

Sustaining the resources
entrusted to our care.

Comprehensive Annual Financial Report

Fiscal Years Ended June 30, 2019 and 2018



San Francisco
Water Power Sewer

Services of the San Francisco Public Utilities Commission



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**

**Comprehensive Annual Financial Report
For the Fiscal Years Ended
June 30, 2019 and 2018**

Prepared by SFPUC Financial Services

A handwritten signature in blue ink, appearing to read 'Eric Sandler', is written over a solid blue horizontal line.

**Eric Sandler
Assistant General Manager, Business Services
& Chief Financial Officer**

This page has been intentionally left blank.



The San Francisco Public Utilities Commission

TABLE OF CONTENTS

Introductory Section (Unaudited)	Page
General Manager’s Transmittal Letter	1-14
The Reporting Entity.....	2-4
Long-Term Strategic Goals, Major Accomplishments and Initiatives, and Financial Planning.....	4-11
Business Continuity and Emergency Planning.....	11-12
San Francisco’s Budget Process.....	12
Financial Transparency, Reporting and Auditing Process.....	12-13
Financial Authority and Policies.....	13
Accounting Systems, Policies, and Internal Controls.....	13-14
Achievement Awards from Government Finance Officers Association.....	14
Conclusion.....	14
Mission Statement and Commission Members	15
Structure and Organizational Chart	16
SFPUC Strategic Plan	17
Enterprise Risk Management Framework	17-19
Operating and Capital Budgets	19
Ten-Year Financial Plan	20
Ten-Year Capital Plan	20

(Continued)

Financial Section	Page
Independent Auditors' Report	21-23
Management's Discussion and Analysis (Unaudited)	24-72
Basic Financial Statements	73-163
Statements of Net Position – Proprietary Funds.....	73-74
Statements of Revenues, Expenses, and Changes in Net Position – Proprietary Funds.....	75
Statements of Cash Flows – Proprietary Funds.....	76-77
Notes to Basic Financial Statements.....	78-163
Required Supplementary Information (Unaudited)	164-167
Schedules of the Proportionate Share of the Net Pension Liability.....	164
Schedules of Employer Contributions - Pension Plan.....	165-166
Schedules of Changes in Other Postemployment Benefits Liability and Related Ratios Other Postemployment Healthcare Benefits Plan.....	167
Supplementary Information (Proprietary Funds)	168-170
Schedule of Changes in Net Position – Dollar and Percentage Change vs. Prior Year.....	168-169
Schedule of Changes in Revenues, Expenses, and Net Position – Dollar and Percentage Change vs. Prior Year.....	170
 Statistical Section (Unaudited)	
Financial Trends	171-199
Comparative Highlights of Revenues and Expenses.....	171-176
Changes in Net Position.....	177-188
Summary of Net Position by Component.....	189-194
Investments in Capital Assets.....	195-199

(Continued)

	Page
Revenue Capacity	200-206
Water, Wastewater, Hetchy Power, and CleanPowerSF Rates History.....	200-203
Net Revenue and Debt Service Coverage.....	204-206
Debt Capacity	207-224
Debt Ratings.....	207
Summary of Debt Outstanding.....	208-210
History of Outstanding Debt by Type.....	211
Principal and Interest Payments for Debt Issues.....	212-224
Demographic and Economic Information	225-242
City and County of San Francisco Economic and General Information.....	225-230
Summary of Accounts by Type of Customer.....	231-232
Water Accounts and Billings.....	233
Historical Water Sales.....	234-236
Bay Area Water Supply and Conservation Agency Members.....	237
Water and Wastewater Accounts, and Billings by Type of Customer.....	238-239
Historical Hetchy Water Sales.....	240
Historical Hetchy Power Electric Sales.....	241
Historical CleanPowerSF Electric Sales.....	242
Operating Information	243-248
Budgeted Full-Time Equivalent (FTEs) Employees by Division.....	243
Operating and Capacity Indicators.....	244-245
Major Water Wholesale, Retail, and Sewer Customer Accounts by Revenue.....	246
Major Electric Retail and Wholesale Customer Accounts by Revenue.....	247
Performance Measures.....	248



Photo by: Robin Scheswohl

Inspection of the Fire Boat Manifold piping underneath the pier, San Francisco.



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

Introductory Section (Unaudited)

Certificate of Achievement

General Manager's Transmittal Letter

The Reporting Entity

Long-Term Strategic Goals, Major Accomplishments and Initiatives, and Financial Planning

Business Continuity and Emergency Planning

San Francisco's Budget Process

Financial Transparency, Reporting and Auditing Process

Financial Authority and Policies

Accounting Systems, Policies, and Internal Controls

Achievement Awards from Government Finance Officers Association

Mission Statement and Commission Members

Structure and Organizational Chart

2020 SFPUC Strategic Plan

Enterprise Risk Management Framework

Operating and Capital Budgets

Ten-Year Financial Plan

Ten-Year Capital Plan

The San Francisco Public Utilities Commission
A Department of the City and County of San Francisco, California



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 Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2018

Christopher P. Morrill

Executive Director/CEO



SAN FRANCISCO PUBLIC UTILITIES COMMISSION GENERAL MANAGER’S TRANSMITTAL LETTER

January 31, 2020

Dear Customers and Stakeholders,

At the San Francisco Public Utilities Commission (SFPUC), our mission is to provide our customers with high-quality, reliable water, power, and wastewater services 24/7. As stewards of our natural and financial resources, we invest ratepayer dollars in ongoing critical maintenance and capital improvements to our water and sewer systems. Decades of proactive planning, continuous maintenance, and infrastructure upgrades mean we can deliver dependable water services to 2.7 million people in the Bay Area, and wastewater and power services to San Francisco around the clock.

Through the Water System Improvement Program (WSIP), we have seismically strengthened crucial pipelines and facilities, constructed three major tunnels, and have recently completed a replacement earth and rock-fill dam at Calaveras Reservoir, restoring the original reservoir volume. We also continued implementation of the San Francisco Groundwater Supply Project to diversify and strengthen our local water supply. Even in the event of a major earthquake or during a drought, these upgrades will ensure vital water service to the communities we serve.

A dependable water system also requires an equally reliable wastewater system. The Sewer System Improvement Program (SSIP) will ensure a reliable, sustainable, and seismically-safe sewer system now and for future generations. With 60% of the 1,000 miles of sewer pipelines that run under our feet over 50 years old, and our largest treatment facility over 65 years old, routine repairs are no longer enough. Phase 1 of SSIP is well underway and includes treatment plant projects, pump stations, and force main improvements, as well as flood resilience and stormwater management projects to help us continue protecting public health and the environment.

The SFPUC also continued to operate and maintain the Hetch Hetchy Power System (HHPS), which has generated 100% greenhouse gas-free hydroelectric energy to power City services and residential customers in the San Francisco Bay Area for more than a century. Through the implementation and expansion of CleanPowerSF, San Francisco’s Community Choice Aggregation (CCA) program, we continue to educate residents and businesses on cleaner, more renewable energy sources to help San Francisco meet its aggressive climate action goals.

In fiscal year 2019, we maintained a stable financial condition, controlling our operating costs and maintaining positive revenues. Fiscal stewardship of our ratepayer dollars is one of our highest priorities.

On behalf of the San Francisco Public Utilities Commission, I am pleased to present the SFPUC Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2019.

London N. Breed
Mayor

Ann Moller Caen
President

Francesca Vietor
Vice President

Anson Moran
Commissioner

Sophie Maxwell
Commissioner

Tim Paulson
Commissioner

Harlan L. Kelly, Jr.
General Manager



The Reporting Entity - Profile of the San Francisco Public Utilities Commission

The San Francisco Public Utilities Commission (SFPUC), a 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 oversight services and are paid for through utility rates and charges.

The **Water Enterprise** operates the Hetch Hetchy Regional Water System (System), a wholesale and retail drinking water utility 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, transmission, and treatment facilities from the Alameda East Portal to the wholesale service area and terminal reservoirs in San Francisco. 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 includes the Bay Division pipelines, and the system on the Peninsula includes the San Andreas, Sunset, 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. This system encompasses 1,250 miles of distribution pipelines, as well as 12 in-City reservoirs and eight water tanks with a total storage capacity of approximately 413 million gallons. Since June 2011, the Water Enterprise has operated the City's Auxiliary Water Supply System (AWSS), an independent, high-pressure water supply system for fire suppression.

On average, 85% of the drinking water 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 remaining 15% of the water supply currently comes from precipitation collected in the reservoirs of the Alameda Creek Watershed in Alameda County, and the Peninsula Watershed in San Mateo County.

The San Francisco Groundwater Supply Project diversifies our local water supply. Groundwater from the Westside Basin Aquifer blends with the Hetchy Regional System water stored in the Sunset and Sutro reservoirs before distribution. Diversifying our sources will strengthen San Francisco's local water supply, allowing it to continue to meet needs in the event of long-term drought or emergency.

Water Enterprise revenue is based on retail and wholesale water rate payments from customers. Retail rates are set by the SFPUC, and 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 wastewater flows generated 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.

No sewer system can handle the most intense rain storms, and protecting public and private properties. Flood risk requires participation from government and private property owners. 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. As part of the RainReadySF Program, Adopt A Drain SF enables San Francisco residents to "adopt" one of the City's 25,000 storm drains, keeping it free of debris. While helping to reduce localized flooding, the program also fosters community engagement by encouraging San Franciscans to take an active role in improving their neighborhood. To date, more than 2,000 community members have adopted over 3,000 drains throughout the City. As of February 2019, service requests submitted to the City's customer service department (311) to address issues related to flooding were reported at 36 percent below expected levels over a two-year period since the launch of the program, illustrating the effectiveness of the resident initiative.

This year, similar to our popular Adopt-A-Drain program, we launched the Rain Guardians program, which enables San Francisco residents to become "guardians" of our new rain gardens. Rain gardens are a green infrastructure feature that take advantage of the natural processes of soils and plants to slow down and clean stormwater and keep it from overwhelming the City's combined sewer system. To date, 40 out of 69 rain gardens have been adopted by over 45 community members.

The Hetch Hetchy Water and Power and CleanPowerSF Enterprise (Hetch Hetchy) comprises 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 new clean energy alternatives.

Hetchy Water is responsible for operating the Hetch Hetchy Reservoir, the main source of water for the Hetch Hetchy Regional Water 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 Hetch Hetchy Regional Water System.

Hetchy Power is the publicly owned utility for the City providing full-service and clean energy services to our customers. Our Hetchy Power System generates and delivers hydroelectric, solar and biogas energy to retail and wholesale electricity customers. Hetchy Power's customers include the San Francisco International Airport, libraries, police stations, City Hall, San Francisco Municipal Transportation Agency (SFMTA), Treasure Island, Hunter's Point Shipyard, Transbay Terminal, shoreside power hookups, CleanPowerSF and other utility districts. Hetchy Power also owns and maintains 60% of the streetlights in the City. Finally, Hetchy Power provides electrical maintenance services, energy efficiency programs, and distributes generation services to our residents, businesses, and customers.

The Hetchy Power System is composed of transmission lines that traverse the State of California, electric transmission and distribution facilities, and a generation portfolio that includes: three large hydroelectric powerhouses; one small, in-line hydroelectric powerhouse; 27 solar arrays and two biogas facilities. Our main hydroelectric powerhouses, including Holm, Kirkwood and Moccasin, are in the Sierra Nevada mountain range. Hetchy Power revenue is based on retail and wholesale, power-rate payments and charges collected from customers. Retail rates are set by the Commission.

CleanPowerSF, San Francisco's CCA program, provides electricity customers in San Francisco with new choices for power supply and increased access to renewable energy sources. The program allows us to partner with Pacific Gas and Electric Company (PG&E), an investor owned utility, to deliver clean energy to our residents and businesses. Under this program, CleanPowerSF supplies customers with electricity from renewable sources while PG&E delivers the energy on its transmission and distribution lines. CleanPowerSF's Green product features at least 40% California Renewable Portfolio Standard (RPS) certified renewable energy, and its SuperGreen product offers 100% California RPS-certified renewable energy.

Following the largest and last major enrollment in April 2019, CleanPowerSF now serves more than 376,000 customers in San Francisco. Collectively, Hetchy Power and CleanPowerSF meet approximately 80% of the electricity demand in San Francisco.

Long-Term Strategic Goals, Major Accomplishments and Initiatives

Our mission is to provide our customers with high-quality, efficient, and reliable water, power, and wastewater services in a manner that supports both environmental and community interests, and that sustains the resources entrusted to our care. Our budget is aligned with these long-term strategic goals and objectives as detailed in the SFPUC's 2020 Strategic Plan:

- **Reliable Service and Assets:** We provide reliable service and value to our customers by optimizing the operation, maintenance, replacement, and improvement of all assets in the most cost-effective manner.
- **Organizational Excellence:** We are a high-performing organization focused on efficiency, effectiveness, and accountability across the organization.
- **Effective Workforce:** We attract, retain, and develop an effective workforce, reflective and supportive of our communities, that consistently delivers high-quality services to stakeholders.
- **Financial Sustainability:** We assure financial integrity and sustainability, meeting today's operating and capital investment needs while managing risk and long-term affordability for the future.
- **Stakeholder and Community Interest:** We foster trust and engagement with our customers, employees, and the communities we serve through open and timely communication and education.
- **Environmental Stewardship:** We sustainably manage the resources entrusted to our care to ensure environmental and community health.

Some of our achievements for this fiscal year are summarized below.

Water System Improvement Program (WSIP)

Through our WSIP, one of the largest infrastructure programs in the nation, we and our wholesale customers have invested \$4.8 billion into strengthening the San Francisco and Regional Water Systems. The 87 projects of the WSIP enhance our ability to provide high-quality, reliable drinking water to our customers, even after a major earthquake and during an extended drought period. This year the WSIP advanced to 97% complete. Accomplishments include:

- Calaveras Dam Replacement Project: The new earth and rockfill dam is now complete and in operation.
- Fish Passage Facilities in Alameda Creek Watershed: The construction is now complete, and the project is in operation.
- Alameda Creek Recapture Project: A recirculated draft of the Environmental Impact Report is expected Fall 2019.
- Regional Groundwater Storage and Recovery Project: Startup testing of the twelve Phase 1 production well stations are expected to move forward in Fall 2019. One of the production well stations drilled in Phase 1 will be completed and connected to California Water's treatment facility under Phase 2, and two additional test wells have been drilled and tested under Phase 2 for possible future conversion to production wells.

Pipe Repair and Replacement in San Francisco

With over 2,000 miles of water and sewer mains, the work of preventative maintenance is a continuing challenge. For fiscal year 2019, the Wastewater Enterprise inspected 215 miles and replaced 11.4 miles of sewer pipes and the Water Enterprise replaced 11.2 miles of water pipes.

Local Water Program

Our Local Water Program focuses on diversifying San Francisco's water supply while ensuring we optimize efficient use of our water resources. With tools including conservation, groundwater, recycled water and our non-potable program, the Local Water Program ensures that San Francisco will be resilient in the face of risks to our water supplies such as drought, climate change, earthquakes, new regulations, and growing demand. Accomplishments include:

- San Francisco Groundwater Supply Project: Construction is complete on four well stations, and construction on the remaining two well stations is in progress.
- Westside Recycled Water Project: Recycled water pipeline construction is complete. The treatment facility, pump station and reservoir are under construction.
- Utilizing our rebates and incentives, our customers replaced 1,670 toilets and urinals, and 532 clothes washers, with water-efficient models. We distributed over 7,375 water-efficient devices, such as showerheads and aerators.
- We conducted over 2,697 water-wise evaluations, including detailed outdoor audits of acres of irrigated landscape, to help San Franciscans be even more water efficient.
- Leak Alert Program: Automated water meters are now in place for most of San Francisco's water accounts, providing the SFPUC with hourly water consumption data enabling us to notify customers about unusual usage. The SFPUC notifies single-family customers and small multi-family properties (two to five dwelling units) with three days of constant water used by letter, phone, text message, and email. The SFPUC send over 13,800 automated leak alert notifications to account holders in fiscal year 2019. Constant water uses at these sites as ranged from 7.5 gallons per hour to over 50 gallons per hour, which left unchecked for just a few weeks can increase household water use and bills by 50% or more. Leak alerts have helped many customers fix leaks promptly, saving them significant amounts of wasted water and money on their water bills.

Sewer System Improvement Program (SSIP)

The SSIP, is a 20-year, multi-billion-dollar investment to upgrade and modernize our aging sewer system to ensure we can continue to protect public health and the environment. The SSIP is improving our operational efficiency and reliability, enhancing our seismic resilience, and preparing us for climate change-related challenges. Investments today in our outdated infrastructure will save us money in the long-run and ensure our sewer system continues to operate reliably and efficiently without interruption. Phase 1 of SSIP is investing over \$2.9 billion across 70 projects to improve and upgrade our collection system, treatment facilities and stormwater management efforts. Accomplishments include:

- Southeast Plant New Headworks Facility Project: The project was awarded an Envision Gold Award for sustainable infrastructure, designated by the Institute for Sustainable Infrastructure (ISI). To reach Gold status, a project must demonstrate that it delivers a heightened range of environmental, social, and economic benefits to the host and affected communities. Demolition of the existing headworks facility is underway, upgrades to the Bruce Flynn Pump Station are nearing completions and construction of new underground structures is in progress.
- Southeast Plant Biosolids Digester Facilities Project: The California Association of Environmental Professional (AEP) granted the SFPUC and partners an Outstanding Environmental Analysis Document Award for the Biosolids Digester Facilities Project Environmental Impact Report (EIR) and a Merit Award for the project's supporting Environmental Justice Report. Design is nearing completion for various components, with demolition of existing asphalt plant and central shops, and relocation of sewer pipelines planned to begin in early 2020.
- Southeast Treatment Plant Primary and Secondary Clarifier Upgrade Project: Upgrades were completed that maintain regulatory compliance, improve operational reliability for liquid treatment at the Southeast Treatment Plant.
- Green Infrastructure Projects: Construction was completed on Chinatown Living Alley and Visitacion Valley Green Nodes. Construction is underway for the Baker Beach Green Street and soon to start for the Sunset Boulevard Greenway Phase II.
- Green Infrastructure Grant Program: An innovative grant program to encourage owners of large, impervious parcels to apply for grants to fund green infrastructure projects that manage stormwater and improve the City's collection system performance during wet weather. The grant will cover the costs of design and construction of approved stormwater management features, such as rain gardens, permeable pavement, cisterns, and vegetated roofs.
- Interagency Project Coordination: We strive to "dig once" when planning major system upgrades around San Francisco. Multiple sewer upgrades remain under way as part of the SFMTA and San Francisco Public Works led projects, including: Van Ness Improvement Project, Geary Rapid Transit Project, Geary Boulevard Improvement Project, Mission Bay Loop, L Taraval Improvement Project, and Better Market Street.

Hetchy Capital Improvement Projects

Upgrades to the aging facilities of Hetchy Water and Hetchy Power (HHWP) are under way. Upcountry water and power facilities being assessed for rehabilitation projects include three impounding reservoirs, three regulating reservoirs, three large powerhouses, one small powerhouse, one switchyard, three substations, 170 miles of pipelines and tunnels, almost 100 miles of paved road, over 160 miles of transmission lines, watershed land, and rights-of-way property. Accomplishments include:

- Fiscal year 2019 Mountain Tunnel Interim Repairs Project: The construction contract for Phase 2 of the interim repairs that were initiated in 2017 was successfully completed during a shutdown of the tunnel in January to February 2019.
- Mountain Tunnel Improvement Project: 95% design documents for the rehabilitation of the existing tunnel are complete and a construction contract was advertised. Draft Environmental documentation (California Environmental Quality Act/National Environmental Policy Act) has been published for public review.
- Holm Powerhouse Rehabilitation and Kirkwood Powerhouses Oil Containment Upgrade: Construction contract work is in progress.

- Lower Cherry Aqueduct (LCA) Rehabilitation: Construction continued with substantial completion in Fall 2019.
- Rim Fire Related Construction: Rim Fire cost reimbursement efforts with insurance, Federal Emergency Management Agency, and California Governor's Office of Emergency Services continued during the year.

In addition to the planned projects listed above, significant resources were expended this fiscal year to respond to an emergency at Hetch Hetchy. On March 22, 2018, Hetch Hetchy in Moccasin experienced excessive rainfall and subsequent flash flooding, with the flood water containing a large volume of debris consisting of sediment, downed trees and logs. This flash flooding had a serious detrimental effect on SFPUC assets associated with Moccasin Reservoir and adjacent areas. SFPUC declared an emergency on March 23, 2018, and clean-up efforts and emergency repairs were immediately started to restore water delivery to the City. The reservoir was out of service until the major emergency repairs and interim improvements were substantially completed and the reservoir could be brought back into service in April 2019. The improvements were funded through the HHWP 10-Year Capital Improvement Program, and a California Disaster Assistance Act (CDAAA) grant with the California Governor's Office of Emergency Services (Cal OES) has been established and will reimburse part of the costs of damage repair. A separate project to implement longer-term improvements is currently under development, to prepare for uncertainty due to climate change.

Energy Efficiency and Renewable Power Resources

Hetchy Power offers an array of energy efficiency, renewable energy, and green building programs for our customers. We serve our municipal, residential and commercial customers some of the cleanest energy in the country. In addition, CleanPowerSF has expanded and now serves more than 300,000 San Francisco customers. and completed citywide enrollments in April 2019.

This past year, the Power Enterprise launched the Upgrade for Savings program in July 2018. These two programs, along with our Blueprint for Savings program launched last July, which helps our non-residential electric customers build and/or modernize their buildings with energy- efficient features. With technical support and cash incentives, these programs help customers to create more sustainable buildings that earn higher rents, provide healthier work places, and have smaller environmental footprints. Accomplishments include:

- Solar Arrays: A total of 27 solar arrays generate nearly 8.6 megawatts of power in San Francisco. Additional projects are currently in the design and permitting process.
- GoSolarSF: GoSolarSF provides monetary incentives to help residents and businesses install solar panels on city rooftops. For this reporting period, over 400 solar projects were spurred on by incentives totaling \$1.1 million. Since the program launched in 2008, more than \$28 million incentives have been distributed and 5,400 solar systems constructed.
- Energy Efficiency: The Power Enterprise completed four energy efficiency projects this past fiscal year, which will save 1.4 million kilowatt hours (kWh) of electricity and approximately 7,600 therms of natural gas per year. These projects are part of more than 200 energy efficiency projects in public buildings since 2002, reducing the City's greenhouse gas emissions and saving over \$6 million each year in energy costs.

Workforce Planning and Staff Development

Utilities nationwide are facing an aging workforce heading toward retirement. The SFPUC continues to bolster our programs to support hiring in our communities for internships and contracting opportunities. We are improving recruiting and hiring processes, creating clear career pathways, and advancing our culture of high performance to consistently deliver high-quality services.

We are also involved with workforce development planning efforts at the regional level by leveraging collaborative and strategic partnerships with water and wastewater agencies, education institutions, and non-profit organizations.

- **Local Hire:** For the eighth consecutive year, we have exceeded the requirements of San Francisco's Local Hiring Ordinance. For the 256 SFPUC public works projects subject to the Ordinance through the current reporting period, 44% of all hours and 67% of all apprentice hours have been worked by San Francisco residents.
- **Project Labor Agreement (PLA):** Approximately 8.5 million craft hours were performed by more than 14,100 workers on the WSIP PLA. Approximately half (46%) of those hours have been worked by local and regional service territory residents and 70% of all apprentice opportunities were worked by local and regional service territory resident apprentices. The parties to the PLA have extended it to also cover the SSIP, and approximately 570,000 construction craft hours have been worked by more than 2,000 workers on PLA-covered SSIP projects. Through the reporting period for the program, 32% of all hours and 63% of all entry-level apprentice hours have been worked by San Francisco residents.
- **Youth and Adult Workforce Development**
 - **Project Pull:** This paid summer internship program pairs highly motivated, local high school students and incoming college freshman with City staff who introduce them to job skills and technical careers. For the most recent fiscal year, the program included approximately 115 high school interns and 57 college team leads. Over 24 summers, Project Pull has provided more than 1,800 students with summer employment.
- **Contractors Assistance Center:** We provide local community contractors and small businesses with the tools and resources needed to compete for City-funded contracts. The Center offers a wide range of services including: classroom-style workshops, one-on-one consulting for contractors and local businesses, business development training, access to plans and specs for Public Works projects, networking events, and free computer usage and meeting space.

