859	(19,642)	265,772
Capital assets being depreciated and amortized:				
Facilities and improvements	486,995	16,834	—	503,829
Intangible assets	25,193	—	—	25,193
Machinery and equipment	116,805	3,140	(87)	119,858
Total capital assets being depreciated and amortized	628,993	19,974 *	(87)	648,880
Less accumulated depreciation and amortization for:				
Facilities and improvements	(230,751)	(13,141)	—	(243,892)
Intangible assets	(12,273)	(253)	—	(12,526)
Machinery and equipment	(68,468)	(4,217)	87	(72,598)
Total accumulated depreciation and amortization	(311,492)	(17,611)	87	(329,016)
Total capital assets being depreciated and amortized, net	317,501	2,363	—	319,864
Total capital assets, net	$ 492,056	113,222	(19,642)	585,636

*Decrease in construction in progress included $648 in capital project write-offs, mainly related to Hope San Francisco Project in Sunnydale and Potrero. The remaining difference of $980 was offset by direct additions to machinery and equipment.

	2020	Increases	Decreases	2021
Capital assets not being depreciated and amortized:				
Land and rights-of-way	$ 1,949	—	—	1,949
Intangible assets	1,431	—	—	1,431
Construction work in progress	164,749	70,059	(63,633) *	171,175
Total capital assets not being depreciated and amortized	168,129	70,059	(63,633)	174,555
Capital assets being depreciated and amortized:				
Facilities and improvements	438,702	48,293	—	486,995
Intangible assets	25,193	—	—	25,193
Machinery and equipment	109,270	7,535	—	116,805
Total capital assets being depreciated and amortized	573,165	55,828 *	—	628,993
Less accumulated depreciation and amortization for:				
Facilities and improvements	(219,420)	(11,331)	—	(230,751)
Intangible assets	(12,020)	(253)	—	(12,273)
Machinery and equipment	(64,425)	(4,043)	—	(68,468)
Total accumulated depreciation and amortization	(295,865)	(15,627)	—	(311,492)
Total capital assets being depreciated and amortized, net	277,300	40,201	—	317,501
Total capital assets, net	$ 445,429	110,260	(63,633)	492,056

*Decrease in construction work in progress is greater than increase in capital assets being depreciated explained by $8,333 in capital project write-offs, mainly related to Bay Corridor Project, Transmission and Distribution System Improvement Project, and Treasure Island Capital Improvement Project. The remaining difference of $528 was offset by direct additions to machinery and equipment.

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. Per the implementation of GASB Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period*, no interest was capitalized to construction in progress beginning in fiscal year 2022.

(Dollars in thousands, unless otherwise stated)

Interest included in the construction work in progress and total interest expense incurred during the years ended June 30, 2022 and 2021 are as follows:

		2022			
		Water	Wastewater	Hetchy Power	SFPUC Total
Interest expensed	$	213,668	77,743	5,624	297,035
Interest included in construction work in progress*		—	—	—	—
Total interest incurred	$	213,668	77,743	5,624	297,035

*Per the implementation of GASB Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period.*

		Restated 2021^			
		Water	Wastewater	Hetchy Power	SFPUC Total
Interest expensed^	$	184,678	34,944	1,972	221,594
Interest included in construction work in progress		19,461	33,420	1,083	53,964
Total interest incurred	$	204,139	68,364	3,055	275,558

^Restated per implementation of GASB Statement No. 87, *Leases*

(5) Restricted Assets

Department-wide Business Type Activities

The following table summarizes the department-wide restricted assets as of June 30, 2022 and 2021.

		2022	2021
Cash and investments with City Treasury	$	9,299	12,231
Cash and investments outside City Treasury		129,367	136,892
Interest and other receivables		221,532	89,379
Total restricted assets	$	360,198	238,502

Water Restricted Assets

Pursuant to the Indentures, all revenues of the Water 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 Water 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 Water 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 Water 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 Water 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 Water Enterprise may establish or the Board of Supervisors may require with respect to employees of the Water Enterprise;
3. The payment of principal, interest, reserve, sinking fund, and other mandatory funds created to secure Revenue Bonds issued by the Water Enterprise for the acquisition, construction, or extension of facilities owned, operated, or controlled by the Water Enterprise;

(Dollars in thousands, unless otherwise stated)

4. The payment of principal and interest on General Obligation Bonds issued by the City for the Water Enterprise's purposes;
5. Reconstruction and replacement as determined by the Water Enterprise or as required by any of the Water 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 Water Enterprise; and for any other lawful purpose of the Water Enterprise, including the transfer of surplus funds pursuant to the Charter.

In accordance with the Indenture, the bond financing program maintains certain restricted cash and investment balances in trust. Restricted assets held in trust consisted of the following as of June 30, 2022 and 2021:

		2022	2021
Cash and investments with City Treasury:			
Water revenue bond construction fund	$	9,299	—
Cash and investments outside City Treasury:			
2010B Water revenue bond fund		21,386	21,492
2010D Water revenue bond fund		1	—
2010E Water revenue bond fund		16,304	16,299
2010G Water revenue bond fund		17,703	17,698
2011B Water revenue bond fund		—	670
2011C Water revenue bond fund		—	140
2012A Water revenue bond fund		1	1
2020A Water revenue bond fund		86	7,370
2020B Water revenue bond fund		34	3,097
2020C Water revenue bond fund		54	3,463
2020D Water revenue bond fund		38	1,513
2020F Water revenue refunding bond fund		12	12
2020G Water revenue refunding bond fund		22	22
2020H Water revenue refunding bond fund		7	7
2009C Certificates of participation - 525 Golden Gate		1,638	1,638
2009D Certificates of participation - 525 Golden Gate		5,567	6,551
Commercial Paper - Tax Exempt		14	29,793
Commercial Paper - Taxable		37	34
Habitat reserve endowment fund		13,053	13,053
Total cash and investments outside City Treasury		75,957	122,853
Interest and other receivables:			
Water bond construction fund including capacity fee receivables		4,146	3,987
Due from other government for State Revolving Fund		7,553	49,546
Total restricted assets	$	96,955	176,386

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.

Wastewater Restricted Assets

The Master Bond Resolution was discharged upon the issuance of the 2003 Series A Refunding Bonds. Pursuant to the Indenture, which became effective with the issuance of the 2003 Series A Refunding Bonds, all net revenues of the Wastewater Enterprise (except amounts on deposit in the rebate fund) are irrevocably pledged to the punctual payment of debt service on the Wastewater revenue bonds. Accordingly, the net revenues of the Wastewater Enterprise shall not be used for any other purpose while any of its revenue bonds are outstanding except as expressly permitted by the Indenture. Further, all net revenues shall be deposited by the City Treasurer, by instruction of the Wastewater Enterprise, in special funds designated as the Revenue Fund, which must be maintained in the City Treasury. These funds, held at the City Treasury, are recorded in the statements of net position of the Wastewater Enterprise as cash and investments. Deposits in the Revenue Fund, including earnings thereon, shall be appropriated, transferred, expended, or used for the following purposes and only in accordance with the following priority:

(Dollars in thousands, unless otherwise stated)

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

In accordance with the Indenture, the Wastewater Enterprise maintains certain restricted cash and investment balances in trust. Restricted assets held in trust consisted of the following as of June 30, 2022 and 2021:

		2022	2021
Cash and investments outside City Treasury:			
2009 Series C Certificates of Participation – 525 Golden Gate	$	433	433
2009 Series D Certificates of Participation – 525 Golden Gate		1,472	1,732
2010 Series A Wastewater revenue bond fund		—	3,592
2010 Series B Wastewater revenue bond fund		8,826	4,401
2021 Series A Wastewater revenue bond fund		24,396	—
2021 Series B Wastewater revenue bond fund		3,937	—
2021 Series A Wastewater revenue note fund		145	—
2021 Series B Wastewater revenue note fund		86	—
Commercial Paper - Tax Exempt		63	38
Total cash and investments outside City Treasury		39,358	10,196
Interest and other receivables:			
Wastewater revenue bond construction fund including capacity fee receivables		2,735	3,291
Due from other government for State Revolving Fund		202,795	20,755
Total restricted assets	$	244,888	34,242

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

Hetchy Water Restricted Assets

Hetchy Water restricted assets held in trust consist of the following as of June 30, 2022 and 2021:

		2022	2021
Cash and investments with City Treasury:			
Hetch Hetchy bond construction fund	$	—	6,990
Total restricted assets	$	—	6,990

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

Hetchy Power Restricted Assets

Pursuant to the Hetchy Power Trust Indenture (the “Indenture”), established in fiscal year 2015, net revenues of the Hetchy Power are pledged first to the 2015 Series AB Bonds and 2021 Series AB Bonds, and have a priority lien on the pledge of net revenues to the outstanding CREBs, QECBs, and NCREBs (the “Subordinate Obligations”). The Lease/Purchase Agreements for the Subordinate Obligations pledge the net revenues of the Hetchy Power to these bonds, and such pledge is subordinate in lien to the net revenues pledge for the 2015 Series AB Bonds and 2021 Series AB Bonds (the “Bonds” or “Bond”).

(Dollars in thousands, unless otherwise stated)

In the Indenture, the SFPUC covenants and agrees that it will pay into the Revenue Fund as received all Revenues of Hetchy Power and shall be used and applied, as provided by the Indenture, solely for the purposes of operating and maintaining Hetchy Power and paying all costs, charges, and expenses in connection therewith and for the purpose of making repairs, renewals, and replacements to Hetchy Power and constructing additions, betterments, and extensions thereto.

The Indenture provides that Revenues deposited in the Revenue Fund shall be disbursed in the following order of priority:

1. The payment of operation and maintenance expenses;
2. Any priority reconstruction and replacement fund deposits;
3. Deposit in the interest account of each Bond Fund;
4. Deposit in the bond retirement account of each Bond Fund;
5. Deposit in the reserve fund;
6. (i) Payment of principal and premium, if any, and interest on any Subordinate Obligations; (ii) deposit into a reserve fund securing any Subordinate Obligations; (iii) Swap Agreement payments pursuant to Swap Agreements entered into by the SFPUC with respect to any Subordinate Obligations; and (iv) payment to any financial institution or insurance company providing any letter of credit, line of credit, or other credit or liquidity facility, including municipal bond insurance and guarantees, that secures the payment of principal of or interest on any Subordinate Obligations; in each case in any order of priority within this paragraph which may be hereafter established by the SFPUC by resolution;
7. Any additional reconstruction and replacement fund deposits into the reconstruction and replacement fund;
8. Any necessary or desirable capital additions or improvements to the Hetchy Power;
9. Any payment under a Take-or-Pay Power Purchase Agreement that does not constitute an operation and maintenance expense;
10. Any payment under a Swap Agreement that does not constitute a Swap Agreement payment; and
11. Any other lawful purpose of the SFPUC.

In the Indenture, the SFPUC covenants and agrees to transfer to the Trustee for deposit in the Interest Account of each applicable Bond Fund all Refundable Credits received by the SFPUC.

In accordance with the Agreements, Hetchy Power maintains certain restricted cash and investment balances in trust. Restricted assets held in trust consist of the following as of June 30, 2022 and 2021:

	2022	2021
Cash and investments with City Treasury:		
Hetch Hetchy bond construction fund	$ —	5,241
Cash and investments outside City Treasury:		
2009 Series C Certificates of Participation – 525 Golden Gate	223	223
2009 Series D Certificates of Participation – 525 Golden Gate	758	892
2015 Series A Revenue Bonds	2,194	2,193
2015 Series B Revenue Bonds	516	516
2021 Series AB Revenue Bonds	10,346	—
Commercial Paper	15	19
Total restricted cash and investments outside City Treasury	14,052	3,843
Interest receivable:		
Hetch Hetchy bond construction fund	4,303	11,800
Total restricted assets	$ 18,355	20,884

Restricted assets listed above as cash and investments with City Treasury are held in funds accounts within the Hetchy Power Revenue Fund.

(Dollars in thousands, unless otherwise stated)

(6) Short-Term Debt

Department-wide Business Type Activities

The following table summarizes the department-wide short-term commercial paper debt.

		2021	Additions	Reductions	2022
Water	$	105,862	130,221	(29,786)	206,297
Wastewater		638,518	80,639	(340,000)	379,157
Hetchy Power		114,671	63,058	(137,710)	40,019
SFPUC Total	$	859,051	273,918	(507,496)	625,473

Water 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, 2022 and 2021, amounts outstanding under Proposition E were $206,297 and $105,862, respectively. Commercial paper interest rates ranged from 0.1% to 2.0%.

With maturities up to 270 days, the Water 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 Water 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 Water Enterprise had $293,703 and $394,138 in unused authorization as of June 30, 2022 and 2021, 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, 2022, there were no such events describe herein.

Wastewater Short-Term Debt

Under the voter approved 2002 Proposition E, the Commission and Board of Supervisors has authorized the issuance of up to $750,000 in commercial paper for the purpose of reconstructing, expanding, repairing, or improving the Wastewater Enterprise's facilities. The Wastewater Enterprise had $379,157 and $638,518 in commercial paper outstanding as of June 30, 2022 and 2021, respectively.

In accordance with GASB Statement No. 88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*, the Wastewater Enterprise had $370,843 and $111,482 in unused authorization as of June 30, 2022 and 2021, respectively. Significant Events of default as specified in the Reimbursement Agreements, Revolving Credit and Term Loan Agreements, or Revolving Credit Agreements include 1. payment defaults, 2. material breach of warranty, representation, or other non-remedied breach of covenants as specified in the respective agreements (not cured within applicable grace periods), and 3. bankruptcy and insolvency events, which may result in all outstanding obligations to be immediately due and payable (unless waived by the respective Bank, if applicable); or issuance of a No-Issuance Notice, reduction in credit to outstanding amount plus interest coverage, and/or termination of the respective agreement. As of June 30, 2022, there were no such events described herein.

Hetchy Water Short-Term Debt

Hetchy Water had no commercial paper outstanding as of June 30, 2022 and 2021.

Hetchy Power Short-Term Debt

Effective March 2019, under Charter Sections 9.107(6) and 9.107(8), and 2018 Proposition A, the Commission and Board of Supervisors authorized the issuance of up to $250,000 in commercial paper notes for the purpose of reconstructing, replacing, expanding, repairing or improving power facilities of Hetchy Power. Interest rates for the commercial paper ranged from 0.1% to 1.1% and 0.1% to 0.2% in fiscal years 2022 and 2021, respectively. Hetchy Power had $40,019 and $114,671 commercial paper outstanding as of June 30, 2022 and 2021, respectively. The Power Enterprise had $209,981 and $135,329 in unused authorization as of June 30, 2022 and 2021, respectively.

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 Reimbursement Agreements include 1. non-payment, 2. material breach of warranty, representation, or other non-remedied breach of covenants as specified in the respective agreements and 3. bankruptcy, 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, 2022, there were no such events described herein.

CleanPowerSF Short-Term Debt

CleanPowerSF had no commercial paper outstanding as of June 30, 2022 and 2021.

(Dollars in thousands, unless otherwise stated)

(7) Changes in Long-Term Liabilities

Department-wide Long-Term Liability activities for the years ended June 30, 2022 and 2021 are as follows:

	Interest rate	Maturity (Calendar Year)	Restated 2021^	Additions	Reductions	2022	Due within one year
Revenue Bonds:							
2010A wastewater revenue bonds	4.00 – 5.00 %	2021	$ 8,820	—	(8,820)	—	—
2010B water revenue bonds (Build America)	4.00 – 6.00	2040	361,500	—	(12,330)	349,170	12,780
2010B wastewater revenue bonds (Build America)	4.65 – 5.82	2040	192,515	—	—	192,515	7,280
2010E water revenue bonds (Build America)	4.90 – 6.00	2040	344,200	—	—	344,200	12,745
2010G water revenue bonds (Build America)	6.95	2050	351,470	—	—	351,470	—
2011B water revenue bonds	3.50 – 5.00	2041	755	—	(755)	—	—
2011C water revenue bonds	3.00 – 5.00	2041	825	—	(825)	—	—
2013A wastewater revenue bonds	1.00 – 5.00	2025	29,595	—	(14,060)	15,535	13,090
2013B wastewater revenue bonds	4.00 – 5.00	2042	331,585	—	—	331,585	—
2015A water revenue refunding bonds	2.00 – 5.00	2036	397,745	—	(15,325)	382,420	16,045
2015A hetchy power revenue bonds	4.00 – 5.00	2045	32,025	—	—	32,025	—
2015B hetchy power revenue bonds	3.00 – 4.00	2026	4,550	—	(815)	3,735	850
2016A water revenue refunding bonds	4.00 – 5.00	2039	743,050	—	(23,315)	719,735	32,790
2016B water revenue refunding bonds	1.50 – 5.00	2030	81,525	—	(10,015)	71,510	12,530
2016C water revenue bonds	0.87 – 4.19	2046	237,050	—	(5,820)	231,230	5,955
2016A wastewater revenue bonds	4.00 – 5.00	2046	240,580	—	—	240,580	—
2016B wastewater revenue bonds	4.00 – 5.00	2046	67,820	—	—	67,820	—
2017A water revenue bonds	5.00	2047	27,000	—	—	27,000	2,325
2017B water revenue bonds	5.00	2047	32,930	—	—	32,930	2,835
2017C water revenue bonds	5.00	2047	15,750	—	—	15,750	1,355
2017D water revenue refunding bonds	2.00 – 5.00	2035	347,720	—	(925)	346,795	1,455
2017E water revenue refunding bonds	4.00 – 5.00	2031	48,890	—	—	48,890	765
2017F water revenue refunding bonds	5.00	2031	8,705	—	—	8,705	700
2017G water revenue refunding bonds	2.03 – 2.91	2024	32,780	—	(820)	31,960	13,070
2018A wastewater revenue bonds	4.00 – 5.00	2043	229,050	—	—	229,050	7,715
2018B wastewater revenue bonds	5.00	2043	185,950	—	—	185,950	6,260
2018C wastewater revenue bonds	2.13	2048	179,145	—	—	179,145	—
2019A water revenue refunding bonds	1.81 – 3.47	2043	615,725	—	(24,405)	591,320	3,495
2019B water revenue refunding bonds	3.15 – 3.52	2041	16,450	—	(65)	16,385	70
2019C water revenue refunding bonds	3.15 – 3.52	2041	17,925	—	(75)	17,850	75
2020A water revenue bonds	4.00 – 5.00	2050	150,895	—	—	150,895	—
2020B water revenue bonds	5.00	2050	61,330	—	—	61,330	—
2020C water revenue bonds	4.00	2050	85,335	—	—	85,335	—
2020D water revenue bonds	3.00	2050	49,200	—	—	49,200	—
2020E water revenue refunding bonds	2.83 – 2.95	2047	341,435	—	(5,900)	335,535	500
2020F water revenue refunding bonds	0.26 – 3.15	2047	136,880	—	(1,425)	135,455	—
2020G water revenue refunding bonds	0.26 – 3.10	2043	120,585	—	(5,820)	114,765	5,795
2020H water revenue refunding bonds	0.26 – 3.15	2047	65,495	—	(680)	64,815	—
2021A wastewater revenue bonds	4.00 – 5.00	2051	—	260,835	—	260,835	—
2021B wastewater revenue bonds	5.00	2051	—	37,045	—	37,045	—
2021 Series A Revenue Bonds	4.00 – 5.00	2052	—	74,280	—	74,280	—
2021 Series B Revenue Bonds	4.00 – 5.00	2052	—	49,720	—	49,720	—
Clean Renewable Energy Bonds	0.00	2022	843	—	(422)	421	421
Qualified Energy Conservation Bonds	4.74	2027	3,687	—	(549)	3,138	555
New Clean Renewable Energy Bonds 2015	4.62	2032	1,779	—	(142)	1,637	146
Less issuance discount			(153)	—	23	(130)	(6)
Add issuance premiums			430,068	102,842	(35,772)	497,138	—
Revenue Notes:							
2021 Series A - Biosolids	1.00	2025	—	218,355	—	218,355	—
2021 Series B - SEP Headworks	1.00	2026	—	129,110	—	129,110	—
Add issuance premiums			—	3,358	(467)	2,891	—
Total revenue bonds & notes payable			6,631,009	875,545	(169,524)	7,337,030	161,596
2009C Certificates of Participation (COPs)	2.00 – 5.00	2022	8,535	—	(4,160)	4,375	4,375
2009C COPs issuance premiums			95	—	(75)	20	20
2009D COPs (Build America)	6.36 – 6.49	2041	129,550	—	—	129,550	—
State Revolving Fund Loans (CWSRF Loans) Water	1.00	2051	107,407	14,354	—	121,761	3,283
State Revolving Fund Loans (CWSRF Loans) Wastewater	0.80 – 1.80	2051	108,559	196,583	(2,483)	302,659	2,481
Other post-employment benefits obligations			234,488	25,469	(32,810)	227,147	—
Net Pension Liability			382,382	—	(382,382)	—	—
Accrued vacation and sick leave			31,776	13,941	(14,775)	30,942	15,427
Accrued workers' compensation			18,648	6,555	(5,206)	19,997	3,708
Due to Other City departments *			369	11	—	380	380
Lease liability			10,945	27	(4,102)	6,870	3,587
Damage claims liability			55,075	13,104	(18,383)	49,796	20,115
Wholesale balancing account water			60,864	18,633	(347)	79,150	48,422
Pollution remediation obligations			9,071	260	—	9,331	—
Unearned revenues, refunds, and other			16,159	23,113	(19,215)	20,057	10,143
			$ 7,804,932	1,187,595	(653,462)	8,339,065	273,537

*Ending balance included elimination entries of $629 interfund payables and receivables between Wastewater and Hetchy Power for the 525 Golden Gate Avenue Headquarters Living Machine.
^Restated due to the implementation of GASB Statement No. 87, *Leases*.

(Dollars in thousands, unless otherwise stated)

	Interest rate	Maturity (Calendar Year)	2020	Additions	Reductions	Restated 2021^	Due within one year
Revenue Bonds:							
2010A wastewater revenue bonds	4.00 – 5.00 %	2021	$ 17,210	—	(8,390)	8,820	8,820
2010B water revenue bonds (Build America)	4.00 – 6.00	2040	373,420	—	(11,920)	361,500	12,330
2010B wastewater revenue bonds (Build America)	4.65 – 5.82	2040	192,515	—	—	192,515	—
2010D water revenue refunding bonds	3.00 – 5.00	2021	30,990	—	(30,990)	—	—
2010E water revenue bonds (Build America)	4.90 – 6.00	2040	344,200	—	—	344,200	—
2010G water revenue bonds (Build America)	6.95	2050	351,470	—	—	351,470	—
2011B water revenue bonds	3.50 – 5.00	2041	1,485	—	(730)	755	755
2011C water revenue bonds	3.00 – 5.00	2041	1,620	—	(795)	825	825
2011D water revenue refunding bonds	4.00 – 5.00	2028	19,135	—	(19,135)	—	—
2012A water revenue bonds	4.00 – 5.00	2043	216,540	—	(216,540)	—	—
2012B water revenue bonds	4.00 – 5.00	2043	16,520	—	(16,520)	—	—
2012C1 water revenue refunding bonds	4.00	2031	8,465	—	(8,465)	—	—
2012C2 water revenue refunding bonds	4.00 – 5.00	2032	69,570	—	(69,570)	—	—
2013A wastewater revenue bonds	1.00 – 5.00	2025	44,445	—	(14,850)	29,595	14,060
2013B wastewater revenue bonds	4.00 – 5.00	2042	331,585	—	—	331,585	—
2015A water revenue refunding bonds	2.00 – 5.00	2036	412,380	—	(14,635)	397,745	15,325
2015A hetchy power revenue bonds	4.00 – 5.00	2045	32,025	—	—	32,025	—
2015B hetchy power revenue bonds	3.00 – 4.00	2026	5,335	—	(785)	4,550	815
2016A water revenue refunding bonds	4.00 – 5.00	2039	763,005	—	(19,955)	743,050	23,315
2016B water revenue refunding bonds	1.50 – 5.00	2030	95,980	—	(14,455)	81,525	10,015
2016C water revenue bonds	0.87 – 4.19	2046	242,755	—	(5,705)	237,050	5,820
2016A wastewater revenue bonds	4.00 – 5.00	2046	240,580	—	—	240,580	—
2016B wastewater revenue bonds	4.00 – 5.00	2046	67,820	—	—	67,820	—
2017A water revenue bonds	5.00	2047	121,140	—	(94,140)	27,000	—
2017B water revenue bonds	5.00	2047	147,725	—	(114,795)	32,930	—
2017C water revenue bonds	5.00	2047	70,675	—	(54,925)	15,750	—
2017D water revenue refunding bonds	2.00 – 5.00	2035	348,610	—	(890)	347,720	925
2017E water revenue refunding bonds	4.00 – 5.00	2031	48,890	—	—	48,890	—
2017F water revenue refunding bonds	5.00	2031	8,705	—	—	8,705	—
2017G water revenue refunding bonds	2.03 – 2.91	2024	33,280	—	(500)	32,780	820
2018A wastewater revenue bonds	4.00 – 5.00	2043	229,050	—	—	229,050	—
2018B wastewater revenue bonds	5.00	2043	185,950	—	—	185,950	—
2018C wastewater revenue bonds	2.13	2048	179,145	—	—	179,145	—
2019A water revenue refunding bonds	1.81 – 3.47	2043	622,580	—	(6,855)	615,725	24,405
2019B water revenue refunding bonds	3.15 – 3.52	2041	16,450	—	—	16,450	65
2019C water revenue refunding bonds	3.15 – 3.52	2041	17,925	—	—	17,925	75
2020A water revenue bonds	4.00 – 5.00	2050	—	150,895	—	150,895	—
2020B water revenue bonds	5.00	2050	—	61,330	—	61,330	—
2020C water revenue bonds	4.00	2050	—	85,335	—	85,335	—
2020D water revenue bonds	3.00	2050	—	49,200	—	49,200	—
2020E water revenue refunding bonds	2.83 – 2.95	2047	—	341,435	—	341,435	5,900
2020F water revenue refunding bonds	0.26 – 3.15	2047	—	136,880	—	136,880	1,425
2020G water revenue refunding bonds	0.26 – 3.10	2043	—	120,585	—	120,585	5,820
2020H water revenue refunding bonds	0.26 – 3.15	2047	—	65,495	—	65,495	680
Clean Renewable Energy Bonds	0.00	2022	1,265	—	(422)	843	422
Qualified Energy Conservation Bonds	4.74	2027	4,229	—	(542)	3,687	549
New Clean Renewable Energy Bonds 2012	4.74	2020	130	—	(130)	—	—
New Clean Renewable Energy Bonds 2015	4.62	2032	3,190	—	(1,411)	1,779	142
Less issuance discount			(177)	—	24	(153)	—
Add issuance premiums			449,024	73,542	(92,498)	430,068	—
Total revenue bonds payable			6,366,836	1,084,697	(820,524)	6,631,009	133,308
2009C Certificates of Participation (COPs)	2.00 – 5.00	2022	12,490	—	(3,955)	8,535	4,160
2009C COPs issuance premiums			225	—	(130)	95	—
2009D COPs (Build America)	6.36 – 6.49	2041	129,550	—	—	129,550	—
State Revolving Fund Loans (CWSRF Loans) Water	1.00	2051	73,271	49,546	(15,410)	107,407	1,667
State Revolving Fund Loans (CWSRF Loans) Wastewater	0.80 – 1.80	2051	88,549	22,468	(2,458)	108,559	2,483
Other post-employment benefits obligations			260,397	26,291	(52,200)	234,488	—
Net Pension Liability			313,899	164,517	(96,034)	382,382	—
Accrued vacation and sick leave			25,428	18,447	(12,099)	31,776	15,639
Accrued workers' compensation			18,612	4,641	(4,605)	18,648	3,467
Due to Other City departments *			851	—	(482)	369	369
Lease liability			14,772	—	(3,827)	10,945	4,075
Damage claims liability			29,544	38,914	(13,383)	55,075	20,925
Wholesale balancing account water			64,857	—	(3,993)	60,864	21,538
Pollution remediation obligations			9,377	—	(306)	9,071	—
Unearned revenues, refunds, and other			9,117	28,750	(21,708)	16,159	6,191
			$ 7,417,775	1,438,271	(1,051,114)	7,804,932	213,822

*Ending balance Included elimination entries $739 of interfund payables and receivables between Wastewater and Hetchy Power for the 525 Golden Gate Avenue Headquarters Living Machine.
^Restated due to the implementation of GASB 87, *Leases*.

(Dollars in thousands, unless otherwise stated)

Water Long-Term Liability activities for the years ended June 30, 2022 and 2021 are as follows:

	Interest rate	Maturity (Calendar Year)	Restated 2021^	Additions	Reductions	2022	Due within one year
Revenue Bonds:							
2010B revenue bonds (Build America)	4.00 – 6.00 %	2040	$ 361,500	—	(12,330)	349,170	12,780
2010E revenue bonds (Build America)	4.90 – 6.00	2040	344,200	—	—	344,200	12,745
2010G revenue bonds (Build America)	6.95	2050	351,470	—	—	351,470	—
2011B revenue bonds	3.50 – 5.00	2041	755	—	(755)	—	—
2011C revenue bonds	3.00 – 5.00	2041	825	—	(825)	—	—
2015A revenue refunding bonds	2.00 – 5.00	2036	397,745	—	(15,325)	382,420	16,045
2016A revenue refunding bonds	4.00 – 5.00	2039	743,050	—	(23,315)	719,735	32,790
2016B revenue refunding bonds	1.50 – 5.00	2030	81,525	—	(10,015)	71,510	12,530
2016C revenue bonds	0.87 – 4.19	2046	237,050	—	(5,820)	231,230	5,955
2017A revenue bonds	5.00	2047	27,000	—	—	27,000	2,325
2017B revenue bonds	5.00	2047	32,930	—	—	32,930	2,835
2017C revenue bonds	5.00	2047	15,750	—	—	15,750	1,355
2017D revenue refunding bonds	2.00 – 5.00	2035	347,720	—	(925)	346,795	1,455
2017E revenue refunding bonds	4.00 – 5.00	2031	48,890	—	—	48,890	765
2017F revenue refunding bonds	5.00	2031	8,705	—	—	8,705	700
2017G revenue refunding bonds	2.03 – 2.91	2024	32,780	—	(820)	31,960	13,070
2019A revenue refunding bonds	1.81 – 3.47	2043	615,725	—	(24,405)	591,320	3,495
2019B revenue refunding bonds	3.15 – 3.52	2041	16,450	—	(65)	16,385	70
2019C revenue refunding bonds	3.15 – 3.52	2041	17,925	—	(75)	17,850	75
2020A revenue bonds	4.00 – 5.00	2050	150,895	—	—	150,895	—
2020B revenue bonds	5.00	2050	61,330	—	—	61,330	—
2020C revenue bonds	4.00	2050	85,335	—	—	85,335	—
2020D revenue bonds	3.00	2050	49,200	—	—	49,200	—
2020E revenue refunding bonds	2.83 – 2.95	2047	341,435	—	(5,900)	335,535	500
2020F revenue refunding bonds	0.26 – 3.15	2047	136,880	—	(1,425)	135,455	—
2020G revenue refunding bonds	0.26 – 3.10	2043	120,585	—	(5,820)	114,765	5,795
2020H revenue refunding bonds	0.26 – 3.15	2047	65,495	—	(680)	64,815	—
Less issuance discount			(133)	—	9	(124)	—
Add issuance premiums			301,758	—	(25,349)	276,409	—
Total revenue bonds payable			4,994,775	—	(133,840)	4,860,935	125,285
2009C Certificates of Participation (COPs)	2.00 – 5.00	2022	6,094	—	(2,970)	3,124	3,124
2009C COPs issuance premiums			69	—	(55)	14	14
2009D COPs (Build America)	6.36 – 6.49	2041	92,499	—	—	92,499	—
State Revolving Funds Loan	1.00	2051	107,407	14,354	—	121,761	3,283
Other post-employment benefits obligations			148,771	14,868	(19,524)	144,115	—
Net pension liability			216,417	—	(216,417)	—	—
Accrued vacation and sick leave			13,916	8,177	(8,364)	13,729	6,888
Accrued workers' compensation			8,828	2,793	(2,648)	8,973	1,700
Lease liability			4,244	—	(1,381)	2,863	1,008
Damage claims liability			36,723	452	(1,106)	36,069	10,191
Wholesale balancing account			60,864	18,633	(347)	79,150	48,422
Pollution remediation obligations			1,271	—	—	1,271	—
Total			$ 5,691,878	59,277	(386,652)	5,364,503	199,915

^Restated due to the implementation of GASB 87, *Leases*.

(Dollars in thousands, unless otherwise stated)

	Interest rate	Maturity (Calendar Year)	2020	Additions	Reductions	Restated 2021^	Due within one year
Revenue Bonds:							
2010B revenue bonds (Build America)	4.00 – 6.00 %	2040	$ 373,420	—	(11,920)	361,500	12,330
2010D revenue refunding bonds	3.00 – 5.00	2021	30,990	—	(30,990)	—	—
2010E revenue bonds (Build America)	4.90 – 6.00	2040	344,200	—	—	344,200	—
2010G revenue bonds (Build America)	6.95	2050	351,470	—	—	351,470	—
2011B revenue bonds	3.50 – 5.00	2041	1,485	—	(730)	755	755
2011C revenue bonds	3.00 – 5.00	2041	1,620	—	(795)	825	825
2011D revenue refunding bonds	4.00 – 5.00	2028	19,135	—	(19,135)	—	—
2012A revenue bonds	4.00 – 5.00	2043	216,540	—	(216,540)	—	—
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)	—	—
2015A revenue refunding bonds	2.00 – 5.00	2036	412,380	—	(14,635)	397,745	15,325
2016A revenue refunding bonds	4.00 – 5.00	2039	763,005	—	(19,955)	743,050	23,315
2016B revenue refunding bonds	1.50 – 5.00	2030	95,980	—	(14,455)	81,525	10,015
2016C revenue bonds	0.87 – 4.19	2046	242,755	—	(5,705)	237,050	5,820
2017A revenue bonds	5.00	2047	121,140	—	(94,140)	27,000	—
2017B revenue bonds	5.00	2047	147,725	—	(114,795)	32,930	—
2017C revenue bonds	5.00	2047	70,675	—	(54,925)	15,750	—
2017D revenue refunding bonds	2.00 – 5.00	2035	348,610	—	(890)	347,720	925
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	33,280	—	(500)	32,780	820
2019A revenue refunding bonds	1.81 – 3.47	2043	622,580	—	(6,855)	615,725	24,405
2019B revenue refunding bonds	3.15 – 3.52	2041	16,450	—	—	16,450	65
2019C revenue refunding bonds	3.15 – 3.52	2041	17,925	—	—	17,925	75
2020A revenue bonds	4.00 – 5.00	2050	—	150,895	—	150,895	—
2020B revenue bonds	5.00	2050	—	61,330	—	61,330	—
2020C revenue bonds	4.00	2050	—	85,335	—	85,335	—
2020D revenue bonds	3.00	2050	—	49,200	—	49,200	—
2020E revenue refunding bonds	2.83 – 2.95	2047	—	341,435	—	341,435	5,900
2020F revenue refunding bonds	0.26 – 3.15	2047	—	136,880	—	136,880	1,425
2020G revenue refunding bonds	0.26 – 3.10	2043	—	120,585	—	120,585	5,820
2020H revenue refunding bonds	0.26 – 3.15	2047	—	65,495	—	65,495	680
Less issuance discount			(143)	—	10	(133)	—
Add issuance premiums			311,923	73,542	(83,707)	301,758	—
Total revenue bonds payable			4,695,295	1,084,697	(785,217)	4,994,775	108,500
2009C Certificates of Participation (COPs)	2.00 – 5.00	2022	8,918	—	(2,824)	6,094	2,970
2009C COPs issuance premiums			161	—	(92)	69	—
2009D COPs (Build America)	6.36 – 6.49	2041	92,499	—	—	92,499	—
State Revolving Funds Loan	1.00	2051	73,271	49,546	(15,410)	107,407	1,667
Other post-employment benefits obligations			163,684	14,036	(28,949)	148,771	—
Net pension liability			178,133	93,066	(54,782)	216,417	—
Accrued vacation and sick leave			11,620	10,109	(7,813)	13,916	6,787
Accrued workers' compensation			9,174	1,912	(2,258)	8,828	1,694
Lease liability			5,399	—	(1,155)	4,244	1,381
Damage claims liability			10,767	27,643	(1,687)	36,723	14,400
Wholesale balancing account			64,857	—	(3,993)	60,864	21,538
Pollution remediation obligations			1,577	—	(306)	1,271	—
Total			$ 5,315,355	1,281,009	(904,486)	5,691,878	158,937

^Restated due to the implementation of GASB 87, *Leases*.

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

a) Water Revenue Bonds 2010 Series B

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, 2022 and 2021, the principal amount outstanding was $349,170 and $361,500, respectively.

b) Water Revenue Bonds 2010 Series DE

In July 2010, the Water 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 Water 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. A portion of the proceeds from 2020 Series E and 2020 Series G refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreements, dated October 1, 2020, to refund and legally defease the outstanding 2010 Series D 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 D bonds starting on November 1, 2021. As of June 30, 2022 and 2021, the principal amount of 2010 Series D bonds outstanding was $0.

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, 2022 and 2021, the principal amount of 2010 Series E bonds outstanding was $344,200.

c) Water Revenue Bonds 2010 Series FG

In December 2010, the Water 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%.

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 Water 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, 2022 and 2021, the principal amount of 2010 Series F bonds outstanding was $0.

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, 2022 and 2021, the principal amount of 2010 Series G bonds outstanding was $351,470.

d) Water Revenue Bonds 2011 Series ABCD

In August 2011, the Water 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 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, 2022 and 2021, the principal amount of 2011 Series A bonds outstanding was $0.

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 Water 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, 2022 and 2021, the principal amount of 2011 Series B bonds outstanding was $0 and $755, 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 Water 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 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, 2022 and 2021, the principal amount of 2011 Series C bonds outstanding was $0 and $825, 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, 2022 and 2021, the principal amount of 2011 Series D bonds outstanding was $0.

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

In June 2012, the Water 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 Water Enterprise for costs to settle litigation arising out of certain capital projects of benefit to the Water 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, 2019 Series A, and 2020 Series E refunding bonds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreements, dated December 1, 2017, December 1, 2019, and October 1, 2020 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, 2022 and 2021, the principal amount of 2012 Series A bonds outstanding was $0.

The $16,520 Series B bonds were issued as tax-exempt bonds to reimburse the Water Enterprise $15,750 for costs to settle litigation arising out of certain capital projects of benefit to the Water 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%. A portion of the proceeds of the 2020 Series G refunding bonds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement dated October 1, 2020 to refund and legally defease a portion of the outstanding 2012 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 2012 Series B bonds starting on November 1, 2031 and thereafter. As of June 30, 2022 and 2021, the principal amount of 2012 Series B bonds outstanding was $0.

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 and 2020 Series G refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreements dated December 1, 2017 and October 1, 2020, respectively, 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, 2025 and thereafter. As of June 30, 2022 and 2021, the principal amount of 2012 Series C bonds outstanding was $0.

f) Water Revenue Refunding Bonds 2015 Series A

In April 2015, the Water 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, 2022 and 2021, the principal amount of 2015 Series A bonds outstanding was $382,420 and $397,745, respectively.

g) Water Revenue Refunding Bonds 2016 Series AB

In October 2016, the Water 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 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, 2022 and 2021, the principal amount of 2016 Series AB bonds outstanding was $791,245 and $824,575, respectively.

h) Water Revenue Bonds 2016 Series C

In December 2016, the Water 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, 2022 and 2021, the principal amount of 2016 Series C bonds outstanding was $231,230 and $237,050, respectively.

i) Water Revenue Bonds 2017 Series ABC

In December 2017, the Water 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 have a true interest cost of 3.8%. A portion of the proceeds of the 2020 Series E refunding bonds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement dated October 1, 2020 to refund and legally defease a portion of the outstanding 2017 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 2017 Series A bonds starting on November 1, 2030 and thereafter. As of June 30, 2022 and 2021, the principal amount of 2017 Series A bonds outstanding was $27,000.

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%. A portion of the proceeds of the 2020 Series F refunding bonds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement dated October 1, 2020 to refund and legally defease a portion of the outstanding 2017 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 2017 Series B bonds starting on November 1, 2030 and thereafter. As of June 30, 2022 and 2021, the principal amount of 2017 Series B bonds outstanding was $32,930.

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%. A portion of the proceeds of the 2020 Series H refunding bonds were deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement dated October 1, 2020 to refund and legally defease a portion of the outstanding 2017 Series C 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 2017 Series C bonds starting on November 1, 2030 and thereafter. As of June 30, 2022 and 2021, the principal amount of 2017 Series C bonds outstanding was $15,750.

j) Water Revenue Refunding Bonds 2017 Series DEFG

In December 2017, the Water 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, 2022 and 2021, the principal amount of 2017 Series DEFG bonds outstanding was $436,350 and $438,095 respectively.

k) Water Revenue Refunding Bonds 2019 Series ABC

In January 2020, the Water 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, 2022 and 2021, the principal amount of 2019 Series ABC bonds outstanding was $625,555 and $650,100, respectively.

l) Water Revenue Bonds 2020 Series ABCD

In September 2020, the Water Enterprise issued tax-exempt revenue bonds, 2020 Series ABCD in the aggregate amount of $346,760. The purpose of the 2020 Series ABCD Bonds was to refund approximately $229,770 aggregate principal amount of commercial paper notes and to provide $164,632 new money for various capital projects of the Water Enterprise, and capital projects of Hetch Hetchy Water. The bonds carried “Aa2” and “AA-” ratings from Moody’s and S&P, respectively. The 2020 Series ABCD bonds include term bonds with coupons of 3.0% to 5.0% and final maturities from 2045 to 2050.

The $150,895 2020 Series A bonds were issued as tax-exempt Green Bonds to refund approximately $180,000 of commercial paper notes for WSIP capital projects. The Series A bonds were issued as term bonds with coupons of 4.0% and 5.0% and a final maturity of 2050. The 2020 Series A bonds have a true interest cost of 3.3%. As of June 30, 2022 and 2021, the principal amount of 2020 Series A bonds outstanding was $150,895.

The $61,330 Series B bonds were issued as tax-exempt bonds to provide $69,644 in new money for Water Enterprise capital projects (non-WSIP, Regional). The Series B bonds were issued as term bonds with coupons of 5.0% and have a final maturity of 2050. The Series B bonds have a true interest cost of 3.7%. As of June 30, 2022 and 2021, the principal amount of 2020 Series B bonds outstanding was $61,330.

The $85,335 Series C bonds were issued as tax-exempt bonds to provide $94,948 in new money for Water Enterprise capital projects (non-WSIP, Local). The Series C bonds were issued as term bonds with coupons of 4.0% and have a final maturity of 2050. The Series C bonds have a true interest cost of 3.0%. As of June 30, 2022 and 2021, the principal amount of 2020 Series C bonds outstanding was $85,335.

The $49,200 Series D bonds were issued as tax-exempt bonds to refund approximately $49,761 of commercial paper notes for Hetch Hetchy Water capital projects. The Series D bonds were issued as term bonds with coupons of 3.0% and a final maturity of 2050. The 2020 Series D bonds have a true interest cost of 2.7%. As of June 30, 2022 and 2021, the principal amount of 2020 Series D bonds outstanding was $49,200.

m) Water Revenue Bonds 2020 Series EFGH

In October 2020, the Water Enterprise issued taxable revenue bonds, 2020 Series EFGH refunding bonds in the aggregate amount of $664,395. The 2020 Series E (WSIP, Green) bonds were issued for the purpose of refunding a portion of the outstanding 2010 Series D (WSIP) bonds maturing on and after November 1, 2020, a portion of the outstanding 2012 Series A (WSIP) bonds maturing on and after November 1, 2038, and a portion of the outstanding 2017 Series A (WSIP) bonds maturing on and after November 1, 2030.

The 2020 Series F (non-WSIP, Regional) bonds were issued for the purpose of refunding a portion of the outstanding 2017 Series B bonds maturing on or after November 1, 2030.

The 2020 Series G (non-WSIP, Local) bonds were issued for the purpose of refunding a portion of the outstanding 2010 Series D bonds maturing on or after November 1, 2020, a portion of the 2011 Series D bonds maturing on or after November 1, 2022, a portion of 2012 Series B bonds maturing on or after November 1, 2031, and a portion of 2012 Series C bonds maturing on or after November 1, 2025.

The 2020 Series H (Hetch Hetchy Water) bonds issued for the purpose of refunding a portion of the outstanding 2017 Series C bonds maturing on or after November 1, 2030.

The bonds carried “Aa2” and “AA-” ratings from Moody’s and S&P, respectively. The 2020 Series EFGH bonds include serial bonds and term bonds with interest rates varying from 0.3% to 3.1% and have a final maturity in 2047. The Series EFGH bonds have a true interest cost of 2.7%. The refunding resulted in the recognition of a deferred accounting loss of $27,010, gross debt service savings of $117,114, and an economic gain of $75,212 or 12.0% of refunded principal. As of June 30, 2022 and 2021, the principal amount of 2020 Series EFGH bonds outstanding was $650,570 and $664,395, respectively.

n) 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, 2022. The federal interest subsidy amounts represent 35.0%, excluding sequestration, of the interest for the revenue bond 2010 Series B, E, and G.

(Dollars in thousands, unless otherwise stated)

		Principal	Interest before subsidy	Federal interest subsidy*	Interest net of subsidy
Fiscal years ending June 30:					
2023	$	125,285	203,067	(21,290)	181,777
2024		135,095	197,481	(20,841)	176,640
2025		140,485	191,563	(20,370)	171,193
2026		151,930	185,085	(19,876)	165,209
2027		157,635	177,956	(19,345)	158,611
2028-2032		892,755	770,116	(87,360)	682,756
2033-2037		1,092,025	540,947	(64,682)	476,265
2038-2042		1,037,900	295,084	(35,116)	259,968
2043-2047		464,125	145,355	(17,128)	128,227
2048-2051		387,415	40,159	(4,608)	35,551
Total		4,584,650	2,746,813	(310,616)	2,436,197
Less: Current portion		(125,285)			
Less: Unamortized bond discount		(124)			
Add: Unamortized bond premiums		276,409			
Long-term portion as of June 30, 2022	$	4,735,650			

*The SFPUC received an IRS notice, dated June 2, 2022, 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 $18,776, due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same after fiscal year 2023.

As defined in the Indentures, the principal and interest of the Water 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).

o) SF Westside Recycled Water Project and Future Annual Debt Service for 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 Water 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 1.0% 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 Water Enterprise's outstanding revenue bonds.

The principal outstanding as of June 30, 2022 and 2021 were $121,761 and $107,407, respectively. In addition, there was $15,000 of principal forgiveness.

		Principal	Interest	Total
Fiscal years ending June 30:				
2023	$	3,283	1,142	4,425
2024		3,542	1,185	4,727
2025		3,577	1,149	4,726
2026		3,613	1,114	4,727
2027		3,649	1,077	4,726
2028-2032		18,801	4,833	23,634
2033-2037		19,760	3,874	23,634
2038-2042		20,768	2,866	23,634
2043-2047		21,827	1,806	23,633
2048-2052		22,941	692	23,633
Total		121,761	19,738	141,499
Less: Current portion		(3,283)		
Long-term portion as of June 30, 2022	$	118,478		

p) Drinking Water State Revolving Fund (DWSRF) Loan

In April 2022, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a Drinking Water State Revolving Fund (DWSRF) Loan to fund the Water Enterprise's Mountain Tunnel Improvement Project. The DWSRF loan is in the amount of $238,219. It will bear an interest rate of 1.1% for a 30-year term, with interest payments beginning annually after the initial loan proceed draw occurs and loan principal repayment beginning one year after substantial completion of project construction. Power Enterprise is responsible for repayment for its share of SRF Loan debt service costs representing up to its allocable share of the cost of the Mountain Tunnel Project by a Memorandum of Understanding that will be executed with the Water Enterprise. The DWSRF loan is secured on a parity lien basis with the Water Enterprise's outstanding revenue bonds. The principal outstanding as of June 30, 2022 was $0.

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, 2022, there was no commercial paper outstanding pursuant to this authorization and $1,499,230 of bonds had been issued in fiscal years 2006, 2010, 2012, 2021 against Prop A. The total authorization against Prop A was $1,499,230 as of June 30, 2022.

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, 2022, the Board of Supervisors has authorized the issuance of $4,617,099 in revenue bonds with $3,898,744 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 Water Enterprise's SF Westside Recycled Water Project in the amount of $186,220 (which includes a $15,000 grant) and in April 2022, the SFPUC entered in to an Installment Sale Agreement with the State Water Resources Control Board for a Drinking Water State Revolving Fund (DWSRF) Loan to fund the Mountain Tunnel Improvement Project in the amount of $238,219. Additionally, $206,297 and $105,862 in commercial paper was outstanding pursuant to this authorization as of June 30, 2022 and 2021, respectively.

s) 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, and CWSRF Loan) include 1) Non-payment 2) material breach of warranty, representation or indenture covenants (not cured within applicable grace periods) and 3) bankruptcy and insolvency events, which may result in the Trustee (upon written request by the majority of the owners (by aggregate amount of the bond obligations or of a credit provider), declaring the principal and the interest accrued thereon, to be due and payable immediately. As of June 30, 2022, there were no such events describe herein.

(Dollars in thousands, unless otherwise stated)

Wastewater Long-Term Liability activities for the years ended June 30, 2022 and 2021 are as follows:

	Interest rate	Maturity (Calendar Year)	Restated 2021^	Additions	Reductions	2022	Due within one year
Revenue bonds:							
2010 Series A	4.00 – 5.00 %	2021	$ 8,820	—	(8,820)	—	—
2010 Series B (Build America)	4.65 – 5.82	2040	192,515	—	—	192,515	7,280
2013 Series A	1.00 – 5.00	2025	29,595	—	(14,060)	15,535	13,090
2013 Series B	4.00 – 5.00	2042	331,585	—	—	331,585	—
2016 Series A	4.00 – 5.00	2046	240,580	—	—	240,580	—
2016 Series B	4.00 – 5.00	2046	67,820	—	—	67,820	—
2018 Series A	4.00 – 5.00	2043	229,050	—	—	229,050	7,715
2018 Series B	5.00	2043	185,950	—	—	185,950	6,260
2018 Series C	2.13	2048	179,145	—	—	179,145	—
2021 Series A	4.00 – 5.00	2051	—	260,835	—	260,835	—
2021 Series B	5.00	2051	—	37,045	—	37,045	—
For issuance premiums			124,862	75,820	(9,489)	191,193	—
Revenue Notes:							
2021 Series A - Biosolids	1.00	2025	—	218,355	—	218,355	—
2021 Series B - SEP Headworks	1.00	2026	—	129,110	—	129,110	—
For issuance premiums			—	3,358	(467)	2,891	—
Total revenue bonds and notes payable			1,589,922	724,523	(32,836)	2,281,609	34,345
2009 Series C Certificates of Participation (COPs)	2.00 – 5.00	2022	1,611	—	(785)	826	826
2009 Series C COPs issuance premiums			18	—	(14)	4	4
2009 Series D COPs (Build America)	6.36 – 6.49	2041	24,458	—	—	24,458	—
State Revolving Fund Loans (CWSRF Loans)	0.80 – 1.80	2056	108,559	196,583	(2,483)	302,659	2,481
Other post-employment benefits obligations			50,711	5,466	(7,054)	49,123	—
Net pension liability			103,746	—	(103,746)	—	—
Accrued vacation and sick leave			11,658	2,895	(3,652)	10,901	5,479
Accrued workers' compensation			6,582	3,207	(2,243)	7,546	1,393
Due to Other City departments			739	—	(110)	629	111
Lease liability			5,952	27	(2,341)	3,638	2,341
Damage claims liability			16,713	8,812	(13,480)	12,045	9,323
Pollution remediation obligations			7,800	260	—	8,060	—
Total			$ 1,928,469	941,773	(168,744)	2,701,498	56,303

^Restated due to the implementation of GASB Statement No. 87, *Leases*.

	Interest rate	Maturity (Calendar Year)	2020	Additions	Reductions	Restated 2021^	Due within one year
Revenue bonds:							
2010 Series A	4.00 – 5.00 %	2021	$ 17,210	—	(8,390)	8,820	8,820
2010 Series B (Build America)	4.65 – 5.82	2040	192,515	—	—	192,515	—
2013 Series A	1.00 – 5.00	2025	44,445	—	(14,850)	29,595	14,060
2013 Series B	4.00 – 5.00	2042	331,585	—	—	331,585	—
2016 Series A	4.00 – 5.00	2046	240,580	—	—	240,580	—
2016 Series B	4.00 – 5.00	2046	67,820	—	—	67,820	—
2018 Series A	4.00 – 5.00	2043	229,050	—	—	229,050	—
2018 Series B	5.00	2043	185,950	—	—	185,950	—
2018 Series C	2.13	2048	179,145	—	—	179,145	—
For issuance premiums			133,433	—	(8,571)	124,862	—
Total revenue bonds payable			1,621,733	—	(31,811)	1,589,922	22,880
2009 Series C Certificates of Participation (COPs)	2.00 – 5.00	2022	2,358	—	(747)	1,611	785
2009 Series C COPs issuance premiums			43	—	(25)	18	—
2009 Series D COPs (Build America)	6.36 – 6.49	2041	24,458	—	—	24,458	—
State Revolving Fund Loans (CWSRF Loans)	0.80 – 1.80	2051	88,549	22,468	(2,458)	108,559	2,483
Other post-employment benefits obligations			58,183	6,609	(14,081)	50,711	—
Net pension liability			86,235	42,533	(25,022)	103,746	—
Accrued vacation and sick leave			8,914	5,406	(2,662)	11,658	5,811
Accrued workers' compensation			6,051	2,616	(2,085)	6,582	1,198
Due to Other City departments			849	—	(110)	739	110
Lease liability			8,247	—	(2,295)	5,952	2,314
Damage claims liability			15,891	6,428	(5,606)	16,713	5,892
Pollution remediation obligations			7,800	—	—	7,800	—
Total			$ 1,929,311	86,060	(86,902)	1,928,469	41,473

^ Restated due to the implementation of GASB Statement No. 87, *Leases*.

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

a) Wastewater Revenue Bonds 2010 Series A

During fiscal year 2010, the Wastewater Enterprise issued revenue bonds 2010 Series A in the amount of $47,050 with interest rates ranging from 4.0% to 5.0%. Proceeds from the bonds were used to redeem $50,000 in outstanding commercial paper notes, fund a cash debt service reserve fund, and pay the costs of issuing the bonds. The bonds were rated "Aa3" and "AA-" by Moody's and S&P, respectively at the time of issuance. Bonds mature through October 1, 2021. The true interest cost is 2.9%. As of June 30, 2022 and 2021, the 2010 Series A bonds' principal amount outstanding was $0 and $8,820, respectively.

b) Wastewater Revenue Bonds 2010 Series B

During fiscal year 2010, the Wastewater Enterprise issued revenue bonds 2010 Series B (Federally Taxable – Build America Bonds – Direct Payment) in the amount of $192,515 with interest rates ranging from 4.7% to 5.8%. Proceeds from the bonds were used to redeem $53,500 in outstanding commercial paper notes, provide funding for capital projects in the amount of $112,429, fund a cash debt service reserve fund, and pay financing costs for the bonds. The bonds were rated "Aa3" and "AA-" by Moody's and S&P, respectively at the time of issuance. Bonds mature through October 1, 2040. The true interest cost is 3.7%. As of June 30, 2022 and 2021, the 2010 Series B bonds' principal amount outstanding was $192,515.

c) Wastewater Revenue Bonds 2013 Series A

In January 2013, the Wastewater Enterprise issued tax-exempt revenue bonds 2013 Series A in the amount of $193,400 for the purpose of refunding the remaining portion of the outstanding 2003 Series A bonds maturing on and after October 1, 2013. The bonds carried "Aa3" and "AA-" ratings from Moody's and S&P, respectively at the time of issuance. The 2013 Series A refunding bonds include serial bonds with interest rates varying from 1.0% to 5.0% and have a final maturity in October 2025. The Series A bonds have a true interest cost of 1.2%. The 2013 Series A bonds also refunded the remaining portion of the outstanding state revolving fund loans. The refunding resulted in the recognition of a deferred accounting loss of $2,986, gross debt service savings of $35,107 over the next 13 years, and an economic gain of $32,783 or 15.4% of the refunded principal. As of June 30, 2022 and 2021, the principal amount outstanding of the 2013 Series A bonds was $15,535 and $29,595, respectively.

d) Wastewater Revenue Bonds 2013 Series B

In February 2013, the Wastewater Enterprise issued revenue bonds 2013 Series B in the amount of $331,585 with interest rates ranging from 4.0% to 5.0%. Proceeds from the bonds were used for Wastewater capital projects, pay off all outstanding Wastewater commercial paper notes, and pay the costs of issuing the bonds. The bonds were rated "Aa3" and "AA-" by Moody's and S&P, respectively at the time of issuance. Bonds mature through October 1, 2042. The true interest cost is 3.6%. As of June 30, 2022 and 2021, the principal amount outstanding of the 2013 Series B bonds was $331,585.

e) Wastewater Revenue Bonds 2016 Series A

In May 2016, the Wastewater Enterprise issued tax-exempt revenue bonds 2016 Series A (Green Bonds) in the amount of $240,580 with interest rates ranging from 4.0% to 5.0%. Proceeds from the bonds were used for Wastewater capital projects, to pay off $53,439 of outstanding commercial paper notes, to fund capitalized interest, and pay the costs of issuing the bonds. The bonds carried ratings of "AA" and "Aa3" from S&P and Moody's, respectively at the time of issuance. Bonds mature through October 1, 2046. The bonds have a true interest cost of 3.2%. As of June 30, 2022 and 2021, the principal amount outstanding of the 2016 Series A bonds was $240,580.

f) Wastewater Revenue Bonds 2016 Series B

In May 2016, the Wastewater Enterprise issued tax-exempt revenue bonds 2016 Series B in the amount of $67,820 with interest rates ranging from 4.0% to 5.0%. Proceeds from the bonds were used for Wastewater capital projects, to pay off $20,560 of outstanding commercial paper notes, to fund capitalized interest, and pay the costs of issuing the bonds. The bonds carried ratings of “AA” and “Aa3” from S&P and Moody’s, respectively at the time of issuance. Bonds mature through October 1, 2046. The bonds have a true interest cost of 3.2%. As of June 30, 2022 and 2021, the principal amount outstanding of the 2016 Series B bonds was $67,820.

g) Wastewater Revenue Bonds 2018 Series A

In August 2018, the Wastewater Enterprise issued tax-exempt revenue bonds 2018 Series A (SSIP) (Green Bonds) in the amount of $229,050 with interest rates ranging from 4.0% to 5.0%. Proceeds from the bonds were used for Wastewater capital projects in furtherance of the SFPUC’s Sewer System Improvement Program (SSIP), to pay off $25,000 of outstanding commercial paper notes, to fund capitalized interest, and pay the costs of issuing the bonds. The bonds carried ratings of “AA” and “Aa3” from S&P and Moody’s, respectively at the time of issuance. Bonds mature through October 1, 2043. The bonds have a true interest cost of 3.4%. As of June 30, 2022 and 2021, the principal amount outstanding of the 2018 Series A bonds was $229,050.

h) Wastewater Revenue Bonds 2018 Series B

In August 2018, the Wastewater Enterprise issued tax-exempt revenue bonds 2018 Series B (Non-SSIP) in the amount of $185,950 with 5.0% interest rate. Proceeds from the bonds were used for Wastewater capital projects, to fund capitalized interest, and pay the costs of issuing the bonds. The bonds carried ratings of “AA” and “Aa3” from S&P and Moody’s, respectively at the time of issuance. Bonds mature through October 1, 2043. The bonds have a true interest cost of 3.5%. As of June 30, 2022 and 2021, the principal amount outstanding of the 2018 Series B bonds was $185,950.

i) Wastewater Revenue Bonds 2018 Series C

In August 2018, the Wastewater Enterprise issued tax-exempt revenue bonds 2018 Series C (SSIP) (Green Bonds) in the amount of $179,145 with 2.1% interest rate. Proceeds from the bonds were used for Wastewater capital projects, to fund capitalized interest, and pay the costs of issuing the bonds. The bonds carried ratings of “AA” and “Aa3” from S&P and Moody’s, respectively at the time of issuance. Bonds mature through October 1, 2048. The Initial Mandatory Tender date of the 2018 Series C bonds is October 1, 2023. The bonds have a true interest cost of 3.5%. As of June 30, 2022 and 2021, the principal amount outstanding of the 2018 Series C bonds was $179,145.

j) Wastewater Revenue Bonds 2021 Series AB

In November 2021, the Wastewater Enterprise issued tax-exempt revenue bonds, 2021 Series AB in the aggregate amount of $297,880. The purpose of the 2021 Series AB Bonds was to refund approximately $340,000 aggregate principal amount of commercial paper notes which funded various capital projects of the Wastewater Enterprise. The bonds carried “Aa2” and “AA” ratings from Moody’s and S&P, respectively.

The $260,835 2021 Series A Bonds were issued as tax-exempt Green Bonds to refund approximately $296,000 of commercial paper notes for SSIP capital projects. The Series A bonds were issued as serial bonds with coupons of 4.0% and 5.0% and a final maturity of 2051. The 2021 Series A bonds have a true interest cost of 3.0%. As of June 30, 2022, the principal amount of the 2021 Series A bonds outstanding was $260,835.

(Dollars in thousands, unless otherwise stated)

The $37,045 2021 Series B bonds were issued as tax-exempt bonds to refund approximately $44,000 of commercial paper notes for Wastewater capital projects. The Series B bonds were issued as serial bonds with coupons of 5.0% and have a final maturity of 2051. The Series B bonds have a true interest cost of 3.2%. As of June 30, 2022, the principal amount of the 2021 Series B bonds outstanding was $37,045.

k) Wastewater Revenue Notes 2021 Series AB

In November 2021, the Wastewater Enterprise issued tax-exempt revenue (Green) notes, 2021 Sub-Series A and Sub-Series B together with an aggregate principal of $347,465 to finance a portion of the design, acquisition and construction of the Biosolids Digester Facility Project and Southeast Water Pollution Control Plant improvements. The SFPUC intends to pay principal of the 2021A Notes and 2021B Notes from the proceeds of one or more draws under WIFIA Loan Agreements for the Biosolids Digester Facility Project and Southeast Treatment Plant Improvements, respectively, or from the proceeds of future obligations.

The $218,355 2021 Series A Notes were issued as tax-exempt Green Notes to fund a portion of the Biosolids Digester Facilities Project. The Series A Notes were issued with 1.0% coupons and a final maturity of 2025. The 2021 Series A Notes have a true interest cost of 0.75%. As of June 30, 2022, the principal amount of 2021 Series A Notes outstanding was $218,355.

The $129,110 2021 Series B Notes were issued as tax-exempt Green Notes to fund a portion of Southeast Water Pollution Control Plant improvements. The Series B Notes were issued with 1.0% coupons and a final maturity of 2026. The 2021 Series B Notes have a true interest cost of 0.81%. As of June 30, 2022, the principal amount of 2021 Series B Notes outstanding was $129,110.

l) Future Annual Debt Service of Revenue and Refunding Bonds

The following table presents the future annual debt service relating to the revenue and refunding bonds outstanding as of June 30, 2022. The interest before subsidy amounts include the interest for 2010 Series A and B, 2013 Series A and B, 2016 Series A and B, and 2018 Series A, B, and C, 2021 Series A and B bonds, and 2021 Series A and B notes. The federal interest subsidy amounts represent 35% of the interest, excluding sequestration, for the 2010 Series B revenue bonds.

	Principal	Interest before subsidy	Federal interest subsidy*	Interest net of subsidy
Fiscal years ending June 30:				
2023	$ 34,345	79,288	(3,471)	75,817
2024	36,905	79,234	(3,356)	75,878
2025	36,935	79,083	(3,235)	75,848
2026	257,030	76,151	(3,105)	73,046
2027	169,625	72,469	(2,968)	69,501
2028-2032	233,765	325,416	(12,483)	312,933
2033-2037	295,065	259,098	(7,749)	251,349
2038-2042	367,020	181,095	(2,061)	179,034
2043-2047	404,575	96,342	—	96,342
2048-2052	252,260	22,115	—	22,115
Total	2,087,525	1,270,291	(38,428)	1,231,863
Less: Current portion	(34,345)			
Add: Unamortized bond premiums	194,084			
Long-term portion as of June 30, 2022	$ 2,247,264			

*The SFPUC received an IRS notice, dated June 2, 2022, that the federal interest subsidy on the 2010 Series B bonds is reduced by 5.7%, or a total reduction of $2,323, due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same after fiscal year 2023.

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

m) Lake Merced Green Infrastructure Project CWSRF Loan

In January 2016, then amended in May 2016, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a Clean Water State Revolving Fund ("CWSRF") Loan to fund the Lake Merced Green Infrastructure Project of the Sewer System Improvement Program. The aggregate amount of the CWSRF loans is $7,435. The loan bears an interest rate of 1.6% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; substantial completion is expected by July 2020. The CWSRF loan is secured on a parity lien basis with the Wastewater Enterprise's outstanding revenue bonds. The SFPUC has received loan disbursements to date totaling $6,116 and a construction period interest of $166 transferred to principal. As of June 30, 2022 and 2021, the principal amount outstanding of the loan was $6,112 and $6,282, respectively.

n) Southeast Plant (SEP) 521/522 and Disinfection Upgrade Project CWSRF Loan

In September 2017, then amended in December 2017 and May 2018, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a CWSRF Loan to fund the SEP 521/522 and Disinfection Upgrade Project of the Sewer System Improvement Program. The aggregate amount of the CWSRF loans is $40,007. The loan bears an interest rate of 1.8% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; substantial completion occurred in July 2019. The CWSRF loan is secured on a parity lien basis with the Wastewater Enterprise's outstanding revenue bonds. The SFPUC has received proceeds from loan disbursements to date totaling $39,741. As of June 30, 2022 and 2021, the principal amount outstanding of the loan was $37,450 and $38,512, respectively.

o) North Point Facility Outfall Rehabilitation Project CWSRF Loan

In September 2017 the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a CWSRF Loan to fund the North Point Facility Outfall Rehabilitation Project of the Sewer System Improvement Program. The aggregate amount of the CWSRF loans is $20,199. The loan bears an interest rate of 1.8% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction, substantial completion occurred in February 2018. The CWSRF loans is secured on a parity lien basis with the Wastewater Enterprise's outstanding revenue bonds. The SFPUC has received proceeds from loan disbursements to date totaling $17,706. As of June 30, 2022 and 2021 the principal amount outstanding of the loan was $15,710 and $16,181, respectively.

p) Southeast Plant (SEP) Primary/Secondary Clarifier Upgrade Project CWSRF Loan

In September 2017 the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a CWSRF Loan to fund the SEP Primary/Secondary Clarifier Upgrade Project of the Sewer System Improvement Program. The aggregate amount of the CWSRF loans is $34,446. The loan bears an interest rate of 0.8% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; substantial completion occurred in June 2018. The CWSRF loan is secured on a parity lien basis with the Wastewater Enterprise's outstanding revenue bonds. The SFPUC has received proceeds from loan disbursements to date totaling $29,197. As of June 30, 2022 and 2021, the principal amount outstanding of the loan was $26,048 and $26,829, respectively.

q) Oceanside Plant (OSP) Digester Gas Utilization Upgrade Project

In May 2020 the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a CWSRF Loan to fund the OSP Digester Gas Utilization Upgrade Project of the Sewer System Improvement Program. The CWSRF loan is in the amount of $54,388, which includes $4,000 of principal forgiveness, or a grant. The loan bears an interest rate of 1.4% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; substantial completion is expected in August 2021. The CWSRF loan is secured on a parity lien basis with the Wastewater Enterprise's outstanding revenue bonds. The SFPUC has received proceeds from loan disbursements to date totaling $22,544 and a receivable for reimbursement of $6,117, which included a loan forgiveness grant of $4,000. As of June 30, 2022 and 2021, the principal amount outstanding of the loan was $24,661 and $20,755, respectively.

r) Southeast Plant (SEP) Biosolids Digester Facilities Project

In May 2020 the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a CWSRF Loan to fund the SEP Biosolids Digester Facilities Project of the Sewer System Improvement Program. The CWSRF loan is in the amount of $132,000, which includes $4,000 of principal forgiveness, or a grant. The loan bears an interest rate of 1.4% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; substantial completion is expected in May 2026. The CWSRF loan is secured on a parity lien basis with the Wastewater Enterprise's outstanding revenue bonds. The SFPUC has received proceeds from loan disbursements to date totaling $0 and a receivable for reimbursement of $132,000, which includes a $4,000 loan forgiveness grant. As of June 30, 2022 and 2021, the principal amount outstanding of the loan was $128,000 and $0, respectively.

s) Southeast Plant (SEP) New Headworks (Grit) Replacement Project

In May 2021, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a CWSRF Loan to fund the SEP New Headworks (Grit) Replacement Project of the Sewer System Improvement Program. The CWSRF loan is in the amount of $112,036. The loan bears an interest rate of 1.1% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; substantial completion is expected in March 2024. The CWSRF loan is secured on a parity lien basis with the Wastewater Enterprise's outstanding revenue bonds. The SFPUC has received proceeds from loan disbursements to date totaling $0 and a receivable for reimbursement of $64,678. As of June 30, 2022 and 2021, the principal amount outstanding of the loan was $64,678 and $0, respectively.

(Dollars in thousands, unless otherwise stated)

t) Future Annual Debt Services of State Revolving Fund Loans (CWSRF Loans Wastewater Revenue Notes 2021 Series AB)

The future annual debt services relating to the State Revolving Fund Loan to fund the Lake Merced Green Infrastructure Project, the North Point Facility Outfall Rehabilitation Project, the SEP Primary/ Secondary Clarifier Upgrade Project, the SEP 521/522 and Disinfection Upgrade Project, the OSP Digester Gas Utilization Upgrade Project, the SEP Biosolids Digester Facilities Project, and the SEP New Headworks (Grit) Replacement Project outstanding as of June 30, 2022 are as follows:

		Principal	Interest and Fees*	Total
Fiscal years ending June 30:				
2023	$	2,481	1,524	4,005
2024		3,192	1,824	5,016
2025		5,079	2,481	7,560
2026		5,154	2,406	7,560
2027		8,693	4,121	12,814
2028-2032		45,402	18,672	64,074
2033-2037		48,807	15,267	64,074
2038-2042		52,476	11,598	64,074
2043-2047		56,429	7,645	64,074
2048-2052		48,642	3,637	52,279
2053-2056		26,304	812	27,116
Total		302,659	69,987	372,646
Less: Current portion		(2,481)		
Long-term portion as of June 30, 2022	$	300,178		

*Interest and Fees included debt admin fees for the North Point Facility and SEP Clarifier Upgrade SRF loans.

u) WIFIA Loan Agreement-Biosolids Digester Facility Project

In July 2018 the SFPUC entered into a "Water Infrastructure Finance and Innovation Act (WIFIA)" Loan Agreement ("WIFIA Loan") with the United States Environmental Protection Agency in the amount of $699,242. The WIFIA Loan was entered into pursuant to the WIFIA statute authorized by Congress in 2014. The WIFIA Loan will fund 49% of the costs of the Wastewater Enterprise's Biosolids Digester Facility Project plus certain eligible expenses. Payment of the WIFIA Loan will be secured by a senior lien pledge of the Wastewater Enterprise's net revenues and is on a parity lien basis with the SFPUC's outstanding Wastewater Revenue Bonds and Clean Water State Revolving Fund ("SRF") Loans entered into with the California State Water Resources Control Board.

The original 2018 loan bore a fixed interest rate of 3.09% for a 35-year term, with loan repayment expected to begin in fiscal year 2026, after substantial completion of project construction. In June 2020, the SFPUC re-executed the WIFIA Loan Agreement to have a fixed interest rate of 1.45% for a 35-year term. All other terms of WIFIA Loan Agreement are unchanged.

The SFPUC has not submitted any requests for loan disbursements to date and there is no outstanding loan principal as of June 30, 2022.

v) WIFIA Loan Agreement-Southeast Treatment Plant Improvements Project

In June 2020 the SFPUC entered into a "Water Infrastructure Finance and Innovation Act (WIFIA) Loan Agreement (WIFIA Loan) with the United States Environmental Protection Agency in the amount of $513,862. The WIFIA Loan was entered into pursuant to the WIFIA statute authorized by Congress in 2014. The WIFIA Loan will fund 49% of the costs of the Wastewater Enterprise's SEP New Headworks Replacement Project and additional costs of the revised Biosolids Digester Facility Project plus certain eligible expenses. Payment of the WIFIA Loan will be secured by a senior lien pledge of the Wastewater

(Dollars in thousands, unless otherwise stated)

Enterprise's net revenues and is on a parity lien basis with the SFPUC's outstanding Wastewater Revenue Bonds and Clean Water State Revolving Fund ("SRF") Loans entered into with the California State Water Resources Control Board. The loan will bear a fixed interest rate of 1.45% for a 35-year term, with loan repayment expected to begin in fiscal year 2025, after substantial completion of project construction. The SFPUC has not submitted any requests for loan disbursements to date and there is no outstanding loan principal as of June 30, 2022.

w) Events of Default and Remedies

In accordance with GASB Statement No. 88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*, significant events of default as specified in the Wastewater Enterprise Indenture (applicable to Wastewater Revenue Bonds, SRF Loans, and WIFIA Loan include 1) Non-payment 2) material breach of warranty, representation, or indenture covenants (not cured within applicable grace periods), and 3) bankruptcy and insolvency events, which may result in the Trustee (upon written request by the majority of the owners (by aggregate amount of the bond obligations or of a credit provider), declaring the principal and the interest accrued thereon, to be due and payable immediately. As of June 30, 2022, there were no such events described herein.

Hetchy Water Long-Term Liability activities for the years ended June 30, 2022 and 2021 are as follows:

		Restated 2021^	Additions	Reductions	2022	Due within one year
Other post-employment benefits obligations	$	14,444	1,921	(2,125)	14,240	—
Net pension liability		26,645	—	(26,645)	—	—
Accrued vacation and sick leave		2,185	749	(765)	2,169	1,034
Accrued workers' compensation		1,120	233	(125)	1,228	215
Lease liability		78	—	(16)	62	3
Damage claims liability		525	253	(151)	627	228
Unearned revenues, refunds, and other		138	14	(18)	134	24
Total	$	45,135	3,170	(29,845)	18,460	1,504

^Restated due to the implementation of GASB Statement No. 87, *Leases*.

		2020	Additions	Reductions	Restated 2021^	Due within one year
Other post-employment benefits obligations	$	16,350	1,818	(3,724)	14,444	—
Net pension liability		21,477	12,119	(6,951)	26,645	—
Accrued vacation and sick leave		1,646	1,034	(495)	2,185	1,059
Accrued workers' compensation		1,187	18	(85)	1,120	197
Due to Other City departments		240	—	(240)	—	—
Lease liability		93	—	(15)	78	16
Damage claims liability		558	478	(511)	525	218
Unearned revenues, refunds, and other		627	629	(1,118)	138	22
Total	$	42,178	16,096	(13,139)	45,135	1,512

^Restated due to the implementation of GASB Statement No. 87, *Leases*.

(Dollars in thousands, unless otherwise stated)

Hetchy Power Long-Term Liability activities for the years ended June 30, 2022 and 2021 are as follows:

	Interest Rate	Maturity (Calendar Year)	Restated 2021^	Additions	Reductions	2022	Due within one year
Bonds:							
Clean Renewable Energy Bonds	0.00 %	2022	$ 843	—	(422)	421	421
Qualified Energy Conservation Bonds	4.74	2027	3,687	—	(549)	3,138	555
New Clean Renewable Energy Bonds 2015	4.62	2032	1,779	—	(142)	1,637	146
2015 Series A Revenue Bonds	4.00 - 5.00	2045	32,025	—	—	32,025	—
2015 Series B Revenue Bonds	3.00 - 4.00	2026	4,550	—	(815)	3,735	850
2021 Series A Revenue Bonds	4.00 - 5.00	2052	—	74,280	—	74,280	—
2021 Series B Revenue Bonds	4.00 - 5.00	2052	—	49,720	—	49,720	—
Less issuance discount			(20)	—	14	(6)	(6)
Add issuance premiums			3,448	27,022	(934)	29,536	—
Total bonds payable			46,312	151,022	(2,848)	194,486	1,966
2009 Series C Certificates of Participation (COPs)	2.00 – 5.00	2022	830	—	(405)	425	425
2009 Series C COPs issuance premiums			8	—	(6)	2	2
2009 Series D COPs (Build America)	6.36 – 6.49	2041	12,593	—	—	12,593	—
Other post-employment benefits obligations			17,653	2,347	(2,595)	17,405	—
Net pension liability			32,566	—	(32,566)	—	—
Accrued vacation and sick leave			3,617	1,856	(1,876)	3,597	1,747
Accrued workers' compensation			2,118	322	(190)	2,250	400
Due to Other City departments			369	11	—	380	380
Lease liability			94	—	(19)	75	3
Damage claims liability			1,108	2,005	(2,090)	1,023	358
Unearned revenues, refunds, and other			5,993	8,410	(7,676)	6,727	5,923
Total			$ 123,261	165,973	(50,271)	238,963	11,204

^Restated due to the implementation of GASB Statement 87, *Leases*.