Community Engagement

The SFPUC is proud to be the first utility in the nation to adopt Environmental Justice and Community Benefits policies, and we are committed to working with communities impacted by our operations and capital projects. These policies ensure that we are engaging and providing our communities with job opportunities, training, and access to educational resources while supporting a healthy and sustainable environment.

We aim to educate our communities on the positive impacts of infrastructure investments. Our approach is to foster continuous engagement through community presentations, participation in local events, and tours of our local and regional infrastructure. As we face the challenge of aging infrastructure, it is now more important than ever to educate and work with our communities to tackle this issue together.

We strive to be good neighbors in our community by maintaining transparent communications and building strong partnerships through:

- Innovative educational campaigns;
- Media and crisis communications;
- Informative print and digital publications in multiple languages;
- Timely responses to public inquiries and public records requests;
- Engaging and timely social media content; and
- Public hearings, community events and educational presentations.

Accomplishments include:

Arts

- Bayview Artist Registry: As required by San Francisco's '2% for the Arts' ordinance, the SFPUC is partnering with the San Francisco Arts Commission (SFAC) to support public art as it builds or rebuilds capital infrastructure. We have engaged in extensive outreach to create a Bayview Artist Registry. This registry is a pool of 300 artists with a meaningful connection to the Bayview, and as art opportunities arise through SSIP, both agencies will draw upon the artists in this pool.
- Bayview Arts Master Plan: To ensure that the artworks commissioned for the Bayview speak to the stories, values and contributions of the individuals who live in this neighborhood, as well as the environmental mission of the SFPUC, the SFPUC is partnering with the SFAC to draft a master plan which will guide our investment in public art in the Bayview. During the fiscal year 2019, 180 individuals have been interviewed in over two dozen meetings. The Bayview Arts Master Plan will be the first arts master plan in San Francisco history to include a youth voice.

Education

- California Academy of Sciences Partnership
 - Story of Poo: We have partnered with the California Academy of Sciences to produce an animated video titled, "The Story of Poo," which tells the story of San Francisco's sewer system. Created for elementary age children, the video is narrated by a young girl who shares what she has learned after a recent visit to the Southeast Wastewater Treatment Plant www.sfwater.org/storyofpoo.
 - Bayview Teachers Institute: The SFPUC is partnering with the California Academy of Sciences to provide an in-depth professional learning opportunity to increase the science literacy (through the lens of our ecoliteracy publication, "Big Ideas") of K-5 teachers and students in San Francisco's Bayview neighborhood. The Bayview Teacher Institute took place in June 2019 and will provide professional development opportunities during and following the subsequent school year.
 - College Hill Learning Garden: The SFPUC's continues to host hundreds of San Francisco Unified School District (SFUSD) youth for free field trips to the College Hill Learning Garden. Available to all SFUSD schools, these free fieldtrips teach youth about the importance of eco-stewardship and the water, power and sewer operations of the SFPUC. Interested teachers can request a fieldtrip at www.sfwater.org/collegehill.
- John O'Connell High School Annual Camp Mather Trip
 - The SFPUC continues to partner with John O'Connell High School in San Francisco's Mission District to integrate SFPUC operations and careers into their existing career awareness curriculum. In May 2019, a capstone activity for this partnership was the annual overnight field trip to the SFPUC's Hetch Hetchy Reservoir and Camp Mather for 130 freshman students and 35 chaperones from John O'Connell High School. Camp Mather is a summer recreation camp owned by the SFPUC and operated by the City's Recreation and Parks Department. During this immersive educational experience, the students visit the primary source of San Francisco's water supply, make real-world connections to their SFPUC-themed studies and forge lasting bonds for their remaining years in High School.
 - Another component of our Kindergarten to College (K2C) Awareness Pilot with John O'Connell High School is the integration of SFPUC concepts into all 9th to 12th grade Math, Science, and English curriculum to help expose students to our careers. Teachers spend a week on-site at our facilities, including treatment plants, our headquarters building, and water and power operations yards. During the externship week, teachers connect with experts and develop curriculum that will be implemented in the upcoming academic year. By the end of the week, teachers produce a project plan that integrates a SFPUC challenge or question and provides information about related career pathways at the SFPUC to students. This planning builds on John O'Connell's team-teaching

model, where all Science, English and Career Technical Education (CTE) is co-taught by a team of three teachers.

- Throughout the academic year, SFPUC staff stay in touch with teachers to help troubleshoot questions, come into class to present to students, and evaluate student work. Teachers are paid a stipend for the week on-site at the SFPUC and for implementing the project during the school year. A non-profit specializing in teacher professional development and connections to Science, Technology, Engineering, and Math (STEM) workplaces provides technical assistance and facilitation support for 15 teachers annually.

Environmental Justice and Land Use

- Grant Programs: Sidewalk Garden and Front Yard Ambassador
 - The Front Yard Ambassadors Program, in partnership with Friends of the Urban Forest, collaborates with community members to break up concrete paving in front yards and establish native and drought tolerant plants throughout the Sunset District. In addition, the SFPUC, in partnership with Climate Action Now! and Friends of the Urban Forest, manages the Sidewalk Gardens Program. The program engages community members to replace concrete sidewalks with vibrant gardens in the Bayview Hunter's Point neighborhood and throughout our urban watersheds. Combined, these programs have removed over 20,000 square feet of impervious concrete in front of more than 120 homes throughout the City. These programs not only benefit the air quality of the neighborhood by increasing greenery but also capture stormwater, reducing the strain on our combined sewer system and recharging our aquifers.
- Bayview Hunter's Point Environmental Justice Analysis for Biosolids Digesters Facilities Project
 - The SFPUC and Environmental Science Associates received a California Association of Environmental Professional (AEP) award for the project's groundbreaking Environmental Justice (EJ) Analysis Report. This first-of-its-kind EJ Report is a groundbreaking example of a public utility living up to its commitments to equity while evaluating the impacts of a major infrastructure project. The SFPUC is committed to implementing the EJ analysis recommendations including expanded air quality monitoring, tree planting, bike and pedestrian improvements and electric vehicle charging stations, in addition to the project improvements and mitigation measures that are part of the environmental impact report.
- Hummingbird Farm
 - The SFPUC's Hummingbird Farm received the Community Service Award for its Hummingbird Farm from the California Municipal Utilities Association (CMUA), the State's leading professional group for water and power industry professionals in the public sector. Hummingbird Farm is located in the Excelsior neighborhood and was developed in partnership with the District 11 Supervisor, The San Francisco Foundation, and People Organizing for Economic/Environmental Rights (PODER). Since its opening in 2017, Hummingbird Farm continues to be a thriving community space that provides cultural and educational opportunities, and fresh organic produce for the Excelsior community. PODER serves as the site operator and has hosted hundreds of youth participants and even more community members in workshops, volunteer work, and educational classes. These events range from sunrise ceremonies, permaculture workshops, neighborhood potlucks, and weeding/pruning classes. Additionally, due to its open design, the farm has become an informal cultural gathering space which hosts meet-ups, dance classes, and nature hikes for residents.

Neighborhood Revitalization

- Southeast Community Facility at 1550 Evans: With the community-focused design complete for the new community center, we are moving towards construction of a new state-of-the-art community facility in early 2020, slated to open in 2021. We remain committed to working with the Bayview community to ensure local workers have opportunities during the construction of

the new center. The result will be a new facility envisioned by the community, built by the community, and for the community.

- **Community Grant Program:** Through this program, the SFPUC supports two local non-profit organizations to connect Bayview Hunters Point residents with green sector job readiness programs in areas such as horticulture, urban agriculture, and food services. This year, grantees provided 43 youth residents of the 94124, 94134, and 94107 zip codes with the skills and training needed to secure permanent, quality jobs.
- **Southeast Community Facility (SECF) Future Fair:** The Second Annual Futures Fair: Flourish held on August 1, 2019 was a success! More than 110 youth ages 12 to 18 attended. Participants benefited from a wide range of career exposure opportunities within both the public and private sectors. Additionally, the conference platform included engaging interactive workshops on financial literacy, emotional intelligence and exercises in networking and peer support. The lunch and learn panel discussion offered participants further exploration into career opportunities through a dialogue with career professionals from across San Francisco's booming economy.
- **SECF Health and Harvest Fair:** SECF Commission hosted the 12th Annual Health and Harvest Fair on November 9, 2019 at the SECF in the Bayview. More than 200 community members attended. The event featured access to free medical and dental screenings, information on open enrollment, community dancing and yoga, a Kid's Zone with a rock climbing wall, live music, access to free produce, and much more.

Social Impact Partnerships

- **Climate Education for Hunters Point Youth:** SFPUC partners with electricity generation firm Calpine Energy Services to support hands-on climate change education for low-income African-American women through Hunters Point Family's Girls 2000 "Climate and Health" project. This year, 6 young women ages 9 to 16 engaged in 3 educational field trips and created reusable pads for young women in Bayview Hunters Point and Nepal to reduce waste from disposable pads and learn about San Francisco's transition from fossil fuels to renewable energy.
- **Water Education for East Palo Alto Youth:** This year, we partnered with environmental engineering firm Brown and Caldwell to support 125 youth leading a Water Equity Campaign organized by our non-profit partner Youth United for Community Action. The campaign included a 4-minute educational video and presentations at 8 community-based organizations and 2 community events to raise awareness about water access in East Palo Alto, a city that receives 100% of its water supply from SFPUC.

Long-Term Financial Planning

The SFPUC's long-term financial planning is performed on a rolling ten-year forward basis. Consistent with the San Francisco Charter, updates to the Ten-Year Capital Plan, Ten-Year Financial Plan and Long-Term Strategic Plan are annually reviewed by the Commission, and public input is sought and welcomed. Additionally, the first five years of the Ten-Year Financial Plan are presented to the Board of Supervisors as part of the citywide financial plan. Our plans provide estimated rate impacts of projected spending and assure compliance with debt service coverage and fund balance reserve policy requirements. The plans also have been incorporated into our award-winning Budget and Financial Reports, helping ensure transparency for policy makers, the public and other users of our reports.

Business Continuity and Emergency Planning

The SFPUC has made significant investments in physical security for the water, wastewater and power enterprises, including establishing the SFPUC Emergency Planning and Security Program, which promotes maximum coordination and integration of all emergency planning responsibilities, focusing on security, emergency planning, preparedness, and continuity of operations. The program offers support for security assessment, incident coordination response, continuity of operations, and recovery; it is designed to provide the SFPUC with the capability to respond and recover quickly and appropriately to

any potential emergency, and is responsible for the overall administration and coordination for the security system operations and development of the security strategy, policies, and procedures.

San Francisco's Budget Process

The budget cycle for the biennial July 1 fiscal year budget begins in October and 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.

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, 2019 and 2018 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, 2019, for the 11th year. 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 <http://www.sfwater.org/index.aspx?page=999>. 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, 2019, the independent auditors noted no matters involving internal controls over financial reporting that would be considered a material weakness for Water and Hetch Hetchy Water and Power and CleanPowerSF. For Wastewater Enterprise, an immaterial correction was recorded to the 2018 financial statement to eliminate the recognition of certain capital assets that are recorded by another fund. The impact of the changes was

to decrease beginning net position as of July 2017 by \$6,767 and increase fiscal year 2018 expenses by \$28,313.

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

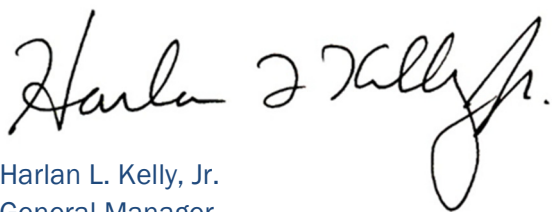
The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the SFPUC for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2018. This was the 10th consecutive year that the government has achieved this prestigious award. In order to be awarded the Certificate of Achievement, a government must publish an easily readable and efficiently organized CAFR. This report must satisfy both GAAP and applicable legal requirements. A Certificate of Achievement is valid for a period of one year. We believe our current CAFR continues to meet the Certificate of Achievement program's requirements and we are submitting it to GFOA to determine its eligibility for another certificate.

Conclusion

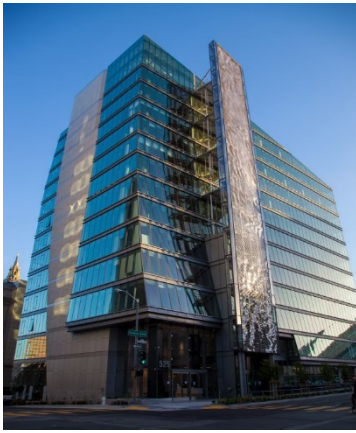
We foster environmental, economic, and social sustainability for San Francisco and our service areas through continued investments in the upgrade and rehabilitation of existing systems and facilities. We rely upon the support of our community, our staff, and our elected officials to maintain our essential 24/7 operations.

We would like to express appreciation to the Mayor, the Board of Supervisors, and our Commission for their continued support of our achievements in responsible financial management, financial transparency, and reporting excellence.

Respectfully submitted,

A handwritten signature in black ink that reads "Harlan L. Kelly, Jr." The signature is written in a cursive style with a large, looping initial 'H' and a long, sweeping underline.

Harlan L. Kelly, Jr.
General Manager
San Francisco Public Utilities Commission



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.

The SFPUC is a sustainable utility leader, recognized for superior results in service, value, environmental stewardship and innovation.

The SFPUC's values include the following:

- **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 2019

San Francisco Mayor and Public Utilities Commission Members

LONDON N. BREED
MAYOR

ANN MOLLER CAEN
PRESIDENT

ANSON MORAN
COMMISSIONER

FRANCESCA VIETOR
VICE PRESIDENT

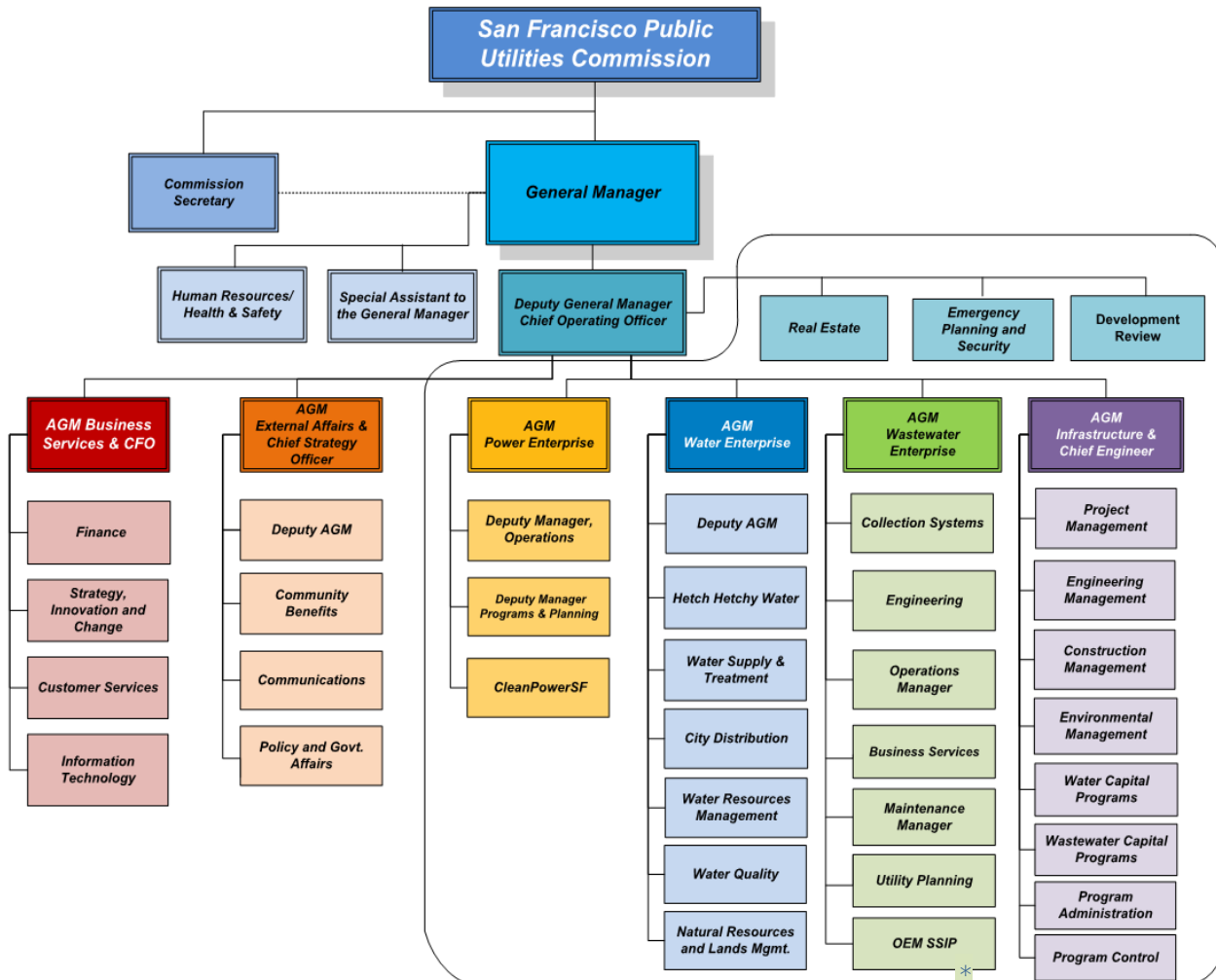
SOPHIE MAXWELL
COMMISSIONER

TIM PAULSON
COMMISSIONER

Structure

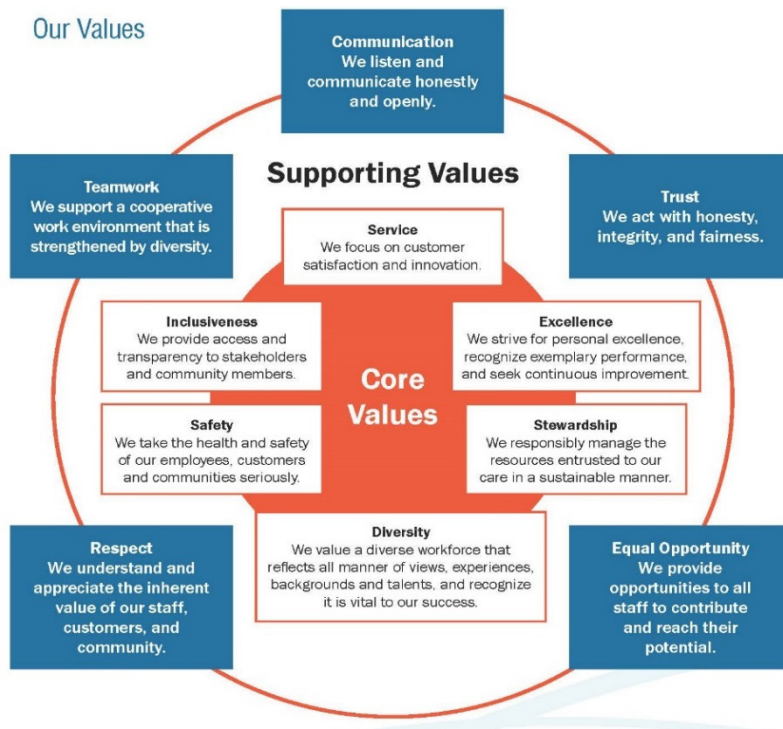
The SFPUC is comprised of three utility Enterprises, the Water Enterprise, Wastewater Enterprise, and the Power Enterprise, which is operated within Hetch Hetchy Water and Power and CleanPowerSF. Three Bureaus, comprised of Business Services, External Affairs, and Infrastructure provide critical support services and oversight to the Enterprises. Business Services Bureau includes Finance, Strategy, Innovation and Change, Customer Services and Information Technology. External Affairs/Chief Strategy Office Bureau includes Community Benefits, Communications, Policy and Government Affairs. Infrastructure/Chief Engineer Bureau includes Project Management, Engineering Management, Construction Management, Environmental Management, Water Capital Programs, Wastewater Capital Programs, Program Administration and Program Control. The Office of the Deputy General Manager/Chief Operating Officer includes Development Review, Real Estate and Emergency Planning and Security. The Office of the General Manager includes Human Resources/Health and Safety, and Special Assistant to the General Manager.

Organizational Chart



AGM is Assistant General Manager, the person who leads an Enterprise or Bureau.

*OEM SSIP, Operations, Engineering, and Maintenance (OEM) for Sewer System Improvement Program (SSIP)



The 2020 SFPUC Strategic Plan is a high-level and future-oriented plan. The purpose is to better align the work of the Water, Power and Wastewater Enterprises, set a strategic direction and identify key priorities.

The 2020 SFPUC Strategic Plan outlines the mission, vision and values and sets forth 6 priority goals and supporting objectives.

The goals are as follows:

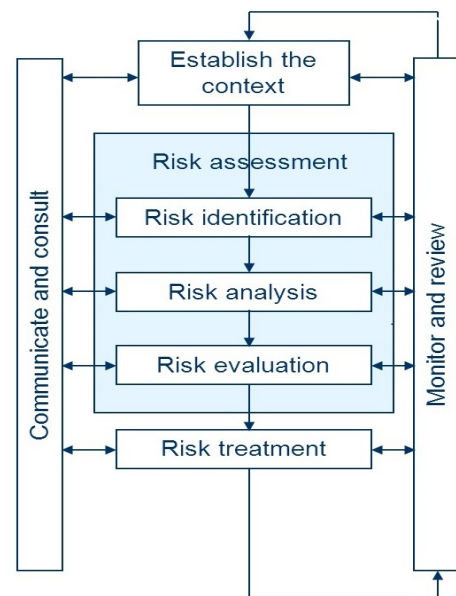
- Reliable service and assets;
- Organizational excellence;
- Effective workforce;
- Financial sustainability;
- Stakeholder and community interest; and
- Environmental stewardship.

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. A Steering Committee will report quarterly 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://sfwater.org/index.aspx?page=1078> 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, by adding value to the strategic decision-making process. The Risk Management division of the Strategy, Innovation and Change Bureau, provides strategic 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 the ISO 31000 standard for Risk Management for the Hetchy Power and CleanPowerSF program as the framework implementing and maturing ERM. The



framework supports a systematic and proactive approach to identify and analyze 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. The ERM process allows for a transparent flow of information throughout the enterprise and program, providing visibility of risks and issues to stakeholders across the business so that they can be discussed and managed openly.

Senior management in the Power Enterprise is deeply involved in the monitoring process and meets on a periodic basis to discuss immediate, emerging, and high priority risks; while a larger meeting of internal stakeholders is convened semi-annually to discuss broader risks across the enterprise. During these stakeholder discussions, new risks can be proposed and vetted for inclusion in the risk registry or existing risks retired if they no longer pose a threat to business objectives. Risks are profiled, and a risk register is retained in a risk management software application; which further assigns accountability and provides ongoing monitoring. Overall, the monitoring process established by the Power Enterprise and CleanPowerSF provides the ability for senior management to remain agile when responding to priority risks without being siloed in the decision-making process.

The 2020 SFPUC Strategic Plan, by way of the strategic goal of Financial Sustainability, endeavors to formalize enterprise risk management across the organization. ERM will continue to be applied in various areas of the organization. Previous successes include the Business Services Bureau, Emergency Planning and Security, and specific project-related programs.

The SFPUC also engages other methodologies as part of a comprehensive process for risk management. This includes the SFPUC Purchased Insurance Program, a portfolio of insurance policies acquired to mitigate various liability risks in mission critical assets, operational and financial. ERM benefitted this strategic process as a guide for senior management to assess and identify areas where risks were transferred through the purchase of insurance. Realized benefits include property insurance reimbursements of nearly \$7.2 million to date for fiscal year 2019, related to the August 2013 “Rim Fire”, a large-scale wildfire that damaged and destroyed SFPUC mission critical assets in the Stanislaus National Forest. Additional reimbursements are anticipated and ongoing. Other risk management activities include contractual risk review 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 \$1 million, 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.

Fiscal Year 2020 Operating Budgets

The SFPUC annual budgets, including debt service and cash-funded capital, as well as operation programs total \$1.4 billion and \$1.3 billion for fiscal years 2020 and 2019, 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 operating budget is financed by both wholesale and retail rates, service charges and non-operating revenues, including rents and interest earnings. Of the SFPUC fiscal year 2020 \$1.4 billion operating budget, the Water Enterprise accounts for \$598.6 million to fund the operations and maintenance of the SFPUC water system; Wastewater Enterprise's operating budget of \$360.1 million funds the operations and maintenance of the SFPUC's sewer system. Hetch Hetchy Water and Power's operating budget of \$227.5 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 \$212.9 million funds the operations and maintenance services, mostly for power purchases. Detailed budget information is available on our website <https://www.sfwater.org/index.aspx?page=350>.