	Interest Rate	Maturity (Calendar Year)	2020	Additions	Reductions	Restated 2021^	Due within one year
Bonds:							
Clean Renewable Energy Bonds	0.00 %	2022	$ 1,265	—	(422)	843	422
Qualified Energy Conservation Bonds	4.74	2027	4,229	—	(542)	3,687	549
New Clean Renewable Energy Bonds 2012	4.74	2020	130	—	(130)	—	—
New Clean Renewable Energy Bonds 2015	4.62	2032	3,190	—	(1,411)	1,779	142
2015 Series A Revenue Bonds	4.00 - 5.00	2045	32,025	—	—	32,025	—
2015 Series B Revenue Bonds	3.00 - 4.00	2026	5,335	—	(785)	4,550	815
Less issuance discount			(34)	—	14	(20)	—
Add issuance premiums			3,668	—	(220)	3,448	—
Total bonds payable			49,808	—	(3,496)	46,312	1,928
2009 Series C Certificates of Participation (COPs)	2.00 – 5.00	2022	1,214	—	(384)	830	405
2009 Series C COPs issuance premiums			21	—	(13)	8	—
2009 Series D COPs (Build America)	6.36 – 6.49	2041	12,593	—	—	12,593	—
Other post-employment benefits obligations			19,983	2,223	(4,553)	17,653	—
Net pension liability			26,249	14,812	(8,495)	32,566	—
Accrued vacation and sick leave			2,957	1,763	(1,103)	3,617	1,777
Accrued workers' compensation			2,200	95	(177)	2,118	378
Due to Other City departments			600	—	(231)	369	369
Lease liability			113	—	(19)	94	19
Damage claims liability			2,222	4,212	(5,326)	1,108	409
Unearned revenues, refunds, and other			7,642	8,560	(10,209)	5,993	5,141
Total			$ 125,602	31,665	(34,006)	123,261	10,426

^Restated due to the implementation of GASB Statement 87, *Leases*.

(Dollars in thousands, unless otherwise stated)

CleanPowerSF Long-Term Liability activities for the years ended June 30, 2022 and 2021 are as follows:

	Restated 2021^	Additions	Reductions	2022	Due within one year
Other post-employment benefits obligations	$ 2,909	867	(1,512)	2,264	—
Net pension liability	3,008	—	(3,008)	—	—
Accrued vacation and sick leave	400	264	(118)	546	279
Lease liability	577	—	(345)	232	232
Damage claims liability	6	1,582	(1,556)	32	15
Unearned revenues, refunds, and other	10,028	14,689	(11,521)	13,196	4,196
Total	$ 16,928	17,402	(18,060)	16,270	4,722

^Restated due to the implementation of GASB Statement No. 87, *Leases*.

	2020	Additions	Reductions	Restated 2021^	Due within one year
Other post-employment benefits obligations	$ 2,197	1,605	(893)	2,909	—
Net pension liability	1,805	1,987	(784)	3,008	—
Accrued vacation and sick leave	291	135	(26)	400	205
Lease liability	920	—	(343)	577	345
Damage claims liability	106	153	(253)	6	6
Unearned revenues, refunds, and other	848	19,561	(10,381)	10,028	1,028
Total	$ 6,167	23,441	(12,680)	16,928	1,584

^Restated due to the implementation of GASB Statement No. 87, *Leases*.

a) Clean Renewable Energy Bonds

In November 2008, Hetchy Power issued $6,325 of taxable CREBs to finance the installation of solar energy equipment on City-owned facilities, including Chinatown Branch Library, Maxine Hall Medical Center, City Distribution Division Warehouse, North Point Wastewater Plant, Chinatown Public Health Center, Municipal Transportation Agency Woods, and Municipal Transportation Agency Ways and Structures. The CREBs were non-rated and privately-placed with Banc of America Leasing. The net effective interest rate on the CREBs, after the federal tax subsidy, is 0% through 2022. Hetchy Power began making principal payments in the amount of $422 on December 15, 2008 and will continue annual payments for 15 years until December 15, 2022. Funding for these payments will be guaranteed by net power revenues. Interest payments are not required, since the effective equivalent of interest on the bonds is paid in the form of federal tax credits in lieu of interest paid by the issuer.

The future annual debt service relating to the CREBs outstanding as of June 30, 2022 is as follows:

Fiscal years ending June 30:	Principal
2023	$ 421
Less: Current portion	(421)
Less: Unamortized bond discount	(6)
Less: Current portion	6
Long-term portion as of June 30, 2022	$ —

(Dollars in thousands, unless otherwise stated)

b) Qualified Energy Conservation Bonds

In December 2011, Hetchy Power issued $8,291 of taxable QECBs. The QECBs were issued to fund certain qualified green components for the SFPUC's 525 Golden Gate Headquarters project. The QECBs were non-rated and privately placed with Banc of America Leasing. The net effective interest rate on the QECBs, after the federal tax subsidy, is 1.2% through 2028.

The future annual debt service relating to the QECBs outstanding as of June 30, 2022 is as follows:

Fiscal years ending June 30:		Principal	Interest before subsidy	Federal interest subsidy*	Interest net of subsidy
2023	$	555	142	(100)	42
2024		562	116	(82)	34
2025		569	89	(63)	26
2026		576	62	(44)	18
2027		582	35	(24)	11
2028		294	7	(4)	3
Total		3,138	451	(317)	134
Less: Current portion		(555)			
Long-term portion as of June 30, 2022	$	2,583			

*The SFPUC received an IRS notice dated June 2, 2022 that the federal interest subsidy is reduced by 5.7% or a total reduction of $19 due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same after fiscal year 2023.

c) New Clean Renewable Energy Bonds 2012

In April 2012, Hetchy Power issued $6,600 of taxable NCREBs. The NCREBs were issued to fund certain qualified facilities that provide clean, renewable energy at Davies Symphony Hall, City Hall, and University Mound Reservoir. The NCREBs were non-rated and privately placed with Banc of America Leasing. The net effective interest rate on the NCREBs, after the federal tax subsidy, is 1.5% through 2021. $288 and $2,523 of principal was prepaid in fiscal year 2017 and 2016, respectively. There was no prepayment thereafter. 2012 NCREBs have been fully repaid as of June 30, 2021.

d) New Clean Renewable Energy Bonds 2015

In October 2015, Hetchy Power issued $4,100 of taxable 2015 NCREBs. The 2015 NCREBs were issued to fund certain qualified clean, renewable energy solar generation facilities at the Marina Middle School and the San Francisco Police Academy. The 2015 NCREBs were non-rated and privately placed with Banc of America Leasing. The net effective interest rate on the 2015 NCREBs, after the federal tax subsidy, is 1.4% through 2033. $0 and $1,272 of principal were prepaid in fiscal years 2022 and 2021, respectively.

(Dollars in thousands, unless otherwise stated)

The future annual debt service relating to the 2015 NCREBs outstanding as of June 30, 2022 is as follows:

Fiscal years ending June 30:		Principal	Interest before subsidy	Federal interest subsidy*	Interest net of subsidy
2023	$	146	74	(49)	25
2024		148	67	(44)	23
2025		150	60	(40)	20
2026		152	53	(35)	18
2027		154	47	(31)	16
2028-2032		803	122	(81)	41
2033		84	2	(1)	1
Total		1,637	425	(281)	144
Less: Current portion		(146)			
Long-term portion as of June 30, 2022	$	1,491			

*The SFPUC received an IRS notice dated June 2, 2022 that the federal interest subsidy is reduced by 5.7% or a total reduction of $17 due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same after fiscal year 2023.

e) Power Revenue Bonds 2015 Series A (Green) and Series B

In May 2015, Hetchy Power issued tax-exempt revenue bonds, 2015 Series A (Green) in the amount of $32,025 with interest rates ranging from 4.0% to 5.0% and 2015 Series B in the amount of $7,530 with interest rates ranging from 3.0% to 4.0%. Proceeds from the bonds were used to finance reconstruction or replacement of existing facilities of the SFPUC's Hetch Hetchy project, to fund capitalized interest on the 2015 Series AB Bonds, to fund a debt service reserve account for the 2015 Series AB Bonds, and to pay costs of issuance of the 2015 Series AB bonds. The bonds were rated "A+" and "AA-" by S&P and Fitch, respectively. Final maturity for 2015 Series AB are November 1, 2045 and November 1, 2026, respectively. The true interest cost is 3.95%. As of June 30, 2022 and 2021, the outstanding principal amounts were $35,760 and $36,575, respectively.

The future annual debt service relating to the 2015 Series AB Bonds outstanding as of June 30, 2022 are as follows:

Hetchy Power - Power Revenue Bonds 2015 Series A (Green)

Fiscal years ending June 30:		Principal	Interest	Total
2023	$	—	1,593	1,593
2024		—	1,593	1,593
2025		—	1,593	1,593
2026		—	1,593	1,593
2027		830	1,576	2,406
2028-2032		5,645	7,121	12,766
2033-2037		7,205	5,522	12,727
2038-2042		9,190	3,482	12,672
2043-2046		9,155	943	10,098
Total		32,025	25,016	57,041
Add: Unamortized bond premium		3,119		
Long-term portion as of June 30, 2022	$	35,144		

(Dollars in thousands, unless otherwise stated)

Hetchy Power - Power Revenue Bonds 2015 Series B

Fiscal years ending June 30:		Principal	Interest	Total
2023	$	850	124	974
2024		880	93	973
2025		910	62	972
2026		945	25	970
2027		150	3	153
Total		3,735	307	4,042
Less: Current portion		(850)		
Add: Unamortized bond premium		114		
Long-term portion as of June 30, 2022	$	2,999		

f) Power Revenue Bonds 2021 Series A (Green) and Series B

In December 2021, Hetchy Power issued tax-exempt revenue bonds, 2021 Series A (Green) in the amount of $74,280 with interest rates ranging from 4.0% to 5.0% and 2021 Series B in the amount of $49,720 with interest rates ranging from 4.0% to 5.0%. Proceeds from the bonds were used to refinance a portion of the costs of various capital projects benefiting the Power Enterprise, to fund capitalized interest on the 2021 Series AB Bonds, and to pay costs of issuance. The bonds were rated “AA” and “AA-” by S&P and Fitch, respectively. Final maturity for 2021 Series AB are November 1, 2051. The true interest cost is 2.64%. As of June 30, 2022 the outstanding principal amount was $124,000.

The future annual debt service relating to the 2021 Series AB Bonds outstanding as of June 30, 2022 are as follows:

Hetchy Power - Power Revenue Bonds 2021 Series A (Green)

Fiscal years ending June 30:		Principal	Interest	Total
2023	$	—	3,085	3,085
2024		—	3,085	3,085
2025		1,385	3,050	4,435
2026		1,455	2,979	4,434
2027		1,530	2,905	4,435
2028-2032		8,875	13,294	22,169
2033-2037		11,025	11,140	22,165
2038-2042		13,470	8,698	22,168
2043-2047		16,450	5,716	22,166
2048-2052		20,090	2,073	22,163
Total		74,280	56,025	130,305
Add: Unamortized bond premium		15,933		
Long-term portion as of June 30, 2022	$	90,213		

Hetchy Power - Power Revenue Bonds 2021 Series B

Fiscal years ending June 30:		Principal	Interest	Total
2023	$	—	2,045	2,045
2024		—	2,045	2,045
2025		585	2,030	2,615
2026		620	2,000	2,620
2027		650	1,969	2,619
2028-2032		3,765	9,308	13,073
2033-2037		4,755	8,363	13,118
2038-2042		5,945	7,295	13,240
2043-2047		9,900	5,920	15,820
2048-2052		23,500	2,426	25,926
Total		49,720	43,401	93,121
Add: Unamortized bond premium		10,370		
Long-term portion as of June 30, 2022	$	60,090		

(Dollars in thousands, unless otherwise stated)

g) Events of Default and Remedies

In accordance with GASB Statement No. 88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*, significant events of default as specified in the Power Enterprise Indenture (applicable to Power Revenue Bonds and energy bonds) and the Equipment Lease/Purchase Agreement 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), declare the principal and the interest accrued thereon to be due and payable immediately. As of June 30, 2022 and 2021, there were no such events described herein.

(8) Certificates of Participation Issued for the 525 Golden Gate Avenue Headquarters Building

Department-wide Business Type Activities

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” (BABs) 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 this memorandum of understanding.

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 Hetchy 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 Hetchy Power (9.7%).

The future annual debt services relating to the certificates of participation 2009 Series C and D outstanding as of June 30, 2022 are as follows:

Water Enterprise

Certificates of Participation 2009 Series C (Tax-Exempt)	Principal	Interest	Total
Fiscal years ending June 30:			
2023	$ 3,124	78	3,202
Less: Current portion	(3,124)		
Add: Unamortized bond premium	14		
Less: Current portion	(14)		
Long-term portion as of June 30, 2022	$ —		

(Dollars in thousands, unless otherwise stated)

Certificates of Participation 2009 Series D (Taxable BABs)		Principal	Interest before subsidy	Federal interest subsidy*	Interest net of subsidy
Fiscal years ending June 30:					
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		3,545	5,431	(1,792)	3,639
2027		3,695	5,201	(1,716)	3,485
2028-2032		20,949	22,183	(7,321)	14,862
2033-2037		25,811	14,651	(4,835)	9,816
2038-2042		31,830	5,335	(1,761)	3,574
Total			70,285	(23,195)	47,090
Long-term portion as of June 30, 2022	$	92,499			

*The SFPUC received an IRS notice dated June 2, 2022 that the federal interest subsidy on the 2009 Series D bonds is reduced by 5.7%, or a total reduction of $1,402, due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same after fiscal year 2023.

Wastewater Enterprise

Certificates of Participation 2009 Series C (Tax-Exempt)		Principal	Interest	Total
Fiscal years ending June 30:				
2023	$	826	21	847
Less: Current portion		(826)		
Add: Unamortized bond premium		4		
Less: Current portion		(4)		
Long-term portion as of June 30, 2022	$	—		

Certificates of Participation 2009 Series D (Taxable BABs)		Principal	Interest before subsidy	Federal interest subsidy*	Interest net of subsidy
Fiscal years ending June 30:					
2023	$	—	1,578	(521)	1,057
2024		864	1,551	(512)	1,039
2025		900	1,494	(493)	1,001
2026		937	1,436	(474)	962
2027		977	1,375	(454)	921
2028-2032		5,539	5,865	(1,936)	3,929
2033-2037		6,825	3,874	(1,279)	2,595
2038-2042		8,416	1,411	(466)	945
Total			18,584	(6,135)	12,449
Long-term portion as of June 30, 2022	$	24,458			

*The SFPUC received an IRS notice dated June 2, 2022 that the federal interest subsidy on the 2009 Series D bonds is reduced by 5.7%, or a total reduction of $371, due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same after fiscal year 2023.

(Dollars in thousands, unless otherwise stated)

Hetchy Power

Certificates of Participation 2009 Series C (Tax-Exempt)		Principal	Interest	Total
Fiscal years ending June 30:				
2023	$	425	10	435
Less: Current portion		(425)		
Add: Unamortized bond premium		2		
Less: Current portion		(2)		
Long-term portion as of June 30, 2022	$	—		

Certificates of Participation 2009 Series D (Taxable BABs)		Principal	Interest before subsidy	Federal interest subsidy*	Interest net of subsidy
Fiscal years ending June 30:					
2023	$	—	812	(268)	544
2024		445	798	(263)	535
2025		463	769	(254)	515
2026		483	739	(244)	495
2027		503	709	(234)	475
2028-2032		2,852	3,020	(997)	2,023
2033-2037		3,514	1,995	(658)	1,337
2038-2042		4,333	727	(240)	487
Total			9,569	(3,158)	6,411
Long-term portion as of June 30, 2022	$	12,593			

*The SFPUC received an IRS notice dated June 2, 2022 that the federal interest subsidy is reduced by 5.7% or a total reduction of $191 due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same after fiscal year 2023.

(9) Revenue Pledge

Department-wide Business Type Activities

Department-wide revenue pledge for the years ended June 30, 2022 and 2021 are as follows:

		2022	2021
Bonds issued with revenue pledge	$	7,038,726	6,623,446
Notes issued with revenue pledge		347,465	—
Clean Water State Revolving Fund (CWSRF) loans with revenue pledge		432,026	221,088
Principal and interest remaining due at the end of the year		11,494,005	10,421,954
Principal and interest paid during the year		369,899	335,861
Net revenues for the year ended June 30		516,732	458,054
Funds available for debt service		819,884	808,093

Water Revenue Pledge

The Water 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 Water Enterprise through the fiscal year ending 2051.

(Dollars in thousands, unless otherwise stated)

The original amount of revenue bonds and State Revolving Fund loans issued, total principal and interest remaining, principal and interest paid during fiscal years 2022 and 2021, applicable net revenues and funds available for debt service are as follows:

		2022	2021
Bonds issued with revenue pledge	$	4,891,480	4,891,480
Clean Water State Revolving Fund (CWSRF) loans with revenue pledge		121,761	107,407
Principal and interest remaining due at the end of the year		7,472,962	7,771,993
Principal and interest paid during the year		279,352	248,427
Net revenues for the year ended June 30		306,918	339,046
Funds available for debt service		410,424	467,738

Wastewater Revenue Pledge

The Wastewater Enterprise has pledged future revenues to repay various revenue bonds, revenue notes, and State Revolving Fund loans. Proceeds from the revenue bonds, revenue notes, and State Revolving Fund loans provided financing for various capital construction projects, and to refund previously issued bonds. The bonds, notes, and State Revolving Fund loans payable through fiscal years 2052, 2027 and 2056, respectively, and are solely from revenues of the Wastewater Enterprise.

The original amount of revenue bonds issued, revenue notes issued, and State Revolving Fund loans issued, total principal and interest remaining, principal and interest paid during fiscal years 2022 and 2021, applicable net revenues, and funds available for debt service are as follows:

		2022	2021
Bonds issued with revenue pledge	$	1,964,975	1,667,095
Notes issued with revenue pledge		347,465	—
Clean Water State Revolving Fund (CWSRF) loans with revenue pledge		310,265	113,681
Principal and interest remaining due at the end of the year		3,730,462	2,578,879
Principal and interest paid during the year		86,619	82,066
Net revenues for the year ended June 30		155,504	108,399
Funds available for debt service		310,835	306,177

Hetchy Power Revenue Pledge

Hetchy Power has pledged future power revenues to repay the 2008 CREBs, the 2011 QECBs, the 2012 NCREBs, and the 2015 NCREBs. Additionally, Hetchy Power has pledged future power revenues for 2015 Series AB and 2021 Series AB power revenue bonds. Proceeds from the bonds provided financing for various capital construction and facility energy efficiency projects. The Series 2015 AB power and 2021 Series AB revenue bonds are payable through fiscal year 2046 and 2052, respectively, are solely payable from net revenues of Hetchy Power on a senior lien basis to the 2008 CREBs, the 2011 QECBs, and the 2015 NCREBs.

The original amount of bonds issued, total principal and interest remaining, principal and interest paid during fiscal years 2022 and 2021, applicable net revenues, and funds available for debt service are as follows:

		2022	2021
Bonds issued with revenue pledge	$	182,271	64,871
Principal and interest remaining due at the end of the year		290,581	71,082
Principal and interest paid during the year*		3,928	5,368
Net revenues for the year ended June 30		54,310	10,609
Funds available for debt service		98,625	34,178

*Per Indenture, debt service for coverage is calculated using the amount of principal and interest paid during the year for the 2015 Series AB and 2021 Series AB power revenue bonds net of capitalized interest if any, which have a senior lien on power enterprise revenues; principal and interest paid during the year for the 2015 Series AB and 2021 Series AB power revenue bonds was $2,565, net of capitalized interest.

(Dollars in thousands, unless otherwise stated)

(10) Leases

Department-wide Business Type Activities

Lessee

The SFPUC has entered into long-term leases for land, office space, communication site, data processing, machinery, and other equipment. The terms and conditions for these leases varies, which ranges between 1-75 years. A summary of intangible right-to-use lease during the years ended June 30, 2022 and 2021 is as follows:

Right-to-use assets:		2021	Increases	Decreases	Remeasurements	2022
Land	$	605	—	—	—	605
Building/facility		14,414	—	(58)	—	14,356
Total lease assets		15,019	—	(58)	—	14,961
Less accumulated amortization for:						
Land		(187)	(196)	—	—	(383)
Building/facility		(3,934)	(3,929)	58	—	(7,805)
Total accumulated amortization		(4,121)	(4,125)	58	—	(8,188)
Total lease assets, net	$	10,898	(4,125)	—	—	6,773

Right-to-use assets:		2020	Increases	Decreases	Remeasurements	2021
Land	$	605	—	—	—	605
Building/facility		14,167	250	(3)	—	14,414
Total lease assets		14,772	250	(3)	—	15,019
Less accumulated amortization for:						
Land		—	(187)	—	—	(187)
Building/facility		—	(3,937)	3	—	(3,934)
Total accumulated amortization		—	(4,124)	3	—	(4,121)
Total lease assets, net	$	14,772	(3,874)	—	—	10,898

A summary of changes in the related leases liabilities during the years ended June 30, 2022 and 2021 is as follows:

		2021	Deductions	2022	Due within one year
Water	$	4,244	(1,381)	2,863	1,008
Wastewater		5,952	(2,314)	3,638	2,341
Hetchy Water		78	(16)	62	3
Hetchy Power		94	(19)	75	3
CleanPowerSF		577	(345)	232	232
SFPUC Total	$	10,945	(4,075)	6,870	3,587

		2020	Deductions	2021	Due within one year
Water	$	5,399	(1,155)	4,244	1,381
Wastewater		8,247	(2,295)	5,952	2,314
Hetchy Water		93	(15)	78	16
Hetchy Power		113	(19)	94	19
CleanPowerSF		920	(343)	577	345
SFPUC Total	$	14,772	(3,827)	10,945	4,075

Variable Lease Payments

Variable lease payments, other than those payments that depend on an index or rate or are fixed in substance, are excluded from the measurement of the lease liability. Such amounts are recognized as lease expenses in the period in which the obligation for those payments is incurred.

Certain equipment or facility rental leases require SFPUC to make variable lease payments that based on usage, related to the property taxes levied on the lessor, and insurance payments made by the lessor; these amounts are generally determined annually. The amounts recognized as expense for variable lease payments not included in the measurement of the lease liability for SFPUC during the year ended June 30, 2022 and 2021 were as follows:

(Dollars in thousands, unless otherwise stated)

		Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
2022	$	34	207	1	1	43	286
2021		—	130	—	—	24	154

Lessor

The SFPUC has leased facilities, easements, communication site and equipment to various tenants. The terms and conditions for these leases vary, which range between 1-65 years.

Water Enterprise variable payments include percentage of sales, utility payments or payments depended on an index made by the lessee; these amounts are generally determined periodically. The Water Enterprise did not incur revenue related to residual value guarantees or lease termination penalties. The total amounts for lease revenue, interest revenue, and other lease-related revenues recognized during the year ended June 30, 2022 and 2021 were $2,332 and $2,976, respectively.

Water Enterprise as Lessor

Principal and interest requirements to maturity for the leases receivable at June 30, 2022 and 2021 are as follows:

Years ending June 30:		Principal amount	Interest amount	FY 2022 Total
2023	$	3,325	907	4,232
2024		3,389	848	4,237
2025		3,470	804	4,274
2026		2,951	743	3,694
2027		2,619	687	3,306
2028-2032		10,827	2,777	13,604
2033-2037		10,736	1,691	12,427
2038-2042		2,258	940	3,198
2043-2047		—	998	998
2048-2052		—	1,157	1,157
2053-2057		—	1,341	1,341
2058-2062		765	789	1,554
2063-2067		1,128	675	1,803
2068-2072		1,577	513	2,090
2073+		3,120	327	3,447
Total	$	46,165	15,197	61,362

Years ending June 30:		Principal amount	Interest amount	FY 2021 Total
2022	$	3,289	957	4,246
2023		3,285	901	4,186
2024		3,348	843	4,191
2025		3,427	800	4,227
2026		2,905	739	3,644
2027-2031		11,102	2,988	14,090
2032-2036		10,862	1,908	12,770
2037-2041		4,302	1,010	5,312
2042-2046		—	969	969
2047-2051		—	1,123	1,123
2052-2056		—	1,302	1,302
2057-2061		586	924	1,510
2062-2066		1,049	701	1,750
2067-2071		1,479	550	2,029
2072+		3,476	414	3,890
Total	$	49,110	16,129	65,239

(Dollars in thousands, unless otherwise stated)

Water Enterprise as Lessee

A summary of intangible right-to-use leases during the years ended June 30, 2022 and 2021 is as follows:

Right-to-use assets:	2021	Increases	Decreases	Remeasurements	2022
Land	$ 605	—	—	—	605
Building/facility	5,041	—	—	—	5,041
Total lease assets	5,646	—	—	—	5,646
Less accumulated amortization for:					
Land	(187)	(196)	—	—	(383)
Building/facility	(1,222)	(1,229)	—	—	(2,451)
Total accumulated amortization	(1,409)	(1,425)	—	—	(2,834)
Total lease assets, net	$ 4,237	(1,425)	—	—	2,812

Right-to-use assets:	2020	Increases	Decreases	Remeasurements	2021
Land	$ 605	—	—	—	605
Building/facility	4,794	250	(3)	—	5,041
Total lease assets	5,399	250	(3)	—	5,646
Less accumulated amortization for:					
Land	—	(187)	—	—	(187)
Building/facility	—	(1,225)	3	—	(1,222)
Total accumulated amortization	—	(1,412)	3	—	(1,409)
Total lease assets, net	$ 5,399	(1,162)	—	—	4,237

Future annual lease payments as of June 30, 2022 and 2021 are as follows:

Years ending June 30:	Principal amount	Interest amount	FY 2022 Total
2023	$ 1,008	42	1,050
2024	370	33	403
2025	186	29	215
2026	101	27	128
2027	103	25	128
2028-2032	436	96	532
2033-2037	446	49	495
2038-2042	213	6	219
Total	2,863	307	3,170
Less: Current portion	(1,008)		
Long-term portion as of June 30, 2022	$ 1,855		

Years ending June 30:	Principal amount	Interest amount	FY 2021 Total
2022	$ 1,381	58	1,439
2023	1,008	42	1,050
2024	370	33	403
2025	186	29	215
2026	101	27	128
2027-2031	455	105	560
2032-2036	436	58	494
2037-2041	307	12	319
Total	4,244	364	4,608
Less: Current portion	(1,381)		
Long-term portion as of June 30, 2021	$ 2,863		

(Dollars in thousands, unless otherwise stated)

Wastewater Enterprise as Lessee

A summary of intangible right-to-use leases during the years ended June 30, 2022 and 2021 is as follows:

Right-to-use assets:	2021	Increases	Decreases	Remeasurements	2022
Building/facility	$ 8,247	—	—	—	8,247
Total lease assets	8,247	—	—	—	8,247
Less accumulated amortization for:					
Building/facility	(2,325)	(2,325)	—	—	(4,650)
Total accumulated amortization	(2,325)	(2,325)	—	—	(4,650)
Total lease assets, net	$ 5,922	(2,325)	—	—	3,597

Right-to-use assets:	2020	Increases	Decreases	Remeasurements	2021
Building/facility	$ 8,247	—	—	—	8,247
Total lease assets	8,247	—	—	—	8,247
Less accumulated amortization for:					
Building/facility	—	(2,325)	—	—	(2,325)
Total accumulated amortization	—	(2,325)	—	—	(2,325)
Total lease assets, net	$ 8,247	(2,325)	—	—	5,922

Future annual lease payments as of June 30, 2022 and 2021 are as follows:

Years ending June 30:	Principal amount	Interest amount	FY 2022 Total
2023	$ 2,341	30	2,371
2024	1,297	6	1,303
Total	3,638	36	3,674
Less: Current portion	(2,341)		
Long-term portion as of June 30, 2022	$ 1,297		

Years ending June 30:	Principal amount	Interest amount	FY 2021 Total
2022	$ 2,314	57	2,371
2023	2,341	30	2,371
2024	1,297	6	1,303
Total	5,952	93	6,045
Less: Current portion	(2,314)		
Long-term portion as of June 30, 2021	$ 3,638		

(Dollars in thousands, unless otherwise stated)

Hetchy Water as Lessee

A summary of intangible right-to-use leases during the years ended June 30, 2022 and 2021 is as follows:

Right-to-use assets:	2021	Increases	Decreases	Remeasurements	2022
Building/facility	$ 93	—	(26)	—	67
Total lease assets	93	—	(26)	—	67
Less accumulated amortization for:					
Building/facility	(19)	(13)	26	—	(6)
Total accumulated amortization	(19)	(13)	26	—	(6)
Total lease assets, net	$ 74	(13)	—	—	61

Right-to-use assets:	2020	Increases	Decreases	Remeasurements	2021
Building/facility	$ 93	—	—	—	93
Total lease assets	93	—	—	—	93
Less accumulated amortization for:					
Building/facility	—	(19)	—	—	(19)
Total accumulated amortization	—	(19)	—	—	(19)
Total lease assets, net	$ 93	(19)	—	—	74

Future annual lease payments as of June 30, 2022 and 2021 are as follows:

Years ending June 30:	Principal amount	Interest amount	FY 2022 Total
2023	$ 3	1	4
2024	3	1	4
2025	3	1	4
2026	3	1	4
2027	3	1	4
2028-2032	17	4	21
2033-2037	18	3	21
2038-2042	12	1	13
Total	62	13	75
Less: Current portion	(3)		
Long-term portion as of June 30, 2022	$ 59		

Years ending June 30:	Principal amount	Interest amount	FY 2021 Total
2022	$ 16	2	18
2023	3	1	4
2024	3	1	4
2025	3	1	4
2026	3	1	4
2027-2031	16	5	21
2032-2036	18	3	21
2037-2041	16	1	17
Total	78	15	93
Less: Current portion	(16)		
Long-term portion as of June 30, 2021	$ 62		

(Dollars in thousands, unless otherwise stated)

Hetchy Power as Lessee

A summary of intangible right-to-use leases during the years ended June 30, 2022 and 2021 is as follows:

Right-to-use assets:	2021	Increases	Decreases	Remeasurements	2022
Building/facility	$ 113	—	(32)	—	81
Total lease assets	113	—	(32)	—	81
Less accumulated amortization for:					
Building/facility	(23)	(17)	32	—	(8)
Total accumulated amortization	(23)	(17)	32	—	(8)
Total lease assets, net	$ 90	(17)	—	—	73

Right-to-use assets:	2020	Increases	Decreases	Remeasurements	2021
Building/facility	$ 113	—	—	—	113
Total lease assets	113	—	—	—	113
Less accumulated amortization for:					
Building/facility	—	(23)	—	—	(23)
Total accumulated amortization	—	(23)	—	—	(23)
Total lease assets, net	$ 113	(23)	—	—	90

Future annual lease payments as of June 30, 2022 and 2021 are as follows:

Years ending June 30:	Principal amount	Interest amount	FY 2022 Total
2023	$ 3	2	5
2024	4	2	6
2025	4	1	5
2026	4	1	5
2027	4	1	5
2028-2032	20	5	25
2033-2037	23	3	26
2038-2042	13	1	14
Total	75	16	91
Less: Current portion	(3)		
Long-term portion as of June 30, 2022	$ 72		

Years ending June 30:	Principal amount	Interest amount	FY 2021 Total
2022	$ 19	2	21
2023	3	2	5
2024	4	2	6
2025	4	1	5
2026	4	1	5
2027-2031	20	6	26
2032-2036	22	3	25
2037-2041	18	1	19
Total	94	18	112
Less: Current portion	(19)		
Long-term portion as of June 30, 2021	$ 75		

(Dollars in thousands, unless otherwise stated)

CleanPowerSF as Lessee

A summary of intangible right-to-use leases during the years ended June 30, 2022 and 2021 is as follows:

Right-to-use assets:	2021	Increases	Decreases	Remeasurements	2022
Building/facility	$ 920	—	—	—	920
Total lease assets	920	—	—	—	920
Less accumulated amortization for:					
Building/facility	(345)	(345)	—	—	(690)
Total accumulated amortization	(345)	(345)	—	—	(690)
Total lease assets, net	$ 575	(345)	—	—	230

Right-to-use assets:	2020	Increases	Decreases	Remeasurements	2021
Building/facility	$ 920	—	—	—	920
Total lease assets	920	—	—	—	920
Less accumulated amortization for:					
Building/facility	—	(345)	—	—	(345)
Total accumulated amortization	—	(345)	—	—	(345)
Total lease assets, net	$ 920	(345)	—	—	575

Future annual lease payments as of June 30, 2022 and 2021 are as follows:

Years ending June 30:	Principal amount	Interest amount	FY 2022 Total
2023	$ 232	1	233
Less: Current portion	(232)		
Long-term portion as of June 30, 2022	$ —		

Years ending June 30:	Principal amount	Interest amount	FY 2021 Total
2022	$ 345	5	350
2023	232	1	233
Total	577	6	583
Less: Current portion	(345)		
Long-term portion as of June 30, 2021	$ 232		

(11) Water Wholesale Balancing Account

Water Supply Agreement

From 1984-2009, the Water 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 Water Enterprise of the outstanding balance of $356,139 as discussed further in the "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 Water 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 2022 and 2021, the WRR, net of adjustments, charged to such wholesale customers was $289,828 and $245,743 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 Water 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 Water Enterprise owed the Wholesale Customers $79,150 and $60,864 for the years ended June 30, 2022 and 2021, respectively, an increase of $18,286. Refer to the compliance audit report for the final balancing account available at https://sfpuc.org/about-us/reports/audited-financial-statements-reports.

In addition to advancing funds to acquire the pre-2009 assets as discussed previously, the Water 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 Water Enterprise is estimated at $9,532, 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.

(12) Other Non-Operating Revenues – Hetchy Power Transbay Cable Construction and Licensing Fees

In 2007, the Board of Supervisors adopted the resolution to enter into two non-exclusive licenses with the Transbay Cable LLC (the Licensee) for the Transbay Cable Project. The Licensee proposed to install, operate, and maintain approximately 53 miles of high-voltage direct current transmission cable running from the City of Pittsburg to the City. The first license is a Construction License to install a 400 MW high-voltage transmission line, with a four-year term. The Licensee has paid Hetchy Power $3,500 in Renewable Energy, Transmission and Grid Reliability. The entire licensing fees were fully spent as of 2020.

The second license is an operational license for operation of the transmission line with 25-year term and an option to renew for 10 years. The Licensee agrees to pay Hetchy Power in excess of $20,000 in 10 separate installments of $2,000 annually with adjustments for inflation, as the "San Francisco Electric Reliability Payment" to implement, advance, promote, or enhance policies and projects consistent with City Energy Policies. The project came on line November 29, 2010 and cumulative revenues of $22,708 were recorded, with final payment of $2,574 received in fiscal year 2020. Per agreement, the SFPUC shall consult with Departments of Environment and Public Health, as well as community members, including the Power Plant Task Force, in developing its proposals to the Board of Supervisors on how to spend the San Francisco Electricity Reliability Payment, and shall consider specifically renewable energy, conservation, and environmental health programs, which benefit low-income, at-risk, and environmentally disadvantaged communities. The San Francisco Electricity Reliability Payment shall also be partly used for green jobs training and placement programs, which benefit low-income, at-risk, and environmentally disadvantaged communities. As of June 30, 2022, cumulative expenses of $11,136 have been incurred, with $1,525 and $1,254 in fiscal years 2022 and 2021, respectively.

(Dollars in thousands, unless otherwise stated)

(13) Employee Benefits

a) Pension Plan

San Francisco City and County Employees' Retirement System – The SFPUC participates in a cost-sharing multiple-employer defined benefit pension Plan (SFERS Plan). The SFERS Plan is administered by the San Francisco City and County Employees' Retirement System (SFERS). For purposes of measuring the net pension liability, deferred outflows/inflows of resources related to pensions, pension expense, information about the fiduciary net position of the SFERS Plan, and additions to/deductions from the SFERS Plan's fiduciary net position have been determined on the same basis as they are reported by the SFERS 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.

Replacement Benefits Plan – The Replacement Benefits Plan (RBP) is a qualified excess benefit plan established in October 1989. Internal Revenue Code Section 415(m) provides for excess benefit arrangements that legally permit benefit payments above the Section 415 limits, provided that the payments are not paid from the SFERS Plan. The RBP allows the City to pay SFERS retirees any portion of the Charter-mandated retirement allowance that exceeds the annual Section 415(b) limit. The RBP plan does not meet the criteria of a qualified trust under GASB Statement No. 73 because RBP assets are subject to the claims of the employer's general creditors under federal and state law in the event of insolvency.

GASB Statements No. 68 and No. 73 require that the SFERS Plan and RBP reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:

	Fiscal Year 2022	Fiscal Year 2021
Valuation Date (VD)	June 30, 2020 updated to June 30, 2021	June 30, 2019 updated to June 30, 2020
Measurement Date (MD)	June 30, 2021	June 30, 2020
Measurement Period (MP)	July 1, 2020 to June 30, 2021	July 1, 2019 to June 30, 2020

SFERS Plan – The City is an employer of the SFERS Plan with a proportionate share of 94.64% as of June 30, 2021 (measurement date) and 94.39% as of June 30, 2020 (measurement date) a 0.25% increased from prior year. SFPUC's allocation percentage was determined based on its employer contributions divided by the City's total employer contributions for fiscal years 2021 and 2020. The net pension liability, deferred outflows/inflows of resources related to pensions, amortization of deferred outflows/inflows, and pension expense are based on each department's allocated percentage. SFPUC's allocation of the City's proportionate share was 7.59%: 4.27% for Water, 1.99% for Wastewater, 0.57% for Hetchy Water, 0.69% for Hetchy Power and 0.07% for CleanPowerSF as of June 30, 2021 (measurement date). SFPUC's allocation of the City's proportionate share was 7.46%: 4.21% for Water, 2.03% for Wastewater, 0.52% for Hetchy Water, 0.64% for Hetchy Power and 0.06% for CleanPowerSF as of June 30, 2020 (measurement date).

RBP – The Water Enterprise's allocation percentage was determined based on the Water Enterprise's headcount (both active members and retirees) divided by the City's total headcount for fiscal year 2021. The Water Enterprise's total pension liability, deferred outflows/inflows of resources related to pensions, amortization of deferred outflows/inflows and pension expense is based on the Water Enterprise's allocated percentage. The Water Enterprise's allocation of the City's proportionate share was 1.85% as of June 30, 2021 (measurement date) and 0.64% as of June30, 2020 (measurement date).

SFERS Plan Description – The Plan provides basic service retirement, disability, and death benefits based on specified percentages of defined final average monthly salary and provides annual cost of living adjustments (COLA) after retirement. The Plan also provides pension continuation benefits to qualified survivors. The San Francisco City and County Charter and the Administrative Code are the authorities which establish and amend the benefit provisions and employer obligations of the Plan. The Retirement System issues a publicly available financial report that includes financial statements and required supplementary information for the Plan. That report may be obtained on the Retirement System's website http://mysfers.org or by writing to the San Francisco City and County Employees' Retirement System, 1145 Market Street, 5th Floor, San Francisco, CA 94103 or by calling (415) 487-7000.

SFERS Benefits – The Retirement System provides service retirement, disability, and death benefits based on specified percentages of defined final average monthly salary and annual COLA after retirement. Benefits and refunds are recognized when due and payable in accordance with the terms of the SFERS Plan. The Retirement System pays benefits according to the category of employment and the type of benefit coverage provided by the City and County.

The four main categories of Plan members are:

a. Miscellaneous Non-Safety Members – staff, operational, supervisory, and all other eligible employees who are not in special membership categories.
b. Sheriff's Department and Miscellaneous Safety members – sheriffs assuming office on and after January 7, 2012, and undersheriffs, deputized personnel of the Sheriff's department, and miscellaneous safety employees hired on and after January 7, 2012.
c. Firefighter Members – firefighters and other employees whose principal duties are in fire prevention and suppression work or who occupy positions designated by law as firefighter member positions.
d. Police Members – police officers and other employees whose principal duties are in active law enforcement or who occupy positions designated by law as police member positions.

The membership groups and the related service retirement benefits are included in the Notes to the Basic Financial Statements of San Francisco Employees' Retirement System.

All members are eligible to apply for a disability retirement benefit, regardless of age, when they have 10 or more years of credited service and they sustain an injury or illness that prevents them from performing their duties. Safety members are eligible to apply for an industrial disability retirement benefit from their first day on the job if their disability is caused by an illness or injury that they receive while performing their duties.

All retired members receive a benefit adjustment each July 1, which is the Basic COLA. The majority of adjustments are determined by changes in Consumer Price Index with increases capped at 2%. The Plan provides for a Supplemental COLA in years when there are sufficient "excess" investment earnings in the Plan. The maximum benefit adjustment each July 1 is 3.5% including the Basic COLA. Effective July 1, 2012, voters approved changes in the criteria for payment of the Supplemental COLA benefit, so that Supplemental COLAs would only be paid when the Plan is also fully funded on a market value of assets basis. Certain provision of this voter-approved proposition were challenged in the Courts. A decision by the California Courts modified the interpretation of the proposition. Effective July 1, 2012, members who retired before November 6, 1996 will receive a Supplemental COLA only when the Plan is also fully funded on a market value of assets basis. However, the “full funding” requirement does not apply to members who retired on or after November 6, 1996 and were hired before January 7, 2012. For all members hired before January 7, 2012, all Supplemental COLAs paid to them in retirement benefits will continue into the future even where an additional Supplemental COLA is not payable in any given year. For members hired on and after January 7, 2012, a Supplemental COLA will only be paid to retirees when the Plan is fully funded on a market value of asset basis and in addition for these members, Supplemental COLAs will not be permanent adjustments to retirement benefits. That is, in years when a Supplemental COLA is not paid, all previously paid Supplemental COLAs will expire.

Funding and Contribution Policy

SFERS Plan – Contributions are made by both the City and the participating employees. Employee contributions are mandatory as required by the Charter. Employee contribution rates varied from 7.5% to 13.0% as a percentage of gross covered salary in fiscal years 2021 and 2020. 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, 2020 actuarial report, the required employer contribution rate for fiscal year 2022 was 19.91% to 24.41%. Based on the July 1, 2019 actuarial report, the required employer contribution rate for fiscal year 2021 was 22.40% to 26.90%.

Employer contributions and employee contributions made by the employer to the SFERS Plan are recognized when due and the employer has made a formal commitment to provide the contributions. The City’s proportionate share of employer contributions recognized by the Retirement System in fiscal years ended June 30, 2021 and 2020 (measurement years) were $791,736 and $701,307, respectively. The SFPUC’s allocation of employer contributions for fiscal years 2021 and 2020 (measurement periods) were $59,094 and $52,242, respectively. The Water Enterprise’s allocation of employer contributions for fiscal years 2021 and 2020 (measurement periods) were $33,367 and $29,647, respectively. The Wastewater Enterprise’s allocation of employer contributions for fiscal years 2021 and 2020 (measurement periods) were $16,083 and $14,352, respectively. Hetchy Water’s allocation of employer contributions for fiscal years 2021 and 2020 (measurement periods) were $4,130 and $3,574, respectively. Hetchy Power’s allocation of employer contributions for fiscal years 2021 and 2020 (measurement periods) were $5,048 and $4,369, respectively. CleanPowerSF’s allocation of employer contributions for fiscal years 2021 and 2020 (measurement periods) were $466 and $300, respectively.

For the year ended June 30, 2022, the City’s actuarial determined contribution was $729,578. SFPUC’s share was $55,460: $31,151 for Water, $14,543 for Wastewater, $4,149 for Hetchy Water, $5,071 for Hetchy Power and $546 for CleanPowerSF for fiscal year 2022 and will be recognized as a reduction of the net pension liability in the subsequent fiscal period.

Replacement Benefits Plan – The RBP is and will remain unfunded and the rights of any participant and beneficiary are limited to those specified in the RBP. The RBP constitutes an unsecured promise by the City to make benefit payments in the future to the extent funded by the City. The City paid $4,097 and $3,600 replacement benefits in the years ended June 30, 2022 and June 30,2021, respectively.

(Dollars in thousands, unless otherwise stated)

Pension (Assets)/Liabilities, Pension Expenses, and Deferred Outflows and Inflows of Resources Related to Pensions

Fiscal Year 2022

The City reported net pension asset (NPA) of $2,226,990 for its proportionate share of the SFERS Plan and RBP, which the net pension asset for SFERS Plan was $2,446,564 and the net pension liability of the RBP was $219,574, as of June 30, 2022. The City's net pension asset for the SFERS Plan is measured as the proportionate share of the net pension asset. The net pension (asset)/ liability of the SFERS Plan is measured as of June 30, 2021 (measurement date), and the total pension (asset)/liability for the SFERS Plan and RBP used to calculate the net pension (asset)/ liability was determined by an actuarial valuation as of June 30, 2020 rolled forward to June 30, 2021 using standard update procedures. The City's proportion of the net pension (asset)/liability for the SFERS Plan was based on a projection of the City's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. The SFPUC's allocation of the City's proportionate share of the net pension (asset) for the plan as of June 30 2022 was ($181,926) of which ($100,407) for Water Enterprise, ($48,770) for Wastewater Enterprise, ($13,912) for Hetchy Water, ($17,004) for Hetchy Power and ($1,833) for CleanPowerSF. The Water Enterprise's allocation of the total pension liability for the RBP as of June 30, 2022 was $4,056.

For the year ended June 30, 2022, the City recognized net pension (benefit) of ($922,979), which includes pension (benefit) of ($951,714) for the SFERS Plan and pension expense of $28,735 for RBP, including amortization of deferred outflow/inflow related pension items. SFPUC's allocation of pension (benefit) for the SFERS Plan including amortization of deferred outflow/inflow related pension items were ($54,567) of which ($29,908), net of RBP of $3,131, was for the Water Enterprise, ($20,601) was for the Wastewater Enterprise, ($1,816) was for Hetchy Water, ($2,220) was for Hetchy Power, and ($22) was for CleanPowerSF.

At June 30, 2022, SFPUC reported deferred outflows of resources and deferred inflows of resources related to pensions were the following:

SFERS Plan - Schedule of Deferred Outflows of Resources

Fiscal Year 2022		Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
Pension contribution subsequent to the measurement date	$	31,151	14,543	4,149	5,071	546	55,460
Differences between expected and actual experience		9,593	4,479	1,278	1,561	168	17,079
Changes in assumptions		7,068	3,300	941	1,151	124	12,584
Change in employer's proportion		3,531	3,047	328	400	14	7,320
Total	$	51,343	25,369	6,696	8,183	852	92,443

SFERS Plan - Schedule of Deferred Inflows of Resources

Fiscal Year 2022		Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
Differences between expected and actual experience	$	343	160	45	56	6	610
Changes in assumptions		18,339	8,562	2,443	2,985	322	32,651
Net difference between projected and actual earnings on pension plan investments		226,935	105,948	30,223	36,939	3,982	404,027
Change in employer's proportion		1,706	—	1,766	2,158	1,104	6,734
Total	$	247,323	114,670	34,477	42,138	5,414	444,022

(Dollars in thousands, unless otherwise stated)

Water Enterprise - RBP

Fiscal Year 2022		Schedule of Deferred Outflows of Resources	Schedule of Deferred Inflows of Resources
Differences between expected and actual experience	$	552	—
Changes in assumptions		757	—
Change in employer's proportion		200	1,381
Total	$	1,509	1,381

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 (benefit)/ expense as follows:

Deferred Outflows/(Inflows) of Resources

	SFERS Plan						RBP
Fiscal years	Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total	Water
2023	$ (57,166)	(26,134)	(8,033)	(9,817)	(1,407)	(102,557)	247
2024	(51,954)	(23,662)	(7,470)	(9,130)	(1,278)	(93,494)	52
2025	(54,608)	(24,937)	(7,679)	(9,386)	(1,194)	(97,804)	1
2026	(63,403)	(29,111)	(8,748)	(10,693)	(1,229)	(113,184)	(172)
Total	$ (227,131)	(103,844)	(31,930)	(39,026)	(5,108)	(407,039)	128

Fiscal Year 2021

The City reported net pension liabilities for its proportionate share of the pension liability of the Plan and RBP of $5,292,473 (which includes RBP pension liability of $185,203) as of June 30, 2021. The City's net pension liability for the SFERS Plan is measured as the proportionate share of the net pension liability. The net pension liability of the SFERS Plan is measured as of June 30, 2020 (measurement date), and the total pension liability for the SFERS Plan and RBP used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2019 rolled forward to June 30, 2020 using standard update procedures. The City's proportion of the net pension liability for the SFERS Plan was based on a projection of the City's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. The SFPUC's allocation of the City's proportionate share of the net pension liability for the plan as of June 30 2021 was $381,205, of which $215,240 for Water Enterprise, $103,746 for Wastewater Enterprise, $26,645 for Hetchy Water, $32,566 for Hetchy Power and $3,008 for CleanPowerSF. The Water Enterprise's allocation of the total pension liability for the RBP as of June 30, 2021 was $1,177.

For the year ended June 30, 2021, the City's recognized pension expense was $962,576 (which includes RBP pension expense of $25,243) including amortization of deferred outflow/inflow related pension items. SFPUC's allocation of pension expense including amortization of deferred outflow/inflow related pension items were $77,865 of which $43,929 for the Water Enterprise, $19,053 for the Wastewater Enterprise, $6,103 for Hetchy Water, $7,459 for Hetchy Power, and $1,321 for CleanPowerSF. Pension expense increased from the prior year, largely due to the amortization of deferrals.

(Dollars in thousands, unless otherwise stated)

At June 30, 2021, SFPUC reported deferred outflows of resources and deferred inflows of resources related to pensions were the following:

SFERS Plan - Schedule of Deferred Outflows of Resources

Fiscal Year 2021		Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
Pension contribution subsequent to the measurement date	$	33,367	16,083	4,130	5,048	466	59,094
Differences between expected and actual experience		7,310	3,524	905	1,106	102	12,947
Changes in assumptions		11,817	5,696	1,463	1,788	165	20,929
Change in employer's proportion		6,987	2,744	743	907	7	11,388
Total	$	63,988	30,219	7,799	9,531	803	112,340

SFERS Plan - Schedule of Deferred Inflows of Resources

Fiscal Year 2021		Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
Differences between expected and actual experience	$	674	325	83	102	9	1,193
Net difference between projected and actual earnings on pension plan investments		—	—	—	—	—	—
Change in employer's proportion		54	26	443	541	1,032	2,096
Total	$	4,456	2,148	988	1,207	1,093	9,892

Water Enterprise - RBP

Fiscal Year 2021		Schedule of Deferred Outflows of Resources	Schedule of Deferred Inflows of Resources
Differences between expected and actual experience	$	112	—
Changes in assumptions		315	13
Change in employer's proportion		382	416
Total	$	809	429

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 Resources

		SFERS Plan						RBP
Fiscal years		Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total	Water
2022	$	54	(787)	(115)	(141)	(472)	(1,461)	109
2023		6,166	3,009	665	812	(195)	10,457	193
2024		11,286	5,528	1,160	1,418	(90)	19,302	12
Total	$	26,165	11,988	2,681	3,276	(756)	43,354	380

Actuarial Assumptions

Fiscal Year 2022

A summary of the actuarial assumptions and methods used to calculate the Total Pension Liability for both SFERS Plan and RBP as of June 30, 2021 (measurement period) is provided below, including any assumptions that differ from those used in the July 1, 2020 actuarial valuation. Refer to the July 1, 2020 actuarial valuation report for a complete description of all other assumptions, which can be found on the Retirement System's website http://mysfers.org.

(Dollars in thousands, unless otherwise stated)

Key Actuarial Assumptions	SFERS Plan			
Valuation Date	June 30, 2020 updated to June 30, 2021			
Measurement Date	June 30, 2021			
Actuarial Cost Method	Entry-Age Normal Cost			
Expected Rate of Return	7.40% net of investment expenses			
Municipal Bond Yield	2.21% as of June 30, 2020			
	2.16% as of June 30, 2021			
	Bond Buyer 20-Bond GO Index, June 25, 2020 and June 24, 2021			
Inflation	2.50%			
Salary Increases	3.25% plus merit component based employee classification and years of service			
Discount Rate	7.40% as of June 30, 2020			
	7.40% as of June 30, 2021			
Administrative Expenses	0.60% of payroll as of June 30, 2020			
	0.60% of payroll as of June 30, 2021			
	Old Miscellaneous and all New Plans	Old Police & Fire pre 7/1/75	Old Police & Fire, Charters A8.595 and A8.596	Old Police & Fire, Charters A8.559 and A8.585
Basic COLA June 30, 2020	2.00%	2.50%	3.10%	4.20%
Basic COLA June 30, 2021	2.00%	1.90%	2.50%	3.60%

Key Actuarial Assumptions	Replacement Benefits Plan			
Valuation Date	June 30, 2020 updated to June 30, 2021			
Measurement Date	June 30, 2021			
Actuarial Cost Method	Entry-Age Normal Cost			
Municipal Bond Yield	2.16% as of June 30, 2021			
	Bond Buyer 20-Bond GO Index, June 25, 2020 and June 24, 2021			
Inflation	2.50%			
Salary Increases	3.25% plus merit component based employee classification and years of service			
Discount Rate	2.16% as of June 30, 2021			
Administrative Expenses	0.60% of payroll as of June 30, 2021			
	Old Miscellaneous	Old Police & Fire	Old Police & Fire, Charters	Old Police & Fire, Charters
Basic COLA June 30, 2020	2.00%	2.50%	3.10%	4.20%
Basic COLA June 30, 2021	2.00%	1.90%	2.50%	3.60%

Mortality rates for health Miscellaneous members were based upon adjusted PubG-2010 Employee and Retiree tables for non-annuitants and retirees, respectively. Mortality rates were then projected generationally from the base year using the MP-2019 projection scale.

The actuarial assumptions used at the June 30, 2021 measurement date was based upon the result of a demographic experience study for the period July 1, 2014 through June 30, 2019 and an economic experience study as of July 1, 2020.

(Dollars in thousands, unless otherwise stated)

Fiscal Year 2021

A summary of the actuarial assumptions and methods used to calculate the Total Pension Liability for both SFERS Plan and RBP as of June 30, 2020 (measurement period) is provided below, including any assumptions that differ from those used in the July 1, 2019 actuarial valuation. Refer to the July 1, 2019 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	SFERS Plan
Valuation Date	June 30, 2019 updated to June 30, 2020
Measurement Date	June 30, 2020
Actuarial Cost Method	Entry-Age Normal Cost
Expected Rate of Return	7.40% net of pension plan investment, including inflation
Municipal Bond Yield	3.50% as of June 30, 2019 2.21% as of June 30, 2020 Bond Buyer 20-Bond GO Index, June 27, 2019 and June 25, 2020
Inflation	2.75%
Salary Increases	3.50% plus merit component based on employee classification and years of service
Discount Rate	7.40% as of June 30, 2019 7.40% as of June 30, 2020
Administrative Expenses	0.60% of payroll as of June 30, 2019 0.60% of payroll as of June 30, 2020

	Old Miscellaneous and all New Plans	Old Police & Fire pre 7/1/75	Old Police & Fire, Charters A8.595 and A8.596	Old Police & Fire, Charters A8.559 and A8.585
Basic COLA June 30, 2019	2.00%	2.50%	3.10%	4.20%
Basic COLA June 30, 2020	2.00%	2.50%	3.10%	4.20%

Key Actuarial Assumptions	Replacement Benefits Plan
Valuation Date	June 30, 2019 updated to June 30, 2020
Measurement Date	June 30, 2020
Actuarial Cost Method	Entry-Age Normal Cost
Municipal Bond Yield	2.21% as of June 30, 2020 Bond Buyer 20-Bond GO Index, June 27, 2019 and June 25, 2020
Inflation	2.75%
Salary Increases	3.50% plus merit component based on employee classification and years of service
Discount Rate	2.21% as of June 30, 2020
Administrative Expenses	0.60% of payroll as of June 30, 2020

	Old Miscellaneous	Old Police & Fire	Old Police & Fire, Charters	Old Police & Fire, Charters
Basic COLA June 30, 2020	2.00%	2.50%	3.10%	4.20%

For healthy annuitants, the sex distinct 2009 CalPERS healthy annuitant mortality table, adjusted 1.014 for females and 0.909 for males. For active members, the sex distinct 2009 CalPERS employee mortality tables, adjusted 0.918 for females and 0.948 for males. Rates are projected generationally from the 2009 base year using a modified version of the MP-2015 projection scale.

The actuarial assumptions used at the June 30, 2020 measurement date was based upon the result of a demographic experience study for the period July 1, 2009 through June 30, 2014 and an economic experience study as of July 1, 2019.

Discount Rate

Fiscal Year 2022

SFERS Plan – The beginning and end of year measurements are based on different assumptions and contribution methods that may result in different discount rates. The discount rate was 7.40% as of June 30, 2021 (measurement date) and June 30, 2020 (measurement date).

The discount rate used to measure the Total Pension Liability as of June 30, 2021 was 7.40%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will continue to be made at the rates specified in the Charter. Employer contributions were assumed to be made in accordance with the contribution policy in effect for July 1, 2020 actuarial valuation. That policy includes contributions equal to the employer portion of the entry age normal costs for members as of the valuation date, a payment for the expected administrative expenses, and an amortization payment on the unfunded actuarial liability.

(Dollars in thousands, unless otherwise stated)

The amortization payment is based on closed periods that vary in length depending on the source. Charter amendments prior to July 1, 2014 are amortized over 20 years. After July 1, 2014, any Charter changes to active member benefits are amortized over 15 years and changes to inactive member benefits, including Supplemental COLAs, are amortized over 5 years. The remaining unfunded actuarial liability not attributable to Charter amendments as of July 1, 2013 is amortized over a 19-year period commencing July 1, 2014. Experience gains and losses and assumption or method changes on or after July 1, 2014 are amortized over 20 years. The full amortization payment for the 2015 assumption changes is phased in over a period of 5 years. For the July 1, 2016 valuation, the increase in the unfunded actuarial liability attributable to the Supplemental COLAs granted on July 1, 2013 and July 1, 2014 are amortized over 17-years and 5-years respectively. All amortization schedules are established as a level percentage of payroll so payments increase 3.25% each year. The unfunded actuarial liability is based on an actuarial value of assets that smooths investment gains and losses over five years and a measurement of the actuarial liability that excludes the value of any future Supplemental COLAs.

While the contributions and measure of actuarial liability in the funding valuation do not anticipate any future Supplemental COLAs, the projected contributions for the determination of the discount rate include the anticipated future amortization payments on future Supplemental COLAs for current members when they are expected to be granted. For members who worked after November 6, 1996 and before Proposition C passed (Post 97 Retirees), a Supplemental COLA is granted if the actual investment earnings during the year exceed the expected investment earnings on the actuarial value of assets. For members who did not work after November 6, 1996 and before Proposition C passed, the market value of assets must also exceed the actuarial liability at the beginning of the year for a Supplemental COLA to be granted. When a Supplemental COLA is granted, the amount depends on the amount of excess earnings and the basic COLA amount for each membership group. The large majority of members receive a 1.50% Supplemental COLA when granted.

Because the probability of a Supplemental COLA depends on the current funded level of the Retirement System for certain members, an assumption was developed as of June 30, 2021 for the probability and amount of Supplemental COLA for each future year. A full Supplemental COLA will be paid to all retired members, and their beneficiaries, who were retired effective July 1, 2021. The table below shows the net assumed Supplemental COLA for members with a 2.00% Basic COLA for sample years.

Assumed Supplemental COLA for Members with a 2.00% Basic COLA

Fiscal years	96 - Prop C	Before 11/6/96 or After Prop C
2023	0.75 %	0.70 %
2025	0.75	0.70
2027	0.75	0.60
2029	0.75	0.60
2031	0.75	0.60
2033 +	0.75	0.50

The projection of benefit payments to current members for determining the discount rate includes the payment of anticipated future Supplemental COLAs.

(Dollars in thousands, unless otherwise stated)

Based on these assumptions, the Retirement System's fiduciary net position was projected to be available to make projected future benefit payments for current members for all future years. Projected benefit payments are discounted at the long-term expected return on assets of 7.40% to the extent the fiduciary net position is available to make the payments and at the municipal bond rate of 2.16% to the extent they are not available. The single equivalent rate used to determine the Total Pension Liability as of June 30, 2021 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 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:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return
Global Equity	37.0 %	4.2 %
Private Equity	23.0	7.9
Private Credit	10.0	5.1
Real Assets	10.0	5.1
Hedge Funds/Absolute Returns	10.0	2.9
Treasuries	8.0	0.0
Liquid Credit	5.0	2.3
Leverage	(3.0)	0.1
Total	100.0 %	

RBP – The beginning and end of year measurements are based on different assumptions that result in different discount rates. The discount rate was 2.16% as of June 30, 2021. This reflects the yield for a 20-year, tax-exempt general obligation municipal bond with an average rating of AA/Aa or higher. The Municipal Bond Yields are the Bond Buyer 20-Year GO Index as of June 25, 2020 and June 24, 2021. These are the rates used to determine the total pension liability as of June 30, 2021.

The inflation assumption of 2.50% compounded annually was used for projecting the annual IRC Section 415(b) limitations. However, the actual IRC Section 415(b) limitations published by the IRS of $230 for 2021 was used for the 2021 measurement date.

The SFERS assumptions about Basic and Supplemental COLA previously discussed also apply to the RBP, including the impact of the State Appeals Court determination that the full funding requirement for payment of Supplemental COLA included in Proposition C was unconstitutional and the impact is accounted for as a change in benefits.

On June 30, 2022, City's membership in the RBP had a total of 350 active members and 135 retirees and beneficiaries currently receiving benefits. The Water Enterprise has 9 active members and 3 retiree and beneficiary currently receiving benefits.

Fiscal Year 2021

SFERS Plan – The beginning and end of year measurements are based on different assumptions and contribution methods that may result in different discount rates. The discount rate was 7.40% as of June 30, 2020 (measurement date) and June 30, 2019 (measurement date).

(Dollars in thousands, unless otherwise stated)

The discount rate used to measure the Total Pension Liability as of June 30, 2020 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, 2019 actuarial valuation. That policy includes contributions equal to the employer portion of the entry age normal costs for members as of the valuation date, a payment for the expected administrative expenses, and an amortization payment on the unfunded actuarial liability.

The amortization payment is based on closed periods that vary in length depending on the source. Charter amendments prior to July 1, 2014 are amortized over 20 years. After July 1, 2014, any Charter changes to active member benefits are amortized over 15 years and changes to inactive member benefits, including Supplemental COLAs, are amortized over 5 years. The remaining unfunded actuarial liability not attributable to Charter amendments as of July 1, 2013 is amortized over a 19-year period commencing July 1, 2014. Experience gains and losses and assumption or method changes on or after July 1, 2014 are amortized over 20 years. The full amortization payment for the 2015 assumption changes is phased in over a period of 5 years. For the July 1, 2016 valuation, the increase in the unfunded actuarial liability attributable to the Supplemental COLAs granted on July 1, 2013 and July 1, 2014 are amortized over 17-years and 5-years respectively. All amortization schedules are established as a level percentage of payroll so payments increase 3.50% each year. The unfunded actuarial liability is based on an actuarial value of assets that smooths investment gains and losses over five years and a measurement of the actuarial liability that excludes the value of any future Supplemental COLAs.

While the contributions and measure of actuarial liability in the funding valuation do not anticipate any future Supplemental COLAs, the projected contributions for the determination of the discount rate include the anticipated future amortization payments on future Supplemental COLAs for current members when they are expected to be granted. For members who worked after November 6, 1996 and before Proposition C passed (Post 97 Retirees), a Supplemental COLA is granted if the actual investment earnings during the year exceed the expected investment earnings on the actuarial value of assets. For members who did not work after November 6, 1996 and before Proposition C passed, the market value of assets must also exceed the actuarial liability at the beginning of the year for a Supplemental COLA to be granted. When a Supplemental COLA is granted, the amount depends on the amount of excess earnings and the basic COLA amount for each membership group. The large majority of members receive a 1.50% Supplemental COLA when granted.

Because the probability of a Supplemental COLA depends on the current funded level of the Retirement System for certain members, an assumption was developed as of June 30, 2020 for the probability and amount of Supplemental COLA for each future year. There were no excess earnings during the fiscal year ending June 30, 2020; consequently, no Supplemental COLA will be paid effective July 1, 2020. The table below shows the net assumed Supplemental COLA for members with a 2.00% Basic COLA for sample years.

Assumed Supplemental COLA for Members with a 2.00% Basic COLA

Fiscal years	96 - Prop C	Before 11/6/96 or After Prop C
2022	0.75 %	0.19 %
2024	0.75	0.27
2026	0.75	0.30
2028	0.75	0.33
2030	0.75	0.35
2032	0.75	0.37
2034 +	0.75	0.38

(Dollars in thousands, unless otherwise stated)

The projection of benefit payments to current members for determining the discount rate includes the payment of anticipated future Supplemental COLAs.

Based on these assumptions, the Retirement System's fiduciary net position was projected to be available to make projected future benefit payments for current members for all future years. Projected benefit payments are discounted at the long-term expected return on assets of 7.40% to the extent the fiduciary net position is available to make the payments and at the municipal bond rate of 2.21% to the extent they are not available. The single equivalent rate used to determine the Total Pension Liability as of June 30, 2020 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 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:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return
Global Equity	31.0 %	4.9 %
Private Equity	18.0	7.9
Real Assets	17.0	5.7
Hedge Funds/Absolute Returns	15.0	3.0
Private Credit	10.0	4.8
Treasuries	6.0	(0.5)
Liquid Credit	3.0	2.7
Total	100.0 %	

RBP – The beginning and end of year measurements are based on different assumptions that result in different discount rates. The discount rate was 2.21% as of June 30, 2020. This reflects the yield for a 20-year, tax-exempt general obligation municipal bond with an average rating of AA/Aa or higher. The Municipal Bond Yields are the Bond Buyer 20-Year GO Index as of June 27, 2019 and June 25, 2020. These are the rates used to determine the total pension liability as of June 30, 2020.

The inflation assumption of 2.75% compounded annually was used for projecting the annual IRC Section 415(b) limitations. However, the actual IRC Section 415(b) limitations published by the IRS of $230 for 2020 was used for the 2020 measurement date.

The SFERS assumptions about Basic and Supplemental COLA previously discussed also apply to the RBP, including the impact of the State Appeals Court determination that the full funding requirement for payment of Supplemental COLA included in Proposition C was unconstitutional and the impact is accounted for as a change in benefits.

On June 30, 2021, City's membership in the RBP had a total of 683 active members and 105 retirees and beneficiaries currently receiving benefits. The Water Enterprise has 4 active members and 1 retiree and beneficiary currently receiving benefits.

(Dollars in thousands, unless otherwise stated)

Sensitivity of Proportionate Share of the Net Pension (Asset)/Liability to Changes in the Discount Rate

The following presents the SFPUC's allocation of the employer's proportionate share of the net pension (asset)/liability (NPA/NPL) for the SFERS Plan, calculated using the discount rate, as well as what the SFPUC's allocation of the employer's proportionate share of the net pension (asset)/liability would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate.

SFERS Plan - Schedule of Employers' Proportionate Share of the Net Pension (Asset)/Liability

Fiscal Year 2022		Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
1% Decrease Share of NPL @ 6.40%	$	69,621	32,504	9,272	11,333	1,221	123,951
Share of (NPA) @ 7.40%		(104,463)	(48,770)	(13,912)	(17,004)	(1,833)	(185,982)
1% Increase Share of (NPA) @ 8.40%		(248,184)	(115,868)	(33,053)	(40,398)	(4,354)	(441,857)

Schedule of Employers' Proportionate Share of the Net Pension Liability

Fiscal Year 2021		Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
1% Decrease Share of NPL @ 6.40%	$	380,571	183,436	47,111	57,580	5,318	674,016
Share of NPL @ 7.40%		215,240	103,746	26,645	32,566	3,008	381,205
1% Increase Share of NPL @ 8.40%		78,645	37,907	9,736	11,899	1,099	139,286

The following presents the Water Enterprise's allocation of the employer's proportionate share of the total pension liability for the RBP, calculated using the discount rate, as well as what the Water 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.

Replacement Benefits Plan - Schedule of Employers' Proportionate Share of the Net Pension Liability

Fiscal Year 2022		Water
1% Decrease Share of NPL @ 1.16%	$	4,889
Share of NPL @ 2.16%		4,056
1% Increase Share of NPL @ 3.16%		3,411

Fiscal Year 2021		Water
1% Decrease Share of NPL @ 1.21%	$	1,418
Share of NPL @ 2.21%		1,177
1% Increase Share of NPL @ 3.21%		989

b) Other Post-Employment Benefits

The SFPUC participates in the City's single-employer defined benefit other post-employment benefits plan (the Plan). The Plan is maintained by the City and is administered through the City's Health Service System. It provides post-employment medical, dental and vision insurance benefits to eligible employees, retired employees, surviving spouses, and domestic partners. Health benefit provisions are established and may be amended through negotiations between the City and the respective bargaining units. The City does not issue a separate report on its other post-employment benefit plan.

GASB Statement No. 75 requires that reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used.

San Francisco Health Service System Retiree Plan - Single-Employer

	Fiscal Year 2022	Fiscal Year 2021
Valuation Date (VD)	June 30, 2020 updated to June 30, 2021	June 30, 2020
Measurement Date (MD)	June 30, 2021	June 30, 2020
Measurement Period (MP)	July 1, 2020 to June 30, 2021	July 1, 2019 to June 30, 2020

(Dollars in thousands, unless otherwise stated)

The SFPUC's allocation percentage of the Plan was determined based on its percentage of citywide "pay-as-you-go" contributions for the years ended June 30, 2021 and June 30, 2020. The SFPUC'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 SFPUC's allocated percentage. The SFPUC's proportionate share of the City's OPEB elements as of June 30, 2021 (measurement date) was 6.15%: 3.90% for the Water Enterprise, 1.33% for the Wastewater Enterprise, 0.39% for Hetchy Water, 0.47% for Hetchy Power, and 0.06% for CleanPowerSF. The SFPUC's proportionate share of the City's OPEB elements as of June 30, 2020 (measurement date) was 6.14%: 3.89% for the Water Enterprise, 1.33% for the Wastewater Enterprise, 0.38% for Hetchy Water, 0.46% for Hetchy Power, and 0.08% for CleanPowerSF.

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		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.

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 United Healthcare Dental
Vision:	Vision benefits are provided under the medical insurance plans and are administered by Vision Service Plan.

Projections of the sharing of benefit related costs are based on an established pattern of practice.

Contributions – Benefits provided under the Plan are currently paid through "pay as you go" funding. Additionally, under the City Charter, active officers and employees of the City who commenced employment on or after January 10, 2009, shall contribute to the Retiree Health Care Trust Fund (Trust Fund) a percentage of compensation not to exceed 2% of pre-tax compensation. The City shall contribute 1% of compensation for officers and employees who commenced employment on or after January 10, 2009 until the City's GASB Actuary has determined that the City's portion of the Trust Fund is fully funded. At that time, the City's 1% contribution shall cease, and officers and employees will each contribute 50% of the maximum 2% of pre-tax compensation.

Starting July 1, 2016, active officers and employees of the City who commenced employment on or before January 9, 2009, shall contribute 0.25% of pre-tax compensation into the Trust Fund. Beginning on July 1st of each subsequent year, the active officers and employees of the City who commenced employment on or before January 9, 2009, shall contribute an additional 0.25% of pre-tax compensation up to a maximum of 1%. Starting July 1, 2016, the City shall contribute 0.25% of compensation into the Trust Fund for each officer and employee who commenced employment on or before January 9, 2009. Beginning on July 1st of each subsequent year, the City shall contribute an additional 0.25% of compensation, up to a maximum of 1% for each officer and employee who commenced employment on or before January 9, 2009. When the City's 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.

(Dollars in thousands, unless otherwise stated)

Fiscal Year 2022

For the fiscal year ended June 30, 2022, the City's funding was based on "pay-as-you-go" plus a contribution of $41,841 to the Retiree Healthcare Trust Fund. The "pay-as-you-go" portion paid by the City was $211,205 for a total contribution of $252,866 for the fiscal year ended June 30, 2022. The SFPUC's proportionate share of contributions for fiscal year 2022 was $15,560: $9,873 for Water Enterprise, $3,365 for the Wastewater Enterprise, $975 for Hetchy Water, $1,192 for Hetchy Power, and $155 for CleanPowerSF for fiscal year 2022 and will be recognized as a reduction of the net OPEB liability in the subsequent fiscal period.

Fiscal Year 2021

For the fiscal year ended June 30, 2021, the City's funding was based on "pay-as-you-go" plus a contribution of $39,555 to the Retiree Healthcare Trust Fund. The "pay-as-you-go" portion paid by the City was $206,439 for a total contribution of $245,994 for the fiscal year ended June 30, 2021. The SFPUC's proportionate share of contributions for fiscal year 2021 was $15,087: $9,572 for Water Enterprise, $3,263 for the Wastewater Enterprise, $929 for Hetchy Water, $1,136 for Hetchy Power, and $187 for CleanPowerSF.

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

Fiscal Year 2022

As of June 30, 2022, the City reported net OPEB liabilities related to the Plan of $3,691,122. The SFPUC's proportionate share of the City's net OPEB liability as of June 30, 2022 was $227,147: $144,115 for Water Enterprise, $49,123 for the Wastewater Enterprise, $14,240 for Hetchy Water, $17,405 for Hetchy Power, and $2,264 for CleanPowerSF.

For the year ended June 30, 2022, the City's recognized OPEB expense was $272,001. Amortization of the City's deferred outflows and inflows is included as a component of OPEB expense. The SFPUC's proportionate share of the City's OPEB expense was $22,932: $14,566 for Water Enterprise, $5,364 for the Wastewater Enterprise, $1,874 for Hetchy Water, $2,291 for Hetchy Power, offset by $1,163 for CleanPowerSF.

As of June 30, 2022, the SFPUC's reported its proportionate share of the City's deferred outflows and inflows of resources related to OPEB from the following sources:

Schedule of Deferred Outflows of Resources

Fiscal Year 2022		Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
Contribution subsequent to the measurement date	$	9,873	3,365	975	1,192	155	15,560
Differences between expected and actual experience		4,330	1,476	428	523	68	6,825
Changes in assumptions		6,091	2,076	602	735	96	9,600
Change in proportion		12,151	5,981	1,267	1,549	479	21,427
	Total $	32,445	12,898	3,272	3,999	798	53,412

Schedule of Deferred Inflows of Resources

Fiscal Year 2022		Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
Differences between expected and actual experience	$	22,191	7,564	2,193	2,680	348	34,976
Net difference between projected and actual earnings on plan investments		2,728	930	269	329	43	4,299
Change in proportion		429	146	272	333	1,203	2,383
	Total $	25,348	8,640	2,734	3,342	1,594	41,658

(Dollars in thousands, unless otherwise stated)

Amounts reported as deferred outflows, exclusive of contributions made after the measurement date, and deferred inflows of resources will be amortized annually and recognized in OPEB (benefit)/expense as follows:

Fiscal years		Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
2023	$	(313)	291	(105)	(128)	(264)	(519)
2024		(324)	288	(106)	(130)	(264)	(536)
2025		(286)	301	(103)	(125)	(264)	(477)
2026		(263)	231	46	57	(167)	(96)
2027		(669)	95	(43)	(53)	(59)	(729)
Thereafter		(921)	(313)	(126)	(156)	67	(1,449)
Total	$	(2,776)	893	(437)	(535)	(951)	(3,806)

Fiscal Year 2021

As of June 30, 2021, the City reported net OPEB liabilities related to the Plan of $3,823,334. The SFPUC's proportionate share of the City's net OPEB liability as of June 30, 2021 was $234,488: $148,771 for Water Enterprise, $50,711 for the Wastewater Enterprise, $14,444 for Hetchy Water, $17,653 for Hetchy Power, and $2,909 for CleanPowerSF.

For the year ended June 30, 2021, the City's recognized OPEB expense was $320,684. Amortization of the City's deferred outflows and inflows is included as a component of OPEB expense. The SFPUC's proportionate share of the City's OPEB expense was a net credit of $14,011: $5,978 for Water Enterprise, $6,174 for the Wastewater Enterprise, $1,480 for Hetchy Water, $1,809 for Hetchy Power, offset by $1,430 expense for CleanPowerSF.

As of June 30, 2021, the SFPUC's reported its proportionate share of the City's deferred outflows and inflows of resources related to OPEB from the following sources:

Schedule of Deferred Outflows of Resources

Fiscal Year 2021		Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
Contribution subsequent to the measurement date	$	9,572	3,263	929	1,136	187	15,087
Differences between expected and actual experience		5,394	1,839	524	640	106	8,503
Changes in assumptions		7,531	2,567	731	894	147	11,870
Net difference between projected and actual earnings on pension plan investments		97	33	9	12	2	153
Change in proportion		15,168	7,407	1,532	1,870	—	25,977
	Total $	37,762	15,109	3,725	4,552	442	61,590

Schedule of Deferred Inflows of Resources

Fiscal Year 2021		Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
Differences between expected and actual experience	$	21,315	7,265	2,070	2,529	417	33,596
Change in proportion		—	—	15	19	1,496	1,530
	Total $	21,315	7,265	2,085	2,548	1,913	35,126

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:

Fiscal years		Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
2022	$	1,266	829	90	110	(328)	1,967
2023		1,324	849	96	117	(326)	2,060
2024		1,312	846	94	116	(326)	2,042
2025		1,351	859	99	120	(326)	2,103
2026		1,368	788	245	299	(222)	2,478
Thereafter		254	410	87	106	(130)	727
Total	$	6,875	4,581	711	868	(1,658)	11,377

(Dollars in thousands, unless otherwise stated)

Actuarial Assumptions

Fiscal Year 2022

A summary of the actuarial assumptions and methods used to calculate the total OPEB liability as of June 30, 2021 (measurement date) is provided below:

Key Actuarial Assumptions	
Valuation Date	June 30, 2020 updated to June 30, 2021
Measurement Date	June 30, 2021
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 6.74% trending down to ultimate rate of 4.04% in 2075 Medicare trend starts at 7.24% trending down to ultimate rate of 4.04% in 2075 10-County average trend starts at 5.50% trending down to ultimate rate of 4.04% in 2075 Vision and expenses trend remains a flat 3.00% for all years
Expected Rate of Return on Plan Assets	7.00%
Salary Increase Rate	Wage Inflation Component: 3.25% Additional Merit Component (dependent on years of service): Police: 0.50% - 7.50% Fire: 0.50% - 14.00% Muni Drivers: 0.00% - 16.00% Craft: 0.50% - 3.75% Misc: 0.30% - 5.50%
Inflation Rate	Wage Inflation: 3.25% compounded annually Consumer Price Inflation: 2.50% compounded annually
Mortality Tables	Base mortality tables are developed by multiplying a published table by an adjustment factor developed study for the period ending June 30, 2019.

Non-Annuitants

	Published Table	Adjustment Factor Male	Adjustment Factor Female
Miscellaneous	PubG-2010 Employee	0.834	0.866
Safety	PubS-2010 Employee	1.011	0.979

Healthy Retirees

	Published Table	Adjustment Factor Male	Adjustment Factor Female
Miscellaneous	PubG-2010 Employee	1.031	0.977
Safety	PubS-2010 Employee	0.947	1.044

Disabled Retirees

	Published Table	Adjustment Factor Male	Adjustment Factor Female
Miscellaneous	PubG-2010 Employee	1.045	1.003
Safety	PubS-2010 Employee	0.916	0.995

Beneficiaries

	Published Table	Adjustment Factor Male	Adjustment Factor Female
Miscellaneous	PubG-2010 Employee	1.031	0.977
Safety	PubG-2010 Employee	1.031	0.977

The mortality rates in the base tables are projected generationally from the base year using the MP–2019 projection scale.

(Dollars in thousands, unless otherwise stated)

Fiscal Year 2021

A summary of the actuarial assumptions and methods used to calculate the total OPEB liability as of June 30, 2020 (measurement date) is provided below:

Key Actuarial Assumptions	
Valuation Date	June 30, 2020
Measurement Date	June 30, 2020
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 4.00% in 2022, 7.00% in 2023, trending down to ultimate rate of 4.04% in 2 Medicare trend starts at 1.00% in 2022, 7.50% in 2023, trending down to ultimate rate of 4.04% in 2075 10-County average trend starts at 4.50% in 2022, 5.50% in 2023, trending down to ultimate rate of 4.04 Vision and expenses trend remains a flat 3.00% for all years
Expected Rate of Return on Plan Assets	7.00%
Salary Increase Rate	Wage Inflation Component: 3.25% Additional Merit Component (dependent on years of service): Police: 0.50% - 7.50% Fire: 0.50% - 14.00% Muni Drivers: 0.00% - 16.00% Craft: 0.50% - 3.75% Misc: 0.30% - 5.50%
Inflation Rate	Wage Inflation: 3.25% compounded annually Consumer Price Inflation: 2.50% compounded annually
Mortality Tables	Base mortality tables are developed by multiplying a published table by an adjustment factor developed study for the period ending June 30, 2019.

Non-Annuitants

	Published Table	Adjustment Factor Male	Adjustment Factor Female
Miscellaneous	PubG-2010 Employee	0.834	0.866
Safety	PubS-2010 Employee	1.011	0.979

Healthy Retirees

	Published Table	Adjustment Factor Male	Adjustment Factor Female
Miscellaneous	PubG-2010 Employee	1.031	0.977
Safety	PubS-2010 Employee	0.947	1.044

Disabled Retirees

	Published Table	Adjustment Factor Male	Adjustment Factor Female
Miscellaneous	PubG-2010 Employee	1.045	1.003
Safety	PubS-2010 Employee	0.916	0.995

Beneficiaries

	Published Table	Adjustment Factor Male	Adjustment Factor Female
Miscellaneous	PubG-2010 Employee	1.031	0.977
Safety	PubG-2010 Employee	1.031	0.977

The mortality rates in the base tables are projected generationally from the base year using the MP–2019 projection scale.

Sensitivity of Liabilities to Changes in the Healthcare Cost Trend Rate and Discount Rate

The following presents the SFPUC's proportionate share of the City's net OPEB liability calculated using the healthcare cost trend rate, as well as what its 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 as of June 30, 2022 and June 30, 2021:

		Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	Total 2022
1% Decrease	$	122,667	41,812	12,121	14,814	1,927	193,341
Healthcare Trend		144,115	49,123	14,240	17,405	2,264	227,147
1% Increase		170,851	58,236	16,882	20,634	2,685	269,288

(Dollars in thousands, unless otherwise stated)

		Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	Total 2021
1% Decrease	$	128,633	43,846	12,488	15,264	2,515	202,746
Healthcare Trend		148,771	50,711	14,444	17,653	2,909	234,488
1% Increase		175,020	59,657	16,992	20,767	3,422	275,858

Discount Rate

Fiscal Year 2022

The discount rate used to measure the Total OPEB Liability as of June 30, 2021 was 7.0%. Based on the assumption that plan member contributions will continue to be made at the rates specified in the Charter, it was determined that the Plan's projected fiduciary net position will be greater than or equal to the benefit payments projected for each future period. As such, the long-term expected rate of return on plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

The long-term expected rate of return on OPEB plan investments was 7.0% based on expected future returns and historical returns experienced by the Trust Fund. Expected future returns were determined based on 10-year and 20-year capital market assumptions for the Trust Fund's asset allocation.

Target allocation for each major asset class and best estimates of geometric real rates of return are summarized in the following table:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return
Equities		
U.S. Large Cap	28.0 %	8.2 %
U.S. Small Cap	3.0	9.5
Developed Market Equity (non-U.S.)	15.0	8.9
Emerging Market Equity	13.0	11.0
Credit		
Bank Loans	3.0	4.4
High Yield Bonds	3.0	4.4
Emerging Market Bonds	3.0	4.3
Rate Securities		
Investment Grade Bonds	9.0	1.9
Long-term Government Bonds	4.0	3.2
Short-term Treasury Inflation-Protected Securities (TIPS)	4.0	1.5
Private Markets		
Private Equity	5.0	13.0
Core Private Real Estate	5.0	6.2
Risk Mitigating Strategies		
Global Macro	5.0	4.4
Total	**100.0** %	

The following presents the SFPUC's proportionate share of the City's net OPEB liability calculated using the discount rate, as well as what the SFPUC'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:

Fiscal Year 2022		Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
1% Decrease 6.00%	$	168,520	57,442	16,652	20,352	2,648	265,614
Discount Rate 7.00%		144,115	49,123	14,240	17,405	2,264	227,147
1% Increase 8.00%		124,181	42,328	12,271	14,997	1,951	195,728

(Dollars in thousands, unless otherwise stated)

Fiscal Year 2021

The discount rate used to measure the Total OPEB Liability as of June 30, 2020 was 7.0%. Based on the assumption that plan member contributions will continue to be made at the rates specified in the Charter, it was determined that the Plan's projected fiduciary net position will be greater than or equal to the benefit payments projected for each future period. As such, the long-term expected rate of return on plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

The long-term expected rate of return on OPEB plan investments was 7.0% based on expected future returns and historical returns experienced by the Trust Fund. Expected future returns were determined based on 10-year and 20-year capital market assumptions for the Trust Fund's asset allocation.

Target allocation for each major asset class and best estimates of geometric real rates of return are summarized in the following table:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return
Equities		
U.S. Large Cap	28.0 %	8.4 %
U.S. Small Cap	3.0	9.8
Developed Market Equity (non-U.S.)	15.0	9.6
Emerging Market Equity	13.0	11.7
Credit		
Bank Loans	3.0	4.9
High Yield Bonds	3.0	4.9
Emerging Market Bonds	3.0	4.8
Rate Securities		
Investment Grade Bonds	9.0	2.2
Long-term Government Bonds	4.0	3.1
Short-term Treasury Inflation-Protected Securities (TIPS)	4.0	1.9
Private Markets		
Private Equity	5.0	12.5
Core Private Real Estate	5.0	6.4
Risk Mitigating Strategies		
Global Macro	5.0	4.1
Total	**100.0 %**	

The asset allocation targets summarized have a 20-year return estimate of 6.90%, which was weighted against a 10-year model estimating a 6.93% return, resulting in the ultimate long-term expected rate of return of 7.00%.

The following presents the SFPUC's proportionate share of the City's net OPEB liability calculated using the discount rate, as well as what the SFPUC'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:

Fiscal Year 2021		Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
1% Decrease 6.00%	$	172,646	58,848	16,761	20,486	3,376	272,117
Discount Rate 7.00%		148,771	50,711	14,444	17,653	2,909	234,488
1% Increase 8.00%		129,281	44,067	12,551	15,341	2,528	203,768

(Dollars in thousands, unless otherwise stated)

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

(14) Related Parties

Various common costs incurred by the Commission are allocated proratably between Water, Wastewater, Hetchy Water and Hetchy Power and CleanPowerSF. 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 following tables show the administrative costs including COVID-19 Project expenses for the years ended June 30, 2022 and 2021:

Fiscal Years	Water			Wastewater		Hetchy Water		Hetchy Power		CleanPowerSF		SFPUC Total
2022	$	52,769	49.2%	32,212	30.0%	10,886	10.2%	8,820	8.2%	2,515	2.4%	107,202
2021		48,374	49.4%	29,457	30.0%	4,585	4.7%	13,202	13.5%	2,312	2.4%	97,930

SFPUC's 75-year lease agreement with the San Francisco Recreation and Parks Department (SFRPD), 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.

The following tables show the allocable share of expenses and prepayments for the years ended June 30, 2022 and 2021:

2022		Water	Wastewater	Hetchy Water	Hetchy Power	SFPUC Total
Allocable share of expenses	$	44	22	5	13	84
Allocable share of prepayment		3,265	1,145	151	753	5,314

2021		Water	Wastewater	Hetchy Water	Hetchy Power	SFPUC Total
Allocable share of expenses	$	45	21	4	13	83
Allocable share of prepayment		3,309	1,167	156	766	5,398

Water Enterprise

The Water Enterprise purchases water from Hetch Hetchy Water. The amounts, totaling $45,815 and $44,149 for the years ended June 30, 2022 and 2021, respectively, have been included in the services provided by other departments in the accompanying financial statements.

The Water Enterprise purchases electricity from Hetch Hetchy Power at market rates. The amounts, totaling $11,394 and $9,790 for the years ended June 30, 2022 and 2021, respectively, have been included in services provided by other departments in the accompanying financial statements.

The Water Enterprise sold water to the Wastewater Enterprise at retail rates. This amount, totaling $1,819 and $1,308 for the years ended June 30, 2022 and 2021, respectively, has been included in charges for services in the accompanying financial statements.

Since fiscal year 2008, the Water Enterprise has charged City departments for water usage with the exception of fire hydrants, which are used for general public safety. In fiscal years 2022 and 2021, the Water Enterprise delivered water for fire hydrant purposes totaling $8 and $7, 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 Water Enterprise and charge amounts designed to recover those departments' costs. These charges, totaling $15,951 and $16,239 for the years ended June 30, 2022 and 2021, respectively, have been included in services provided by other departments in the accompanying financial statements.

During the fiscal year ended June 30, 2022, the Water Enterprise transferred $30,000 to Hetch Hetchy Water to fund various Mountain Tunnel projects, $500 to the Department of Public Works for the UN Plaza Large Alternative Water Source project and purchase of capital assets, $134 to the Arts Commission for arts enrichment fund for the new CDD Headquarters, and $32 to the Office of the City Administrator for the Water Enterprise's contribution to the Surety Bond Program. The Water Enterprise received $15,030 for the Earthquake Safety and Emergency Response program, and $5 from the General Fund for low income assistance programs.

As of June 30, 2022, the Water Enterprise had interfund receivables of $102 from DPW relating to custom work projects and $69 from Academy of Sciences for unpaid interdepartmental services. As of June 30, 2021, the Water Enterprise had $248 due from DPW for custom work projects.

The Water Enterprise had receivables due from the Office of Community Investment and Infrastructure for capacity fees of $195 and from Treasure Island Development Authority for custom work projects of $7 for the year ended June 30, 2022. As of June 30, 2021, the Water Enterprise had no receivables due from component units.

Wastewater Enterprise

The Wastewater Enterprise purchases electricity from Hetch Hetchy Power at market rates. This amount, totaling $11,887 and $10,122 for the years ended June 30, 2022 and 2021, respectively, has been included in services provided by other departments in the accompanying financial statements.

The Wastewater Enterprise purchases water from Water Enterprise at retail rates. This amount, totaling $1,819 and $1,308 for the years ended June 30, 2022 and 2021, respectively, has been included in services provided by other departments in the accompanying financial statements.

The Wastewater Enterprise provides sewer services to other City departments at non-residential rates established by the Commission, and through the Customer Services Bureau, bills and collects sewer service charges on behalf of the Wastewater Enterprise.

The City's Department of Public Works provides certain engineering and other services to the Wastewater Enterprise and charges amounts designed to recover its costs. These services are primarily related to street cleaning, engineering, building repair, and sewer repair. These amounts totaling approximately $13,099 and $15,088 for the years ended June 30, 2022 and 2021, respectively, have been included in services provided by other departments in the accompanying financial statements.

A variety of other City departments provide services such as purchasing, legal, data processing, telecommunications, and human resources to the Wastewater Enterprise and charge amounts designed to recover those departments' costs. These charges totaling approximately $12,840 and $11,795 for the years ended June 30, 2022 and 2021, respectively, have been included in services provided by other departments in the accompanying financial statements.

As of June 30, 2022 and 2021, the Wastewater Enterprise has payables in the amount of $629 and $739, respectively, which is associated with the SFPUC Headquarters Living Machine system. As of June 30, 2022 and 2021, the Wastewater Enterprise has payable of $0 to the City Attorney's Office for legal services provided.

As of June 30, 2022, the Wastewater Enterprise has interfund receivable of $224, of which $118 from DPW for custom work projects and $106 from the Academy of Sciences for sewer charges. In fiscal year 2021, the Wastewater Enterprise has interfund receivable of $261, of which $237 from the DPW and $24 from the San Francisco Port for the Islais Creek Project.

As of June 30, 2022, the Wastewater Enterprise has receivables due of $1,015, consisting of $1,014 from the Treasure Island Development Authority for capacity charges and $1 from the Office of Community Investment and Infrastructure (OCII) for the Candlestick Point Project. In fiscal year 2021, the Wastewater Enterprise has receivable of $20 due from OCII.

SFPUC's 30-year lease agreement with the San Francisco Port Commission, for the use of approximately 4,833 square feet of land located within Seawall Lot 345 and within the public right-of-way on Terry A. Francois Boulevard and on Illinois Street, commenced on September 1st, 2018. SFPUC intends to use the premises for the reconstruction of the Mariposa Pump Station and Force Main Improvements. Total payment under this agreement is $502, which was fully made as of fiscal year 2019. As of June 30, 2022, the Wastewater Enterprise's expenses and prepayment were $17 and $438, respectively, and as of June 30, 2021 were $17 and $455, respectively.

Hetchy Water

The Water Enterprise purchases water from Hetchy Water. Included in the operating revenues are the water assessment fees of $45,815 and $44,149 for the years ended June 30, 2022 and 2021, respectively. The water assessment fees represent a recovery to fund upcountry, water-related costs that are not otherwise funded through Hetchy water-related revenue or Water revenue bonds.

A variety of City departments provide direct services such as engineering, purchasing, legal, data processing, telecommunication, and human resources to Hetchy Water and charge amounts designed to recover those departments' costs. These charges totaling approximately $3,129 and $2,517 for the years ended June 30, 2022 and 2021, respectively, have been included in services provided by other departments in the accompanying financial statements.

Hetchy Water received $30,001 and $16,000 for the years ended June 30, 2022 and 2021, respectively, from the Water Enterprise to fund upcountry projects.

Hetchy Power

As of June 30, 2022, and 2021, operating revenues in sales of power to departments within the City were $116,334 and $82,129, respectively.

A variety of City departments provide direct services such as engineering, purchasing, legal, data processing, telecommunication, and human resources to Hetchy Power and charge amounts designed to recover those departments' costs. These charges totaling approximately $6,253 and $6,137 for the years ended June 30, 2022 and 2021, respectively, have been included in services provided by other departments in the accompanying financial statements.

The Water Enterprise also purchases electricity and gas from Hetchy Power. This amount totaled $11,394 and $9,790 for the years ended June 30, 2022 and 2021, respectively.

The Wastewater Enterprise purchases electricity and gas from Hetchy Power. This amount totaled $11,887 and $10,122 for the years ended June 30, 2022 and 2021, respectively.

The Low Carbon Fuel Standard (LCFS) program is a regulatory program overseen by the California Air Resources Board (CARB). The LCFS program seeks to reduce the carbon intensity of California's transportation fuel by 20% by 2030. Transportation fuel suppliers can achieve this goal by either reducing the carbon intensity of their fuels or purchasing LCFS credits from other fuel suppliers that have a lower carbon intensity. In 2017, the San Francisco Municipal Transportation Agency (SFMTA) joined the LCFS program, signing up its transit fleet of electric buses, cable cars, and light rail vehicles and generating LCFS credits. Through a Memorandum of Understanding (MOU) with SFMTA, approved by the SFPUC Commission in Resolution 17-0199, net proceeds from the sale of LCFS credits would be shared 50/50 between SFMTA and Hetchy Power. Under the MOU, Hetchy Power would take responsibility for selling the LCFS credits. In Ordinance 0199-19, the Board of Supervisors authorized Hetchy Power to establish the Low Carbon Fuel Standard Fund to account for the revenue and expenditure from the sale of LCFS credits. The Ordinance also allowed Hetchy Power to sell LCFS credits on behalf of other City agencies. As of June 30, 2022 and 2021, Hetchy Power received total payments of $2,367 and $2,362, respectively, 50% ($1,184 in fiscal year 2022 and $1,181 in fiscal year 2021) was reallocated to SFMTA and the remaining portion was reported as other non-operating revenues on the Statements of Revenues, Expenses, and Change in Net Position.

Due from other City departments was $11,804 and $12,406 for the years ended June 30, 2022 and 2021, respectively. Hetchy Power serves as the City's department for energy efficiency projects and maintains the Sustainable Energy Account (SEA) (formerly known as the Mayor's Energy Conservation Account) fund to sponsor and financially support such projects at various City departments. In this role, Hetchy Power may secure low-interest financing to supplement funds available in the SEA fund. At June 30, 2022 and 2021, projects completed or under way throughout the City amounted to $4,050 and $4,556, respectively, and are recorded as due from other government agencies.

Hetch Hetchy funded a project for the Treasure Island Development Authority and recorded a receivable in connection with an upgraded submarine power cable for the Treasure Island as due from other government agencies. This amount totaled $6,666 and $6,627 for the years ended June 30, 2022 and 2021, respectively.

(Dollars in thousands, unless otherwise stated)

As of June 30, 2022 and 2021, Hetchy Power recorded receivables of $629 and $739, respectively, due from Wastewater Enterprise for its share of costs relating to SFPUC Headquarters Living Machine System. Details of due from other City departments are as follows:

	2022	2021
Treasure Island Development Authority	$ 6,666	6,627
SEA-related projects - Moscone Center	4,050	4,556
Wastewater - 525 Golden Gate Headquarters Project	629	739
San Francisco Recreation and Park	314	419
Department of Public Works	145	65
Total due from other City departments	11,804	12,406
Less: current portion	(867)	(7,413)
Long-term portion as of June 30, net	$ 10,937	4,993

As of June 30, 2022, Hetchy Power had payables in the amount of $380, of which $369 to the Port of San Francisco for Pier 70 Shoreside Power Project and $11 to the Department of Public Works for painting of light poles. As of June 30, 2021, Hetchy Power had payables of $369 to the Port of San Francisco for Pier 70 Shoreside Power Project.

CleanPowerSF

As of June 30, 2022, and 2021, operating revenue in sales of power to Hetchy Power were $2,332 and $1,072, respectively. Operating expenses in purchase of power from Hetchy Power were $1,589 and $2,456, respectively. Wholesale sales of energy, capacity and/or other electric power related products may be made between the CleanPowerSF and Hetchy Power, when available. CleanPowerSF and Hetchy Power transact for such products at prevailing market prices.

A variety of City departments provide direct services such as engineering, purchasing, legal, data processing, telecommunication, and human resources to CleanPowerSF and charge amounts designed to recover those departments' costs. These charges totaling approximately $3,621 and 3,928 for the years ended June 30, 2022 and 2021, respectively, have been included in services provided by other departments in the accompanying financial statements.

CleanPowerSF received program support services from Hetchy Power. This amount totaled $1,861 and $2,224 for the years ended June 30, 2022 and 2021, respectively.

(15) Risk Management

The SFPUC'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 Enterprise Risk Management and the City's Office of Risk Management. With certain exceptions, the City and the SFPUC'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 are 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 SFPUC obtains commercial insurance. At least annually, the City actuarially determines general liability and workers' compensation risk exposures. The SFPUC does not maintain commercial earthquake coverage, with certain minor exceptions, such as a sub-limit for fire-sprinkler leakage due to earthquake under the SFPUC Property Insurance program. In the past three years, there was no settlements that exceeded insurance coverage.

(Dollars in thousands, unless otherwise stated)

	Risks	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)	Cyber Liability	Purchased Insurance
(g)	Crime	Purchased Insurance
(h)	Electronic data processing	Purchased Insurance and Self-Insured
(i)	Surety bonds	Purchased and Contractual Risk Transfer
(j)	Errors and omissions	Purchased and Contractual Risk Transfer
(k)	Builders' risk	Contractual Risk Transfer

a) General Liability

Through coordination with the Controller 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 SFPUC and the City and County of San Francisco's Annual Comprehensive Financial Report. The claim expense allocations are determined based on actuarially determined anticipated claim payments and the projected timing of disbursement.

The changes for the general liability (damage claims) for the years ended June 30, 2022 and 2021 are as follows:

	2022					
	Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
Beginning of year	$ 36,723	16,713	525	1,108	6	55,075
Claims and changes in estimates	452	8,812	253	2,005	1,582	13,104
Claims paid	(1,106)	(13,480)	(151)	(2,090)	(1,556)	(18,383)
End of year	$ 36,069	12,045	627	1,023	32	49,796

	2021					
	Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
Beginning of year	$ 10,767	15,891	558	2,222	106	29,544
Claims and changes in estimates	27,643	6,428	478	4,212	153	38,914
Claims paid	(1,687)	(5,606)	(511)	(5,326)	(253)	(13,383)
End of year	$ 36,723	16,713	525	1,108	6	55,075

b) Workers' Compensation

The City actuarially determines and allocates workers' compensation costs to the SFPUC 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 SFPUC'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.

(Dollars in thousands, unless otherwise stated)

The changes in the liabilities for workers' compensation for the years ended June 30, 2022 and 2021 are as follows:

2022*		Water	Wastewater	Hetchy Water	Hetchy Power	SFPUC Total
Beginning of year	$	8,828	6,582	1,120	2,118	18,648
Claims and changes in estimates		2,793	3,207	233	322	6,555
Claims paid		(2,648)	(2,243)	(125)	(190)	(5,206)
End of year	$	8,973	7,546	1,228	2,250	19,997

2021*		Water	Wastewater	Hetchy Water	Hetchy Power	SFPUC Total
Beginning of year	$	9,174	6,051	1,187	2,200	18,612
Claims and changes in estimates		1,912	2,616	18	95	4,641
Claims paid		(2,258)	(2,085)	(85)	(177)	(4,605)
End of year	$	8,828	6,582	1,120	2,118	18,648

* CleanPowerSF had no workers' compensation liability as of June 30, 2022 and 2021.

c) Property

The SFPUC'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 SFPUC requires each contractor to provide its own insurance, while ensuring the full scope of work be covered with satisfactory levels to limit the SFPUC's risk exposure. Once construction is complete, the SFPUC 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: 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 SFPUC public officials with financial oversight responsibilities are provided coverage through a commercial Public Officials Liability Policy.

e) Employment Practices Liability

An Employment Practices Liability Policy is retained to protect against employment-related claims and liabilities.

f) Cyber Liability

A Cyber Liability Policy is retained to protect against cyber-related claims and liabilities.

g) Crime

The SFPUC also retains a Commercial Crime Policy, in lieu of bonding its employees, to provide coverage against liabilities or losses due to third-party crime or employee fraud.

h) Electronic Data Processing

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

i) Surety Bonds

Bonds are required in most phases of the public utilities construction contracting process for such phases as bid, performance, and payment or maintenance. Additionally, bonds may be required in other contracts where goods or services are provided to ensure compliance with applicable terms and conditions such as warranty.

j) Errors and Omissions

Errors and omissions, also known as Professional Liability, are commonly transferred through contract to the contracted professional, or retained through self insurance on a case-by-case basis depending on the size, complexity, or scope of construction or professional service contracts. Examples of such contracts are inclusive of services provided by engineers, architects, design professionals, and other licensed or certified professional service providers.

k) Builders' Risk

Builders' Risk policies of insurance are required to be provided by the contractor on all construction projects for the full value of construction.

l) Energy Risk Management

Similar to other electric utilities with a heavy reliance on hydroelectric generation, Hetch Hetchy is exposed to risks that could impact its ability to generate net revenues to fund operating and capital investment activities. Hydroelectric generation facilities in the Sierra Nevada are the primary source of electricity for Hetch Hetchy. For this reason, the Hetch Hetchy revenues can vary with watershed hydrology, unexpected generator outages, and market prices for energy. Given the inherent risk for all hydroelectric generation, several risk management interventions have been developed to mitigate exposure.

m) Enterprise Risk Management

The Power Enterprise adopted the ISO 31000 standard for Hetchy Power and the CleanPowerSF program as the framework for implementing Enterprise Risk Management (ERM). The SFPUC utilizes this framework to systematically and proactively identify and mitigate risks that threatens its business objectives. Since not all risks are insurable or transferable contractually, the ERM program provides an additional method to manage risks and protect the SFPUC's current and expanding business allowing for increased operational resiliency and the ability to capitalize on opportunities.

(16) Commitments and Litigation

a) Commitments

SFPUC has outstanding commitments with third parties for various capital projects and other purchase agreements for materials and services. As of June 30, 2022 and 2021, the Water Enterprise had outstanding commitments with third parties of $322,132 and $185,161, respectively. As of June 30, 2022 and 2021, the Wastewater Enterprise had outstanding commitments with third parties of $1,037,607 and $633,255, respectively. As of June 30, 2022 and 2021, Hetch Hetchy had outstanding commitments with third parties of $199,283 and $143,404, respectively.

Hetchy Water

To meet certain requirements of the Don Pedro Reservoir operating license, the City entered into an agreement with the Modesto Irrigation District (MID) and Turlock Irrigation District (TID) in which the Districts would be responsible for an increase in water flow releases from the reservoir in exchange for annual payments from the City, which are included in Hetchy Water's operating expenses. The payment amounts were $5,129 and $5,069 for fiscal years 2022 and 2021, respectively. The payments are to be made for the duration of the license, but may be terminated with one year's prior written notice after 2001. The City and the Districts have also agreed to monitor the fisheries in the lower Tuolumne River for the duration of the license. A maximum monitoring expense of $1,400 is to be shared between the City and the Districts over the term of the license. The City's share of the monitoring costs is 52%, while the Districts are responsible for 48% of the costs.

Hetchy Power

Wholesale Distribution Tariff (WDT) and Key Operating Agreements for Grid Access

Upon expiration of the City's previous Interconnection Agreement with PG&E, the City began taking service in 2015 under the Wholesale Distribution Tariff (WDT) for distribution service and under the CAISO Open-Access Transmission Tariff for transmission service. The FERC-regulated Wholesale Distribution Tariff is implemented by PG&E through the City specific Service Agreements and Interconnection Agreements. The terms of these agreements have been in contention since the effective date. The City continues to negotiate with PG&E and, where necessary, file complaints and protests at FERC. In September 2020, PG&E filed a revised WDT. Under the terms of the new WDT, the City would pay substantially higher rates, at least twice to potentially four times the current charges, and be required to install costly and inefficient equipment not needed for technical, safety or reliability of operations. In addition, Hetchy Power would no longer be allowed to connect to the "network" grid in the center of San Francisco; have new secondary interconnections; and/or serve any small, typically unmetered loads, such as streetlights, traffic signal and bus shelters.

Staff prepare regular reporting to the Board of Supervisors outlining on-going disputes with PG&E over project requirements, costs and delays. During fiscal years 2022 and 2021, Hetchy Power purchased distribution services for $22,404 and $8,868, respectively, from PG&E under the terms of the Service Agreements and Interconnection Agreements that implement the WDT. The City continues to litigate and dispute these terms at FERC and in the court systems; and pursue the purchase of PG&E's electric grid in San Francisco.

Western System Power Pool and other Market Purchases and Sales

Hetchy Power may purchase or sell energy and other related products (such as ancillary services, spinning reserves, resource adequacy products, and congestion revenue rights) with different market entities through the Western System Power Pool (WSPP) and the CAISO. During fiscal years 2022 and 2021, Hetchy Power purchased $4,152 and $0 of power and other related products, respectively. Sales of excess power, after meeting Hetch Hetchy's obligations, were $0 for 2022 and $469 or 110,043 MWh for 2021, respectively.

Power Purchase Agreement (PPA)

Hetchy Power (Buyer) purchases energy, capacity, and environmental attributes from a local solar photovoltaic project located at Sunset Reservoir (the facility) pursuant to the 2009 25-year PPA with SFCity1, LP, owned by Duke Energy (Seller). In November 2010, the facility commenced commercial operation and began to provide Hetchy Power energy generated by the facility.

The PPA sets the starting purchase price of generated energy at $235/MWh, increasing by 3% each year throughout the term of the agreement, and it is expected that the facility will generate 6,560 MWh per year. In fiscal year 2022, the facility generated 6,460 MWh and the rate was at $334/MWh. In the event that the facility generates more energy than expected due to better than normal meteorological conditions, the PPA requires the Buyer to purchase all the excess energy but generation in excess of 120% of expected is purchased at no cost. The PPA also requires the Seller to generate a minimum amount of energy from the facility annually. If energy production falls below 50% of expected, the Seller must provide replacement power, and if energy falls below 90% of expected, the price for energy generated is lowered. In fiscal years 2022 and 2021, purchases of energy under the Agreement were $2,225, or 6,460 MWh, and $2,127, or 6,598 MWh, respectively.

APX, Inc

Hetchy Power and CleanPowerSF participate in the California Independent System Operator (CAISO) energy markets which requires the SFPUC to have a contract with a certified Scheduling Coordinator (SC). In June 2022, CleanPowerSF renewed a 5-year contract with APX, Inc with contract amount not to exceed $134,743 to fulfill this requirement. APX, Inc provides a number of services including but not limited to an interface with the CAISO's energy scheduling portal, manage invoice payments to the CAISO and communications between the CAISO and the SFPUC, and dispatch of the Hetch Hetchy plant 24 hours a day, seven days a week. The contract also provides that APX, Inc will act as the SC for renewable generation plants under some of CleanPowerSF's Power Purchase Agreements. Hetchy Power's share was $456 and $472 as of June 30, 2022 and 2021, respectively. CleanPowerSF's share was $192 as of June 30, 2022 and 2021.

CleanPowerSF

CleanPowerSF has added multiple additional short-term and medium-term contracts with multiple counterparties pursuant to master agreements, including the WSPP Master Agreement, to purchase renewable, carbon-free and conventional energy and resource adequacy capacity. CleanPowerSF has also entered into long-term contracts for renewable energy and capacity with renewable energy developers including sPower, Terra-Gen, NextEra and EDF Renewables. These contracts have been entered to allow CleanPowerSF to meet its existing retail sales obligations, to support future retail sales from citywide enrollment into the CleanPowerSF program, and to comply with state law requiring that 65% of CleanPowerSF's RPS compliance targets be fulfilled by RPS-eligible electricity from contracts of 10 or more years. Citywide enrollment was substantively completed with the enrollment of residential accounts in April 2019. Since it began serving customers in 2016, CleanPowerSF's cumulative opt-out rate is 4.3% of all enrolled accounts. The total power purchase cost, net of wholesale sales, equaled $238,149 and $188,533 in fiscal years 2022 and 2021, respectively.

CleanPowerSF contracts with Calpine Energy Solutions to provide meter data management, billing and customer care support. Calpine is responsible for calculating and providing CleanPowerSF charges to Pacific Gas & Electric (PG&E), which in turn bills both CleanPowerSF and PG&E customers for electricity transmission, distribution, and CleanPowerSF generation services. PG&E remits payments received from customers for CleanPowerSF charges to the City. During fiscal years 2022 and 2021, amounts paid were $4,730 and $6,664, respectively.

CleanPowerSF Power Purchase Agreement (PPA)

In November 2021, CleanPowerSF amended an existing Renewable Power Purchase Agreement with Blythe Solar IV, LLC (seller) to purchase a storage product from the solar powered generation facility located in Blythe, California pursuant to the 20-year PPA. Under the revised agreement, the project in Blythe, California, will add batteries to the operating 62-MW solar photovoltaic power plant. The contract, including the new battery component, is for $196,399 over 20 years.

In November 2020, CleanPowerSF executed a Power and Storage Purchase Agreement to purchase solar product and storage product from a solar powered generation facility and battery storage facility located at Livermore pursuant to the 25-year PPA with IP Aramis, LLC (Seller). As of June 30, 2022 and 2021, CleanPowerSF received cash collateral of $9,000 for Development Assurance and Performance Assurance from the Seller.

CleanPowerSF Guarantee

In March 2018, CleanPowerSF entered into a five-year, $75,000 Credit Agreement with JPMorgan Chase Bank, National Association ("Bank") to provide letters of credit or loans from the Bank to guarantee certain power purchase agreement payment obligations of CleanPowerSF and to meet working capital needs, if necessary. In November 2021 the Credit Agreement was decreased (at the request of CleanPowerSF) the available amount from $75,000 to $20,000, and the stated term of the agreement was extended to March 2024. Additional changes to the agreement effected by the November 2021 Amendments include elimination of target reserve requirements, revisions to debt service coverage (allowing for a liquidity test two times in the aggregate for any consecutive four quarters) and rate-setting covenants, changes to ongoing reporting requirements to the Bank, and changes to events of default, including the addition of an event of default if CleanPowerSF's long-term unenhanced credit rating is downgraded below investment grade or suspended, withdrawn or otherwise unavailable. In May 2022 CleanPowerSF executed another amendment to its Credit Agreement to eliminate and change certain financial covenants contained in the 2018 Credit Agreement. Specifically, this Amendment eliminated the covenant of the Commission to maintain a specified debt service coverage ratio and changed such financial covenant to commit the Commission to maintain a specified level of Day Liquidity on Hand (as defined in the Credit Agreement).The Credit Agreement is secured by CleanPowerSF's net revenues; there is no pledge of, or lien on net revenues that ranks senior to the obligations under the Credit Agreement. The Bank issued letters of credit in the face amounts totaling $5,847 and $13,810 for fiscal years ending June 30, 2022 and 2021, respectively. CleanPowerSF did not draw on the Credit Agreement during fiscal years 2022 and 2021. Accordingly, the uncommitted credit capacity under the Credit Agreement was $14,153 and $61,190 during fiscal years 2022 and 2021, respectively

Original financial covenants include that CleanPowerSF maintain a Debt Service Coverage Ratio as defined in the Credit Agreement of not less than 1.05 for each fiscal quarter, as determined for the four consecutive fiscal quarter periods ended on the last day of such fiscal quarter. As of June 30, 2021, CleanPowerSF was not in compliance with this financial covenant as calculated for the four consecutive fiscal quarters ended on such date, resulting in a covenant event of default under the Credit Agreement. In connection with subsequent amendments to the Credit Agreement, JPMorgan Chase granted a waiver of such event of default for the period ended June 30, 2021. CleanPowerSF was in compliance with other covenants and requirements of the Credit Agreement as of June 30, 2021. CleanPowerSF was in compliance with all covenants and requirements of the Credit Agreement as amended as of June 30, 2022.

GASB Statement No. *88, Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*, requires the disclosure of certain information related to debt, including unused letters of credit. Significant events of default under the Credit Agreement, include 1) non-payment, 2) material breach of warranty, representation, or other non-remedied breach of covenants as specified in the agreement and 3) bankruptcy and insolvency events, which could result in all outstanding loans under the Credit Agreement to be immediately due and payable; or the immediate termination of the Bank's commitment to issue letters of credit or make loans under the Credit Agreement.

Green Tariff and Community Solar Green Tariff Programs for Disadvantaged Communities

In June 2018. the California Public Utilities Commission (CPUC) established the Disadvantaged Communities-Green Tariff (DAC-GT) and Community Solar Green Tariff (CSGT) program to address barriers to solar adoption faced by low-income electric customers in neglected communities. The

DAC-GT program provides a 20% rate discount on 100% Renewable Portfolio Standard (RPS) eligible electricity service to income-qualified customers residing in Disadvantaged Communities (DACs) as defined by the California Environmental Protection Agency's (Cal EPA). Similar to DAC-GT, the CSGT program allows primarily for the DACs to benefit from the development of solar generation projects located in their own or nearby DACs. CSGT projects must also have a local community-based sponsor that supports site selection and customer enrollment.

The CPUC approved CleanPowerSF's application to establish DAC-GT and CSGT programs in April 2021 and to receive funds to cover program administration and a portion of electricity supply costs. CleanPowerSF began enrolling customers in the DAC-GT program branded as "SuperGreen Saver" on June 1, 2022. The CSGT program is expected to start serving customers during fiscal year 2025, once CleanPowerSF is able to procure electricity from a CSGT-eligible solar project(s). As of June 30, 2022, CleanPowerSF received $1,150 from a combination of ratepayer funds and California Cap and Trade Auction proceeds.

b) Grants

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

c) Litigation

The SFPUC is a defendant in various legal actions and claims that arise during the normal course of business. The final disposition of these legal actions and claims is not determinable. However, in the opinion of management, the outcome of any litigation of these matters will not have a material effect on the financial position or changes in net position of SFPUC.

d) Environmental Issue

Water

As of June 30, 2022 and 2021, the pollution remediation liability of $1,271 related to the Pacific Rod & Gun Club site.

Wastewater

As of June 30, 2022, and 2021, the Wastewater Enterprise recorded $8,060 and $7,800 in pollution remediation liability, respectively. The increase of $260 in pollution remediation liability in fiscal year 2022 is due to violation penalties of $240 at the Southeast Plant for the discharge of secondary treated and disinfected wastewater and $20 at the Oceanside Plant for failure to meet the District permit condition-imposed standards relating to gas released into the atmosphere from digesters. As of June 30, 2022 the pollution remediation liability of $8,060 consisted of $7,800 for the Yosemite Creek toxic sediments and $260 aggregate violation fines at the Southeast Plant and Oceanside Plant. In fiscal year 2021, the pollution liability of $7,800 was based on cleanup cost estimates for the toxic sediments at Yosemite Creek.

Hetch Hetchy

Hetch Hetchy had no pollution remediation liability as of June 30, 2022 and 2021.

(17) Subsequent Events

a) SFPUC Extension on the Moratorium on Shutoff of Electric Service

On September 13, 2022, the Commission approved to extend moratorium on shutoff of water service and sewer service for the residents in the City and electric service for residential retail customers in the City through June 30, 2023 and granted the General Manager discretion to restart severance and liens processes to multi-family residential accounts carrying balances greater than $25 which are 90 days or more past due. In addition, the temporary suspension of the return of delinquent residential CleanPowerSF customers to PG&E has also been extended through June 30, 2023.

b) Wastewater Revenue Bonds 2022 Series B Issuances

On July 6, 2022, the SFPUC issued its San Francisco Wastewater Revenue Bonds, 2022 Sub-Series B (Refunding) with an aggregate principal of $137,080 to refund a portion of the SFPUC's outstanding 2013 Series A and 2013 Series B Wastewater Revenue Bonds.

c) Wastewater Interim Funding Program – Credit Providers

On July 7, 2022, the SFPUC entered into a $75,000 Revolving Credit and Term Loan Agreement with TD Bank N.A. (TD Bank) (Series A-4) which expires July 6, 2027. The Series A-4 Revolving Credit and Term Loan Agreement replaced the $75,000 Revolving Credit and Term Loan Agreement from the Toronto Dominion Bank which expired July 8, 2022.

Required Supplementary Information (Unaudited)

Schedules of the Proportionate Share of the Net Pension (Asset)/Liability

Schedules of Employer Contributions – Pension Plan

Schedules of Changes in Total Pension Liability and Related Ratios – Replacement Benefits Plan

Schedules of Changes in Other Post-employment Benefits Liability and Related Ratio - Other Post-employment Healthcare Benefits Plan

Schedules of Employer Contributions – Other Post-employment Healthcare Benefits Plan

Supplementary Information (Proprietary Funds)

Schedule of Changes in Net Position – Dollar and Percentage Change vs. Prior Year

Schedule of Changes in Revenues, Expenses, and Net Position – Dollar and Percentage Change vs. Prior Year

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Required Supplementary Information (Unaudited)
Schedules of the Proportionate Share of the Net Pension (Asset)/Liability
Fiscal Years Ended 2015 to 2022
(In thousands)

City - San Francisco Employee's Retirement System (SFERS) Plan and Measurement Period (MP)	2015* (MP 2014)	2016** (MP 2015)	2017** (MP 2016)	2018 (MP 2017)	2019** (MP 2018)	2020 (MP 2019)	2021 (MP 2020)	2022 (MP 2021)
Proportion of net pension liability	93.78%	93.90%	94.22%	94.07%	94.10%	94.13%	94.39%	94.64%
Proportionate share of the net pension (asset)/liability	$ 1,660,365	2,156,049	5,476,654	4,697,131	4,030,207	4,213,808	5,107,270	(2,446,564)
Covered payroll (City and County only)	$ 2,398,979	2,529,879	2,681,695	2,880,112	3,045,153	3,186,405	3,378,945	3,434,713
Proportionate share of the net pension (asset)/liability as a percentage of covered payroll	69.21%	85.22%	204.22%	163.09%	132.35%	132.24%	151.15%	-71.23%
Plan fiduciary net position as a percentage of total pension (asset)/liability	91.84%	89.90%	77.61%	81.78%	85.20%	85.30%	83.10%	107.80%
Water								
Proportion of net pension liability	5.08%	5.00%	4.75%	4.45%	4.35%	4.23%	4.21%	4.27%
Proportionate share of the net pension (asset)/liability	$ 84,374	108,024	259,956	209,003	175,429	178,133	215,240	(100,407)
Covered payroll^	127,364	132,138	134,734	135,361	140,137	142,781	150,170	154,740
Proportionate share of the net pension (asset)/liability as a percentage of covered payroll	66.25%	81.75%	192.94%	154.40%	125.18%	124.76%	143.33%	-64.89%
Wastewater								
Proportion of net pension liability	2.27%	2.20%	2.17%	2.15%	2.11%	2.05%	2.03%	1.99%
Proportionate share of the net pension (asset)/liability	$ 37,615	48,177	118,907	100,973	85,037	86,235	103,746	(48,770)
Covered payroll^	56,913	58,141	61,552	65,399	67,975	69,197	72,410	72,116
Proportionate share of the net pension (asset)/liability as a percentage of covered payroll	66.09%	82.86%	193.18%	154.40%	125.10%	124.62%	143.28%	-67.63%
Hetchy Water								
Proportion of net pension liability	0.56%	0.57%	0.57%	0.54%	0.50%	0.51%	0.52%	0.57%
Proportionate share of the net pension (asset)/liability	$ 9,242	12,093	31,235	25,216	20,390	21,477	26,645	(13,912)
Covered payroll^	14,040	15,064	16,168	16,426	16,108	17,215	18,548	20,656
Proportionate share of the net pension (asset)/liability as a percentage of covered payroll	65.83%	80.28%	193.19%	153.51%	126.59%	124.76%	143.65%	-67.35%
Hetchy Power								
Proportion of net pension liability	0.68%	0.69%	0.70%	0.65%	0.62%	0.62%	0.64%	0.69%
Proportionate share of the net pension (asset)/liability	$ 11,295	14,781	38,177	30,819	24,920	26,249	32,566	(17,004)
Covered payroll	17,049	18,235	19,855	19,772	19,974	20,928	22,829	25,005
Proportionate share of the net pension (asset)/liability as a percentage of covered payroll	66.25%	81.06%	192.27%	155.87%	124.76%	125.43%	142.65%	-68.00%
CleanPowerSF								
Proportion of net pension liability	Data not available - CleanPowerSF launched in May 2016.			0.02%	0.03%	0.04%	0.06%	0.07%
Proportionate share of the net pension (asset)/liability	$			1,087	1,070	1,805	3,008	(1,833)
Covered payroll^				608	966	1,350	2,140	2,537
Proportionate share of the net pension (asset)/liability as a percentage of covered payroll				178.68%	110.71%	133.69%	140.55%	-72.26%
SFPUC Total								
Proportion of net pension liability	8.59%	8.46%	8.19%	7.81%	7.61%	7.45%	7.46%	7.59%
Proportionate share of the net pension (asset)/liability	$ 142,526	183,075	448,275	367,098	306,846	313,899	381,205	(181,926)
Covered payroll^	215,365	223,577	232,309	237,566	245,159	251,471	266,098	275,054
Proportionate share of the net pension (asset)/liability as a percentage of covered payroll	66.18%	81.88%	192.96%	154.52%	125.16%	124.83%	143.26%	-66.14%

* Fiscal year 2015 was the first year of implementation of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*. Therefore only seven eight years data shown. RSI will be provided for 10 years as it becomes available.

**Changes of Assumptions - There were no changes in the discount rate for the measurement period ended June 30, 2021 and 2020. For the measurement period ended June 30, 2019, the discount rate was decreased from 7.50% to 7.40%. There were no changes in the discount rate for the measurement pension ended June 30, 2018. For the measurement period ended June 30, 2017, the discount rate was increased from 7.46% to 7.50%.

^ Water, Wastewater, Hetchy Water, Hetchy Power, CleanPowerSF and SFPUC covered payroll is calculated based on the percentage of proportion of net pension (asset)/liability by the Total covered payroll from SFERS (www.mysfers.org). The total covered payroll for SFERS includes the City, San Francisco Unified School District, San Francisco Community College District, and the San Francisco Courts.

Source: Office of the Controller, City and County of San Francisco and San Francisco Employees' Retirement System (SFERS)

See accompanying auditors' report.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Required Supplementary Information (Unaudited)
Schedules of Employer Contributions - Pension Plan
Fiscal Years Ended 2015 to 2022
(In thousands)

City - SFERS Plan and Measurement Period (MP)	2015* (MP 2015)	2016 (MP 2016)	2017 (MP 2017)	2018 (MP 2018)	2019 (MP 2019)	2020 (MP 2020)	2021 (MP 2021)	2022 (MP 2022)
Actuarially determined contributions[1]**	$ 556,511	496,343	519,073	582,568	607,408	701,307	791,736	729,578
Contributions in relations to the actuarially determined contributions[1]	(556,511)	(496,343)	(519,073)	(582,568)	(607,408)	(701,307)	(791,736)	(729,578)
Contribution deficiency (excess)	$ —	—	—	—	—	—	—	—
Covered payroll	$ 2,529,879	2,681,695	2,880,112	3,045,153	3,186,405	3,378,945	3,434,713	3,553,859
Contributions as a percentage of covered payroll	22.00%	18.51%	18.02%	19.13%	19.06%	20.76%	23.05%	20.53%
Water								
Actuarially determined contributions[1]	$ 28,280	24,497	24,638	25,922	26,440	29,647	33,367	31,151
Contributions in relations to the actuarially determined contributions[1]	(28,280)	(24,497)	(24,638)	(25,922)	(26,440)	(29,647)	(33,367)	(31,151)
Contribution deficiency (excess)	$ —	—	—	—	—	—	—	—
Covered payroll^	$ 132,138	134,734	135,361	140,137	142,781	150,170	154,740	159,803
Contributions as a percentage of covered payroll	21.40%	18.18%	18.20%	18.50%	18.52%	19.74%	21.56%	19.49%
Wastewater								
Actuarially determined contributions[1]	$ 12,608	10,930	11,270	12,523	12,816	14,352	16,083	14,543
Contributions in relations to the actuarially determined contributions[1]	(12,608)	(10,930)	(11,270)	(12,523)	(12,816)	(14,352)	(16,083)	(14,543)
Contribution deficiency (excess)	$ —	—	—	—	—	—	—	—
Covered payroll^	$ 58,141	61,552	65,399	67,975	69,197	72,410	72,116	74,475
Contributions as a percentage of covered payroll	21.69%	17.76%	17.23%	18.42%	18.52%	19.82%	22.30%	19.53%
Hetchy Water								
Actuarially determined contributions[1]	$ 3,097	2,806	2,961	3,128	3,073	3,574	4,130	4,149
Contributions in relations to the actuarially determined contributions[1]	(3,097)	(2,806)	(2,961)	(3,128)	(3,073)	(3,574)	(4,130)	(4,149)
Contribution deficiency (excess)	$ —	—	—	—	—	—	—	—
Covered payroll^	$ 15,064	16,168	16,426	16,108	17,215	18,548	20,656	21,332
Contributions as a percentage of covered payroll	20.56%	17.36%	18.03%	19.42%	17.85%	19.27%	19.99%	19.45%
Hetchy Power								
Actuarially determined contributions[1]	$ 3,786	3,430	3,618	3,822	3,756	4,369	5,048	5,071
Contributions in relations to the actuarially determined contributions[1]	(3,786)	(3,430)	(3,618)	(3,822)	(3,756)	(4,369)	(5,048)	(5,071)
Contribution deficiency (excess)	$ —	—	—	—	—	—	—	—
Covered payroll^	$ 18,235	19,855	19,772	19,974	20,928	22,829	25,005	25,823
Contributions as a percentage of covered payroll	20.76%	17.27%	18.30%	19.14%	17.95%	19.14%	20.19%	19.64%
CleanPowerSF								
Actuarially determined contributions[1]	$ Data not available - CleanPowerSF launched in May 2016.			135	161	300	466	546
Contributions in relations to the actuarially determined contributions[1]				(135)	(161)	(300)	(466)	(546)
Contribution deficiency (excess)	$			—	—	—	—	—
Covered payroll^				966	1,350	2,140	2,537	2,620
Contributions as a percentage of covered payroll				13.97%	11.92%	14.02%	18.37%	20.84%
SFPUC Total								
Actuarially determined contributions[1]	$ 47,771	41,663	42,487	45,530	46,246	52,242	59,094	55,460
Contributions in relations to the actuarially determined contributions[1]	(47,771)	(41,663)	(42,487)	(45,530)	(46,246)	(52,242)	(59,094)	(55,460)
Contribution deficiency (excess)	$ —	—	—	—	—	—	—	—
Covered payroll^	$ 223,577	232,309	236,958	245,159	251,471	266,098	275,054	284,053
Contributions as a percentage of covered payroll	21.37%	17.93%	17.93%	18.57%	18.39%	19.63%	21.48%	19.52%

(continued)

[1]Contractually required contributions is an actuarially contribution for all cost-sharing plans.

*Fiscal year 2015 was the first year of implementation of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*. Therefore only eight seven years data shown. RSI will be provided for 10 years as it becomes available.

** In fiscal year 2015, the actuarially determined contributions were based on an estimated. Due to the early implementation of GASB Statement No. 82, *Pension Issues*, the City decreased the actuarially determined contributions for the City SFERS plan to deduct the employer pickup in the amount of $8.6 million. (City and County only.)

^Water, Wastewater, Hetchy Water, Hetchy Power, CleanPowerSF and SFPUC covered payroll is calculated based on the latest available measurement period percentage of proportion of net pension (asset)/liability by the Total covered payroll from SFERS (www.mysfers.org). The total covered payroll for SFERS includes the City, San Francisco Unified School District, San Francisco Community College District and the San Francisco Courts. For fiscal year 2021, the percentage of proportion of net pension liability is updated to be based on measuring period 2021. Fiscal year 2022 is an estimated percentage of proportion of net pension liability based on measuring period 2021.

Source: Office of the Controller, City and County of San Francisco and San Francisco Employees' Retirement System (SFERS)

See accompanying auditors' report.

Source: Office of the Controller, City and County of San Francisco.See accompanying auditors' report.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Required Supplementary Information (Unaudited)
Schedules of Employer Contributions - Pension Plan
Fiscal Years Ended 2015 to 2022

Methods and assumptions used to determine contribution rates to SFERS Plan

	Fiscal Year 2022	Fiscal Year 2021
Valuation date	July 1, 2019	July 1, 2018
Actuarial cost method	Entry-age normal cost method	Entry-age normal cost method
Amortization method	Level annual percentage of payroll	Level annual percentage of payroll
Remaining amortization period	Closed 15-year period	Closed 15-year period
Asset valuation method	5 year smoothed market	5 year smoothed market
Investment rate of return	7.40% (net of investment expenses)	7.40% (net of investment expenses)
Inflation	2.75%	3.00% compounded annually
Projected salary increase	Wage inflation component: 3.50%	Wage inflation component: 3.50%

	Fiscal Year 2020	Fiscal Year 2019
Valuation date	July 1, 2017	July 1, 2016
Actuarial cost method	Entry-age normal cost method	Entry-age normal cost method
Amortization method	Level annual percentage of payroll	Level annual percentage of payroll
Remaining amortization period	Closed 15-year period	Closed 15-year period
Asset valuation method	5 year smoothed market	5 year smoothed market
Investment rate of return	7.50% (net of investment expenses)	7.50% (net of investment expenses)
Inflation	3.00% compounded annually	3.25% compounded annually
Projected salary increase	Wage inflation component: 3.50%	Wage inflation component: 3.75%

	Fiscal Year 2018	Fiscal Year 2017
Valuation date	July 1, 2015	July 1, 2014
Actuarial cost method	Entry-age normal cost method	Entry-age normal cost method
Amortization method	Level annual percentage of payroll	Level annual percentage of payroll
Remaining amortization period	Closed 15-year period	Closed 15-year period
Asset valuation method	5 year smoothed market	5 year smoothed market
Investment rate of return	7.50% (net of investment expenses)	7.50% (net of investment expenses)
Inflation	3.25% compounded annually	3.25% compounded annually
Projected salary increase	Wage inflation component: 3.75%	Wage inflation component: 3.75%

	Fiscal Year 2016	Fiscal Year 2015
Valuation date	July 1, 2013	July 1, 2012
Actuarial cost method	Entry-age normal cost method	Entry-age normal cost method
Amortization method	Level annual percentage of payroll	Level annual percentage of payroll
Remaining amortization period	Rolling 15-year period	Rolling 15-year period
Asset valuation method	5 year smoothed market	5 year smoothed market
Investment rate of return	7.58% (net of investment expenses)	7.58% (net of investment expenses)
Inflation	3.33% compounded annually	3.33% compounded annually
Projected salary increase	Wage inflation component: 3.83%	Wage inflation component: 3.83%

Methods and assumptions updated per Office of the Controller.
Source: Office of the Controller, City and County of San Francisco.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Required Supplementary Information (Unaudited)
Schedules of Changes in Total Pension Liability and Related Ratios - Replacement Benefits Plan
Fiscal Years 2021 to 2022
(In thousands)

City Replacement Benefits Plan		2021* (MP 2020)	2022 (MP 2021)
Plan total pension liability:			
Service Cost	$	1,976	2,571
Interest		4,776	4,076
Changes of benefits		—	—
Differences between expected and actual experience		7,800	24,547
Changes of assumptions		37,013	7,274
Benefit payments		(3,634)	(4,097)
Net change in total pension liability		47,931	34,371
Total pension liability, beginning		137,272	185,203
Plan total pension liability, ending	$	185,203	219,574
Covered-employee payroll	$	3,414,923	3,470,495
Plan total pension liability as a percentage of the covered-employee payroll	$	5.42%	6.33%
Water Enterprise			
Plan total pension liability:			
Service Cost	$	13	47
Interest		30	75
Changes of benefits		—	—
Differences between expected and actual experience		50	453
Changes of assumptions		235	134
Benefit payments		(23)	(76)
Net change in total pension liability		305	635
Total pension liability, beginning		—	1,177
Adjustments to pension		872	2,244
Plan total pension liability, ending	$	1,177	4,056
Covered-employee payroll	$	21,695	64,104
Plan total pension liability as a percentage of the covered-employee payroll	$	0.03%	0.12%
Water Enterprise's allocation of the City's proportionate share:		0.64%	1.85%

* Fiscal year 2021 was the first year SFPUC Water Enterprise have Replacement Benefits Plan. RSI will be provided for 10 years as it becomes available.

No assets are accumulated in a trust that meet the criteria in GASB Statement No. 73 to pay related benefits.

Source: Office of the Controller, City and County of San Francisco.

See accompanying auditors' report.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Required Supplementary Information (Unaudited)
Schedules of Changes in Other Post-employment Benefits Liability and Related Ratios
Other Post-employment Healthcare Benefits Plan
Fiscal Years Ended 2018 to 2022
(In thousands)

City Plan and Measurement Period (MP)		2018* (MP 2017)	2019 (MP 2018)	2020 (MP 2019)	2021 (MP 2020)	2022 (MP 2021)
Total Other Postemployment Benefits (OPEB) Liability						
Service Cost	$	125,195	127,850	133,736	141,642	155,840
Interest (includes interest on service cost)		272,942	290,029	283,520	314,907	300,122
Differences between expected and actual experience		—	(385,732)	194,068	(381,922)	(151,947)
Changes of assumptions		—	111,119	—	151,725	—
Benefits payments, including refunds of member contributions		(165,470)	(178,019)	(185,839)	(196,445)	(206,439)
Net change in total OPEB liability		232,667	(34,753)	425,485	29,907	97,576
Total OPEB liability - beginning		3,659,019	3,891,686	3,856,933	4,282,418	4,312,323
Adjustments to OPEB		—	—	—	(2)	—
Total OPEB liability - ending	$	3,891,686	3,856,933	4,282,418	4,312,323	4,409,899
Plan fiduciary net position						
Contributions - employer	$	183,898	203,858	218,625	235,963	245,994
Contributions - member		31,686	41,682	51,024	60,236	61,582
Net investment income		17,368	14,105	26,959	22,746	128,916
Benefit payments, including refunds of member contributions		(165,470)	(178,019)	(185,839)	(196,445)	(206,439)
Administrative expense		(109)	(137)	(132)	(113)	(265)
Net change in plan fiduciary net position		67,373	81,489	110,637	122,387	229,788
Plan fiduciary net position - beginning		107,104	174,477	255,966	366,603	488,989
Adjustments to OPEB		—	—	—	(1)	—
Plan fiduciary net position - ending		174,477	255,966	366,603	488,989	718,777
Net OPEB liability - ending	$	3,717,209	3,600,967	3,915,815	3,823,334	3,691,122
Plan fiduciary net position as a percentage of the total OPEB liability		4.48%	6.64%	8.56%	11.34%	16.30%
Covered payroll	$	3,393,658	3,583,448	3,763,446	3,951,792	3,955,498
Net OPEB liability as a percentage of covered payroll		109.53%	100.49%	104.05%	96.75%	93.32%
Water						
Proportion of net OPEB liability	$	166,336	150,771	163,684	148,771	144,115
Percentage of proportion of net OPEB liability		4.47%	4.19%	4.18%	3.89%	3.90%
Covered payroll		151,858	150,037	157,315	153,769	154,437
Net OPEB liability as a percentage of covered payroll		109.53%	100.49%	104.05%	96.75%	93.32%
Wastewater						
Proportion of net OPEB liability	$	59,517	53,567	58,183	50,711	49,123
Percentage of proportion of net OPEB liability		1.60%	1.49%	1.49%	1.33%	1.33%
Covered payroll		54,337	53,306	55,919	52,415	52,641
Net OPEB liability as a percentage of covered payroll		109.53%	100.49%	104.05%	96.75%	93.32%
Hetchy Water						
Proportion of net OPEB liability	$	15,872	15,404	16,350	14,444	14,240
Percentage of proportion of net OPEB liability		0.43%	0.43%	0.42%	0.38%	0.39%
Covered payroll		14,490	15,329	15,714	14,929	15,260
Net OPEB liability as a percentage of covered payroll		109.53%	100.49%	104.05%	96.75%	93.32%
Hetchy Power						
Proportion of net OPEB liability	$	19,400	18,826	19,983	17,653	17,405
Percentage of proportion of net OPEB liability		0.52%	0.52%	0.51%	0.46%	0.47%
Covered payroll		17,711	18,734	19,205	18,246	18,652
Net OPEB liability as a percentage of covered payroll		109.53%	100.49%	104.05%	96.75%	93.32%
CleanPowerSF						
Proportion of net OPEB liability	$	728	1,242	2,197	2,909	2,264
Percentage of proportion of net OPEB liability		0.02%	0.03%	0.06%	0.08%	0.06%
Covered payroll		665	1,236	2,112	3,007	2,426
Net OPEB liability as a percentage of covered payroll		109.53%	100.49%	104.05%	96.75%	93.32%
SFPUC Total						
Proportion of net OPEB liability	$	261,853	239,810	260,397	234,488	227,147
Percentage of proportion of net OPEB liability		7.04%	6.66%	6.66%	6.14%	6.15%
Covered payroll		239,061	238,643	250,265	242,366	243,416
Net OPEB liability as a percentage of covered payroll		109.53%	100.49%	104.05%	96.75%	93.32%

(continued)

*Fiscal year 2018 was the first year of implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Post-employment Benefits Other Than Pensions*. Therefore five years data is shown. RSI will be provided for 10 years as it becomes available.
^ Water, Wastewater, Hetchy Water, Hetchy Power, CleanPowerSF and SFPUC covered payroll is based on the percentage of proportion of net OPEB liability to the City's covered payroll.

Source: Office of the Controller, City and County of San Francisco.

See accompanying auditors' report.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Required Supplementary Information (Unaudited)
Schedules of Employer Contributions - Other Post-employment Healthcare Benefits Plan
Fiscal Years Ended 2018 to 2022
(In thousands)

City - City Plan and Measurement Period		2018* (MP 2018)	2019 (MP 2019)	2020 (MP 2020)	2021** (MP 2021)	2022 (MP 2022)
Charter Required or Actuarially determined contributions (ADC)	$	203,858	218,625	235,963	245,992	252,866
Contributions in relations to charter required contribution or ADC		(203,858)	(218,625)	(235,963)	(245,992)	(252,866)
Contribution deficiency (excess)	$	—	—	—	—	—
Covered payroll	$	3,583,448	3,763,446	3,951,792	3,955,498	4,267,680
Contributions as a percentage of covered payroll		5.69%	5.81%	5.97%	6.22%	5.93%
Water						
Charter Required or Actuarially determined contributions (ADC)	$	9,122	9,154	9,863	9,572	9,873
Contributions in relations to charter required contribution or ADC		(9,122)	(9,154)	(9,863)	(9,572)	(9,873)
Contribution deficiency (excess)	$	—	—	—	—	—
Covered payroll^	$	150,037	157,315	153,769	154,437	166,626
Contributions as a percentage of covered payroll		6.08%	5.82%	6.41%	6.20%	5.93%
Wastewater						
Charter Required or Actuarially determined contributions (ADC)	$	3,264	3,252	3,506	3,263	3,365
Contributions in relations to charter required contribution or ADC		(3,264)	(3,252)	(3,506)	(3,263)	(3,365)
Contribution deficiency (excess)	$	—	—	—	—	—
Covered payroll^	$	53,306	55,919	52,415	52,641	56,796
Contributions as a percentage of covered payroll		6.12%	5.82%	6.69%	6.20%	5.92%
Hetchy Water						
Charter Required or Actuarially determined contributions (ADC)	$	870	935	985	929	975
Contributions in relations to charter required contribution or ADC		(870)	(935)	(985)	(929)	(975)
Contribution deficiency (excess)	$	—	—	—	—	—
Covered payroll^	$	15,329	15,714	14,929	15,260	16,464
Contributions as a percentage of covered payroll		5.68%	5.95%	6.60%	6.09%	5.92%
Hetchy Power						
Charter Required or Actuarially determined contributions (ADC)	$	1,064	1,143	1,204	1,136	1,192
Contributions in relations to charter required contribution or ADC		(1,064)	(1,143)	(1,204)	(1,136)	(1,192)
Contribution deficiency (excess)	$	—	—	—	—	—
Covered payroll^	$	18,734	19,205	18,246	18,652	20,124
Contributions as a percentage of covered payroll		5.68%	5.95%	6.60%	6.09%	5.92%
CleanPowerSF						
Charter Required or Actuarially determined contributions (ADC)	$	40	75	132	187	155
Contributions in relations to charter required contribution or ADC		(40)	(75)	(132)	(187)	(155)
Contribution deficiency (excess)	$	—	—	—	—	—
Covered payroll^		1,236	2,112	3,007	2,426	2,618
Contributions as a percentage of covered payroll		3.24%	3.55%	4.39%	7.71%	5.92%
SFPUC Total						
Charter Required or Actuarially determined contributions (ADC)	$	14,360	14,559	15,690	15,087	15,560
Contributions in relations to charter required contribution or ADC		(14,360)	(14,559)	(15,690)	(15,087)	(15,560)
Contribution deficiency (excess)	$	—	—	—	—	—
Covered payroll^	$	238,642	250,265	242,366	243,416	262,628
Contributions as a percentage of covered payroll		6.02%	5.82%	6.47%	6.20%	5.92%

*Fiscal year 2018 was the first year of implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Post-employment Benefits Other Than Pensions*. Therefore five years data is shown. RSI will be provided for 10 years as it becomes available.
** Fiscal year 2021 and 2020 covered payroll data and percentage updated in fiscal year 2022.

^ Water, Wastewater, Hetchy Water, Hetchy Power, CleanPowerSF and SFPUC covered payroll is calculated based on the percentage of proportion of net OPEB liability by the Total covered payroll. For fiscal year 2022, the percentage of proportion of net OPEB liability is based on FY2021.

Source: Office of the Controller, City and County of San Francisco.

See accompanying auditors' report.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Schedule of Changes in Net Position – Dollar and Percentage Change vs. Prior Year
Proprietary Funds
June 30, 2022 and 2021
(In thousands)

	Business Type Activities – Proprietary Funds													
	Water		Wastewater		Hetchy Water		Hetchy Power		CleanPowerSF		Eliminations		SFPUC Total	
Assets	$ Change	% Change	$ Change	% Change	$ Change	% Change	$ Change	% Change	$ Change	% Change	$ Change	% Change	$ Change	% Change
Current assets:														
Cash and investments with City Treasury $	(22,873)	(4.7)	3,457	1.2	4,817	5.4	(1,078)	(0.6)	(34,604)	(38.1)	—	—	(50,281)	(4.4)
Cash and investments outside City Treasury	17	5.6	31	8.5	—	—	(595)	(97.4)	—	—	—	—	(547)	(42.8)
Receivables:														
Charges for services (net of allowance for doubtful accounts of $3,915, $4,273, $0, $1,297, and $6,330 in 2022 and $5,445, $5,369, $0, $1,258, and $5,485 in 2021)	6,267	11.3	7,240	21.9	33	7.5	(8,835)	(46.4)	20,438	72.3	—	—	25,143	18.4
Due from other City departments, current portion	(70)	(28.2)	(56)	(19.9)	—	—	(6,546)	(88.3)	—	—	(1)	(0.9)	(6,673)	(85.2)
Due from other governments	(16)	(100.0)	25	100.0	(67)	(11.6)	31	11.6	—	—	—	—	(27)	(3.1)
Interest	142	55.3	125	66.1	19	90.5	76	60.8	6	10.9	—	—	368	56.9
Interest-Leases	25	2.9	—	—	—	—	—	—	—	—	—	—	25	2.9
Restricted due from other governments	(41,993)	(84.8)	182,040	877.1	—	—	—	—	—	—	—	—	140,047	199.2
Leases receivable, current portion	36	1.1	—	—	—	—	—	—	—	—	—	—	36	1.1
Restricted interest and other receivable (net of allowance for doubtful accounts of $146, $385, $0, $0 and $0 in 2022 and $24, $68, $0, $0 and $0 in 2021)	159	4.0	(540)	(19.0)	—	—	(7,497)	(63.5)	—	—	—	—	(7,878)	(42.3)
Total current receivables	(35,450)	(31.2)	188,834	330.4	(15)	(1.4)	(22,771)	(58.9)	20,444	72.2	(1)	(0.9)	151,041	63.3
Prepaid charges, advances, and other receivables, current portion	6,033	98.1	(531)	(60.5)	(186)	(46.3)	(755)	(28.3)	8,366	383.1	—	—	12,927	105.3
Inventory	865	14.6	301	11.3	8	4.2	(142)	(7.8)	—	—	—	—	1,032	9.7
Restricted cash and investments outside City Treasury, current portion	(46,102)	(80.6)	15,289	5,130.5	—	—	5,075	3,317.0	—	—	—	—	(25,738)	(44.7)
Total current assets	(97,510)	(14.6)	207,381	60.5	4,624	5.1	(20,266)	(8.6)	(5,794)	(4.8)	(1)	(0.9)	88,434	6.1
Non-current assets:														
Net pension asset	100,407	100.0	48,770	100.0	13,912	100.0	17,004	100.0	1,833	100.0	—	—	181,926	100.0
Restricted cash and investments with City Treasury	9,299	100.0	—	—	(6,990)	(100.0)	(5,241)	(100.0)	—	—	—	—	(2,932)	(24.0)
Restricted cash and investments outside City Treasury, less current portion	(794)	(1.2)	13,873	140.2	—	—	5,134	139.1	—	—	—	—	18,213	23.0
Leases receivable, less current portion	(2,981)	(6.5)	—	—	—	—	—	—	—	—	—	—	(2,981)	(6.5)
Restricted interest and other receivable, and prepaid (net of allowance for doubtful accounts of $8, $29, $0, $0, and $0 in 2022 and $8, $29, $0, $0, and $0 in 2021)	—	—	(16)	(3.6)	—	—	—	—	—	—	—	—	(16)	(3.5)
Lease assets, net of accumulated amortization	(1,425)	(33.6)	(2,325)	(39.3)	(13)	(17.6)	(17)	(18.9)	(345)	(60.0)	—	—	(4,125)	(37.9)
Charges for services, less current portion (net of allowance for doubtful accounts of $656, $567, $0, $0, and $0 in 2022 and $658, $569 $0, $0, and $0 in 2021)	—	—	1	0.3	—	—	—	—	—	—	—	—	1	0.2
Prepaid charges, advances, and other receivables, less current portion	243	6.9	(27)	(2.3)	(6)	(3.9)	8,637	1,147.0	12,236	100.0	—	—	21,083	376.1
Capital assets, not being depreciated and amortized	(79,155)	(12.4)	383,773	27.6	18,805	48.8	91,217	52.3	—	—	—	—	414,640	18.5
Capital assets, net of accumulated depreciation and amortization	108,950	2.2	55,828	2.5	4,721	3.4	2,363	0.7	—	—	—	—	171,862	2.3
Due from other City departments, less current portion	—	—	—	—	—	—	5,944	119.0	—	—	111	17.6	6,055	138.7
Total non-current assets	134,544	2.4	499,877	13.8	30,429	16.5	125,041	24.7	13,724	2,386.8	111	17.6	803,726	8.0
Total assets	37,034	0.6	707,258	17.8	35,053	12.7	104,775	14.1	7,930	6.5	110	14.9	892,160	7.8
Deferred outflows of resources														
Unamortized loss on refunding of debt	(15,510)	(10.0)	(58)	(63.7)	—	—	—	—	—	—	—	—	(15,568)	(10.0)
Pensions	(11,945)	(18.4)	(4,850)	(16.0)	(1,103)	(14.1)	(1,348)	(14.1)	49	6.1	—	—	(19,197)	(17.0)
Other post-employment benefits	(5,317)	(14.1)	(2,211)	(14.6)	(453)	(12.2)	(553)	(12.1)	356	80.5	—	—	(8,178)	(13.3)
Total deferred outflows of resources $	(32,772)	(12.7)	(7,119)	(15.7)	(1,556)	(13.5)	(1,901)	(13.5)	405	32.5	—	—	(42,943)	(13.0)

(Continued)

See accompanying auditors' report.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Schedule of Changes in Net Position – Dollar and Percentage Change vs. Prior Year
Proprietary Funds
June 30, 2022 and 2021
(In thousands)

	Business Type Activities – Proprietary Funds													
	Water		Wastewater		Hetchy Water		Hetchy Power		CleanPowerSF		Eliminations		SFPUC Total	
	$ Change	% Change	$ Change	% Change	$ Change	% Change	$ Change	% Change	$ Change	% Change	$ Change	% Change	$ Change	% Change
Liabilities														
Current liabilities:														
Accounts payable $	6,669	41.2	7,306	47.8	4,192	98.4	(6,241)	(27.2)	7,667	48.3	—	—	19,593	26.3
Accrued payroll	650	6.6	255	4.1	56	5.4	88	3.4	82	28.2	—	—	1,131	5.7
Accrued vacation and sick leave, current portion	101	1.5	(332)	(5.7)	(25)	(2.4)	(30)	(1.7)	74	36.1	—	—	(212)	(1.4)
Accrued workers' compensation, current portion	6	0.4	195	16.3	18	9.1	22	5.8	—	—	—	—	241	7.0
Due to other City departments, current portion	—	—	1	0.9	—	—	11	3.0	—	—	(1)	(0.9)	11	3.0
Damage claims liability, current portion	(4,209)	(29.2)	3,431	58.2	10	4.6	(51)	(12.5)	9	150.0	—	—	(810)	(3.9)
Unearned revenues, refunds, and other, current portion	171	0.9	792	14.8	2	9.1	782	15.2	3,168	308.2	—	—	4,915	16.1
Bond, loan and lease interest payable	(757)	(2.1)	4,184	24.2	—	—	868	189.1	(1)	(100.0)	—	—	4,294	8.0
Bonds, current portion	16,785	15.5	11,465	50.1	—	—	38	2.0	—	—	—	—	28,288	21.2
Certificates of participation, current portion	168	5.7	45	5.7	—	—	22	5.4	—	—	—	—	235	5.6
Commercial paper	100,435	94.9	(259,361)	(40.6)	—	—	(74,652)	(65.1)	—	—	—	—	(233,578)	(27.2)
State revolving funds loans payable, current portion	1,616	96.9	(2)	(0.1)	—	—	—	—	—	—	—	—	1,614	38.9
Lease liability, current portion	(373)	(27.0)	27	1.2	(13)	(81.3)	(16)	(84.2)	(113)	(32.8)	—	—	(488)	(12.0)
Wholesale balancing account, current portion	26,884	124.8	—	—	—	—	—	—	—	—	—	—	26,884	124.8
Current liabilities payable from restricted assets	(1,910)	(7.0)	(77)	(0.1)	(2,733)	(30.2)	3,666	23.8	—	—	—	—	(1,054)	(0.7)
Total current liabilities	146,236	39.2	(232,071)	(28.5)	1,507	9.5	(75,493)	(45.4)	10,886	61.4	(1)	(0.9)	(148,936)	(10.7)
Long-term liabilities:														
Other post-employment benefits obligations	(4,656)	(3.1)	(1,588)	(3.1)	(204)	(1.4)	(248)	(1.4)	(645)	(22.2)	—	—	(7,341)	(3.1)
Net pension liability	(216,417)	(100.0)	(103,746)	(100.0)	(26,645)	(100.0)	(32,566)	(100.0)	(3,008)	(100.0)	—	—	(382,382)	(100.0)
Accrued vacation and sick leave, less current portion	(288)	(4.0)	(425)	(7.3)	9	0.8	10	0.5	72	36.9	—	—	(622)	(3.9)
Accrued workers' compensation, less current portion	139	1.9	769	14.3	90	9.8	110	6.3	—	—	—	—	1,108	7.3
Due to other City departments, less current portion	—	—	(111)	(17.6)	—	—	—	—	—	—	111	17.6	—	—
Damage claims liability, less current portion	3,555	15.9	(8,099)	(74.8)	92	30.0	(34)	(4.9)	17	100.0	—	—	(4,469)	(13.1)
Unearned revenues, refunds, and other, less current portion	—	—	—	—	(6)	(5.2)	(48)	(5.6)	—	—	—	—	(54)	(0.5)
Bonds, less current portion	(150,625)	(3.1)	329,866	21.1	—	—	148,136	333.8	—	—	—	—	327,377	5.0
Notes, less current portion	—	—	350,356	100.0	—	—	—	—	—	—	—	—	350,356	100.0
Certificates of participation, less current portion	(3,193)	(3.3)	(844)	(3.3)	—	—	(433)	(3.3)	—	—	—	—	(4,470)	(3.3)
State revolving funds loans payable, less current portion	12,738	12.0	194,102	183.0	—	—	—	—	—	—	—	—	206,840	97.7
Lease liability, less current portion	(1,008)	(35.2)	(2,341)	(64.3)	(3)	(4.8)	(3)	(4.0)	(232)	(100.0)	—	—	(3,587)	(52.2)
Wholesale balancing account, less current portion	(8,598)	(21.9)	—	—	—	—	—	—	—	—	—	—	(8,598)	(21.9)
Pollution remediation obligations	—	—	260	3.3	—	—	—	—	—	—	—	—	260	2.9
Total long-term liabilities	(368,353)	(6.7)	758,199	40.2	(26,667)	(61.1)	114,924	101.9	(3,796)	(24.7)	111	17.6	474,418	6.2
Total liabilities	(222,117)	(3.8)	526,128	19.5	(25,160)	(42.3)	39,431	14.1	7,090	21.4	110	14.9	325,482	3.6
Deferred inflows of resources														
Related to pensions	243,819	4,991.2	112,522	5,238.5	33,489	3,389.6	40,931	3,391.1	4,321	395.3	—	—	435,082	4,215.5
Leases	(3,527)	(7.3)	—	—	—	—	—	—	—	—	—	—	(3,527)	(7.3)
Other post-employment benefits	4,033	18.9	1,375	18.9	649	31.1	794	31.2	(319)	(16.7)	—	—	6,532	18.6
Total deferred inflows of resources	244,325	328.8	113,897	1,210.0	34,138	1,110.9	41,725	1,111.2	4,002	133.1	—	—	438,087	468.3
Net position														
Net investment in capital assets	20,342	3.9	(161,084)	(12.8)	23,526	13.3	29,096	9.0	—	—	—	—	(88,120)	(3.9)
Restricted for debt service	(30,915)	(67.8)	2,399	80.2	—	—	41	41.4	—	—	—	—	(28,475)	(58.5)
Restricted for capital projects	(22,319)	(100.0)	114,657	100.0	—	—	—	—	—	—	—	—	92,338	413.7
Unrestricted	14,946	22.6	104,142	227.5	993	2.1	(7,419)	(5.0)	(2,757)	(3.2)	—	—	109,905	27.8
Total net position $	(17,946)	(2.8)	60,114	4.6	24,519	10.9	21,718	4.6	(2,757)	(3.2)	—	—	85,648	3.1

See accompanying auditors' report.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Schedule of Changes in Revenues, Expenses, and Net Position – Dollar and Percentage Change vs. Prior Year
Proprietary Funds
June 30, 2022 and 2021
(In thousands)

	Business Type Activities – Proprietary Funds											
	Water		Wastewater		Hetchy Water		Hetchy Power		CleanPowerSF		SFPUC Total	
	$ Change	% Change	$ Change	% Change	$ Change	% Change	$ Change	% Change	$ Change	% Change	$ Change	% Change
Operating revenues:												
Charges for services $	(10,780)	(2.0)	37,805	11.9	2,221	4.7	36,858	27.1	50,195	24.2	116,299	9.2
Rents and concessions	30	0.2	63	9.8	1	0.9	1	0.7	—	—	95	0.6
Capacity fees	837	63.1	2,570	69.3	—	—	—	—	—	—	3,407	67.7
Other revenues	594	3.5	779	15.3	—	—	—	—	—	—	1,373	6.2
Total operating revenues	(9,319)	(1.6)	41,217	12.6	2,222	4.7	36,859	27.0	50,195	24.2	121,174	9.3
Operating expenses:												
Personnel services	(49,143)	(37.1)	(26,993)	(29.8)	(4,235)	(21.3)	(6,110)	(15.0)	(3,474)	(45.5)	(89,955)	(30.9)
Contractual services	(572)	(4.1)	2,626	15.9	456	19.0	899	10.3	143	2.1	3,552	7.4
Transmission/distribution and other power costs	—	—	—	—	—	—	14,810	40.3	(820)	(81.0)	13,990	37.1
Purchased electricity	—	—	—	—	—	—	749	12.5	49,569	26.1	50,318	25.7
Materials and supplies	2,544	19.3	2,753	30.3	90	7.1	280	14.1	7	26.9	5,674	22.2
Depreciation and amortization	2,460	1.7	3,232	4.3	277	4.6	1,978	12.6	—	—	7,947	3.3
Services provided by other departments	3,072	4.4	1,332	3.5	612	24.3	116	1.9	(307)	(7.8)	4,825	4.0
General and administrative and other	(5,357)	(7.3)	(17,952)	(28.3)	4,584	24.9	(2,015)	(6.8)	4,289	138.2	(16,451)	(8.7)
Total operating expenses	(46,996)	(10.5)	(35,002)	(12.0)	1,784	3.5	10,707	7.4	49,407	23.2	(20,100)	(1.7)
Operating income (loss)	37,677	28.2	76,219	214.7	438	(12.8)	26,152	282.5	788	(15.7)	141,274	93.3
Non-operating revenues (expenses):												
Federal and state grants	(8,898)	(60.0)	20,711	100.0	(899)	(66.6)	3,441	232.0	2,424	100.0	16,779	95.0
Interest and investment income (loss)	(12,270)	(893.0)	(5,900)	497.1	(2,700)	1,163.8	(4,025)	(16,770.8)	(1,337)	(2,621.6)	(26,232)	(87,440.0)
Interest expenses	(28,990)	(15.7)	(42,799)	(122.5)	1	50.0	(3,652)	(185.2)	21	80.8	(75,419)	(34.0)
Amortization of premium, discount, refunding loss, and issuance costs	2,093	26.9	(75)	(0.9)	—	—	(411)	(187.7)	—	—	1,607	9.7
Net gain from sale of assets	(1,477)	(57.8)	4	22.2	7	100.0	9	100.0	—	—	(1,457)	(56.6)
Other non-operating revenues	6,372	22.4	(172)	(3.5)	19	633.3	(6,960)	(39.1)	(592)	(63.9)	(1,333)	(2.6)
Other Non-operating expenses	1,380	62.5	(73)	(17.8)	26	41.3	311	34.5	—	—	1,644	45.9
Net non-operating revenues (expenses)	(41,790)	(31.7)	(28,304)	(122.4)	(3,546)	(336.1)	(11,287)	(67.8)	516	54.2	(84,411)	61.9
Change in net position before capital contributions and transfers	(4,113)	(228.8)	47,915	387.7	(3,108)	(130.9)	14,865	201.3	1,304	(32.1)	56,863	376.4
Capital contributions	(4,180)	100.0	—	—	—	—	—	—	—	—	(4,180)	(100.0)
Transfers from the City and County of San Francisco	(5,990)	(28.5)	(1,440)	(100.0)	14,001	87.5	—	—	—	—	6,571	17.1
Transfers to the City and County of San Francisco	(14,012)	84.1	4,027	(96.2)	—	—	—	—	—	—	(9,985)	46.7
Net capital contributions and transfers	(24,182)	(282.8)	2,587	(94.1)	14,001	87.5	—	—	—	—	(7,594)	(35.7)
Change in net position	(28,295)	(273.4)	50,502	525.4	10,893	79.9	14,865	216.9	1,304	(32.1)	49,269	135.4
Net position at beginning of year	10,349	1.6	9,612	0.7	13,626	6.5	6,853	1.5	(4,061)	(4.5)	36,379	1.3
Net position at end of year $	(17,946)	(2.8)	60,114	4.6	24,519	10.9	21,718	4.6	(2,757)	(3.2)	85,648	3.1

See accompanying auditors' report.