Fiscal Year 2020 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 Enterprise 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 2020 capital budgets were \$917.6 million, including \$206.9 million for the Water Enterprise, \$511.1 million for the Wastewater Enterprise, and \$199.6 million for Hetch Hetchy Water and Power Enterprise. The major capital investment for the Water Enterprise included Local Water Conveyance/Distribution System projects, the Water Transmission program and the Buildings and Grounds program. The Local Water Conveyance and Distribution program, which to install, replace, and renew pipelines and service connections for the 1,250 mile drink water distribution system in San Francisco. The Water Transmission program includes upgrades such as chemical dosage, flow monitoring, valve and pump replacement, chemical handling and installation of ozone generators, to the Sunol Valley and Harry Tracy Water Treatment Plant. The Buildings and Grounds program focus on structures improvements for the Sunol and Millbrae Yards. The Wastewater Enterprise's major capital investment includes SSIP treatment Facilities for the plant, design and construction of the new digester and solids handling facility at Southeast Plant, continuing Renewal and Replacement (R&R) Project for the Collection System Sewer R&R, spot sewer repair and Treatment Plant Facilities Improvements and the Southeast Community Center Improvement to evaluate and implement the functional and operational reliability of the existing facility. The Hetch Hetchy Water and Power's major capital investment includes the design and construction for Transmission/Distribution Improvement project, and infrastructure projects including the Mountain Tunnel Improvement project.

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 includes a rolling ten-year financial summary for each Enterprise, describing projected sources and uses, resulting fund balances and key financial ratios. Projected costs and revenues are estimates and subject to variations inherent in all such projections. Consequently, the estimates are viewed as indications of expected trends given expenditure, revenue, and financing assumptions. These assumptions are based on current Board of Supervisors and Commission policies, goals and objectives representing management's best estimates at the time. This is not a budget, nor are funds appropriated based on the plan. The plan assumes debt financing of capital needs over the next few years for the Capital Improvement Program including Water's WSIP, Wastewater's SSIP, and Hetch Hetchy Water and Power's Capital Program, and assumes a financing strategy that utilizes short-term financing via the existing Interim Funding Program (which includes the Commercial Paper Program) to match financing needs with project spending. The Interim Funding Program facilitates short-term financing, typically at lower interest rates than longer term debt, which minimizes costs for ratepayers. The authorized Interim Funding Program as of June 30, 2019 was \$1.5 billion including \$500 million for Water Enterprise, \$750 million for Wastewater Enterprise and \$250 million for Hetch Hetchy Water and Power Enterprise.

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 helps inform and guide managers, policy makers, elected officials and the public by providing the proposed long-term capital program, projects and investment. The Ten-Year Capital Plan guides the biennial capital budget development. As the budget process progresses through the Spring and final adoption in the Summer, the updated Capital Improvement Programs (CIPs) are revised forming the biennial capital budget. Consequently, even though the annual CIPs are based on the Ten-Year Capital Plan, they do not always match by project or dollar amount.

SFPUC fiscal years 2020 through 2029 Ten-Year Capital Plan totals \$8.1 billion. Water Enterprise is approximately \$1.6 billion with investments divided between regional and local (in-city predominately) needs. Wastewater Enterprise is approximately \$5.3 billion which mainly includes the R&R program and SSIP. Hetchy Water and Hetchy Power's is approximately \$1.2 billion is to fund up-county water/power projects and local power projects such as Bay Corridor project and Mountain Tunnel project.



Financial Section

Independent Auditors' Report

Management's Discussion and Analysis (Unaudited)

Basic Financial Statements

Statements of Net Position – Proprietary Funds

Statements of Revenues, Expenses, and Changes in Net Position – Proprietary Funds

Statements of Cash Flows – Proprietary Funds

Notes to Basic Financial Statements

Required Supplementary Information (Unaudited)

Schedules of the Proportionate Share of the Net Pension Liability

Schedules of Employer Contributions – Pension Plan

Schedules of Changes in Other Postemployment Benefits Liability and related Ratios
Other Postemployment 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



Photo by: Katherine DuTiel

Sunol Water Temple



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



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

Independent Auditors' Report

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

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of each major fund of the San Francisco Public Utilities Commission (SFPUC), a department of the City and County of San Francisco, California (the City), as of and for the years ended June 30, 2019 and 2018, and the related notes to the financial statements, which collectively comprise the SFPUC's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

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

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities of each major fund for SFPUC, as of June 30, 2019 and 2018, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with U.S. generally accepted accounting principles.



Emphasis of Matter

As discussed in Note 1, the financial statements of SFPUC are intended to present the net position, the changes in net position and, where applicable, cash flows of only that portion of the business-type activities and each major fund of the City that is attributable to the transactions of SFPUC. They do not purport to, and do not, present fairly the financial position of the City as of June 30, 2019 and 2018, the changes in its financial position, or, where applicable, its cash flows for the years then ended in accordance with U.S. generally accepted accounting principles.

As discussed in Note 2(u) to the financial statements, the 2018 Wastewater Enterprise financial statements have been restated to correct a misstatement.

Our opinion is not modified with respect to these matters.

Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis on pages 24-72 and required supplementary information, as listed in the accompanying table of contents on pages 164-167 (collectively referred to as RSI) be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the RSI in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary and Other Information

Our audits were conducted for the purpose of forming opinions on the financial statements that collectively comprise SFPUC's basic financial statements. The introductory section, supplementary information and statistical section as listed in the accompanying table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The supplementary 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. Such 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 auditing standards generally accepted in the United States of America. In our opinion, the supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory and statistical section sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated January 31, 2020 on our consideration of the 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
January 31, 2020

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

This section presents management's analysis of the San Francisco Public Utilities Commission's (SFPUC or the Commission) financial condition and activities as of and for the fiscal years ended June 30, 2019 and 2018. Management's Discussion and Analysis (MDA) is intended to serve as an introduction to 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.

In May 2016, SFPUC 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 Hetch Hetchy Water and Power and CleanPowerSF Enterprise starting fiscal year ended 2017.

The information in this MDA is presented under the following headings:

- Organization and Business
- Overview of the Financial Statements
- Financial Analysis
- Capital Assets
- Debt Administration
- Rates and Charges
- Request for Information

Organization and Business

The 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 Water and Power and CleanPowerSF (Hetch Hetchy), which is composed of three funds: 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 185 million gallons of water per day in the year ended June 30, 2019. Approximately two-thirds of the water delivered by the Water Enterprise is to wholesale customers. Retail customers use the remaining one-third and are primarily San Francisco consumers, including residential, commercial, industrial, and governmental users. Wholesale customers include cities, water districts, one private utility, and one non-profit university. Service to these customers is provided pursuant to the 25-year Amended and Restated Water Supply Agreement (WSA), commenced on July 1, 2009, which established the basis for determining the costs of wholesale service.

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 993 miles of combined storm and sanitary collection

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

system pipes, sewer mains, transport/storage boxes, other storage structures, and tunnels. San Francisco is the only coastal city in California with a combined sewer system that collects both wastewater and stormwater in the same network of pipes and provides treatment to remove harmful pollutants before discharging into the San Francisco Bay and Pacific Ocean. In addition, the Wastewater 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 Wastewater Enterprise recovers costs of service through user fees based on the volume and strength of sanitary flow. As of June 30, 2019, the Wastewater Enterprise serves 148,068 residential accounts, which discharge about 16.3 million units of sanitary flow per year (measured in hundreds of cubic feet, or ccf) and 25,897 non-residential accounts, which discharge about 7.6 million ccf per year.

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

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's customers, and to offer, when available, power for the municipal loads and agricultural pumping demands of the Modesto Irrigation District (MID) 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 for Hetchy Water and Hetchy Power

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.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

CleanPowerSF

The core business of CleanPowerSF 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.

Overview of the Financial Statements

The Department's financial statements include:

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, non-capital, and investing activities. These statements summarize the annual flow of cash receipts and cash payments, without consideration of the timing of the event giving rise to the obligation or receipt, and exclude non-cash accounting measures of depreciation or amortization of assets.

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

Fund Financial Statements

The Department has five enterprise funds: Water, Wastewater, Hetchy Water, Hetchy Power, and CleanPowerSF.

Financial Analysis

Financial Highlights for Fiscal Year 2019

Department-wide Business Type Activities

- Total assets exceeded total liabilities by \$2,281,402.
- Net position increased by \$187,245 or 8.2% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization, increased by \$427,312 or 5.2% to \$8,661,093.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

- Operating revenues increased by \$186,160 or 18.0% to \$1,218,858.
- Operating expenses increased by \$120,516 or 14.9% to \$927,184.

Water

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

Wastewater

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

Hetchy Water

- Total assets of Hetchy Water exceeded total liabilities by \$198,686.
- Net position increased by \$9,383 or 4.9% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization, increased by \$9,304 or 6.7% to \$149,103.
- Operating revenues, excluding interest and investment income, and other non-operating revenues, increased by \$445 or 1.3% to \$34,005.
- Operating expenses, excluding other non-operating expenses, increased by \$10,513 or 26.4% to \$50,305.

Hetchy Power

- Total assets of Hetchy Power exceeded total liabilities by \$442,675.
- Net position increased by \$39,089 or 9.6% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization, increased by \$61,905 or 18.2% to \$401,528.
- Operating revenues, excluding interest and investment income, and other non-operating revenues, increased by \$24,726 or 20.8% to \$143,561.
- Operating expenses, excluding interest expenses, other non-operating expenses, and amortization of premium, discount, and issuance costs, increased by \$3,293 or 2.8% to \$122,688.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

CleanPowerSF

- Total assets of CleanPowerSF exceeded total liabilities by \$39,872.
- Net position increased by \$31,141 or 351.5% during the fiscal year.
- CleanPowerSF had no capital assets, net of accumulated depreciation and amortization, as of June 30, 2019.
- Operating revenues, excluding interest and investment income, and other non-operating revenues, increased by \$128,252 or 324.1% to \$167,820.
- Operating expenses, excluding interest expense increased by \$98,856 or 257.2% to \$137,284.

Financial Highlights for Fiscal Year 2018

Department-wide Business Type Activities

- Total assets exceeded total liabilities by \$2,023,682.
- Net position increased by \$45,135 or 2.0% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization, increased by \$483,896 or 6.2% to \$8,233,781.
- Operating revenues increased by \$105,047 or 11.3% to \$1,032,698.
- Operating expenses decreased by \$53,509 or 6.2% to \$806,668.

Water

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

Wastewater

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

Hetchy Water

- Total assets of Hetchy Water exceeded total liabilities by \$185,276.
- Net position increased by \$23,434 or 13.9% during the fiscal year.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

- Capital assets, net of accumulated depreciation and amortization, increased by \$12,068 or 9.4% to \$139,799.
- Operating revenues, excluding interest and investment income, and other non-operating revenues, decreased by \$1,590 or 4.5% to \$33,560.
- Operating expenses, excluding other non-operating expenses, decreased by \$10,307 or 20.6% to \$39,792.

Hetchy Power

- Total assets of Hetchy Power exceeded total liabilities by \$398,663.
- Net position increased by \$4,940 or 1.2% during the fiscal year.
- Capital assets, net of accumulated depreciation and amortization, increased by \$22,633 or 7.1% to \$339,623.
- Operating revenues, excluding interest and investment income, and other non-operating revenues, decreased by \$2,127 or 1.8% to \$118,835.
- Operating expenses, excluding interest expenses, other non-operating expenses, and amortization of premium, discount, and issuance costs, increased by \$2,460 or 2.1% to \$119,395.

CleanPowerSF

- Total assets of CleanPowerSF exceeded total liabilities by \$8,577.
- Net position increased by \$642 or 7.8% during the fiscal year.
- CleanPowerSF had no capital assets, net of accumulated depreciation and amortization, as of June 30, 2018.
- Operating revenues, excluding interest and investment income and other non-operating revenues, increased by \$5,701 or 16.8% to \$39,568.
- Operating expenses, excluding interest expense, increased by \$11,332 or 41.8% to \$38,428, of which \$3,501 was electricity purchased from Hetchy Power.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(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, 2019, 2018, and 2017

	<u>2019*</u>	<u>2018*</u>	<u>2017*</u>	<u>2019 - 2018</u> <u>Change</u>	<u>2018 - 2017</u> <u>Change</u>
Total assets:					
Current and other assets	\$ 1,818,271	1,294,469	1,220,184	523,802	74,285
Capital assets, net of accumulated depreciation and amortization	8,661,093	8,233,781	7,749,885	427,312	483,896
Total assets	<u>10,479,364</u>	<u>9,528,250</u>	<u>8,970,069</u>	<u>951,114</u>	<u>558,181</u>
Deferred outflows of resources:					
Unamortized loss on refunding of debt	139,387	150,755	127,510	(11,368)	23,245
Pensions	97,016	109,009	181,681	(11,993)	(72,672)
Other post-employment benefits	20,903	14,360	—	6,543	14,360
Total deferred outflows of resources	<u>257,306</u>	<u>274,124</u>	<u>309,191</u>	<u>(16,818)</u>	<u>(35,067)</u>
Liabilities:					
Current liabilities:					
Bonds	125,512	100,155	71,327	25,357	28,828
Certificates of participation	3,765	3,580	3,405	185	175
Commercial paper	503,558	323,451	276,469	180,107	46,982
State revolving fund loans	1,239	296	—	943	296
Other liabilities	285,428	279,817	205,098	5,611	74,719
Subtotal current liabilities	<u>919,502</u>	<u>707,299</u>	<u>556,299</u>	<u>212,203</u>	<u>151,000</u>
Long-term liabilities:					
Bonds	6,390,220	5,889,998	5,592,743	500,222	297,255
Certificates of participation	142,442	146,428	150,268	(3,986)	(3,840)
State revolving fund loans	86,793	22,311	—	64,482	22,311
Other liabilities	659,005	738,532	734,959	(79,527)	3,573
Subtotal long-term liabilities	<u>7,278,460</u>	<u>6,797,269</u>	<u>6,477,970</u>	<u>481,191</u>	<u>319,299</u>
Total liabilities:					
Bonds	6,515,732	5,990,153	5,664,070	525,579	326,083
Certificates of participation	146,207	150,008	153,673	(3,801)	(3,665)
Commercial paper	503,558	323,451	276,469	180,107	46,982
State revolving fund loans	88,032	22,607	—	65,425	22,607
Other liabilities	944,433	1,018,349	940,057	(73,916)	78,292
Total liabilities	<u>8,197,962</u>	<u>7,504,568</u>	<u>7,034,269</u>	<u>693,394</u>	<u>470,299</u>
Deferred inflows of resources:					
Related to pensions	58,298	26,459	19,201	31,839	7,258
Other post-employment benefits	22,240	422	—	21,818	422
Total deferred inflows of resources	<u>80,538</u>	<u>26,881</u>	<u>19,201</u>	<u>53,657</u>	<u>7,680</u>
Net position:					
Net investment in capital assets	2,147,756	2,087,816	1,979,445	59,940	108,371
Restricted for debt service	18,617	25,079	12,451	(6,462)	12,628
Restricted for capital projects	26,906	44,690	39,557	(17,784)	5,133
Unrestricted	264,891	113,340	194,337	151,551	(80,997)
Total net position	<u>\$ 2,458,170</u>	<u>2,270,925</u>	<u>2,225,790</u>	<u>187,245</u>	<u>45,135</u>

* Eliminated interfund payables and receivables of \$3,731, \$5,601 and \$7,250 working capital loan between Hetchy Power and CleanPowerSF and \$955, \$1,061 and \$1,166 between Wastewater and Hetchy Power for the 525 Golden Gate Avenue Headquarters construction cost in fiscal years 2019, 2018 and 2017, respectively.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(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, 2019, 2018, and 2017					
	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2019 - 2018</u>	<u>2018 - 2017</u>
				<u>Change</u>	<u>Change</u>
Total assets:					
Current and other assets	\$ 604,463	676,284	599,800	(71,821)	76,484
Capital assets, net of accumulated depreciation and amortization	<u>5,388,658</u>	<u>5,263,233</u>	<u>5,053,464</u>	<u>125,425</u>	<u>209,769</u>
Total assets	<u>5,993,121</u>	<u>5,939,517</u>	<u>5,653,264</u>	<u>53,604</u>	<u>286,253</u>
Deferred outflows of resources:					
Unamortized loss on refunding of debt	139,061	150,255	126,805	(11,194)	23,450
Pensions	55,465	62,062	105,357	(6,597)	(43,295)
Other post-employment benefits	<u>13,142</u>	<u>9,122</u>	<u>–</u>	<u>4,020</u>	<u>9,122</u>
Total deferred outflows of resources	<u>207,668</u>	<u>221,439</u>	<u>232,162</u>	<u>(13,771)</u>	<u>(10,723)</u>
Liabilities:					
Current liabilities:					
Revenue bonds and Capital Appreciation Bonds	100,899	76,665	48,875	24,234	27,790
Certificates of participation	2,688	2,556	2,431	132	125
Commercial paper	161,336	40,312	145,000	121,024	(104,688)
Other liabilities	<u>132,251</u>	<u>137,576</u>	<u>118,602</u>	<u>(5,325)</u>	<u>18,974</u>
Subtotal current liabilities	<u>397,174</u>	<u>257,109</u>	<u>314,908</u>	<u>140,065</u>	<u>(57,799)</u>
Long-term liabilities:					
Revenue and capital appreciation bonds	4,709,678	4,839,101	4,512,370	(129,423)	326,731
Certificates of participation	101,704	104,550	107,291	(2,846)	(2,741)
Other liabilities	<u>402,782</u>	<u>455,341</u>	<u>438,455</u>	<u>(52,559)</u>	<u>16,886</u>
Subtotal long-term liabilities	<u>5,214,164</u>	<u>5,398,992</u>	<u>5,058,116</u>	<u>(184,828)</u>	<u>340,876</u>
Total liabilities:					
Revenue and capital appreciation bonds	4,810,577	4,915,766	4,561,245	(105,189)	354,521
Certificates of participation	104,392	107,106	109,722	(2,714)	(2,616)
Commercial paper	161,336	40,312	145,000	121,024	(104,688)
Other liabilities	<u>535,033</u>	<u>592,917</u>	<u>557,057</u>	<u>(57,884)</u>	<u>35,860</u>
Total liabilities	<u>5,611,338</u>	<u>5,656,101</u>	<u>5,373,024</u>	<u>(44,763)</u>	<u>283,077</u>
Deferred inflows of resources:					
Related to pensions	33,330	15,063	11,135	18,267	3,928
Other post-employment benefits	<u>13,983</u>	<u>268</u>	<u>–</u>	<u>13,715</u>	<u>268</u>
Total deferred inflows of resources	<u>47,313</u>	<u>15,331</u>	<u>11,135</u>	<u>31,982</u>	<u>4,196</u>
Net position:					
Net investment in capital assets	563,457	504,476	495,868	58,981	8,608
Restricted for debt service	16,193	22,933	10,989	(6,740)	11,944
Restricted for capital projects	–	32,978	37,904	(32,978)	(4,926)
Unrestricted	<u>(37,512)</u>	<u>(70,863)</u>	<u>(43,494)</u>	<u>33,351</u>	<u>(27,369)</u>
Total net position	<u>\$ 542,138</u>	<u>489,524</u>	<u>501,267</u>	<u>52,614</u>	<u>(11,743)</u>

Water Net Position, Fiscal Year 2019

For the year ended June 30, 2019, the Water Enterprise's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$542,138. Total net position increased from prior year by \$52,614 or 10.7% (see Table 1A). The increase in net position was the result of an increase of \$39,833 in assets and deferred outflows of resources, coupled with a decrease of \$12,781 in liabilities and deferred inflows of resources.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Current and other assets primarily is comprised of restricted and unrestricted balances of cash, receivables for water deliveries and services, interfund receivables due from other governmental agencies, and inventory. This also includes receivables, which represent cumulative amounts due from the wholesale customers to match revenues with the 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, 2019, the Water Enterprise owed the wholesale customers \$64,829, which was mainly due to lower water demand by the wholesale customers. This amount was recorded as a liability in accordance with the 2009 agreement. See Note 10(a), Water Supply Agreement, for additional details.

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

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

Total liabilities decreased by \$44,763 or 0.8% which is explained by decreases of \$107,903 in principal of revenue bonds, capital appreciation bonds and certificates of participation mainly due to principal repayments, \$33,574 in net pension liability based on actuarial report, \$16,897 in restricted and unrestricted payables mainly from lower WSIP project activities, \$15,565 in other post-employment benefits obligations from actuarial assumptions, \$1,893 in general liability based on actuarial report, \$621 in workers' compensation based on actuarial estimates, \$481 in interest payable, \$303 in accrued payroll, vacation and sick leave, \$117 in pollution remediation liability mainly for the Lake Merced and 17th and Folsom sites (see Note 15(d) for details), and \$96 payment to the Department of Public Works for road structure support projects. These decreases were offset by increases of \$121,024 in commercial paper from additional issuances, \$8,963 in the Wholesale Balancing Account (see Note 10(a) for details), and \$2,700 in unearned revenues mainly from BAWSCA bond surcharge.

Deferred inflows of resources increased by \$31,982 due to a \$18,267 increase relating to pension, and a \$13,715 increase in OPEB obligations based on actuarial report.

Water Net Position, Fiscal Year 2018

For the year ended June 30, 2018, the Water Enterprise's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$489,524. Total net position decreased from prior

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

year by \$11,743 or 2.3% (see Table 1A). The decrease in net position was the result of an increase of \$287,273 in liabilities and deferred inflows of resources, offset by an increase of \$275,530 in assets and deferred outflows of resources.

Current and other assets primarily is comprised of restricted and unrestricted balances of cash, receivables for water deliveries and services, interfund receivables due from other governmental agencies, and inventory. This also includes receivables, which represent cumulative amounts due from the wholesale customers to match revenues with the 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, 2018, the Water Enterprise owed the wholesale customers \$55,866, which was mainly due to increased water demand by the wholesale customers that generated additional billed revenue. This amount was recorded as a liability in accordance with the 2009 agreement. See Note 10(a), Water Supply Agreement, for additional details.

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

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

Total liabilities increased by \$283,077 or 5.3% which is explained by increases of \$351,905 in principal of revenue bonds and certificates of participation mainly due to the issuance of 2017 Series ABC bonds, \$45,006 in other post-employment benefits obligations as a result of implementation of GASB Statement NO. 75, \$22,588 in restricted and unrestricted payables due to prior year activities to close out the legacy system payables, \$12,395 in the Wholesale Balancing Account (see Note 10(a) for details), \$2,664 in general liability based on actuarial report, \$2,154 in interest payable due to higher outstanding debt principal, \$1,868 in workers' compensation based on actuarial estimates, \$354 in unearned revenues mainly from additional deposits for custom work, and \$89 due to the Department of Public Works for road structure support projects. These increases were offset by decreases of \$104,688 in commercial paper due to refunding from the 2017 Series ABC and 2017 Series DEFG bonds, \$50,953 in net pension liability based on actuarial report, \$157 in pollution remediation liability mainly for the Lake Merced and 17th and Folsom sites (see Note 15(d) for details), and \$148 in accrued payroll, vacation and sick leave.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

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

The following table summarizes Wastewater's changes in net position.