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 the business-type activities and each major fund of San Francisco Public Utilities Commission (SFPUC), as of and for the year ended June 30, 2022, and the related notes to the financial statements, which collectively comprise the SFPUC's basic financial statements, and have issued our report thereon dated February 28, 2023.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered SFPUC'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 SFPUC's internal control. Accordingly, we do not express an opinion on the effectiveness of SFPUC's internal control.

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

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

Report on Compliance and Other Matters

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

Purpose of This Report

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

KPMG LLP

San Francisco, California
February 28, 2023

Statistical Section (Unaudited)

Financial Trends

These schedules contain trend information to help understand how SFPUC's financial performance and well-being have changed over time.

Revenue Capacity

These schedules contain information to help the reader assess SFPUC's revenues sources and rate structures.

Debt Capacity

These schedules contain information to help the reader assess the affordability of the SFPUC's current levels of outstanding debt and its ability to issue additional debt in the future.

Demographic and Economic Information

These schedules offer demographic and economic indicators to help the reader understand the environment within which SFPUC's financial activities take place.

Operating Information

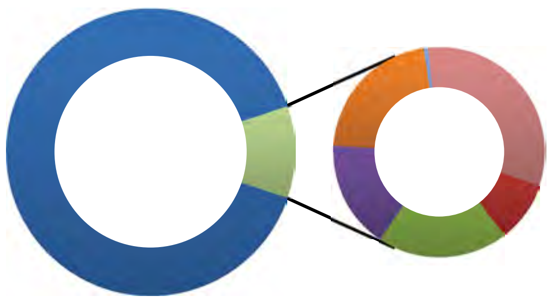
These schedules contain service and infrastructure data to enhance the reader's ability to understand how the information in the SFPUC financial report relates to the services it provides and the activities it performs.

Statistical Section

Financial Trends

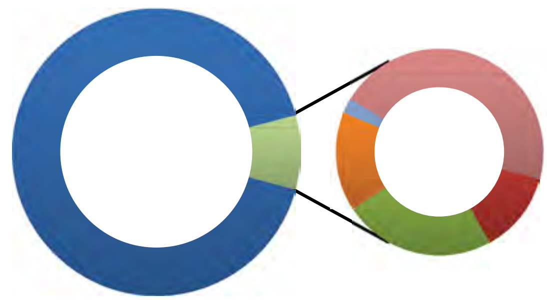
Financial Trends
Department-wide
Comparative Highlights of Revenues & Expenses
Fiscal Years Ended 2022 and 2021^
(Dollars in Thousands)

2022 Revenues - $1,482,570



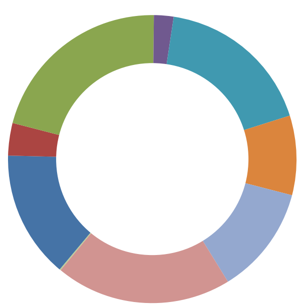
Charges for services	$1,375,765	92.8%
Other	$106,805	7.2%
Rents and concessions	$14,719	1.0%
Other operating revenues	$31,962	2.2%
Interest and investment loss	$(26,202)	-1.8%
Net gain from sale of assets	$1,117	0.1%
Federal and State grants	$34,440	2.3%
Other non-operating revenues	$50,769	3.4%

2021 Revenues - $1,373,639



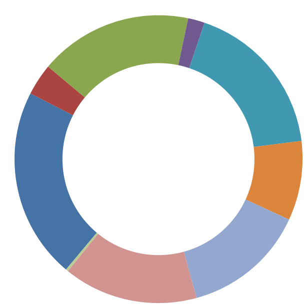
Charges for services	$1,259,466	91.6%
Other	$114,173	8.4%
Rents and concessions	$14,624	1.1%
Other operating revenues	$27,182	2.0%
Interest and investment loss	$30	0.0%
Net gain from sale of assets	$2,574	0.2%
Federal and State grants	$17,661	1.3%
Other non-operating revenues	$52,102	3.8%

2022 Expenses - $1,410,599



Personnel services	$201,290	14.3%
Contractual services	$51,851	3.7%
Purchased power & related costs	$297,990	21.1%
Materials and supplies	$31,228	2.2%
Depreciation and amortization	$249,757	17.7%
Services provided by other departments	$125,955	8.9%
General & administrative and Other operating expenses	$171,654	12.2%
Interest Expense	$278,936	19.8%
Non-operating expenses	$1,938	0.1%

2021 Expenses - $1,358,531



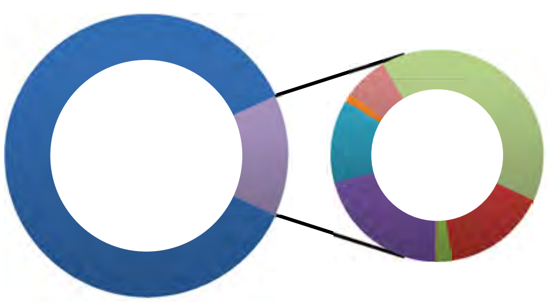
Personnel services	$291,245	21.5%
Contractual services	$48,687	3.6%
Purchased power & related costs	$233,682	17.2%
Materials and supplies	$25,554	1.9%
Depreciation and amortization	$241,423	17.8%
Services provided by other departments	$121,130	8.9%
General & administrative and Other operating expenses	$188,105	13.9%
Interest Expense	$205.124	15.0%
Non-operating expenses	$3,582	0.3%

*Interest expenses includes net of amortization of premium, discount, refunding loss, and issuance costs.
^Rents and concessions, Interest and investment income (loss), Contractual services, and Depreciation and amortization categories were restated due to the implementation of GASB Statement No. 87, *Leases*.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

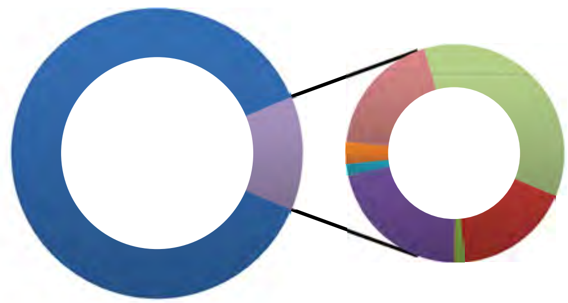
Financial Trends
Water Fund
Comparative Highlights of Revenues & Expenses
Fiscal Years Ended 2022 and 2021^
(Dollars in Thousands)

2022 Revenues - $604,092



Charges for services	$539,526	89.3%
Other	$64,566	10.7%
Rents and concessions	$13,765	2.3%
Capacity fees	$2,163	0.4%
Other operating revenues	$17,663	2.8%
Interest and investment income	$(10,896)	-1.8%
Net gain from sale of assets	$1,079	0.2%
Federal and State grants	$5,931	1.0%
Other non-operating revenues	$34,861	5.8%

2021 Revenues - $629,684

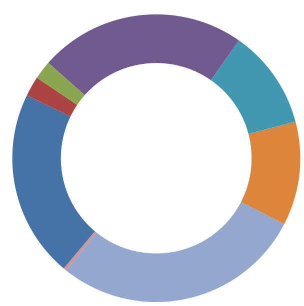


Charges for services	$550,306	87.4%
Other	$79,378	12.6%
Rents and concessions	$13,735	2.2%
Capacity fees	$1,326	0.2%
Other operating revenues	$17,069	2.7%
Interest and investment income	$1,374	0.2%
Net gain from sale of assets	$2,556	0.4%
Federal and State grants	$14,829	2.4%
Other non-operating revenues	$28,489	4.5%

2022 Expenses - $606,407

Personnel services	$83,385	13.8%
Contractual services	$13,457	2.2%
Materials and supplies	$15,719	2.6%
Depreciation and amortization	$147,904	24.4%
Services provided by other departments	$73,307	12.1%
General & administrative and Other operating expense	$68,014	11.2%
*Interest Expense	$203,793	33.6%
Non-operating expenses	$828	0.1%

2021 Expenses - $627,886



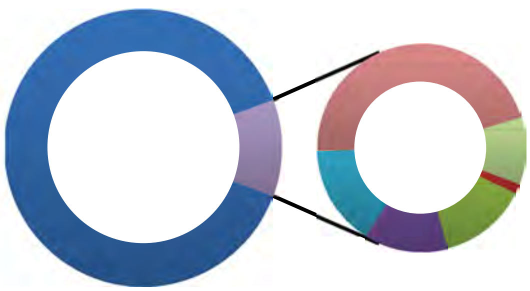
Personnel services	$132,528	21.1%
Contractual services	$14,029	2.2%
Materials and supplies	$13,175	2.1%
Depreciation and amortization	$145,444	23.2%
Services provided by other departments	$70,235	11.2%
General & administrative and Other operating expense	$73,371	11.6%
*Interest Expense	$176,896	28.2%
Non-operating expenses	$2,208	0.4%

*Interest expenses includes net of amortization of premium, discount, refunding loss, and issuance costs.
^Rents and concessions, Interest and investment income (loss), Contractual services, and Depreciation and amortization categories were restated due to the implementation of GASB Statement No. 87, *Leases*.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

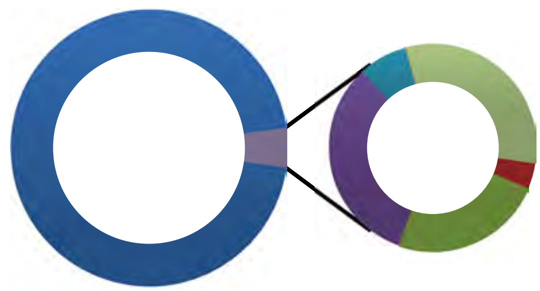
Financial Trends
Wastewater Fund
Comparative Highlights of Revenues & Expenses
Fiscal Years Ended 2022 and 2021^
(Dollars in Thousands)

2022 Revenues - $ 387,249



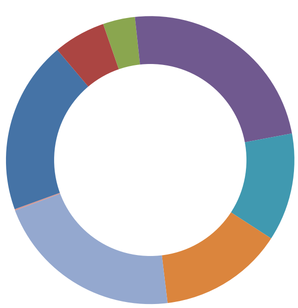
Charges for services	$356,041	92.0%
Other	$31,208	8.0%
Rents and concessions	$705	0.2%
Capacity fees	$6,280	1.6%
Other operating revenues	$5,856	1.5%
Interest and investment income	$(7,087)	-1.8%
Net gain from sale of assets	$22	0.0%
Federal and State grants	$20,711	5.3%
Other non-operating revenues	$4,721	1.2%

2021 Revenues - $331,389



Charges for services	$318,236	96.1%
Other	$13,153	3.9%
Rents and concessions	$642	0.2%
Capacity fees	$3,710	1.1%
Other operating revenues	$5,077	1.5%
Interest and investment income	$(1,187)	-0.4%
Net gain from sale of assets	$18	0.0%
Other non-operating revenues	$4,893	1.5%

2022 Expenses - $326,974



Personnel services	$63,456	19.5%
Contractual services	$19,115	5.8%
Materials and supplies	$11,844	3.6%
Depreciation and amortization	$77,575	23.7%
Services provided by other departments	$39,645	12.1%
General & administrative and Other operating expense	$45,536	13.9%
*Interest Expense	$69,321	21.3%
Non-operating expenses	$482	0.1%

2021 Expenses - $319,029

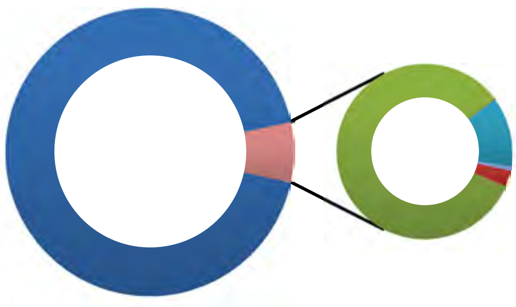
Personnel services	$90,449	28.4%
Contractual services	$16,489	5.2%
Materials and supplies	$9,091	2.8%
Depreciation and amortization	$74,343	23.3%
Services provided by other departments	$38,313	12.0%
General & administrative and Other operating expense	$63,488	19.9%
*Interest Expense	$26,447	8.3%
Non-operating expenses	$409	0.1%

*Interest expenses includes net of amortization of premium, discount, refunding loss, and issuance costs.
^Contractual services, and Depreciation and amortization categories were restated due to the implementation of GASB Statement No. 87, *Leases*.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

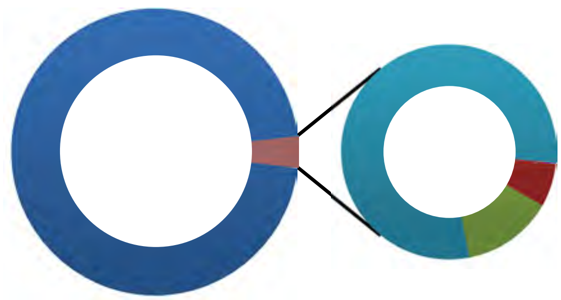
Financial Trends
Hetchy Water Fund
Comparative Highlights of Revenues & Expenses
Fiscal Years Ended 2022 and 2021^
(Dollars in Thousands)

2022 Revenues - $46,859



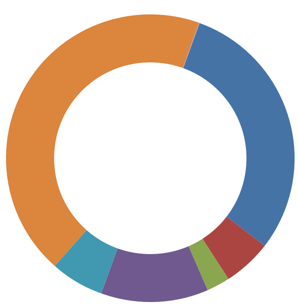
Charges for services	$49,200	105.0%
Other	$(2,341)	-5.0%
Rents and concessions	$112	0.2%
Interest and investment loss	$(2,932)	-6.3%
Net gain from sale of assets	$7	0.0%
Federal and State grants	$450	1.0%
Other non-operating revenues	$22	0.1%

2021 Revenues - $48,210



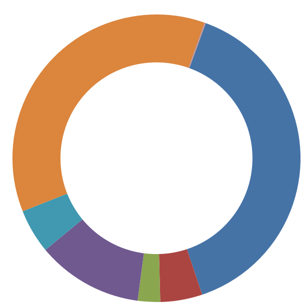
Charges for services	$46,979	97.5%
Other	$1,231	2.5%
Rents and concessions	$111	0.2%
Interest and investment loss	$(232)	-0.5%
Federal and State grants	$1,349	2.8%
Other non-operating revenues	$3	0.0%

2022 Expenses - $52,341



Personnel services	$15,636	29.9%
Contractual services	$2,854	5.5%
Materials and supplies	$1,362	2.6%
Depreciation and amortization	$6,305	12.0%
Services provided by other departments	$3,129	6.0%
General and administrative and Other	$23,017	44.0%
Interest Expense	$1	0.0%
Non-operating expenses	$37	0.0%

2021 Expenses - $50,584



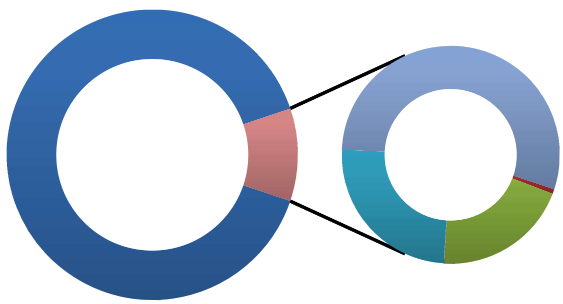
Personnel services	$19,871	39.3%
Contractual services	$2,398	4.7%
Materials and supplies	$1,272	2.5%
Depreciation and amortization	$6,028	11.9%
Services provided by other departments	$2,517	5.0%
General and administrative and Other	$18,433	36.4%
Interest Expense	$2	0.0%
Non-operating expenses	$63	0.1%

^Contractual services, and Depreciation and amortization categories were restated due to the implementation of GASB Statement No. 87, *Leases*.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

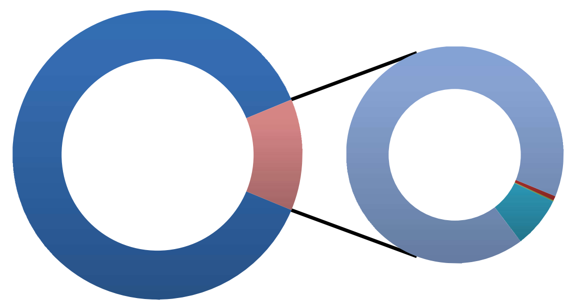
Financial Trends
Hetchy Power Fund
Comparative Highlights of Revenues & Expenses
Fiscal Years Ended 2022 and 2021^
(Dollars in Thousands)

2022 Revenues - $185,004



Charges for services	$173,105	93.5%
Other	$11,899	6.5%
Rents and concessions	$137	0.1%
Interest and investment loss	$(4,001)	-2.2%
Net gain from sale of assets	$9	0.0%
Federal and State grants	$4,924	2.7%
Other non-operating revenues	$10,830	5.9%

2021 Revenues - $155,680

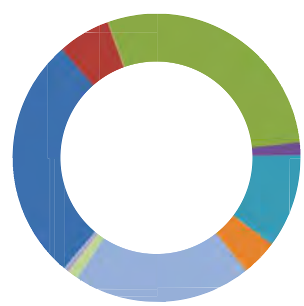


Charges for services	$136,247	87.5%
Other	$19,433	12.5%
Rents and concessions	$136	0.1%
Interest and investment income/loss	$24	0.0%
Federal and State grants	$1,483	1.0%
Other non-operating revenues	$17,790	11.4%

2022 Expenses - $162,754

Personnel services	$34,646	21.3%
Contractual services	$9,604	5.9%
Purchased power & related costs	$58,252	35.9%
Materials and supplies	$2,270	1.4%
Depreciation and amortization	$17,628	10.8%
Services provided by other departments	$6,253	3.8%
General and administrative and Other	$27,694	17.0%
Interest Expense	$5,816	3.6%
Solar incentive program	$395	0.2%
Non-operating expenses	$196	0.1%

2021 Expenses - $148,295



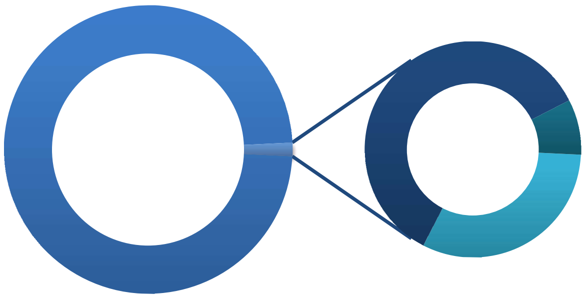
Personnel services	$40,756	27.5%
Contractual services	$8,705	5.9%
Purchased power & related costs	$42,693	28.8%
Materials and supplies	$1,990	1.3%
Depreciation and amortization	$15,650	10.5%
Services provided by other departments	$6,137	4.1%
General and administrative and Other	$29,709	20.0%
Interest Expense	$1,753	1.2%
Solar incentive program	$760	0.5%
Non-operating expenses	$142	0.1%

*Interest expenses includes net of amortization of premium, discount, refunding loss, and issuance costs.
^Contractual services, and Depreciation and amortization categories were restated due to the implementation of GASB Statement No. 87, *Leases*.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

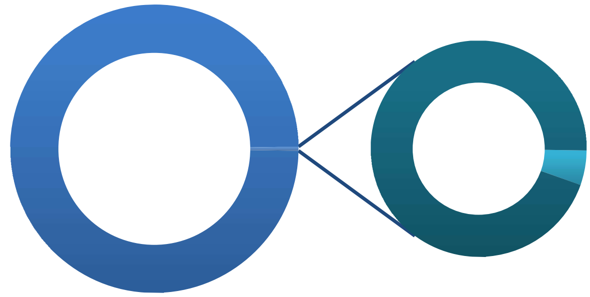
Financial Trends
CleanPowerSF
Comparative Highlights of Revenues & Expenses
Fiscal Years Ended 2022 and 2021^
(Dollars in Thousands)

2022 Revenues - $259,366



Charges for services	$257,893	99.5%
Other	$1,473	0.5%
Interest and investment loss	$(1,286)	-0.5%
Federal and State grants	$2,424	0.9%
Other non-operating revenues	$335	0.1%

2021 Revenues - $208,676



Charges for services	$207,698	99.5%
Other	$978	0.5%
Interest and investment income	$51	0.0%
Other non-operating revenues	$927	0.5%

2022 Expenses - $262,123

Personnel services	$4,167	1.6%
Contractual services	$6,821	2.6%
Purchased power & related costs	$239,738	91.5%
Materials and supplies	$33	0.0%
Depreciation and amortization	$345	0.1%
Services provided by other departments	$3,621	1.4%
General and administrative and Other	$7,393	2.8%
Interest Expense	$5	0.0%

2021 Expenses - $212,737

Personnel services	$7,641	3.6%
Contractual services	$6,678	3.1%
Purchased power & related costs	$190,989	89.8%
Materials and supplies	$26	0.0%
Depreciation and amortization	$345	0.2%
Services provided by other departments	$3,928	1.8%
General and administrative and Other	$3,104	1.5%
Interest Expense	$26	0.0%

^Contractual services, and Depreciation and amortization categories were restated due to the implementation of GASB Statement No. 87, *Leases*.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

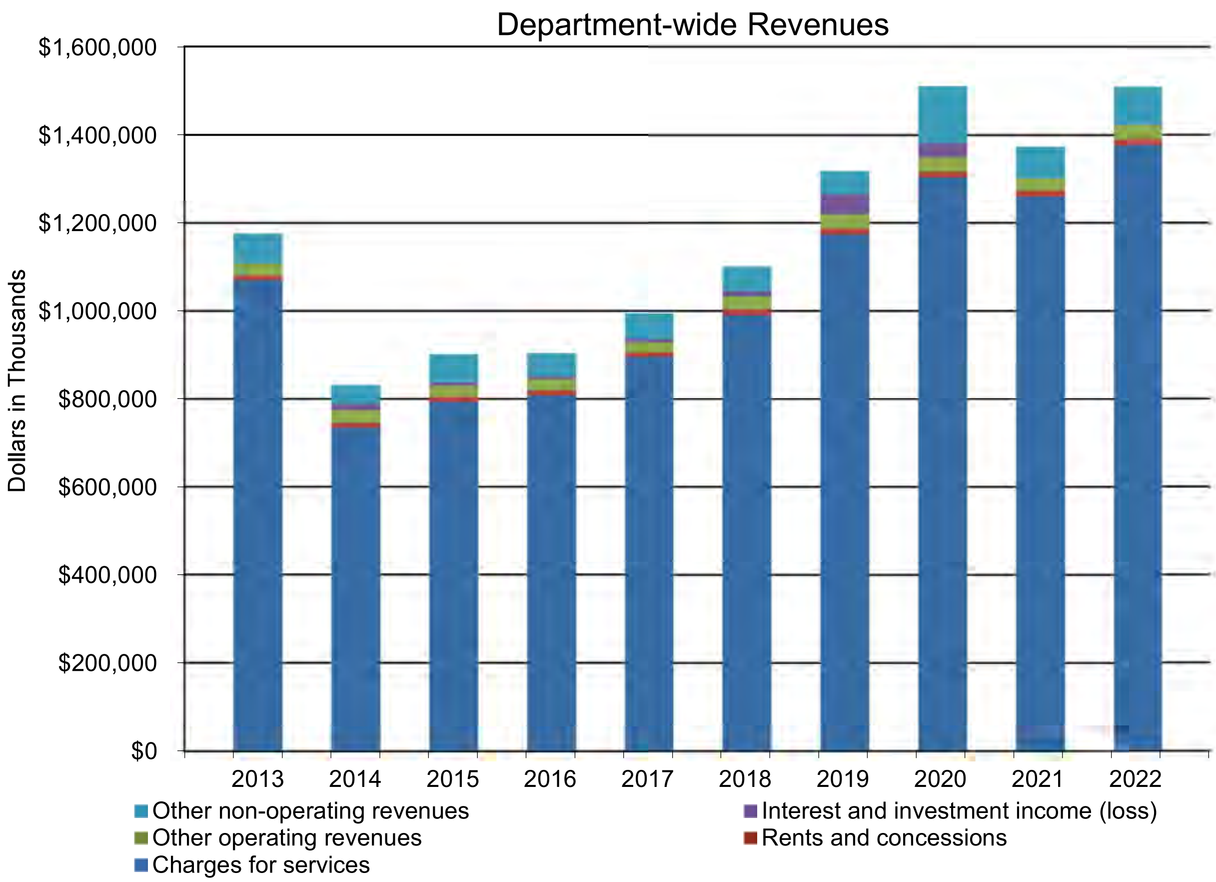
Financial Trends
Department-wide - Changes in Net Position
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

Revenues:		2013	2014	2015	2016	2017	2018	2019	2020	2021^	2022
Charges for services	$	1,069,674*	733,746	792,199	807,259	895,472	989,842	1,172,573	1,303,411	1,259,466	1,375,765
Rents and concessions		10,736	11,727	13,336	13,096	9,734	13,813	13,989	13,135	14,624	14,719
Other operating revenues		27,541	28,944	24,317	25,672	22,445	29,043	32,296	32,217	27,182	31,962
Subtotal operating revenues		**1,107,951**	**774,417**	**829,852**	**846,027**	**927,651**	**1,032,698**	**1,218,858**	**1,348,763**	**1,301,272**	**1,422,446**
Interest and investment income (loss)		38	15,083	8,175	6,060	8,511	11,694	46,639	32,103	30	(26,202)
Other non-operating revenues		67,989	41,946	63,430	51,972	58,422	55,705	52,483	129,198	72,337	86,326
Subtotal non-operating revenues		**68,027**	**57,029**	**71,605**	**58,032**	**66,933**	**67,399**	**99,122**	**161,301**	**72,367**	**60,124**
Total revenues	$	**1,175,978**	**831,446**	**901,457**	**904,059**	**994,584**	**1,100,097**	**1,317,980**	**1,510,064**	**1,373,639**	**1,482,570**

(Continued)

*Include a one-time early repayment of $356,139 from BAWSCA for capital costs recovery.
^Rents and concessions and Interest and investment income (loss) categories were restated due to the implementation of GASB Statement No. 87, *Leases*.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



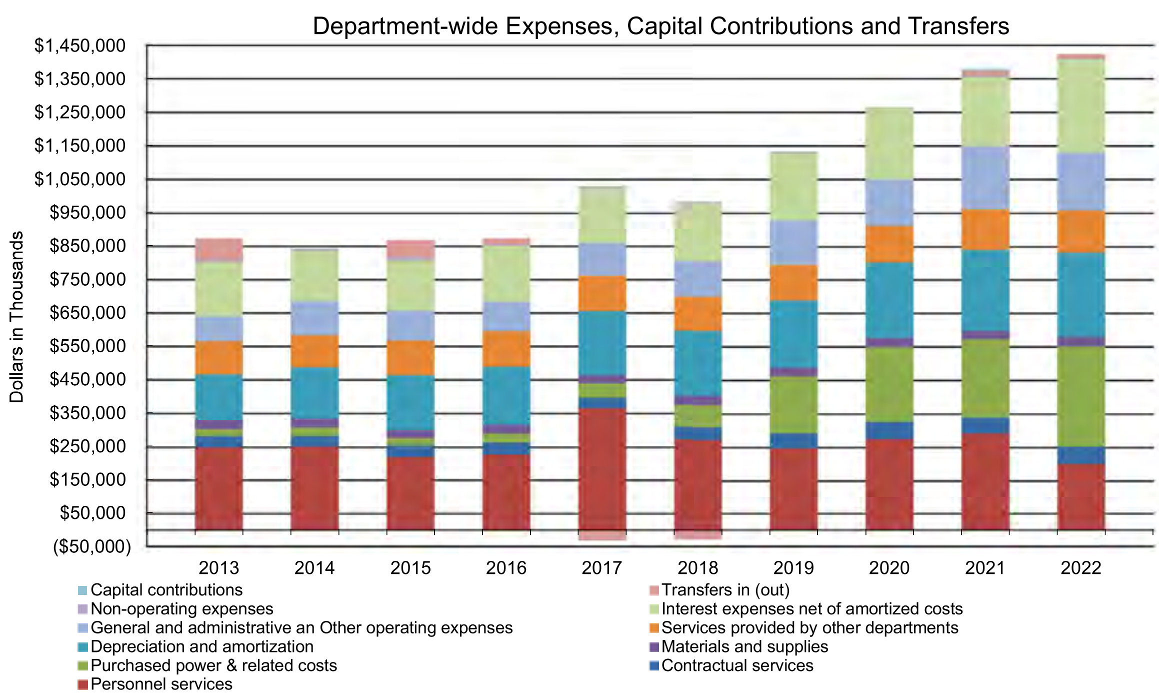
Financial Trends

Department-wide - Changes in Net Position
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

Expenses:		2013	2014	2015	2016	2017	2018	2019	2020	2021^	2022
Personnel services	$	249,927	252,068	220,385	227,930	365,494	271,888	248,189	275,892	291,245	201,290
Contractual services		32,082	30,133	35,216	34,915	31,563	39,408	44,832	50,821	48,299	51,851
Purchased power & related costs		20,891	26,215	20,296	26,792	43,407	64,732	170,275	223,601	233,682	297,990
Materials and supplies		26,557	26,411	24,842	26,128	23,972	28,024	25,130	26,695	25,554	31,228
Depreciation and amortization		137,252	152,742	163,525	173,978	191,997	193,457	200,712	226,194	241,810	249,757
Services provided by other departments		98,533	96,918	104,535	106,476	105,417	102,199	108,043	109,444	121,130	125,955
General and administrative and Other operating expenses		74,917	101,473	88,559	88,615	98,327	106,960	130,003	136,755	188,105	171,654
Subtotal operating expenses		**640,159**	**685,960**	**657,358**	**684,834**	**860,177**	**806,668**	**927,184**	**1,049,402**	**1,149,825**	**1,129,725**
Interest expenses		169,105	165,345	161,712	178,864	179,819	192,183	224,867	237,271	221,622	297,041
Amortization of premium, discount, refunding loss, and issuance costs		(5,607)	(13,908)	(10,554)	(11,950)	(15,090)	(19,188)	(23,722)	(22,627)	(16,498)	(18,105)
Non-operating expenses		5,986	5,206	7,916	4,439	4,466	4,129	3,766 ^^	1,652 ^^	3,582	1,938
Subtotal non-operating expenses		**169,484**	**156,643**	**159,074**	**171,353**	**169,195**	**177,124**	**204,911**	**216,296**	**208,706**	**280,874**
Total expenses		**809,643**	**842,603**	**816,432**	**856,187**	**1,029,372**	**983,792**	**1,132,095**	**1,265,698**	**1,358,531**	**1,410,599**
Change in net position before capital contributions, transfers and extraordinary item		366,335	(11,157)	85,025	47,872	(34,788)	116,305	185,885	244,366	15,108	71,971
Capital contributions		—	678 *	—	—	—	—	—	—	4,180 *	—
Transfers in (out)		64,176 #	386	52,806	17,899	(30,644)	(28,371)	1,360	(805)	17,091	13,677
Extraordinary item:											
Rim fire — loss		—	(6,843)	—	—	—	—	—	—	—	—
Change in net position		**430,511**	**(16,936)**	**137,831**	**65,771**	**(65,432)**	**87,934**	**187,245**	**243,561**	**36,379**	**85,648**
Net position at beginning of year											
Beginning of year, as previously reported		1,971,500	2,366,565	2,349,629	2,225,451	2,292,646	2,225,790 **	2,270,925	2,458,170	2,701,731	2,738,110
Cumulative effect of accounting change due to error		—	—	—	—	—	(6,767)	—	—	—	—
Cumulative effect of accounting change		(35,446) ^	—	(262,009) ~	—	—	(36,032) ⌂	—	—	—	—
Less: CleanPowerSF beginning net position		—	—	—	—	(1,424)	—	—	—	—	—
Beginning of year as restated		1,936,054	2,366,565	2,087,620	2,225,451	2,291,222	2,182,991	2,270,925	2,458,170	2,701,731	2,738,110
Net position at end of year	**$**	**2,366,565**	**2,349,629**	**2,225,451**	**2,291,222**	**2,225,790**	**2,270,925**	**2,458,170**	**2,701,731**	**2,738,110**	**2,823,758**

^Fiscal year 2013 have been restated for the retrospective application of GASB Statement No. 65.
Fiscal year 2021 Contractual services, and Depreciation and amortization categories were restated due to the implementation of GASB Statement No. 87, *Leases*.
#Include transfer in of $63,075 from the Department of Public Works related to the improvement of the Auxiliary Water Supply System Earthquake Safety and Emergency Response project.
*Capital contributions of $678 in FY 2014 was from Department of Emergency Management and $4,180 in FY2021 was from Department of Public Works.
~The beginning net position for fiscal year 2015 has been restated for the retrospective application of GASB Statement No. 68.
**The Wastewater Enterprise recorded certain immaterial corrections to the 2018 financial statement to eliminate the recognition of certain capital assets that are recorded by another fund. The impact of the change was to decrease beginning position as of July 2017 by $6,767 and increase fiscal year 2018 expenses by $28,313.
⌂The beginning net position for fiscal year 2018 has been restated for the retrospective application of GASB Statement No. 75.
^^ Non-operating expenses include net loss from sale of assets.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



Financial Trends

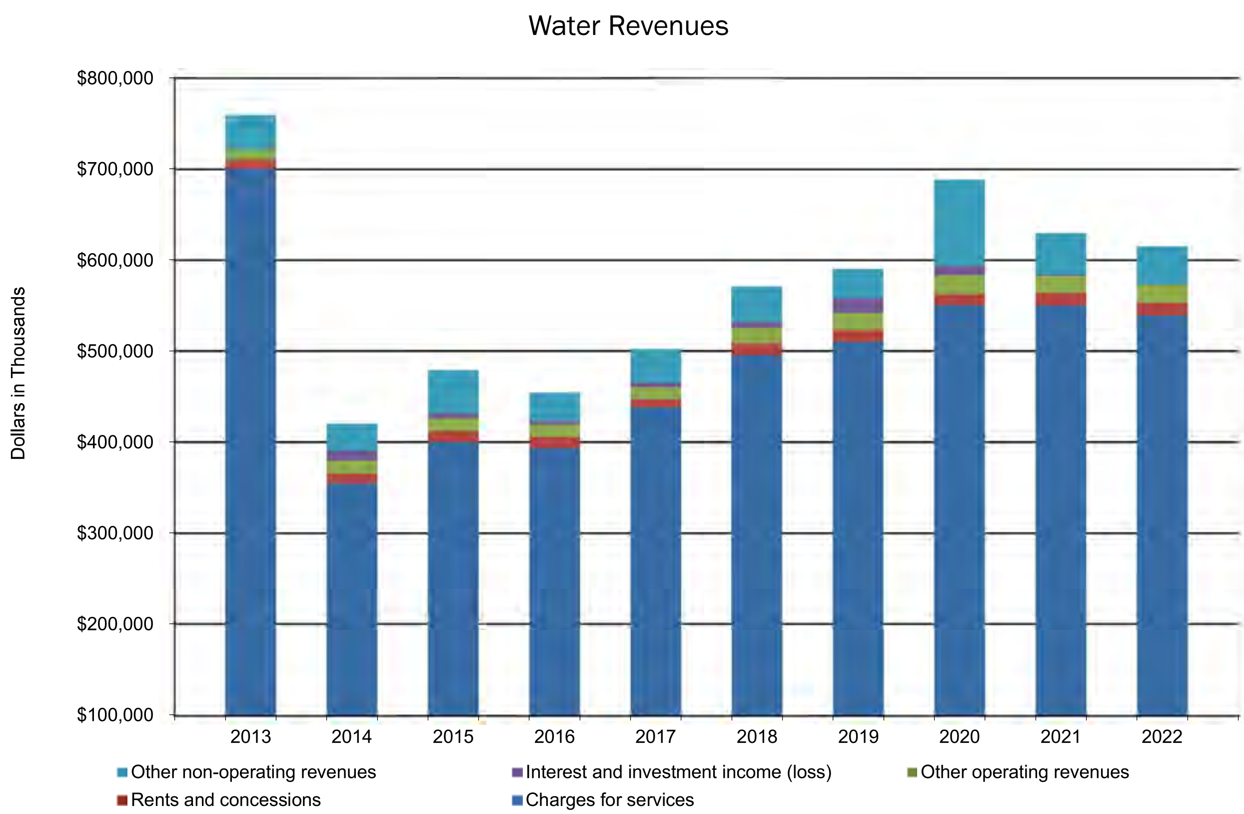
Water - Changes in Net Position
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

Revenues:		2013	2014	2015	2016	2017	2018	2019	2020	2021 ^	2022
Charges for services	$	700,513 *	354,827	400,023	393,582	438,207	495,138	509,703	550,753	550,306	539,526
Rents and concessions		9,599	10,675	12,284	12,081	8,813	12,906	13,010	12,124	13,735	13,765
Other operating revenues		11,358	14,380	13,740	13,853	13,311	17,595	19,678	20,474	18,395	19,826
Subtotal operating revenues		**721,470**	**379,882**	**426,047**	**419,516**	**460,331**	**525,639**	**542,391**	**583,351**	**582,436**	**573,117**
Interest and investment income (loss)		(281)	10,907	5,789	3,595	4,331	6,448	15,650	10,517	1,374	(10,896)
Other non-operating revenues		37,921	29,197	47,314	31,253	37,405	39,064	32,399	94,734	45,874	41,871
Subtotal non-operating revenues		**37,640**	**40,104**	**53,103**	**34,848**	**41,736**	**45,512**	**48,049**	**105,251**	**47,248**	**30,975**
Total revenues	**$**	**759,110**	**419,986**	**479,150**	**454,364**	**502,067**	**571,151**	**590,440**	**688,602**	**629,684**	**604,092**

(Continued)

*Include a one-time early repayment of $356,139 from BAWSCA for capital costs recovery.
^Rents and concessions and Interest and investment income (loss) categories were restated due to the implementation of GASB Statement No. 87, *Leases*.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



Financial Trends

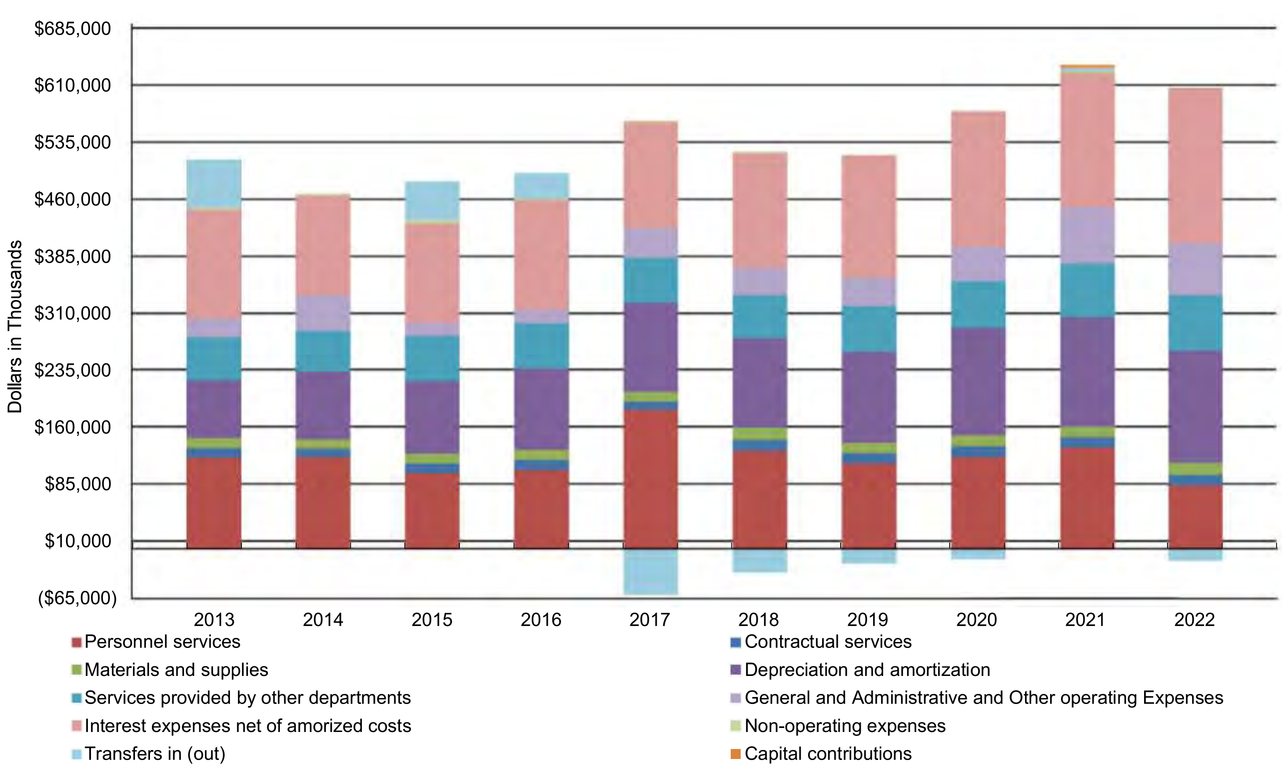
Water - Changes in Net Position
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

Expenses:		2013	2014	2015	2016	2017	2018	2019	2020	2021^	2022
Personnel services	$	119,151	119,849	99,192	103,027	182,034	128,295	111,594	119,943	132,528	83,385
Contractual services		12,819	10,921	12,729	13,451	10,664	14,131	13,715	14,523	14,029	13,457
Materials and supplies		13,074	12,154	12,667	12,896	12,564	15,936	13,421	14,050	13,175	15,719
Depreciation and amortization		75,448	89,026	95,384	106,666	118,826	118,751	120,815	142,228	145,444	147,904
Services provided by other departments		57,684	54,856	60,365	60,868	59,173	56,860	59,751	61,128	70,235	73,307
General and administrative and											
Other operating expenses		25,563	46,749	16,613	17,878	38,566	36,174	37,798	46,245	73,371	68,014
Subtotal operating expenses		**303,739**	**333,555**	**296,950**	**314,786**	**421,827**	**370,147**	**357,094**	**398,117**	**448,782**	**401,786**
Interest expenses		147,741	136,645	137,106	153,258	148,075	164,001	177,998	191,246	184,678	213,668
Amortization of premium, discount, refunding loss,											
and issuance costs		(5,002)	(6,169)	(6,100)	(8,849)	(9,029)	(13,540)	(17,788)	(13,752)	(7,782)	(9,875)
Non-operating expenses		2,327	2,089	4,829	2,210	2,607	1,920	1,388	529	2,208	828
Subtotal non-operating expenses		**145,066**	**132,565**	**135,835**	**146,619**	**141,653**	**152,381**	**161,598**	**178,023**	**179,104**	**204,621**
Total expenses		**448,805**	**466,120**	**432,785**	**461,405**	**563,480**	**522,528**	**518,692**	**576,140**	**627,886**	**606,407**
Change in net position before capital contributions											
and transfers		310,305	(46,134)	46,365	(7,041)	(61,413)	48,623	71,748	112,462	1,798	(2,315)
Capital contributions *		—	310	—	—	—	—	—	—	4,180	—
Transfers in (out)		63,484 #	405	50,995	33,244	(59,988)	(30,986)	(19,134)	(13,585)	4,371	(15,631)
Change in net position		**373,789**	**(45,419)**	**97,360**	**26,203**	**(121,401)**	**17,637**	**52,614**	**98,877**	**10,349**	**(17,946)**
Net position at beginning of year											
Beginning of year, as previously reported		358,495	699,631	654,212	596,465	622,668	501,267	489,524	542,138	641,015	651,364
Cumulative effect of accounting change		(32,653)^	—	(155,107)~	—	—	(29,380)⌂	—	—	—	—
Beginning of year as restated		325,842	699,631	499,105	596,465	622,668	471,887	489,524	542,138	641,015	651,364
Net Position at end of year	$	**699,631**	**654,212**	**596,465**	**622,668**	**501,267**	**489,524**	**542,138**	**641,015**	**651,364**	**633,418**

^Fiscal year 2013 have been restated for the retrospective application of GASB Statement No. 65.
Fiscal year 2021 Contractual services, and Depreciation and amortization categories were restated due to the implementation of GASB Statement No. 87, *Leases*.
*Fiscal year 2014 of $678 in capital asset from the Department of Emergency Management and fiscal year 2021 $4,180 from Department of Public Works.
#Include transfer in of $63,075 from the Department of Public Works related to the improvement of the AWSS Earthquake Safety and Emergency Response project.
~Fiscal year 2015 has been restated for the retrospective application of GASB Statement No. 68.
⌂Fiscal year 2018 has been restated for the retrospective application of GASB Statement No. 75.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

Water Expenses, Capital Contributions and Transfer



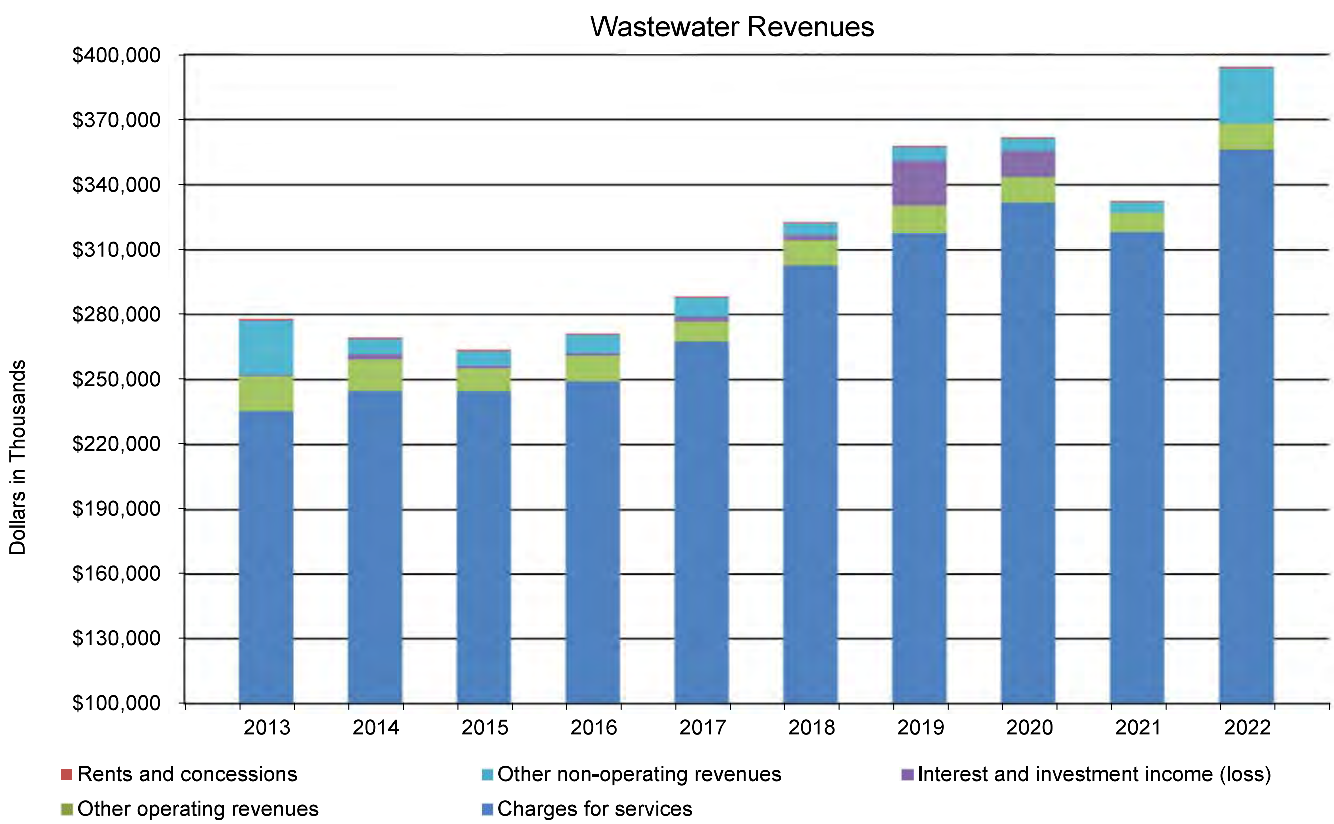
Financial Trends

Wastewater - Changes in Net Position
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

Revenues:		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Charges for services	$	235,479	244,705	244,604	249,203	267,601	303,037	317,761	331,721	318,236	356,041
Rents and concessions		892	828	821	753	606	611	702	664	642	705
Other operating revenues		16,183	14,564	10,577	11,819	9,134	11,448	12,618	11,743	8,787	12,136
Subtotal operating revenues		**252,554**	**260,097**	**256,002**	**261,775**	**277,341**	**315,096**	**331,081**	**344,128**	**327,665**	**368,882**
Interest and investment income (loss)		524	2,400	1,207	1,185	2,327	2,317	20,701	12,137	(1,187)	(7,087)
Other non-operating revenues		24,886	6,882	6,564	8,263	8,633	5,330	6,164	5,596	4,911	25,454
Subtotal non-operating revenues		**25,410**	**9,282**	**7,771**	**9,448**	**10,960**	**7,647**	**26,865**	**17,733**	**3,724**	**18,367**
Total revenues	$	**277,964**	**269,379**	**263,773**	**271,223**	**288,301**	**322,743**	**357,946**	**361,861**	**331,389**	**387,249**

(Continued)

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



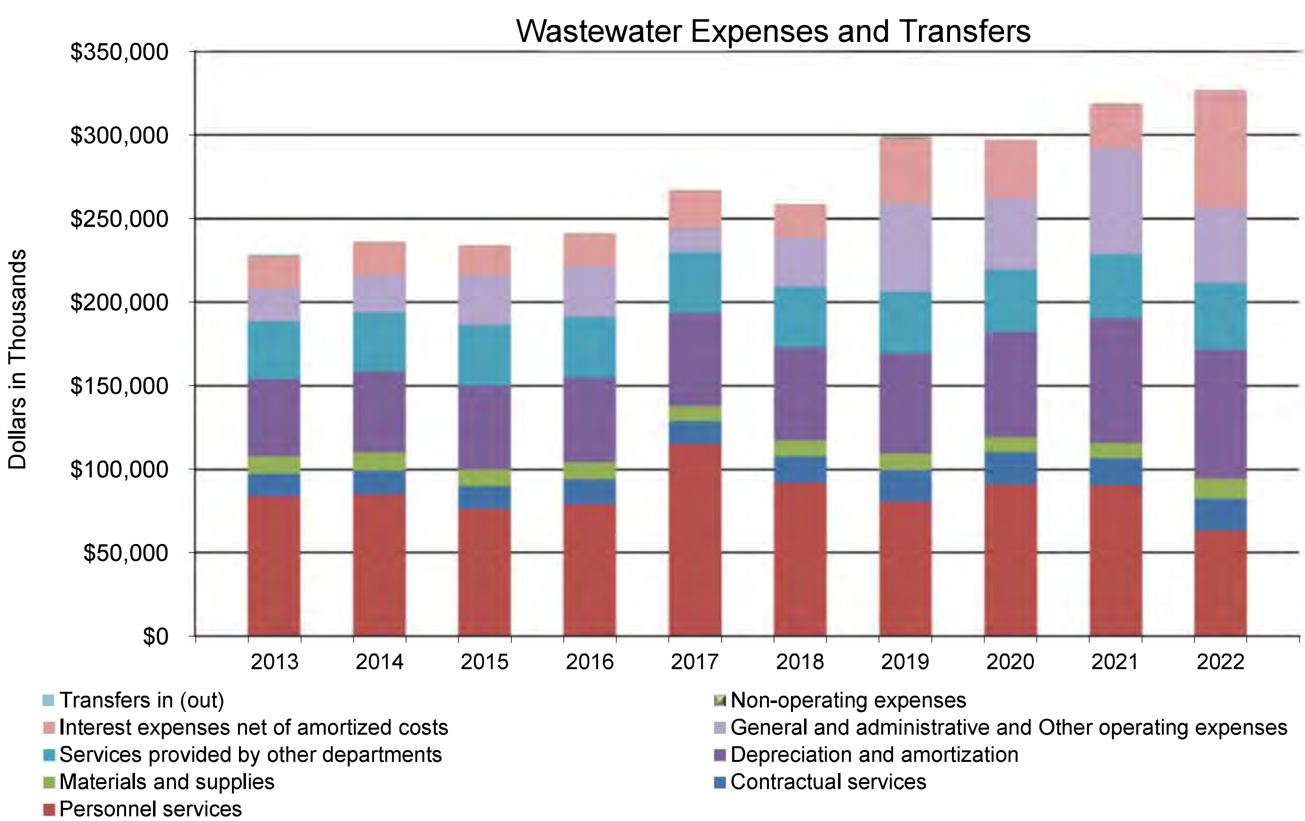
Financial Trends

Wastewater - Changes in Net Position
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

Expenses:		2013	2014	2015	2016	2017	2018	2019	2020	2021 ^	2022
Personnel services	$	84,155	85,114	76,396	79,088	115,288	91,977	80,693	91,013	90,449	63,456
Contractual services		13,418	14,314	13,841	15,069	13,825	16,061	19,040	19,357	16,489	19,115
Materials and supplies		10,481	10,830	9,815	10,192	8,736	9,446	9,853	8,991	9,091	11,844
Depreciation and amortization		46,347	48,402	50,254	50,799	55,441	55,591	60,033	62,967	74,343	77,575
Services provided by other departments		34,141	35,274	36,212	36,157	36,832	36,374	36,629	37,309	38,313	39,645
General and administrative and Other operating expenses		19,718	22,406	29,967	30,248	14,098	29,457	53,565	42,622	63,488	45,536
Subtotal operating expenses		**208,260**	**216,340**	**216,485**	**221,553**	**244,220**	**238,906**	**259,813**	**262,259**	**292,173**	**257,171**
Interest expenses		19,723	27,126	22,791	22,251	28,474	24,978	43,803	43,216	34,944	77,743
Amortization of premium, refunding loss, and issuance costs		(612)	(7,711)	(5,347)	(2,979)	(5,806)	(5,400)	(5,697)	(8,647)	(8,497)	(8,422)
Non-operating expenses		566	533	280	485	383	414	1,013^^	52	409	482
Subtotal non-operating expenses		**19,677**	**19,948**	**17,724**	**19,757**	**23,051**	**19,992**	**39,119**	**34,621**	**26,856**	**69,803**
Total expenses		**227,937**	**236,288**	**234,209**	**241,310**	**267,271**	**258,898**	**298,932**	**296,880**	**319,029**	**326,974**
Change in net position before transfers		50,027	33,091	29,564	29,913	21,030	63,845	59,014	64,981	12,360	60,275
Transfers in (out)		888	19	(232)	(16,025)	(30,707)	(26,960)	(3,996)	(1,188)	(2,748)	(161)
Change in net position		**50,915**	**33,110**	**29,332**	**13,888**	**(9,677)**	**36,885**	**55,018**	**63,793**	**9,612**	**60,114**
Net position at beginning of year											
Beginning of year, as previously reported		1,100,353	1,148,757	1,181,867	1,142,052	1,155,940	1,146,263	1,174,125	1,229,143	1,292,936	1,302,548
Cumulative effect of accounting change due to error		—	—	—	—	—	(6,767)*	—	—	—	—
Cumulative effect of accounting change		(2,511)^	—	(69,147)~	—	—	(2,256)⌂	—	—	—	—
Beginning of year as restated		1,097,842	1,148,757	1,112,720	1,142,052	1,155,940	1,137,240	1,174,125	1,229,143	1,292,936	1,302,548
Net Position at end of year	$	**1,148,757**	**1,181,867**	**1,142,052**	**1,155,940**	**1,146,263**	**1,174,125**	**1,229,143**	**1,292,936**	**1,302,548**	**1,362,662**

^Fiscal year 2013 have been restated for the retrospective application of GASB Statement No. 65.
Fiscal year 2021 Contractual services, and Depreciation and amortization categories were restated due to the implementation of GASB Statement No. 87, *Leases*.
*The Wastewater Enterprise recorded certain immaterial corrections to the 2018 financial statement to eliminate the recognition of certain capital assets that are recorded by another fund. The impact of the change was to decrease beginning position as of July 2017 by $6,767 and increase fiscal year 2018 expenses by $28,313.
~Fiscal year 2015 has been restated for the retrospective application of GASB Statement No. 68.
⌂Fiscal year 2018 has been restated for the retrospective application of GASB Statement No. 75.
^^Non-operating expense includes net loss/gain from sales of assets.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



Financial Trends

Hetchy Water - Changes in Net Position

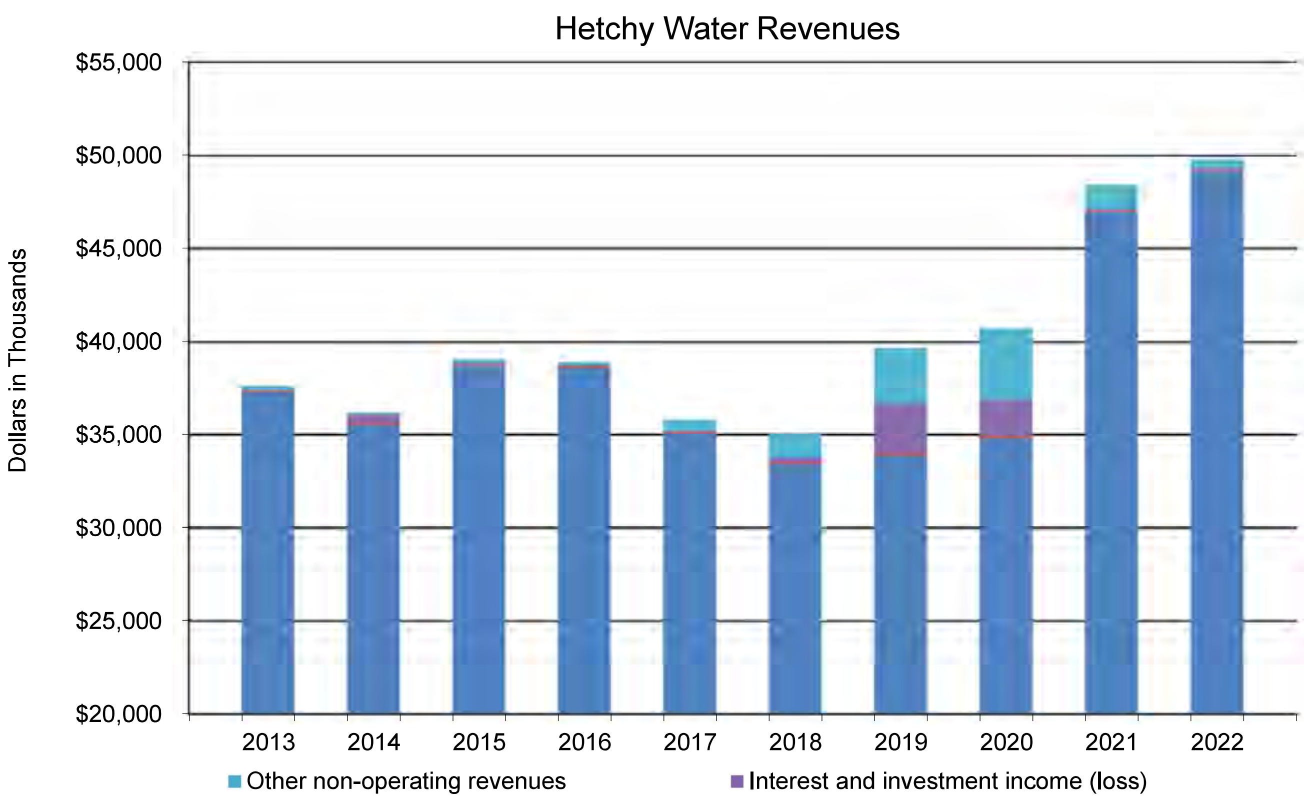
Fiscal Years Ended 2013 to 2022

(Dollars in Thousands)

Revenues:		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Charges for services	$	37,284	35,521	38,731	38,624	35,008	33,427	33,880	34,797	46,979	49,200
Rents and concessions		110	101	104	118	142	133	125	156	111	112
Subtotal operating revenues		**37,394**	**35,622**	**38,835**	**38,742**	**35,150**	**33,560**	**34,005**	**34,953**	**47,090**	**49,312**
Interest and investment income (loss)		(344)	487	(74)	(38)	46	218	2,670	1,932	(232)	(2,932)
Other non-operating revenues		290	69	250	200	616	1,237	3,013	3,861	1,352	479
Subtotal non-operating revenues		**(54)**	**556**	**176**	**162**	**662**	**1,455**	**5,683**	**5,793**	**1,120**	**(2,453)**
Total revenues	**$**	**37,340**	**36,178**	**39,011**	**38,904**	**35,812**	**35,015**	**39,688**	**40,746**	**48,210**	**46,859**

(Continued)

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



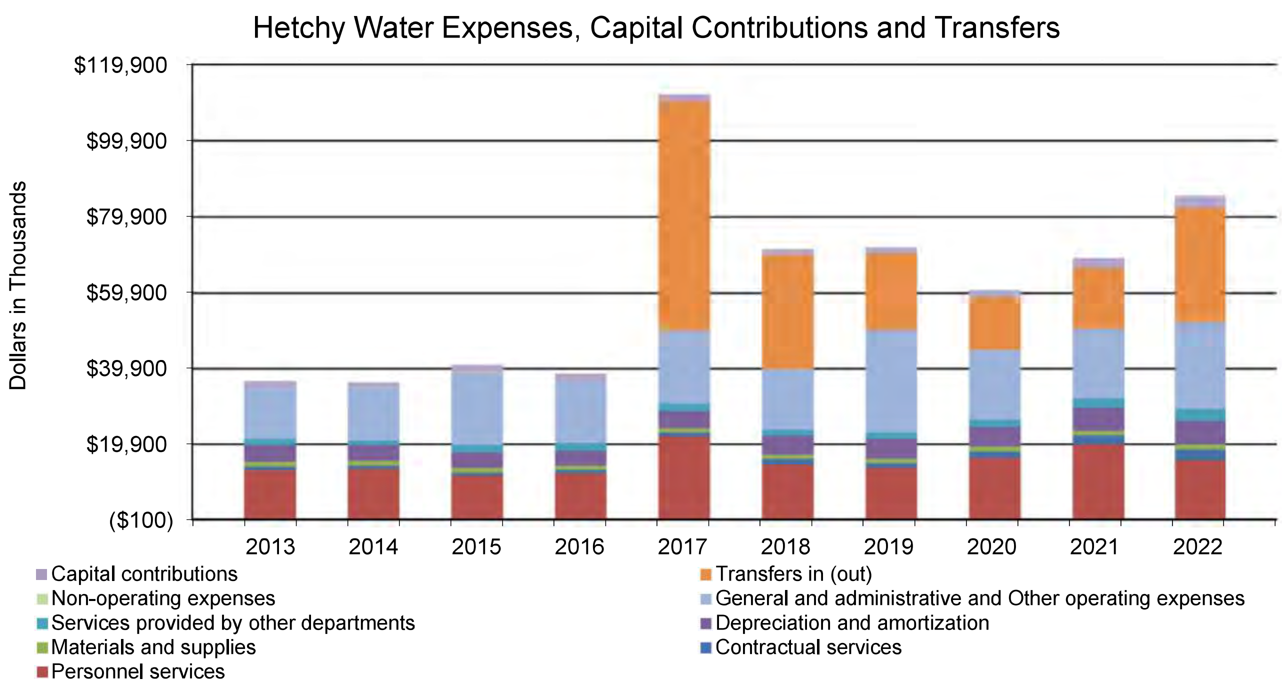
Financial Trends

Hetchy Water - Changes in Net Position
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

Expenses:		2013	2014	2015	2016	2017	2018	2019	2020	2021^	2022
Personnel services	$	13,057	13,343	11,557	12,183	21,998	14,516	13,707	16,304	19,871	15,636
Contractual services		889	835	794	902	1,017	1,524	1,205	1,642	2,398	2,854
Materials and supplies		1,331	1,352	1,321	1,191	1,161	1,101	1,133	1,337	1,272	1,362
Depreciation and amortization		4,378	4,186	4,102	3,874	4,505	5,066	5,380	5,276	6,028	6,305
Services provided by other departments		1,706	1,211	1,979	2,054	1,962	1,572	1,622	1,853	2,517	3,129
General and administrative and											
Other operating expenses		13,540	14,098	18,948	16,332	19,456	16,013	27,258	18,461	18,433	23,017
Subtotal operating expenses		**34,901**	**35,025**	**38,701**	**36,536**	**50,099**	**39,792**	**50,305**	**44,873**	**50,519**	**52,303**
Interest expenses		—	—	—	—	—	—	—	—	2	1
Non-operating expenses		68	99	313	68	68	68	—	11	63	37
Total expenses		**34,969**	**35,124**	**39,014**	**36,604**	**50,167**	**39,860**	**50,305**	**44,884**	**50,584**	**52,341**
Change in net position before capital contributions transfers and extraordinary item		2,371	1,054	(3)	2,300	(14,355)	(4,845)	(10,617)	(4,138)	(2,374)	(5,482)
Capital contributions		—	166*	—	—	—	—	—	—	—	—
Transfers in (out)		—	—	—	—	60,000	30,000	20,000	14,000	16,000	30,001
Extraordinary item:											
Rim fire — loss		—	(2,709)	—	—	—	—	—	—	—	—
Change in net position		**2,371**	**(1,489)**	**(3)**	**2,300**	**45,645**	**25,155**	**9,383**	**9,862**	**13,626**	**24,519**
Net position at beginning of year											
Beginning of year, as previously reported		136,522	138,893	137,404	120,411	122,711	168,356⌂	191,790	201,173	211,035	224,661
Cumulative effect of accounting change		—	—	(16,990)#	—	—	(1,721)	—	—	—	—
Beginning of year as restated		136,522	138,893	120,414	120,411	122,711	166,635	191,790	201,173	211,035	224,661
Net position at end of year	**$**	**138,893**	**137,404**	**120,411**	**122,711**	**168,356**	**191,790**	**201,173**	**211,035**	**224,661**	**249,180**

*Include transfer of $166 in capital asset from the Department of Emergency Management.
#The beginning net position for fiscal year 2015 has been restated for the retrospective application of GASB Statement No. 68.
⌂The beginning net position for fiscal year 2018 has been restated for the retrospective application of GASB Statement No. 75.
^Contractual services, and Depreciation and amortization categories were restated due to the implementation of GASB Statement No. 87, *Leases*.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



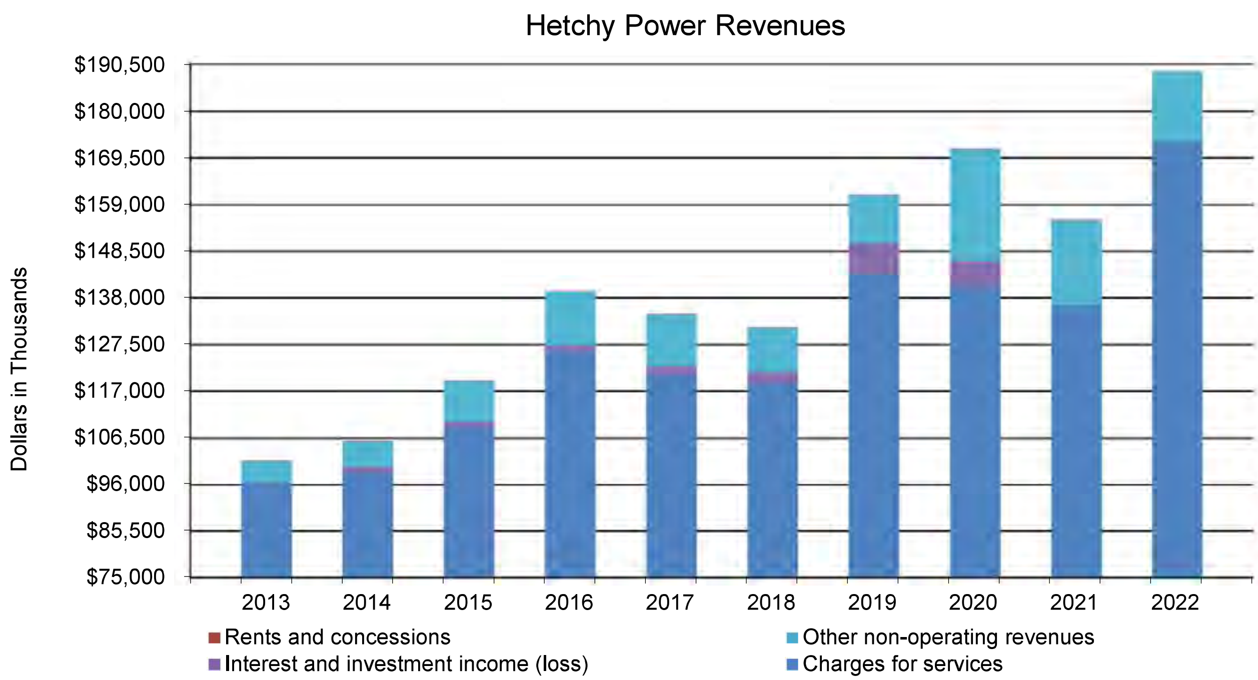
Financial Trends

Hetchy Power - Changes in Net Position
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

Revenues:		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Charges for services	$	96,398	98,693	108,841	125,850	120,789	118,672	143,409	140,680	136,247	173,105
Rents and concessions		135	123	127	144	173	163	152	191	136	137
Subtotal operating revenues		**96,533**	**98,816**	**108,968**	**125,994**	**120,962**	**118,835**	**143,561**	**140,871**	**136,383**	**173,242**
Interest and investment income (loss)		139	1,289	1,253	1,318	1,718	2,537	6,883	5,746	24	(4,001)
Other non-operating revenues		4,892	5,798	9,302	12,256	11,764	10,073	10,907	25,006	19,273	15,763
Subtotal non-operating revenues		**5,031**	**7,087**	**10,555**	**13,574**	**13,482**	**12,610**	**17,790**	**30,752**	**19,297**	**11,762**
Total revenues	**$**	**101,564**	**105,903**	**119,523**	**139,568**	**134,444**	**131,445**	**161,351**	**171,623**	**155,680**	**185,004**

(Continued)

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



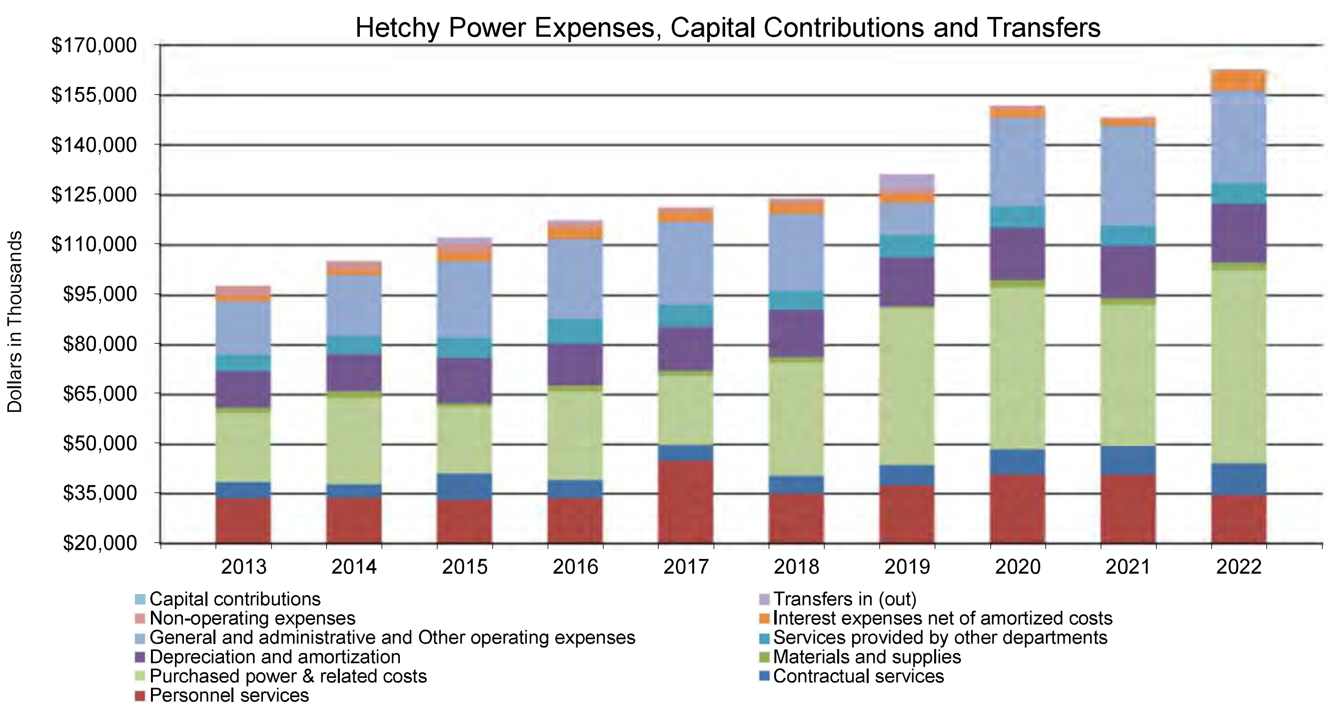
Financial Trends

Hetchy Power - Changes in Net Position
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

Expenses:		2013	2014	2015	2016	2017	2018	2019	2020	2021^	2022
Personnel services	$	33,564	33,762	33,240	33,632	44,961	34,950	37,583	40,712	40,756	34,646
Contractual services		4,956	4,063	7,852	5,493	4,916	5,526	6,086	7,742	8,705	9,604
Purchased power & related costs		20,891	26,215	20,296	26,792	20,970	34,435	47,437	48,831	42,693	58,252
Materials and supplies		1,671	2,075	1,039	1,849	1,510	1,541	672	2,260	1,990	2,270
Depreciation and amortization		11,079	11,128	13,785	12,639	13,225	14,049	14,484	15,723	15,650	17,628
Services provided by other departments		5,002	5,577	5,979	7,397	6,716	5,848	6,833	6,426	6,137	6,253
General and administrative and											
Other operating expenses		16,096	18,220	23,031	24,157	24,637	23,046	9,593	26,433	29,709	27,694
Subtotal operating expenses		**93,259**	**101,040**	**105,222**	**111,959**	**116,935**	**119,395**	**122,688**	**148,127**	**145,640**	**156,347**
Interest expenses		1,641	1,574	1,815	3,355	3,200	3,103	2,936	2,740	1,972	5,624
Amortization of premium, discount,											
and issuance costs		7	(28)	893	(122)	(255)	(248)	(237)	(228)	(219)	192
Non-operating expenses		3,025	2,485	2,494	1,676	1,408	1,727	1,365	1,060	902	591
Total expenses		**97,932**	**105,071**	**110,424**	**116,868**	**121,288**	**123,977**	**126,752**	**151,699**	**148,295**	**162,754**
Change in net position before capital contributions											
transfers and extraordinary item		3,632	832	9,099	22,700	13,156	7,468	34,599	19,924	7,385	22,250
Capital contributions		—	202#	—	—	—	—	—	—	—	—
Transfers in (out)		(196)	(38)	2,043	680	51	(425)	4,490	(32)	(532)	(532)
Extraordinary item:											
Rim fire — loss		—	(4,134)	—	—	—	—	—	—	—	—
Change in net position		**3,436**	**(3,138)**	**11,142**	**23,380**	**13,207**	**7,043**	**39,089**	**19,892**	**6,853**	**21,718**
Net position at beginning of year											
Beginning of year, as previously reported		376,130	379,284	376,146	366,523	389,903	401,686	406,626	445,715	465,607	472,460
Cumulative effect of accounting change		(282)^	—	(20,765)*	—	—	(2,103)⌂	—	—	—	—
Less: CleanPowerSF beginning net position		—	—	—	—	(1,424)	—	—	—	—	—
Beginning of year as restated		375,848	379,284	355,381	366,523	388,479	399,583	406,626	445,715	465,607	472,460
Net position at end of year	**$**	**379,284**	**376,146**	**366,523**	**389,903**	**401,686**	**406,626**	**445,715**	**465,607**	**472,460**	**494,178**

^Fiscal year 2013 have been restated for the retrospective application of GASB Statement No. 65.
Fiscal year 2021 Contractual services, and Depreciation and amortization categories were restated due to the implementation of GASB Statement No. 87, *Leases*.
#Include transfer of $202 in capital asset from the Department of Emergency Management.
*Fiscal year 2015 has been restated for the retrospective application of GASB Statement No. 68.
⌂Fiscal year 2018 has been restated for the retrospective application of GASB Statement No. 75.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



Financial Trends

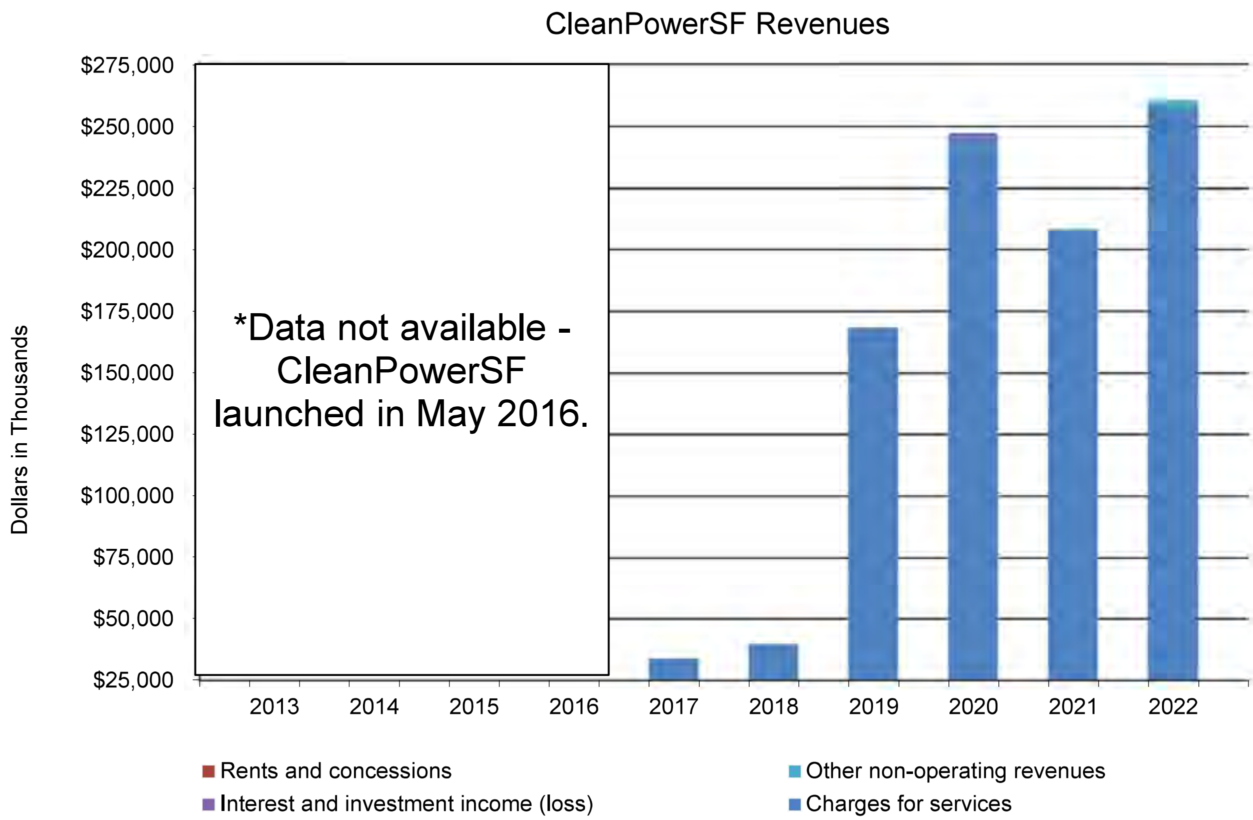
CleanPowerSF - Changes in Net Position
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

Revenues:		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Charges for services	$	*Data not available - CleanPowerSF launched in May 2016.				33,867	39,568	167,820	245,460#	207,698	257,893
Rents and concessions						—	—	—	—	—	—
Subtotal operating revenues						**33,867**	**39,568**	**167,820**	**245,460**	**207,698**	**257,893**
Interest and investment income (loss)						89	174	735	1,771	51	(1,286)
Other non-operating revenues						4	1	—	1	927	2,759
Subtotal non-operating revenues						**93**	**175**	**735**	**1,772**	**978**	**1,473**
Total revenues	$					**33,960**	**39,743**	**168,555**	**247,232**	**208,676**	**259,366**

(Continued)

*CleanPowerSF was presented as part of Hetchy Power in fiscal year 2016.
#Increase in charges for services is due to completion of city-wide enrollment.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

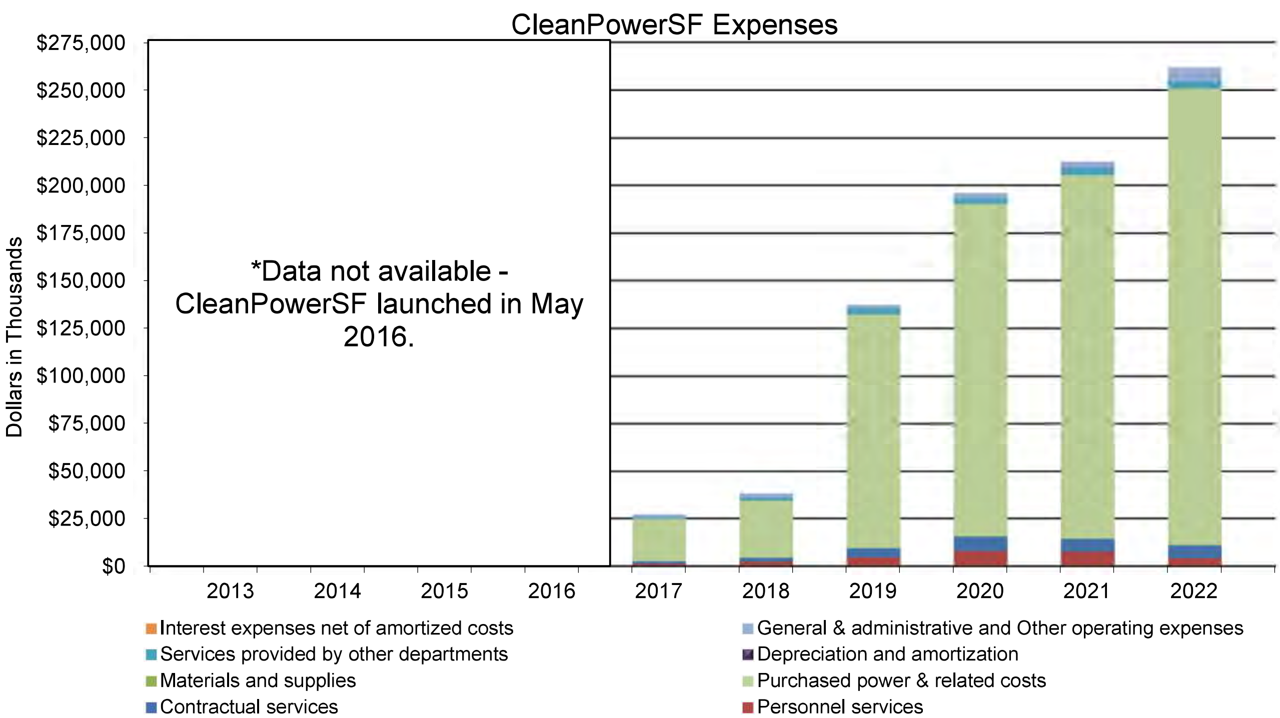


Financial Trends
CleanPowerSF - Changes in Net Position
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

Expenses:	2013	2014	2015	2016	2017	2018	2019	2020	2021^	2022
Personnel services $	*Data not available - CleanPowerSF launched in May 2016.				1,213	2,150	4,612	7,920	7,641	4,167
Contractual services					1,141	2,166	4,786	7,557	6,678	6,821
Purchased power & related costs					22,437	30,297	122,838	174,770 #	190,989	239,738
Materials and supplies					1	—	51	57	26	33
Depreciation and amortization					—	—	—	—	345	345
Services provided by other departments					734	1,545	3,208	2,728	3,928	3,621
General & administrative and other operating expenses					1,570	2,270	1,789	2,994	3,104	7,393
Subtotal operating expenses					**27,096**	**38,428**	**137,284**	**196,026**	**212,711**	**262,118**
Interest expenses					70	101	130	69	26	5
Total expenses					**27,166**	**38,529**	**137,414**	**196,095**	**212,737**	**262,123**
Change in net position					**6,794**	**1,214**	**31,141**	**51,137**	**(4,061)**	**(2,757)**
Net position at beginning of year										
Beginning of year, as previously reported					1,424	8,218	8,860	40,001	91,138	87,077
Cumulative effect of accounting change					—	(572)⌂	—	—	—	—
Beginning of year as restated					1,424	7,646	8,860	40,001	91,138	87,077
Net position at end of year $					**8,218**	**8,860**	**40,001**	**91,138**	**87,077**	**84,320**

*CleanPowerSF was presented as part of Hetchy Power in fiscal year 2016.
⌂Fiscal year 2018 has been restated for the retrospective application of GASB Statement No. 75.
#Increase in purchased power and related costs is due to higher enrollment and electricity sales.
^Contractual services, and Depreciation and amortization categories were restated due to the implementation of GASB Statement No. 87, *Leases*.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



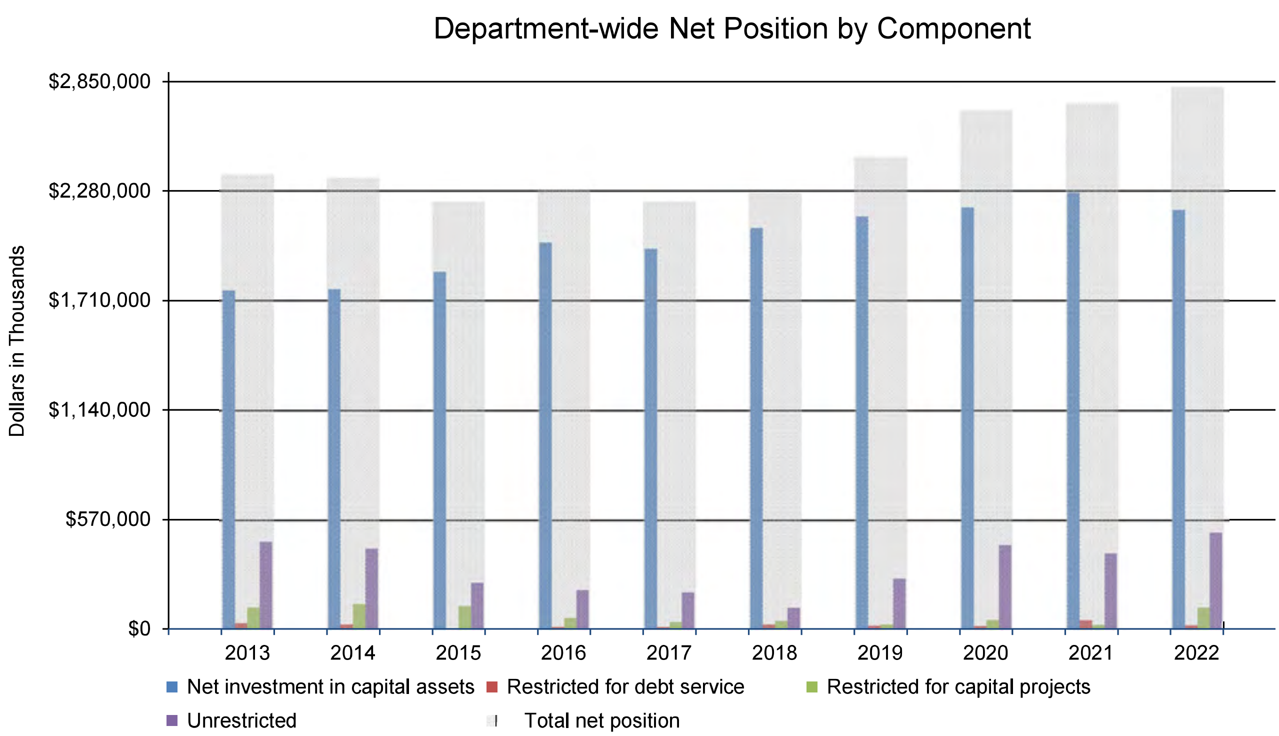
Financial Trends

Department-wide - Summary of Net Position by Component
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

	2013^	2014	2015*	2016	2017	2018⌂	2019	2020	2021@	2022
Net investment in capital assets $	1,762,526	1,769,815	1,859,439	2,011,814	1,979,445	2,087,816	2,147,756	2,194,130	2,271,638	2,183,518
Restricted for debt service	33,683	25,990	1,704	13,409	12,451	25,079	18,617	17,285	48,677	20,202
Restricted for capital projects	114,299	131,590	120,496	60,357	39,557	44,690	26,906	49,635	22,319	114,657
Unrestricted	456,057	422,234	243,812	205,642	194,337	113,340	264,891	440,681	395,476	505,381
Total net position $	**2,366,565**	**2,349,629**	**2,225,451**	**2,291,222**	**2,225,790**	**2,270,925**	**2,458,170**	**2,701,731**	**2,738,110**	**2,823,758**

^Fiscal year 2013 have been restated for the retrospective application of GASB Statement No. 65.
*Fiscal year 2015 have been restated for the cumulative effect of accounting change per GASB Statement No. 68.
⌂Fiscal year 2018 has been restated for the retrospective application of GASB Statement No. 75.
@Unrestricted restated due to the implementation of GASB Statement No. 87, *Leases*.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



Financial Trends

Water - Summary of Net Position by Component

Fiscal Years Ended 2013 to 2022

(Dollars in Thousands)

		2013 ^	2014	2015 *	2016	2017	2018 ⌂	2019	2020	2021 @	2022
Net investment in capital assets	$	364,863	366,799	425,073	543,327	495,868	504,476	563,457	527,856	517,302	537,644
Restricted for debt service		32,723	25,356	1,053	12,122	10,989	22,933	16,193	15,916	45,586	14,671
Restricted for capital projects		103,616	103,154	95,735	40,743	37,904	32,978	—	43,122	22,319	—
Unrestricted		198,429	158,903	74,604	26,476	(43,494)	(70,863)	(37,512)	54,121	66,157	81,103
Total net position	$	**699,631**	**654,212**	**596,465**	**622,668**	**501,267**	**489,524**	**542,138**	**641,015**	**651,364**	**633,418**

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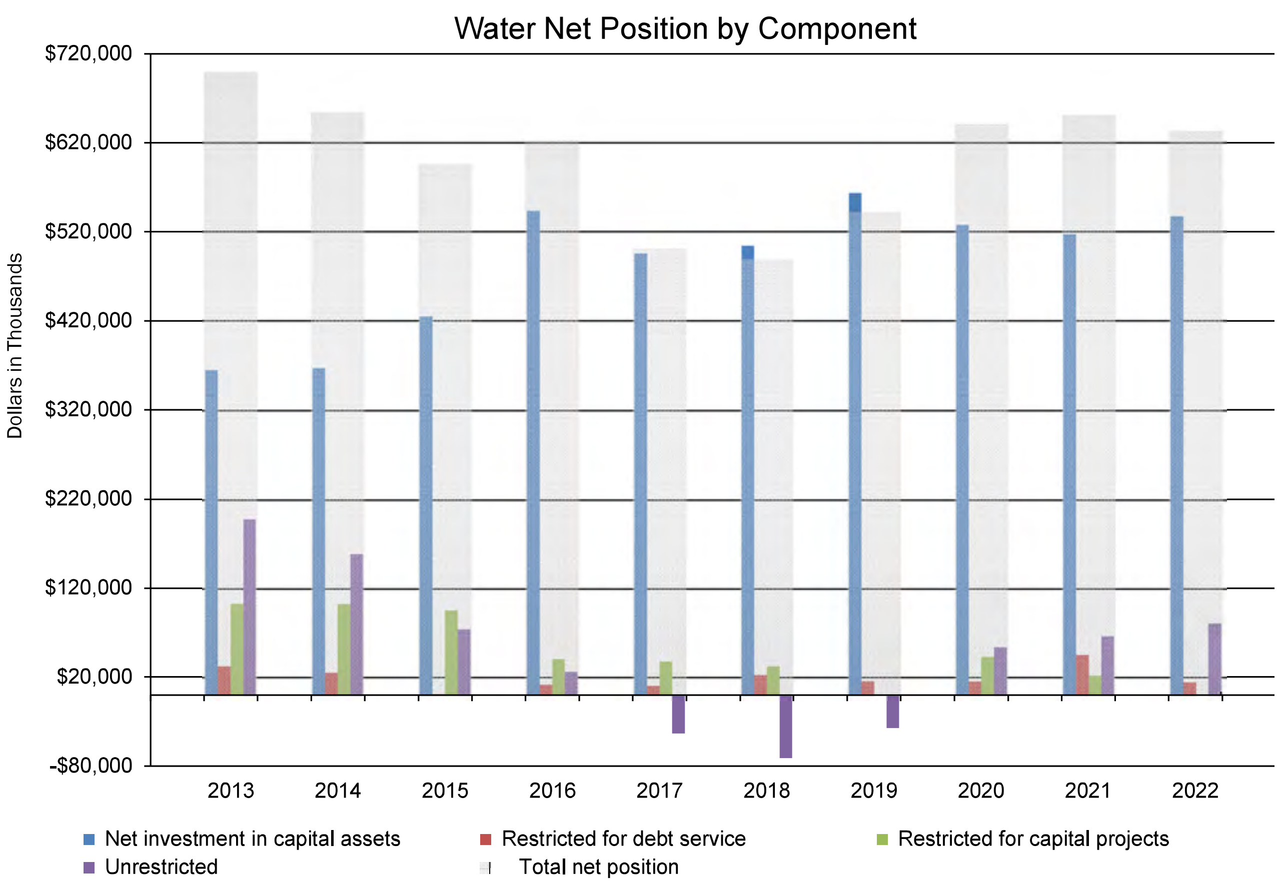

Financial Trends

Wastewater - Summary of Net Position by Component
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

		2013 ^	2014	2015 *	2016	2017	2018 ⌂	2019	2020	2021 @	2022
Net investment in capital assets	$	1,074,526	1,066,814	1,088,552	1,098,723	1,095,165	1,172,623	1,133,662	1,183,288	1,253,789	1,092,705
Restricted for debt service		960	634	349	981	977	1,312	1,279	1,227	2,992	5,391
Restricted for capital projects		2,931	22,929	20,327	18,205	1,653	—	18,505	—	—	114,657
Unrestricted		70,340	91,490	32,824	38,031	48,468	190	75,697	108,421	45,767	149,909
Total net position	**$**	**1,148,757**	**1,181,867**	**1,142,052**	**1,155,940**	**1,146,263**	**1,174,125**	**1,229,143**	**1,292,936**	**1,302,548**	**1,362,662**

^Fiscal year 2013 have been restated for the retrospective application of GASB Statement No. 65.
*Fiscal year 2015 have been restated for the cumulative effect of accounting change per GASB Statement No. 68.
⌂Fiscal year 2018 has been restated for the retrospective application of GASB Statement No. 75.
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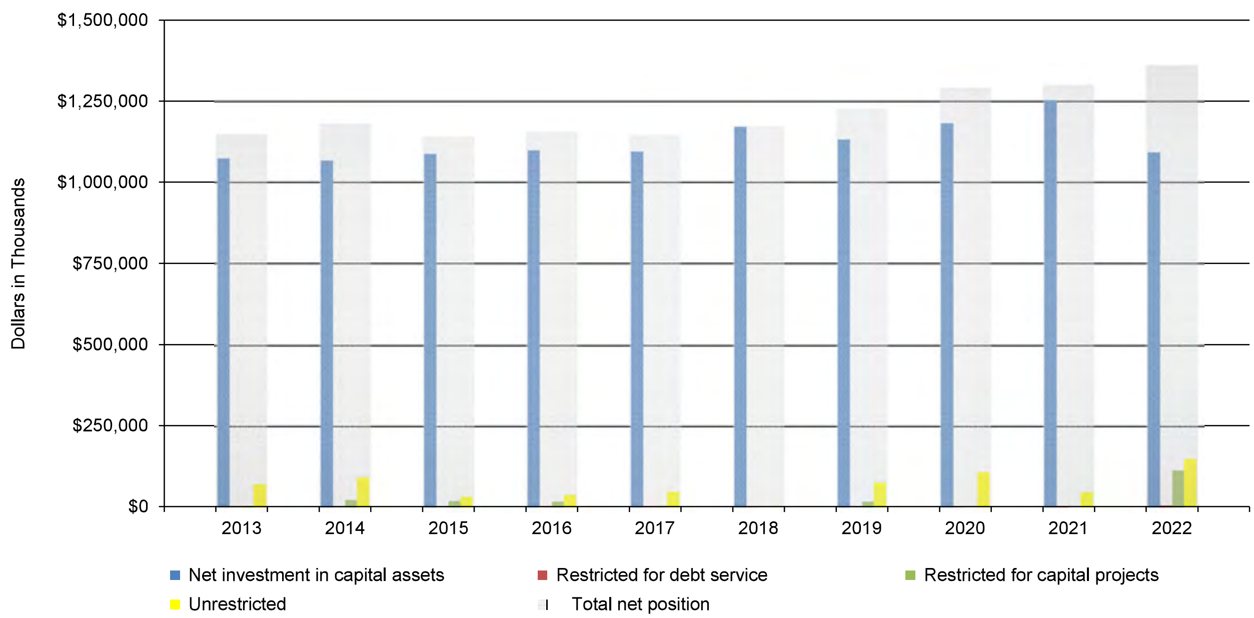
Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

Wastewater Net Position by Component



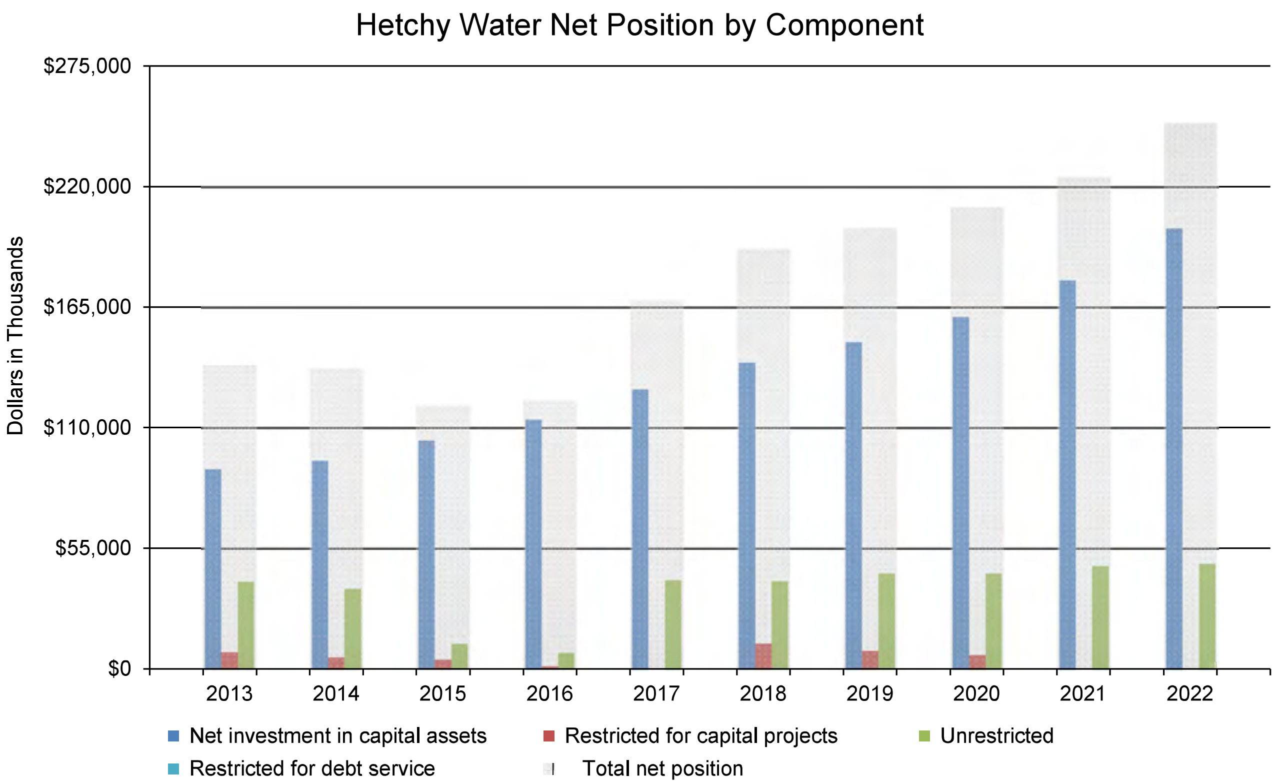
Financial Trends

Hetchy Water - Summary of Net Position by Component
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

		2013	2014	2015 *	2016	2017	2018 ⌂	2019	2020	2021 @	2022
Net investment in capital assets	$	91,228	95,186	104,330	113,867	127,731	139,799	149,103	160,782	177,481	201,007
Restricted for debt service		—	—	—	—	—	—	—	—	—	—
Restricted for capital projects		7,752	5,507	4,434	1,409	—	11,712	8,401	6,513	—	—
Unrestricted		39,913	36,711	11,647	7,435	40,625	40,279	43,669	43,740	47,180	48,173
Total net position	$	**138,893**	**137,404**	**120,411**	**122,711**	**168,356**	**191,790**	**201,173**	**211,035**	**224,661**	**249,180**

*Fiscal year 2015 have been restated for the cumulative effect of accounting change per GASB Statement No. 68.
⌂Fiscal year 2018 has been restated for the retrospective application of GASB Statement No. 75.
@Unrestricted restated due to the implementation of GASB Statement No. 87, *Leases*.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



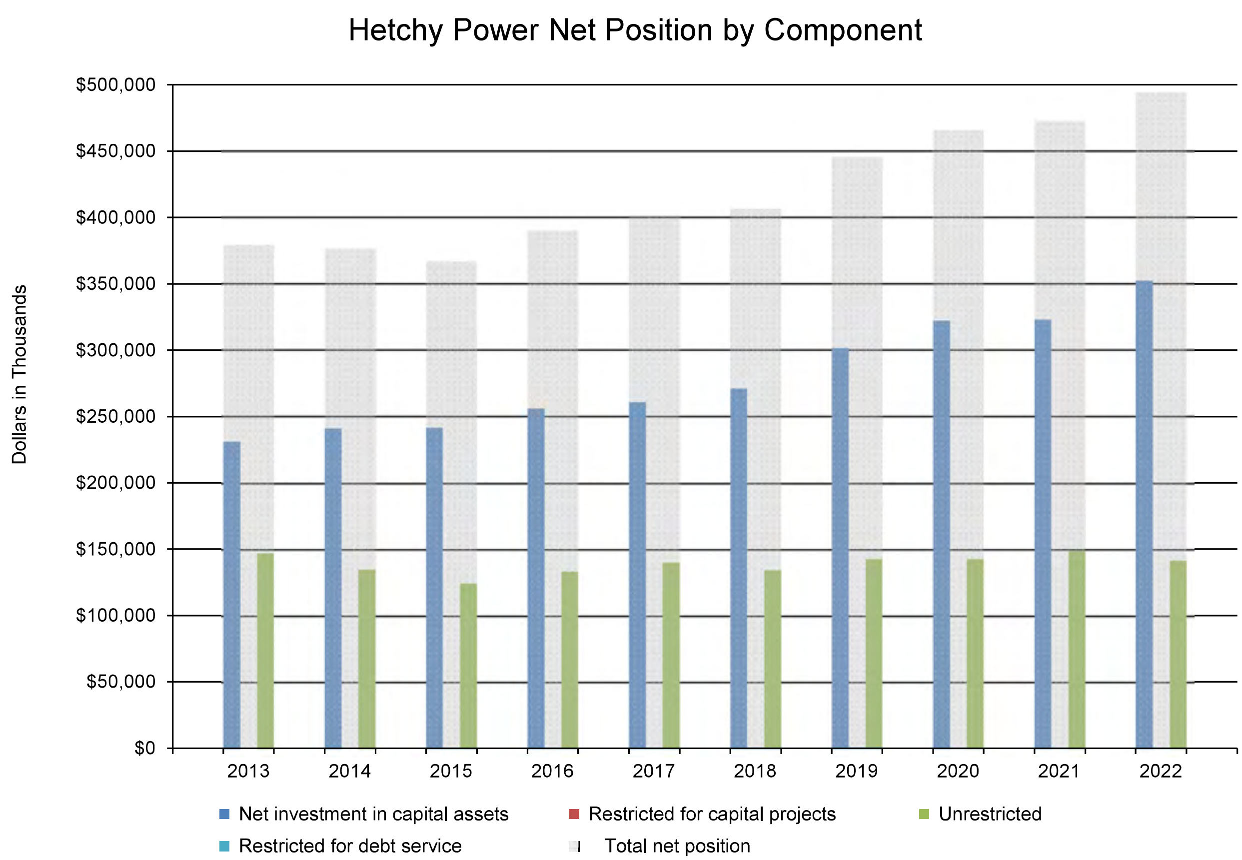
Financial Trends

Hetchy Power - Summary of Net Position by Component
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

		2013 ^	2014	2015*	2016	2017	2018 ⌂	2019	2020	2021 @	2022
Net investment in capital assets	$	231,909	241,016	241,484	255,897	260,681	270,918	301,534	322,204	323,066	352,162
Restricted for debt service		—	—	302	306	485	834	1,145	142	99	140
Restricted for capital projects		—	—	—	—	—	—	—	—	—	—
Unrestricted		147,375	135,130	124,737	133,700	140,520	134,874	143,036	143,261	149,295	141,876
Total net position	$	**379,284**	**376,146**	**366,523**	**389,903**	**401,686**	**406,626**	**445,715**	**465,607**	**472,460**	**494,178**

^Fiscal year 2013 have been restated for the retrospective application of GASB Statement No. 65.
*Fiscal year 2015 have been restated for the cumulative effect of accounting change per GASB Statement No. 68.
⌂Fiscal year 2018 has been restated for the retrospective application of GASB Statement No. 75.
@Unrestricted restated due to the implementation of GASB Statement No. 87, *Leases*.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



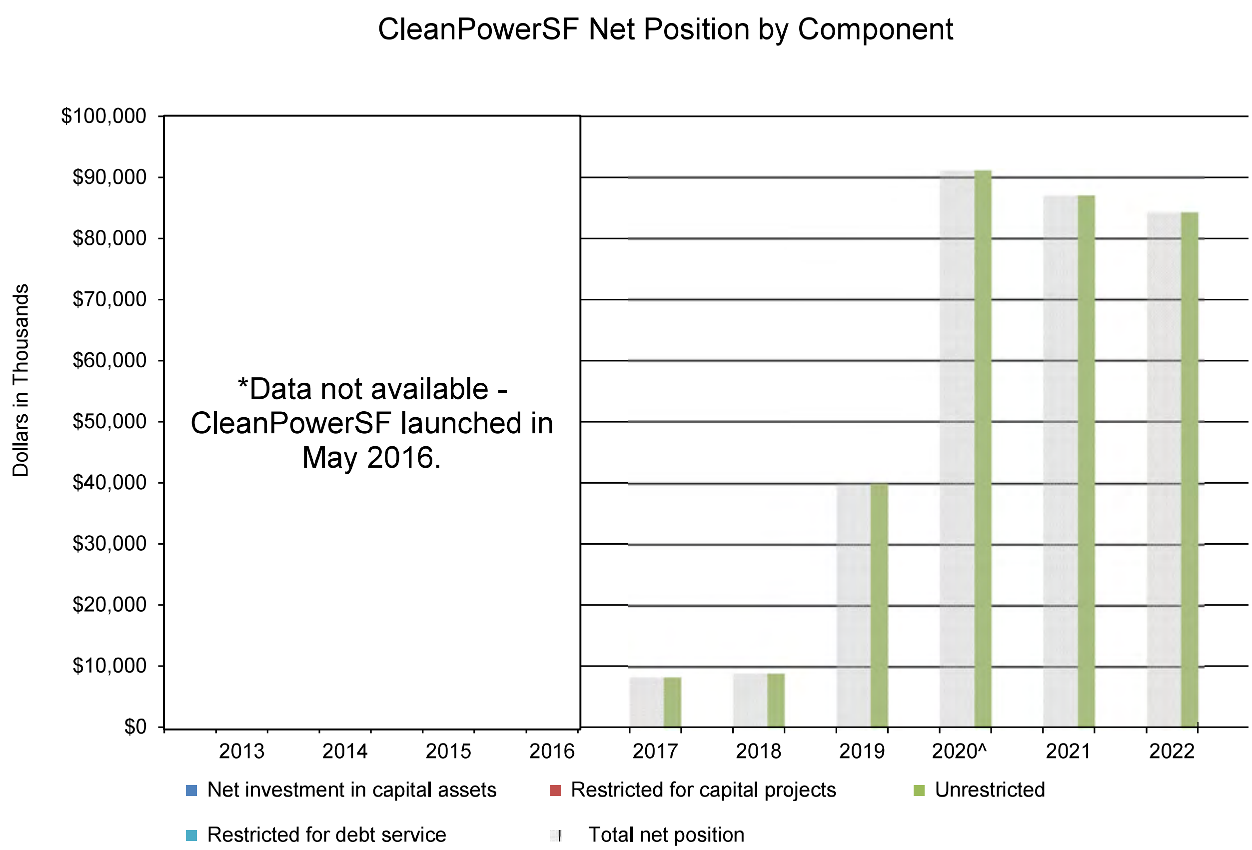
Financial Trends

CleanPowerSF - Summary of Net Position by Component
Fiscal Years Ended 2017 to 2022
(Dollars in Thousands)

		2013	2014	2015	2016	2017	2018⌂	2019	2020^	2021@	2022
Net investment in capital assets	$	*Data not available - CleanPowerSF launched in May 2016.				—	—	—	—	—	—
Restricted for debt service						—	—	—	—	—	—
Restricted for capital projects						—	—	—	—	—	—
Unrestricted						8,218	8,860	40,001	91,138	87,077	84,320
Total net position	$					**8,218**	**8,860**	**40,001**	**91,138**	**87,077**	**84,320**

* CleanPowerSF fiscal year 2016 two months of financial data was reported with Hetchy Power.
⌂Fiscal year 2018 has been restated for the retrospective application of GASB Statement No. 75.
^ Increase in fiscal year 2020 is due to completion of citywide enrollment.
@Unrestricted restated due to the implementation of GASB Statement No. 87, *Leases*.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



Financial Trends

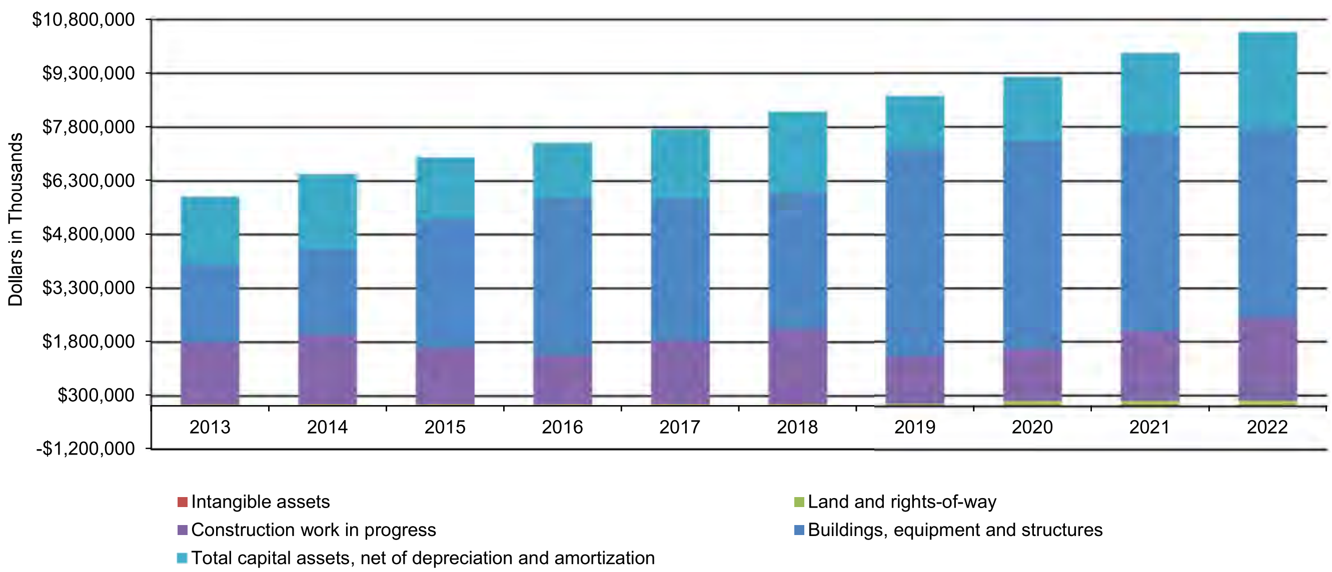
Department-wide Investments in Capital Assets
Summary of Intangible Assets, Property, Plant and Equipment
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Buildings, equipment and structures	$	6,238,702	6,790,353	7,800,455	8,565,038	8,736,914	9,084,980	10,483,615	10,957,712	11,369,025	11,783,944
Less accumulated depreciation		(2,266,290)	(2,413,969)	(2,572,737)	(2,742,700)	(2,930,531)	(3,120,191)	(3,316,443)	(3,538,382)	(3,773,696)	(4,016,382)
Subtotal		3,972,412	4,376,384	5,227,718	5,822,338	5,806,383	5,964,789	7,167,172	7,419,330	7,595,329	7,767,562
Intangible assets, net of amortization*		41,525	39,122	38,885	36,674	34,904	36,956	34,853	32,528	35,102	34,731
Land and rights-of-way		64,764	67,290	67,213	67,213	67,301	70,947	71,228	155,089	154,001	163,194
Construction work in progress		1,789,980	2,012,810	1,625,592	1,436,187	1,841,297	2,161,089	1,387,840	1,592,097	2,079,754	2,485,201
Total capital assets, net of depreciation and amortization	$	**5,868,681**	**6,495,606**	**6,959,408**	**7,362,412**	**7,749,885**	**8,233,781**	**8,661,093**	**9,199,044**	**9,864,186**	**10,450,688**

* Include amortizable and non-amortizable intangible assets.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

Department-wide Investments in Capital Assets



Financial Trends

Water - Investments in Capital Assets

Summary of Intangible Assets, Property, Plant and Equipment

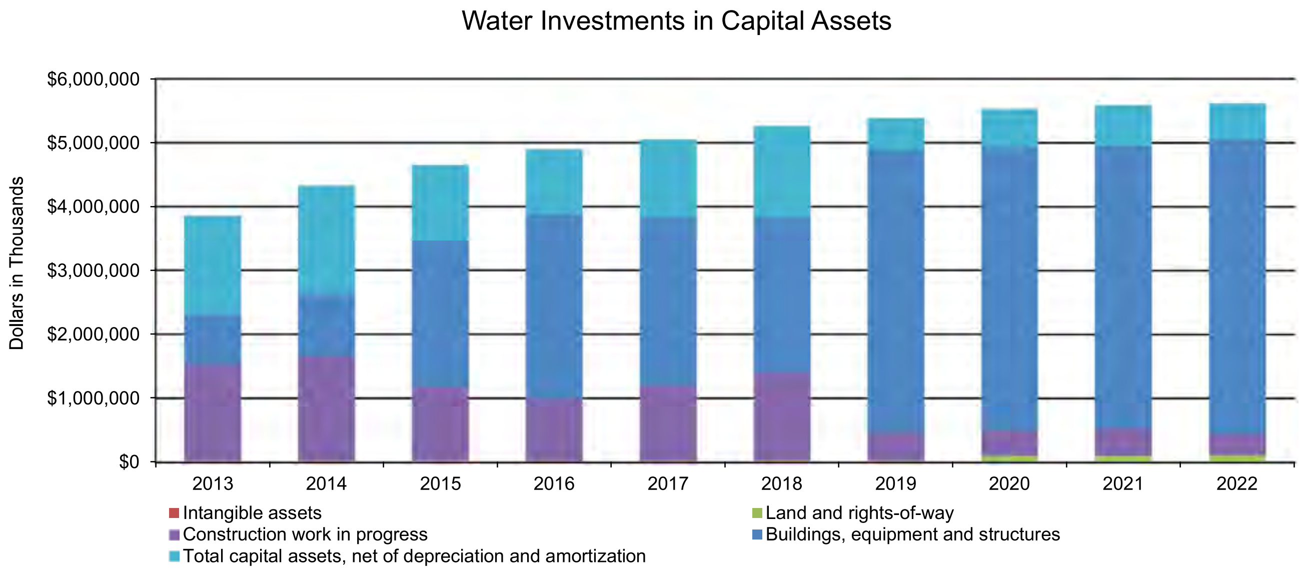
Fiscal Years Ended 2013 to 2022

(Dollars in Thousands)

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Buildings, equipment and structures	$	3,177,874	3,594,412	4,497,411	5,036,587	5,100,680	5,217,106	6,399,688	6,577,333	6,739,364	6,993,164
Less accumulated depreciation		(876,972)	(962,863)	(1,054,987)	(1,158,520)	(1,274,504)	(1,391,274)	(1,509,481)	(1,648,895)	(1,791,178)	(1,936,417)
Subtotal		2,300,902	2,631,549	3,442,424	3,878,067	3,826,176	3,825,832	4,890,207	4,928,438	4,948,186	5,056,747
Intangible assets, net of amortization*		8,030	6,896	7,244	5,843	4,671	7,321	5,816	4,089	2,763	3,152
Land and rights-of-way		24,307	26,811	26,811	26,811	26,777	30,029	30,029	105,336	104,248	113,441
Construction work in progress		1,525,689	1,662,294	1,176,805	987,780	1,195,840	1,400,051	462,606	492,682	532,602	444,254
Total capital assets, net of depreciation and amortization	**$**	**3,858,928**	**4,327,550**	**4,653,284**	**4,898,501**	**5,053,464**	**5,263,233**	**5,388,658**	**5,530,545**	**5,587,799**	**5,617,594**

* Include amortizable and non-amortizable intangible assets.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



Financial Trends

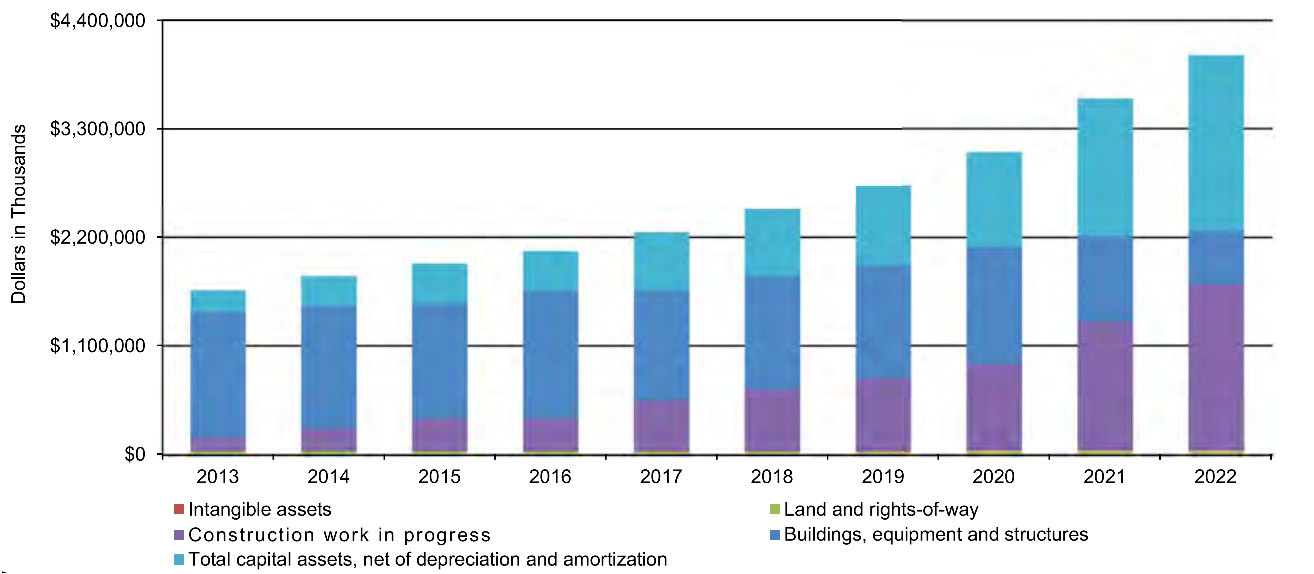
Wastewater - Investments in Capital Assets
Summary of Intangible Assets, Property, Plant and Equipment
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Buildings, equipment and structures	$	2,481,895	2,588,575	2,665,863	2,842,648	2,904,499	3,094,871	3,271,188	3,520,624	3,702,375	3,832,594
Less accumulated depreciation		(1,038,309)	(1,085,418)	(1,134,843)	(1,185,275)	(1,240,172)	(1,295,323)	(1,354,209)	(1,416,292)	(1,488,148)	(1,562,239)
Subtotal		1,443,586	1,503,157	1,531,020	1,657,373	1,664,327	1,799,548	1,916,979	2,104,332	2,214,227	2,270,355
Intangible assets, net of amortization*		4,809	4,023	3,921	3,594	3,457	3,320	3,183	3,046	7,407	7,107
Land and rights-of-way		35,737	35,737	35,737	35,737	35,737	35,737	36,018	44,572	44,572	44,572
Construction work in progress		176,711	262,642	362,110	362,958	548,179	652,521	765,624	910,338	1,340,644	1,724,417
Total capital assets, net of depreciation and amortization	**$**	**1,660,843**	**1,805,559**	**1,932,788**	**2,059,662**	**2,251,700**	**2,491,126**	**2,721,804**	**3,062,288**	**3,606,850**	**4,046,451**

* Include amortizable and non-amortizable intangible assets.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

Wastewater Investments in Capital Assets



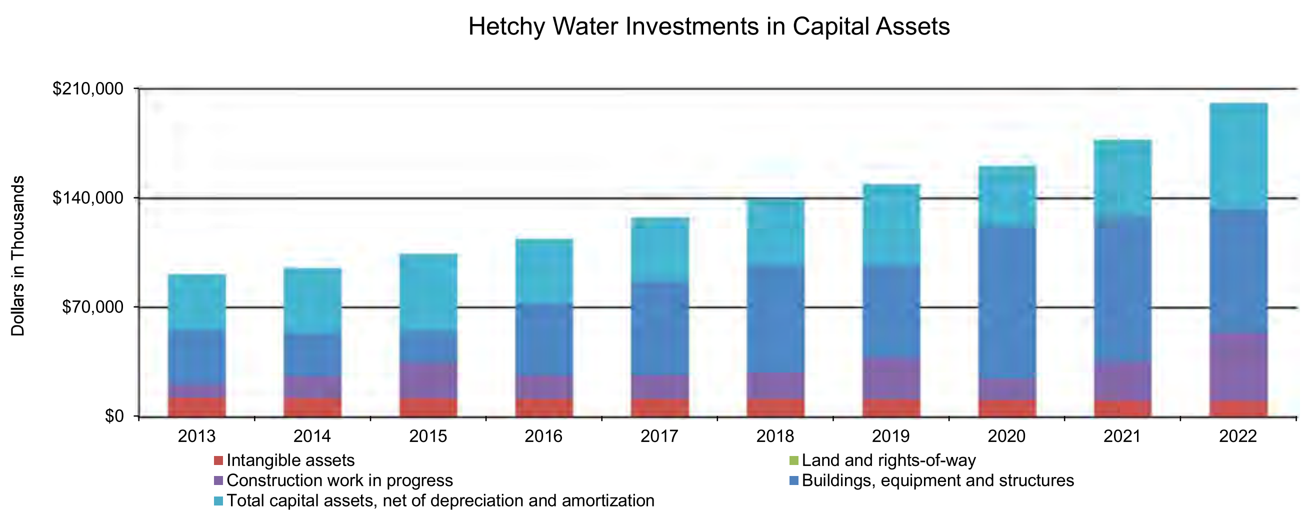
Financial Trends

Hetchy Water - Investments in Capital Assets
Summary of Intangible Assets, Property, Plant and Equipment
Fiscal Years Ended 2013 to 2022

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Buildings, equipment and structures	$	213,936	216,910	221,345	242,936	261,139	276,177	281,562	311,783	323,486	334,499
Less accumulated depreciation		(158,796)	(162,724)	(166,546)	(170,199)	(174,352)	(179,139)	(184,312)	(189,350)	(195,151)	(201,236)
Subtotal		55,140	54,186	54,799	72,737	86,787	97,038	97,250	122,433	128,335	133,263
Intangible assets, net of amortization*		12,239	12,032	11,825	11,618	11,410	11,203	10,996	10,789	10,581	10,374
Land and rights-of-way		3,028	3,038	3,003	3,003	3,055	3,232	3,232	3,232	3,232	3,232
Construction work in progress		20,821	25,922	34,703	26,509	26,479	28,326	37,625	24,328	35,333	54,138
Total capital assets, net of depreciation and amortization	**$**	**91,228**	**95,178**	**104,330**	**113,867**	**127,731**	**139,799**	**149,103**	**160,782**	**177,481**	**201,007**

* Include amortizable and non-amortizable intangible assets.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



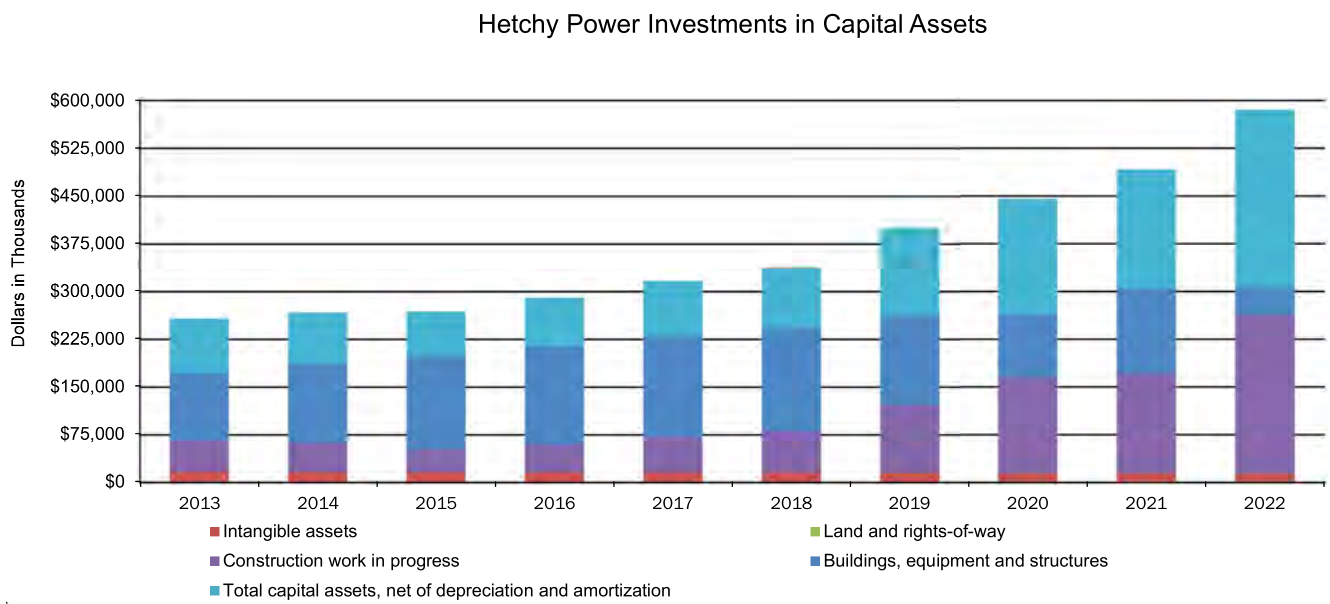
Financial Trends

Hetchy Power - Investments in Capital Assets
Summary of Intangible Assets, Property, Plant and Equipment
Fiscal Years Ended 2013 to 2022

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Buildings, equipment and structures	$	364,997	390,456	415,836	442,867	470,596	496,826	531,177	547,972	603,800	623,687
Less accumulated depreciation		(192,213)	(202,964)	(216,361)	(228,706)	(241,503)	(254,455)	(268,441)	(283,845)	(299,219)	(316,490)
Subtotal		172,784	187,492	199,475	214,161	229,093	242,371	262,736	264,127	304,581	307,197
Intangible assets, net of amortization*		16,447	16,171	15,895	15,619	15,366	15,112	14,858	14,604	14,351	14,098
Land and rights-of-way		1,692	1,704	1,662	1,662	1,732	1,949	1,949	1,949	1,949	1,949
Construction work in progress		66,759	61,952	51,974	58,940	70,799	80,191	121,985	164,749	171,175	262,392
Total capital assets, net of depreciation and amortization	$	**257,682**	**267,319**	**269,006**	**290,382**	**316,990**	**339,623**	**401,528**	**445,429**	**492,056**	**585,636**

* Include amortizable and non-amortizable intangible assets.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



Statistical Section

Revenue Capacity

Water Rates History

Wastewater Rates History

Hetchy Power Electric Rates History

CleanPowerSF Electric Rates History

Net Revenue and Debt Service Coverage

Revenue Capacity

Water Rate History

Fiscal Years Ended 2013 to 2022

Rates Per Hundred Cubic Feet

	Retail									Wholesale	
		Single-Family			Multiple-Family			Non-Residential			
Fiscal Years Ended June 30	Service Charge ($)[1]	Volume Charge ($/ccf) (0-3 ccf)	Volume Charge ($/ccf) (over 3 ccf)	% Increase/ (Decrease)[4]	Volume Charge ($/ccf) (0-3 ccf)	Volume Charge ($/ccf) (over 3 ccf)	% Increase/ (Decrease)[4]	Volume Charge ($/ccf)	% Increase/ (Decrease)	Volume Charge ($/ccf)	% Increase/ (Decrease)
2013	7.90	3.90	5.20	12.5	4.20	5.50	13.0	5.10	12.8	2.93	11.4
2014	8.40	4.20	5.50	6.5	4.50	5.90	6.9	5.40	5.9	2.45	(16.4)

	Retail									Wholesale	
		Single-Family			Multiple-Family			Non-Residential			
Fiscal Years Ended June 30	Service Charge ($)[1]	Volume Charge ($/ccf) (0-4 ccf)	Volume Charge ($/ccf) (over 4 ccf)	% Increase/ (Decrease)[4]	Volume Charge ($/ccf) (0-3 ccf)	Volume Charge ($/ccf) (over 3 ccf)	% Increase/ (Decrease)[4]	Volume Charge ($/ccf)	% Increase/ (Decrease)	Volume Charge ($/ccf)	% Increase/ (Decrease)
2015 [2, 3]	8.81	4.86	6.52	10.1	4.98	6.67	9.4	5.79	7.2	2.93	19.6
2016	9.87	5.45	7.31	12.1	5.58	7.48	12.1	6.49	12.1	3.75	28.0
2017	10.86	6.00	8.05	10.1	6.14	8.23	10.0	7.14	10.0	4.10	9.3
2018	11.63	6.42	8.62	7.0	6.57	8.81	7.0	7.64	7.0	4.10	0.0
2019 [5]	12.30	7.10	9.10	8.0	7.22	9.26	7.6	8.43	10.3	4.10	0.0
2020 [5]	13.28	7.85	9.61	8.5	7.94	9.73	8.4	9.14	8.4	4.10	0.0
2021 [5]	14.19	8.68	10.15	8.3	8.73	10.23	8.1	9.81	7.3	4.10	0.0
2022 [5]	15.17	9.60	10.71	8.4	9.60	10.76	8.1	10.55	7.5	4.10	0.0

[1]Monthly service charge for 5/8" meter. Larger meter sizes charged at different rates.
[2]Rates approved on May 13, 2014.
[3]Effective July 1, 2015, the Single-Family Residential Tier 1 changed from 0-3 ccf to 0-4 ccf.
[4]The percentage increase/(decrease) is based on an average monthly bill of 6 ccf for Single-Family and 4 ccf for Multiple-Family.
[5]Rates approved on May 8, 2018.

Source: San Francisco Public Utilities Commission Annual Disclosure Reports and Rate Schedules.

Revenue Capacity

Wastewater Rate History

Fiscal Years Ended 2013 to 2022

Rates Per Hundred Cubic Feet

Fiscal Years Ended June 30	Single-Family Volume Charge ($/ccf) (0-3 ccf)	Single-Family Volume Charge ($/ccf) (over 3 ccf)	Single-Family % Increase/ (Decrease)[3]	Multiple-Family Volume Charge ($/ccf) (0-3 ccf)	Multiple-Family Volume Charge ($/ccf) (over 3 ccf)	Multiple-Family % Increase/ (Decrease)[3]	Non-Residential Volume Charge ($/ccf)	Non-Residential Chemical Oxygen Demand Charge ($/lb)	Non-Residential Suspended Solids Charge ($/lb)	Non-Residential Oil and Grease Charge ($/lb)
2013	7.52	10.03	5.1	7.86	10.49	5.0	6.55	0.22	0.88	1.10
2014	7.90	10.53	5.0	8.25	11.01	5.0	6.62	0.22	0.89	1.11

Fiscal Years Ended June 30	Single-Family Volume Charge ($/ccf) (0-4 ccf)	Single-Family Volume Charge ($/ccf) (over 4 ccf)	Single-Family % Increase/ (Decrease)[3]	Multiple-Family Volume Charge ($/ccf) (0-3 ccf)	Multiple-Family Volume Charge ($/ccf) (over 3 ccf)	Multiple-Family % Increase/ (Decrease)[3]	Non-Residential Volume Charge ($/ccf)	Non-Residential Chemical Oxygen Demand Charge ($/lb)	Non-Residential Suspended Solids Charge ($/lb)	Non-Residential Oil and Grease Charge ($/lb)
2015 [1,2]	9.06	11.23	6.1	9.24	11.48	10.0	6.15	0.44	0.83	0.87
2016	9.82	11.34	6.9	9.95	11.51	5.8	6.45	0.46	0.87	0.91
2017	10.84	11.66	9.0	10.91	11.75	7.9	6.90	0.49	0.93	0.97
2018 [4]	12.40	12.40	12.2	12.40	12.40	11.8	7.66	0.55	1.03	1.08

Fiscal Years Ended June 30	Service Charge ($)[5]	Single-Family Volume Charge ($/ccf)	Single-Family % Increase/ (Decrease)[3]	Multiple-Family Volume Charge ($/ccf)	Multiple-Family % Increase/ (Decrease)[3]	Non-Residential Volume Charge ($/ccf)	Non-Residential Chemical Oxygen Demand Charge ($/lb)	Non-Residential Suspended Solids Charge ($/lb)	Non-Residential Oil and Grease Charge ($/lb)
2019 [6]	0.98	13.06	4.5	13.06	3.5	7.84	0.52	1.30	1.33
2020 [6]	2.19	13.88	6.6	13.88	5.3	8.29	0.56	1.41	1.42
2021 [6]	3.60	14.89	9.1	14.89	7.4	8.86	0.60	1.53	1.54
2022 [6]	5.21	15.97	8.9	15.97	9.5	9.46	0.65	1.65	1.66

[1]Effective July 1, 2015, the Single-Family Residential Tier 1 rate structure changed from 0-3 ccf to 0-4 ccf.
[2]Four years of rates were approved on May 13, 2014.
[3]The percentage increase/(decrease) is based on an average monthly bill of 5.4 ccf for Single-Family (based on a 90% flow factor) and 3.8 ccf for Multiple-Family (based on a 95% flow factor).
[4]Effective July 1, 2017, no tiers for wastewater volumetric charges for single-family and multi-family residential wastewater.
[5]Effective July 1, 2018, all wastewater customers pay a monthly service charge per account.
[6]Rates approved on May 22, 2018.

Source: San Francisco Public Utilities Commission Annual Disclosure Reports and Rate Schedules.

Revenue Capacity
Hetchy Power Electric Rate History
Fiscal Years Ended 2013 to 2022

Rates Per Kilowatt Hour		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Residential*											
Residential Services - Multi-family	$	0.18590	0.20052	0.20526	0.21784	0.23073	0.22894	0.23298	0.26429	0.28308	0.33772
Residential - Public Power											
Tier 1		0.10931	0.11200	0.11451	0.11705	0.13391	0.14198	0.14610	0.14868	0.15537	0.17781
Tier 2		0.12427	0.12733	0.13018	0.13306	0.15222	0.16139	0.16607	0.16900	0.17661	0.20211
Tier 3		0.25440	0.26065	0.26649	0.27238	0.31160	0.33037	0.33995	0.34595	0.36153	0.41372
Commercial											
Small General Service		0.18531	0.19717	0.21152	0.22560	0.23020	0.23786	0.24931	0.26884	0.27749	0.32523
Medium General Demand-Metered Service		0.15876	0.17573	0.18503	0.19667	0.20346	0.21265	0.21889	0.23721	0.24167	0.30162
Medium General Demand-Metered TOU** Service		0.12833	0.13953	0.14761	0.15049	0.15893	0.16176	0.16709	0.18735	0.18959	0.23972
Industrial											
Service to Customers with equal to or greater than Demand of 1,000 Kilowatts or More - Secondary Voltage		0.13170	0.14434	0.15216	0.15969	0.16868	0.17553	0.18279	0.19804	0.19537	0.23230
Service to Customers with equal to or greater than Demand of 1,000 Kilowatts or More - Primary Voltage		0.11990	0.13169	0.13908	0.14498	0.15229	0.15874	0.16466	0.17774	0.17627	0.22023
Service to Customers with equal to or greater than Demand of 1,000 Kilowatts or More - Transmission Voltage		0.09431	0.10383	0.10608	0.10743	0.11719	0.12501	0.12786	0.14240	0.13414	0.18171
General Fund City Departments#		0.04250	0.04750	0.05750	0.06750	0.07250	0.07750	0.07377	0.07877	0.08877	0.09877
Streetlights		0.13085	0.13840	0.15045	0.15712	0.15874	0.16451	0.17354	0.18693	0.18754	0.23439
Traffic Signals^		0.14111	0.14762	0.15866	0.17187	0.18018	0.18432	0.18945	0.20194	0.19768	0.20413

*Residential rates include master-metered multi-family services (EM) and multi-family services (ES). Tiers for Residential Public Power vary between Winter and Summer months.
**TOU stands for time-of-use.
#Prior to fiscal year 2019, the General Fund rate shown was one of six rates being charged to customers. In fiscal year 2019, the six rates were consolidated into one, which was set to a ½ cent per kWh increase from the weighted average of the six prior rates. The decrease in fiscal year 2019 is a function of the change in what this line item represents – rates did not decrease.

The rates shown for each year are average rates per kWh charged in the months including June for residential, commercial, and industrial rates. Rates are subject to change at any time.

Source: San Francisco Public Utilities Commission Rates Schedules and Fees and PG&E electric rates schedules.

Revenue Capacity

CleanPowerSF Electric Rate History

Fiscal Years Ended 2016 to 2022

	2013	2014	2015	2016^	2017	2018	2019	2020	2021#	2022
Rates per Kilowatt-hour	Data not available - CleanPowerSF launched in May 2016.									
Residential										
E-1 (Green) $				0.07267	0.07267	0.06836	0.07163	0.08235	0.06918	N/A
E-1 (SuperGreen)				0.09267	0.09267	0.08836	0.08663	0.09235	0.07918	N/A
E-6 (Green)				0.06719	0.06693	0.05868	0.06612	0.08197	0.06935	N/A
E-6 (SuperGreen)				0.08719	0.08693	0.07868	0.08112	0.09197	0.07935	N/A
E-TOUA (Green)				N/A	0.06801	0.06283	0.06548	0.07702	N/A	N/A
E-TOUA (SuperGreen)				N/A	0.08801	0.08283	0.08048	0.08702	N/A	N/A
E-TOUB (Green)				N/A	0.06819	0.06285	0.06460	0.07598	0.06223	N/A
E-TOUB (SuperGreen)				N/A	0.08819	0.08285	0.07960	0.08598	0.07223	N/A
E-TOUC* (Green)				N/A	N/A	N/A	0.07010	0.07913	0.06449	N/A
E-TOUC* (SuperGreen)				N/A	N/A	N/A	0.08510	0.08913	0.07449	N/A
EVA (Green)				0.05837	0.05822	0.05350	0.05358	0.06526	N/A	N/A
EVA (SuperGreen)				0.07837	0.07822	0.07350	0.06858	0.07526	N/A	N/A
EVB (Green)				N/A	0.04747	0.04263	0.03889	0.04692	0.06154	N/A
EVB (SuperGreen)				N/A	0.06747	0.06263	0.05389	0.05692	0.07154	N/A
Green				**New rate classification starting fiscal year 2022						0.09112
SuperGreen										0.10112
Non-Residential										
Small Commercial Green										0.08833
Small Commercial SuperGreen										0.09333
Medium Commerical Green										0.09415
Medium Commercial SuperGreen										0.09915
Large Commercial Green										0.08003
Large Commercial SuperGreen										0.08503
Industrial Green										0.07752
Industrial SuperGreen										0.08252
Streetlights Green										0.07434
Streetlights SuperGreen										0.07934
Outdoor Lighting Green										0.07999
Outdoor Lighting SuperGreen										0.08499
Agriculture Green										0.06277
Agriculture SuperGreen										0.06777
Commercial										
A-1 (Green)				0.07772	0.07740	0.07447	0.07919	0.08011	0.06498	N/A
A-1 (SuperGreen)				0.09772	0.09740	0.08847	0.08919	0.08761	0.07248	N/A
A-1X (Green)				0.07770	0.07751	0.07509	0.07954	0.08184	0.06600	N/A
A-1X (SuperGreen)				0.09770	0.09751	0.08909	0.08954	0.08934	0.07359	N/A
A-6 (Green)				0.08883	0.08820	0.08631	0.09491	0.10079	0.09359	N/A
A-6 (SuperGreen)				0.10883	0.10820	0.10031	0.10491	0.10829	0.10109	N/A
A-10S (Non Time of Use - Green)				0.07940	0.07940	0.07674	0.08355	0.08252	0.06828	N/A
A-10S (Non Time of Use - SuperGreen)				0.09940	0.09940	0.09074	0.08855	0.08752	0.07328	N/A
A-10SX (Time of Use - Green)				0.07899	0.07813	0.07579	0.08322	0.08185	0.06671	N/A
A-10SX (Time of Use - SuperGreen)				0.09899	0.09813	0.08979	0.08822	0.08685	0.07171	N/A
E-19S (Green)				0.07925	0.07853	0.07658	0.08336	0.08010	0.06392	N/A
E-19S (SuperGreen)				0.09925	0.09853	0.09058	0.08836	0.08510	0.06892	N/A
E-19SV (Green)				0.07368	0.07304	0.07104	0.07670	0.07387	0.06150	N/A
E-19SV (SuperGreen)				0.09368	0.09304	0.08504	0.08170	0.07887	0.06650	N/A
E-20P (Green)				0.07005	0.06895	0.06729	0.07300	0.06958	N/A	N/A
E-20P (SuperGreen)				0.09005	0.08895	0.08129	0.08300	0.07708	N/A	N/A
E-20S (Green)				0.07502	0.07395	0.07167	0.07774	0.07434	0.06282	N/A
E-20S (SuperGreen)				0.09502	0.09395	0.08567	0.08774	0.08184	0.07032	N/A

The rates shown for each year are the average rates per kWh calculated by the SFPUC and PG&E in its Joint Rate Comparisons prepared in fiscal years 2016 to 2021. Each average rate is calculated using the energy consumption (and if applicable, demand) of a typical customer on that rate schedule in San Francisco and the rates in place during each reported fiscal year.

*Rate E-TOUC was a new rate beginning fiscal year 2019, and therefore was not included in the Joint Rate Comparison. The same methodology to calculate average rate was applied.

#Fiscal year 2021, Rates E-TOU-A and EVA are closed as of January 2021. Rate E-20P was not included due to lack of data to provided average rate.

**N/A due to new rate classification for fiscal year 2022.

May exclude new rates due to insufficient data for average rate calculation.

Source: San Francisco Public Utilities Commission and PG&E Joint Rate Comparisons. Starting fiscal year 2022, SFPUC CleanPowerSF Management Report.

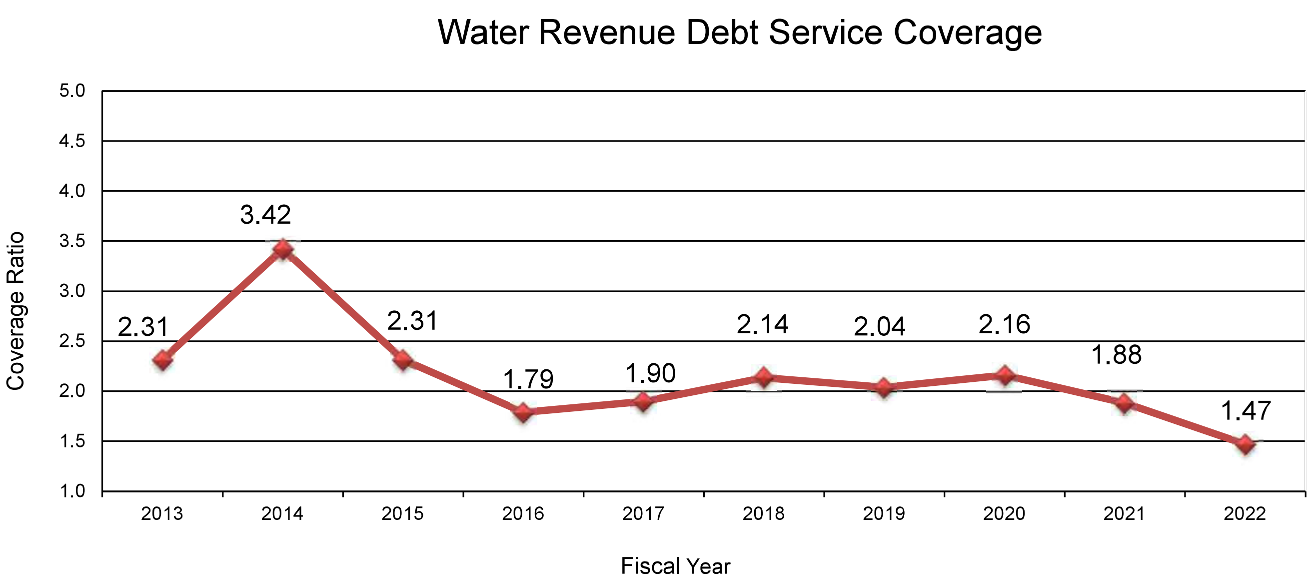
Revenue Capacity

Water - Net Revenue and Debt Service Coverage
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

		2013	2014	2015	2016	2017	2018	2019	2020	2021 #	2022
Operating, other and investment revenue	$	721,189	390,789	431,836	423,111	464,662	532,087	558,041	593,868	581,141	565,317
Less operating, other and maintenance expenses		(303,739)	(333,555)	(296,950)	(314,786)	(421,827)	(370,147)	(357,094)	(398,117)	(448,690)	(401,634)
Adjustment to investing activities[1]		258	(2,438)	732	635	111	(1,245)	(4,821)	(516)	3,846	13,050
Depreciation and non-cash expenses		78,323	95,355	98,192	107,268	121,375	119,624	122,248	148,294	150,257	151,114
Changes in working capital		52,193	46,088	(37,175)	(11,062)	63,520	31,060	(11,073)	(20,763)	24,707	(42,906)
Appropriated fund balance		—	—	—	23,994	10,747	1,452	4,318	17,181	27,785	21,977
Net revenue[4]		548,224	196,239	196,635	229,160	238,588	312,831	311,619	339,947	339,046	306,918
Other available funds[2]		26,744	287,522	248,390	162,733	155,852	186,752	221,362	241,931	128,692	103,506
Funds available for revenue debt service	$	574,968	483,761	445,025	391,893	394,440	499,583	532,981	581,878	467,738	410,424
Revenue debt service[3]	$	248,530	141,325	192,312	219,195	207,812	233,959	261,638	269,210	248,427	279,352
Revenue debt service coverage		**2.31**	**3.42**	**2.31**	**1.79**	**1.90**	**2.14**	**2.04**	**2.16**	**1.88**	**1.47**

[1]Adjustment of investing activities and non-operating revenues to a cash basis.
[2]As per the Indenture, in addition to current year cash flow, the coverage calculation permits the inclusion of all funds except for Trust and Agency Fund not budgeted to be spent in such months and legally available to pay debt service.
[3]Revenue debt service is calculated net of capitalized interest and federal interest subsidy the Commission is scheduled to receive during the 12-month period ending June 30 for any series of bonds.
[4]Net revenues beginning fiscal years 2016 includes appropriated available funds.
Starting in fiscal year 2022, certain types of non operating revenue is included in net revenue.
#Starting fiscal year 2021, Treasure Island revenue and expenses are excluded from debt service coverage.