Table 1B
Proprietary Fund – Wastewater
Comparative Condensed Net Position
June 30, 2019, 2018, and 2017

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2019 - 2018</u>	<u>2018 - 2017</u>
				Change	Change
Total assets:					
Current and other assets	\$ 821,796	268,983	285,444	552,813	(16,461)
Capital assets, net of accumulated depreciation and amortization	2,721,804	2,491,126	2,251,700	230,678	239,426
Total assets	<u>3,543,600</u>	<u>2,760,109</u>	<u>2,537,144</u>	<u>783,491</u>	<u>222,965</u>
Deferred outflows of resources:					
Unamortized loss on refunding of debt	326	500	705	(174)	(205)
Pensions	26,886	29,984	48,192	(3,098)	(18,208)
Other post-employment benefits	4,669	3,264	—	1,405	3,264
Total deferred outflows of resources	<u>31,881</u>	<u>33,748</u>	<u>48,897</u>	<u>(1,867)</u>	<u>(15,149)</u>
Liabilities:					
Current liabilities:					
Revenue bonds	22,085	21,010	20,015	1,075	995
Certificates of participation	711	676	643	35	33
Commercial paper	291,498	262,859	111,411	28,639	151,448
State revolving fund loans	1,239	296	—	943	296
Other liabilities	101,156	98,185	58,559	2,971	39,626
Subtotal current liabilities	<u>416,689</u>	<u>383,026</u>	<u>190,628</u>	<u>33,663</u>	<u>192,398</u>
Long-term liabilities:					
Revenue bonds	1,630,524	998,136	1,024,910	632,388	(26,774)
Certificates of participation	26,892	27,645	28,370	(753)	(725)
State revolving fund loans	86,793	22,311	—	64,482	22,311
Other liabilities	164,316	181,241	190,777	(16,925)	(9,536)
Subtotal long-term liabilities	<u>1,908,525</u>	<u>1,229,333</u>	<u>1,244,057</u>	<u>679,192</u>	<u>(14,724)</u>
Total liabilities:	1,652,609	1,019,146	1,044,925	633,463	(25,779)
Revenue bonds	27,603	28,321	29,013	(718)	(692)
Commercial paper	291,498	262,859	111,411	28,639	151,448
State revolving fund loans	88,032	22,607	—	65,425	22,607
Other liabilities	265,472	279,426	249,336	(13,954)	30,090
Total liabilities	<u>2,325,214</u>	<u>1,612,359</u>	<u>1,434,685</u>	<u>712,855</u>	<u>177,674</u>
Deferred inflows of resources:					
Related to pensions	16,157	7,277	5,093	8,880	2,184
Other post-employment benefits	4,967	96	—	4,871	96
Total deferred inflows of resources	<u>21,124</u>	<u>7,373</u>	<u>5,093</u>	<u>13,751</u>	<u>2,280</u>
Net position:					
Net investment in capital assets	1,133,662	1,172,623	1,095,165	(38,961)	77,458
Restricted for debt service	1,279	1,312	977	(33)	335
Restricted for capital projects	18,505	—	1,653	18,505	(1,653)
Unrestricted	75,697	190	48,468	75,507	(48,278)
Total net position	<u>\$ 1,229,143</u>	<u>1,174,125</u>	<u>1,146,263</u>	<u>55,018</u>	<u>27,862</u>

Wastewater Net Position, Fiscal Year 2019

For the year ended June 30, 2019, the Wastewater Enterprise's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$1,229,143. The Wastewater Enterprise's total net position increased by \$55,018 or 4.7% as a result of increases of \$75,507 in unrestricted net position and

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

\$18,505 in restricted for capital projects, offset by decreases of \$38,961 in net investment in capital assets and \$33 in restricted for debt service (see Table 1B).

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

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

Total liabilities increased by \$712,855 or 44.2%. As of June 30, 2019, total outstanding balance of \$2,059,742 for revenue bonds payable, commercial paper, certificates of participation, and State Revolving Fund (SRF) loans represented 88.6% of total liabilities, an increase of \$726,809 or 54.5%. The increase was mainly due to \$663,103 issuance of revenue bonds Series 2018 ABC, \$66,850 in SRF loans to fund capital project spending, and \$53,639 issuance of commercial paper to fund capital projects, offset by \$48,111 in debt repayments, and \$8,672 in amortization of premium during the year. Other liabilities of \$265,472 such as payables to vendors, contractors, and other government agencies for goods and services under contractual agreements, decreased by \$13,954 or 5.0%, due to decreases of \$15,936 in net pension liability based on actuarial report, \$5,950 in other post-employment benefits obligations based on actuarial report, \$5,737 in restricted and unrestricted payable to vendors and contractors due to more payments than vouchers, \$114 deposit from Pacific Gas & Electric due to expenses incurred for the Cross Bore Project, \$106 to Hetch Hetchy Power due to payment for the 525 Golden Gate Living Machine System, \$34 in prepaid rent from tenants, and \$14 in grant advance recognized to revenue in current year for the Green Infrastructure Leadership. These decreases were offset by increases of \$6,958 in bond and loan interest payable due to higher outstanding debt principal, \$2,797 in pollution remediation liability due to increased estimated cleanup liabilities of \$3,000 for the toxic sediments at Yosemite Creek, offset by \$203 payment for paving surrounding soils due to contamination of hazardous materials at Southeast Plant, \$2,302 in general liability based on actuarial estimates, \$1,250 in employee related benefits including vacation, workers' compensation, and accrued payroll mainly due to actuarial estimate and 3% increase of cost of living adjustment (COLA), and \$630 in customer credit balances. Deferred inflows of resources increased by \$13,751, of which \$8,880 in relation to pensions based on actuarial report and \$4,871 in other post-employment benefits based on actuarial report.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Wastewater Net Position, Fiscal Year 2018

For the year ended June 30, 2018, the Wastewater Enterprise's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$1,174,125. The Wastewater Enterprise's total net position increased by \$27,862 or 2.4% as a result of increases of \$77,458 in net investment in capital assets and \$335 in restricted for debt service, offset by decreases of \$48,278 in unrestricted net position and \$1,653 in restricted for capital projects (see Table 1B).

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

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

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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

525 Golden Gate Living Machine System, \$84 in payments to DPW for the street and sewer repairs & maintenance as well as engineering support, and \$83 in general liability based on actuarial estimates. Deferred inflows of resources increased by \$2,280, of which \$2,184 in relation to pensions based on actuarial report and \$96 in other post-employment benefits per implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*.

The following table summarizes Hetchy Water's changes in net position.

Table 1C - A
Proprietary Fund - Hetchy Water
Comparative Condensed Net Position
June 30, 2019, 2018, and 2017

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2019 - 2018</u>	<u>2018 - 2017</u>
				<u>Change</u>	<u>Change</u>
Total assets:					
Current and other assets	\$ 94,432	97,578	80,350	(3,146)	17,228
Capital assets, net of accumulated depreciation and amortization	<u>149,103</u>	<u>139,799</u>	<u>127,731</u>	<u>9,304</u>	<u>12,068</u>
Total assets	<u>243,535</u>	<u>237,377</u>	<u>208,081</u>	<u>6,158</u>	<u>29,296</u>
Deferred outflows of resources:					
Pensions	6,447	7,488	12,659	(1,041)	(5,171)
Other post-employment benefits	<u>1,343</u>	<u>870</u>	<u>—</u>	<u>473</u>	<u>870</u>
Total deferred outflows of resources	<u>7,790</u>	<u>8,358</u>	<u>12,659</u>	<u>(568)</u>	<u>(4,301)</u>
Liabilities:					
Current liabilities	6,726	8,978	6,293	(2,252)	2,685
Long-term liabilities	<u>38,123</u>	<u>43,123</u>	<u>44,753</u>	<u>(5,000)</u>	<u>(1,630)</u>
Total liabilities	<u>44,849</u>	<u>52,101</u>	<u>51,046</u>	<u>(7,252)</u>	<u>1,055</u>
Deferred inflows of resources:					
Related to pensions	3,874	1,818	1,338	2,056	480
Other post-employment benefits	<u>1,429</u>	<u>26</u>	<u>—</u>	<u>1,403</u>	<u>26</u>
Total deferred inflows of resources	<u>5,303</u>	<u>1,844</u>	<u>1,338</u>	<u>3,459</u>	<u>506</u>
Net position:					
Net investment in capital assets	149,103	139,799	127,731	9,304	12,068
Restricted for capital projects	8,401	11,712	—	(3,311)	11,712
Unrestricted	<u>43,669</u>	<u>40,279</u>	<u>40,625</u>	<u>3,390</u>	<u>(346)</u>
Total net position	<u>\$ 201,173</u>	<u>191,790</u>	<u>168,356</u>	<u>9,383</u>	<u>23,434</u>

Hetchy Water Net Position, Fiscal Year 2019

Hetchy Water's net position of \$201,173 increased by \$9,383 or 4.9% resulting from increases of \$5,590 in total assets and deferred outflows of resources, and \$3,793 decreases in total liabilities and deferred inflows of resources (see Table 1C-A). Decrease in current and other assets of \$3,146 was attributed to \$6,315 decrease in cash and investment with City Treasury due primarily to increase in operating and capital project spending, and \$4 in prepaid charges, advances, and other receivables, of which \$7 in payment from prior year Rim Fire insurance reimbursement, and \$4 in advance paid to the Recreation and Parks Department for the Civic Center Garage, offset by increases of \$4 in vendor prepayments, \$2 in payroll credit, and \$1 in rental receivables. The decreases were offset by increases of \$2,858 in State grants receivables for the Lower Cherry Aqueduct Project and 2018 Moccasin Storm Project, \$252 in restricted and unrestricted interest receivables due to higher annualized interest rates, \$51 in charges for services receivables mainly from Lawrence Livermore National Laboratory due to pending collection, and \$12 in inventory due to more purchase than issuance.

Capital assets, net of accumulated depreciation and amortization, increased by \$9,304 or 6.7% to \$149,103 primarily from construction and capital improvement activities. Deferred outflows of resources

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

decreased by \$568, due to a decrease of \$1,041 in pensions based on actuarial report, offset by an increase of \$473 in OPEB based on actuarial report.

Hetchy Water's total liabilities decreased by \$7,252 or 13.9% to \$44,849, as explained by decreases of \$4,826 in pension liability based on actuarial report, \$2,276 in restricted and unrestricted payables to vendors and contractors, \$468 in OPEB obligations based on actuarial assumptions, and \$9 in general liability based on actuarial estimates, offset by increases of \$321 in employee related benefits including workers' compensation, vacation, sick leave and accrued payroll based on actuarial estimates and 3% increase of COLA, and \$6 in unearned revenue included \$3 in sales tax payables, \$2 in customers' prepayments from charges for services, and \$1 in rental prepayment. Deferred inflows of resources increased by \$3,459, due to increases of \$2,056 in related to pensions and \$1,403 in OPEB based on actuarial reports.

Hetch Hetchy 2018 Moccasin Storm, Fiscal Year 2018

On March 22, 2018, the Moccasin Dam and Reservoir and surrounding areas in the town of Moccasin, Tuolumne County, experienced significant rainfall and subsequent flooding. The SFPUC activated its Emergency Action Plan and notified responsible oversight agencies. On April 19, 2018, the California State Governor issued a State of Emergency Proclamation as the storm event caused widespread damage to several counties in the State. Tuolumne County is identified as an affected county. Hetch Hetchy Enterprise sustained considerable damage to its Moccasin-area water supply, drainage, and power generation assets. Shortly after the Governor's Emergency Proclamation, SFPUC de-activated its Emergency Action Plan and shifted to cost recovery activities.

As of June 30, 2018, the emergency, clean up, repair and construction costs related to the 2018 Moccasin Storm totaled \$4,094. Of this, \$3,687 was capital project related and capitalized to construction work in progress (See Table 3E). \$407 was emergency and cleanup costs and has been expensed. Hetchy Water and Hetchy Power impairment loss were \$177 and \$118, respectively, for a total of \$295, which was reported under operating expenses in the Statements of Revenues, Expenses, and Change in Net Position.

Hetchy Water Net Position, Fiscal Year 2018

Hetchy Water's net position of \$191,790 increased by \$23,434 or 13.9% resulting from an increase of \$24,995 in total assets and deferred outflows of resources, and \$1,561 in total liabilities and deferred inflows of resources (see Table 1C-A). Increase in current and other assets of \$17,228 was attributed to \$16,921 increase in cash and investment with City Treasury primarily due to \$30,000 transfer from the Water Enterprise to fund upcountry water projects, \$210 increase in interest receivables as a result of higher interest rates, \$58 in prepaid charges, advances, and other receivables, of which \$60 from vendor prepayments, and \$6 from Rim Fire insurance recoveries receivables, offset by decreases of \$5 from advance paid to the Recreation and Parks Department for the Civic Center Garage and \$3 in payroll credits. Grant receivables increased by \$53 from Association of Bay Area Governments for Lower Cherry Aqueduct Emergency Rehabilitation project. These increases were offset by a decrease of \$14 from Charges for services receivables primarily from Groveland Community Services due to higher collection.

Capital assets, net of accumulated depreciation and amortization, increased by \$12,068 or 9.4% to \$139,799 primarily due to increases in facilities, improvements, machinery, and equipment for Cherry Dam Outlet Works Rehabilitation, 2018 Moccasin Storm, Moccasin Facilities New Construction, and San Joaquin Pipeline Rehabilitation projects. Deferred outflows of resources for pensions decreased by \$4,301, of which \$5,171 was for pensions based on actuarial report, offset by an increase of \$870 in other post-employment benefits per implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Hetchy Water's total liabilities increased by \$1,055 or 2.1% to \$52,101, due to increases of \$4,592 in other post-employment benefits due to implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*, \$2,753 in outstanding payables to vendors and contractors for goods and services as compared to prior year due to early close-out of legacy finance system payables to prepare for system conversion, \$77 in employee related benefits including workers' compensation, vacation and sick leave, and \$5 in prepaid rent, offset by decreases of \$6,019 in net pension liability, and \$353 in general liability based on actuarial estimates. Deferred inflows of resources increased by \$506, of which \$480 was related to pensions based on actuarial report and \$26 in other post-employment benefits due to implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*.

The following table summarizes Hetchy Power's changes in net position.

Table 1C - B
Proprietary Fund - Hetchy Power
Comparative Condensed Net Position
June 30, 2019, 2018, and 2017

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2019 - 2018</u> <u>Change</u>	<u>2018 - 2017</u> <u>Change</u>
Total assets:					
Current and other assets	\$ 239,222 *	238,023 *	243,406 *	1,199	(5,383)
Capital assets, net of accumulated depreciation and amortization	401,528	339,623	316,990	61,905	22,633
Total assets	<u>640,750</u>	<u>577,646</u>	<u>560,396</u>	<u>63,104</u>	<u>17,250</u>
Deferred outflows of resources:					
Pensions	7,879	9,152	15,473	(1,273)	(6,321)
Other post-employment benefits	1,641	1,064	-	577	1,064
Total deferred outflows of resources	<u>9,520</u>	<u>10,216</u>	<u>15,473</u>	<u>(696)</u>	<u>(5,257)</u>
Liabilities:					
Current liabilities:					
Bonds	2,528	2,480	2,437	48	43
Certificates of participation	366	348	331	18	17
Commercial paper	50,724	20,280	20,058	30,444	222
Other liabilities	28,346	30,935	17,717	(2,589)	13,218
Subtotal current liabilities	<u>81,964</u>	<u>54,043</u>	<u>40,543</u>	<u>27,921</u>	<u>13,500</u>
Long-term liabilities:					
Bonds	50,018	52,761	55,463	(2,743)	(2,702)
Certificates of participation	13,846	14,233	14,607	(387)	(374)
Other liabilities	52,247	57,946	61,935	(5,699)	(3,989)
Subtotal long-term liabilities	<u>116,111</u>	<u>124,940</u>	<u>132,005</u>	<u>(8,829)</u>	<u>(7,065)</u>
Total liabilities:					
Bonds	52,546	55,241	57,900	(2,695)	(2,659)
Certificates of participation	14,212	14,581	14,938	(369)	(357)
Commercial paper	50,724	20,280	20,058	30,444	222
Other liabilities	80,593	88,881	79,652	(8,288)	9,229
Total liabilities	<u>198,075</u>	<u>178,983</u>	<u>172,548</u>	<u>19,092</u>	<u>6,435</u>
Deferred inflows of resources:					
Related to pensions	4,734	2,222	1,635	2,512	587
Other post-employment benefits	1,746	31	-	1,715	31
Total deferred inflows of resources	<u>6,480</u>	<u>2,253</u>	<u>1,635</u>	<u>4,227</u>	<u>618</u>
Net position:					
Net investment in capital assets	301,534	270,918	260,681	30,616	10,237
Restricted for debt service	1,145	834	485	311	349
Unrestricted	143,036	134,874	140,520	8,162	(5,646)
Total net position	<u>\$ 445,715</u>	<u>406,626</u>	<u>401,686</u>	<u>39,089</u>	<u>4,940</u>

* Included \$3,731, \$5,601 and \$7,250 working capital loan to CleanPowerSF in fiscal years 2019, 2018 and 2017, respectively.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Hetchy Power Net Position, Fiscal Year 2019

Hetchy Power's net position of \$445,715 increased by \$39,089 or 9.6% resulting from an increase of \$62,408 in total assets and deferred outflows of resources, offset by an increase of \$23,319 in total liabilities and deferred inflows of resources (see Table 1C-B). Current and other assets increased by \$1,199 or 0.5%. Prepaid charges, advances, and other receivables increased by \$2,512, of which \$2,209 billing credits from Western Area Power Administration, \$278 in receivables for DAS, \$91 in vendor prepayments, \$15 in payroll credit, \$5 in custom work receivables for the Sunnydale Housing Projects, and \$1 in rental receivables, offset by decreases of \$74 payment from prior year Rim Fire insurance reimbursement, and \$13 in advance paid to the Recreation and Parks Department for the Civic Center Garage. Other increases included \$1,202 in inventory due to recognition of the in-city warehouses, \$733 in restricted and unrestricted interest receivables due to higher annualized interest rates, \$579 in cash and investment with City Treasury and outside City Treasury, and \$394 in grants receivables from State and Federal mainly for the Early Intake Switchyard Project. The increases were offset by decreases of \$2,752 in due from other City departments due to repayments of \$1,870 from CleanPowerSF for working capital loan net of interest, \$685 from Sustainable Energy Account, \$106 from the Wastewater Enterprise for the Living Machine System, and \$105 from Recreation and Parks Department for energy efficiency projects, offset by an increase of \$14 in custom work receivables from the Department of Public Works for Hunters Point Shipyard Projects. Charges for service receivables decreased by \$1,469 mainly due to higher collections from retail customers.

Capital assets, net of accumulated depreciation and amortization, increased by \$61,905 or 18.2% to \$401,528 primarily from construction and capital improvement activities. Deferred outflows of resources decreased by \$696, due to a decrease of \$1,273 in pensions based on actuarial report, offset by an increase of \$577 in OPEB based on actuarial report.

Hetchy Power's total liabilities of \$198,075 increased by \$19,092 or 10.7%. As of June 30, 2019, outstanding debts increased by \$27,380 was attributable to an increase of \$30,444 in additional Hetchy Power commercial paper issuance; offset by \$2,828 in principal repayments, and \$236 in amortization of premium and discount.

Other liabilities of \$80,593, such as payables to vendors, contractors, and other government agencies for goods and services under contractual agreements, decreased by \$8,288 or 9.3%, mainly attributable to \$5,899 in pension liability based on actuarial report, \$2,019 in unearned revenues, \$574 in OPEB obligations based on actuarial assumptions, \$513 in payables to vendors and contractors, and \$180 in general liability based on actuarial estimates, offset by increases of \$530 in employee related benefits including workers' compensation, vacation, sick leave and accrued payroll based on actuarial estimates and 3% increase of COLA, \$350 increase in payable due to the Port of San Francisco for power rebate, and \$17 in interest payables mainly due to higher commercial paper outstanding. Decrease of \$2,019 in unearned revenues included \$2,257 billing true up for MID in prior year, and \$952 in customer deposits from retail and commercial customers; offset by increases of \$536 in utility and electric energy surcharge tax payables, \$382 in prepayment for DAS, \$271 in additional deposits for custom work projects, and \$1 in rental prepayment.

Deferred inflows of resources increased by \$4,227, of which \$2,512 was related to pensions and \$1,715 in OPEB based on actuarial reports.

Hetchy Power Net Position, Fiscal Year 2018

Hetchy Power's net position of \$406,626 increased by \$4,940 or 1.2% resulting from an increase of \$11,993 in total assets and deferred outflows of resources, offset by an increase of \$7,053 in total

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Management's Discussion and Analysis (Unaudited)

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

liabilities and deferred inflows of resources (see Table 1C-B). A working capital loan of \$5,601 due to Hetchy Power from CleanPowerSF was eliminated upon consolidation. Current and other assets decreased by \$5,383 or 2.2%, of which \$3,123 decrease in cash and investment with City Treasury and outside City Treasury mainly due to increased capital project spending, \$2,113 in due from other City departments included repayments of \$1,649 from CleanPowerSF for working capital loan, \$677 from Mayor's Energy Conservation Account, \$387 from CleanPowerSF electricity purchased in prior year, \$105 from the Wastewater Enterprise for the Living Machine System, and \$29 decrease in custom work receivables for Hunter's Point Shipyard and Candlestick Point projects, offset by an increase of \$734 in receivable from Recreation and Parks Department for energy efficiency projects.

Charges for service receivables decreased by \$1,128 primarily due to decreased power sales to MID, and \$37 in grant receivables due to collections from the Federal Emergency Management Agency for the Hazard Mitigation Grant Project. Prepaid charges, advances, and other receivables increased by \$662 including \$347 in vendor prepayments, \$287 in receivables for Distributed Antenna System (DAS), and \$75 in Rim Fire insurance recoveries receivables, offset by decreases of \$21 in custom work receivables for the Sunnydale Housing projects, \$15 in payroll credits, and \$11 in advance paid to the Recreation and Parks Department for the Civic Center Garage. Interest receivables increased by \$356 due to higher interest rates.

Capital assets, net of accumulated depreciation and amortization, increased by \$22,633 or 7.1% to \$339,623 primarily due to additions of facilities, improvements, machinery, and equipment for Cherry Dam Outlet Works Rehabilitation, Warnerville Substation Rehabilitation, Moccasin Facilities New Construction, and Mountain Tunnel Improvement projects. Deferred outflows of resources decreased by \$5,257, of which \$6,321 was for pensions based on actuarial report, offset by an increase of \$1,064 in other post-employment benefits per implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*.

Hetchy Power's total liabilities of \$178,983 increased by \$6,435 or 3.7%. As of June 30, 2018, outstanding debts decreased by \$2,794 attributable to \$2,764 in principal repayments, and \$252 in amortization of premium and discount, offset by an increase of \$222 in commercial paper issuance. Other liabilities of \$88,881, such as payables to vendors, contractors, and other government agencies for goods and services under contractual agreements, increased by \$9,229 or 11.6% mainly attributed to \$10,046 in outstanding accounts payable to vendors and contractors for goods and services as compared to prior year due to early close-out of legacy finance system payables to prepare for system conversion, \$3,459 in unearned revenues, \$2,545 in other post-employment benefits due to implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*, \$381 in general liability based on actuarial estimates, and \$164 in employee related benefits including workers' compensation, vacation and sick leave; offset by decreases of \$7,358 in net pension liability based on actuarial report and \$8 in bond and loan interest payable.

Increase of \$3,459 in unearned revenues included \$1,867 in credits to MID due to year-end true-up reconciliation, \$814 in deposits from DAS and the Hunter's Point Shipyard projects, \$708 in utility and electric energy surcharge tax payables, \$535 in deposits for Sunnydale Parcel Q custom work project, \$94 in DAS customer prepayments, and \$7 in prepaid rent, offset by a decrease of \$566 in prior year credit due to other City department for work order billings. Deferred inflows of resources increased by \$618, of which \$587 was related to pensions based on actuarial report and \$31 in other post-employment benefits per implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(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, 2019, 2018 and 2017

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2019 - 2018</u> <u>Change</u>	<u>2018 - 2017</u> <u>Change</u>
Total assets:					
Current and other assets	\$ 63,044	20,263	19,600	42,781	663
Total assets	<u>63,044</u>	<u>20,263</u>	<u>19,600</u>	<u>42,781</u>	<u>663</u>
Deferred outflows of resources:					
Pensions	339	323	-	16	323
Other post-employment benefits	108	40	-	68	40
Total deferred outflows of resources	<u>447</u>	<u>363</u>	<u>-</u>	<u>84</u>	<u>363</u>
Liabilities:					
Current liabilities	17,056	4,252	6,032	12,804	(1,780)
Long-term liabilities	6,116 *	7,434 *	5,350 *	(1,318)	2,084
Total liabilities	<u>23,172</u>	<u>11,686</u>	<u>11,382</u>	<u>11,486</u>	<u>304</u>
Deferred inflows of resources:					
Related to pensions	203	79	-	124	79
Other post-employment benefits	115	1	-	114	1
Total deferred inflows of resources	<u>318</u>	<u>80</u>	<u>-</u>	<u>238</u>	<u>80</u>
Net position:					
Unrestricted	40,001	8,860	8,218	31,141	642
Total net position	<u>\$ 40,001</u>	<u>8,860</u>	<u>8,218</u>	<u>31,141</u>	<u>642</u>

* Included \$3,731, \$5,601 and \$7,250 working capital loan from Hetchy Power in fiscal years 2019, 2018 and 2017, respectively.

CleanPowerSF Net Position, Fiscal Year 2019

CleanPowerSF's net position of \$40,001 increased by \$31,141 or 351.5%, resulting from an increase of \$42,865 in total assets and deferred outflows of resources, offset by an increase of \$11,724 in total liabilities and deferred inflows of resources (see Table 1C-C). Total assets increased by \$42,781 over the prior year. Charges for services receivables increased by \$29,418 from higher electricity sales mainly due to completion of citywide full enrollment, \$13,119 in cash and investment with City Treasury due to higher collection from electricity sales, \$138 in interest receivables due to higher annualized interest rates, and \$106 increase in prepaid charges, advances, and other receivables due to increases of \$373 in receivable of refund from purchased electricity and \$1 in payroll credit, offset by a decrease of \$268 in vendor prepayments.