Source: San Francisco Public Utilities Commission Annual Disclosure Reports.



Revenue Capacity

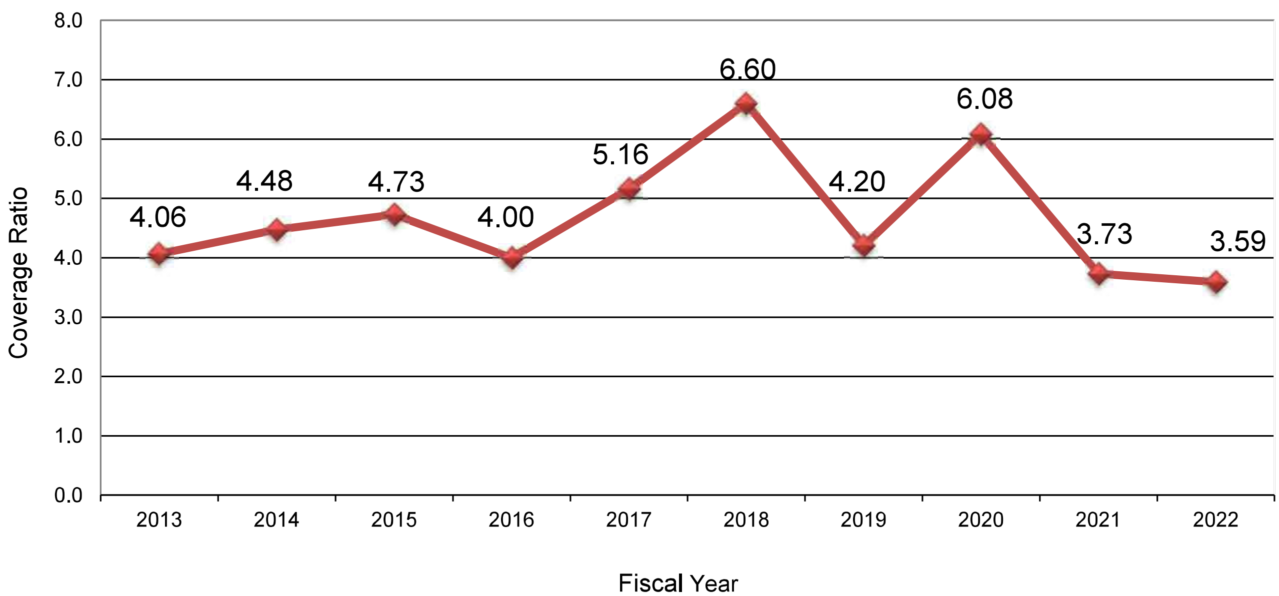
Wastewater - Net Revenue and Debt Service Coverage
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

		2013	2014	2015	2016	2017	2018	2019	2020	2021 #	2022
Operating, other and investment revenue	$	253,078	262,497	257,209	262,960	279,668	317,413	351,782	356,265	325,008	360,756
Less operating, other and maintenance expenses		(208,260)	(216,340)	(216,485)	(221,553)	(244,220)	(238,906)	(259,813)	(262,259)	(290,737)	(255,010)
Adjustment to investing activities[1]		337	(601)	127	(12)	251	(489)	(8,047)	2,950	4,356	8,422
Depreciation and non-cash expenses		52,108	50,717	51,773	56,285	57,998	60,072	68,568	68,603	78,368	77,806
Changes in working capital		(13,795)	12,908	3,923	2,404	26,292	18,336	(2,125)	523	(8,596)	(36,470)
State revolving fund loan payments[3]		(9,421)	—^	—	—	—	—	—	—	—	—
Net revenue[4]		74,047	109,181	96,547	100,084	119,989	156,426	150,365	166,082	108,399	155,504
Other available funds[2]		80,094	109,807	134,413	139,847	131,554	153,596	103,281	215,722	197,778	155,331
Funds available for revenue debt service	$	154,141	218,988	230,960	239,931	251,543	310,022	253,646	381,804	306,177	310,835
Revenue debt service*	$	37,921	48,932	48,878	60,022	48,769*	47,003	60,347	62,797	82,066	86,619
Revenue debt service coverage		**4.06**	**4.48**	**4.73**	**4.00**	**5.16**	**6.60**	**4.20**	**6.08**	**3.73**	**3.59**

[1]Adjustment of investing activities and non-operating revenues to a cash basis.
[2]As per the Indenture, in addition to current year cash flow, the coverage calculation permits the inclusion of all funds except for Trust and Agency Fund not budgeted to be spent in such 12 months and legally available to pay debt service.
[3]State revolving fund loan for Sewer System Improvement projects (starting fiscal year 2019) have the same seniority as revenue bonds.
[4]Starting in fiscal year 2022, certain types of non operating revenue is included in net revenue.
^In January 2013, 2013 Series A refunded the remaining portion of the outstanding state revolving fund loans.
*Effective fiscal year 2013, revenue debt service is calculated net of capitalized interest.
**In fiscal year 2018 Wastewater financial statements, fiscal year 2017 revenue debt service is presented gross of capitalized interest, $60,407.
#Starting fiscal year 2021, Treasure Island revenue and expenses are excluded from debt service coverage.

Source: San Francisco Public Utilities Commission Annual Disclosure Reports.

Wastewater Revenue Debt Service Coverage



Revenue Capacity

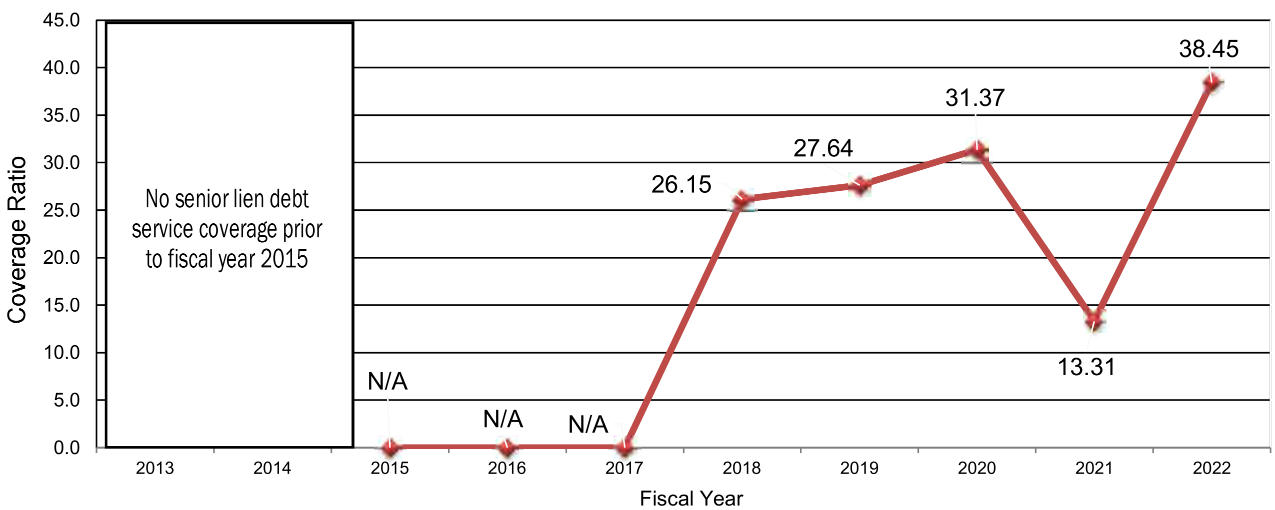
Hetchy Power - Net Revenue and Debt Service Coverage
Fiscal Years Ended 2015 to 2022
(Dollars in Thousands)

		2013	2014	2015	2016	2017	2018	2019	2020	2021 #	2022
Operating, other and investment revenue	$			117,704	122,954	122,187	122,251	152,873	151,835	142,696	176,896
Less operating, other and maintenance expenses				(105,222)	(110,012)	(116,935)	(119,395)	(122,688)	(148,127)	(139,566)	(142,716)
Adjustment to investing activities*				(8)	11	29	419	(2,606)	101	1,902	3,297
Depreciation and non-cash expenses				17,654	15,331	14,208	14,131	14,604	27,470	23,037	18,351
Changes in working capital				7,037	(9,214)	11,740	13,281	(2,386)	3,243	(18,641)	(2,702)
Low Carbon Fuel Standard revenue				—	—	—	—	—	6,920	1,181	1,184
Net revenue[1]		No senior lien debt service coverage prior to fiscal year 2015		37,165	19,070	31,229	30,687	39,798	41,442	10,609	54,310
Other available funds⌂				14,031	13,974	32,199	36,525	31,215	39,119	23,569	44,315
Funds available for revenue debt service	$			51,196	33,044	63,428	67,212	71,013	80,561	34,178	98,625
Revenue debt service**	$			N/A	N/A	N/A	2,570	2,569	2,568	2,567	2,565
Revenue debt service coverage				**N/A**	**N/A**	**N/A**	**26.15**	**27.64**	**31.37**	**13.31**	**38.45**

Not Applicable (N/A) debt service for CREBs, QECBs and NCREBs, is subordinate in lien pursuant to Power's Master Trust Indenture dated May 1, 2015.
[1]Certain types of non operating revenue is included in net revenue.
*Adjustment of investing activities and non-operating revenues to a cash basis.
**Series 2015 AB power revenue bonds senior lien debt service is capitalized through fiscal year 2018. So there is no basis for calculating debt service coverage from fiscal years 2015 to 2017.
⌂Starting fiscal year 2019, other available funds are calculated based on percentage of unrestricted net position due to implementation of new financial system, PeopleSoft. Fiscal year 2018 and prior, fund equity was determined by financial activities in the general ledger fund equity account, however it is no longer available in PeopleSoft.
#Starting fiscal year 2021, Treasure Island revenue and expenses are excluded from debt service coverage.

Source: San Francisco Public Utilities Commission Annual Disclosure Reports.

Hetchy Power Revenue Debt Service Coverage



Statistical Section

Debt Capacity

Debt Capacity
Debt Ratings
As of June 30, 2022

Debt by Type	Ratings by: Moody's Investors Service	Ratings by: Standard & Poor's
Water		
Revenue bonds	Aa2	AA-
Commercial paper - $500 million tax-exempt/taxable		
$200 million Sumitomo Mitsui Letter of Credit	P-1	A-1
$100 million Barclays PLC Letter of Credit	P-1	A-1
$100 million Sumitomo Mitsui Letter of Credit	P-1	A-1
$100 million US Bank Revolving Credit Agreement	N/A	N/A
Certificates of participation - SFPUC Headquarters Project*	Aa1	AA+
Wastewater		
Revenue bonds	Aa2	AA
Commercial paper - $750 million tax-exempt		
$200 million State Street Liquidity Facility	P-1	A-1+
$150 million Bank of America Letter of Credit	P-1	A-1
$150 million Sumitomo Mitsui Letter of Credit	P-1	A-1
$100 million Sumitomo Mitsui Letter of Credit	P-1	A-1
$75 million Toronto Dominion Bank Liquidity Facility	P-1	A-1+
$75 million US Bank Revolving Credit Agreement	N/A	N/A
Certificates of participation - SFPUC Headquarters Project*	Aa1	AA+
Hetchy Power		
Revenue bonds**	N/A	AA
Commercial paper - $250 million tax-exempt		
$125 million Bank of America Letter of Credit***	N/A	A-1
$125 million Sumitomo Mitsui Letter of Credit⌂	N/A	A-1
Certificates of participation - SFPUC Headquarters Project*	Aa1	AA+

*Bonds issued by CCSF and reflects General Fund COP credit rating at issuance.
**Hetchy Power revenue bonds are rated AA- by Fitch.
***Power letter of credit is rated F1+ by Fitch.
⌂Power letter of credit is rated F1 by Fitch.
CleanPowerSF did not have any debt outstanding as of June 30, 2022 but had a credit rating of A2 from Moody's investor service.
Source: Rating agency reports.

Water, Wastewater, Hetchy Power, and CleanPowerSF
Credit Ratings
Fiscal Years Ended 2013 to 2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Moody's Investors Service										
Water	Aa3	Aa3	Aa3	Aa3	Aa3	Aa3	Aa3	Aa2	Aa2	Aa2
Wastewater	Aa3	Aa3	Aa3	Aa3	Aa3	Aa3	Aa3	Aa2	Aa2	Aa2
CleanPowerSF	First rating from Moody's assigned on December 9, 2020.								A2	A2
Standard & Poor's										
Water	AA-	AA-	AA-	AA-	AA-	AA-	AA-	AA-	AA-	AA-
Wastewater	AA-	AA-	AA-	AA	AA	AA	AA	AA	AA	AA
Hetchy Power	Zero debt prior to fiscal year 2015		A+	A+	A+	A+	AA	AA	AA	AA
Fitch Ratings										
Hetchy Power	Zero debt prior to fiscal year 2015		AA-	AA-	AA-	AA-	AA-	AA-	AA-	AA-

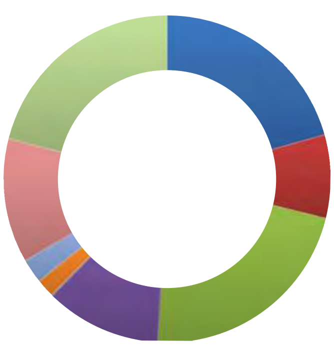
Debt Capacity
Water - Summary of Debt Outstanding (Exclude Commercial Paper)
As of June 30, 2022
(Dollars in Thousands)

Revenue Bonds and Certificates of Participation

Revenue bonds		**Amount**	**Use of proceeds**
2010 Series B (Build America Bonds)	$	349,170	Water System Improvement Program
2010 Series E (Build America Bonds)		345,233	Water System Improvement Program
2010 Series G (Build America Bonds)		354,405	Water System Improvement Program
2015 Series A		416,606	Refunded remainder of 2006A Bonds and partial refunding of 2009A Bonds
2016 Series A		812,324	Refunded portion of 2009A, 2009B and 2010F Bonds
2016 Series B		75,840	Refunded remainder of 2006B and 2006C Bonds and portion of 2010A
2016 Series C		231,106	Refund all of outstanding taxable commercial paper notes.
2017 Series A		30,074	Water System Improvement Program
2017 Series B		36,691	Non Water System Improvement Program (Non-WSIP)
2017 Series C		17,549	Hetchy Water Improvements
2017 Series D		401,218	Refund 2011A and 2012A Bonds
2017 Series E		55,465	Refund 2011C, 2011D and 2012C1 Bonds
2017 Series F		9,807	Refund 2011B Bonds
2017 Series G		31,960	Refund 2011A Bonds
2019 Series A		591,320	Refunding Federal Taxable WSIP
2019 Series B		16,385	Refunding Federal Taxable Hetch Hetchy
2019 Series B		17,850	Refunding Federal Taxable Local Water Main
2020 Series A		190,672	Water System Improvement Program (Green Bonds)
2020 Series B		74,310	Regional Water
2020 Series C		100,176	Local Water
2020 Series D		52,204	Hetch Hetchy Water
2020 Series E		335,535	Refunding Federal Taxable WSIP
2020 Series F		135,455	Refunding Federal Taxable Non-WSIP
2020 Series G		114,765	Refunding Federal Taxable Local Water
2020 Series H		64,815	Refunding Federal Taxable Hetch Hetchy Water
Total revenue bonds		**4,860,935**	
State of California revolving fund loans		**121,761**	
Certificates of participation (COPs)			
2009 Series C		3,138	525 Golden Gate Avenue Headquarters Building
2009 Series D (Build America Bonds)		92,499	525 Golden Gate Avenue Headquarters Building
Total certificates of participation (COPs)		**95,637**	
Total Water debt outstanding	**$**	**5,078,333**	

Amount shown above are inclusive of unamortized bond premium and discount.
Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

Water Debt Composition



2010	$1,048,808	20.7%
2015	$416,606	8.2%
2016	$1,119,270	22.0%
2017	$582,764	11.5%
2009C-COP	$3,138	0.1%
2009D-COP	$92,499	1.8%
SRF Loans	$121,761	2.4%
2019	$625,555	12.3%
2020	$1,067,932	21.0%

Debt Capacity

Wastewater - Summary of Debt Outstanding (Exclude Commercial Paper)

As of June 30, 2022

(Dollars in Thousands)

Revenue Bonds, Notes, Loans and Certificates of Participation

		Amount	Use of proceeds
Revenue bonds/notes			
2010 Series B (Build America Bonds)	$	192,515	Clean Water Capital Improvement Programs
2013 Series A		15,789	Refunded the remaining portion of the 2003 Series A bonds
2013 Series B		354,304	Sewer System Improvement Program
2016 Series A		271,053	Sewer System Improvement Program
2016 Series B		76,411	Sewer System Improvement Program
2018 Series A		256,016	Sewer System Improvement Program
2018 Series B		213,462	Sewer System Improvement Program
2018 Series C		179,145	Sewer System Improvement Program
2021 Series A		324,013	Sewer System Improvement Program
2021 Series B		48,545	Sewer System Improvement Program
2021 Series A Notes		220,121	Sewer System Improvement Program
2021 Series B Notes		130,235	Sewer System Improvement Program
Total revenue bonds/notes		**2,281,609**	
State of California revolving fund loans		**302,659**	Sewer System Improvement Program
Certificates of participation (COPs)			
2009 Series C		830	525 Golden Gate Avenue Headquarters Building
2009 Series D (Build America Bonds)		24,458	525 Golden Gate Avenue Headquarters Building
Total certificates of participation (COPs)		**25,288**	
Total Wastewater debt outstanding	**$**	**2,609,556**	

Amount shown above are inclusive of unamortized bond premium and discount.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

Wastewater Debt Composition

2010	$192,515	7.4%
2013	$370,093	14.2%
2016	$347,464	13.3%
2018	$648,623	24.9%
2021	$372,558	14.3%
2021 Notes	$350,356	13.4%
SRF Loans	$302,659	11.6%
2009C-COP	$830	0.0%
2009D-COP	$24,458	0.9%

Debt Capacity

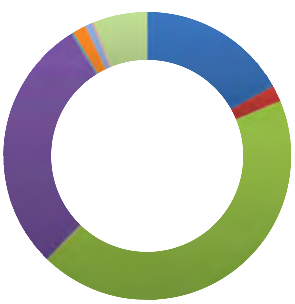
Hetchy Power - Summary of Debt Outstanding (Exclude Commercial Paper)
As of June 30, 2022
(Dollars in Thousands)

Bonds and Certificates of Participation

		Amount	Use of proceeds
Revenue Bonds			
2015 Series A (Green)	$	35,144	Hetch Hetchy facilities
2015 Series B		3,849	Hetch Hetchy facilities
2021 Series A		90,213	Refinance portion costs of Hetchy Power projects
2021 Series B		60,090	Refinance portion costs of Hetchy Power projects
Total revenue bonds		**189,296**	
Other Bonds			
Clean Renewable Energy Bonds (CREBs)		415	Solar energy equipment on city facilities
Qualified Energy Conservation Bonds (QECBs)		3,138	525 Golden Gate Avenue green energy
2015 New Clean Renewable Energy Bonds (NCREBs)		1,637	City facilities renewable energy
Total other bonds		**5,190**	
Certificates of participation (COPs)			
2009 Series C		427	525 Golden Gate Avenue Headquarters Building
2009 Series D (Build America Bonds)		12,593	525 Golden Gate Avenue Headquarters Building
Total certificates of participation (COPs)		**13,020**	
Total Hetchy Power debt outstanding	**$**	**207,506**	

Amount shown above are inclusive of unamortized bond premium and discount.
Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

Hetchy Power Debt Composition



2015 A	$35,144	16.9%
2015 B	$3,849	1.9%
2021 A	$90,213	43.4%
2021 B	$60,090	29.0%
Clean Renewable Energy Bonds 2008 (CREBs)	$415	0.2%
Qualified Energy Conservation bonds 2011 (QECBs)	$3,138	1.5%
New Clean Renewable Energy Bonds 2015 (NCREBs)	$1,637	0.8%
2009C - COP	$427	0.2%
2009D - COP	$12,593	6.1%

Debt Capacity

History of Outstanding Debt by Type - Principal Only (Exclude Commercial Paper)
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

Department-wide

Fiscal Year Ended	Bonds	Revenue Notes	Capital Appreciation Bonds*	State Revolving Fund Loans	Certificates of Participation^	Total
2013	$ 5,194,820	$ —	$ 4,767	$ —	$ 167,219	$ 5,366,806
2014	5,123,609	—	5,107	—	163,934	5,292,650
2015	5,106,187	—	5,471	—	160,615	5,272,273
2016	5,389,447	—	5,860	—	157,207	5,552,514
2017	5,657,792	—	6,278	—	153,673	5,817,743
2018	5,983,428	—	6,725	22,607	150,008	6,162,768
2019	6,513,703	—	2,029	88,032	146,207	6,749,971
2020	6,366,836	—	—	161,820	142,265	6,670,921
2021	6,631,009	—	—	215,966	138,180	6,985,155
2022	6,986,674	350,356	—	424,420	133,945	7,895,395

Water

Fiscal Year Ended	Revenue Bonds^	State Revolving Fund Loans	Capital Appreciation Bonds*	Certificates of Participation^	Total	Service Area by Population	Debt per Capita (in thousands)	Number of Customer Accounts	Debt per Customer Account (in thousands)
2013	$ 4,351,610	$ —	$ 4,767	$ 119,395	$ 4,475,772	2,550,368	$ 1.75	173,744	$ 25.76
2014	4,322,713	—	5,107	117,049	4,444,869	2,595,166	1.71	173,970	25.55
2015	4,298,827	—	5,471	114,680	4,418,978	2,635,893	1.68	174,111	25.38
2016	4,257,454	—	5,860	112,246	4,375,560	2,657,633	1.65	174,083	25.13
2017	4,554,967	—	6,278	109,722	4,670,967	2,680,705	1.74	174,349	26.79
2018	4,909,041	—	6,725	107,106	5,022,872	2,705,107	1.86	175,054	28.69
2019	4,808,548	—	2,029	104,392	4,914,969	2,710,848	1.81	175,803	27.96
2020 *	4,695,295	73,271	—	101,578	4,870,144	2,722,925	1.79	176,379	27.61
2021 *	4,994,775	107,407	—	98,662	5,200,844	2,658,140	1.96	176,246	29.51
2022 **	4,860,935	121,761	—	95,637	5,078,333	2,637,555	1.93	177,072	28.68

Wastewater

Fiscal Year Ended	Revenue Bonds^	Revenue Notes	State Revolving Fund Loans	Certificates of Participation^	Total	Service Area by Population	Debt per Capita (in thousands)	Number of Customer Accounts	Debt per Customer Account (in thousands)
2013	$ 824,821	$ —	$ —	$ 31,570	$ 856,391	841,138	$ 1.02	163,445	$ 5.24
2014	783,801	—	—	30,950	814,751	852,469	0.96	163,537	4.98
2015	747,185	—	—	30,323	777,508	862,004	0.90	163,686	4.75
2016	1,071,883	—	—	29,680	1,101,563	876,103	1.26	163,587	6.73
2017	1,044,925	—	—	29,013	1,073,938	879,166	1.22	163,738	6.56
2018	1,019,146	—	22,607	28,321	1,073,938	880,696	1.22	163,976	6.55
2019	1,652,609	—	88,032	27,603	1,768,244	881,549	2.01	173,956	10.16
2020 *	1,621,733	—	88,549	26,859	1,737,141	870,014	2.00	174,516	9.95
2021 *	1,589,922	—	108,559	26,087	1,724,568	815,201	2.12	174,356	9.89
2022 **	1,931,253	350,356	302,659	25,288	2,609,556	804,534	3.24	175,171	14.90

Hetchy Power

Fiscal Years Ended	Bonds^	Certificates of Participation^	Total	Number of Customer Accounts	Debt per Customer Account (in thousands)
2013	$ 18,389	$ 16,254	$ 34,643	2,257	$ 15.35
2014	17,095	15,935	33,030	2,271	14.54
2015	60,175	15,612	75,787	2,305	32.88
2016	60,110	15,281	75,391	2,627	28.70
2017	57,900	14,938	75,391	3,068	24.57
2018	55,241	14,581	72,838	3,547	20.54
2019	52,546	14,212	66,758	3,747	17.82
2020	49,808	13,828	63,636	4,077	15.61
2021	46,312	13,431	59,743	5,385	11.09
2022	194,486	13,020	207,506	5,110	40.61

*No annual payments for Series 1991A Capital Appreciation Bonds.
**2022 population was estimated by multiplying 2021 population by the 2020 and 2021 population growth rate.
***Updated from last year's ACFR with newly available data
^Bonds, Notes, and Certificates of Participation are inclusive of bond premiums and discounts.

Source: San Francisco Public Utilities Commission Water Sewer System and Power Enterprise Billing System, Customer To Meter Billing System, Customer Care and Billing System, Audited Financial Statements, Office of the Controller, City and County of San Francisco and BAWSCA.org.

Debt Capacity

Department-wide - Future Principal and Interest and Fee Payments for Debt Issues*
(Exclude Commercial Paper)
(Dollars in Thousands)

	Water			Wastewater			Power			SFPUC Total		
Payments Due for FY Ended	Total Principal	Total Interest	Total Principal & Interest Payments	Total Principal	Total Interest	Total Principal & Interest Payments	Total Principal	Total Interest	Total Principal & Interest Payments	Total Principal	Total Interest	Total Principal & Interest Payments
2023	$ 131,692	186,995	318,687	37,652	78,419	116,071	2,397	7,468	9,865	171,741	272,882	444,623
2024	141,904	181,754	323,658	40,961	78,741	119,702	2,035	7,408	9,443	184,900	267,903	452,803
2025	147,464	176,129	323,593	42,914	79,330	122,244	4,062	7,296	11,358	194,440	262,755	457,195
2026	159,088	169,962	329,050	263,121	76,414	339,535	4,231	7,128	11,359	426,440	253,504	679,944
2027	164,979	163,173	328,152	179,295	74,543	253,838	4,399	6,955	11,354	348,673	244,671	593,344
2028	170,663	156,003	326,666	52,293	71,779	124,072	4,284	6,763	11,047	227,240	234,545	461,785
2029	178,221	148,447	326,668	54,504	69,558	124,062	4,184	6,566	10,750	236,909	224,571	461,480
2030	186,990	140,463	327,453	56,824	67,224	124,048	4,380	6,363	10,743	248,194	214,050	462,244
2031	193,781	132,595	326,376	59,263	64,773	124,036	4,592	6,156	10,748	257,636	203,524	461,160
2032	202,850	124,944	327,794	61,822	62,200	124,022	4,794	5,941	10,735	269,466	193,085	462,551
2033	205,791	116,636	322,427	64,504	59,500	124,004	4,929	5,721	10,650	275,224	181,857	457,081
2034	215,933	107,597	323,530	67,246	56,752	123,998	5,063	5,507	10,570	288,242	169,856	458,098
2035	223,957	98,137	322,094	70,027	53,953	123,980	5,287	5,281	10,568	299,271	157,371	456,642
2036	239,674	88,618	328,292	72,937	51,034	123,971	5,526	5,049	10,575	318,137	144,701	462,838
2037	252,241	78,967	331,208	75,983	47,972	123,955	5,778	4,805	10,583	334,002	131,744	465,746
2038	232,135	69,780	301,915	79,088	44,848	123,936	6,031	4,550	10,581	317,254	119,178	436,432
2039	240,756	61,273	302,029	82,259	41,655	123,913	6,300	4,283	10,583	329,315	107,211	436,526
2040	249,228	52,568	301,796	85,498	38,400	123,897	6,575	4,005	10,580	341,301	94,973	436,274
2041	206,900	44,534	251,434	88,808	35,070	123,878	6,866	3,713	10,579	302,574	83,317	385,891
2042	161,479	38,252	199,731	92,260	31,605	123,864	7,166	3,411	10,577	260,905	73,268	334,172
2043	113,564	33,545	147,109	93,975	28,029	122,004	6,500	3,115	9,615	214,039	64,688	278,727
2044	117,692	29,404	147,096	86,290	24,457	110,747	6,790	2,827	9,617	210,772	56,688	267,460
2045	81,090	25,696	106,786	89,853	20,891	110,745	7,090	2,527	9,617	178,033	49,114	227,147
2046	84,843	22,411	107,254	93,529	17,222	110,752	7,405	2,212	9,617	185,777	41,845	227,622
2047	88,763	18,978	107,741	97,356	13,388	110,745	7,720	1,898	9,618	193,839	34,264	228,103
2048	92,877	15,373	108,250	80,217	9,956	90,173	8,035	1,583	9,618	181,129	26,912	208,041
2049	99,252	11,385	110,637	81,204	6,946	88,150	8,360	1,255	9,615	188,816	19,586	208,402
2050	104,183	7,015	111,198	46,053	4,618	50,671	8,705	914	9,619	158,941	12,547	171,488
2051	109,364	2,426	111,790	46,000	2,962	48,962	9,060	558	9,618	164,424	5,946	170,370
2052	4,680	47	4,727	47,427	1,270	48,697	9,430	189	9,619	61,537	1,506	63,043
2053	—	—	—	8,457	353	8,810	—	—	—	8,457	353	8,810
2054	—	—	—	7,555	241	7,796	—	—	—	7,555	241	7,796
2055	—	—	—	5,110	144	5,254	—	—	—	5,110	144	5,254
2056	—	—	—	5,182	73	5,255	—	—	—	5,182	73	5,255
Total	**$ 4,802,034**	**2,503,103**	**7,305,137**	**2,415,468**	**1,314,320**	**3,729,788**	**177,974**	**131,448**	**309,422**	**7,395,476**	**3,948,871**	**11,344,347**

May not total due to rounding.
*Principal and interest (net of federal interest subsidy) includes bonds, COPs, and state revolving fund loans and excludes premium and discounts.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity

Water - Future Principal and Interest Payments for Debt Issues
(Exclude Commercial Paper)
(Dollars in Thousands)

Principal Payments

Payments Due for FY Ended	State Revolving Fund Loans	COPs Series 2009C	COPs Series 2009D	2010B	2010E	2010G	2015A	2016A	2016B	2016C
2023	$ 3,283	3,124	—	12,780	12,745	—	16,045	32,790	12,530	5,955
2024	3,542	—	3,267	13,245	13,165	—	28,070	23,590	13,175	6,105
2025	3,577	—	3,402	13,725	13,610	—	29,485	24,800	13,720	6,275
2026	3,613	—	3,545	14,225	14,080	—	30,990	26,050	7,715	6,455
2027	3,649	—	3,695	14,765	14,585	—	20,945	38,150	8,015	6,645
2028	3,686	—	3,852	15,355	15,125	—	20,530	46,305	3,815	6,850
2029	3,723	—	4,013	15,965	15,715	—	21,580	48,655	3,990	7,075
2030	3,760	—	4,180	16,600	16,340	—	22,685	51,135	4,180	7,310
2031	3,797	—	4,359	17,260	16,990	—	23,810	53,460	4,370	7,565
2032	3,835	—	4,545	17,945	17,665	11,060	25,000	34,135	—	7,835
2033	3,874	—	4,737	18,660	18,365	11,575	26,280	35,875	—	8,120
2034	3,912	—	4,941	19,405	19,095	12,110	27,490	37,710	—	8,435
2035	3,952	—	5,155	20,175	19,855	12,665	28,610	39,670	—	8,760
2036	3,991	—	5,373	20,980	20,645	13,255	29,765	41,745	—	9,110
2037	4,031	—	5,605	21,810	21,470	13,865	31,135	43,670	—	9,475
2038	4,071	—	5,844	22,680	22,320	14,505	—	45,455	—	9,860
2039	4,112	—	6,094	23,580	23,210	15,175	—	47,305	—	10,265
2040	4,153	—	6,355	24,520	24,130	15,880	—	49,235	—	10,685
2041	4,195	—	6,625	25,495	25,090	16,610	—	—	—	11,125
2042	4,237	—	6,912	—	—	17,380	—	—	—	11,585
2043	4,279	—	—	—	—	18,180	—	—	—	12,070
2044	4,322	—	—	—	—	19,025	—	—	—	12,590
2045	4,365	—	—	—	—	19,900	—	—	—	13,125
2046	4,408	—	—	—	—	20,820	—	—	—	13,685
2047	4,453	—	—	—	—	21,785	—	—	—	14,270
2048	4,497	—	—	—	—	22,790	—	—	—	—
2049	4,542	—	—	—	—	23,845	—	—	—	—
2050	4,588	—	—	—	—	24,945	—	—	—	—
2051	4,634	—	—	—	—	26,100	—	—	—	—
2052	4,680	—	—	—	—	—	—	—	—	—
2053	—	—	—	—	—	—	—	—	—	—
2054	—	—	—	—	—	—	—	—	—	—
2055	—	—	—	—	—	—	—	—	—	—
2056	—	—	—	—	—	—	—	—	—	—
Total	**$ 121,761**	**3,124**	**92,499**	**349,170**	**344,200**	**351,470**	**382,420**	**719,735**	**71,510**	**231,230**

(Continued)

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity

Water - Future Principal and Interest Payments for Debt Issues

(Exclude Commercial Paper)

(Dollars in Thousands)

	Principal Payments									
Payments Due for FY Ended	**2017A**	**2017B**	**2017C**	**2017D**	**2017E**	**2017F**	**2017G**	**2019A**	**2019B**	**2019C**
2023	$ 2,325	2,835	1,355	1,455	765	700	13,070	3,495	70	75
2024	2,445	2,985	1,425	1,270	795	735	13,665	3,565	70	80
2025	2,570	3,135	1,500	10,230	835	770	5,225	3,640	75	80
2026	2,705	3,295	1,575	20,515	7,425	875	—	3,720	75	80
2027	2,840	3,465	1,660	21,540	7,830	920	—	3,805	80	85
2028	2,990	3,645	1,745	22,615	6,630	965	—	3,900	80	90
2029	3,140	3,830	1,830	23,740	7,080	1,020	—	4,000	85	90
2030	3,300	4,025	1,925	24,935	8,555	855	—	4,105	85	95
2031	—	—	—	26,140	7,960	905	—	4,215	90	95
2032	—	—	—	14,980	1,015	960	—	31,095	90	100
2033	—	—	—	46,855	—	—	—	4,055	1,340	1,465
2034	—	—	—	59,875	—	—	—	4,180	1,385	1,510
2035	—	—	—	61,540	—	—	—	4,310	1,425	1,550
2036	—	—	—	11,105	—	—	—	63,930	1,470	1,600
2037	4,685	5,715	2,735	—	—	—	—	80,670	1,525	1,660
2038	—	—	—	—	—	—	—	86,145	1,575	1,720
2039	—	—	—	—	—	—	—	38,500	1,630	1,775
2040	—	—	—	—	—	—	—	39,650	1,690	1,835
2041	—	—	—	—	—	—	—	40,970	1,745	1,900
2042	—	—	—	—	—	—	—	42,370	1,800	1,965
2043	—	—	—	—	—	—	—	59,450	—	—
2044	—	—	—	—	—	—	—	61,550	—	—
2045	—	—	—	—	—	—	—	—	—	—
2046	—	—	—	—	—	—	—	—	—	—
2047	—	—	—	—	—	—	—	—	—	—
2048	—	—	—	—	—	—	—	—	—	—
2049	—	—	—	—	—	—	—	—	—	—
2050	—	—	—	—	—	—	—	—	—	—
2051	—	—	—	—	—	—	—	—	—	—
2052	—	—	—	—	—	—	—	—	—	—
2053	—	—	—	—	—	—	—	—	—	—
2054	—	—	—	—	—	—	—	—	—	—
2055	—	—	—	—	—	—	—	—	—	—
2056	—	—	—	—	—	—	—	—	—	—
Total	**$ 27,000**	**32,930**	**15,750**	**346,795**	**48,890**	**8,705**	**31,960**	**591,320**	**16,385**	**17,850**

(Continued)

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity

Water - Future Principal and Interest Payments for Debt Issues
(Exclude Commercial Paper)
(Dollars in Thousands)

					Principal Payments				
Payments Due for FY Ended	2020A	2020B	2020C	2020D	2020E	2020F	2020G	2020H	Total Principal Payments
2023	$ —	—	—	—	500	—	5,795	—	131,692
2024	—	—	—	—	1,530	1,430	7,065	685	141,904
2025	—	—	—	—	1,575	1,440	7,105	690	147,464
2026	—	—	—	—	1,620	1,450	8,385	695	159,088
2027	—	—	—	—	1,665	1,465	8,475	700	164,979
2028	—	—	—	—	1,715	1,485	8,575	710	170,663
2029	—	—	—	—	1,765	1,505	8,700	720	178,221
2030	—	—	—	—	1,815	1,530	8,840	735	186,990
2031	—	—	—	—	5,300	5,720	9,005	2,740	193,781
2032	—	—	—	—	5,450	5,830	18,520	2,790	202,850
2033	—	—	—	—	5,605	5,955	10,180	2,850	205,791
2034	—	—	—	—	5,770	6,090	1,110	2,915	215,933
2035	—	—	—	—	5,930	6,235	1,140	2,985	223,957
2036	—	—	—	—	6,100	6,385	1,165	3,055	239,674
2037	—	—	—	—	1,645	910	1,200	435	252,241
2038	—	—	—	—	6,560	6,875	1,235	3,290	232,135
2039	—	—	—	—	57,375	7,075	1,275	3,385	240,756
2040	—	—	—	—	59,020	7,280	1,315	3,480	249,228
2041	—	—	—	—	60,715	7,490	1,355	3,585	206,900
2042	—	—	—	—	62,450	7,700	1,395	3,685	161,479
2043	—	—	—	—	6,405	7,940	1,440	3,800	113,564
2044	—	—	—	—	6,600	8,195	1,490	3,920	117,692
2045	10,730	4,300	5,950	3,425	6,795	8,455	—	4,045	81,090
2046	11,445	4,590	6,340	3,660	7,000	8,725	—	4,170	84,843
2047	12,195	4,895	6,760	3,895	7,205	9,000	—	4,305	88,763
2048	19,525	7,840	10,825	6,240	7,425	9,290	—	4,445	92,877
2049	30,970	12,520	17,360	10,015	—	—	—	—	99,252
2050	32,160	13,240	18,550	10,700	—	—	—	—	104,183
2051	33,870	13,945	19,550	11,265	—	—	—	—	109,364
2052	—	—	—	—	—	—	—	—	4,680
2053	—	—	—	—	—	—	—	—	—
2054	—	—	—	—	—	—	—	—	—
2055	—	—	—	—	—	—	—	—	—
2056	—	—	—	—	—	—	—	—	—
Total	**$ 150,895**	**61,330**	**$ 85,335**	**49,200**	**335,535**	**135,455**	**114,765**	**64,815**	**4,802,034**

(Continued)

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity

Water - Future Principal and Interest Payments for Debt Issues
(Exclude Commercial Paper)
(Dollars in Thousands)

Interest Payments										
Payments Due for FY Ended	State Revolving Fund Loans	COPs Series 2009C	COPs 2009D Before Subsidy	2010B Before Subsidy	2010E Before Subsidy	2010G Before Subsidy	2015A	2016A	2016B	2016C
2023	$ 1,142	78	5,968	20,329	19,748	24,427	17,708	32,776	2,723	8,614
2024	1,185	—	5,864	19,613	19,104	24,427	16,643	31,366	2,099	8,463
2025	1,149	—	5,652	18,871	18,417	24,427	15,223	30,157	1,569	8,298
2026	1,114	—	5,431	18,102	17,691	24,427	13,721	28,885	1,209	8,118
2027	1,077	—	5,201	17,269	16,917	24,427	12,421	27,280	894	7,925
2028	1,041	—	4,960	16,365	16,084	24,427	11,385	25,169	639	7,719
2029	1,004	—	4,710	15,426	15,182	24,427	10,332	22,795	464	7,498
2030	967	—	4,450	14,448	14,219	24,428	9,225	20,300	279	7,260
2031	929	—	4,176	13,433	13,219	24,428	8,097	17,952	87	7,007
2032	892	—	3,887	12,376	12,180	24,043	6,915	16,030	—	6,738
2033	853	—	3,585	11,278	11,099	23,256	5,632	14,280	—	6,448
2034	814	—	3,272	10,136	9,976	22,433	4,425	12,440	—	6,138
2035	775	—	2,944	8,950	8,809	21,572	3,303	10,506	—	5,809
2036	736	—	2,603	7,714	7,593	20,672	2,145	8,470	—	5,463
2037	696	—	2,247	6,430	6,329	19,729	778	6,554	—	5,098
2038	655	—	1,875	5,096	5,015	18,743	—	4,771	—	4,712
2039	615	—	1,488	3,708	3,650	17,712	—	2,916	—	4,306
2040	574	—	1,084	2,265	2,229	16,633	—	985	—	3,883
2041	532	—	664	765	753	15,504	—	—	—	3,443
2042	490	—	224	—	—	14,323	—	—	—	2,985
2043	448	—	—	—	—	13,087	—	—	—	2,499
2044	405	—	—	—	—	11,794	—	—	—	1,983
2045	362	—	—	—	—	10,441	—	—	—	1,445
2046	318	—	—	—	—	9,026	—	—	—	884
2047	273	—	—	—	—	7,546	—	—	—	299
2048	229	—	—	—	—	5,997	—	—	—	—
2049	184	—	—	—	—	4,376	—	—	—	—
2050	139	—	—	—	—	2,681	—	—	—	—
2051	93	—	—	—	—	907	—	—	—	—
2052	47	—	—	—	—	—	—	—	—	—
2053	—	—	—	—	—	—	—	—	—	—
2054	—	—	—	—	—	—	—	—	—	—
2055	—	—	—	—	—	—	—	—	—	—
2056	—	—	—	—	—	—	—	—	—	—
Total	**$ 19,738**	**78**	**70,285**	**222,574**	**218,214**	**500,320**	**137,953**	**313,632**	**9,963**	**133,033**

(Continued)

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity

Water - Future Principal and Interest Payments for Debt Issues
(Exclude Commercial Paper)
(Dollars in Thousands)

Interest Payments										
Payments Due for FY Ended	**2017A**	**2017B**	**2017C**	**2017D**	**2017E**	**2017F**	**2017G**	**2019A**	**2019B**	**2019C**
2023	$ 1,292	1,576	754	17,199	2,376	418	706	19,328	558	608
2024	1,173	1,430	684	17,131	2,337	382	343	19,258	556	605
2025	1,047	1,277	611	16,843	2,296	344	76	19,185	553	603
2026	915	1,116	534	16,074	2,090	303	—	19,105	551	600
2027	777	947	453	15,023	1,709	258	—	19,018	549	598
2028	631	770	368	13,919	1,347	211	—	18,924	546	595
2029	478	583	279	12,760	1,004	162	—	18,825	543	592
2030	317	386	185	11,543	613	115	—	18,722	541	589
2031	234	285	136	10,307	220	71	—	18,611	538	586
2032	234	286	137	9,331	20	24	—	18,119	535	583
2033	234	286	137	7,797	—	—	—	17,623	513	558
2034	234	286	137	5,129	—	—	—	17,499	470	511
2035	234	286	137	2,094	—	—	—	17,367	425	463
2036	234	286	137	278	—	—	—	16,244	377	411
2037	118	142	67	—	—	—	—	13,856	324	353
2038	—	—	—	—	—	—	—	11,101	270	294
2039	—	—	—	—	—	—	—	9,042	213	232
2040	—	—	—	—	—	—	—	7,752	155	168
2041	—	—	—	—	—	—	—	6,385	94	103
2042	—	—	—	—	—	—	—	4,938	32	35
2043	—	—	—	—	—	—	—	3,170	—	—
2044	—	—	—	—	—	—	—	1,069	—	—
2045	—	—	—	—	—	—	—	—	—	—
2046	—	—	—	—	—	—	—	—	—	—
2047	—	—	—	—	—	—	—	—	—	—
2048	—	—	—	—	—	—	—	—	—	—
2049	—	—	—	—	—	—	—	—	—	—
2050	—	—	—	—	—	—	—	—	—	—
2051	—	—	—	—	—	—	—	—	—	—
2052	—	—	—	—	—	—	—	—	—	—
2053	—	—	—	—	—	—	—	—	—	—
2054	—	—	—	—	—	—	—	—	—	—
2055	—	—	—	—	—	—	—	—	—	—
2056	—	—	—	—	—	—	—	—	—	—
Total	**$ 8,152**	**9,942**	**4,756**	**155,429**	**14,011**	**2,288**	**1,125**	**315,141**	**8,343**	**9,088**

(Continued)

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity

Water - Future Principal and Interest Payments for Debt Issues
(Exclude Commercial Paper)
(Dollars in Thousands)

		Interest Payments										
Payments Due for FY Ended		2020A	2020B	2020C	2020D	2020E	2020F	2020G	2020H	Federal Interest Subsidy	Total Interest Payments Net of Subsidy	Total Principal & Interest Payments
2023	$	7,294	3,067	3,413	1,476	9,522	3,598	1,837	1,721	(23,260)	186,995	318,687
2024		7,295	3,067	3,413	1,476	9,493	3,594	1,809	1,720	(22,776)	181,754	323,658
2025		7,295	3,067	3,413	1,477	9,449	3,586	1,765	1,715	(22,235)	176,129	323,593
2026		7,295	3,067	3,413	1,476	9,404	3,575	1,704	1,710	(21,668)	169,962	329,050
2027		7,295	3,067	3,414	1,476	9,357	3,559	1,621	1,703	(21,061)	163,173	328,152
2028		7,295	3,067	3,414	1,476	9,310	3,541	1,515	1,694	(20,409)	156,003	326,666
2029		7,295	3,067	3,414	1,476	9,261	3,519	1,387	1,684	(19,719)	148,447	326,668
2030		7,295	3,067	3,414	1,476	9,210	3,494	1,241	1,672	(18,993)	140,463	327,453
2031		7,295	3,067	3,414	1,476	9,109	3,429	1,084	1,641	(18,237)	132,595	326,376
2032		7,294	3,066	3,413	1,476	8,958	3,320	820	1,589	(17,324)	124,944	327,794
2033		7,294	3,066	3,413	1,476	8,801	3,197	524	1,530	(16,245)	116,636	322,427
2034		7,295	3,066	3,413	1,476	8,641	3,062	400	1,465	(15,122)	107,597	323,530
2035		7,295	3,067	3,413	1,476	8,476	2,918	374	1,396	(13,953)	98,137	322,094
2036		7,295	3,067	3,413	1,476	8,306	2,764	346	1,322	(12,734)	88,618	328,292
2037		7,295	3,067	3,413	1,476	8,196	2,672	313	1,278	(11,464)	78,967	331,208
2038		7,295	3,066	3,413	1,476	8,080	2,561	275	1,225	(10,143)	69,780	301,915
2039		7,295	3,066	3,413	1,476	7,177	2,363	236	1,130	(8,765)	61,273	302,029
2040		7,295	3,066	3,413	1,476	5,533	2,159	196	1,033	(7,331)	52,568	301,796
2041		7,295	3,066	3,413	1,476	3,842	1,949	155	932	(5,837)	44,534	251,434
2042		7,295	3,066	3,413	1,476	2,102	1,733	112	829	(4,801)	38,252	199,731
2043		7,295	3,067	3,413	1,476	1,126	1,498	68	717	(4,319)	33,545	147,109
2044		7,295	3,067	3,413	1,476	934	1,244	23	595	(3,893)	29,404	147,096
2045		7,026	2,959	3,294	1,425	737	983	—	470	(3,446)	25,696	106,786
2046		6,471	2,737	3,049	1,318	534	712	—	341	(2,979)	22,411	107,254
2047		5,893	2,500	2,787	1,205	325	434	—	207	(2,491)	18,978	107,741
2048		5,131	2,181	2,435	1,053	109	146	—	70	(1,979)	15,373	108,250
2049		3,917	1,672	1,871	809	—	—	—	—	(1,444)	11,385	110,637
2050		2,400	1,028	1,153	498	—	—	—	—	(885)	7,015	111,198
2051		814	349	391	169	—	—	—	—	(299)	2,426	111,790
2052		—	—	—	—	—	—	—	—	—	47	4,727
2053		—	—	—	—	—	—	—	—	—	—	—
2054		—	—	—	—	—	—	—	—	—	—	—
2055		—	—	—	—	—	—	—	—	—	—	—
2056		—	—	—	—	—	—	—	—	—	—	—
Total	**$**	**192,139**	**80,889**	**90,071**	**38,950**	**165,992**	**65,610**	**17,805**	**31,389**	**(333,811)**	**2,503,103**	**7,305,137**

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity

Wastewater - Future Principal and Interest Payments for Debt Issues

(Exclude Commercial Paper)

(Dollars in Thousands)

	Principal Payments							
Payments Due for FY Ended	State Revolving Fund Loans	COPs Series 2009C	COPs Series 2009D	2010B	2013A	2013B	2016A	2016B
2023	$ 2,481	826	—	7,280	13,090	—	—	—
2024	3,192	—	864	7,505	575	8,835	5,475	1,545
2025	5,079	—	900	7,745	610	9,280	5,760	1,625
2026	5,154	—	937	8,000	1,260	9,130	6,055	1,705
2027	8,693	—	977	8,270	—	10,915	6,365	1,795
2028	8,820	—	1,018	8,560	—	11,475	6,690	1,885
2029	8,948	—	1,061	8,860	—	12,065	7,035	1,980
2030	9,078	—	1,106	9,180	—	12,680	7,395	2,085
2031	9,211	—	1,152	9,520	—	13,330	7,775	2,190
2032	9,345	—	1,202	9,875	—	14,015	8,170	2,305
2033	9,481	—	1,253	10,250	—	14,735	8,590	2,420
2034	9,619	—	1,307	10,640	—	15,415	9,030	2,545
2035	9,759	—	1,363	11,045	—	16,045	9,495	2,675
2036	9,902	—	1,420	11,470	—	16,695	9,980	2,815
2037	10,046	—	1,482	11,910	—	17,375	10,495	2,960
2038	10,193	—	1,545	12,365	—	18,090	10,975	3,095
2039	10,342	—	1,612	12,845	—	18,820	11,425	3,220
2040	10,493	—	1,680	13,340	—	19,590	11,890	3,350
2041	10,646	—	1,752	13,855	—	20,390	12,375	3,490
2042	10,802	—	1,828	—	—	35,625	12,880	3,630
2043	10,960	—	—	—	—	37,080	13,405	3,780
2044	11,120	—	—	—	—	—	13,955	3,935
2045	11,283	—	—	—	—	—	14,520	4,095
2046	11,449	—	—	—	—	—	15,115	4,260
2047	11,616	—	—	—	—	—	15,730	4,435
2048	11,787	—	—	—	—	—	—	—
2049	9,934	—	—	—	—	—	—	—
2050	10,073	—	—	—	—	—	—	—
2051	8,500	—	—	—	—	—	—	—
2052	8,347	—	—	—	—	—	—	—
2053	8,457	—	—	—	—	—	—	—
2054	7,555	—	—	—	—	—	—	—
2055	5,110	—	—	—	—	—	—	—
2056	5,182	—	—	—	—	—	—	—
Total	**$ 302,659**	**826**	**24,458**	**192,515**	**15,535**	**331,585**	**240,580**	**67,820**

(Continued)

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity

Wastewater - Future Principal and Interest and Fee Payments for Debt Issues
(Exclude Commercial Paper)
(Dollars in Thousands)

Principal Payments

Payments Due for FY Ended		2018A	2018B	2018C	2021A	2021B	2021A Notes	2021B Notes	Total Principal Payments
2023	$	7,715	6,260	—	—	—	—	—	37,652
2024		7,160	5,810	—	—	—	—	—	40,961
2025		6,580	5,335	—	—	—	—	—	42,914
2026		6,915	5,610	—	—	—	218,355	—	263,121
2027		7,270	5,900	—	—	—	—	129,110	179,295
2028		7,645	6,200	—	—	—	—	—	52,293
2029		8,035	6,520	—	—	—	—	—	54,504
2030		8,445	6,855	—	—	—	—	—	56,824
2031		8,880	7,205	—	—	—	—	—	59,263
2032		9,335	7,575	—	—	—	—	—	61,822
2033		9,815	7,960	—	—	—	—	—	64,504
2034		10,315	8,375	—	—	—	—	—	67,246
2035		10,845	8,800	—	—	—	—	—	70,027
2036		11,400	9,255	—	—	—	—	—	72,937
2037		11,985	9,730	—	—	—	—	—	75,983
2038		12,600	10,225	—	—	—	—	—	79,088
2039		13,245	10,750	—	—	—	—	—	82,259
2040		13,880	11,275	—	—	—	—	—	85,498
2041		14,510	11,790	—	—	—	—	—	88,808
2042		15,170	12,325	—	—	—	—	—	92,260
2043		15,860	12,890	—	—	—	—	—	93,975
2044		11,445	9,305	9,285	23,905	3,340	—	—	86,290
2045		—	—	31,310	25,130	3,515	—	—	89,853
2046		—	—	32,590	26,420	3,695	—	—	93,529
2047		—	—	33,915	27,775	3,885	—	—	97,356
2048		—	—	35,300	29,050	4,080	—	—	80,217
2049		—	—	36,745	30,235	4,290	—	—	81,204
2050		—	—	—	31,470	4,510	—	—	46,053
2051		—	—	—	32,755	4,745	—	—	46,000
2052		—	—	—	34,095	4,985	—	—	47,427
2053		—	—	—	—	—	—	—	8,457
2054		—	—	—	—	—	—	—	7,555
2055		—	—	—	—	—	—	—	5,110
2056		—	—	—	—	—	—	—	5,182
Total	**$**	**229,050**	**185,950**	**179,145**	**260,835**	**37,045**	**218,355**	**129,110**	**2,415,468**

(Continued)

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity

Wastewater - Future Principal and Interest and Fee Payments for Debt Issues
(Exclude Commercial Paper)
(Dollars in Thousands)

	Interest Payments								
Payments Due for FY Ended	State Revolving Fund Loans *	COPs Series 2009C	COPs 2009D Before Subsidy	2010B Before Subsidy	2013A	2013B	2016A	2016B	2018A
2023	$ 1,524	21	1,578	10,516	405	14,428	10,646	3,001	10,551
2024	1,824	—	1,551	10,169	89	14,207	10,509	2,962	10,179
2025	2,481	—	1,494	9,801	63	13,754	10,228	2,883	9,836
2026	2,406	—	1,436	9,409	25	13,294	9,963	2,809	9,498
2027	4,121	—	1,375	8,992	—	12,793	9,683	2,729	9,144
2028	3,995	—	1,312	8,550	—	12,233	9,356	2,637	8,771
2029	3,867	—	1,245	8,084	—	11,645	9,013	2,541	8,379
2030	3,736	—	1,177	7,592	—	11,026	8,652	2,439	7,967
2031	3,604	—	1,104	7,073	—	10,376	8,273	2,333	7,534
2032	3,470	—	1,027	6,523	—	9,692	7,875	2,220	7,078
2033	3,334	—	948	5,945	—	8,973	7,455	2,101	6,599
2034	3,196	—	865	5,344	—	8,297	7,015	1,977	6,096
2035	3,055	—	778	4,720	—	7,667	6,552	1,847	5,567
2036	2,913	—	689	4,073	—	7,013	6,066	1,710	5,011
2037	2,769	—	594	3,397	—	6,331	5,553	1,565	4,426
2038	2,622	—	496	2,690	—	5,622	5,071	1,430	3,812
2039	2,473	—	393	1,957	—	4,884	4,623	1,303	3,166
2040	2,322	—	287	1,194	—	4,116	4,157	1,172	2,557
2041	2,168	—	175	403	—	3,316	3,672	1,035	1,989
2042	2,013	—	59	—	—	2,196	3,167	893	1,396
2043	1,855	—	—	—	—	741	2,641	745	775
2044	1,694	—	—	—	—	—	2,094	590	228
2045	1,531	—	—	—	—	—	1,524	429	—
2046	1,366	—	—	—	—	—	932	264	—
2047	1,198	—	—	—	—	—	314	88	—
2048	1,028	—	—	—	—	—	—	—	—
2049	855	—	—	—	—	—	—	—	—
2050	716	—	—	—	—	—	—	—	—
2051	575	—	—	—	—	—	—	—	—
2052	463	—	—	—	—	—	—	—	—
2053	353	—	—	—	—	—	—	—	—
2054	242	—	—	—	—	—	—	—	—
2055	144	—	—	—	—	—	—	—	—
2056	73	—	—	—	—	—	—	—	—
Total	**$ 69,987**	**21**	**18,584**	**116,432**	**582**	**182,604**	**155,034**	**43,704**	**130,559**

(Continued)

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity

Wastewater - Future Principal and Interest and Fee Payments for Debt Issues
(Exclude Commercial Paper)
(Dollars in Thousands)

		Interest Payments							
Payments Due for FY Ended	2018B	2018C	2021A	2021B	2021A Notes	2021B Notes	Federal Interest Subsidy	Total Interest Payments Net of Subsidy	Total Principal & Interest Payments
2023	$ 9,142	3,808	11,466	1,852	2,183	1,291	(3,992)	78,419	116,071
2024	8,839	5,486	11,466	1,852	2,184	1,291	(3,868)	78,741	119,702
2025	8,560	7,166	11,466	1,852	2,183	1,291	(3,728)	79,330	122,244
2026	8,287	7,166	11,466	1,853	1,091	1,290	(3,579)	76,414	339,535
2027	7,999	7,165	11,466	1,852	—	646	(3,422)	74,543	253,838
2028	7,697	7,165	11,466	1,852	—	—	(3,255)	71,779	124,072
2029	7,379	7,166	11,466	1,852	—	—	(3,079)	69,558	124,062
2030	7,044	7,166	11,466	1,853	—	—	(2,894)	67,224	124,048
2031	6,692	7,165	11,466	1,852	—	—	(2,698)	64,773	124,036
2032	6,323	7,166	11,466	1,852	—	—	(2,492)	62,200	124,022
2033	5,935	7,166	11,466	1,853	—	—	(2,275)	59,500	124,004
2034	5,527	7,166	11,466	1,853	—	—	(2,050)	56,752	123,998
2035	5,097	7,165	11,466	1,853	—	—	(1,814)	53,953	123,980
2036	4,646	7,166	11,466	1,853	—	—	(1,572)	51,034	123,971
2037	4,171	7,166	11,465	1,852	—	—	(1,317)	47,972	123,955
2038	3,672	7,166	11,466	1,852	—	—	(1,051)	44,848	123,936
2039	3,148	7,166	11,465	1,852	—	—	(776)	41,655	123,913
2040	2,597	7,166	11,466	1,853	—	—	(488)	38,400	123,897
2041	2,020	7,166	11,465	1,852	—	—	(192)	35,070	123,878
2042	1,418	7,165	11,466	1,852	—	—	(20)	31,605	123,864
2043	788	7,166	11,465	1,853	—	—	—	28,029	122,004
2044	233	6,980	10,868	1,769	—	—	—	24,457	110,747
2045	—	6,168	9,642	1,597	—	—	—	20,891	110,745
2046	—	4,890	8,353	1,417	—	—	—	17,222	110,752
2047	—	3,560	6,999	1,228	—	—	—	13,388	110,745
2048	—	2,176	5,723	1,029	—	—	—	9,956	90,173
2049	—	734	4,538	819	—	—	—	6,946	88,150
2050	—	—	3,303	599	—	—	—	4,618	50,671
2051	—	—	2,019	368	—	—	—	2,962	48,962
2052	—	—	682	125	—	—	—	1,270	48,697
2053	—	—	—	—	—	—	—	353	8,810
2054	—	—	—	—	—	—	—	241	7,796
2055	—	—	—	—	—	—	—	144	5,254
2056	—	—	—	—	—	—	—	73	5,255
Total	**$ 117,213**	**169,953**	**292,909**	**47,851**	**7,641**	**5,809**	**(44,562)**	**1,314,320**	**3,729,788**

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity

Power - Future Principal and Interest Payments for Debt Issues
(Exclude Commercial Paper)
(Dollars in Thousands)

	Principal Payments									
Payments Due for FY Ended	Clean Renewable Energy Bonds 2008*	COPs Series 2009C	COPs Series 2009D	Qualified Energy Conservation Bonds 2011	2015A	2015B	New Clean Renewable Energy Bonds 2015	2021A	2021B	Total Principal Payments
2023	$ 421	425	—	555	—	850	146	—	—	2,397
2024	—	—	445	562	—	880	148	—	—	2,035
2025	—	—	463	569	—	910	150	1,385	585	4,062
2026	—	—	483	576	—	945	152	1,455	620	4,231
2027	—	—	503	582	830	150	154	1,530	650	4,399
2028	—	—	524	294	1,020	—	156	1,605	685	4,284
2029	—	—	546	—	1,075	—	158	1,690	715	4,184
2030	—	—	569	—	1,125	—	161	1,775	750	4,380
2031	—	—	594	—	1,185	—	163	1,860	790	4,592
2032	—	—	619	—	1,240	—	165	1,945	825	4,794
2033	—	—	645	—	1,305	—	84	2,035	860	4,929
2034	—	—	673	—	1,370	—	—	2,115	905	5,063
2035	—	—	702	—	1,435	—	—	2,200	950	5,287
2036	—	—	731	—	1,510	—	—	2,290	995	5,526
2037	—	—	763	—	1,585	—	—	2,385	1,045	5,778
2038	—	—	796	—	1,665	—	—	2,480	1,090	6,031
2039	—	—	830	—	1,745	—	—	2,585	1,140	6,300
2040	—	—	865	—	1,835	—	—	2,690	1,185	6,575
2041	—	—	901	—	1,925	—	—	2,800	1,240	6,866
2042	—	—	941	—	2,020	—	—	2,915	1,290	7,166
2043	—	—	—	—	2,125	—	—	3,030	1,345	6,500
2044	—	—	—	—	2,230	—	—	3,155	1,405	6,790
2045	—	—	—	—	2,340	—	—	3,285	1,465	7,090
2046	—	—	—	—	2,460	—	—	3,420	1,525	7,405
2047	—	—	—	—	—	—	—	3,560	4,160	7,720
2048	—	—	—	—	—	—	—	3,705	4,330	8,035
2049	—	—	—	—	—	—	—	3,855	4,505	8,360
2050	—	—	—	—	—	—	—	4,010	4,695	8,705
2051	—	—	—	—	—	—	—	4,175	4,885	9,060
2052	—	—	—	—	—	—	—	4,345	5,085	9,430
2053	—	—	—	—	—	—	—	—	—	—
2054	—	—	—	—	—	—	—	—	—	—
2055	—	—	—	—	—	—	—	—	—	—
2056	—	—	—	—	—	—	—	—	—	—
Total	**$ 421**	**425**	**12,593**	**3,138**	**32,025**	**3,735**	**1,637**	**74,280**	**49,720**	**177,974**

(Continued)

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity

Power - Future Principal and Interest Payments for Debt Issues
(Exclude Commercial Paper)
(Dollars in Thousands)

	Interest Payments										
Payments Due for FY Ended	COPs Series 2009C	COPs 2009D Before Subsidy	QECBs 2011 Before Subsidy	2015A	2015B	NCREBs 2015 Before Subsidy	2021A	2021B	Federal Interest Subsidy	Total Interest Payments Net of Subsidy	Total Principal & Interest Payments
2023	$ 10	812	142	1,593	124	74	3,085	2,045	(417)	7,468	9,865
2024	—	798	116	1,593	93	67	3,085	2,045	(389)	7,408	9,443
2025	—	769	89	1,593	62	60	3,050	2,030	(357)	7,296	11,358
2026	—	739	62	1,593	25	53	2,979	2,000	(323)	7,128	11,359
2027	—	709	35	1,576	3	47	2,905	1,969	(289)	6,955	11,354
2028	—	675	7	1,534	—	39	2,826	1,935	(253)	6,763	11,047
2029	—	641	—	1,482	—	32	2,744	1,900	(233)	6,566	10,750
2030	—	606	—	1,427	—	25	2,657	1,864	(216)	6,363	10,743
2031	—	568	—	1,369	—	17	2,576	1,825	(199)	6,156	10,748
2032	—	530	—	1,309	—	9	2,491	1,784	(182)	5,941	10,735
2033	—	488	—	1,245	—	2	2,401	1,747	(162)	5,721	10,650
2034	—	446	—	1,178	—	—	2,318	1,712	(147)	5,507	10,570
2035	—	400	—	1,108	—	—	2,231	1,674	(132)	5,281	10,568
2036	—	354	—	1,034	—	—	2,142	1,636	(117)	5,049	10,575
2037	—	307	—	957	—	—	2,048	1,594	(101)	4,805	10,583
2038	—	255	—	876	—	—	1,951	1,552	(84)	4,550	10,581
2039	—	203	—	790	—	—	1,850	1,507	(67)	4,283	10,583
2040	—	148	—	701	—	—	1,744	1,461	(49)	4,005	10,580
2041	—	90	—	607	—	—	1,634	1,412	(30)	3,713	10,579
2042	—	31	—	508	—	—	1,519	1,363	(10)	3,411	10,577
2043	—	—	—	405	—	—	1,401	1,309	—	3,115	9,615
2044	—	—	—	296	—	—	1,277	1,254	—	2,827	9,617
2045	—	—	—	181	—	—	1,149	1,197	—	2,527	9,617
2046	—	—	—	61	—	—	1,014	1,137	—	2,212	9,617
2047	—	—	—	—	—	—	875	1,023	—	1,898	9,618
2048	—	—	—	—	—	—	730	853	—	1,583	9,618
2049	—	—	—	—	—	—	578	677	—	1,255	9,615
2050	—	—	—	—	—	—	421	493	—	914	9,619
2051	—	—	—	—	—	—	257	301	—	558	9,618
2052	—	—	—	—	—	—	87	102	—	189	9,619
2053	—	—	—	—	—	—	—	—	—	—	—
2054	—	—	—	—	—	—	—	—	—	—	—
2055	—	—	—	—	—	—	—	—	—	—	—
2056	—	—	—	—	—	—	—	—	—	—	—
Total	**$ 10**	**9,569**	**451**	**25,016**	**307**	**425**	**56,025**	**43,401**	**(3,756)**	**131,448**	**309,422**

May not total due to rounding.
*No interest payments are required.

Source: San Francisco Public Utilities Commission Official Statements.

Statistical Section

Demographic and Economic Information

City and County of San Francisco Economic and General Information

The following provides general economic and demographic information about the City and County of San Francisco (the "City").

San Francisco Area

The corporate limits of the City encompass over 93 square miles, of which approximately 49 square miles are land, with the balance consisting of tidelands and a portion of the San Francisco Bay. The City is located on a peninsula bounded by the Pacific Ocean to the west, the Bay to the east, the entrance to the Bay and the Golden Gate Bridge to the north and San Mateo County to the south.

San Francisco Economy

San Francisco benefits from a highly skilled, educated, and professional labor force. Key industries include high tech, tourism, real estate, banking and finance, retailing, apparel design and manufacturing. Emerging industries include multimedia and bioscience. The City is the economic center of the nine counties contiguous to the Bay: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties (the "Bay Area"). The economy of the Bay Area includes a wide range of industries, supplying local needs as well as the needs of national and international markets. Major business sectors in the Bay Area include retail and entertainment, conventions and tourism, service businesses, banking, professional and financial services, corporate headquarters, international and wholesale trade, technology, multimedia and advertising, biotechnology, and higher education.

As of June 30, 2022, employment have slowly increased by 44,000 or 8.6%, from 510,410 to 554,400 employed, according to California Employment Development Department. The Pandemic did not seem to have an effect on housing for the Bay Area. San Francisco homes continue to rise with median home prices increased by $120,000 from 2021 to 2022 with house prices average to $2 million. Personal income per capita for 2022 is $170,483, and a typical home costs approximately 12 times the typical income, one of the highest home price-to-income ratio in the nation.

San Francisco Population and Income

The City had a population estimated at 804,534 as of fiscal year 2022. The table reflects the population and per capita personal income of the City, as estimated based on the U.S. Census Bureau.

CITY AND COUNTY OF SAN FRANCISCO
Population and Income - Fiscal Years 2018-2022

Fiscal Year	Population[1]	Per Capita Personal Income[2]
2018	880,696	131,083
2019	881,549	133,442
2020	870,014	144,250
2021	815,201	166,980
2022	804,534	170,483

[1] 2022 population was estimated by multiplying the estimated 2020 population by the 2020 to 2021 population growth rate. Fiscal year 2020 and 2021 has been updated from last year's ACFR with newly available data.

[2] Per capita personal income for 2021 was estimated by dividing the estimated personal income for 2021 by the reported population in 2021. Fiscal years 2020 and 2021 are updated from last year's ACFR with newly available data. FY2022 was estimated by multiplying the latest quarterly State income by 1,000 and dividing by the estimated 2022 population.

Source: Office of the Controller, City and County of San Francisco

San Francisco Conventions and Tourism

Conventions are coming back to San Francisco. According to the San Francisco Travel Association (the "Travel Association"), a non-profit membership organization, 34 events are confirmed for Moscone Center with expected 308,700 attendees. San Francisco International Airport projects there will be over 40 million passengers in 2022. Hotel occupancy is also expected to be 58.6% in 2022, an increase of 67% compared to 2021. While San Francisco tourism is still slightly down from 2019, it is expected to reach back 2019 levels by 2025.

San Francisco Employment

According to the California Employment Development Department, the State and City have achieved comparable employment data to pre-pandemic. The unemployment rate for the City has decreased to 2.2% from 5.9% in June 2021 and the State's unadjusted unemployment rate also decreased to 4.0% for 2022 from 8.2% in June 2021. This is a significant improvement for the City with labor force increased by 4.5% and unemployment decreased by over 60%.

Tables below summarizes information on the civilian labor, employment, and unemployment in the City; and employment by industry from calendar years 2017 to 2021.

CITY AND COUNTY OF SAN FRANCISCO Civilian Labor Force, Employment, and Unemployment [1] June 2021 and 2022[2]					
Year	Area	Labor Force	Employment	Unemployment	Unemployment Rate
June 2022	San Francisco	566,900	554,400	12,600	2.2%
	State	19,116,400	18,347,800	768,600	4.0%
June 2021	San Francisco	542,300	510,400	31,900	5.9%
	State	18,920,200	17,367,400	1,552,800	8.2%

[1]Labor force data reflects the March 2021 benchmark and Census 2021 population controls at the state level. June 2021 data is updated from last year's ACFR with newly available data.
[2]Data not seasonally adjusted.

Source: California Employment Development Department, Labor Market Information Division.

CITY AND COUNTY OF SAN FRANCISCO Estimated Average Annual Employment by Sector - Calendar Years 2017-2021[1]					
	2017	**2018**	**2019**	**2020**	**2021**
Total Farm	200	200	400	200	200
Total Nonfarm	719,300	735,000	762,500	696,300	693,800
Professional & Business Services	194,700	195,400	203,100	200,900	198,500
Leisure & Hospitality	96,900	98,500	101,800	59,100	57,500
Government	96,600	98,200	98,800	98,200	99,400
Educational & Health Services	89,000	90,300	94,100	91,500	93,600
Trade, Transportation & Utilities	81,000	82,600	84,300	73,200	70,900
Financial Activities	56,300	59,900	62,000	60,300	60,500
Information	43,000	46,100	52,500	54,600	57,000
Manufacturing & Construction	34,300	36,400	37,900	36,600	33,900
Other Services	27,700	27,800	28,400	22,100	22,700
Total All Industries	**719,500**	**735,200**	**762,900**	**696,500**	**694,000**

[1]Data reflects the March 2021 benchmark and 2020 is updated with newly available data.

Source: California Employment Development Department, Labor Market Information Division.

The table below lists 25 major employers in San Francisco County, as reported by the San Francisco Business Times.

CITY AND COUNTY OF SAN FRANCISCO Major Employers	
Employer Name	**Industry**
More than 10,000 Employees	
City and County of San Francisco	City Government
Salesforce	Customer Relationship Management Software
San Francisco Unified School District (SFUSD)	Public Education
University of California, San Francisco	Health Sciences University and Medical Center
5,000 - 9,999 Employees	
Sutter Health	Health Care System
Uber Technologies Inc.	Ride-Sharing Service
Wells Fargo Bank	Financial Services
1,000 - 4,999 Employees	
Accenture	Professional Services and Technology Consulting
Adobe Inc.	Digital medial and marketing
Airbnb Inc.	Online Vacation Rental Services
Allied Universal	Security Systems, Guarding Services
Cisco Systems Inc.	Technology, Networking, Security and Digital
CommonSpirit Health	Health Care System
Cruise	Develops all electric, self-driving vehicles
Deloitte	Accounting, Audit, Tax, Advisory, Consulting
DoorDash Inc.	On-demand logistics platform for local commerce
EY	Accounting, Audit, Tax, Advisory, Consulting
First Republic Bank	Financial Services
Kaiser Permanente	Health Care System
Linkedin Corp	Online Professional Network
Safeway Northern California Division	Grocery stores
Square Inc.	Financial and Merchant Services, Mobile payments
Twitter Inc.	Social Media
United Airlines	Airline Carrier
University of San Francisco	University Education

Source: Calendar year 2021 San Francisco Business Times and City and County of San Francisco.

San Francisco Taxable Sales

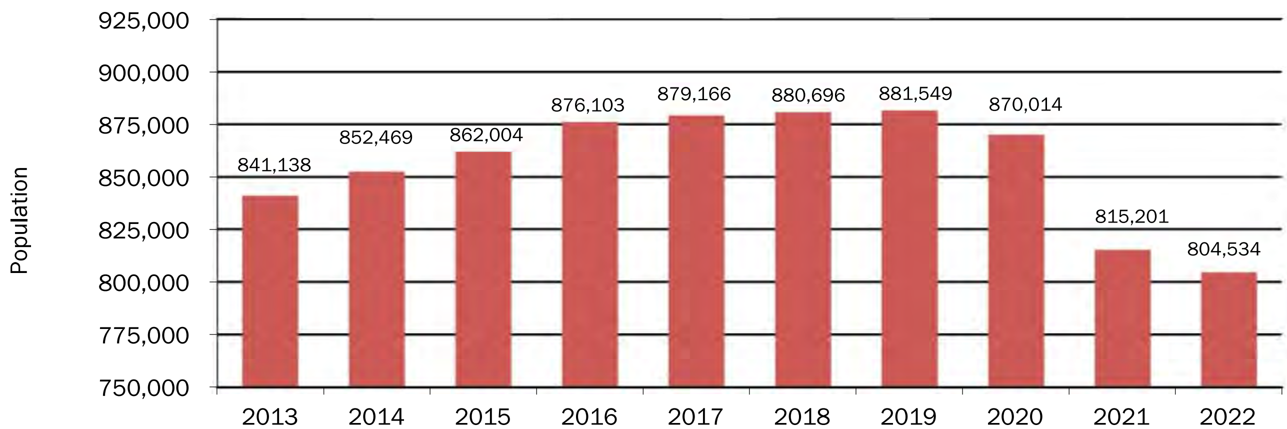
The following table provides information on taxable sales for the City for calendar years 2017 through 2021. Total retail sales increased in 2021 by approximately $1.6 billion compared to 2020.