Deferred outflows of resources increased by \$84 due to an increase of \$68 in OPEB based on actuarial report and \$16 in pensions based on actuarial report.

Total liabilities of \$23,172 increased by \$11,486 or 98.3% included \$12,130 in restricted and unrestricted payables to vendors and contractors for goods and services under contractual agreements as a result of higher power purchases, \$514 in OPEB obligations based on actuarial assumptions, and \$469 in unearned revenue, of which \$190 from utility and electric energy surcharge tax payables, \$160 from net energy metering credits to retail and commercial customers, and \$119 from customers' prepayments. Employee related benefits including vacation, sick leave and accrued payroll increased by \$253 due to higher employment as a result of program growth. General liability increased by \$7 based on actuarial estimates. The increases were offset by decreases of \$1,870 due to working capital loan payment to Hetchy Power, net of accrued interest, and \$17 in net pension liability based on actuarial report.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Deferred inflows of resources increased by \$238 due to increases of \$124 in related to pensions and \$114 in OPEB based on actuarial reports.

CleanPowerSF Net Position, Fiscal Year 2018

CleanPowerSF's net position of \$8,860 increased by \$642 or 7.8% during the fiscal year (see Table 1C-C). Total assets were \$20,263, a \$663 or 3.4% increase from prior year. Increases were attributed to \$2,431 in prepaid expenses for electricity purchases and \$42 in interest receivables due to higher interest rates, offset by decreases of \$1,653 in cash and investment with City Treasury mainly due to higher electricity purchases and \$157 in charges for services receivables from higher collections. Deferred outflows of resources increased \$363, of which \$323 was for pensions based on actuarial report and \$40 in other post-employment benefits per implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*.

Total liabilities of \$11,686 increased by \$304 or 2.7% due to \$2,036 due to other City departments, of which \$1,649 in working capital loan to Hetchy Power, \$387 in payment to Hetchy Power for purchased electricity from prior year, and \$90 in utility tax and electric energy surcharge tax remittance. These decreases were offset by increases of \$1,087 in net pension liability based on actuarial report, \$641 in other post-employment benefits due to implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*, \$600 in outstanding payables to vendors and contractors for goods and services under contractual agreement as compared to prior year due to early close-out of legacy finance system payables to prepare for system conversion, \$58 in unearned revenue from net energy metering credits to retail and commercial customers, and \$44 in employee related benefits including accrued payroll, vacation and sick leave. Deferred inflows of resources increased by \$80, of which \$79 was related to pensions based on actuarial report and \$1 in other post-employment benefits per implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(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 Activities
Years ended June 30, 2019, 2018, and 2017

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2019 - 2018</u>	<u>2018 - 2017</u>
				<u>Change</u>	<u>Change</u>
Revenues:					
Charges for services	\$ 1,172,573	989,842	895,472	182,731	94,370
Rents and concessions	13,989	13,813	9,734	176	4,079
Other operating revenues	32,296	29,043	22,445	3,253	6,598
Interest and investment income	46,639	11,694	8,511	34,945	3,183
Net gain from transfer of assets	619	—	—	619	—
Other non-operating revenues	51,864	55,705	58,422	(3,841)	(2,717)
Total revenues	<u>1,317,980</u>	<u>1,100,097</u>	<u>994,584</u>	<u>217,883</u>	<u>105,513</u>
Expenses:					
Operating expenses	927,184	806,668	860,177	120,516	(53,509)
Interest expenses	224,867	192,183	179,819	32,684	12,364
Amortization of premium, discount, refunding loss, and issuance costs	(23,722)	(19,188)	(15,090)	(4,534)	(4,098)
Non-operating expenses	3,766	4,129	4,466	(363)	(337)
Total expenses	<u>1,132,095</u>	<u>983,792</u>	<u>1,029,372</u>	<u>148,303</u>	<u>(45,580)</u>
Change in net position before transfers	<u>185,885</u>	<u>116,305</u>	<u>(34,788)</u>	<u>69,580</u>	<u>151,093</u>
Transfers from the City and County of San Francisco	25,722	30,469	60,268	(4,747)	(29,799)
Transfers to the City and County of San Francisco	(24,362)	(58,840)	(90,912)	34,478	32,072
Net transfers	<u>1,360</u>	<u>(28,371)</u>	<u>(30,644)</u>	<u>29,731</u>	<u>2,273</u>
Change in net position	<u>187,245</u>	<u>87,934</u>	<u>(65,432)</u>	<u>99,311</u>	<u>153,366</u>
Net position at beginning of year:					
Beginning of year, as previously reported	2,270,925	2,225,790	2,291,222	45,135	(65,432)
Cumulative effect of accounting change due to error	—	(6,767)	—	6,767	(6,767)
Cumulative effect of accounting change	—	(36,032)*	—	36,032	(36,032)
Beginning of year as restated	<u>2,270,925</u>	<u>2,182,991</u>	<u>2,291,222</u>	<u>87,934</u>	<u>(108,231)</u>
Net position at end of year	<u>\$ 2,458,170</u>	<u>2,270,925</u>	<u>2,225,790</u>	<u>187,245</u>	<u>45,135</u>

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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(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 Activities
Years ended June 30, 2019, 2018, and 2017

	2019	2018	2017	2019 - 2018 Change	2018 - 2017 Change
Revenues:					
Charges for services	\$ 509,703	495,138	438,207	14,565	56,931
Rents and concessions	13,010	12,906	8,813	104	4,093
Other operating revenues	19,678	17,595	13,311	2,083	4,284
Interest and investment income	15,650	6,448	4,331	9,202	2,117
Other non-operating revenues	32,399	39,064	37,405	(6,665)	1,659
Total revenues	<u>590,440</u>	<u>571,151</u>	<u>502,067</u>	<u>19,289</u>	<u>69,084</u>
Expenses:					
Operating expenses	357,094	370,147	421,827	(13,053)	(51,680)
Interest expenses	177,998	164,001	148,075	13,997	15,926
Amortization of premium, discount, refunding loss, and issuance costs	(17,788)	(13,540)	(9,029)	(4,248)	(4,511)
Non-operating expenses	1,388	1,920	2,607	(532)	(687)
Total expenses	<u>518,692</u>	<u>522,528</u>	<u>563,480</u>	<u>(3,836)</u>	<u>(40,952)</u>
Change in net position before transfers	<u>71,748</u>	<u>48,623</u>	<u>(61,413)</u>	<u>23,125</u>	<u>110,036</u>
Transfers from the City and County of San Francisco	1,200	382	128	818	254
Transfers to the City and County of San Francisco	(20,334)	(31,368)	(60,116)	11,034	28,748
Net transfers	<u>(19,134)</u>	<u>(30,986)</u>	<u>(59,988)</u>	<u>11,852</u>	<u>29,002</u>
Change in net position	<u>52,614</u>	<u>17,637</u>	<u>(121,401)</u>	<u>34,977</u>	<u>139,038</u>
Net position at beginning of year:					
Beginning of year, as previously reported	489,524	501,267	622,668	(11,743)	(121,401)
Cumulative effect of accounting change	—	(29,380)*	—	29,380	(29,380)
Beginning of year as restated	<u>489,524</u>	<u>471,887</u>	<u>622,668</u>	<u>17,637</u>	<u>(150,781)</u>
Net position at end of year	<u>\$ 542,138</u>	<u>489,524</u>	<u>501,267</u>	<u>52,614</u>	<u>(11,743)</u>

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

Water Results of Operations, Fiscal Year 2019

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

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

The Water Enterprise's total expenses were \$518,692, a decrease of \$3,836 or 0.7%. Operating expenses were \$357,094, a decrease of \$13,053 or 3.5% due to decreases of \$16,701 in personnel services primarily due to pension and OPEB obligations based on actuarial reports, \$2,515 in materials and supplies mainly from prior year obsolete inventory write-offs, and \$416 in contractual services mainly from decreased construction contracts. These decreases were offset by increases of \$2,891 in services provided by other departments mainly due to increased water assessment fees paid to Hetch Hetchy Water and City

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Attorney legal services, \$2,064 in depreciation due to additional capital assets placed into service, and \$1,624 in general and administrative and other mainly due to lower capitalization of capital projects. Interest expenses increased by \$13,997 due to prior year issuance of 2017 Series ABC and DEFG bonds, and reduced interest capitalization for capital projects. Amortization of bond premium, discount, refunding loss, and issuance costs increased by \$4,248 mainly due to the issuance of bonds in prior year. Non-operating expenses decreased by \$532 from reduced community based organization programs.

Transfers in of \$1,200 were from the General Fund for low income assistance programs. Transfers out of \$20,334 included \$20,000 to Hetch Hetchy Water to fund various upcountry capital projects, \$302 to the Arts Commission for arts enrichment, and \$32 to the Office of the City Administrator for the Surety Bond Program.

Water Results of Operations, Fiscal Year 2018

The Water Enterprise's total revenues of \$571,151 for the year represented an increase of \$69,084 or 13.8% from prior year (see Table 2A). Increases included \$56,931 from charges for services, \$4,284 for other operating revenues, \$4,093 for rents and concessions, \$2,117 from interest and investment income, and \$1,659 for other non-operating revenues.

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

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

Transfers in of \$382 included \$282 from the City for Earthquake Safety and Emergency Response projects, and \$100 from the General Fund for the San Francisco War Memorial Veterans Building project. Transfers out of \$31,368 included \$30,000 to Hetch Hetchy Water to fund various upcountry capital projects, \$1,244 to San Francisco Recreation and Parks Department for Alta Plaza Park and Moscone Recreation Center projects, \$92 to San Francisco Municipal Transportation Agency for the Forest Hill Station project, and \$32 to the Office of the City Administrator for the Surety Bond Program.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(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 Activities
Years ended June 30, 2019, 2018, and 2017

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

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

Wastewater Results of Operations, Fiscal Year 2019

The Wastewater Enterprise's total revenues were \$357,946, an increase of \$35,203 or 10.9% from prior year (see Table 2B). Charges for services increased by \$14,724 or 4.9% due to an average 7% adopted rate increase offset by a sanitary flow decrease of 476,093 ccf or 2% from residential and non-residential customers. Interest and investment income increased significantly by \$18,384 or 793.4% due to increases of \$13,632 in interest earned on cash mainly attributed to higher cash balance coupled with higher annualized interest rate and \$4,752 in unrealized gains due to improved market value. Other operating revenues increased by \$1,170 or 10.2% mainly due to \$1,091 increase in capacity fees resulting from 6% increase in number of permits and 7% increase in average permit price, and \$79 in charges for services to other City departments such as the Laguna Honda Hospital and San Francisco Municipal Transportation Agency. Net gain from transfer of assets was \$619 due to transfer of 1800 Jerrold from General Services Agency (GSA). Other non-operating revenues increased by \$215 or 4.0% mainly due to increases of \$305 in miscellaneous revenue such as Stormwater Control Plan review fees, overhead and late payment charges, \$235 State grant received for the stormwater flood management projects, \$29 from the Green Infrastructure Leadership Exchange Grant, \$11 in federal interest subsidy, \$3 net loss from sale of fixed assets in prior year, and \$2 from sale of scrap and waste. These increases were offset by \$228 decrease in biofuel revenue as the SFGreasecycle Program ended in April 2019, \$141 in settlements received in prior year from insurance claim, and \$1 in services to other government agencies. Rents increased by \$91 or

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

14.9% mainly due to \$68 catch-up billing for a lease at Southeast Water Pollution Control Plant in the current year and \$23 from tenants with 4% consumer price index (CPI) average rate increase.

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

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

Wastewater Results of Operations, Fiscal Year 2018

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

Total expenses decreased by \$8,373 or 3.1% due to decreases of \$5,314 in operating expenses, and \$3,496 in interest expenses mainly attributed to increased capitalized bond interest, offset by \$406 amortization of premium, refunding loss, and issuance cost and \$31 in other non-operating expenses due to lower expense incurred for the flood water management program. The decrease of \$5,314 in operating expenses was mainly attributable to \$23,311 decrease in personnel services mainly from pensions, and \$458 in services provided by other departments mainly for light, heat, and power. These decreases were offset by \$15,359 increase in general and administrative and other operating expenses mainly due to decreased capitalization of capital project spending and \$2,236 increases in contractual services mainly

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

due to higher professional and specialized services particularly on engineering services, management, and system consulting services and maintenance services on building structures particularly on sludge removal, pest control, and security services, \$710 in materials and supplies, and \$150 in depreciation expense due to increased capitalized assets.

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

The following table summarizes Hetchy Water's revenues, expenses, and changes in net position.

Table 2C – A
Proprietary Fund – Hetchy Water
Comparative Condensed Activities
Years ended June 30, 2019, 2018, and 2017

	2019	2018	2017	2019 - 2018 Change	2018 - 2017 Change
Revenues:					
Charges for services	\$ 33,880	33,427	35,008	453	(1,581)
Rents and concessions	125	133	142	(8)	(9)
Interest and investment income	2,670	218	46	2,452	172
Other non-operating revenues	3,013	1,237	616	1,776	621
Total revenues	<u>39,688</u>	<u>35,015</u>	<u>35,812</u>	<u>4,673</u>	<u>(797)</u>
Expenses:					
Operating expenses	50,305	39,792	50,099	10,513	(10,307)
Non-operating expenses	—	68	68	(68)	—
Total expenses	<u>50,305</u>	<u>39,860</u>	<u>50,167</u>	<u>10,445</u>	<u>(10,307)</u>
Change in net position before transfers	(10,617)	(4,845)	(14,355)	(5,772)	9,510
Transfers from the City and County of San Francisco	20,000	30,000	60,000	(10,000)	(30,000)
Change in net position	<u>9,383</u>	<u>25,155</u>	<u>45,645</u>	<u>(15,772)</u>	<u>(20,490)</u>
Net position at beginning of year:					
Beginning of year, as previously reported	191,790	168,356	122,711	23,434	45,645
Cumulative effect of accounting change	—	(1,721)*	—	1,721	(1,721)
Beginning of year as restated	<u>191,790</u>	<u>166,635</u>	<u>122,711</u>	<u>25,155</u>	<u>43,924</u>
Net position at end of year	<u>\$ 201,173</u>	<u>191,790</u>	<u>168,356</u>	<u>9,383</u>	<u>23,434</u>

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

Hetchy Water Results of Operations, Fiscal Year 2019

Hetchy Water's total revenues were \$39,688, an increase of \$4,673 or 13.3% over prior year (see Table 2C-A). Charges for services were \$33,880, an increase of \$453 or 1.4% mainly due to an increase of \$978 water assessment fees from the Water Enterprise to fund upcountry water-related cost, offset by decreases of \$497 from Lawrence Livermore National Laboratory and \$28 from other customers. Rents and concessions decreased by \$8 or 6.0% due to lower Moccasin cottage rentals. Interest and investment income increased by \$2,452 or 1,124.8% due to \$1,794 in unrealized gains attributed to increase in market value in cash and investments with City Treasury and \$658 in interest earned resulting from higher interest rates. Other non-operating revenue increased by \$1,776 or 143.6% mainly due to \$1,934 from State grants for the 2018 Moccasin Storm Project and Lower Cherry Aqueduct Project, offset by decreases of \$106 in overhead charges, \$33 from prior year Rim Fire insurance recoveries, \$12 decreased sale of fixed assets, scrap, and waste, and \$7 in miscellaneous revenue.

Total operating expenses were \$50,305, an increase of \$10,513 or 26.4% due to increases of \$9,365 in other operating expenses mainly due to higher capital project expenses, and \$1,880 in general and

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

administrative expenses mainly due to increased taxes, licenses and permit payments to National Park Service and Turlock Irrigation District, \$314 in depreciation and amortization related to building, structure and equipment, \$50 in services provided by other departments mainly explained by higher light, heat, and power charges, and \$32 increase in materials and supplies mainly for fuels and lubricants. These increases were offset by decreases of \$809 in personnel services primarily due to lower pension and OPEB obligations based on actuarial reports, and \$319 in contractual services mainly from decreased engineering services.

Other non-operating expenses decreased by \$68 due to no payments to community-based organization programs. Transfer in of \$20,000 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, 2019 increased by \$9,383 or 4.9% compared to prior year.

Hetchy Water Results of Operations, Fiscal Year 2018

Hetchy Water's total revenues were \$35,015, a decrease of \$797 or 2.2% from prior year's revenues (see Table 2C-A). Charges for services were \$33,427, a decrease of \$1,581 or 4.5% mainly due to a decrease of \$2,000 water assessment fees from the Water Enterprise to fund upcountry water-related costs, offset by an increase of \$418 from Lawrence Livermore National Laboratory due to higher consumption. Rents decreased by \$9 due to lower Moccasin cottage rentals. Other non-operating revenues increased by \$621 mainly due to \$1,050 grant revenue from Association of Bay Area Governments for Lower Cherry Aqueduct Emergency Rehabilitation Project, and \$17 from miscellaneous revenue, offset by decreases of \$431 from prior year Rim Fire insurance recoveries, and \$15 in net gain on sale of assets. Interest and investment income increased by \$172 due to \$769 in interest earned resulting from higher interest rates and higher cash balances, offset by an increase in unrealized loss of \$597 attributed to decline in market value in cash and investments with City Treasury.

Total operating expenses were \$39,792, a decrease of \$10,307 or 20.6% due to \$7,482 in personnel services for lower pensions and personnel costs, \$3,161 in other operating expenses mainly due to increased capitalized project expenses, \$390 decrease in legal services provided by City Attorney, \$282 in general and administrative expenses mainly due to judgments and claims based on actuarial estimates, and \$60 in building, construction and equipment maintenance supplies. These decreases were offset by increases of \$561 in depreciation and amortization related to building, structure and equipment, and \$507 in contractual services mainly for engineering services. Other non-operating expenses of \$68 related to the Summer Youth Program for Garden Project remained the same from prior year. Transfer in of \$30,000 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, 2018 increased by \$23,434 or 13.9% compared to prior year.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(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 Activities
Years ended June 30, 2019, 2018, and 2017

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2019 - 2018</u> <u>Change</u>	<u>2018 - 2017</u> <u>Change</u>
Revenues:					
Charges for services	\$ 143,409	118,672	120,789	24,737	(2,117)
Rents and concessions	152	163	173	(11)	(10)
Interest and investment income	6,883	2,537	1,718	4,346	819
Other non-operating revenues	10,907	10,073	11,764	834	(1,691)
Total revenues	<u>161,351</u>	<u>131,445</u>	<u>134,444</u>	<u>29,906</u>	<u>(2,999)</u>
Expenses:					
Operating expenses	122,688	119,395	116,935	3,293	2,460
Interest expenses	2,936	3,103	3,200	(167)	(97)
Amortization of premium, discount, and issuance costs	(237)	(248)	(255)	11	7
Non-operating expenses	1,365	1,727	1,408	(362)	319
Total expenses	<u>126,752</u>	<u>123,977</u>	<u>121,288</u>	<u>2,775</u>	<u>2,689</u>
Change in net position before transfers	34,599	7,468	13,156	27,131	(5,688)
Transfers from the City and County of San Francisco	4,522	87	100	4,435	(13)
Transfers to the City and County of San Francisco	(32)	(512)	(49)	480	(463)
Net transfers	<u>4,490</u>	<u>(425)</u>	<u>51</u>	<u>4,915</u>	<u>(476)</u>
Change in net position	<u>39,089</u>	<u>7,043</u>	<u>13,207</u>	<u>32,046</u>	<u>(6,164)</u>
Net position at beginning of year:					
Beginning of year, as previously reported	406,626	401,686	389,903	4,940	11,783
Cumulative effect of accounting change	-	(2,103) *	-	2,103	(2,103)
Less: CleanPowerSF beginning net position	-	-	(1,424)	-	1,424
Beginning of year as restated	<u>406,626</u>	<u>399,583</u>	<u>388,479</u>	<u>7,043</u>	<u>11,104</u>
Net position at end of year	<u>\$ 445,715</u>	<u>406,626</u>	<u>401,686</u>	<u>39,089</u>	<u>4,940</u>

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

Hetchy Power Results of Operations, Fiscal Year 2019

Hetchy Power's total revenues were \$161,351, an increase of \$29,906 or 22.8% over prior year (see Table 2C-B). Charges for services were \$143,409, an increase of \$24,737 or 20.8% primarily due to \$11,721 in wholesale electricity from recognition of California Independent System Operator (CAISO) Congestion Revenue Right (CRR) credits, \$7,462 in sales to City departments mainly from the Office of the City Administrator, Zuckerberg San Francisco General Hospital, and San Francisco International Airport, \$5,371 in sales to non-City customers mainly from tenants of the Port of San Francisco and Transbay Joint Powers Authority, and \$589 in sale of capacity to CleanPowerSF. The increases were offset by a decrease of \$406 in Treasure Island utilities revenue. Rents and concessions decreased by \$11 or 6.7% due to lower Moccasin cottage rentals. Interest and investment income increased by \$4,346 or 171.3% due to \$2,657 in unrealized gains attributed to increase in market value in cash and investments with City Treasury and \$1,689 in interest earned resulting from higher interest rates.

Other non-operating revenues increased by \$834 or 8.28% mainly due to \$787 from Hunters Point Project, \$641 in overhead charges, \$446 in Cap and Trade revenues, \$367 in Federal grant for the Early Intake Switchyard Project, \$331 from Rim Fire insurance recovery, \$192 in settlement, \$88 in annual license fee received from San Francisco Port Transbay Cable Project, and \$39 in State grants for the 2018 Moccasin Storm Project and Other Small Power Projects. These increases were offset by decreases of \$1,671 received in prior year for Energy Efficiency Projects, Power System Impact Mitigation Project and Sunnydale Parcel Q Housing Project, \$178 lower fees collected from DAS, \$92 reimbursement for Central Subway

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Project, \$56 in sale of fixed assets, scrap, and waste, \$39 in Federal interest subsidy due to sequestration, and \$21 in miscellaneous revenues.

Total operating expenses, excluding interest expenses, other non-operating expenses, and amortization of premium, discount, and issuance costs, increased by \$3,293 or 2.8% to \$122,688. The increase was attributed to \$13,002 in purchased electricity and transmission, distribution and other power costs mainly due to CAISO CRR credits were recognized as revenue instead of offsetting to expenses, \$2,633 in personnel services primarily due to higher salaries and fringe benefits, \$985 in legal services provided by the City Attorney, \$560 in contractual services, and \$435 in depreciation and amortization due to increased capitalized assets of building, structure and equipment. These increases were offset by decreases of \$12,875 in other operating expenses mainly due to increased capitalization of project expenses, \$869 in materials and supplies mainly explained by the recognition of material and supplies to inventory for the in-city warehouse, and \$578 in general and administrative expenses mainly due to lower judgments and claims based on actuarial estimates. Interest expenses were \$2,936, a decrease of \$167 or 5.4% mainly due to higher capitalized interest. Amortization of premium and discount slightly decreased by \$11 or 4.4% to \$237.

Other non-operating expenses were \$1,365, a decrease of \$362 or 21% due to \$716 in lower payments for GoSolarSF Incentive Program and community-based organization programs, offset by \$354 in loss from sale of fixed assets. Net transfer of \$4,490 included transfers in of \$4,522 from the City's Education Revenue Augmentation fund for utility acquisition assessments and transfer out of \$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, 2019 increased by \$39,089 or 9.6% compared to prior year.

Hetchy Power Results of Operations, Fiscal Year 2018

Hetchy Power's total revenues were \$131,445, a decrease of \$2,999 or 2.2% from prior year's revenues (see Table 2C-B). Charges for services were \$118,672, a decrease of \$2,117 or 1.8% was primarily due to \$7,658 in power sales to MID, offset by increases of \$2,359 electricity sales to other City departments, \$1,677 sales to other retail customers mainly from San Francisco Port operations, and \$1,491 in sale of electricity to CleanPowerSF. Rents decreased by \$10 due to lower Moccasin cottage rentals.

Other non-operating revenues decreased by \$1,691 or 14.4% included \$2,984 lower collection from Power System Impact Mitigation Project, \$751 from prior year Rim Fire insurance recovery, \$45 in federal interest subsidy due to sequestration, \$37 in grant advance received from FEMA for the Rim Fire projects in prior year, and \$9 in miscellaneous revenue; offset by increases of \$1,000 in fees collected from DAS, \$838 from energy efficiency projects, \$134 in Cap and Trade revenues, \$85 in annual license fee received from San Francisco Port Transbay Cable Project, \$28 in collection from Sunnysdale Parcel Q Housing project, \$27 in overhead charges, and \$23 in net gain on sale of assets. Interest and investment income increased by \$819 due to \$1,651 interest earned resulting from higher interest rates, offset by an increase in unrealized loss of \$832 attributed to decline in market value in cash and investments with City Treasury.

Total operating expenses, excluding interest expenses, other non-operating expenses, and amortization of premium, discount, and issuance costs, increased by \$2,460 or 2.1% to \$119,395 due to \$7,674 in energy supply purchases and \$5,791 in transmission and distribution power cost due to powerhouse shut down and to fulfill the balancing reserve requirement, \$824 in depreciation and amortization related to building, structure and equipment, \$610 in contractual services primarily due to increased software licensing fees, \$136 in general and administrative expenses mainly due to judgments and claims based on actuarial estimates, and promotion expenses; and \$31 in safety material and supplies. These increases were offset

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

by decreases \$10,011 in personnel services mainly due to lower pensions, \$1,727 in other operating expenses mainly due to increased capitalized project expenses, and \$868 decrease in legal services provided by City Attorney.

Other non-operating expenses increased by \$319 or 22.7% to \$1,727 due to higher payments for GoSolarSF Incentive Program. Interest expense decreased by \$97 was due to higher capitalized interest for capital projects. Amortization of premium and discount slightly decreased by \$7. Net transfer of \$425 included transfers out of \$480 to Department of Emergency Management for Heating, Ventilation, and Air Conditioning (HVAC) controls upgrade, and \$32 to the Office of the City's Administrator for the Surety Bond Program; offset by transfer in of \$87 refund from the Police Department for the HVAC Controls Upgrade Phase I project.

As a result of the above activities, net position for the year ended June 30, 2018 increased by \$4,940 or 1.2% 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 Activities					
Years ended June 30, 2019, 2018 and 2017					
	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2019 - 2018</u>	<u>2018 - 2017</u>
				<u>Change</u>	<u>Change</u>
Revenues:					
Charges for services	\$ 167,820	39,568	33,867	128,252	5,701
Interest and investment income	735	174	89	561	85
Other non-operating revenues	-	1	4	(1)	(3)
Total revenues	<u>168,555</u>	<u>39,743</u>	<u>33,960</u>	<u>128,812</u>	<u>5,783</u>
Expenses:					
Operating expenses	137,284	38,428	27,096	98,856	11,332
Interest expenses	130	101	70	29	31
Total expenses	<u>137,414</u>	<u>38,529</u>	<u>27,166</u>	<u>98,885</u>	<u>11,363</u>
Change in net position	<u>31,141</u>	<u>1,214</u>	<u>6,794</u>	<u>29,927</u>	<u>(5,580)</u>
Net position at beginning of year:					
Beginning of year, as previously reported	8,860	8,218	1,424	642	6,794
Cumulative effect of accounting change	-	(572) *	-	572	(572)
Beginning of year as restated	<u>8,860</u>	<u>7,646</u>	<u>1,424</u>	<u>1,214</u>	<u>6,222</u>
Net position at end of year	<u>\$ 40,001</u>	<u>8,860</u>	<u>8,218</u>	<u>31,141</u>	<u>642</u>

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

CleanPowerSF Results of Operations, Fiscal Year 2019

CleanPowerSF's total revenues were \$168,555, a \$128,812 or 324.1% increase over prior year (see Table 2C-C). Charges for services increased by \$128,252 or 324.1% which included \$127,146 increased electricity sales to retail and commercial customers due to 1,421,175 MWh or 256% consumption increase and \$1,106 from capacity sales to Hetchy Power and other entities. CleanPowerSF completed citywide full enrollment in April 2019, and the number of customer accounts have grown from 81,679 to 376,787 as of June 2019. Interest and investment income increased by \$561 or 322.4% due to \$328 in interest earned resulting from higher average cash balance and \$233 in unrealized gains attributed to increase in market value in cash and investments with City Treasury. Other non-operating revenue decreased by \$1 due to lower opt out termination fees from customers.

Total operating expenses, excluding interest expenses were \$137,284, an increase of \$98,856 or 257.2% from prior year. The increase was due to \$92,541 or 305.4% in purchased electricity and transmission, distribution and other power costs as a result of higher enrollment and electricity sales, \$2,620 in

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

professional and contractual services for administrative support and program development, \$2,462 in personnel services mainly due to program growth, \$1,663 in services provided by other departments mainly explained by increased support provided by Hetchy Power for administrative, data scheduling and procurement, \$754 in general and administrative expenses mainly from increased taxes, license, permits, and membership fee; and \$51 in material and supplies. Other operating expenses decreased by \$1,235 mainly due to decreased department overhead charges compared to prior year. Interest expenses were \$130, an increase of \$29 or 28.7% due to higher interest rates on working capital loan from Hetchy Power.

As a result of the above activities, net position for the year ended June 30, 2019 increased by \$31,141 or 351.5% compared to prior year.

CleanPowerSF Results of Operations, Fiscal Year 2018

CleanPowerSF's total revenues were \$39,743, an increase of \$5,783 or 17.0% over prior year's revenues (see Table 2C-C). Increase of \$5,701 or 16.8% in charges for services included \$5,666 increased electricity sales to retail and commercial customers due to consumption increase of 103,146 MWh or 23% and \$47 in capacity sale, offset by a decrease of \$12 from prior year electricity sales to Hetchy Power. Interest and investment income was \$174, an increase of \$85 or 95.5% due to higher interest rates. Other non-operating revenues decreased by \$3 resulting from lower opt out termination fees collected from customers.

Total operating expenses, excluding interest expenses were \$38,428, an increase of \$11,332 or 41.8% from prior year. The increase was due to \$7,860 in purchased electricity and transmission, distribution and other power costs from higher sales, including \$1,608 or 84.9% increase in purchased electricity from Hetchy Power, \$1,025 in professional and contractual services for customer billing and program development, \$937 in personnel services mainly due to pensions, and \$811 in services provided by other departments mainly from legal services provided by City Attorney and communication services. General and administrative increased by \$526 mainly due to increases of \$190 in judgments and claims expense, \$180 in tax, license and permits for Pacific Gas & Electric Company (PG&E), and \$144 in membership fees. Other operating expenses increased by \$174 for administrative, data scheduling and procurement support. These increases were offset by \$1 decrease in material and supplies. Other non-operating expense increased by \$31 due to higher interest rate on loan repayment to Hetchy Power.

As a result of the above activities, net position for the year ended June 30, 2018 increased by \$642 or 7.8% compared to prior year.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(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.

Table 3
Business Type Activities
Capital Assets, Net of Accumulated Depreciation and Amortization
As of June 30, 2019, 2018, and 2017

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2019 - 2018</u> <u>Change</u>	<u>2018 - 2017</u> <u>Change</u>
Facilities, improvements, machinery, and equipment	\$ 7,167,172	5,964,789	5,806,383	1,202,383	158,406
Intangible assets	34,853	36,956	34,904	(2,103)	2,052
Land and rights-of-way	71,228	70,947	67,301	281	3,646
Construction work in progress	<u>1,387,840</u>	<u>2,161,089</u>	<u>1,841,297</u>	<u>(773,249)</u>	<u>319,792</u>
Total	<u>\$ 8,661,093</u>	<u>8,233,781</u>	<u>7,749,885</u>	<u>427,312</u>	<u>483,896</u>

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, 2019, 2018, and 2017

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2019 - 2018</u> <u>Change</u>	<u>2018 - 2017</u> <u>Change</u>
Facilities, improvements, machinery, and equipment	\$ 4,890,207	3,825,832	3,826,176	1,064,375	(344)
Intangible assets	5,816	7,321	4,671	(1,505)	2,650
Land and rights-of-way	30,029	30,029	26,777	-	3,252
Construction work in progress	<u>462,606</u>	<u>1,400,051</u>	<u>1,195,840</u>	<u>(937,445)</u>	<u>204,211</u>
Total	<u>\$ 5,388,658</u>	<u>5,263,233</u>	<u>5,053,464</u>	<u>125,425</u>	<u>209,769</u>

Water Capital Assets, Fiscal Year 2019

The Water Enterprise has net capital assets of \$5,388,658 invested in a broad range of utility capital assets as of June 30, 2019 (see Table 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 \$125,425 from the prior year. Construction work in progress decreased by \$937,445 primarily due to capital assets placed into service. Intangible assets decreased by \$1,505 due to amortization of \$2,171 primarily relating to the SFPUC On-Line Invoicing System, Automated Water Meter Program upgrades and SFBid online contracting system, offset by increases of \$666 mainly from Water Quality Sampling and Maximo asset management software. Land was unchanged from prior year. Facilities, improvements, machinery, and equipment increased by \$1,064,375 mainly attributable to capital assets placed into service such as Calaveras Dam, WSIP Security Upgrades, and West Sunset Well Station.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

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

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

Major depreciable facilities, improvements, intangible assets, machinery and equipment placed in service, including transfers of completed projects from construction work in progress, during the year ended June 30, 2019 include the following:

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

See Note 4 for additional information about capital assets.

Water System Improvement Program

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 97% completed with \$4.5 billion of project appropriations expended through fiscal year ended

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

June 30, 2019. The program consists of 35 local projects located within San Francisco and 52 regional projects spread over seven different counties from the Sierra Foothills to San Francisco. As of June 30, 2019, 34 local projects are completed, and the target completion date is December 2019. For regional projects, 42 are completed and the expected completion date is December 2021. Additional details regarding the WSIP are available at <https://www.sfwater.org/index.aspx?page=115>.

Water Capital Assets, Fiscal Year 2018

The Water Enterprise has net capital assets of \$5,263,233 invested in a broad range of utility capital assets as of June 30, 2018 (see Table 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 \$209,769 from the prior year. Construction work in progress increased by \$204,211 primarily due to additions from the Calaveras Dam Replacement, Recycled Water, Sunol Long Term Improvements, and Regional Groundwater Storage & Recovery projects. Land increased by \$3,252 mainly from the purchase of property at Rollins Road in Burlingame, California. Intangible assets increased by \$2,650 due to additions of \$3,988 mainly for software updates for the Automated Meter Reading System, offset by decreases of \$1,338 amortization mainly relating to the SFPUC On-Line Invoicing System, and the SFBid online contracting system. Facilities, improvements, machinery, and equipment decreased by \$344 mainly attributable to depreciation.

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

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

Major depreciable facilities, improvements, intangible assets, machinery and equipment placed in service, including transfers of completed projects from construction work in progress, during the year ended June 30, 2018 include the following:

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

See Note 4 for additional information about capital assets.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Water System Improvement Program

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 800,000 retail customers in San Francisco, in an environmentally sustainable manner. The program is structured to cost effectively meet water quality requirements and long-term water supply objectives, as well as improve seismic and delivery reliability.

Overall, the \$4.8 billion WSIP to upgrade the City of San Francisco's regional and local drinking water systems is 96% completed with \$4.4 billion of project appropriations expended through fiscal year ended June 30, 2018. The program consists of 35 local projects located within San Francisco and 52 regional projects spread over seven different counties from the Sierra Foothills to San Francisco. As of June 30, 2018, 34 local projects are completed and the target completion date is December 2018. For regional projects, 40 are completed and the expected completion date is December 2021. Additional details regarding the WSIP are available at <https://www.sfwater.org/index.aspx?page=115>.

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, 2019, 2018, and 2017

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

Wastewater Capital Assets, Fiscal Year 2019

The Wastewater Enterprise has capital assets of \$2,721,804, net of accumulated depreciation and amortization, invested in a broad range of utility capital assets as of June 30, 2019 (see Table 3B). This amount represents an increase of \$230.678, or 9.3% from prior fiscal year. The investment in capital assets includes land, buildings, improvements, wastewater treatment plants, sewer pipes and mains, underground transport and storage boxes, pump stations, machinery, and equipment. Facilities, improvements, machinery, and equipment increased by \$117,431 or 6.5%, construction work in progress increased by \$113,103 or 17.3%, and land and rights-of-way increased by \$281 or 0.8%, offset by a decrease of \$137 or 4.1%, in intangible assets due to amortization. The \$281 increase in land and rights-of-way is due to jurisdictional transfer of properties between Wastewater Enterprise with GSA and DPW for 1800 and 1801 Jerrold.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

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

Southeast Plant Biosolids and Digester Facilities Project	\$ 84,770
Southeast Plant New Headworks Grit Removal and Influent Pump Station	58,369
Southeast Plant Building 521/522 and Disinfection Upgrades	14,262
As-Needed Spot Sewer Replacement No. 37	11,134
Griffith Pump Station Improvements	10,986
Channel Tunnel/Bayside Drainage	9,989
Seismic Reliability - Phase 1	9,146
Van Ness Bus Rapid Transit Sewer Improvements	8,065
Northshore to Channel Force Main	7,983
Southeast Plant Primary and Secondary Clarifier	7,173
Mariposa Pump Station & Force Main	5,800
Southeast Plant Existing Digester Gas Handling Improvements	5,741
As-Needed Main Sewer Replacement #6	5,294
Southeast Community Center	5,187
Southeast Plant Oxygen Generation Plant O1	4,964
Various Locations Sewer Replacement #1	4,917
Oceanside Plant Condition Assessment Repairs	4,915
Westside Pump Station Reliability Improvements	4,836
Southeast 740 Digester Gas Upgrade	4,810
Drumm & Jackson St Sewer Improvement	4,773
Various Locations Sewer Replacement #3	4,681
Public Works Filbert St and Leavenworth St Infrastructure Improvements	4,531
Public Works Various Locations No. 28 Infrastructure Improvements	4,341
Various Locations Sewer Replacement #5	4,191
Oceanside Plant Digester Gas Handling Utilization	4,157
Other project additions individually below \$4,000	1,957
Total	<u>\$ 296,972</u>

Major depreciable facilities, improvements, intangible assets, machinery, and equipment placed in service, including transfers of completed projects from construction work in progress, during the year ended June 30, 2019 include the following:

Southeast Plant Existing Digester Gas Handling Improvement	\$ 19,683
As-Needed Spot Sewer Replacement No. 37	11,158
Southeast Plant Oxygen Generation Plant O1	9,457
Northshore to Channel Force Main	9,330
Wastewater Crocker Amazon/Excelsior/Ingleside Districts Sewer Replacement	8,688
Southeast Plant Primary and Secondary Clarifier Upgrade	8,268
Various Locations Sewer Replacement and Pavement Renovation No. 1	7,935
Drumm & Jackson Street Sewer Improvement	7,720
Various Locations Sewer Replacement and Pavement Renovation No. 2	7,100
Sunnydale Early Implementation Project	6,262
Public Works Various Locations No. 22 Infrastructure Improvement	6,012
Public Works Polk St Infrastructure Improvement	5,582
Public Works Various Locations No. 27 Infrastructure Improvement	5,510
Hydraulic & Drainage Sewer Improvement	5,345
As-Needed Main Sewer Replacement #6	5,294
Haight-Ashbury/Tenderloin/Diamond	5,234
Various Locations Sewer Replacement and Pavement Renovation No. 4	4,908
Public Works Various Locations No. 24 Infrastructure Improvement	4,678
Public Works 25th Ave and Lowell Street Sewer Replacement	3,710
Collection Division Consolidation	3,140
Other project additions individually below \$3,000	33,387
Total	<u>\$ 178,401</u>

See Note 4 for additional information about capital assets.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(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 endorsed by the Commission along with the baseline for scope, schedule and budget for phase I, II, and III projects.

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

Wastewater Capital Assets, Fiscal Year 2018

The Wastewater Enterprise has capital assets of \$2,491,126, net of accumulated depreciation and amortization, invested in a broad range of utility capital assets as of June 30, 2018 (see Table 3B). This amount represents an increase of \$239,426 or 10.6% from prior fiscal year. The investment in capital assets includes land, buildings, improvements, wastewater treatment plants, sewer pipes and mains, underground transport and storage boxes, pump stations, machinery, and equipment. Facilities, improvements, machinery, and equipment increased by \$135,221, or 8.1%, and construction work in progress increased by \$104,342 or 19.0%, offset by a decrease of \$137, or 4.0%, in intangible assets due to amortization.

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

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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(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, 2018 include the following:

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

See Note 4 for additional information about capital assets.

Sewer System Improvement Program

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

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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

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, 2019, 2018, and 2017

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2019 - 2018</u> <u>Change</u>	<u>2018 - 2017</u> <u>Change</u>
Facilities, improvements, machinery, and equipment	\$ 97,250	97,038	86,787	212	10,251
Intangible assets	10,996	11,203	11,410	(207)	(207)
Land and rights-of-way	3,232	3,232	3,055	–	177
Construction work in progress	37,625	28,326	26,479	9,299	1,847
Total	<u>\$ 149,103</u>	<u>139,799</u>	<u>127,731</u>	<u>9,304</u>	<u>12,068</u>

Hetchy Water Capital Assets, Fiscal Year 2019

Hetchy Water has capital assets of \$149,103, net of accumulated depreciation and amortization, invested in a broad range of utility capital assets as of June 30, 2019 (see Table 3C-A). This amount represents an increase of \$9,304 or 6.7%, primarily due to increases of \$9,299 in construction work in progress and \$212 in facilities, improvements, machinery, and equipment, offset by a decrease of \$207 in amortization of intangible assets.

For the year ended June 30, 2019, Hetchy Water's major additions to construction work in progress totaled \$21,241. Major depreciable facilities, improvements, intangible assets, machinery, and equipment placed in service totaled \$6,119 (see Table 3D).

See Note 4 for additional information about capital assets.

Hetchy Water Capital Assets, Fiscal Year 2018

Hetchy Water has capital assets of \$139,799, net of accumulated depreciation and amortization, invested in a broad range of utility capital assets as of June 30, 2018 (see Table 3C-A). This amount represents an increase of \$12,068 or 9.4%, primarily due to increases of \$10,251 in facilities, improvements, machinery, and equipment, \$1,847 in construction work in progress, and \$177 in land and rights-of-way; offset by a decrease of \$207 in intangible assets due to amortization.

For the year ended June 30, 2018, Hetchy Water's major additions to construction work in progress totaled \$17,041. Major depreciable facilities, improvements, intangible assets, machinery, and equipment placed in service totaled \$15,110 (see Table 3E).

See Note 4 for additional information about capital assets.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(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, 2019, 2018, and 2017

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2019 - 2018</u>	<u>2018 - 2017</u>
				<u>Change</u>	<u>Change</u>
Facilities, improvements, machinery, and equipment	\$ 262,736	242,371	229,093	20,365	13,278
Intangible assets	14,858	15,112	15,366	(254)	(254)
Land and rights-of-way	1,949	1,949	1,732	-	217
Construction work in progress	121,985	80,191	70,799	41,794	9,392
Total	<u>\$ 401,528</u>	<u>339,623</u>	<u>316,990</u>	<u>61,905</u>	<u>22,633</u>

Hetchy Power Capital Assets, Fiscal Year 2019

Hetchy Power has capital assets of \$401,528, net of accumulated depreciation and amortization, invested in utility capital assets as of June 30, 2019 (see Table 3C-B). This amount represents an increase of \$61,905 or 18.2%, primarily due to increases of \$41,794 in construction work in progress, and \$20,365 in facilities, improvements, machinery, and equipment; offset by a decrease of \$254 in amortization of intangible assets.

For the year ended June 30, 2019, Hetchy Power's major additions to construction work in progress totaled \$76,585. Major depreciable facilities, improvements, intangible assets, machinery, and equipment placed in service totaled \$34,932 (see Table 3D).

See Note 4 for additional information about capital assets.

Hetchy Power Capital Assets, Fiscal Year 2018

Hetchy Power has capital assets of \$339,623, net of accumulated depreciation and amortization, invested in utility capital assets as of June 30, 2018 (see Table 3C-B). This amount represents an increase of \$22,633 or 7.1%, primarily due to increases of \$13,278 in facilities, improvements, machinery, and equipment, \$9,392 in construction work in progress, and \$217 in land and rights-of-way; offset by a decrease of \$254 in intangible assets due to amortization.

For the year ended June 30, 2018, Hetchy Power's major additions to construction work in progress totaled \$36,567. Major depreciable facilities, improvements, intangible assets, machinery, and equipment placed in service totaled \$27,154 (see Table 3E).

See Note 4 for additional information about capital assets.

CleanPowerSF Capital Assets

CleanPowerSF had no capital assets as of June 30, 2019 and 2018.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(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, 2019 and 2018 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, 2019

	<u>Hetchy Water</u>	<u>Hetchy Power</u>	<u>Total 2019</u>
Streetlight Replacement	\$ —	15,803	15,803
Bay Corridor Project	—	14,100	14,100
Warnerville Substation Rehabilitation	—	12,099	12,099
Mountain Tunnel Improvement	4,443	5,430	9,873
2018 Moccasin Storm	8,569	—	8,569
Other Powerhouse Projects	—	8,034	8,034
Warnerville Power System Impact Mitigation	—	5,418	5,418
San Joaquin Pipeline Rehabilitation	3,268	—	3,268
Lower Cherry Aqueduct	3,047	—	3,047
Other project additions individually below \$3,000	1,914	15,701	17,615
Additions to Construction Work in Progress	<u>\$ 21,241</u>	<u>76,585</u>	<u>97,826</u>
Streetlight Replacement	\$ —	15,803	15,803
Transbay Transit Center	—	8,101	8,101
Modesto Transmission Line Clearance Mitigation	—	2,804	2,804
Other project additions individually below \$1,000	6,119	8,224	14,343
Facilities, Improvements, Intangible Assets, Machinery, and Equipment Placed in Service	<u>\$ 6,119</u>	<u>34,932</u>	<u>41,051</u>

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, 2018

	<u>Hetchy Water</u>	<u>Hetchy Power</u>	<u>Total 2018</u>
Cherry Dam Outlet Works Rehabilitation	\$ 3,688	4,507	8,195
Moccasin Facilities New Construction	2,779	3,397	6,176
Mountain Tunnel Improvement	2,185	2,671	4,856
2018 Moccasin Storm	3,414	273	3,687
Warnerville Substation Rehabilitation	—	3,595	3,595
San Joaquin Pipeline Rehabilitation	2,615	—	2,615
Tenderloin Street Improvement	—	2,371	2,371
Bay Corridor Transmission and Distribution	—	2,285	2,285
Treasure Island Capital Improvements	—	2,127	2,127
Other project additions individually below \$2,000	2,360	15,341	17,701
Additions to Construction Work in Progress	<u>\$ 17,041</u>	<u>36,567</u>	<u>53,608</u>
Moccasin Facilities Upgrades	\$ 9,087	11,109	20,196
Cherry Dam Outlet Works Rehabilitation	4,557	5,570	10,127
Streetlight Light-Emitting Diode Conversion	—	7,652	7,652
O'Shaughnessy Dam Improvement	504	616	1,120
Other project additions individually below \$1,000	962	2,207	3,169
Facilities, Improvements, Intangible Assets, Machinery, and Equipment Placed in Service	<u>\$ 15,110</u>	<u>27,154</u>	<u>42,264</u>

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

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, 2019, 2018, and 2017

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2019 - 2018</u>	<u>2018 - 2017</u>
				Change	Change
Revenue bonds	\$ 6,503,164	5,971,153	5,643,806	532,011	327,347
Clean Renewable Energy Bonds 2008	1,639	2,047	2,453	(408)	(406)
Capital appreciation bonds	2,029	6,725	6,278	(4,696)	447
Commercial paper	503,558	323,451	276,469	180,107	46,982
Certificates of participation	146,207	150,008	153,673	(3,801)	(3,665)
State revolving fund loans	88,032	22,607	—	65,425	22,607
Qualified Energy Conservation Bonds 2011	4,765	5,294	5,817	(529)	(523)
New Clean Renewable Energy Bonds	4,135	4,934	5,716	(799)	(782)
Total	<u>\$ 7,253,529</u>	<u>6,486,219</u>	<u>6,094,212</u>	<u>767,310</u>	<u>392,007</u>

Water Debt Administration

As of June 30, 2019, the Water Enterprise had \$5,076,305 total debt outstanding, an increase of \$13,121 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.