CITY AND COUNTY OF SAN FRANCISCO Taxable Sales - Calendar Years 2017-2021[1] ($ in Thousands)						
		2017	**2018**	**2019**	**2020**	**2021**
Building Material/Garden Equipment/Supplies	$	605,711	681,369	718,692	642,104	685,895
Clothing and Clothing Accessories Stores		2,056,070	2,046,414	2,029,312	1,163,031	1,587,968
Food and Beverage Stores		863,215	856,217	861,757	746,455	722,410
Food Services and Drinking Places		4,743,633	4,844,464	5,046,263	2,081,728	2,953,373
Gasoline Stations		490,255	583,480	548,509	304,977	432,768
General Merchandise Stores		814,324	790,845	755,350	560,059	667,930
Home Furnishings and Appliance Stores		916,777	1,018,006	1,034,213	768,022	919,239
Motor Vehicle and Parts Dealers		628,666	674,008	601,929	593,476	625,719
Other Retail Stores[2]		2,373,545	2,535,667	2,671,219	2,690,590	2,508,494
Retails Stores Total	**$**	**13,492,196**	**14,030,470**	**14,267,244**	**9,550,442**	**11,103,796**
All Other Outlets not listed above		5,981,674	6,312,252	6,689,891	4,839,281	5,503,320
Total All Outlets	**$**	**19,473,870**	**20,342,722**	**20,957,135**	**14,389,723**	**16,607,116**

[1]Most recent annual data available and may not total due to rounding.
[2]Other Retail Stores include Health and Personal Care Stores, Sporting Goods, Hobby Book, and Music stores, Miscellaneous Store Retailers, and Non-store Retailers.
Source: California Department of Tax and Fee Administration.

Demographic and Economic Information
San Francisco Population and Income
Fiscal Years Ended 2013 to 2022

Year	Population [1]		Personal Income (In Thousands) [2]		Per Capita Personal income [2]
2013	841,138	$	72,858,445	$	86,619
2014	852,469		77,233,279		90,600
2015	862,004		89,533,450		103,867
2016	876,103		96,161,308		109,760
2017	879,166		106,006,635		120,576
2018	880,696		115,444,581		131,083
2019	881,549		117,635,944		133,442
2020	870,014		125,499,720		144,250
2021	815,201		136,122,330		166,980 [5]
2022	804,534 [3]		137,159,159 [4]		170,483 [5]



[1]Data from US Census Bureau. Fiscal year 2020 and 2021 has been updated from last year's Annual Comprehensive Financial Report with newly available data.
[2]Data from US Bureau of Economic Analysis. Fiscal years 2019, 2020 and 2021 are updated from last year's ACFR with newly available data.
[3]2022 population was calculated by multiplying the estimated 2020 population by the 2020 to 2021 population growth rate.
[4]Personal income was estimated by assuming that its percentage of state personal income in fiscal years 2020 and 2021 remained at the 2020 level of 4.54 percent.
[5]Per capita personal income for 2021 was estimated by dividing the estimated personal income for 2021 by the reported population in 2021. 2022 was estimated by multiplying the latest quarterly State income by 1,000 and dividing by the estimated 2022 population.

Source: Office of the Controller, City and County of San Francisco.

Demographic & Economic Information

San Francisco City and County Principal Employers

Employer	2021[1] Employees	2021[1] Rank	2021[1] Percentage of Total City Employment	2012[2] Employees	2012[2] Rank	2012[2] Percentage of Total City Employment
City and County of San Francisco	35,802	1	6.4 %	25,458	1	5.3 %
University of California, San Francisco	29,500	2	5.3	22,664	2	4.7
Salesforce	10,603	3	1.9	4,000	9	0.8
San Francisco Unified School District	10,322	4	1.8	8,189	5	1.7
Sutter Health	6,100	5	1.1	—	—	—
Wells Fargo Bank	5,899	6	1.1	8,300	4	1.7
Uber Technologies Inc.	5,500	7	1.0	—	—	—
Allied Universal	4,095	8	0.7	—	—	—
Kaiser Permanente	3,921	9	0.7	3,581	10	0.8
First Republic Bank	3,042	10	0.5	—		
Pacific Gas & Electric Corporation	—	—	—	4,415	7	0.9
California Pacific Medical Center	—	—	—	8,559	3	1.8
Gap, Inc.	—	—	—	6,000	6	1.3
State of California	—	—	—	4,184	8	0.9
Total	**114,784**		**20.5** %	**95,350**		**19.9** %
Total City Employment[3]			**561,308**			**477,650**

[1]The latest data as of calendar year 2020 is presented from City and County of San Francisco data provided by Office of Controller's Payroll and Personnel Services Division. The University of California, SF data is from the Data Source Corporate Personnel Data Warehouse. All other data is obtained from the San Francisco Business Times Book of Lists.
[2]Percentages have been restated based on updated employment information, and as a result, may differ from amounts reported in the fiscal year 2011-12 Annual Comprehensive Financial Report from the City and County of San Francisco.
[3]Data is from State of California Employee Development Department.

Source: Office of the Controller, City and County of San Francisco.

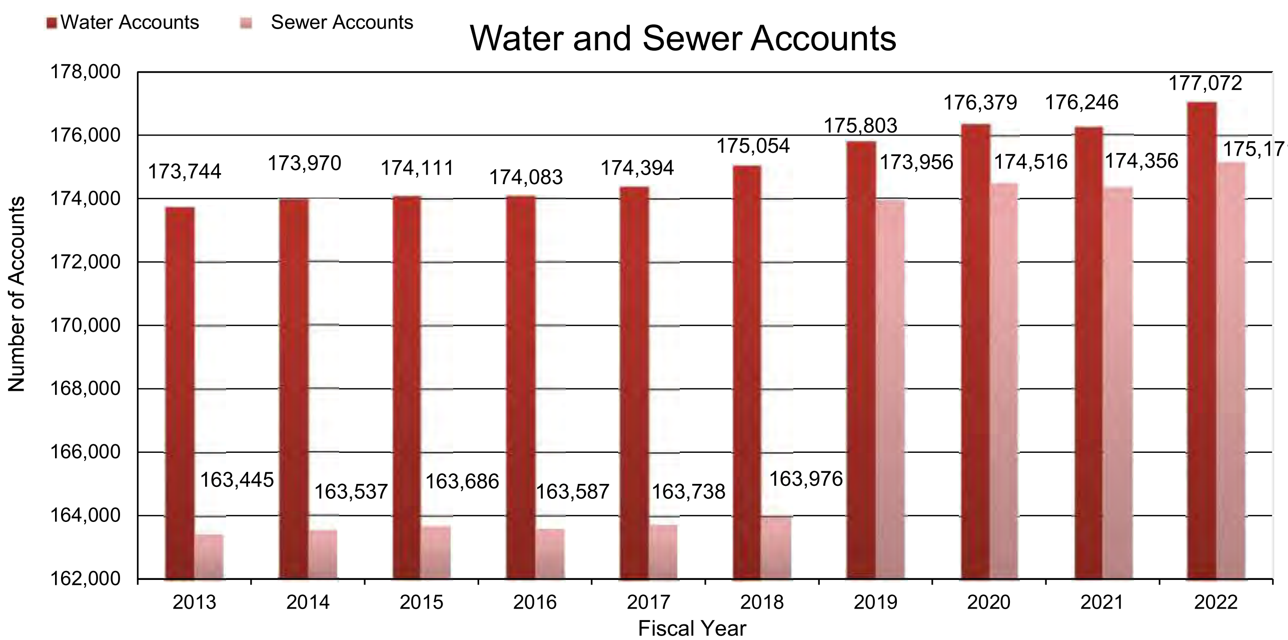
Demographic & Economic Information

Summary of Water and Sewer Accounts by Type of Customer
Fiscal Years Ended 2013 to 2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Water Account Types										
Retail - San Francisco										
Multi-Family Residential	41,121	41,165	41,279	41,369	41,594	42,101	42,482	42,849	43,360	43,693
Single-Family Residential	110,062	110,144	110,140	110,050	110,118	110,153	110,413	110,584	110,113	110,485
Commercial	20,270	20,354	20,384	20,320	20,344	20,429	20,512	20,509	20,306	20,399
Industrial	83	82	81	81	80	80	81	77	75	72
Municipal	1,826	1,843	1,849	1,885	1,882	1,915	1,939	1,985	2,019	2,049
Subtotal	**173,362**	**173,588**	**173,733**	**173,705**	**174,018**	**174,678**	**175,427**	**176,004**	**175,873**	**176,698**
Retail - Other										
Commercial	89	88	85	85	83	86	87	87	86	87
Municipal	1	1	1	1	1	1	1	1	1	1
Other	3	3	3	3	3	3	2	2	2	2
Residential	208	212	211	211	211	208	208	207	206	206
Subtotal	**301**	**304**	**300**	**300**	**298**	**298**	**298**	**297**	**295**	**296**
Wholesale										
Private utilities	21	21	22	22	22	22	22	22	22	22
Public utilities	60	57	56	56	56	56	56	56	56	56
Subtotal	**81**	**78**	**78**	**78**	**78**	**78**	**78**	**78**	**78**	**78**
Total water accounts	**173,744**	**173,970**	**174,111**	**174,083**	**174,394**	**175,054**	**175,803**	**176,379**	**176,246**	**177,072**
Sewer Account Types										
Retail & Resale										
Multi-Family Residential	36,301	36,248	36,313	36,293	36,323	36,326	36,387	36,467	36,528	36,595
Single-Family Residential	111,007	111,125	111,173	111,137	111,268	111,385	111,681	111,869	111,398	111,786
Commercial[2]	15,400	15,430	15,460	15,411	15,388	15,494	24,465	24,721	24,941	25,278
Municipal[2]	729	725	731	738	751	763	1,109	1,150	1,182	1,208
Suburban (Watershed Keepers)	8	9	9	8	8	8	8	7	7	7
Unmetered Properties[1]	No data prior to fiscal year 2019						306	302	300	297
Total sewer accounts	**163,445**	**163,537**	**163,686**	**163,587**	**163,738**	**163,976**	**173,956**	**174,516**	**174,356**	**175,171**

[1]Beginning in fiscal year 2019, Unmetered Properties accounts are included.
[2]Large increase in commercial sewer accounts in fiscal year 2019 is due to new requirements that all water accounts for fire-fighting purposes have a corresponding sewer account. Fiscal year 2019 sewer accounts were updated between Commercial and Municipal.

Source: San Francisco Public Utilities Commission Water Sewer System and Customer Care and Billing System as of June 30, 2021 and Rate Schedules.



Demographic & Economic Information

Summary of Hetchy Water, Hetchy Power and CleanPowerSF Accounts by Type of Customer
Fiscal Years Ended 2013 to 2022

Hetchy Water Accounts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Upcountry Water Sales	7	7	7	6	5	5	5	5	5	5

Source: San Francisco Public Utilities Commission Customer Care and Billing System.

Hetchy Power

Electric Meters	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
City Agencies	1,449	1,470	1,480	1,494	1,491	1,511	1,499	1,512	1,489	1,522
Non-City Agencies*	766	758	783	1,090	1,536	1,996	2,209	2,526	3,858	3,551
Moccasin/City of Riverbank	40	41	40	41	39	38	37	37	36	35
Modesto/Turlock Irrigation District	2	2	2	2	2	2	2	2	2	2
Total accounts	**2,257**	**2,271**	**2,305**	**2,627**	**3,068**	**3,547**	**3,747**	**4,077**	**5,385**	**5,110**
Gas and Steam Meters										
Nature Gas (City Agencies)	346	351	352	359	351	355	352	352	352	355
Steam (City Agencies)	12	12	12	12	12	12	12	12	12	12
Total accounts	**358**	**363**	**364**	**371**	**363**	**367**	**364**	**364**	**364**	**367**

* Non-City Agencies include electric retail and municipal customers such as Moscone tenants, Exploratorium, and Yerba Buena Gardens. Increases from fiscal years 2016 to 2021 are new accounts in various Redevelopment Projects and the Distributed Antenna System.

Source: San Francisco Public Utilities Commission Power Enterprise Billing System and starting fiscal year 2021, Customer To Meter Billing System.

CleanPowerSF Account	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Residential	Data not available - CleanPowerSF launched in May 2016.			364	69,492	74,160	343,807 ^	351,219 ^	352,835	351,350
Commercial										
Small Commercial Service				6,256	6,169	6,422	27,750	27,368	27,044	25,852
Medium Commercial Service				541	504	688	2,428	2,381	2,272	2,006
Large Commercial Service				299	314	336	1,812	1,887	1,859	1,827
Agricultural				—	3	7	25	25	25	22
Street and Outdoor Lighting				—	—	—	306	299	297	298
Commercial Subtotal				7,096	6,990	7,453	32,321	31,960	31,497	30,005
Total accounts				**7,460**	**76,482**	**81,613**	**376,128**	**383,179**	**384,332**	**381,355**

^Increase is from completion of citywide enrollment.

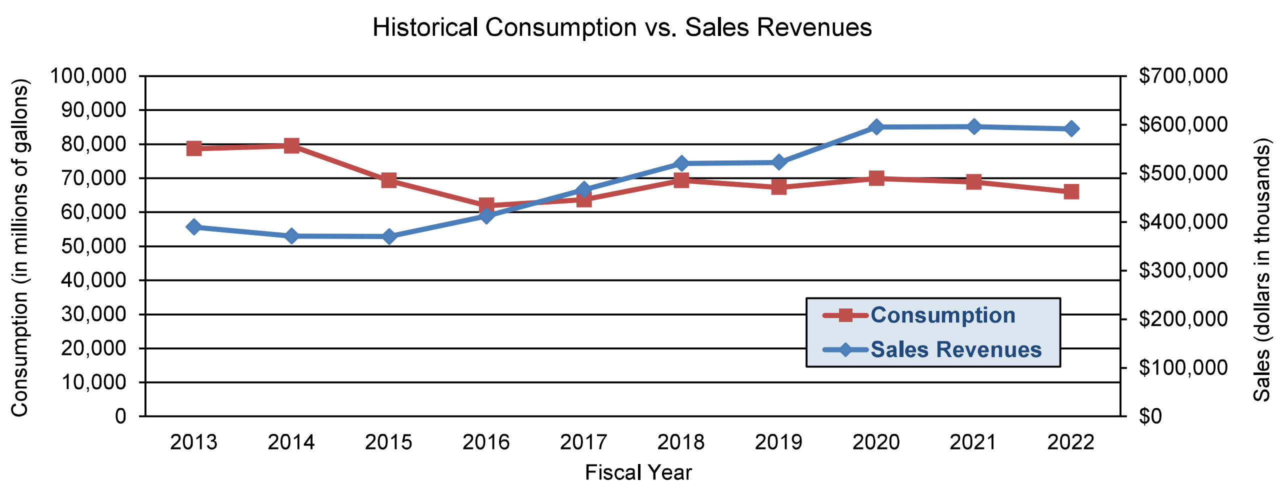
Source: Calpine's customer snapshot reports. Calpine obtains the data from PG&E.

Demographic & Economic Information
Water Accounts and Billings
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

Fiscal Year	Number of Consumer Accounts	Water Consumed (CCF)*	Water Consumed (MG)**	Service Charges Billed ($)	Water Charges Billed ($)	Total Amount Billed ($)
2013	173,744	105,166,558	78,665	29,168	360,354	389,522
2014	173,970	106,183,899	79,425	31,849	339,139	370,988
2015	174,111	92,624,944	69,284	33,561	336,182	369,743
2016	174,083	82,783,466	61,923	37,125	375,020	412,145
2017	174,394	85,169,254	63,706	40,650	425,629	466,279
2018	175,054	92,689,320	69,331	43,748	476,385	520,133
2019	175,803	89,997,393	67,319	44,104	478,448	522,552
2020	176,379	93,495,127	69,934	47,310	548,199	595,509
2021	176,246	91,994,566	68,812	50,391	545,521	595,912
2022	177,072	88,243,491	66,005	53,820	537,588	591,408

*Hundred cubic feet = 748 gallons
**Millions of gallons

Source: Summary of Annual Water Sales reports, San Francisco Public Utilities Commission Water Sewer System and Customer Care and Billing System.



Demographic & Economic Information

Historical Water Sales in Hundred Cubic Feet

Fiscal Years Ended 2013 to 2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2022 % of Total
Retail Customers											
Multi-Family Residential	11,857,405	11,790,707	10,923,723	10,511,291	10,730,224	11,088,325	11,001,321	11,377,523	11,091,058	10,652,590	12.1%
Single-Family Residential	7,848,355	8,124,179	7,056,525	6,674,624	6,765,508	6,954,084	6,766,191	7,051,008	7,101,350	6,413,178	7.3%
Commercial [1]	9,369,923	9,249,884	8,881,095	8,486,990	8,286,580	8,539,377	8,145,347	7,391,713	5,152,409	5,761,374	6.5%
Industrial	91,641	96,073	100,995	94,178	92,846	86,555	84,142	73,296	43,251	47,821	0.1%
Municipal [3,4,6]	1,764,467	1,818,869	1,351,523	1,252,031	1,519,354	1,582,906	1,592,205	1,652,984	1,387,438	1,388,349	1.6%
Suburban Retail [3]	2,082,763	2,090,360	1,860,949	1,556,586	1,397,568	1,524,511	1,426,850	1,474,800	1,368,225	1,329,569	1.5%
Retail water sales	**33,014,554**	**33,170,072**	**30,174,810**	**28,575,700**	**28,792,081**	**29,775,757**	**29,016,056**	**29,021,324**	**26,143,730**	**25,592,881**	**29.0%**
Wholesale Customers											
California Water Service [2]	16,104,269	16,478,539	14,177,253	11,442,469	11,853,307	13,437,872	12,823,623	14,158,729	14,422,994	14,163,074	16.0%
Hayward Municipal Water	7,552,956	7,402,067	6,634,616	5,979,616	6,281,522	7,101,954	6,821,848	6,929,989	7,098,350	6,854,523	7.8%
City of Palo Alto	5,528,554	5,520,468	4,671,433	4,006,084	4,382,560	4,859,576	4,600,987	4,757,199	4,785,384	4,709,184	5.3%
Alameda County Water District	4,423,129	5,837,509	3,885,891	2,924,129	3,039,722	3,875,669	3,745,166	3,788,287	4,638,801	4,575,609	5.2%
City of Sunnyvale	4,653,481	4,169,463	3,801,695	3,816,230	3,966,024	4,615,487	4,281,432	4,602,280	4,745,166	4,336,157	4.9%
City of Redwood City	4,541,338	4,457,196	3,909,265	3,484,888	3,764,419	4,109,993	3,945,340	4,269,768	4,180,327	3,862,674	4.4%
City of Mountain View	4,436,942	4,405,542	3,715,499	3,285,167	3,374,726	3,679,915	3,551,507	3,706,595	3,857,685	3,600,525	4.1%
City of Milpitas	3,137,125	3,244,023	2,556,289	2,199,649	2,361,244	2,544,956	2,504,392	2,956,102	2,618,214	2,332,408	2.6%
City of San Jose	2,197,501	2,263,880	2,189,406	1,990,436	2,017,559	2,198,147	2,104,452	2,065,632	2,052,823	1,975,039	2.2%
Estero Municipal Improvement District	1,977,026	1,983,373	1,942,828	1,755,953	1,869,684	2,064,667	1,966,799	2,115,607	2,101,149	1,887,409	2.1%
All Other Wholesale Customers [2]	17,599,683	17,251,767	14,965,959	13,323,145	13,466,407	14,425,326	14,635,791	15,123,615	15,349,943	14,354,008	16.3%
Wholesale water sales	**72,152,004**	**73,013,827**	**62,450,134**	**54,207,766**	**56,377,174**	**62,913,563**	**60,981,337**	**64,473,803**	**65,850,836**	**62,650,610**	**71.0%**
Total water sales	**105,166,558**	**106,183,899**	**92,624,944**	**82,783,466**	**85,169,254**	**92,689,320**	**89,997,393**	**93,495,127**	**91,994,566**	**88,243,491**	**100.0%**
% Change from prior year	**1.6%**	**1.0%**	**-12.8%**	**-10.6%**	**2.9%**	**8.8%**	**-2.9%**	**3.9%**	**-1.6%**	**-4.1%**	
Number of accounts	**173,744**	**173,970**	**174,111**	**174,083**	**174,394**	**175,054**	**175,803**	**176,379**	**176,246**	**177,072**	
Retail	173,663	173,892	174,033	174,005	174,316	174,976	175,725	176,301	176,168	176,994	
Wholesale	81	78	78	78	78	78	78	78	78	78	

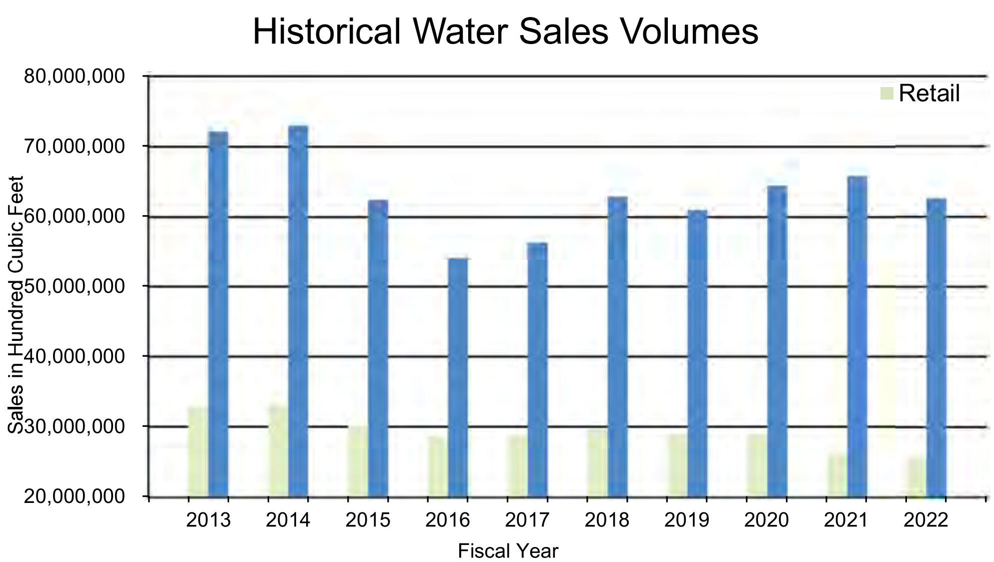
[1]Includes Docks and Ships under Commercial.

[2]From fiscal year 2016 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.

[3]Master-metered Treasure Island water sales were included under Commercial from fiscal year 2011 and 2012 and under Suburban Retail from fiscal year 2013 to fiscal year 2016. Beginning in fiscal year 2017, they have been classified under Municipal. Current Treasure Island usage represents purchases by the Treasure Island Development Authority and various commercial, residential, and governmental leasees. As new development is completed on Treasure Island, customers will open individual accounts under the appropriate commercial or residential line items, and the master-metered amount will be reduced accordingly.

[4]Beginning in fiscal year 2017, recycled water sales to Harding Park are included under Municipal.

Source: Rate Schedules, Summary of Annual Water Sales reports, San Francisco Public Utilities Commission Customer Care and Billing System.



Demographic & Economic Information

Historical Water Sales in Millions of Gallons per Day

Fiscal Years Ended 2013 to 2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2022 % of Total
Retail Customers											
Multi-Family Residential	24.3	24.2	22.4	21.5	22.0	22.7	22.5	23.3	22.7	21.9	12.1%
Single-Family Residential	16.1	16.6	14.5	13.6	13.9	14.3	13.9	14.4	14.6	13.1	7.3%
Commercial [1]	19.2	19.0	18.2	17.3	17.0	17.5	16.7	15.1	10.6	11.8	6.5%
Industrial	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1%
Municipal [3,4,6]	3.6	3.7	2.8	2.6	3.1	3.2	3.3	3.4	2.8	2.8	1.5%
Suburban Retail [3]	4.3	4.3	3.8	3.2	2.9	3.1	2.9	3.0	2.8	2.7	1.5%
Retail water sales	**67.7**	**68.0**	**61.9**	**58.4**	**59.1**	**61.1**	**59.5**	**59.3**	**53.6**	**52.4**	**29.0%**
Wholesale Customers											
California Water Service [2]	33.0	33.8	29.1	23.4	24.3	27.5	26.3	29.0	29.6	29.0	16.0%
Hayward Municipal Water	15.5	15.2	13.6	12.2	12.9	14.6	14.0	14.2	14.5	14.0	7.7%
City of Palo Alto	11.3	11.3	9.6	8.2	9.0	10.0	9.4	9.7	9.8	9.6	5.3%
Alameda County Water District	9.1	12.0	8.0	6.0	6.2	7.9	7.7	7.7	9.5	9.4	5.2%
City of Sunnyvale	9.5	8.5	7.8	7.8	8.1	9.5	8.8	9.4	9.7	8.9	4.9%
City of Redwood City	9.3	9.1	8.0	7.1	7.7	8.4	8.1	8.8	8.6	7.9	4.4%
City of Mountain View	9.1	9.0	7.6	6.7	6.9	7.5	7.3	7.6	7.9	7.4	4.1%
City of Milpitas	6.4	6.6	5.2	4.5	4.8	5.2	5.1	6.1	5.4	4.8	2.6%
City of San Jose	4.5	4.6	4.5	4.1	4.1	4.5	4.3	4.2	4.2	4.1	2.2%
Estero Municipal Improvement District	4.1	4.1	4.0	3.6	3.8	4.2	4.0	4.3	4.3	3.9	2.1%
All Other Wholesale Customers [2]	36.1	35.4	30.7	27.3	27.6	29.6	30.0	31.0	31.5	29.5	16.3%
Wholesale water sales	**147.9**	**149.7**	**128.0**	**110.8**	**115.5**	**128.9**	**125.0**	**131.6**	**135.0**	**128.4**	**71.0%**
Total water sales	**215.6**	**217.7**	**189.9**	**169.2**	**174.6**	**190.0**	**184.5**	**190.9**	**188.6**	**180.8**	**100.0%**
% Change from prior year	**1.6%**	**1.0%**	**-12.8%**	**-10.6%**	**2.9%**	**8.8%**	**-2.9%**	**3.9%**	**-1.6%**	**-4.1%**	
Number of accounts	**173,744**	**173,970**	**174,111**	**174,083**	**174,394**	**175,054**	**175,803**	**176,379**	**176,246**	**177,072**	
Retail	173,663	173,892	174,033	174,005	174,316	174,976	175,725	176,301	176,168	176,994	
Wholesale	81	78	78	78	78	78	78	78	78	78	

[1]Includes Docks and Ships under Commercial.

[2]From fiscal year 2016 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

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[4]Beginning in fiscal year 2017, recycled water sales to Harding Park are included under Municipal.

Source: Rate Schedules, Summary of Annual Water Sales reports, San Francisco Public Utilities Commission Customer Care and Billing System.

Demographic & Economic Information

Historical Water Sales in Millions of Gallons

Fiscal Years Ended 2013 to 2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2022 % of Total
Retail Customers											
Multi-Family Residential	8,869	8,819	8,171	7,862	8,026	8,294	8,229	8,510	8,296	7,968	12.1%
Single-Family Residential	5,871	6,077	5,278	4,993	5,061	5,202	5,061	5,274	5,312	4,797	7.3%
Commercial [1]	7,009	6,919	6,643	6,348	6,198	6,387	6,093	5,529	3,854	4,310	6.5%
Industrial	69	72	76	70	69	65	63	55	32	36	0.1%
Municipal [3,4,6]	1,320	1,361	1,011	937	1,136	1,184	1,191	1,236	1,038	1,038	1.6%
Suburban Retail [3]	1,558	1,564	1,392	1,164	1,045	1,140	1,067	1,103	1,023	995	1.5%
Retail water sales	**24,695**	**24,811**	**22,571**	**21,375**	**21,536**	**22,272**	**21,704**	**21,708**	**19,555**	**19,143**	**29.0%**
Wholesale Customers											
California Water Service [2]	12,046	12,326	10,605	8,559	8,866	10,052	9,592	10,591	10,788	10,594	16.0%
Hayward Municipal Water	5,650	5,537	4,963	4,473	4,699	5,312	5,103	5,184	5,310	5,127	7.8%
City of Palo Alto	4,135	4,129	3,494	2,997	3,278	3,635	3,442	3,558	3,579	3,522	5.3%
Alameda County Water District	3,309	4,366	2,907	2,187	2,274	2,899	2,801	2,834	3,470	3,423	5.2%
City of Sunnyvale	3,481	3,119	2,844	2,855	2,967	3,452	3,203	3,443	3,549	3,243	4.9%
City of Redwood City	3,397	3,334	2,924	2,607	2,816	3,074	2,951	3,194	3,127	2,889	4.4%
City of Mountain View	3,319	3,295	2,779	2,457	2,524	2,753	2,657	2,773	2,886	2,693	4.1%
City of Milpitas	2,347	2,427	1,912	1,645	1,766	1,904	1,873	2,211	1,958	1,745	2.6%
City of San Jose	1,644	1,693	1,638	1,489	1,509	1,644	1,574	1,545	1,536	1,477	2.2%
Estero Municipal Improvement District	1,479	1,484	1,453	1,313	1,399	1,544	1,471	1,582	1,572	1,412	2.1%
All Other Wholesale Customers [2]	13,165	12,904	11,195	9,966	10,073	10,790	10,948	11,312	11,482	10,737	16.3%
Wholesale water sales	**53,970**	**54,614**	**46,713**	**40,548**	**42,170**	**47,059**	**45,615**	**48,226**	**49,257**	**46,862**	**71.0%**
Total water sales	**78,665**	**79,425**	**69,284**	**61,923**	**63,706**	**69,331**	**67,319**	**69,934**	**68,812**	**66,005**	**100.0%**
% Change from prior year	**1.6%**	**1.0%**	**-12.8%**	**-10.6%**	**2.9%**	**8.8%**	**-2.9%**	**3.9%**	**-1.6%**	**-4.1%**	
Number of accounts	**173,744**	**173,970**	**174,111**	**174,083**	**176,379**	**175,054**	**175,803**	**176,379**	**176,246**	**177,072**	
Retail	173,663	173,892	174,033	174,005	176,301	174,976	175,725	176,301	176,168	176,994	
Wholesale	81	78	78	78	78	78	78	78	78	78	

[1]Includes Docks and Ships under Commercial.

[2]From fiscal year 2016 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

[3]Master-metered Treasure Island water sales were included under Commercial from fiscal year 2011 and 2012 and under Suburban Retail from fiscal year 2013 to fiscal year 2016. Beginning in fiscal year 2017, they have been classified under Municipal. Current Treasure Island usage represents purchases by the Treasure Island Development Authority and various commercial, residential, and governmental leasees. As new development is completed on Treasure Island, customers will open individual accounts under the appropriate commercial or residential line items, and the master-metered amount will be reduced accordingly.

[4]Beginning in fiscal year 2017, recycled water sales to Harding Park are included under Municipal.

Source: Rate Schedules, Summary of Annual Water Sales reports, San Francisco Public Utilities Commission Customer Care and Billing System.

Wholesale Water Customers
Map of Bay Area Water Supply and Conservation Agency (BAWSCA) Members

Agency Name:

1. Alameda County Water District
2. City of Brisbane
3. City of Burlingame
4a. California Water Service Company - Bear Gulch
4b. California Water Service Company - Mid-Peninsula
4c. California Water Service Company - South San Francisco
5. Coastside County Water District
6. City of Daly City
7. City of East Palo Alto
8. Estero Municipal Improvement District
9. Guadalupe Valley Municipal Improvement District
10. City of Hayward
11. Town of Hillsborough
12. City of Menlo Park
13. Mid-Peninsula Water District
14. City of Millbrae
15. City of Milpitas
16. City of Mountain View
17. North Coast County Water District
18. City of Palo Alto
19. Purissima Hills Water District
20. City of Redwood City
21. City of San Bruno
22. City of San Jose
23. City of Santa Clara
24. Stanford University
25. City of Sunnyvale
26. Westborough Water District

*Cordilleras Mutual Water is a SFPUC Wholesale Customer but not a member of BAWSCA.
Source: Bay Area Water Supply and Conservation Agency (BAWSCA), San Mateo County General Plan.

Demographic & Economic Information

Water Accounts & Billings by Type of Customer
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

Customer Type		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Multiple-Family Residential											
Number of accounts		41,121	41,165	41,279	41,369	41,594	42,101	42,482	42,849	43,360	43,693
Billings	$	61,681	65,880	68,517	74,055	83,180	91,994	97,879	109,461	115,888	121,922
Single-Family Residential											
Number of accounts		110,062	110,144	110,140	110,050	110,118	110,153	110,413	110,584	110,113	110,485
Billings	$	46,361	51,586	50,670	54,209	60,424	66,304	69,840	78,329	85,094	84,328
Commercial[1]											
Number of accounts		20,270	20,354	20,384	20,320	20,344	20,429	20,512	20,509	20,306	20,399
Billings	$	53,710	56,522	58,416	63,080	67,748	74,720	76,950	76,586	59,883	71,480
Industrial											
Number of accounts		83	82	81	81	80	80	81	77	75	72
Billings	$	511	568	644	677	736	738	796	765	528	612
Municipal[2]											
Number of accounts		1,826	1,843	1,849	1,885	1,882	1,916	1,939	1,985	2,019	2,049
Billings	$	8,663	9,455	8,719	9,274	11,999	13,147	14,253	15,901	14,541	16,224
Suburban Retail											
Number of accounts		301	304	300	300	298	297	298	297	295	296
Billings	$	7,525	8,023	8,122	7,845	8,836	10,466	10,313	11,127	11,113	11,668
Wholesale											
Number of accounts		81	78	78	78	78	78	78	78	78	78
Billings	$	211,071	178,954	174,655	203,005	233,356	262,764	252,521	303,340	308,865	285,174
Total											
Number of accounts		173,744	173,970	174,111	174,083	174,394	175,054	175,803	176,379	176,246	177,072
Billings	$	389,522	370,988	369,743	412,145	466,279	520,133	522,552	595,509	595,912	591,408
Percentage of Revenue											
Residential		27.7%	31.7%	32.2%	31.1%	30.8%	30.4%	32.1%	31.5%	33.7%	34.9%
Non-residential [3]		18.1%	20.1%	20.5%	19.6%	19.2%	19.0%	19.6%	17.5%	14.4%	16.9%
Wholesale		54.2%	48.2%	47.3%	49.3%	50.0%	50.6%	48.3%	51.0%	51.9%	48.2%
Total Percentage of Revenue		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

[1]Includes Docks and Ships and Builders and Contractors under Commercial.
[2]Beginning in fiscal year 2017, Treasure Island and Harding Park recycled water revenues are included in Municipal.
[3]All Suburban Retail usage is included in the Non-Residential line item for purposes of calculating the percentage of revenue from each customer type. However, Suburban Retail usage includes some residential usage.

Source: San Francisco Public Utilities Commission Water Sewer System and Customer Care and Billing System.

Demographic & Economic Information

Wastewater Accounts, Billings & Discharge by Type of Customer
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

Customer Type	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Multiple-Family Residential										
Number of accounts	36,301	36,248	36,313	36,293	36,323	36,326	36,387	36,467	36,528	36,595
Hundred cubic feet	11,034,590	10,979,262	10,199,389	9,854,965	9,996,526	10,282,601	10,222,770	10,536,087	10,262,890	9,909,343
Millions of gallons per day	22.6	22.5	20.9	20.1	20.2	21.1	20.9	21.5	21.0	20.3
Billings	$ 95,607	99,603	100,178	101,730	110,829	126,789	133,454	146,548	153,611	161,553
Single-Family Residential										
Number of accounts	111,007	111,125	111,173	111,137	111,268	111,385	111,681	111,869	111,398	111,786
Hundred cubic feet	6,975,869	7,220,346	6,296,323	5,993,115	6,058,304	6,228,159	6,067,155	6,324,480	6,369,781	5,753,733
Millions of gallons per day	14.3	14.8	12.9	12.2	12.3	12.8	12.4	13.0	13.1	11.8
Billings	$ 58,683	64,377	61,048	61,177	66,661	76,534	79,971	89,688	95,297	96,687
Commercial [2]										
Number of accounts	15,400	15,430	15,460	15,411	15,388	15,494	24,465	24,721	24,941	25,278
Hundred cubic feet	7,816,146	7,931,611	7,594,556	7,366,932	7,171,298	7,230,465	6,978,016	6,246,081	4,154,011	4,818,146
Millions of gallons per day	16.0	16.3	15.6	15.1	15.1	14.8	14.3	12.8	8.5	9.9
Billings	$ 74,978	76,740	76,042	77,387	80,968	89,803	91,069	86,650 ^	61,071	78,207
Municipal [1, 2]										
Number of accounts	729	725	731	738	751	763	1,109	1,150	1,182	1,208
Hundred cubic feet	701,162	657,708	570,386	588,044	578,015	589,621	585,833	545,917	420,610	476,957
Millions of gallons per day	1.4	1.3	1.2	1.2	1.2	1.2	1.2	1.1	0.9	1.0
Billings	$ 6,520	6,205	5,534	5,965	7,586	7,163	9,002	8,885	7,605	8,829
Suburban Retail (Watershed Keepers)										
Number of accounts	8	9	9	8	8	8	8	7	7	7
Hundred cubic feet	298	303	259	200	221	321	217	216	203	62
Millions of gallons per day	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Billings	$ 2	3	2	2	2	4	3	3	3	2
Unmetered Properties*										
Number of accounts	No data prior to fiscal year 2019						306	302	300	297
Hundred cubic feet							N/A	N/A	N/A	N/A
Millions of gallons per day							N/A	N/A	N/A	N/A
Billings	$						82	112	117	118
Total										
Number of accounts	163,445	163,537	163,686	163,587	163,738	163,976	173,956	174,516	174,356	175,171
Hundred cubic feet	26,528,064	26,789,230	24,660,912	23,803,256	23,804,362	24,331,167	23,853,991	23,652,781	21,207,495	20,958,241
Millions of gallons per day	54.4	54.9	50.5	48.6	48.8	49.9	48.8	48.4	43.5	43.0
Billings	$ 235,790	246,927	242,804	246,261	266,046	300,293	313,581	331,886	317,704	345,396
Percentage of Revenue										
Residential	65.4%	66.4%	66.4%	66.2%	66.7%	67.7%	68.1%	71.2%	78.3%	74.8%
Non-residential	34.6%	33.6%	33.6%	33.8%	33.3%	32.3%	31.9%	28.8%	21.7%	25.2%
Total Percentage of Revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

[1]Beginning in fiscal year 2017, Treasure Island revenues are included under Municipal.
[2]Large increase in commercial sewer accounts in fiscal year 2019 is due to new requirements that all water accounts for fire-fighting purposes have a corresponding sewer account. Fiscal year 2019 sewer accounts were updated between Commercial and Municipal.
*Beginning in fiscal year 2019, Unmetered Properties accounts are included.
^Billing amount has been updated.

Source: San Francisco Public Utilities Commission Customer Care and Billing System.

Demographic & Economic Information

Historical Hetchy Water Sales

Fiscal Years Ended 2013 to 2022

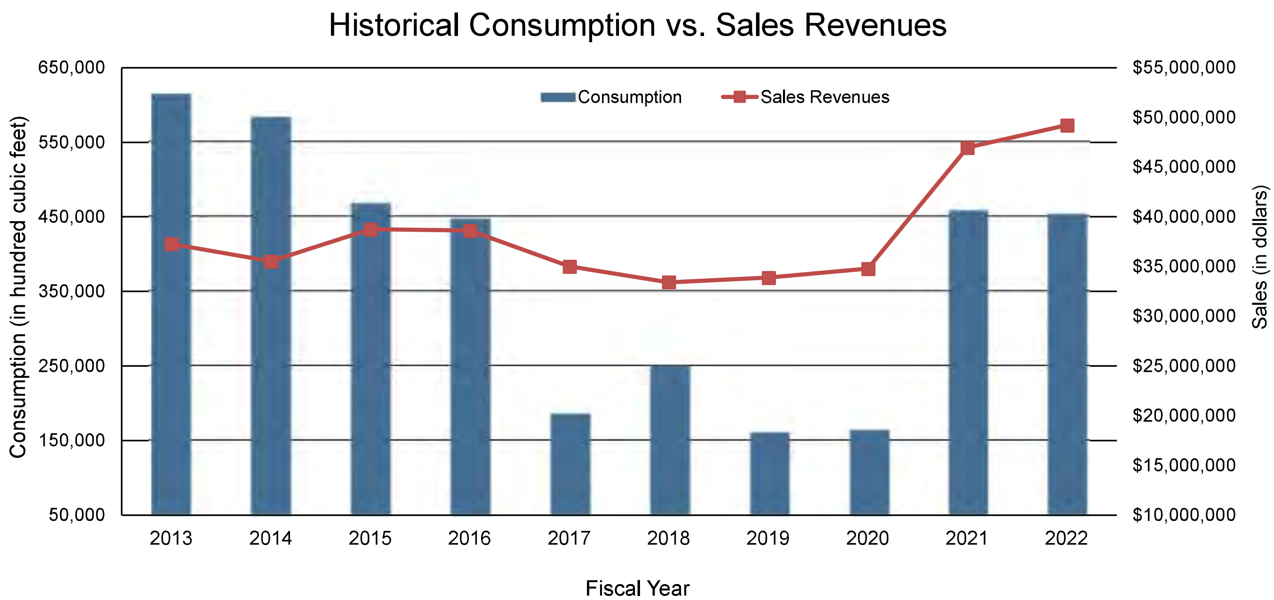
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Sales*										
Groveland Community Services District	$ 157,635	151,969	121,840	163,525	168,757	168,377	147,448	160,626	188,208	155,032
Lawrence Livermore	2,035,808	2,037,396	1,787,240	1,836,447	211,771	630,097	132,893	36,863	2,627,028	3,214,043
State of California	7,415	7,875	8,960	9,429	11,430	13,625	13,392	13,139	11,135	12,422
Other Residential Customers	11,581	15,165	13,391	14,368	15,680	14,726	7,943	1,425	3,469	3,979
Water Assessment	35,071,901	33,309,058	36,800,000	36,600,000	34,600,000	32,600,000	33,578,000	34,585,000	44,149,000	45,815,000
Total sales	**$ 37,284,340**	**35,521,463**	**38,731,431**	**38,623,769**	**35,007,638**	**33,426,825**	**33,879,676**	**34,797,053**	**46,978,839**	**49,200,476**
Consumption (hundred cubic feet)**										
Groveland Community Services District	210,561	200,328	156,801	161,249	154,319	166,624	143,437	158,037	188,595	151,839
Lawrence Livermore	398,026	376,662	307,606	282,531	28,389	81,029	14,267	2,543	266,323	298,585
State of California	3,466	3,026	1,174	1,230	1,302	1,459	1,346	1,235	960	996
Other Residential Customers	2,209	2,749	2,248	2,152	2,085	1,803	1,986	2,454	2,258	2,105
Total consumption	**614,261**	**582,764**	**467,829**	**447,162**	**186,095**	**250,915**	**161,036**	**164,269**	**458,136**	**453,525**

Note: May not total due to rounding.

Source

* City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

** San Francisco Public Utilities Commission Customer Care and Billing System. Fiscal year 2015 and prior was Moccasin meter readings.



Demographic & Economic Information

Historical Hetchy Power Electric Sales
Fiscal Years Ended 2013 to 2022

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Sales (Megawatt hours)											
General Fund Rate Subsidized ~~		365,234	367,904	359,519	373,114	366,880	375,327	366,867	348,157	303,588	331,968
Enterprise Rate ~~		484,628	493,254	487,869	495,272	484,070	471,554	477,477	452,951	404,810	422,200
Wholesale market power sales#		131,200	2,400	—	9,520	29,050	15,900	—	84,574	110,043	—
Modesto/Turlock Irrigation Districts ◊		227,544	103,489	115,026	377,981	152,321	46,651	—	—	—	—
Non-city Agencies*		116,996	117,289	101,605	99,568	95,297	112,157	146,527	133,805	128,945	132,250
Moccasin/City of Riverbank		7,808	9,206	25,472	30,451	9,114	9,650	8,235	7,220	7,672	20,939
Total sales		**1,333,410**	**1,093,542**	**1,089,491**	**1,385,906**	**1,136,732**	**1,031,239**	**999,106**	**1,026,707**	**955,058**	**907,357**
Purchases **		38,702	76,905	45,465	113,154	808	188,052	157,227	58,477	6,598	6,505
Generation ~		1,312,446	1,032,589	988,649	1,532,068	1,726,072	1,302,461	1,212,348	1,287,848	973,802	1,221,772
Total purchases/generation		**1,351,148**	**1,109,494**	**1,034,114**	**1,645,222**	**1,726,880**	**1,490,513**	**1,369,575**	**1,346,325**	**980,400**	**1,228,277**
Banked/(Withdrawal) ⌂		**6,707**	**17,102**	**78,391**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Sales (Dollars in thousands) *											
General Fund Rate Subsidized ~~	$	13,330	15,006	18,125	22,151	23,668	26,591	28,766	28,990	28,095	34,154
Enterprise Rate ~~		52,955	60,766	65,022	65,897	67,627	67,598	73,224	74,895	68,696	81,707
Wholesale market power sales#		5,143	127	—	157	755	688	—	2,780	468	—
Modesto/Turlock Irrigation Districts ◊		6,538	3,431	4,488	13,634	7,700	2,612	—	—	—	—
Non-city Agencies *		14,815	16,305	14,628	15,610	16,350	19,359	23,258	22,255	22,902	24,753
Moccasin/City of Riverbank		486	607	1,100	1,095	550	577	539	625	887	2,377
Total sales	$	**93,267**	**96,242**	**103,363**	**118,544**	**116,650**	**117,425**	**125,787**	**129,545**	**121,048**	**142,991**
Purchases **	$	**2,494**	**4,408**	**2,045**	**5,546**	**1,859**	**8,671**	**11,832**	**7,381**	**6,271**	**6,430**
Number of meters											
Electric		2,257	2,271	2,305	2,627	3,068	3,547	3,747	4,077	5,385	5,110

*Non-city Agencies include electric retail and municipal customers such as Moscone tenants, Exploratorium, and Yerba Buena Gardens.
**Purchases include Western Systems Power Pool (WSPP), Spot Market with Modesto Irrigation District, Sunset Reservoir Photovoltaic generation. Decrease in fiscal year 2017 was due to no purchases with WSPP.
***Sales in dollars do not include utility and surcharge taxes.
~Includes cogeneration and all in-city solar generation. Generation is generic for all electricity production/output. Cogeneration is specific to the combustion turbines at the Southeast treatment plant.
~~The breakdown for City Agencies is grouped per budget schedule.
@Starting fiscal year 2021, 3rd party sale for attributes is added but is not part of the Total average sale per KWh.
#No sales in fiscal years 2015 and 2019 due to no excess power for sale. WSPP includes only energy sales.
⌂Closure of the energy bank with PG&E in fiscal year 2015.
◊Purchase agreement ended in December 2017.

Source: San Francisco Public Utilities Commission Power Enterprise Billing System and starting fiscal year 2021, Customer To Meter Billing System.

Demographic & Economic Information

Historical CleanPowerSF Electric Sales

Fiscal Years Ended 2016 to 2022

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Power Sales (Megawatt hours)*											
Residential					163	148,220	233,515	433,541	1,236,988 ^	1,295,948	1,217,861
Commercial											
Small Commercial Service					14,985	111,618	116,296	484,704	463,977	398,230	411,281
Medium Commercial Service					14,129	92,718	88,924	417,703	402,651	331,389	362,464
Large Commercial Service					12,999	93,968	118,327	797,052	870,886	853,230	869,320
Agricultural					—	42	1,293	6,043	6,004	7,453	8,835
Street and Outdoor Lighting					—	—	38	1,452	1,515	1,477	1,467
Commercial Subtotal					42,113	298,346	324,878	1,706,954	1,745,033	1,591,779	1,653,367
Total Power Sales					**42,276**	**446,566**	**558,393**	**2,140,495**	**2,982,021**	**2,887,727**	**2,871,228**
Sales (Dollars in thousands)*											
Residential	$				14	10,782	15,993	30,787	102,434 ^	98,172	109,135
Commercial											
Small Commercial Service					1,226	8,649	8,716	38,830	38,314	29,289	36,411
Medium Commercial Service			Data not available - CleanPowerSF launched in May 2016.		1,386	7,278	6,809	34,254	33,505	24,516	33,369
Large Commercial Service					1,109	6,860	8,611	62,595	67,963	58,170	74,068
Agricultural					—	3	59	329	326	366	581
Street and Outdoor Lighting					—	—	3	113	105	91	111
Commercial Subtotal					3,721	22,790	24,198	136,121	140,213	112,432	144,540
Total Sales	**$**				**3,735**	**33,572**	**40,191**	**166,908**	**242,647**	**210,604**	**253,675**
Average Sale (in Dollars per Kilowatt hour)											
Residential	$				0.08334	0.07274	0.06849	0.07101	0.08281	0.07575	0.08961
Commercial											
Small Commercial Service					0.08181	0.07749	0.07495	0.08011	0.08258	0.07355	0.08853
Medium Commercial Service					0.09812	0.07850	0.07657	0.08201	0.08321	0.07398	0.09206
Large Commercial Service					0.08530	0.07300	0.07277	0.07853	0.07804	0.06818	0.08520
Agricultural					—	—	0.04563	0.05444	0.05430	0.04911	0.06576
Street and Outdoor Lighting					—	—	—	0.07782	0.06931	0.06161	0.07566
Commercial Subtotal					0.08836	0.07639	0.07448	0.07974	0.08035	0.07063	0.08742
Total Average Sales	**$**				**0.08834**	**0.07518**	**0.07198**	**0.07798**	**0.08137**	**0.07293**	**0.08835**

^Large increase in residential is due to completion of citywide enrollment.

**Starting FY2020, the sales dollar data is based on audited financial statements.

Source: *CleanPowerSF Management Reports.

Statistical Section

Operating Information

Budgeted Full-Time Equivalent (FTEs) Employees by Division

Operating and Capacity Indicators

Capacity Charge Revenues and Expenses

Major Water Wholesale, Retail and Sewer Customer Accounts by Revenue

Major Electric Retail and Wholesale Customer Accounts by Revenue

Performance Measures

Operating Information

Budgeted Full-Time Equivalent (FTEs) Employees by Division

Fiscal Years Ended 2013 to 2022

Enterprises and Bureaus	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Water Enterprise										
City Distribution & Water Administration	260	259	260	268	276	291	304	307	300	314
Natural Resources	81	81	82	82	84	85	86	87	89	91
Water Quality	76	76	76	81	82	83	85	85	85	86
Water Resources	25	25	24	24	23	23	23	23	22	23
Water Supply & Treatment	236	236	229	229	232	232	229	229	231	239
Total Water	**678**	**677**	**671**	**684**	**697**	**714**	**727**	**731**	**727**	**753**
Wastewater Enterprise										
Administration	12	12	11	14	12	12	12	13	12	18
Source Control* & Wastewater Labs	66	66	66	66	65	66	59	60	59	58
Environmental Engineering	50	51	53	53	54	54	58	58	59	60
Maintenance	146	147	141	141	137	138	135	135	141	149
Bayside Operations	117	117	114	115	114	114	111	113	112	112
Planning & Regulation	43	43	47	47	46	47	46	46	32	33
Sewer Collection Operations	51	51	51	51	51	51	59	59	63	65
Total Wastewater	**485**	**487**	**483**	**487**	**479**	**482**	**480**	**484**	**478**	**495**
Hetch Hetchy Water and Power Enterprise										
Hetchy Water										
Water Project Operations	195	195	201	207	203	206	211	216	217	218
Hetchy Power**										
Energy Services	30	30	30	30	29	30	27	28	—	—
Long Range Planning & Light, Heat, and Power	53	53	51	51	52	52	54	54	109	111
Power Administration	23	23	23	23	20	21	21	21	—	—
Subtotal Hetchy Power	**106**	**106**	**104**	**104**	**101**	**103**	**102**	**103**	**109**	**111**
Total Hetch Hetchy Water and Power	**301**	**301**	**305**	**311**	**304**	**309**	**313**	**319**	**326**	**329**
CleanPowerSF										
Administration	Data not available - CleanPowerSF launched in May 2016.				9	11	13	19	26	36
Total CleanPowerSF					**9**	**11**	**13**	**19**	**26**	**36**
Bureaus										
Business Services Admin, AIC#, and Financial Services	70	70	71	71	73	73	73	73	72	74
Customer Services	106	106	106	106	103	103	104	104	103	103
Communications	22	22	22	22	22	22	21	21	21	21
General Manager and Others ^	13	13	11	11	12	13	18	19	21	28
Strategic Planning, Real Estate Services, and Community Benefits	17	18	18	18	18	18	17	17	22	23
Human Resource Services	57	57	58	59	58	58	58	58	62	69
Information Technology Services	74	74	78	78	78	78	78	78	79	81
Infrastructure	369	368	384	389	385	385	380	376	377	374
Total Bureaus	**728**	**728**	**748**	**754**	**749**	**750**	**749**	**746**	**757**	**773**
Total SFPUC annually budgeted positions	**2,192**	**2,193**	**2,207**	**2,236**	**2,238**	**2,266**	**2,282**	**2,299**	**2,314**	**2,386**
Annual Salary Ordinance Positions (AAO) ~	**2,404**	**2,404**	**2,430**	**2,456**	**2,473**	**2,493**	**2,542**	**2,557**	**2,599**	**2,657**

*Fiscal year 2014 and prior is known as BERM, acronym for Bureau of Environmental Regulation Management.
**Beginning fiscal year 2021, Hetchy Power positions are reported under Long Range Planning and Light, Heat, and Power.
#AIC is acronym for Assurance and Internal Controls. Effective Feb 2019, AIC was realigned to two teams: 1. Audit and Compliance and 2. Strategy, Innovation and Change.
^FTEs were added for Security in fiscal year 2011 and Enterprise Workforce Planning in fiscal year 2017.
~AAO includes temporary positions and attrition.

Source: Annual Salary Ordinance.

Operating Information

Water Operating & Capacity Indicators
Fiscal Years Ended 2013 to 2022

Water	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Water mains (miles)^^	1,240	1,240	1,240	1,718^	1,717^	1,718	1,719	1,719	1,719	1,719
Water main breaks repaired	113	116	97	136	102	133	168	142	161	191
New service installations	350	1,144	837	710	1,162	733	628	610	543	428
Meter installed and replaced	994	1,030	1,360	1,395	2,209	1,888	1,699	1,817	1,835	718
Responses to fire alarms	37	28	22	20	20	24	13	12	16	14
Production and Consumption (millions of gallons)#										
Water production	79,935	80,582	69,553	64,454	68,995	73,330	71,272	75,034	73,767	68,271
Average daily production	219	221	191	176	189	201	195	205	202	187
Maximum daily production	302	300	255	242	283	272	275	277	274	237
Water consumption	78,665	79,425	69,284	61,932	63,706	69,331	67,319	69,934	68,812	66,005
Average daily consumption	215.6	217.7	189.9	169.2	174.6	190.0	184.5	190.9	188.6	180.8
Watershed area (acres)										
Alameda	37,314	37,314	37,314	37,314	37,314	37,314	37,314	38,306	38,306	38,944
Peninsula	22,854	22,854	22,854	22,854	22,854	22,854	22,854	22,854	22,854	22,854
Total	**60,168**	**60,168**	**60,168**	**60,168**	**60,168**	**60,168**	**60,168**	**61,160**	**61,160**	**61,798**
Reservoir storage (millions of gallons)**										
Calaveras@	6,337	5,488	6,491	8,774	11,986	8,220	13,026	20,390	19,170	19,533
Crystal Springs	17,191	16,707	17,380	17,103	17,385	16,192	17,015	16,940	16,711	16,251
Pilarcitos	864	815	767	783	872	773	838	849	622	776
San Andreas	5,622	5,603	5,626	5,786	5,935	5,587	5,483	5,381	5,123	5,113
San Antonio	13,456	13,579	14,433	14,927	14,576	13,263	14,835	14,434	14,917	14,587
Total	**43,470**	**42,192**	**44,697**	**47,373**	**50,754**	**44,035**	**51,197**	**57,994**	**56,543**	**56,260**
Treatment plant average capacity (millions of gallons)										
Harry Tracy	26.0	21.2	29.3	35.9	45.3	33.2	38.0	34.7	31.7	29.9
Sunol Valley ***	22.3	10.0	16.9	27.0	39.6	16.5	26.1	11.1	6.9	22.6
Total	**48.3**	**31.2**	**46.2**	**62.9**	**84.9**	**49.7**	**64.1**	**45.8**	**38.6**	**52.5**

*The increase in fiscal year 2012 included approximately 3.5 miles of pipe that was installed as part of the Mission Bay development project.
**In addition to these regional reservoirs, San Francisco Public Utilities Commission has In-city system storage capacity of 413 million gallons (value revised based on current reservoir storage operation limits).
***The decrease in fiscal years 2014, 2018, 2020 and 2021 was due to a reduction in treating local reservoir water (Calaveras and San Antonio) in favor of increasing use of Hetchy Water which was not filtered at the plant. Increasing Hetchy Water use reduced treatment costs and conserved local supplies.
^The increase in fiscal year 2016 included the suburban mains of 245.9 miles, upcountry mains of 229.5 miles and an increase of approximately 2.8 miles of pipe that was installed as part of the Mission Bay, Candlestick Point and Hunter's View project. The decrease in fiscal year 2017 is mainly related to Pilarcitos Aqueduct.
^^Starting fiscal year 2016, water mains (miles) include suburban.
@The Increase of water in the reservoir storage started in fiscal year 2019 due to the completion of the new Calaveras dam.
#Consumption data updated from fiscal years 2012 to 2014 and 2020.

Source: Water Monthly Operating Report, Hetch Hetchy Capital Outlays Summary, Treatment Plant Influent Flow and Sewer Service Charge Calculation Reports.

Operating Information

Wastewater, Hetchy Water and Hetchy Power Operating & Capacity Indicators
Fiscal Years Ended 2013 to 2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Wastewater										
Collection System pipes (miles)@	Data not available FY2019 and prior							1,123	1,125	1,131
Sanitary sewers (miles)@	993	993	993	993	993	993	993	N/A	N/A	N/A
Transport/storage sewers (miles)@	24	17	17	17	17	17	17	N/A	N/A	N/A
Sewer breaks repaired	927	861	1,663	1,520	1,481	912	819	810	531	920
Inspection performed (miles)	135	90	156	80	93	135	215	191	61	56
Sewer replaced (miles)	20.6	12.8	14.9	19.5	13.6	11.0	11.4	15.2	8.9	3.8
Responses to customer calls	7,124	8,697	16,190	10,863	8,260	8,410	7,885	8,510	6,779	6,929
Treatment plant/ facilities average daily flow (millions of gallons per day)										
Oceanside plant	16.5	15.4	15.6	16.0	18.4	15.3	16.5	14.5	13.9	13.9
North Point plant	4.8	3.1	4.7	7.1	11.8	2.7	4.2	1.1	0.9	2.4
Southeast plant	67.0	66.4	64.4	65.4	74.7	61.9	70.2	56.1	48.7	52.2
Yerba Buena & Treasure Island	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3
Total	**88.6**	**85.2**	**85.0**	**88.8**	**105.2**	**80.2**	**91.3**	**72.1**	**63.8**	**68.8**
Hetchy Water										
Watershed area (square miles)										
Hetch Hetchy	459	459	459	459	459	459	459	459	459	459
Lake Eleanor	79	79	79	79	79	79	79	79	79	79
Lake Lloyd (Cherry)	114	114	114	114	114	114	114	114	114	114
Total	**652**	**652**	**652**	**652**	**652**	**652**	**652**	**652**	**652**	**652**
Reservoir storage (millions of gallons)*										
Hetch Hetchy	117,359	114,354	110,745	117,424	111,755	117,231	113,020	116,653	101,808	115,948
Lake Eleanor	7,671	7,731	7,731	8,677	7,610	8,186	8,677	8,398	8,429	8,614
Lake Lloyd (Cherry)	85,358	72,627	64,025	88,478	77,951⌂	83,067	87,829	86,332	82,150	85,989
Total	**210,388**	**194,712**	**182,501**	**214,579**	**197,316**	**208,484**	**209,526**	**211,383**	**192,387**	**210,551**
Hetchy Power										
Hydroelectric generation (megawatt hours)										
Holm	533,719	382,689	436,499	654,952	919,492	431,659	508,060	538,201	339,180	535,177
Kirkwood	440,950	318,379	283,922	528,724	482,996	510,888	401,779	422,278	328,410	390,066
Moccasin	327,054	320,577	255,778	338,005	319,691	356,004	295,766	325,194	304,325	294,705
Moccasin Low-Head #	2,775	22	—	1,359	—	—	—	—	—	—
Total	**1,304,498**	**1,021,667****	**976,199****	**1,523,040^**	**1,722,179^**	**1,298,551****	**1,205,605**	**1,285,673**	**971,915**	**1,219,948**

@Starting FY2020, sanitary sewers and Transport/storage sewers is Included in the Collection System pipes category, which includes combined storm and sanitary collection system pipes, sewer mains, transport/storage boxes, other storage structures, and tunnels.

*In addition to these regional reservoirs, San Francisco Public Utilities Commission has In-City System Storage Capacity of 413 million gallons (value revised based on current reservoir storage operation limits).

⌂The decrease in fiscal year 2017 was mainly due to repair work at Lake Lloyd.

**The decrease in fiscal years 2014, 2015 and 2018 was mainly due to the dry year condition which resulted in less water available for hydroelectric generation.

#Moccasin Low-Head was out of service in fiscal years 2015, 2017- 2022.

^The increase in fiscal years 2016 and 2017 was due to higher precipitation and lower water bank.

Source: Wastewater Monthly Operating Report, Hetch Hetchy Capital Outlays Summary, Treatment Plant Influent Flow, and Sewer Service Charge Calculation Reports.

Operating Information

Water and Wastewater Capacity Charge Revenues & Expenses
Fiscal Year Ended 2021 to 2022
(Dollars in Thousands)

		2021 *	2022	Percent of Total Project Annual Spending	2023 Expense Budget
Water					
Beginning Balance	$	**6,584**	**7,236**		
Revenues		**1,315**	**2,045**		
Capacity Charges		1,326	2,163		
Interest Earnings^		(11)	(118)		
Expenses		**663**	**262**		
Local Water Conveyance/Distribution		274	—	0.0%	—
Pipeline Replacement		389	262	0.5%	3,134
SF Controller Oversight		—	—	0.0%	4
Ending Balance	$	**7,236**	**9,019**		
Wastewater					
Beginning Balance	$	**13,713**	**15,785**		
Revenues		**3,703**	**5,856**		
Capacity Charges		3,710	6,280		
Interest Earnings^		(7)	(424)		
Expenses		**1,631**	**529**		
Collection System Renewal & Replacement		1,631	529	1.9%	12,010
Treatment Facilities Renewal & Replacement		—	—	0.0%	21
SF Controller Oversight		—	—	0.0%	12
Ending Balance	$	**15,785**	**21,112**		

Data provided meets Government Code, Section 66013, https://leginfo.legislature.ca.gov.
*Fiscal year 2021 is first year of presentation.
^Negative interest earnings due to unrealized loss reported per GASB 31.

Source: San Francisco Public Utilities Commission Water Sewer System.

Operating Information
Major Water and Sewer Customer Accounts by Revenue
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

Customer Type	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Water Wholesale Customers										
California Water Service Company	$ 47,655	47,436	46,911	48,792	57,541	63,489	60,859	66,944	67,781	64,447
Hayward Municipal Water System	21,475	21,193	21,475	21,475	28,613	32,316	31,103	31,518	32,130	30,880
City of Palo Alto	16,389	15,855	15,743	16,946	19,975	21,985	21,134	21,773	21,705	21,323
Alameda County Water District	13,274	16,141	13,213	13,847	14,366	16,947	16,849	17,609	21,089	20,509
City of Sunnyvale	13,767	12,201	12,885	15,600	17,810	21,265	19,800	21,029	21,460	19,768
City of Redwood City	13,488	12,847	13,151	14,661	17,169	18,781	18,190	19,408	18,948	17,758
City of Mountain View	13,059	12,691	12,407	13,750	15,340	16,791	16,248	16,790	17,415	16,358
City of Milpitas	9,267	9,311	8,612	9,389	10,722	11,509	11,494	13,284	11,897	10,997
ESD/San Jose Municipal Water System	6,494	6,512	7,185	8,222	9,307	10,182	9,652	9,576	9,410	8,940
Estero Municipal Improvement District	N/A	5,709	6,384	7,216	9,307	9,475	9,015	9,576	9,470	8,630
Water Retail Customers										
San Francisco International Airport	2,938	3,046	3,095	3,220	3,907	4,452	4,880	4,748	3,685	4,420
Lawrence Livermore National Laboratory	N/A	N/A	N/A	1,836	211	631	133	N/A	2,636	3,214
Recreation & Parks Department	N/A	N/A	878	578	1,393	1,397	1,353	2,679	2,481	2,927
Parkmerced Investors Properties, LLC	1,082	1,311	1,393	1,449	1,678	1,840	2,088	2,372	1,878	2,615 *
University of California, San Francisco	1,318	1,364	1,100	1,435	1,534	1,689	1,694	2,185	2,304	2,529
NASA Shared Services Center (NSSC)	1,548	1,551	1,484	1,347	1,741	2,514	2,243	2,481	2,924	2,399
Golden Gate National Cemetery	N/A	N/A	649	839	836	946	900	1,320	1,557	1,663
Public Health Department	624	628	672	808	1,040	1,168	1,157	1,318	1,223	1,261
The Presidio	N/A	376	505	272	367	756	566	1,273	1,840	991
Menlo Country Club	N/A	N/A	639	785	785	833	786	951	1,012	859
Sewer Retail Customers										
Parkmerced Investors Properties, LLC	1,921	2,281	2,326	2,248	2,493	2,790	3,098	3,477	2,779	3,878 *
University of California, San Francisco	2,120	2,078	1,882	2,266	2,068	2,360	2,414	2,852	3,068	3,378
Public Health Department	941	897	647	1,041	1,334	1,547	1,461	1,635	1,513	1,091
1169 Market	701	671	607	579	640	743	694	614	651	894
Recreation & Parks Department	N/A	566	308	332	391	431	418	482	574	893
San Francisco State University	N/A	601	601	618	648	860	810	803	496	804
Bayside Village	N/A	315	325	477	461	525	569	641	701	795
NRG Energy Center San Francisco	819	779	782	874	926	970	1,043	889	653	632
The Stonestown Properties	N/A	N/A	N/A	N/A	N/A	595	722	761	831	617
1231 Market Street Owner LP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	298	523	593

N/A - No sales in the fiscal year or data not available
Highlighted data were not part of major customers for the fiscal year.
* Parkmerced Investor Properties, LLC included a prior year billing adjustment.

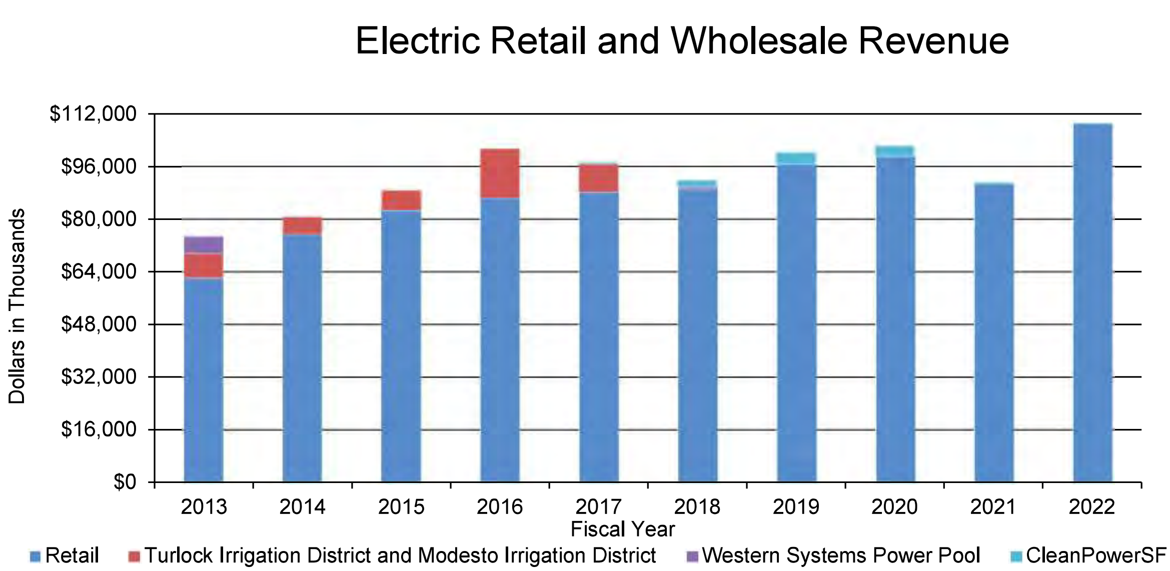
Source: San Francisco Public Utilities Commission Water Sewer System, and Customer Care and Billing System.

Operating Information

Major Electric Retail and Wholesale Customer Accounts by Revenue
Fiscal Years Ended 2013 to 2022
(Dollars in Thousands)

Customer Type	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Retail Customers										
San Francisco International Airport	$ 33,244	39,199	41,614	42,687	43,070	43,434	44,574	46,248	41,626	51,110
SFPUC - Wastewater Enterprise	8,180	8,861	9,748	9,847	10,397	9,979	10,687	10,531	10,522	10,898
SFPUC - Water Enterprise	8,009	8,582	8,640	7,954	8,950	8,592	9,369	9,831	10,130	10,796
Municipal Transportation Agency	4,805	5,403	6,466	7,631	8,193	8,594	8,249	7,758	6,353	9,607
Administrative Services Agency	2,508	3,025	4,386	5,419	5,442	5,743	9,739	9,919	8,707	9,356
Department of Public Health	983	1,319	1,878	2,842	3,125	3,470	4,837	5,228	5,723	6,358
Port of San Francisco	1,369	1,563	1,971	1,941	1,983	2,294	2,236	2,061	1,639	3,156
San Francisco Unified School District	1,444	1,588	1,864	2,214	2,285	2,394	2,252	2,193	1,929	3,068
San Francisco Public Library**	N/A	703	773	860	887	1,340	1,679	1,682	1,601	1,909
City-owned Parking Garages	1,689	1,780	1,876	1,910	1,924	1,960	1,857	1,524	1,368	1,618
Wholesale Customers										
CleanPowerSF	$ Data not available - CleanPowerSF launched in May 2016.			367	1,893	3,501	3,026	339	2,456	1,589
Western Systems Power Pool #	5,143	127 *	N/A	50	237	668	N/A	2,780	1	—
Modesto Irrigation District	2,283	1,879 *	2,666	6,345	8,003	2,422	N/A	N/A	N/A	N/A
Turlock Irrigation District	5,100	3,263 *	3,331	8,615	387	N/A	N/A	N/A	N/A	N/A

* Reflects reduced power generation and power available for sale.
** Updated to reflect latest data.
# Excludes sales to CleanPowerSF and CAISO.
N/A - No sales in the fiscal year or data not available.
Highlighted data were not part of major customers.
Source: San Francisco Public Utilities Commission Power Enterprise Billing System and starting fiscal year 2021, Customer To Meter Billing System.



Operating Information

Performance Measures

Fiscal Year 2022

	Target	Projection	Actual
1. Reliable Service and Assets			
Number of dry weather main sewer overflows per 100 miles of main sewer	<2.6	1	1.2
Percent of in-city service connections without water for more than 4 hours due to an unplanned outage	0.10%	0.05%	0.00%
Percent of streetlight outages complying with 48-hour SFPUC response goal; complex streetlights evaluated	100.0%	100.0%	100.0%
System renewal and replacement rates for in-City water distribution mains	11.5 miles	7.5 miles	4.2 miles
System renewal and replacement rates for Wastewater pipelines	15miles/year 1.6%	13.5 miles	13 miles
2. Organizational Excellence			
Number of employees over the maximum permissible overtime threshold (25% of straight time)	0.0	2.0	16.0
3. Effective Workforce			
Number of promotions	168	175	229
Time to hire (days)	233	269	289
4. Financial Sustainability			
Average residential Power bill as a percent of median income in San Francisco	0.69%	0.76%	0.72%
Average residential Wastewater bill as a percent of median income in San Francisco	0.85%	0.84%	0.84%
Average residential Water bill as a percent of median income in San Francisco	0.70%	0.69%	0.69%
Operating cost coverage (total operational revenues/total operating costs) for Power	0.97	1.03	1.20
Operating cost coverage (total operational revenues/total operating costs) for Wastewater	1.91	1.79	1.87
Operating cost coverage (total operational revenues/total operating costs) for Water	1.91	1.84	1.91
Power debt service coverage - Indentured Coverage	1.35x	N/A	38.45
Wastewater debt service coverage - Indentured Coverage	1.35x	N/A	3.59
Water debt service coverage - Indentured Coverage	1.35x	N/A	1.47
5. Stakeholder and Community Interest			
Number of adults and children who have participated in transformative engagement through SFPUC sponsored education programs	4,600	3,000	2,533
Percent of eligible customers enrolled in California Alternate Rates for Energy (CARE) for CleanPowerSF Customers	80.0%	85.0%	81.0%
Percent of Eligible electric customers receiving low-income discount rate	90.0%	85.0%	46.0%
Percent of eligible households enrolled in Community Assistance Program (CAP)	4.84%	8.98%	9.93%
Percent of retail customers rating the SFPUC as "good" or better on a customer survey	90.0%	89.0%	89.0%
6. Environmental Stewardship			
Average water used by San Francisco residential customers (Gallons Per Capita Per Day - gpcd)	50.0	40.7	43.1
Gallons of stormwater removed annually from the combined sewer system by green infrastructure	107 million gallons	242 million gallons	240 million gallons
Percent of biogas going to beneficial uses - Oceanside Plant	75.0%	0.0%	0.0%
Percent of biogas going to beneficial uses - Southeast Plant	55.0%	47.0%	44.0%
Percent of CleanPowerSF customer account retention rate	90.0%	95.5%	96.0%
Percent of water supplied by alternative sources to system as a whole	3.40%	3.90%	3.60%

Source: Agency Strategic Plan

ANNUAL COMPREHENSIVE FINANCIAL REPORT
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Incumbent
Deputy Chief Financial Officer

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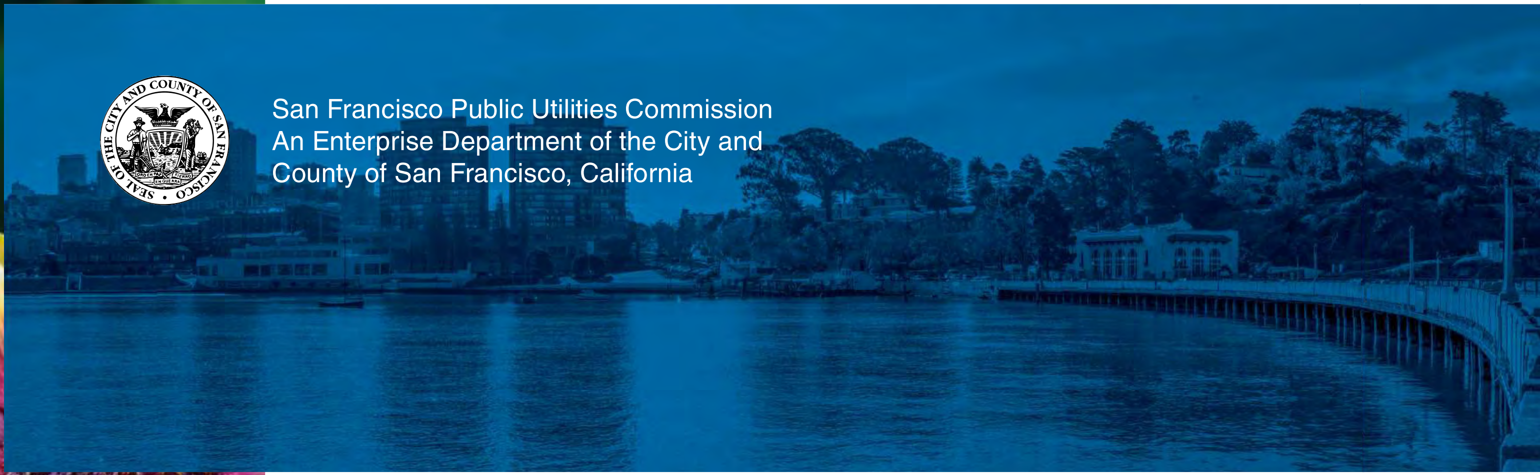

San Francisco Public Utilities Commission
An Enterprise Department of the City and
County of San Francisco, California

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.

Cover photos: Southeast Wastewater Treatment Plant: Biosolids Digester Facilities Project

Back photo: San Francisco Aquatic Park, Southeast Wastewater Treatment Plant: Flowers at the plant

Photos by: Robin Scheswohl and Sabrina Wong

Communications Division
Date of Publication: February 2023

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San Francisco Water Power Sewer

Services of the San Francisco Public Utilities Commission

Popular Annual Financial Report
For Fiscal Year Ended June 30, 2022

Serving People & the Environment

San Francisco Public Utilities Commission

(as of date of publication)

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

Table of Contents

Water

We own and operate the Hetch Hetchy Regional Water System which serves 2.7 million customers. We provide water directly to customers in San Francisco and wholesale through 26 Water agencies in Alameda, Santa Clara, and San Mateo counties.

Power

The same force of gravity that propels tap water to your faucet is also harnessed to generate 100% greenhouse gas-free Hetch Hetchy hydroelectric power. That's right; your tap water powers vital City services like MUNI's electric buses, public schools, and fire stations with electricity that is better for the environment and your health.

Sewer

San Francisco is the only coastal city in California with a combined sewer system that collects and treats both wastewater and stormwater in the same network of pipes. Water flows through most of the sewers using gravity. Our hilly geography comes in handy reducing the energy and maintenance costs associated with mechanical pumping.

Message from Our General Manager

Dear Customers and Interested Parties,

On behalf of the San Francisco Public Utilities Commission (SFPUC), I am pleased to present the Popular Annual Financial Report for Fiscal Year 2021-2022.

The past two years were a period of upheaval and uncertainty. We saw it as a City, and we saw it firsthand as an agency. Nonetheless, San Franciscans prove time and time again that the challenges we face are opportunities to build a stronger, more resilient, and equitable community.

Through historic investments in the City's revitalization, the environment, and our future, the SFPUC serves as a robust economic engine benefiting residents, workers, and businesses in three critical areas: environmental stewardship, access and affordability, and support for our communities.

As we enter the fourth year of a statewide drought, we continue to be prudent when it comes to managing our water supplies. Our approach strikes the right balance. Whether wet or dry, we always release water downstream to protect the natural aquatic ecosystems. We are being good environmental stewards while not gambling with the water supply for 2.7 million Bay Area residents and businesses. Part of this means substantial investments in wildfire mitigation, climate change resiliency, and drought response.

Our environmental leadership goes hand in hand with customer affordability. This year we completed our first ever independent study for CleanPowerSF and Hetch Hetchy Power rates. The recommendations from this study pave the way for new customer savings, including decreased monthly electricity bills for the vast majority of CleanPowerSF residential and commercial customers. Our commitment to investing in renewable energy while maximizing affordability has direct impacts on both people and the planet. The SFPUC is helping San Francisco (the City) achieve its bold carbon reduction goals, including having 385,000 customer accounts enrolled in CleanPowerSF.

We are also continuing to do the important work toward racial equity, both internally and with the communities we work with. This year we opened our new Southeast Community Center at 1550 Evans Avenue. The new center features a childcare facility, nonprofit workspace, community meeting rooms and provides a wide range of workforce development and educational opportunities for residents of all ages across the city, but particularly in our southeast neighborhoods.

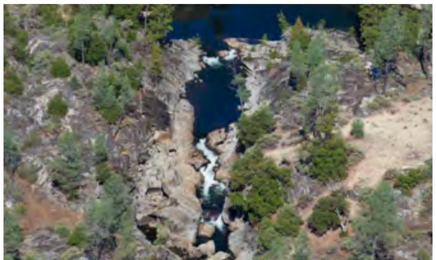
We're delivering on jobs, infrastructure, and community programs while maintaining our reliable water, wastewater, and power services. We continue to provide high-quality water to our customers, and our Hetch Hetchy Power and CleanPowerSF programs collectively meet more than 70 percent of the electricity demand in San Francisco through renewable and greenhouse gas-free energy services. Our wastewater team maintains 1,900 miles of pipes throughout San Francisco and manages the City's around-the-clock wastewater collection system.

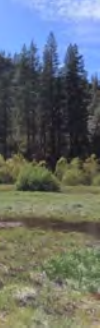
We're continuing to lead the way as a public utility that prioritizes people and the environment. This report showcases that. I'm grateful to the Commissioners and staff who work tirelessly to serve our City and build a better future for all.

Dennis J. Herrera, SFPUC General Manager

Protecting Our Watersheds

Planting around the Riparian pond at the Alameda Creek Watershed Center.





We protect and sustain the resources entrusted to our care, from watershed management and habitat restoration to routine water quality monitoring and assessments.

A healthy watershed produces high-quality drinking water and is more resilient in response to wildfire or drought. Within the Hetch Hetchy Regional Water System, the SFPUC manages the Peninsula and Alameda Watersheds and support the National Park Service and the U.S. Forest Service in managing the Upper Tuolumne Watersheds. These watersheds collect and store drinking water while harboring some of the highest concentrations of rare and unique native plant and animal species. The Peninsula Watershed alone consists of 23,000 acres of diverse and unique habitats, such as oak woodlands, coniferous forests, and serpentine grasslands. These ecosystems must be carefully managed to protect the quality of the water in our reservoirs and an abundance of native plant and animal life.

Fire Prevention

The SFPUC works with CalFire throughout the year to protect these lands from the threat of wildfire, including preventing fires from starting, and keeping those fires that do start from growing and becoming uncontrolled. Fire prevention measures include routine mowing, mulching, and annual prescribed burns that lower the amount of vegetation that could catch fire. This work is increasingly important as the SFPUC mitigates the effects of a prolonged drought, which has resulted in a higher load of dead, dry, and fire-prone vegetation in our watersheds.

Sowing the Seeds of Biodiversity

Biodiversity is a key part of a healthy watershed. Important native plant species on our lands are threatened by aggressive plant pathogens that spread via contaminated plants, soil, air, and water.

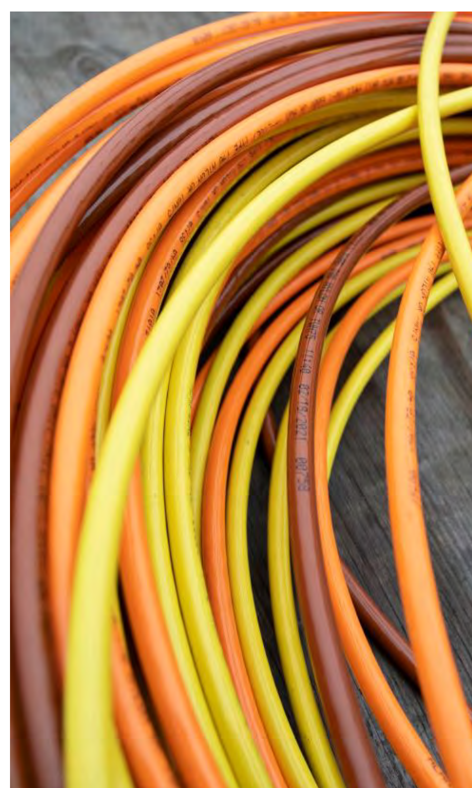
Previously, the SFPUC relied on commercial nurseries for habitat restoration projects, which inadvertently brought invasive plant pathogens to our watersheds. To better protect the environment, we created the Sunol Native Plant Nursery about four years ago. The nursery protects our watersheds one seed at a time, generating our own, pathogen-free native plants to meet our own landscaping and environmental needs. This nursery is rigorously designed to avoid the introduction of plant pathogens at all stages of the growing process.

To date, the nursery has grown more than 25,000 plants from 85 different species from seeds collected on our watershed lands by our own staff. Those plants are thriving at the Sunol Yard, have recently been planted at the Alameda Creek Watershed Center, and were planted to restore habitats near the Lower Crystal Springs Dam on the Peninsula.

Improving our Ecosystems

The SFPUC continues to lead the Upper Tuolumne River Ecosystem Program, a collaborative effort to study ecosystem conditions and develop data-backed recommendations for their improvements. As part of this work, the SFPUC developed guidance with Yosemite National Park for annual snowmelt releases from O'Shaughnessy Dam. The robust guidance ensures we meet our operational needs while ensuring benefits to the river ecosystem. These ecological releases during spring runoff have been conducted since 2006. In May, the SFPUC conducted spring snowmelt releases specifically designed to support wetland vegetation and invertebrate production in the ecologically significant Poopenaut Valley. These carefully designed efforts with Yosemite National Park ensure numerous riparian bird species and up to 17 species of bats continue to thrive.

A Clean Grid Means a Clean Environment



Our work to reduce dirty carbon emissions from fossil fuels and promote equitable access to clean energy in San Francisco never stops.

Investing in the Communities We Serve

San Francisco's success as a global environmental leader is a result of the SFPUC's historic and continued investments in clean energy. To achieve Mayor London N. Breed's aggressive new carbon neutral goals will require we go even further to usher in a clean, all-electric future. To guide the way, the SFPUC completed its first-ever two-year independent power rates study for its renewable electricity service programs, CleanPowerSF and Hetch Hetchy Power. The recommendations from the study allow for new customer savings, including decreased monthly electricity bills for many residential and commercial customers, and the continued expansion of clean energy sources.

The study also promotes stability for customers and greater independence from Pacific Gas & Electric Company (PG&E). As part of the suite of recommendations from the study, the SFPUC will set its own rates and no longer follow PG&E's, which has changed its generation rates four times since January 2021. We are committed to only updating power rates once per year to promote predictable rates for customers.

The adopted rates support the City's climate goals by offering new electric vehicle rates for Hetch Hetchy Power customers, expanding electricity tiers for residential customers transitioning to all-electric buildings, and helping CleanPowerSF customers access 100% renewable energy by lowering premiums for commercial customers on our SuperGreen service. This all came while funding investment in Hetchy Water & Power facilities and new renewable power generation and storage.

Similarly, the SFPUC recently launched the SuperGreen Saver Program to more equitably deliver the benefits of clean energy to the communities most impacted by air pollution. The program provides a 20% rate discount to eligible customers residing in disadvantaged communities. Enrollments began in June and are expected to serve over 1,200 customers in San Francisco.

Expanding Hetch Hetchy Power Grid Infrastructure

Hetch Hetchy Power continued work to complete a new high voltage transmission and distribution system along the eastern waterfront for new and existing customers with large power needs. The project, known as the Bay Corridor Transmission and Distribution System, is expected to serve customers in early 2023. It is a major milestone for the agency's clean energy grid.

Additionally, this fiscal year the Power Enterprise energized the new main electric circuit serving Yerba Buena Island, marking a significant milestone in the area's redevelopment. The new electric circuit and associated switchyard will play a critical role in providing affordable, reliable 100% greenhouse gas-free Hetch Hetchy Power to residents and businesses of Yerba Buena Island and Treasure Island.

Visitacion Valley Middle School Solar Array

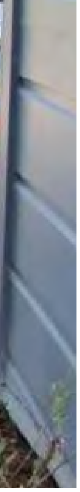
Local solar energy sources are expanding citywide due to the SFPUC's partnerships with other City agencies. In the Mission District's Visitacion Valley Middle School, the SFPUC took advantage of the school's optimal location on a sunny hill and installed a new solar array system in time for in-person learning. Visitacion Valley Middle School will be the seventh new school solar array installed since 2012, when San Francisco Unified School District (SFUSD) and the SFPUC first partnered to install affordable solar systems.

Through rooftop solar arrays like the one at Visitacion Valley Middle School, SFUSD will use clean solar instead of clean hydro when solar is available, and continue to benefit from reduced energy costs to help ensure resources are spent where they matter most – the classroom.

Through these critical investments and partnerships, we're helping to create a healthier community and cleaner future.

Visitacion Valley Middle School - Rooftop Solar Project: Workers taking baseline of performance and ensuring the system is operating properly.

Reduce, Reuse, Recycle



The SFPUC's high-tech wastewater treatment system continues to serve thousands of San Franciscans every day and keep pollutants out of our beautiful bay and ocean. Knowing that water is too precious a resource to use just once, the agency's wastewater division has expanded infrastructure projects and grant programs to build resiliency, improve our systems, and protect the environment.

Promoting Environmental Stewardship Through Grants

The Urban Watershed Stewardship Grant Program continues to provide grants to community groups and nonprofits creating sustainable stormwater management projects in the public realm. Three grants were awarded in the fall 2021 cycle, investing $336,915 dollars towards green infrastructure projects in San Francisco communities. This grant program continues to encourage the planning and implementation of sustainable stormwater projects built by the community for the community. These projects provide sustainable stormwater management solutions, increase urban greening and biodiverse habitat, and showcase creative environmental education opportunities around the city.

Marina Landscape Laborer installing plants on roof garden at Oceanside Wastewater Treatment Plant.

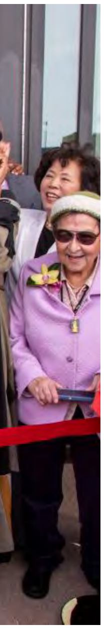
Since 2019, the Green Infrastructure Grant Program has funded projects on large properties that successfully reduce stormwater runoff and benefit the public. Project types can include permeable pavement, bioretention, rainwater harvesting, rain gardens, and vegetated roofs. To date the program has awarded 11 projects totaling over $10 million in funding. The program was also focused on implementing a variety of program updates to further improve participation and equity across a variety of different property types. Those updates were completed in June 2022 in time for the new application cycle this fall.

The Westside Recycled Water Treatment Facility at Oceanside Plant

On the west side of San Francisco, we are aiming to save up to 2 million gallons of drinking water per day from non-potable purposes like irrigation. To achieve this, a new recycled water treatment facility is being constructed at our existing Oceanside Water Pollution Control Plant. Secondary effluent from the Oceanside Plant will undergo an advanced treatment process using membrane filtration, reverse osmosis, and ultraviolet light disinfection to produce recycled water at a level that will exceed state of California standards. The project will produce and deliver up to 2 million gallons of recycled water per day. The system will bring recycled water from the facility to Golden Gate Park, Lincoln Park Golf Course, and other landscaped areas for irrigation. The system is expected to become fully operational in 2023.

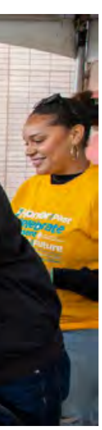
Serving Our Diverse Communities

Grand Opening of the new Southeast Community Center (SECC) at 1550 Evans Avenue, a hub for the local community to gather, learn, play, and grow.



The last two fiscal years have seen many challenges as well as a renewed commitment from the SFPUC to address racial equity and long-time systemic barriers for communities of color. The agency has expanded staffing and consultant resources to advance racial equity work, including several dedicated positions, short-term consultant support, and a new long-term competitive solicitation. Other key accomplishments include implementing new strategies for diversity-based recruitment for SFPUC jobs; developing a focused plan to improve our data to track racial disparities by race, ethnicity, and other demographics; sustaining the SFPUC employee Racial Equity Resource Library as a resource for learning and action; and creating several agency-wide working groups dedicated to issues like equity in contracting and outreach.

The SFPUC will continue to make progress on its racial equity priorities to demonstrate our commitment to social change and the communities we serve. This includes addressing barriers in recruitment and hiring, expanding employee and supervisor training, and fostering an inclusive organizational culture that centers on equity and pipelines for employee growth and opportunity.



Opening of New Southeast Community Center

In October, Mayor Breed and the SFPUC celebrated the completion of the new Southeast Community Center at 1550 Evans Avenue. The 45,000-square-foot LEED Gold Certified facility includes a childcare center, café, free wi-fi, public workspaces, and $1 million in culturally celebratory art commissioned from local artists. The campus includes two acres of open space, with an amphitheater, gardens, outdoor dining areas, and play spaces for children. Equipped with air quality monitors, the facility will be powered by rooftop solar panels and 100% greenhouse gas-free hydroelectricity sourced from the SFPUC's Hetch Hetchy Regional Power System. As a Hetch Hetchy Power customer, the facility will see ongoing operating savings.

The new center is designed to replace the Southeast Community Facility, located at 1800 Oakdale Avenue, which was constructed in partnership with the Bayview-Hunters Point community to mitigate the environmental and social impacts of the SFPUC's Southeast Treatment Plant's expansion in the 1970s and 1980s.

The new community center was developed after an extensive engagement process with Bayview residents, who voiced strong support for building the new center at 1550 Evans Avenue. The center includes a large, state-of-the-art special events space for meetings, events, classes, family celebrations, and community fairs, along with a multi-purpose room, office, and co-working space for community non-profits.

Keeping Our Water Rates Affordable

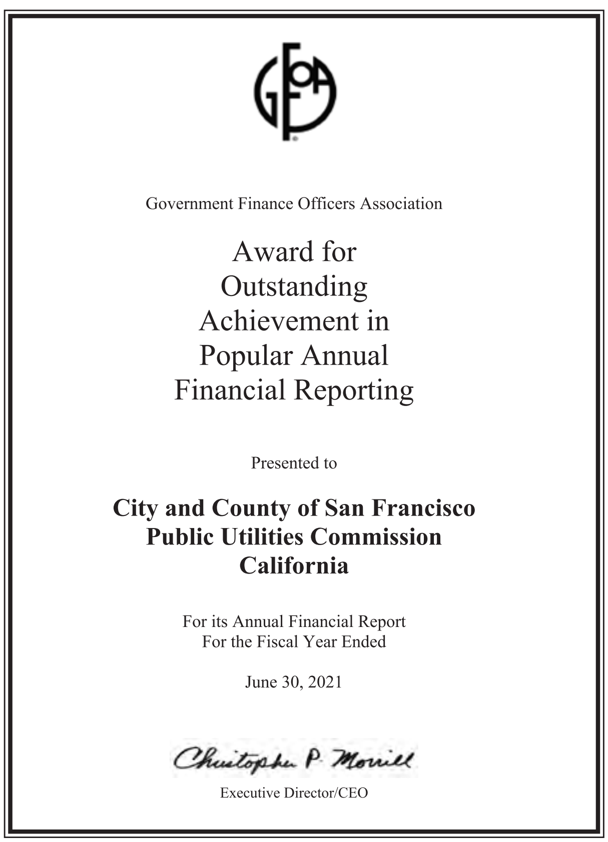
Single-Family Residential FY 2021-22

Monthly Usage (ccf)	5.01
Average Monthly	$136.55
Cost per Person/Day	$2.01
Total Cost per Gallon	$0.036
Total Combined Bill as % of San Francisco Median Household Income	1.35%

Calculation is based on the average monthly water usage

Financial Performance

Since 2010, this report has won the prestigious “Award for Outstanding Achievement in Popular Annual Financial Reporting” from the Government Finance Officers Association.



Government Finance Officers Association

Award for Outstanding Achievement in Popular Annual Financial Reporting

Presented to

City and County of San Francisco Public Utilities Commission California

For its Annual Financial Report For the Fiscal Year Ended

June 30, 2021

Christopher P. Morrill

Executive Director/CEO

This award recognizes our commitment to increase public awareness by providing an overview of our financial condition. The financial information for this report is drawn from the audited financial statements in the SFPUC’s Fiscal Year 2022 Annual Comprehensive Financial Report (ACFR), using the full accrual basis of accounting and providing complete financial information and disclosures in conformance with generally accepted accounting principles (GAAP). PAFR is not audited and is presented on a non-GAAP basis as note disclosures have been excluded in the report. Our ACFR, which provides complete financial information and disclosures in conformance with GAAP, is available online at sfpuc.org/about-us/reports.

Credit Ratings	2022	2021	2020
Water			
Standard & Poor’s	AA-	AA-	AA-
Moody’s Investors Service	Aa2	Aa2	Aa3
Average Borrowing Rate*	3.29%	3.29%	3.48%
Power			
Fitch	AA-	AA-	AA-
Standard & Poor’s	AA	AA	AA
Average Borrowing Rate*	2.87%	3.59%	3.49%
Sewer			
Standard & Poor’s	AA	AA	AA
Moody’s Investors Service	Aa2	Aa2	Aa2
Average Borrowing Rate*	2.94%	3.42%	3.42%
CleanPowerSF			
Moody’s Investors Service	A2	A2	N/A

The SFPUC’s high credit ratings help to reduce borrowing costs.

***Average Borrowing Rate:** Weighted average interest rate on outstanding bonds as of 6/30/22.

The **Comparative Consolidated Net Position** provide information about the nature and amount of resources and obligations at a specific point in time. SFPUC continued to reflect a strong and healthy financial condition over the last several fiscal years. Investments in capital assets constituted 77% of our net position and represented the amount by which the carrying value of capital assets exceeds capital-related debt, which comprises the outstanding balances of any bonds, commercial paper, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets. For FY2022, SFPUC net position increased by 3% or $86 million as compared to FY2021, mainly due to increase in unrestricted and restricted for capital projects.

There are five components in the Statement of Net Position, which is intended to present what the entity owns (assets), owes (liabilities) and its residual or net position.

1. Assets are resources with present service capacity that the government presently owns or controls.
2. Deferred outflow of resources is a consumption of net assets by the government that is applicable to a future reporting period—for example, amortization of refunding loss to future periods.
3. Liabilities are present obligations to sacrifice resources that the government has little or no discretion to avoid, such as debts owed, and represent claims against assets.
4. Deferred inflow of resources is an acquisition of net assets by the government that is applicable to a future reporting period—for example, amortization of net difference in pension projected verses actual earnings.
5. Net position is the residual of all other elements presented in a Statement of Net Position, i.e., the residual interest in the items owned or controlled after deducting debts. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position is improving or worsening.

The **Comparative Revenues and Expenses** reflected continued revenue growth. SFPUC strives to achieve strong financial performance and effectively controls its operating costs to not exceed revenues.

Total revenues and contributions increased by $105 million as compared to prior year. This is mainly due to higher charges for services attributed to an average rate increase of 8% for Wastewater Enterprise and 16% for CleanPowerSF, and reductions in allowance for doubtful accounts due to assistance received from California Utility Arrearages Relief Payment Program (CAPP) for eligible customer account arrearages for all three enterprises.

Total expenses increased by $52 million, as compared to prior year. This was primarily due to higher interest expense due to increased outstanding bond principal balance and the implementation of Governmental Accounting Standards Board (GASB) 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*, which eliminated the capitalization on of interest to capital assets beginning in fiscal year 2022.

Net transfers increased by $3 million is due to reduced transfers in from the City related to emergency projects and increase of transfer out to Hetchy Water for various Mountain Tunnel projects.

Definitions

- **Capital Assets:** Include depreciable, amortizable, non-amortizable and non-depreciable facilities and buildings, improvement, machinery and equipment, intangible assets, land and rights-of-way as well as construction work in progress, net of depreciation and amortization.
- **Current and Other Assets:** Assets easily converted to cash or consumed within one year: cash, investments, receivables, and prepaid expenses.
- **Long-term Debt Outstanding:** Payments due on debt that are more than 12 months in the future.
- **Current Liabilities:** Payments due on obligations owed by SFPUC within the next 12 months.
- **Net Position:** Net difference between assets and deferred outflows of resources, and liabilities and deferred inflows of resources.
- **Change in Net Position:** The total of net income (loss), net of transfers, and cumulative effect of accounting change.
- **Depreciation and Amortization Expense:** Depreciation spreads out the cost of a tangible asset over its useful life, and amortization is the deduction of intangible assets over a specified time period; typically the life of an asset.

Definitions continued

- **Income (Loss):** The difference between total revenues less total expenses.
- **Non-operating Revenues and Expenses:** Revenues and expenses that are incidental to SFPUC's main purpose and derived from activities not directly related to SFPUC's operations such as: license fees and penalties, interest earnings and costs associated with debt.
- **Operating Expenses:** Expenses incurred in the provision of water, sewer, and power services
- **Operating Revenues:** Revenues for the sale of water, sewer, and power services to customers, services, inspections, and programs provided by SFPUC.
- **Transfers in:** Funds recovered from other city departments to support various programs and projects.
- **Transfers out:** Funds provided to other city departments to support various programs and projects.

SFPUC 2022 By the Numbers

Miles	1,719 miles of water mains, 1,131 miles of collection system pipes
Millions of gallons (MG) . . .	266,881 MG water reservoir storage, 68,271 MG water production, 66,005 MG water consumption
Millions of gallons per day (MGD) . . .	181.8 MGD water consumption, 68.8 MGD sewer treatment
San Francisco Population	804,534
San Francisco Personal Income per Capita	$170,483
SFPUC Website	sfpuc.org

A Closer Look at the Numbers

SFPUC assets increased by $892 million or 8%, mainly due to $587 million additional construction and capital improvements, $25 million higher receivables related to charges for services and $342 million increase in receivables from other government entities and interest income offset by a decrease of $62 million in cash and investments mainly due higher capital spending and power purchases attributed to volatile and increased pricing in power market.

SFPUC Assets (DOLLARS IN MILLIONS)

Fiscal Year		FY2022	Restated FY2021^	2022-21 $ Change
Cash & Investments	$	1,225	1,287	(62)
Charges for Services Receivables (net of allowance for doubtful accounts)		162	137	25
Capital Assets............		10,451	9,864	587
Others		534	192	342
Total Assets.............	**$**	**12,372**	**11,480**	**892**

^Restated due to the implementation of GASB Statement No. 87, *Leases*.

SFPUC liabilities increased by $325 million or 4%. The increases included $676 million in outstanding debts due to bonds and State revolving fund loans issuances, offset by a decrease of $351 million in other liabilities mainly related to net pension liabilities.

SFPUC Liabilities (DOLLARS IN MILLIONS)

Fiscal Year		FY2022	Restated FY2021^	2022-21 $ Change
Certificates of Participation .	$	134	138	(4)
Commercial Papers.......		625	859	(234)
Bonds		6,987	6,631	356
Notes		350	—	350
State Revolving Fund Loans .		424	216	208
Others		783	1,134	(351)
Total Liabilities.........	**$**	**9,303**	**8,978**	**325**

^Restated due to the implementation of GASB Statement No. 87, *Leases*.

Financials at a Glance

SFPUC By the Numbers (DOLLARS IN MILLIONS, UNLESS OTHERWISE STATED)

		Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC
Standard & Poor's Bond Rating		AA-	AA	N/A	AA	N/A	N/A
Moody's Investors Service		Aa2	Aa2	N/A	N/A	A2	N/A
Fitch		N/A	N/A	N/A	AA-	N/A	N/A
Current Ratio		1.10 times	0.95 times	5.50 times	2.36 times	4.04 times	1.25 times
Debt Ratio		88.7%	69.0%	11.0%	37.7%	31.0%	75.2%
Debt Service Coverage		1.47	3.59	N/A	38.45	N/A	N/A
Total Assets[1]	$	6,411.4	4,674.8	310.8	846.2	129.8	12,372.3
Deferred Outflows of Resources	$	224.7	38.3	10.0	12.2	1.7	286.9
Total Liabilities[1]	$	5,684.1	3,227.1	34.3	318.7	40.2	9,303.8
Deferred Inflows of Resources	$	318.6	123.3	37.2	45.5	7.0	531.6
Net Position	$	633.4	1,362.7	249.2	494.2	84.3	2,823.8
Number of Customer Accounts		177,072	175,171	5	5,110	381,355	738,713
Capital Budget	$	212.7	408.3	122.8	43.2	2.4	789.4
Adopted Annual Operating Budget	$	633.6	404.5	90.1	128.7	226.5	1,483.4

[1] SFPUC total included elimination entries of $0.7 interfund payable and receivables between Wastewater and Hetchy Power.

Credit ratings and debt service coverage are only applicable to outstanding debt.

Definitions

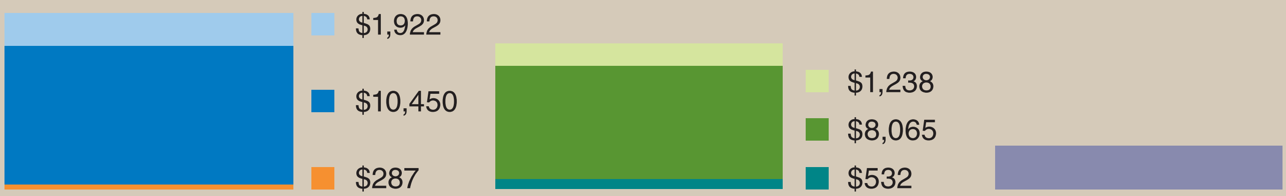
- **Current Ratio** measures the enterprise's ability to pay short-term obligations with its current assets. It is defined as current assets divided by current liabilities.
- **Debt Ratio** measures how much of the enterprise's assets are financed by debt. It is defined as total liabilities divided by total assets.
- **Debt Service Coverage** measures the enterprise's ability to meet both legal and policy-driven revenue obligations associated with debt. To ensure that the SFPUC retains financial flexibility for contingencies, it has adopted and implemented financial policies that impose higher standards than the bond indenture minimum debt service coverage requirements of 1.00x (current) and 1.25x (indenture).

Five-Year Comparative Consolidated Net Position

(DOLLARS IN MILLIONS)

- Current & other assets
- Capital assets net of accumulated depreciation and amortization
- Deferred outflows of resources
- Current liabilities
- Long-term liabilities
- Deferred inflows of resources
- Net position

2022

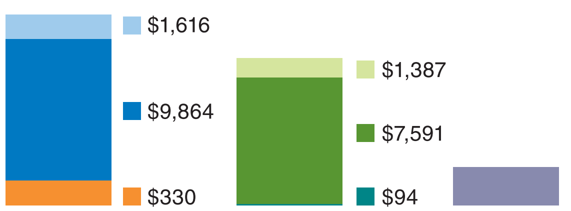


$12,659 Total assets & deferred outflows of resources

$9,835 Total liabilities & deferred inflows of resources

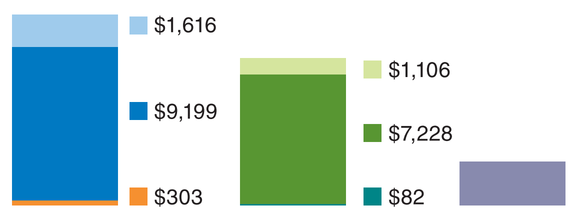
$2,824 Total net position

2021



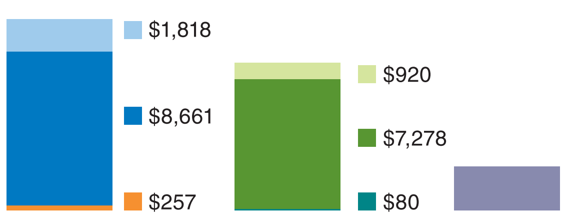
$11,810 | **$9,072** | **$2,738**

2020



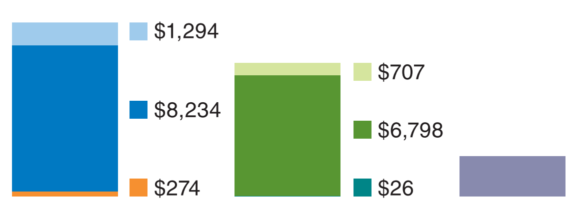
$11,118 | **$8,416** | **$2,702**

2019



$10,736 | **$8,278** | **$2,458**

2018



$9,802 | **$7,531** | **$2,271**

Five-Year Comparative Revenues and Expenses

(DOLLARS IN MILLIONS)

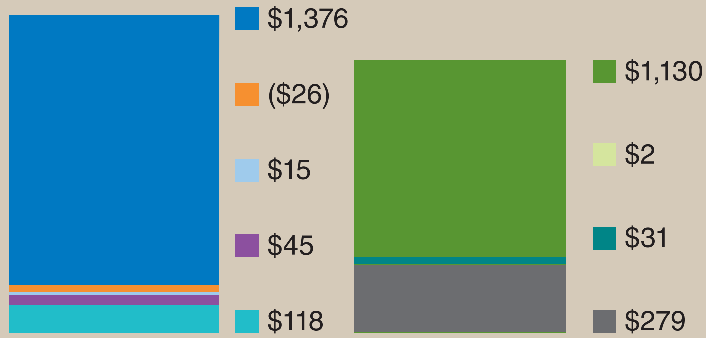
Revenues, Transfers in & Capital Contributions

- Charges for services
- Interest and investment (loss) income
- Rents & concessions
- Transfers in and capital contribution
- Others

Expenses & Transfers out

- Operating expenses
- Non-operating expenses
- Transfers out
- Interest expenses, amortization of premium, discount, refunding loss & issuance costs

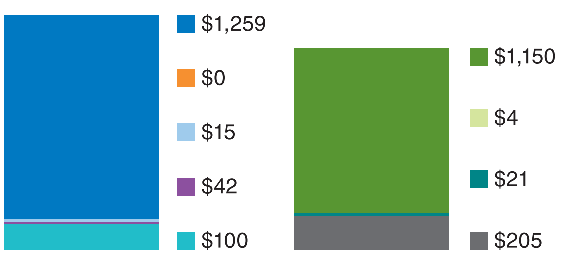
2022



$1,528 Total Revenues, Transfer In & Capital Contribution

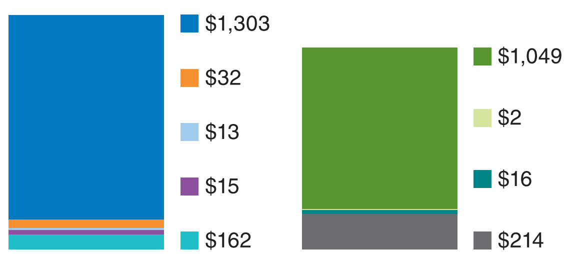
$1,442 Total Expenses & Transfers Out

2021



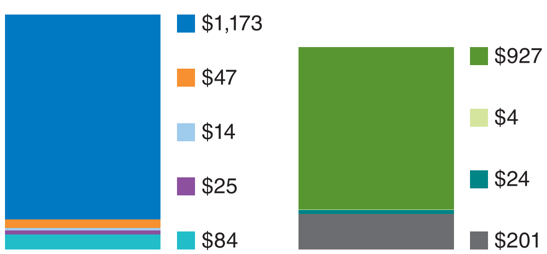
$1,416 | **$1,380**

2020



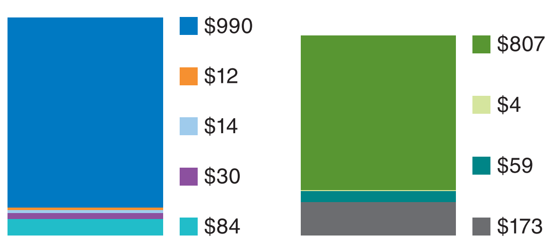
$1,525 | **$1,281**

2019



$1,343 | **$1,156**

2018



$1,130 | **$1,043**

San Francisco Public Utilities Commission
A Department of the City and County of
San Francisco, California

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.

Photos by: Bill Spears, Friends of the Urban Forest, Katherine Du Tiel, NextEra Energy Resources, Reggie Walters, Robin Scheswohl, Sabrina Wong

Date of Publication: February 2023

SFPUC Financial Services
525 Golden Gate Avenue, 4th Floor
San Francisco, CA 94102-3220
sfpuc.org

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Crystal Springs Golf Partners, L.P., Paid Rent Owed for 2019 Through 2021, but a Few Improvements Can Strengthen SFPUC's Lease Administration

San Francisco Public Utilities Commission (SFPUC)

AUDITS DIVISION

March 9, 2023

City & County of San Francisco
Office of the Controller
City Services Auditor

About the Audits Division

The City Services Auditor (CSA) was created in the Office of the Controller through an amendment to the Charter of the City and County of San Francisco (City) that was approved by voters in November 2003. Within CSA, the Audits Division ensures the City's financial integrity and promotes efficient, effective, and accountable government by:

- Conducting performance audits of city departments, contractors, and functions to assess efficiency and effectiveness of service delivery and business processes.
- Investigating reports received through its whistleblower hotline of fraud, waste, and abuse of city resources.
- Providing actionable recommendations to city leaders to promote and enhance accountability and improve the overall performance and efficiency of city government.

Team:
Winnie Woo, *Audit Manager*

Consultant:
Sjoberg Evashenk Consulting, Inc.

Mark de la Rosa
Director of Audits
Office of the Controller
City and County of San Francisco
(415) 554-7574

For media inquiries, please contact con.media@sfgov.org.

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@sfcontroller
LinkedIn Office of the Controller

Audit Authority

CSA conducted this audit under the authority of the San Francisco Charter, Section 3.105 and Appendix F, which requires that CSA conduct periodic, comprehensive financial and performance audits of city departments, services, and activities.

OFFICE OF THE CONTROLLER
CITY AND COUNTY OF SAN FRANCISCO

Ben Rosenfield
Controller

Todd Rydstrom
Deputy Controller

March 9, 2023

San Francisco Public Utilities Commission
525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94102

Mr. Dennis Herrera, General Manager
San Francisco Public Utilities Commission
525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94102

Dear Board Chair, Board Members, and Mr. Herrera:

The Office of the Controller's City Services Auditor (CSA), Audits Division, presents the report of the performance audit of the lease agreement (lease) between the City and County of San Francisco (City) and Crystal Springs Golf Partners, L.P., (Partners). The San Francisco Public Utilities Commission (SFPUC) administers the lease, which requires Partners to operate a public golf course and related facilities, including providing food and beverage services, on property owned by the City in San Mateo County. CSA engaged Sjoberg Evashenk Consulting, Inc., (SEC) to conduct the audit, which had as its objective to determine whether Partners complied with the terms of the lease. SEC also reviewed SFPUC's management and oversight of the lease.

Reporting Period: January 1, 2019, through December 31, 2021

Rent Paid: $2,860,650

Results:

By 2022 Partners had paid all the rent due for the audit period but made some of the rent payments over a year after they would have been due. This occurred because SFPUC suspended the lease's rent requirement for over a year as a result of the COVID-19 pandemic. Also, in a few areas SFPUC can improve its oversight of the lease and better monitor Partners' compliance with it.

The report includes eight recommendations for SFPUC to improve its oversight of the lease. The responses from SFPUC and Partners are attached. CSA will work with the department to follow up every six months on the status of the open recommendations made in this report.

CSA appreciates the assistance and cooperation of all staff involved in this audit. For questions about the report, please contact me at mark.p.delarosa@sfgov.org or 415-554-7574 or CSA at 415-554-7469.

Respectfully,

Mark de la Rosa
Director of Audits

cc: Board of Supervisors
Budget Analyst
Civil Grand Jury
Citizens Audit Review Board
City Attorney
Mayor
Public Library

San Francisco Public Utilities Commission:

Audit of Crystal Springs Golf Partners, L.P.

San Francisco
Water Power Sewer

January 2023

Table of Contents

Report Highlights

Purpose of the Audit

As authorized by the San Francisco Administrative Code, the Office of the Controller's City Services Auditor engaged Sjoberg Evashenk Consulting to conduct a contract compliance audit of Crystal Springs Golf Partners, L.P. (Partners) and assess how well the San Francisco Public Utilities Commission (SFPUC) managed the lease agreement (lease). The 20-year lease, which will expire in September 2037, allows Partners to operate a public golf course and related facilities on SFPUC land. The audit covered 2019 through 2021.

Highlights

During 2019 through 2021, the City and County of San Francisco (City) received nearly $2.9 million in net revenue from Partners in connection with the lease for the Crystal Springs Golf Course. Although it ensured Partners paid all rent that was due, SFPUC suspended rent payments in March 2020 to renegotiate the lease as shelter-in-place and closure orders were implemented due to the COVID-19 pandemic. Lease negotiations were unresolved until May 2021, so rent due continued to accumulate. The audit also found that SFPUC can improve its oversight to ensure Partners complies with all lease provisions.

In summary, the audit found that:

- SFPUC allowed nearly $1 million in rent to accumulate in 2020 and 2021; all amounts owed to the City were paid by early 2022, but the City lost potential interest earnings.
- SFPUC did not always deposit rent payments on time.
- Partners did not track capital improvement expenses by the applicable funding source or provide SFPUC with audited financial information, which the lease requires.
- Partners has not provided SFPUC with planned advertising activities or related costs, which the lease also requires.

Recommendations

This report offers eight recommendations, including that SFPUC:

- Establish formal policies and procedures to monitor, process, calculate, and record payments or amounts due to ensure staff understands how to properly oversee the lease.
- During any future lease negotiations, require payments from tenants per the lease. In future, if SFPUC considers suspending payments or reducing rents due from tenants because of unanticipated or uncontrollable events, it should closely monitor the tenant's capacity to pay and, as soon as practicable, negotiate and collect payments.
- Comply with existing policies and procedures by depositing all checks within five days of receipt. Consider adopting a new procedure to immediately deposit checks and provide lease administrators with a photocopy of the checks for processing and recording.
- Require Partners to review capital improvement project activity and perform a reconciliation to fully categorize all expenditures as corresponding to Trust F or Trust A projects. In future, ensure all capital improvement expenses are paid for with the correct trust funds.
- Ensure Partners submits all required information to SFPUC, such as the audited financial information for the capital improvement funds, biannual plans for capital improvements, advertising expenses, and planned advertising activities.

Introduction and Background

The City Services Auditor (CSA) of the City and County of San Francisco (City) engaged Sjoberg Evashenk Consulting, Inc., (SEC) to conduct a contract compliance audit of Crystal Springs Golf Partners, L.P., dba Crystal Springs Golf Course (Partners) and to assess how well the San Francisco Public Utilities Commission (SFPUC) managed the lease agreement (lease), pursuant to the City's Administrative Code, Chapter 10.6-2.

SFPUC's Real Estate Services Division (RES) oversees the SFPUC's income-producing property. RES negotiates agreements for the lease, license, purchase and sale of real property in the SFPUC's real estate property portfolio and administers the department's existing real estate agreements. Thus, RES negotiated the lease with Partners and administers, monitors, and negotiates any amendments to it.

In March 1996, Partners was formed to operate a municipal golf course, golf shop, and restaurant in San Mateo County under a one-year management contract with the City, which owns the land on which the facilities are located. In 1997, the City established a 20-year lease with Partners to operate a public golf course and related facilities on the property. On March 24, 2017, while negotiations for a new lease were ongoing, the lease expired, so SFPUC and Partners entered into a month-to-month agreement for the operations of the golf course.

On October 1, 2017, the parties executed a new 20-year lease, which requires Partners to pay SFPUC a monthly base rent of $83,333, for the period beginning on the commencement date, and ending on the last day of the third lease year. The lease requires periodic adjustments, starting in the fourth year (2020), based on the average "gross percentage rent" for the three preceding lease years. Gross percentage rent is a percentage of the gross revenue over the base rent.

The lease also requires Partners to pay "percentage rent" quarterly when the percentage rent computed on gross revenue for the quarter exceeds the base rent for the quarter. The percentage rent rate ranges from 5 to 30 percent of gross revenue, depending on the type of revenue. Gross revenue include revenue from food and merchandise. The percentage rent, although payable quarterly, is computed and reconciled annually, after audited financial statements are received, to ensure Partners paid the amount required or to adjust if Partners overpaid or underpaid.

The Lease Requires the Following Rent Payments:

- Monthly Base Rent: Fixed $83,333 per month from 2017 through 2019. Thereafter, adjusted annually based on percentage rent.
- Percentage Rent of Gross Revenue: Due quarterly if computed percentage rent is more than base rent.
- Annual Adjustment: If audited financial reports show a difference in gross revenue reported, percentage rent is adjusted.

While SFPUC's RES manages the commercial interest in SFPUC-owned lands and properties, including this property, SFPUC's Customer Service Bureau (CSB) invoices tenants, collects payments, deposits checks, and records receipts for SFPUC's properties. For this particular property, RES conducts extensive analysis to calculate amounts due and determine proper recording on lease ledgers. To perform these tasks, RES and CSB use Yardi, a real estate management system, which provides information to SFPUC's Finance team. This team records the information in the City's financial system, PeopleSoft, and uses it to reconcile accounts and bank statements.

Exhibit 1 demonstrates how SFPUC bills Partners, and Exhibit 2 shows the process SFPUC uses when it receives payments from Partners.

EXHIBIT 1. HOW SFPUC CALCULATES AMOUNTS DUE FROM PARTNERS AND BILLING PARTNERS

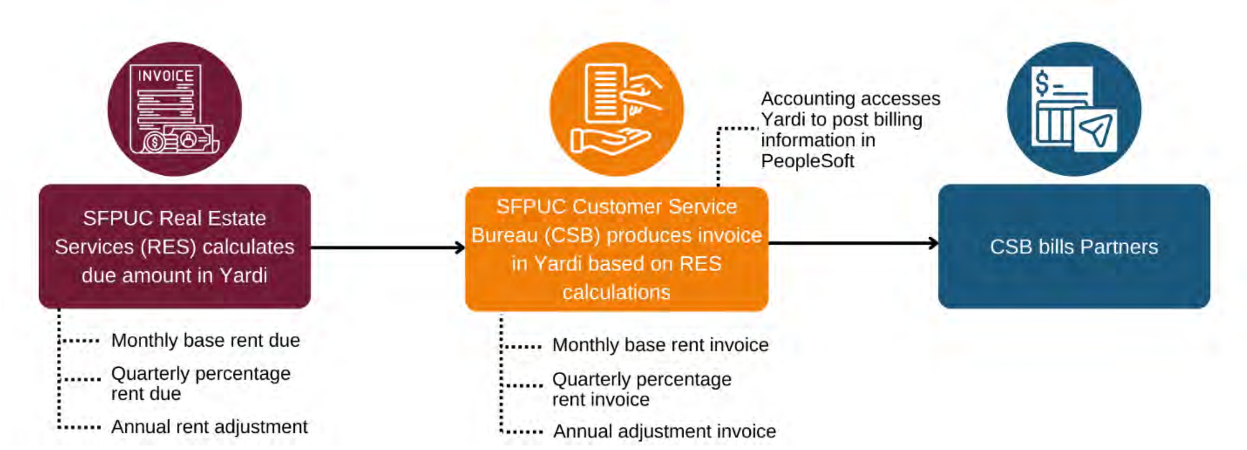
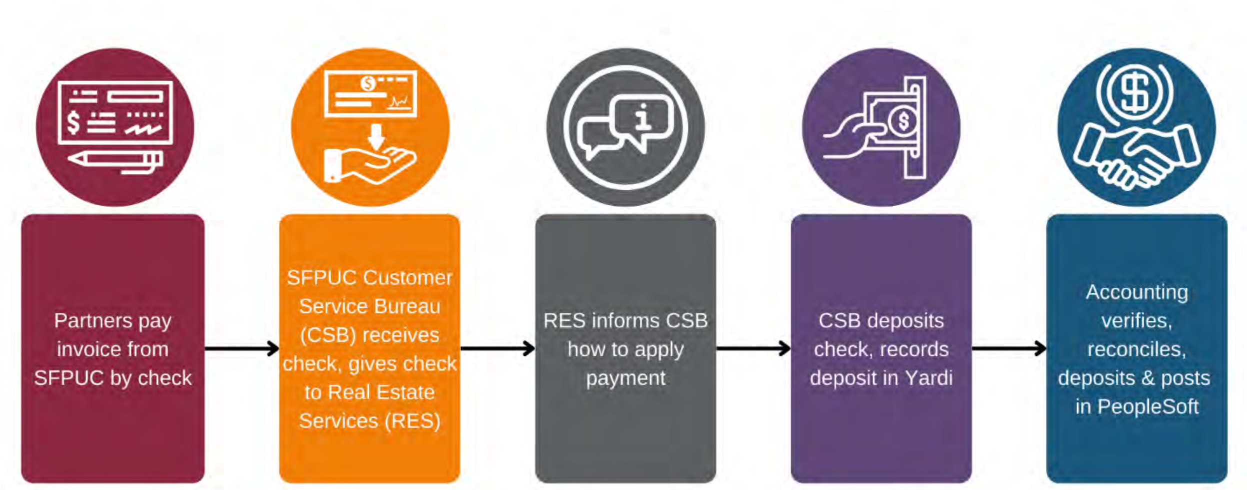


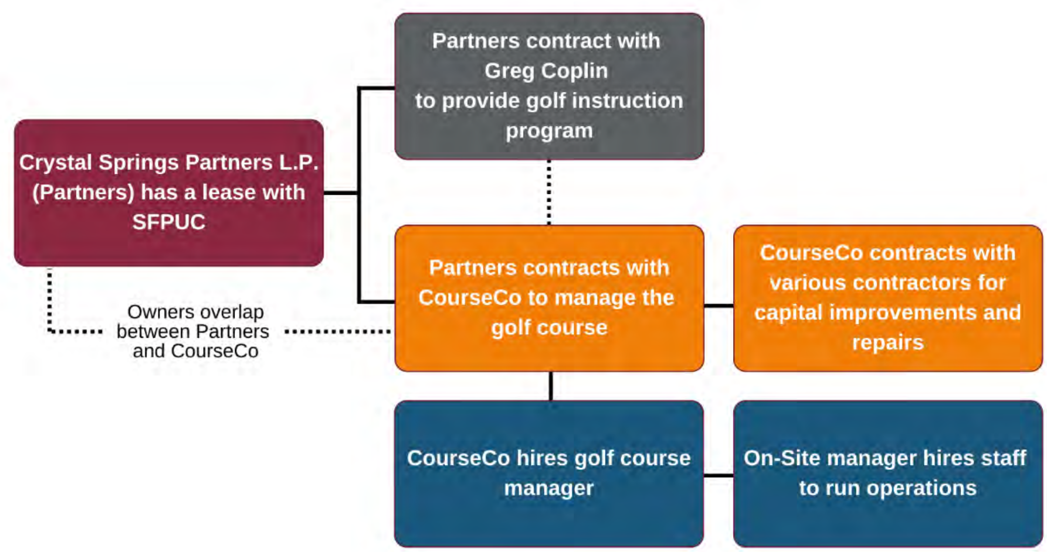
EXHIBIT 2. HOW SFPUC RECEIVES, DEPOSITS, AND RECORDS PAYMENTS FROM PARTNERS



As the lease stipulates, Partners contracts with CourseCo, Inc., (CourseCo) to manage the golf course operations. Stockholders of CourseCo are also owners of Partners. Partners also contracts with Greg Coplin Golf School, LLC, to operate the golf lesson programs offered at the golf course. Under the current lease, Partners staffs all other operations at the golf course, including food and beverage operations.

Exhibit 3 shows the relationship of the various entities and operations at the golf course.

EXHIBIT 3. RELATIONSHIP OF ENTITIES FOR CRYSTAL SPRINGS GOLF COURSE



In March 2020, the golf course closed due to COVID-19 shelter-in-place orders. Shortly thereafter, Partners began negotiations with SFPUC to suspend the rent due to the temporary closure. An amendment was written and signed by all parties in 2021, but was not presented to the Board of Supervisors and never became effective. Instead, SFPUC set the amendment aside after it determined that rent suspension was not needed due to changed conditions with the shelter-in-place orders lifted, some operations resumed, and golf surged as people sought out the socially distanced outdoor activity.

Scope and Methodology

The purpose of this audit is to determine if Partners complied with the reporting, payment, and other significant terms of its lease. Also, we assessed the adequacy of SFPUC's monitoring related to the lease. The audit covered calendar years 2019 through 2021.

To meet the audit's objectives, SEC performed the following audit steps:

- Reviewed the terms of the lease and lease changes.
- Reviewed and assessed SFPUC's protocols and practices for monitoring Partners' compliance with the lease.
- Evaluated SFPUC's policies and procedures for invoicing, processing, and reporting amounts due and payments received related to the Partners' lease.
- Assessed the adequacy of Partners' procedures for collecting, recording, summarizing, and reporting its gross revenue to SFPUC per the lease.
- Reviewed the reports of the independent audit of Partners' financial statements and schedules of gross revenue to identify trends or gaps.
- Examined the workpapers prepared by Partners' independent Certified Public Accountant in support of the audited financial statement audits from 2019 through 2021.
- Reviewed rent calculations to determine if they were appropriately calculated per the lease and if payments were made in a timely manner.
- Reviewed the capital improvements fund to ensure required contributions were made, expenses were proper, capital projects were approved in advance by SFPUC, and that the projects adhere to the lease requirements.
- Verified Partners' compliance with certain other lease provisions.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

AUDIT RESULTS

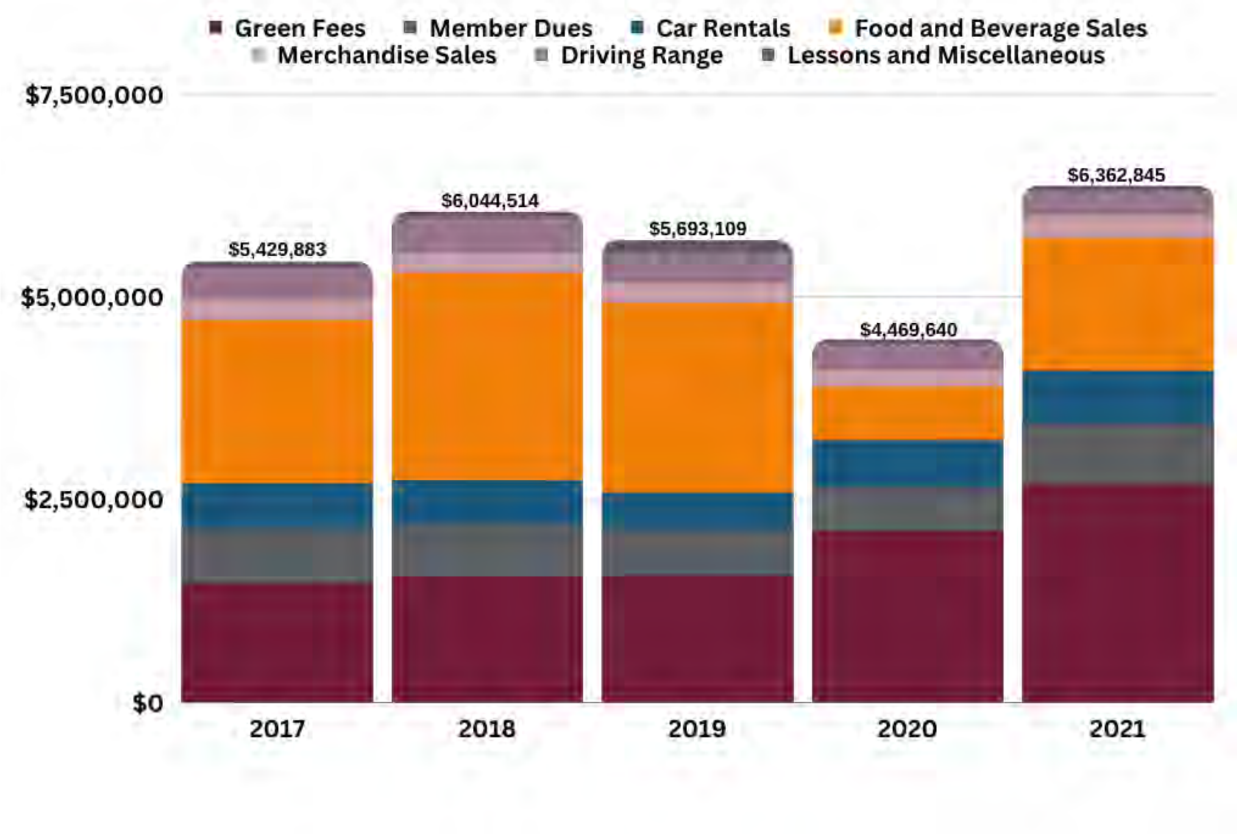
For the period January 1, 2019, through December 31, 2021, Partners properly reported its gross revenue in accordance with its lease. Partners owed SFPUC approximately $2.86 million in rent based on the gross revenue of $16.5 million it earned during the period. However, at the onset of the COVID-19 shelter-in-place directives, SFPUC suspended rent payments for most of 2020 and into 2021 and thus, Partners did not pay rent on time as required by the lease. Further, Partners did not provide SFPUC with required reports on planned capital improvements and financial information relating to the capital improvement funds.

Finding 1: SFPUC Allowed Nearly $1 Million in Unpaid Rent to Accumulate in 2020 and 2021; Partners Paid All Amounts Owed to the City by 2022, but Potential Interest Earnings Were Lost

Throughout 2019 and early 2020, Partners paid its monthly base rent on time. However, in March 2020, Partners asked SFPUC to suspend the base rent because of reduced revenue resulting from the impacts of the COVID-19 pandemic. In particular, San Mateo County's mandatory shelter-in-place ordinance required Partners to cease indoor dining and large events at the golf course, which caused its food and concession revenue to decline significantly. Consequently, as of April 2020, SFPUC informally (without amending the lease) allowed Partners to suspend its rent payments through the remainder of 2020 and into early 2021 while the parties evaluated the pandemic's impacts on golf course operations and negotiated changes to the lease that could have formally suspended or reduced some or all of Partners' rent obligations.

By October 2020, the halted monthly base rent had accumulated to nearly $630,000, prompting SFPUC to require Partners to remit 50 percent of the outstanding balance, or $315,000. Over the next year, Partners made a few rent payments while negotiations continued, but SFPUC did not require regular rent payments because the proposed changes to the lease would have reduced the percentage rent due and suspended base rent among other provisions, and no rent would accrue during the suspension period. In May 2021, SFPUC's revised golf operations forecast concluded that decreases in projected food and beverage revenue at the golf course would be more than offset by a surge in golfing revenue (green fees). Thus, SFPUC and Partners did not move forward with an amendment to the lease that had already been signed by both parties to formally suspend rent payments and reduce the percentage rent. Consistent with SFPUC's revised forecast, green fee revenue increased significantly in 2020 and 2021, helping Partners to generate more total revenue at the golf course in 2021 than it did in any of the three years before the COVID-19 pandemic began, as illustrated in Exhibit 4.

EXHIBIT 4. PARTNERS' ANNUAL GROSS REVENUE, CALENDAR YEARS 2017 THROUGH 2021



SOURCE: AUDITED FINANCIAL STATEMENTS

Due to the increased green fee revenue, SFPUC ended the negotiations with Partners to amend the lease and required Partners to remit the remaining outstanding rent. By the end of 2021, Partners' accumulated rent had reached nearly $1 million, as shown in Exhibit 5.

EXHIBIT 5. UNTIL FULLY PAID IN 2022, ALMOST $1 MILLION IN RENT AND ASSOCIATED AMOUNTS WERE ACCUMULATED IN 2019 THROUGH 2021

Due From or Paid by Partners	2019	2020	2021	Total
Total Rent Due	$1,000,000	$931,300	$1,218,900	$3,150,200
Capital Improvement Fund Deposit[1]	($111,360)	($86,980)	($124,150)	($322,490)
Property Tax	$10,600	$11,050	$11,290	$32,940
Total Due to the City	$899,240	$855,370	$1,106,040	$2,860,650
Amount Paid by Partners	$898,250	$481,530	$499,230	$1,879,010
Total Amount Accumulated	$990	$373,840	$606,810	$981,640

Source: SFPUC's Rent Reconciliations and Lease Ledgers

[1] The lease requires a portion of the rent due be deposited into a capital improvement fund (Trust A).

According to SFPUC, Partners' rent obligations continued to be outstanding (and continued to increase) throughout 2021 even after the lease negotiations ended because SFPUC needed more time—and Partners' audited financial information—to determine the amounts due. As SFPUC calculated the amounts due, Partners made rent payments and, by February 2022, had paid all outstanding amounts. Nevertheless, the City likely lost interest income that it could have earned had Partners been required to pay its rent on time and if that rent had been deposited in a timely manner, even during negotiations to potentially adjust the lease's rent terms.

Although the audit found that the RES manager properly calculated rent amounts due, neither RES nor CSB have formal policies and procedures to oversee and guide the process for this lease. According to the director of RES, the division does not have the staffing resources to develop formalized policies and procedures.

Given the complexity of the lease, including its rent provisions, and the RES manager plans to retire soon, it is important that SFPUC have adequate policies and procedures to ensure staff can carry on the responsibility of enforcing the lease's rent provisions to ensure that Partners pays the correct amount of rent.

Recommendations

The San Francisco Public Utilities Commission should:

1. Require payments from tenants per the lease during any negotiations that may result in a change to the payments due. In future, if it considers suspending payments or reducing rents because of unanticipated or uncontrollable events, SFPUC should closely monitor the circumstances and the tenant's capacity to pay and, as soon as practicable, should establish, bill for, and collect the payments due. SFPUC should also develop formal policies and procedures on how to handle rent collection for unanticipated or uncontrollable events.

2. Formalize policies and procedures on how the rent payments and credits provided for in the Crystal Springs Golf Course lease are to be calculated.

Finding 2. SFPUC Did Not Always Deposit Rent Payments on Time

SFPUC's Customer Service Bureau (CSB) routes checks received from Partners to RES for processing, analyzing, researching, and recording before the payments are deposited in SFPUC's bank account. The audit found that SFPUC often did not deposit Partners' rent checks within five business days of receipt, contrary to its cash management policies and procedures, as reflected in Exhibit 6.

EXHIBIT 6. SFPUC DEPOSITED SOME OF PARTNERS' RENT PAYMENTS WEEKS OR MONTHS AFTER THEY WERE RECEIVED

Year	Number of Rent Payments Received From Partners	Number of Days Rent Payments Deposited After Receipt		
		Within 5 Days	6 to 21 Days	=< 22 Days
2019	13	9	1	3
2020	4	3	1	0
2021	3	1	0	2
2022*	7	4	2	1
Total	27	17	4	6

Note: Includes several payments made by Partners for rent due in 2020 and 2021.
Source: SFPUC Lease Ledger; Partners canceled checks

In fact, in 2019, one check from Partners was deposited almost two months after it was received, and in 2021, two checks from Partners, totaling nearly $1 million, were deposited more than two months after they were received, with one of these deposited over four months later.

According to RES management, checks were not always deposited promptly because of the time required for RES staff to properly process the rent payments and because of staffing limitations in RES due to the COVID-19 pandemic.

In addition to Partners' payments to SFPUC not being depositing promptly, they were not always properly safeguarded. Although RES stated that checks were kept in a locked drawer when they obtained the checks, most RES employees were seldom or never in the office beginning in March 2020 and extending long into 2021 because they were required to work remotely while COVID-19 shelter-in-place orders were in effect. Consequently, rent checks often were left unattended on employees' desks or in their in-boxes for long periods until they came into the office to lock the checks.

Because SFPUC sometimes deposited payments weeks or months after they were received, it lost potential interest revenue the bank would have otherwise paid the City on those funds, and, given the high value of some of the checks, the lost interest was likely significant. Further, not depositing checks immediately, routing payments to another area, leaving checks unattended, and improperly safeguarding checks increases the risk that checks will be temporarily misplaced, lost (and need to be reissued), or stolen.

Recommendations

The San Francisco Public Utilities Commission should:

3. Establish and implement a procedure—that is practical even when Real Estate Services Division staff works remotely—to ensure compliance with the existing policy that all checks be deposited with five days of receipt.

4. Consider not routing checks to the Real Estate Services Division before deposit, but instead deposit them into the bank immediately upon receipt and provide the Real Estate Services Division with a photocopy of the checks for processing and recording.

Finding 3: Partners Did Not Always Track Capital Improvement Expenses by Applicable Funding Source

The lease requires Partners to administer capital improvement funds to pay for specific improvement projects and maintenance activities[2] at the golf course facilities. To do this, Partners established the following two bank accounts:

- Trust A (City and Partners' funds) account[3]—East West Bank account to administer the 2 percent of gross revenue the City and Partners are required to deposit each year to pay for ongoing capital project costs. Our review of Partners' bank statements and general ledger information confirmed that the required amounts were appropriately deposited.

- Trust F (Partners' funds) account[4]—Bank of Marin account to administer the $1,250,000 that Partners was required to deposit in 2017, when the lease was executed, to fund specific capital projects outlined in the lease.

During the audit period, Partners spent $709,048 from the two trust accounts on the projects and activities reflected in Exhibit 7.

EXHIBIT 7. PARTNERS SPENT MORE THAN $700,000 FROM TRUST F AND TRUST A ACCOUNTS, 2019 THROUGH 2021

Projects	Expenditures
Banquet Room	$411,337
Irrigation System Repair	$60,951
Netting	$42,800
Building Repair & Maintenance	$14,650
Tee Box Repair	$13,201
Tree Services	$128,758
Permitting (all projects)	$37,351
Total	$709,048

As required, the expenses reflected in Exhibit 7 generally appear to be related to capital project activities, and SFPUC provided approvals[5] for each project before the activities were undertaken or expenses were incurred.

However, even after spending a considerable amount of time attempting to do so, Partners could not fully categorize all expenditures reflected in Exhibit 7 as corresponding to Trust F or Trust A projects. Because it cannot always differentiate its expenditures from the two accounts, Partners is at risk of inadvertently using city funds deposited in the Trust A account to pay for project activities that were intended to be paid for with funds invested by Partners and deposited in the Trust F account. For example, we found one instance in

[2] Repair and replacement of capital items, including alterations, fixtures, furniture, or equipment.
[3] As of December 31, 2021, Trust A account had a bank balance of $1,055,628.
[4] As of December 31, 2021, Trust F account had a bank balance of $541,551.
[5] Project approvals were reflected in the executed lease or were provided separately through Approval Consent Letters issued by SFPUC after its capital project experts reviewed project details.

which a $68,000 expense appeared to be incorrectly paid from the Trust A account. Although Partners later made an adjustment to move the accounting entry to another expense account, it is unclear whether or not Partners later moved $68,000 back into the Trust A account to correct the error.

Further, to provide oversight of and accountability for the golf course facilities' capital project funding, the lease requires Partners to provide SFPUC with bi-annual capital improvement plans describing capital projects planned, estimated timeframes, and budget/cost information. The lease also requires Partners to provide SFPUC with independent audited financial reports that include a detailed analysis of the capital improvement funds. However, Partners has not provided SFPUC with any of these required reports.

According to Partners, independent audit reports were prepared for overall financial statements and gross revenue, but it was an oversight that detailed analysis was not performed on the capital improvement funds. Further, SFPUC does not ensure that Partners submits these required reports. Without these reports, SFPUC cannot adequately monitor the status of the projects or be assured that city funds have been used appropriately and in line with SFPUC's expectations and priorities.

Last, Partners does not have capital improvement fund policies and procedures that would help ensure funds are used for the intended purpose and activities and to ensure compliance with all capital improvement requirements in the lease.

Recommendations

The San Francisco Public Utilities Commission should:

5. Require Partners to formalize capital improvement fund policies and procedures to help ensure funds are used for the intended purpose and activities and to ensure compliance with all capital improvement requirements in the lease.
6. Require Partners to review capital improvement project activity and perform a reconciliation to fully categorize all expenditures as corresponding to Trust F or Trust A projects. In future, ensure all capital improvement expenses are paid from the correct trust bank accounts.
7. Ensure that Partners submits required reports, including bi-annual plans for capital improvements that provided information about capital improvements planned, completed, estimated and actual cost information and audited financial statements for the capital improvement funds.

Finding 4: Contrary to the Lease, Partners Does Not Provide SFPUC With Planned Advertising Activities or Related Costs

Although the lease requires Partners to spend no less than the base promotion budget to promote and advertise the golf course, Partners has not always spent the minimum required. Further, Partners has not requested SFPUC's permission to spend less than the required amount nor has it provided SFPUC with the lease-required report of expenses and activities.

Specifically, the lease requires Partners to expend annually at least $45,000, as adjusted annually per the Consumer Price Index, but not lower than $45,000—what is called the base promotion budget—to promote and advertise the Crystal Springs Golf Course. However, the lease allows Partners to spend less than the base promotion budget if it makes a written request that is approved by SFPUC. Also, by January 15th of each year, Partners must report to SFPUC its advertising expenses in detail. However, Partners has neither asked SFPUC for a reduction in the base promotion amount nor has it provided a detailed report of its advertising expenses.

Each year's audited financial statements[6] acknowledge that Partners is required to spend a certain amount on advertising, but Partners does not provide detailed information about the activities undertaken nor does it adjust the base promotion budget. Although the promotion budget and adjustment to the budget are immaterial to the financial statements, Partners is required to promote the golf course, spend a minimum, adjust the base, and report on the advertising activities each year.

When we requested information related to this, Partners acknowledged the requirement and added that it would comply with it in the future. Partners also provided us with details on the advertising expenses it incurred in 2019, 2020, and 2021. Although the total advertising expense per the detailed information for each of the fiscal years does not agree exactly with the amounts reported in the Notes to the Financial Statements for those years, the totals are relatively close for two years. However, the amount for 2020 based on the documents provided by Partners is nearly 30% (or $10,098) more than the amount reported in the organization's 2020 audited financial statements. Although none of the differences are material when the financial statements are taken as a whole, the discrepancies demonstrate the need to prepare the annual information and ensure it agrees with other financial information.

Recommendation

8. The San Francisco Public Utilities Commission should ensure Partners submits required annual advertising expense plans and properly promotes the Crystal Springs Golf Course to maximize its use and generate revenue.

[6] Notes to the Financial Statements, Note 4.

Appendix A – SFPUC Response

San Francisco
Water Power Sewer
Services of the San Francisco Public Utilities Commission

525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94102
T 415.554.3155
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TTY 415.554.3488

February 16, 2023

Mark de la Rosa
Director of Audits
City Hall, Room 476
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102

Subject: San Francisco Public Utilities Commission (SFPUC) Response to Crystal Springs Golf Partners, L.P. Audit

Dear Mr. de la Rosa,

Thank you for providing the SFPUC the opportunity to review the Crystal Springs Golf Partners, L.P. Audit Report and respond to its findings and recommendations.

We appreciate the time and effort spent by the staff of Sjoberg Evashenk Consulting, Inc., and the City Services Audit Division to review the Crystal Springs Golf Partners lease administration over the last several months.

Of the eight audit recommendations, the SFPUC concurs with seven and partially concurs with one. We are committed to incorporating these recommendations into our business practices, which will serve to strengthen our lease administration program.

Sincerely,

Dennis J. Herrera

Dennis Herrera
General Manager

CC: Ronald Flynn, Deputy General Manager
Nancy Hom, AGM Business Services/CFO
Rosanna Russell, Real Estate Director
Irella Blackwood, Audit Director

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.

Recommendations and Responses

For each recommendation, the responsible agency should indicate in the column labeled Agency Response whether it concurs, does not concur, or partially concurs and provide a brief explanation. If it concurs with the recommendation, it should indicate the expected implementation date and implementation plan. If the responsible agency does not concur or partially concurs, it should provide an explanation and an alternate plan of action to address the identified issue.

Recommendation	Agency Response	CSA Use Only Status Determination*
The San Francisco Public Utilities Commission should:		
1. Require payments from tenants per the lease during any negotiations that may result in a change to the payments due. In future, if it considers suspending payments or reducing rents because of unanticipated or uncontrollable events, SFPUC should closely monitor the circumstances and the tenant's capacity to pay and, as soon as practicable, should establish, bill for, and collect the payments due. SFPUC should also develop formal policies and procedures on how to handle rent collection for unanticipated or uncontrollable events.	☒ Concur ☐ Do Not Concur ☐ Partially Concur No one could have anticipated the social and economic effects of the COVID 19 pandemic. During the pandemic, the SFPUC followed the City Administrator's "**City Policy Regarding Enforcement of Certain Tenant Lease Obligations by City Department**" regarding suspension of rent payments. The SFPUC developed its own rent forbearance policy dated April 22, 2020. The SFPUC closely monitored the golf course tenant's capacity to pay its rent and required the tenant to develop a pro forma to support its request for reduced rent. The initial pro forma supported a reduction in rent and the SFPUC negotiated a lease amendment. This process required significant time and resources when both were in short supply. As the pandemic progressed more revenue information became available, and it became clear that a reduction in rent was no longer warranted. At this point the lease amendment was abandoned and the SFPUC requested that the tenant to pay past due rent.	☒ Open ☐ Closed ☐ Contested

* Status Determination based on audit team's review of the agency's response and proposed corrective action.

Recommendation	Agency Response	CSA Use Only Status Determination*
	Given that the Mayor's Order and the SFPUC's 2020 rent forbearance policy expired, the SFPUC concurs it should develop formal policies and procedures for dealing with the next pandemic, or other future force majeure event. Such procedures will be developed in consultation with the City to ensure compliance with City policies governing such events. **Implementation: September 30, 2023**	
2. Formalize policies and procedures on how the rent payments and credits provided for in the Crystal Springs Golf Course lease are to be calculated.	☒ Concur ☐ Do Not Concur ☐ Partially Concur Guidance will be drafted to assist in the calculation of rent, documentation that ties the lease language to the report received by Crystal Springs, and documentation that ties the Crystal Springs report to the Excel spreadsheet. **Implementation: March 31, 2023**	☒ Open ☐ Closed ☐ Contested
3. Establish and implement a procedure—that is practical even when Real Estate Services Division staff works remotely—to ensure compliance with the existing policy that all checks be deposited with five days of receipt.	☒ Concur ☐ Do Not Concur ☐ Partially Concur To avoid deposit delays in the future, the tenant agreed to pay its rent electronically using the Controller's ACH system. Tenant has been provided instructions to setup recurring electronic rent payments. **Implementation: March 31, 2023**	☒ Open ☐ Closed ☐ Contested

* Status Determination based on audit team's review of the agency's response and proposed corrective action.

Recommendation	Agency Response	CSA Use Only Status Determination*
4. Consider not routing checks to the Real Estate Services Division before deposit, but instead deposit them into the bank immediately upon receipt and provide the Real Estate Services Division with a photocopy of the checks for processing and recording.	☒ Concur ☐ Do Not Concur ☐ Partially Concur The golf course lease is a specialty lease that is a great anomaly in the SFPUC's rental portfolio. The SFPUC's processing of this tenant's percentage rent is unlike the processing of most real estate rent. Staff spends considerable time recalculating percentage rent before rent payments can be properly applied to the tenant's accounts receivable. This staff time, which together with the pandemic-caused delays in distributing the mail with the rental checks and remote work, caused delays in depositing the rent checks. To avoid deposit delays in the future, the tenant agreed to pay its rent electronically using the Controller's ACH system. Tenant has been provided instructions to setup recurring electronic rent payments. **Implementation: March 31, 2023**	☒ Open ☐ Closed ☐ Contested
5. Require Partners to formalize capital improvement fund policies and procedures to help ensure funds are used for the intended purpose and activities and to ensure compliance with all capital improvement requirements in the lease.	☒ Concur ☐ Do Not Concur ☐ Partially Concur The SFPUC will assist the tenant in formalizing its capital improvement fund policies, procedures, and reporting. Compliance with these policies and procedures will be assured through the lease-mandated annual audit of the capital improvement fund. **Implementation: March 31, 2023**	☒ Open ☐ Closed ☐ Contested

* Status Determination based on audit team's review of the agency's response and proposed corrective action.

Recommendation	Agency Response	CSA Use Only Status Determination*
6. Require Partners to review capital improvement project activity and perform a reconciliation to fully categorize all expenditures as corresponding to Trust F or Trust A projects. In future, ensure all capital improvement expenses are paid from the correct trust bank accounts.	☐ Concur ☐ Do Not Concur ☒ Partially Concur The lease requires the establishment of two capital improvement fund accounts. One account is completely funded by the tenant to fund projects specified in Exhibit D of the lease. These projects represent the tenant's minimum required investment in the lease. The other account is designed to fund ongoing, unspecified capital projects on an as-needed basis. This later account is funded by the tenant and the SFPUC. Unfortunately Exhibit D provided a large unspecified amount to be spent on capital projects. It is not possible to distinguish between funds spent on Exhibit D's "other" capital projects, and funds spent for ongoing, as-needed capital projects, leading to confusion in categorizing certain capital projects. The SFPUC feels that ultimately, the distinction between the two capital funds is of limited unimportance. The lease requires the establishment of the escrow account to ensure that the tenant satisfies its minimum capital investment requirement. However, the lease also states that any excess funds in the escrow account are to be transferred to the regular capital improvement fund. In short, the two capital improvement funds can eventually become comingled. That said, it's important that the tenant completes the capital projects specified in Exhibit D of the lease. The SFPUC will work with the tenant in developing reporting that will ensure that the tenant fulfills its minimum capital investment obligation. **Implementation: June 30, 2023**	☒ Open ☐ Closed ☐ Contested

* Status Determination based on audit team's review of the agency's response and proposed corrective action.

Recommendation	Agency Response	CSA Use Only Status Determination*
7. Ensure that Partners submits required reports, including bi-annual plans for capital improvements that provided information about capital improvements planned, completed, estimated and actual cost information and audited financial statements for the capital improvement funds.	☒ Concur ☐ Do Not Concur ☐ Partially Concur While the lease technically requires bi-annual capital improvement plan reporting, there was never a case where the tenant was making capital improvements without the SFPUC's informed consent. The reason is that the SFPUC issues a formal consent letter, approved by its legal counsel, before capital improvements can be made. At the start of the lease the SFPUC and the tenant developed a long-term capital improvement plan that spanned many years. The SFPUC worked closely with the tenant in the execution of the capital plan, including guidance with City Planning (CEQA) and through the Project Review process at the SFPUC. The SFPUC will work with the tenant in developing reporting that will ensure that the tenant fulfills its minimum capital investment obligation. The tenant employs a 5-yr rolling capital improvement plan. SFPUC will review this capital improvement plan to confirm that this report will satisfy the capital improvement reporting requirements of the lease. **Implementation: March 31, 2023**	☒ Open ☐ Closed ☐ Contested
8. Ensure Partners submits required annual advertising expense plans and properly promotes the Crystal Springs Golf Course to maximize its use and generate revenue.	☒ Concur ☐ Do Not Concur ☐ Partially Concur The SFPUC will require the tenant to submit a report of its annual advertising program expenses. **Implementation: March 31, 2023**	☒ Open ☐ Closed ☐ Contested

* Status Determination based on audit team's review of the agency's response and proposed corrective action.

Appendix B – Partners Response

CRYSTAL SPRINGS GOLF COURSE

March 3, 2023

Mr. Mark de la Rosa
Director of Audits
City Hall, Room 476
1 Dr. Carlton B Goodlett Place
San Francisco, Ca 94102

Subject: San Francisco Public Utilities Commission (SFPUC)
Response to Crystal Springs Golf Partners, L.P. Audit

Mr. de la Rosa:

Thank you for the opportunity to review and respond to the Crystal Springs Golf Partners, L.P. Audit Report. We appreciate the time the SFPUC and Sjoberg Evashenk Consulting have put into this audit along with the recommendations provided. Several of the findings are regarding PUC administration of the lease and therefore we have no comment or response.

Regarding the findings of the use of the two capital accounts we agree with the findings that the use of the appropriate funds for individual projects was not properly tracked and we have already implemented procedures for appropriately tracking. We would like to note that all of the capital projects were appropriately approved and managed. In regard to the submission of the biannual capital fund we will ensure compliance moving forward.

Regarding the findings on not fully reporting on minimum marketing expenditure we will ensure compliance moving forward.

Thank you,

Tom Bugbee
Chief Operating Officer
CourseCo, Inc on behalf of Crystal Springs Golf Partners

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