Table 4A
Proprietary Fund – Water
Outstanding Debt, Net of Unamortized Costs
As of June 30, 2019, 2018, and 2017

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2019 - 2018</u>	<u>2018 - 2017</u>
				Change	Change
Revenue bonds	\$ 4,808,548	4,909,041	4,554,967	(100,493)	354,074
Capital appreciation bonds	2,029	6,725	6,278	(4,696)	447
Commercial paper	161,336	40,312	145,000	121,024	(104,688)
Certificates of participation	104,392	107,106	109,722	(2,714)	(2,616)
Total	<u>\$ 5,076,305</u>	<u>5,063,184</u>	<u>4,815,967</u>	<u>13,121</u>	<u>247,217</u>

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

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

Debt Service Coverage – Pursuant to the Amended and Restated Indenture, the Water Enterprise is required to collect sufficient net revenues each fiscal year, together with any Water Enterprise funds (except

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Bond Reserve Funds), which are available for payment of debt service and are not budgeted to be expended, at least equal to 1.25 times annual debt service for said fiscal year. During fiscal years 2019 and 2018, the 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, 2019, the Board of Supervisors has authorized the issuance of \$4,234,873 in revenue bonds under Proposition E, with \$3,278,440 issued against this authorization. The 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, 2019, \$1,348,335 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 1.8% to 7.0% as of June 30, 2019 and 2018. The Water Enterprise's short-term debt has interest rates ranging from 0.9% to 7.0% during fiscal years 2019 and 2018.

Wastewater Debt Administration

As of June 30, 2019, 2018 and 2017, the Wastewater Enterprise's debt from revenue bonds, commercial paper, certificates of participation, and State revolving fund loans were \$2,059,742, \$1,332,933, and \$1,185,349, respectively, as shown in Table 4B. More detailed information about the Wastewater Enterprise's debt activity is presented in Notes 6, 7, 8 and 9 to the financial statement.

Table 4B
Proprietary Fund – Wastewater
Outstanding Debt, Net of Unamortized Costs
As of June 30, 2019, 2018, and 2017

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

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

Credit Ratings and Bond Insurance – As of June 30, 2019 and 2018, the Wastewater Enterprise carried underlying ratings of “Aa3” and “AA” from Moody's and Standard & Poor's (S&P), respectively.

Debt Service Coverage – Pursuant to the Indenture for the Wastewater bonds, the 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 2019 and 2018, the Wastewater Enterprise's net revenues, together with fund balances available to pay debt service

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

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

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

Hetchy Water Debt Administration

Hetchy Water did not have debt outstanding as of June 30, 2019 and 2018. 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 Debt Administration

As of June 30, 2019, and 2018, Hetchy Power had outstanding debt of \$117,482 and \$90,102, 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, 2019, 2018, and 2017

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2019 - 2018</u>	<u>2018 - 2017</u>
				<u>Change</u>	<u>Change</u>
Clean Renewable Energy Bonds 2008	\$ 1,639	2,047	2,453	(408)	(406)
Certificates of Participation 2009 Series C	1,619	1,988	2,345	(369)	(357)
Certificates of Participation 2009 Series D (BABs)	12,593	12,593	12,593	–	–
Qualified Energy Conservation Bonds 2011	4,765	5,294	5,817	(529)	(523)
New Clean Renewable Energy Bonds 2012	713	1,283	1,839	(570)	(556)
New Clean Renewable Energy Bonds 2015	3,422	3,651	3,877	(229)	(226)
2015 Series A Revenue Bonds	35,585	35,720	35,851	(135)	(131)
2015 Series B Revenue Bonds	6,422	7,246	8,063	(824)	(817)
Commercial Paper	50,724	20,280	20,058	30,444	222
Total	<u>\$ 117,482</u>	<u>90,102</u>	<u>92,896</u>	<u>27,380</u>	<u>(2,794)</u>

The increase of \$27,380 was mainly due to an increase of \$30,444 in commercial paper issuance; offset by decreases of \$2,828 in principal repayments, and \$236 in amortization of premium and discount.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Credit Ratings and Bond Insurance – The Power Enterprise's 2015 Series AB Power Revenue Bonds have been rated "AA-" and "AA" by Fitch Inc. and Standard and Poor's (S&P), respectively, as of June 30, 2019 and "AA-" and "A+" by Fitch Inc. and S&P, respectively, as of June 30, 2018.

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. Because interest on the Series 2015 AB power revenue bonds was capitalized, Hetchy Power was not obligated to make debt service payments on the Series 2015 AB power revenue bonds until fiscal year 2018. Therefore, Hetchy Power did not calculate and report the Indenture-based debt service coverage ratio prior to fiscal year 2018. During fiscal year 2019, 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, 2019, and 2018, \$39,555 of Hetchy Power revenue bonds were issued against existing authorization of \$347,758 and \$192,830, respectively.

Cost of Debt Capital – The Power Enterprise's outstanding long-term senior lien debt consists of the 2015 Series AB Power Revenue Bonds issued in May 2015, which are the first series of bonds 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, range from 1.2% to 1.5% (net of the federal tax subsidy). Certificates of participation carried interest rates range from 2.0% to 6.5%. The Power Enterprise's short-term debt issued under its commercial paper program has interest rates ranging from 1.3% to 1.7%, and 0.9% to 1.6% during fiscal years 2019 and 2018, respectively.

CleanPowerSF Debt Administration

CleanPowerSF did not have debt outstanding as of June 30, 2019 and 2018.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

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 VIII B, 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 SFPUC Rates Schedules and Fees is available at <https://sfwater.org/modules/showdocument.aspx?documentid=7743>.

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 10 of the notes to financial statements for further discussion on the balancing account of the wholesale customers.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
 Management's Discussion and Analysis (Unaudited)
 June 30, 2019 and 2018
 (Dollars in thousands, unless otherwise stated)

Next Year's Rates

Water Enterprise

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

Ten-year Average Rate Adjustments		
Effective date	Retail	Wholesale³
July 1, 2012	12.5 ¹ %	11.4 %
July 1, 2013	6.5 ¹	(16.4)
July 1, 2014	12.0 ²	19.6
July 1, 2015	12.0 ²	28.0
July 1, 2016	10.0 ²	9.3
July 1, 2017	7.0 ²	—
July 1, 2018	9.0 ⁴	—
July 1, 2019	8.0 ⁴	—
July 1, 2020	7.0 ⁴	—
July 1, 2021	7.0 ⁴	—

¹ Five-year retail rate increases adopted and effective July 1, 2009.
² Four-year retail rate increases adopted and effective July 1, 2014.
³ Wholesale rates adopted annually; no increase for wholesale rates effective July 1, 2017; no increase projected through June 30, 2022 from 10 Year Financial Plan.
⁴ Four-year retail rate increases adopted and effective July 1, 2018.

Wastewater Enterprise

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

Ten-year Average Rate Adjustments	
Effective Date	Rate
July 1, 2012	5.0 ¹ %
July 1, 2013	5.0 ¹
July 1, 2014	5.0 ²
July 1, 2015	5.0 ²
July 1, 2016	7.0 ²
July 1, 2017	11.0 ²
July 1, 2018	7.0 ³
July 1, 2019	7.0 ³
July 1, 2020	8.0 ³
July 1, 2021	8.0 ³

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.

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 \$33,578 and \$32,600 for the years ended June 30, 2019 and 2018, respectively. In fiscal year 2020, the assessment fees will be \$34,585, an increase of \$1,007 or 3% as reflected in the fiscal year 2020 adopted budget. Hetch Hetchy charges for services related to the storage and delivery of water.

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.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

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 \$0.005 per kWh on an annual basis. The General Use rates have been adopted every two years.

On May 10, 2018, the Commission adopted a new General Use rate that consolidated six previous subcategories of General Use rates into a single rate. The Commission adopted two years of General Use rates effective July 1, 2018 through June 30, 2020. The adopted General Use rate for fiscal years 2020 and 2019 is \$0.07877/kWh, and \$0.07377/kWh, respectively. The Power Enterprise continues to develop rates under the cost of service analysis model and has started work on the next power rate study which is projected to be completed in 2021.

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 2015, 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 2016 for rates to be effective July 1, 2016. Work is underway on the next power rate study which is projected to be completed in 2021 and provide power rates effective for fiscal year 2022. The SFPUC Rates Schedules and Fees is available at <http://sfwater.org/modules/showdocument.aspx?documentid=7743>.

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 January 23, 2018, Commission took action on SuperGreen rates which resulted in a reduction to SuperGreen rate premiums effective March 1, 2018. The adopted SuperGreen rates varied depending upon customer classes and reflect the program's policy objective to remain competitive with PG&E comparable rates. Through Resolution 18-0209, the Commission approved rates and charges on December 11, 2018, and further authorized the SFPUC General Manager to adjust final CleanPowerSF rates in order to remain competitive with final PG&E rates not otherwise adjusted by Commission action.

The CleanPowerSF Rates Schedules is available at <http://sfwater.org/index.aspx?page=993>.

CleanPowerSF revenues are adequate to support its own operations; the SFPUC intends that these rates be sufficient to pay for impending projects, and be financially independent from Hetch Hetchy in the future. CleanPowerSF is subject to Section 8B.125 of the City Charter, which requires an independent rate study be

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Management's Discussion and Analysis (Unaudited)
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

performed at least once every five years, and the Commission sets rates and charges for the program. CleanPowerSF rates will be included in the next power rate study which is projected to be completed in 2021.

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://www.sfwater.org/index.aspx?page=346>.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Statements of Net Position
Proprietary Funds
June 30, 2019 and 2018
(In thousands)

	Business Type Activities – Proprietary Funds												SFPUC Total	
	Water		Wastewater		Hetchy Water		Hetchy Power		CleanPowerSF		Eliminations		2019	2018
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018		
Assets														
Current assets:														
Cash and investments with City Treasury.....	\$ 405,558	358,768	209,109	164,107	77,433	78,283	188,787	184,193	25,514	12,395	–	–	906,401	797,746
Cash and investments outside City Treasury.....	254	274	274	262	1	2	–	8	–	–	–	–	529	546
Receivables:														
Charges for services (net of allowance for doubtful accounts of \$1,733, \$2,308, \$0, \$19, and \$585 in 2019 and \$2,211, \$2,585, \$0, \$52 and \$306 in 2018).....	55,151	53,835	33,781	30,915	79	28	5,804	7,273	34,789	5,371	–	–	129,604	97,422
Due from other City departments, current portion.....	640	294	220	116	–	–	817	980	–	–	(107) A	(109) B	1,570	1,281
Due from other governments.....	111	325	39,043	17,248	2,911	53	601	207	–	–	–	–	42,666	17,833
Interest	2,644	1,289	1,454	1,051	449	263	1,352	641	197	59	–	–	6,096	3,303
Restricted interest and other receivable (net of allowance for doubtful accounts of \$5, \$19, \$0, \$0 and \$0 in 2019 and \$51, \$191, \$0, \$0 and \$0 in 2018).....	3,795	4,491	4,720	731	66	–	196	174	–	–	–	–	8,777	5,396
Total current receivables.....	62,341	60,234	79,218	50,061	3,505	344	8,770	9,275	34,986	5,430	(107)	(109)	188,713	125,235
Prepaid charges, advances, and other receivables, current portion.....	2,309	1,435	128	116	462	462	3,613	1,088	2,544	2,438	–	–	9,056	5,539
Inventory.....	5,426	5,561	2,284	2,082	198	186	1,417	215	–	–	–	–	9,325	8,044
Restricted cash and investments outside City Treasury, current portion.....	122,512	143,739	44,928	14,282	–	–	3,896	2,777	–	–	–	–	171,336	160,798
Total current assets.....	598,400	570,011	335,941	230,910	81,599	79,277	206,483	197,556	63,044	20,263	(107)	(109)	1,285,360	1,097,908
Non-current assets:														
Restricted cash and investments with City Treasury.....	2,224	102,011	483,885	36,054	12,673	18,137	19,195	23,283	–	–	–	–	517,977	179,485
Restricted cash and investments outside City Treasury, less current portion.....	–	–	–	–	–	–	–	1,038	–	–	–	–	–	1,038
Restricted interest and other receivable, and prepaid (net of allowance for doubtful accounts of \$9, \$31, \$0, \$0, and \$0 in 2019 and \$0 in 2018).....	3	–	453	–	–	–	–	–	–	–	–	–	456	–
Charges for services, less current portion (net of allowance for doubtful accounts of \$662, \$567, \$0, \$0, and \$0 in 2019 and \$0 in 2018).....	189	791	328	810	–	–	–	–	–	–	–	–	517	1,601
Prepaid charges, advances, and other receivables, less current portion.....	3,647	3,471	1,189	1,209	160	164	780	793	–	–	–	–	5,776	5,637
Capital assets, not being depreciated and amortized.....	493,314	1,430,759	804,688	691,304	40,863	31,564	125,365	83,571	–	–	–	–	1,464,230	2,237,198
Capital assets, net of accumulated depreciation and amortization.....	4,895,344	3,832,474	1,917,116	1,799,822	108,240	108,235	276,163	256,052	–	–	–	–	7,196,863	5,996,583
Due from other City departments, less current portion.....	–	–	–	–	–	–	12,764	15,353	–	–	(4,579) A	(6,553) B	8,185	8,800
Total non-current assets.....	5,394,721	5,369,506	3,207,659	2,529,199	161,936	158,100	434,267	380,090	–	–	(4,579)	(6,553)	9,194,004	8,430,342
Total assets.....	5,993,121	5,939,517	3,543,600	2,760,109	243,535	237,377	640,750	577,646	63,044	20,263	(4,686)	(6,662)	10,479,364	9,528,250
Deferred outflows of resources														
Unamortized loss on refunding of debt.....	139,061	150,255	326	500	–	–	–	–	–	–	–	–	139,387	150,755
Pensions.....	55,465	62,062	26,886	29,984	6,447	7,488	7,879	9,152	339	323	–	–	97,016	109,009
Other post-employment benefits.....	13,142	9,122	4,669	3,264	1,343	870	1,641	1,064	108	40	–	–	20,903	14,360
Total deferred outflows of resources.....	\$ 207,668	221,439	31,881	33,748	7,790	8,358	9,520	10,216	447	363	–	–	257,306	274,124

(Continued)

A Included interfund payables and interfund receivables for fiscal year 2019 of \$955 between Wastewater and Hetchy Power for the 525 Golden Gate Avenue Headquarters construction costs and \$3,731 working capital loan between Hetch Power and CleanPowerSF.
B Included interfund payables and interfund receivables for fiscal year 2018 of \$1,061 between Wastewater and Hetchy Power for the 525 Golden Gate Avenue Headquarters construction costs and \$5,601 working capital loan between Hetch Power and CleanPowerSF.
See accompanying notes to basic financial statements.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Statements of Net Position
Proprietary Funds
June 30, 2019 and 2018
(In thousands)

	Business Type Activities – Proprietary Funds													
	Water		Wastewater		Hetchy Water		Hetchy Power		CleanPowerSF		Eliminations		SFPUC Total	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Liabilities														
Current liabilities:														
Accounts payable.....	\$ 12,624	15,554	18,132	18,080	600	810	14,120	14,495	16,210	4,080	–	–	61,686	53,019
Accrued payroll.....	6,943	6,660	4,652	4,394	645	638	1,804	1,654	159	53	–	–	14,203	13,399
Accrued vacation and sick leave, current portion.....	5,706	6,125	4,151	3,766	859	835	1,533	1,504	142	46	–	–	12,391	12,276
Accrued workers' compensation, current portion.....	1,949	2,024	1,031	1,027	201	174	383	351	–	–	–	–	3,564	3,576
Due to other City departments, current portion.....	–	96	107	109	–	–	–	–	–	–	(107) C	(109) D	–	96
Damage claims liability, current portion.....	3,872	4,656	7,013	6,376	70	110	684	727	3	73	–	–	11,642	11,869
Unearned revenues, refunds, and other, current portion.....	20,095	17,395	4,653	4,185	14	8	3,995	6,256	542	73	–	–	29,299	27,917
Bond and loan interest payable.....	38,288	38,769	18,486	11,528	–	–	542	525	–	–	–	–	57,316	50,822
Bonds, current portion.....	98,870	71,665	22,085	21,010	–	–	2,528	2,480	–	–	–	–	123,483	95,155
Capital appreciation bonds, current portion.....	2,029	5,000	–	–	–	–	–	–	–	–	–	–	2,029	5,000
Certificates of participation, current portion.....	2,688	2,556	711	676	–	–	366	348	–	–	–	–	3,765	3,580
Commercial paper.....	161,336	40,312	291,498	262,859	–	–	50,724	20,280	–	–	–	–	503,558	323,451
Wholesale balancing account, current portion.....	10,859	415	–	–	–	–	–	–	–	–	–	–	10,859	415
State revolving funds loans payable, current portion.....	–	–	1,239	296	–	–	–	–	–	–	–	–	1,239	296
Current liabilities payable from restricted assets.....	31,915	45,882	42,931	48,720	4,337	6,403	5,285	5,423	–	–	–	–	84,468	106,428
Total current liabilities.....	397,174	257,109	416,689	383,026	6,726	8,978	81,964	54,043	17,056	4,252	(107)	(109)	919,502	707,299
Long-term liabilities:														
Other post-employment benefits obligations.....	150,771	166,336	53,567	59,517	15,404	15,872	18,826	19,400	1,242	728	–	–	239,810	261,853
Net pension liability.....	175,429	209,003	85,037	100,973	20,390	25,216	24,920	30,819	1,070	1,087	–	–	306,846	367,098
Accrued vacation and sick leave, less current portion.....	4,394	4,561	3,126	2,649	529	488	1,110	1,060	69	18	–	–	9,228	8,776
Accrued workers' compensation, less current portion.....	8,387	8,933	4,883	4,757	1,037	815	1,878	1,609	–	–	–	–	16,185	16,114
Due to other City departments, less current portion.....	–	–	848	952	–	–	350	–	3,731	5,601	(4,579) C	(6,553) D	350	–
Damage claims liability, less current portion.....	7,637	8,746	9,355	7,690	154	123	1,369	1,506	4	–	–	–	18,519	18,065
Unearned revenues, refunds, and other, less current portion.....	–	–	–	–	609	609	3,794	3,552	–	–	–	–	4,403	4,161
Bonds, less current portion.....	4,709,678	4,837,376	1,630,524	998,136	–	–	50,018	52,761	–	–	–	–	6,390,220	5,888,273
Capital appreciation bonds, less current portion.....	–	1,725	–	–	–	–	–	–	–	–	–	–	–	1,725
Certificates of participation, less current portion.....	101,704	104,550	26,892	27,645	–	–	13,846	14,233	–	–	–	–	142,442	146,428
Wholesale balancing account, less current portion.....	53,970	55,451	–	–	–	–	–	–	–	–	–	–	53,970	55,451
State revolving funds loans payable, less current portion.....	–	–	86,793	22,311	–	–	–	–	–	–	–	–	86,793	22,311
Pollution remediation obligations.....	2,194	2,311	7,500	4,703	–	–	–	–	–	–	–	–	9,694	7,014
Total long-term liabilities.....	5,214,164	5,398,992	1,908,525	1,229,333	38,123	43,123	116,111	124,940	6,116	7,434	(4,579)	(6,553)	7,278,460	6,797,269
Total liabilities.....	5,611,338	5,656,101	2,325,214	1,612,359	44,849	52,101	198,075	178,983	23,172	11,686	(4,686)	(6,662)	8,197,962	7,504,568
Deferred inflows of resources														
Related to pensions.....	33,330	15,063	16,157	7,277	3,874	1,818	4,734	2,222	203	79	–	–	58,298	26,459
Other post-employment benefits.....	13,983	268	4,967	96	1,429	26	1,746	31	115	1	–	–	22,240	422
Total deferred inflows of resources.....	47,313	15,331	21,124	7,373	5,303	1,844	6,480	2,253	318	80	–	–	80,538	26,881
Net position														
Net investment in capital assets.....	563,457	504,476	1,133,662	1,172,623	149,103	139,799	301,534	270,918	–	–	–	–	2,147,756	2,087,816
Restricted for debt service.....	16,193	22,933	1,279	1,312	–	–	1,145	834	–	–	–	–	18,617	25,079
Restricted for capital projects.....	–	32,978	18,505	–	8,401	11,712	–	–	–	–	–	–	26,906	44,690
Unrestricted.....	(37,512)	(70,863)	75,697	190	43,669	40,279	143,036	134,874	40,001	8,860	–	–	264,891	113,340
Total net position.....	\$ 542,138	489,524	1,229,143	1,174,125	201,173	191,790	445,715	406,626	40,001	8,860	–	–	2,458,170	2,270,925

C Included interfund payables and interfund receivables for fiscal year 2019 of \$955 between Wastewater and Hetchy Power for the 525 Golden Gate Avenue Headquarters construction costs and \$3,731 working capital loan between Hetch Power and CleanPowerSF.

D Included interfund payables and interfund receivables for fiscal year 2018 of \$1,061 between Wastewater and Hetchy Power for the 525 Golden Gate Avenue Headquarters construction costs and \$5,601 working capital loan between Hetch Power and CleanPowerSF.

See accompanying notes to basic financial statements.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Statements of Revenues, Expenses, and Changes in Net Position
Proprietary Funds
Years ended June 30, 2019 and 2018
(In thousands)

	Business Type Activities – Proprietary Funds											
	Water		Wastewater		Hetchy Water		Hetchy Power		CleanPowerSF		SFPUC Total	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Operating revenues:												
Charges for services.....	\$ 509,703	495,138	317,761	303,037	33,880	33,427	143,409	118,672	167,820	39,568	1,172,573	989,842
Rents and concessions.....	13,010	12,906	702	611	125	133	152	163	–	–	13,989	13,813
Capacity fees.....	2,368	1,720	6,877	5,786	–	–	–	–	–	–	9,245	7,506
Other revenues.....	17,310	15,875	5,741	5,662	–	–	–	–	–	–	23,051	21,537
Total operating revenues.....	542,391	525,639	331,081	315,096	34,005	33,560	143,561	118,835	167,820	39,568	1,218,858	1,032,698
Operating expenses:												
Personnel services.....	111,594	128,295	80,693	91,977	13,707	14,516	37,583	34,950	4,612	2,150	248,189	271,888
Contractual services.....	13,715	14,131	19,040	16,061	1,205	1,524	6,086	5,526	4,786	2,166	44,832	39,408
Transmission/distribution and other power costs.....	–	–	–	–	–	–	37,242	24,238	296	231	37,538	24,469
Purchased electricity.....	–	–	–	–	–	–	10,195	10,197	122,542	30,066	132,737	40,263
Materials and supplies.....	13,421	15,936	9,853	9,446	1,133	1,101	672	1,541	51	–	25,130	28,024
Depreciation and amortization.....	120,815	118,751	60,033	55,591	5,380	5,066	14,484	14,049	–	–	200,712	193,457
Services provided by other departments.....	59,751	56,860	36,629	36,374	1,622	1,572	6,833	5,848	3,208	1,545	108,043	102,199
General and administrative and other.....	37,798	36,174	53,565	29,457	27,258	16,013	9,593	23,046	1,789	2,270	130,003	106,960
Total operating expenses.....	357,094	370,147	259,813	238,906	50,305	39,792	122,688	119,395	137,284	38,428	927,184	806,668
Operating income (loss).....	185,297	155,492	71,268	76,190	(16,300)	(6,232)	20,873	(560)	30,536	1,140	291,674	226,030
Non-operating revenues (expenses):												
Federal and state grants.....	200	597	235	–	2,984	1,050	406	–	–	–	3,825	1,647
Interest and investment income	15,650	6,448	20,701	2,317	2,670	218	6,883	2,537	735	174	46,639	11,694
Interest expenses.....	(177,998)	(164,001)	(43,803)	(24,978)	–	–	(2,936)	(3,103)	(130)	(101)	(224,867)	(192,183)
Amortization of premium, discount, refunding loss, and issuance costs.....	17,788	13,540	5,697	5,400	–	–	237	248	–	–	23,722	19,188
Net gain (loss) from sale of assets.....	2,277	727	(987)	(3)	–	6	(354)	49	–	–	936	779
Net gain from transfer of assets.....	–	–	619	–	–	–	–	–	–	–	619	–
Other non-operating revenues.....	29,922	37,740	5,310	5,333	29	181	10,501	10,024	–	1	45,762	53,279
Other Non-operating expenses.....	(1,388)	(1,920)	(26)	(414)	–	(68)	(1,011)	(1,727)	–	–	(2,425)	(4,129)
Net non-operating revenues (expenses).....	(113,549)	(106,869)	(12,254)	(12,345)	5,683	1,387	13,726	8,028	605	74	(105,789)	(109,725)
Change in net position before transfers.....	71,748	48,623	59,014	63,845	(10,617)	(4,845)	34,599	7,468	31,141	1,214	185,885	116,305
Transfers from the City and County of San Francisco.....	1,200	382	–	–	20,000	30,000	4,522	87	–	–	25,722	30,469
Transfers to the City and County of San Francisco.....	(20,334)	(31,368)	(3,996)	(26,960)	–	–	(32)	(512)	–	–	(24,362)	(58,840)
Net transfers.....	(19,134)	(30,986)	(3,996)	(26,960)	20,000	30,000	4,490	(425)	–	–	1,360	(28,371)
Change in net position.....	52,614	17,637	55,018	36,885	9,383	25,155	39,089	7,043	31,141	1,214	187,245	87,934
Net position at beginning of year.....												
Beginning of year, as previously reported.....	489,524	501,267	1,174,125	1,146,263	191,790	168,356	406,626	401,686	8,860	8,218	2,270,925	2,225,790
Cumulative effect of accounting change due to error.....	–	–	–	(6,767)	–	–	–	–	–	–	–	(6,767)
Cumulative effect of accounting change*.....	–	(29,380)	–	(2,256)	–	(1,721)	–	(2,103)	–	(572)	–	(36,032)
Beginning of year as restated.....	489,524	471,887	1,174,125	1,137,240	191,790	166,635	406,626	399,583	8,860	7,646	2,270,925	2,182,991
Net position at end of year.....	\$ 542,138	489,524	1,229,143	1,174,125	201,173	191,790	445,715	406,626	40,001	8,860	2,458,170	2,270,925

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

See accompanying notes to basic financial statements.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Statements of Cash Flows
Proprietary Funds
Years ended June 30, 2019 and 2018
(In thousands)

	Business Type Activities – Proprietary Funds											
	Water		Wastewater		Hetchy Water		Hetchy Power		CleanPowerSF		SFPUC Total	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Cash flows from operating activities:												
Cash received from customers, including cash deposits.....	\$ 540,479	525,886	328,729	312,769	33,836	33,441	145,652	125,278	138,871	39,693	1,187,567	1,037,067
Cash received from tenants for rent.....	12,837	12,783	653	657	124	138	151	170	–	–	13,765	13,748
Cash paid to employees for services.....	(124,905)	(121,352)	(84,071)	(85,045)	(14,445)	(12,560)	(38,129)	(35,449)	(3,708)	(1,234)	(265,258)	(255,640)
Cash paid to suppliers for goods and services.....	(126,412)	(108,216)	(107,233)	(71,659)	(25,172)	(19,080)	(72,853)	(61,142)	(122,604)	(39,972)	(454,274)	(300,069)
Cash paid for judgments and claims.....	(5,527)	(2,925)	(367)	(2,124)	(534)	(1,356)	(1,730)	(2,005)	(37)	(190)	(8,195)	(8,600)
Net cash provided by (used in) operating activities.....	<u>296,472</u>	<u>306,176</u>	<u>137,711</u>	<u>154,598</u>	<u>(6,191)</u>	<u>583</u>	<u>33,091</u>	<u>26,852</u>	<u>12,522</u>	<u>(1,703)</u>	<u>473,605</u>	<u>486,506</u>
Cash flows from non-capital financing activities:												
Cash received from grants.....	456	422	212	891	126	997	12	37	–	–	806	2,347
Cash received from settlements.....	–	8,308	–	141	–	–	195	3	–	–	195	8,452
Cash received from license fees.....	–	–	–	–	–	–	4,386	4,467	–	–	4,386	4,467
Cash received from miscellaneous revenues.....	5,955	5,401	897	1,181	30	181	5,066	4,651	–	1	11,948	11,415
Cash paid for Hetchy Power loan interest.....	–	–	–	–	–	–	–	–	–	(83)	–	(83)
Cash paid for rebates, program incentives, and other.....	(1,388)	(1,920)	(26)	(414)	–	(68)	(1,011)	(1,727)	–	–	(2,425)	(4,129)
Transfers from the City and County of San Francisco.....	1,200	382	–	–	20,000	30,000	4,522	87	–	–	25,722	30,469
Transfers to the City and County of San Francisco.....	(20,334)	(31,368)	(4,510)	(26,960)	–	–	(32)	(512)	–	–	(24,876)	(58,840)
Net cash provided by (used in) non-capital financing activities.....	<u>(14,111)</u>	<u>(18,775)</u>	<u>(3,427)</u>	<u>(25,161)</u>	<u>20,156</u>	<u>31,110</u>	<u>13,138</u>	<u>7,006</u>	<u>–</u>	<u>(82)</u>	<u>15,756</u>	<u>(5,902)</u>
Cash flows from capital and related financing activities:												
Proceeds from sale of capital assets.....	2,277	3,231	–	21	–	6	–	130	–	–	2,277	3,388
Proceeds from bond issuance, net of premium, discount, refunding loss, and issuance costs.....	–	928,694	663,103	–	–	–	–	–	–	–	663,103	928,694
Proceeds from commercial paper borrowings.....	121,024	15,664	53,639	151,448	–	–	30,444	222	–	–	205,107	167,334
Proceeds from State revolving fund loans.....	–	–	45,078	6,719	–	–	–	–	–	–	45,078	6,719
Principal paid on commercial paper.....	–	(120,352)	(25,000)	–	–	–	–	–	–	–	(25,000)	(120,352)
Principal paid on long-term debt.....	(79,221)	(527,881)	(21,686)	(20,658)	–	–	(2,828)	(2,768)	–	–	(103,735)	(551,307)
Principal paid on state revolving fund loans.....	–	–	(1,425)	–	–	–	–	–	–	–	(1,425)	–
Interest paid on commercial paper.....	(1,018)	(830)	(3,646)	(1,436)	–	–	(438)	(219)	–	–	(5,102)	(2,485)
Interest paid on long-term debt.....	(230,587)	(278,284)	(60,309)	(45,924)	–	–	(3,204)	(3,305)	–	–	(294,100)	(327,513)
Interest paid on state revolving fund loans.....	–	–	(232)	–	–	–	–	–	–	–	(232)	–
Issuance costs paid on long-term debt.....	(4)	(1,405)	(2,801)	(208)	–	–	–	–	–	–	(2,805)	(1,613)
Acquisition and construction of capital assets.....	(208,064)	(257,777)	(278,006)	(258,984)	(22,698)	(14,786)	(76,205)	(33,820)	–	–	(584,973)	(565,367)
Federal interest income subsidy.....	23,977	24,042	4,018	4,008	–	–	581	756	–	–	28,576	28,806
Net cash provided by (used in) capital and related financing activities.....	<u>(371,616)</u>	<u>(214,898)</u>	<u>372,733</u>	<u>(165,014)</u>	<u>(22,698)</u>	<u>(14,780)</u>	<u>(51,650)</u>	<u>(39,004)</u>	<u>–</u>	<u>–</u>	<u>(73,231)</u>	<u>(433,696)</u>
Cash flows from investing activities:												
Interest income received.....	10,829	5,204	12,654	1,828	1,274	658	4,277	2,956	428	196	29,462	10,842
Proceeds from sale of investment outside City Treasury.....	484,965	485,074	166,729	85,012	–	–	4,840	4,990	–	–	656,534	575,076
Purchase of investments outside City Treasury.....	(514,907)	(436,878)	(173,033)	(77,977)	–	–	(3,802)	(3,446)	–	–	(691,742)	(518,301)
Net cash provided by (used in) investing activities.....	<u>(19,113)</u>	<u>53,400</u>	<u>6,350</u>	<u>8,863</u>	<u>1,274</u>	<u>658</u>	<u>5,315</u>	<u>4,500</u>	<u>428</u>	<u>196</u>	<u>(5,746)</u>	<u>67,617</u>
Increase (decrease) in cash and cash equivalents.....	<u>(108,368)</u>	<u>125,903</u>	<u>513,367</u>	<u>(26,714)</u>	<u>(7,459)</u>	<u>17,571</u>	<u>(106)</u>	<u>(646)</u>	<u>12,950</u>	<u>(1,589)</u>	<u>410,384</u>	<u>114,525</u>
Cash and cash equivalents:												
Beginning of year.....	587,604	461,701	213,817	240,531	97,117	79,546	211,275	211,921	12,465	14,054	1,122,278	1,007,753
End of year.....	<u>\$ 479,236</u>	<u>587,604</u>	<u>727,184</u>	<u>213,817</u>	<u>89,658</u>	<u>97,117</u>	<u>211,169</u>	<u>211,275</u>	<u>25,415</u>	<u>12,465</u>	<u>1,532,662</u>	<u>1,122,278</u>
Reconciliation of cash and cash equivalents to the statements of net position:												
Cash and investments with City Treasury:												
Unrestricted.....	\$ 405,558	358,768	209,109	164,107	77,433	78,283	188,787	184,193	25,514	12,395	906,401	797,746
Restricted.....	2,224	102,011	483,885	36,054	12,673	18,137	19,195	23,283	–	–	517,977	179,485
Cash and investments outside City Treasury:												
Unrestricted.....	254	274	274	262	1	2	–	8	–	–	529	546
Restricted.....	122,512	143,739	44,928	14,282	–	–	3,896	3,815	–	–	171,336	161,836
Less: Restricted (with maturity more than 90 days – see table in Note 3).....	(49,728)	(19,786)	(8,320)	(2,016)	–	–	–	(1,038)	–	–	(58,048)	(22,840)
Add: Unrealized (gain) loss on investments.....	(1,584)	2,598	(2,692)	1,128	(449)	695	(709)	1,014	(99)	70	(5,533)	5,505
Cash and cash equivalents at end of year on statements of cash flows.....	<u>\$ 479,236</u>	<u>587,604</u>	<u>727,184</u>	<u>213,817</u>	<u>89,658</u>	<u>97,117</u>	<u>211,169</u>	<u>211,275</u>	<u>25,415</u>	<u>12,465</u>	<u>1,532,662</u>	<u>1,122,278</u>

(Continued)

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Statements of Cash Flows
Proprietary Funds
Years ended June 30, 2019 and 2018
(In thousands)

	Business Type Activities – Proprietary Funds											
	Water		Wastewater		Hetchy Water		Hetchy Power		CleanPowerSF		SFPUC Total	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Reconciliation of operating income (loss) to net cash provided by (used in) operating activities:												
Operating income (loss).....	\$ 185,297	155,492	71,268	76,190	(16,300)	(6,232)	20,873	(560)	30,536	1,140	291,674	226,030
Adjustments to reconcile operating income (loss) to net cash provided by (used in) operating activities:												
Depreciation and amortization.....	120,815	118,751	60,033	55,591	5,380	5,066	14,484	14,049	–	–	200,712	193,457
Provision for uncollectible accounts.....	147	(37)	149	(248)	–	–	(33)	52	279	256	542	23
Write-off of capital assets and other non-cash items.....	1,286	910	8,386	4,729	5,948	28	153	30	–	–	15,773	5,697
Changes in operating assets and liabilities:												
Receivables:												
Charges for services.....	(898)	678	(2,674)	(1,707)	(51)	14	1,502	1,076	(29,697)	(99)	(31,818)	(38)
Due from other City departments.....	(370)	338	(184)	44	–	–	2,792	2,026	–	–	2,238	2,408
Prepaid charges, advances, and other.....	(1,021)	(224)	508	132	3	(58)	(2,234)	(375)	(106)	(2,431)	(2,850)	(2,956)
Inventory.....	135	1,875	(202)	(36)	(12)	–	(1,202)	–	–	–	(1,281)	1,839
Accounts payable.....	(2,930)	8,286	52	12,563	(210)	377	(375)	7,591	12,130	600	8,667	29,417
Accrued payroll.....	283	177	258	(184)	7	(48)	150	7	106	18	804	(30)
Other post-employment benefits obligations.....	(5,870)	6,772	(2,484)	2,423	462	2,027	564	(591)	560	30	(6,768)	10,661
Pension obligations.....	(8,710)	(3,730)	(3,958)	2,458	(1,729)	(368)	(2,114)	(450)	91	843	(16,420)	(1,247)
Accrued vacation and sick leave.....	(586)	(325)	862	466	65	135	79	167	147	26	567	469
Accrued workers' compensation.....	(621)	1,868	130	204	249	(10)	301	(10)	–	–	59	2,052
Due to other City departments.....	(96)	89	–	(84)	–	–	350	–	(2,000)	(2,054)	(1,746)	(2,049)
Wholesale balancing account.....	8,963	12,395	–	–	–	–	–	–	–	–	8,963	12,395
Damage claims liability.....	(1,893)	2,664	2,302	(83)	(9)	(353)	(180)	381	7	–	227	2,609
Unearned revenues, refunds, and other liabilities.....	2,658	354	468	148	6	5	(2,019)	3,459	469	(32)	1,582	3,934
Pollution remediation obligations.....	(117)	(157)	2,797	1,992	–	–	–	–	–	–	2,680	1,835
Total adjustments.....	<u>111,175</u>	<u>150,684</u>	<u>66,443</u>	<u>78,408</u>	<u>10,109</u>	<u>6,815</u>	<u>12,218</u>	<u>27,412</u>	<u>(18,014)</u>	<u>(2,843)</u>	<u>181,931</u>	<u>260,476</u>
Net cash provided by (used in) operating activities.....	<u>\$ 296,472</u>	<u>306,176</u>	<u>137,711</u>	<u>154,598</u>	<u>(6,191)</u>	<u>583</u>	<u>33,091</u>	<u>26,852</u>	<u>12,522</u>	<u>(1,703)</u>	<u>473,605</u>	<u>486,506</u>
Noncash transactions:												
Accrued capital asset costs.....	\$ 31,915	45,882	42,931	48,720	4,337	6,403	5,285	5,423	–	–	84,468	106,428
Interfund payables.....	–	96	955	1,061	–	–	–	–	3,731	5,601	4,686	6,758
Interfund receivables.....	–	–	–	–	–	–	4,686	6,662	–	–	4,686	6,662
Unrealized (gain) loss on investments.....	(1,584)	2,598	(2,692)	1,128	(449)	695	(709)	1,014	(99)	70	(5,533)	5,505

See accompanying notes to basic financial statements.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

(1) Definition of Reporting Entity

The San Francisco Public Utilities Commission (the Commission), established in 1932, is responsible for providing operational oversight of the public utility enterprises of the City, which include the 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 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 Comprehensive Annual Financial Report of the City as enterprise funds. These financial statements are intended to present only the financial position, and the changes in financial position and cash flows of only 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, 2019 and 2018, the changes in its financial position, or, where applicable, the cash flows for the years then ended in conformity with U.S. generally accepted accounting principles (GAAP).

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 2019, the Water Enterprise sold approximately 67,319 million gallons, i.e., about 185 million gallons per day of water, to approximately 2.7 million people within San Francisco and certain suburban areas.

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.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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. 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 Hetchy Power in 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 renewables.

Approximately 74% 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, San Francisco General Hospital, streetlights, Moscone Convention Center, and the Water and Wastewater Enterprises). The majority of the remaining 26% of electricity generated is sold to CleanPowerSF and other publicly owned utilities. 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 California Independent System Operator (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,

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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 funds apply all applicable 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 acquisition value at the time of donation. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the related assets, which range from 1 to 100 years for equipment and 1 to 200 years for 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,

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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 expense in the year in which the decision is made to discontinue such projects.

(h) Capitalization of Interest

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

(i) Bond Discount, Premium, and Issuance Costs

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

(j) Accrued Vacation and Sick Leave

Accrued vacation pay, which may be accumulated up to 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 14(c)).

(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 14(a)).

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

(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 Water Enterprise, Wastewater Enterprise, Hetch Hetchy Water and Power and CleanPowerSF Enterprise did not have arbitrage rebate liability as of June 30, 2019 and 2018.

(n) Refunding of Debt

Gains or losses occurring from refunding of debt prior to maturity are reported as deferred outflows and deferred inflows of resources from refunding of debt. Deferred outflows and deferred inflows of resources are recognized as a component of interest expense using the effective interest method over the remaining life of the old debt or the life of the new debt, whichever is shorter.

(o) Income Taxes

As a department of a government agency, the 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, 2019 and 2018 are as follow:

Fiscal Years Ending June 30		Water	Wastewater	Hetch Water	Hetch Power	CleanPowerSF	SFPUC Total
2019	\$	29,032	13,991	-	500	17,308	60,831
2018		26,441	12,095	-	762	2,486	41,784

(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 the 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, 2019 and 2018.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

(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 15(d)).

(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.

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

	<u>Water</u>	<u>Wastewater</u>	<u>Hetch Hetchy*</u>	<u>SFPUC Total</u>
Record Beginning Net OPEB Liability	\$ (158,939)	(56,870)	(34,399)	(250,208)
Record Beginning Deferred Outflows of Resources - OPEB items	8,229	2,944	1,781	12,954
Remove Net OPEB Obligation (Change from GASB Statement No. 45)	<u>121,330</u>	<u>51,670</u>	<u>28,222</u>	<u>201,222</u>
Total Cumulative Effect of Change in Accounting Principle	\$ <u>(29,380)</u>	<u>(2,256)</u>	<u>(4,396)</u>	<u>(36,032)</u>

*Hetch Hetchy included Hetchy Water, Hetchy Power and CleanPowerSF.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

(u) Immaterial Correction of 2018 Financial Statement Amounts

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 net position as of July 2017 by \$6,767 and increase fiscal year 2018 expenses by \$28,313.

(v) New Accounting Standards Adopted in Fiscal Year 2019

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

(w) GASB Statements Implemented in Fiscal Year 2018

- 1) In June 2015, the GASB issued Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefit Other Than Pension Plans*. GASB Statement No. 75 revises and establishes new accounting and financial reporting requirements for governments that provides their employees with other postemployment benefits other than pensions (OPEB). The standard is effective for periods beginning after June 15, 2017. The SFPUC adopted the provisions of this Statement. Refer to Note 12(b) for details.
- 2) In March 2016, the GASB issued Statement No. 81, *Irrevocable Split Interest Agreements*. GASB Statement No. 81 establishes accounting and financial reporting standards for irrevocable split interest agreement created through trusts in which a donor irrevocably transfers resources to an intermediary. The standard is effective for periods beginning after December 15, 2016. The SFPUC adopted the provisions of this Statement, which did not have a significant impact on its financial statements.
- 3) In March 2017, the GASB issued Statement No. 85, *Omnibus 2017*. GASB Statement No. 85 addresses practice issues identified during the implementation and application of certain GASB Statements. The new standard is effective for periods beginning after June 15, 2017. The SFPUC adopted the provisions of this Statement, which did not have a significant impact on its financial statements.
- 4) In May 2017, the GASB issued Statement No. 86, *Certain Debt Extinguishment Issues*. GASB Statement No. 86 improves accounting and financial reporting for in-substance defeasance of debt using existing resources other than proceeds of refunding debt. The new standard is effective for periods beginning after June 15, 2017. The SFPUC adopted the provisions of this Statement, which did not have a significant impact on its financial statements.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

(x) *Future Implementation of New Accounting Standards*

- 1) In January 2017, the GASB issued Statement No. 84, *Fiduciary Activities*. GASB Statement No. 84 establishes criteria for state and local governments to identify fiduciary activities and how those activities should be reported. The new standard is effective for periods beginning after December 15, 2018. The SFPUC will implement the provisions of Statement No. 84 in fiscal year 2020.
- 2) In June 2017, the GASB issued Statement No. 87, *Leases*. GASB Statement No. 87 establishes a single model for lease accounting and requires reporting of certain lease liabilities that currently are not reported. The new standard is effective for periods beginning after December 15, 2019. The SFPUC will implement the provisions of Statement No. 87 in fiscal year 2021.
- 3) In June 2018, the GASB issued Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*. GASB Statement No. 89 establishes accounting requirements for interest cost incurred before the end of a construction period. The new standard is effective for periods beginning after December 15, 2019. The SFPUC will implement the provisions of Statement No. 89 in fiscal year 2021.
- 4) In August 2018, the GASB issued Statement No. 90, *Accounting and Financial Reporting for Majority Equity Interests*. GASB Statement No. 90 provides clarification when a government should report a majority equity interest in a legally separate organization as either a component unit or an investment. The new standard is effective for periods beginning after December 15, 2018. The SFPUC will implement the provisions of Statement No. 90 in fiscal year 2020.
- 5) In May 2019, the GASB issued Statement No. 91, *Conduit Debt Obligations*. GASB Statement No. 91 enhances the compatibility and consistency of conduit debt obligation reporting and reporting of related transactions by State and local government issuers. The new standard is effective for periods beginning after December 15, 2020. The SFPUC will implement the provisions of Statement No. 91 in fiscal year 2022.

(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.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

U.S. Agencies are valued using a variety of techniques such as matrix pricing, market corroborated pricing inputs such as yield curve, indices, and other market related data and classified in Level 2. Commercial Paper, Money Market Funds, and Certificates of Deposit are not subject to fair value hierarchy.

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.

Department-wide Business Type Activities

Department-wide restricted and unrestricted cash and investments outside City Treasury as of June 30, 2019 and 2018 consist of the following:

SFPUC's Cash and Investments outside City Treasury					Fair Value Measurements Using		
Investments	Credit Ratings (S&P/Moody's)	June 30, 2019		Investments exempt from fair value	Quoted prices in active markets for identical (Level 1)	Significant other observable inputs (Level 2)	Unobservable Inputs (Level 3)
		Maturities	Fair Value				
Commercial Paper	A-1/P-1	October 31, 2019	\$ 58,048	58,048	–	–	–
Commercial Paper	A-1+/P-1	September 10, 2019	352	352	–	–	–
Commercial Paper	A-1/P-1	July 1, 2019	12,332	12,332	–	–	–
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	100,525	100,525	–	–	–
Money Market Funds	A-1+/P-1	< 90 days	61	61	–	–	–
Cash and Cash Equivalents	N/A		18	18	–	–	–
Total Restricted Cash and Investments outside City Treasury			\$ 171,336	171,336	–	–	–
Cash and Cash Equivalents	N/A		529	529	–	–	–
Total Cash and Investments outside City Treasury			\$ 529	529	–	–	–

SFPUC's Cash and Investments outside City Treasury					Fair Value Measurements Using		
Investments	Credit Ratings (S&P/Moody's)	June 30, 2018		Investments exempt from fair value	Quoted prices in active markets for identical (Level 1)	Significant other observable inputs (Level 2)	Unobservable Inputs (Level 3)
		Maturities	Fair Value				
U.S. Agencies	AA+/Aaa	March 20, 2020	\$ 10,680	–	–	10,680	–
Commercial Paper	A-1/P-1	March 8, 2019	12,160	12,160	–	–	–
Commercial Paper	A-1+/P-1	September 26, 2018	270	270	–	–	–
Commercial Paper	A-1+/P-1	< 90 days	56,776	56,776	–	–	–
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	81,893	81,893	–	–	–
Money Market Funds	A-1+/P-1	< 90 days	45	45	–	–	–
Cash and Cash Equivalents	N/A		12	12	–	–	–
Total Restricted Cash and Investments outside City Treasury			\$ 161,836	151,156	–	10,680	–
Cash and Cash Equivalents	N/A		546	546	–	–	–
Total Cash and Investments outside City Treasury			\$ 546	546	–	–	–

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

Department-wide cash, cash equivalents, and investments are shown on the accompanying statements of net position as follows:

	<u>2019</u>	<u>2018</u>
Current assets:		
Cash and investments with City Treasury	\$ 906,401	797,746
Cash and investments outside City Treasury	529	546
Restricted cash and investments outside City Treasury	171,336	160,798
Non-current assets:		
Restricted cash and investments with City Treasury	517,977	179,485
Restricted cash and investments outside City Treasury	—	1,038
Total cash, cash equivalents, and investments	\$ <u>1,596,243</u>	<u>1,139,613</u>

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

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

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 and balances as of June 30, 2019 and 2018 were \$122,512 and \$143,739, 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.

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, 2019 were "Aaa-mf" and "P-1" by Moody's, and "AAAm" and "A-1+" by S&P. The credit ratings of the money market funds invested in as of June 30, 2018 were "Aaa-mf" and "P-1" by Moody's, and "AAAm" and "A-1+" by S&P. Investment agreements must be with a U.S. bank or trust company that have a rating by Moody's and S&P of "A" or higher, or are guaranteed by any entity with a rating of "A" or higher, at the time the agreement is entered.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

The following tables present the Water Enterprise's restricted and unrestricted cash and investments outside City Treasury as of June 30, 2019 and 2018:

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

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

The restricted cash and investments outside City Treasury as of June 30, 2019 and 2018 included an unrealized gain due to changes in fair value on commercial paper of \$123 and \$418, respectively. Additional cash outside of the investment pool included revolving fund and cash in transit. The revolving fund has a balance of \$28 and \$33 at June 30, 2019 and 2018, respectively, which is held in a commercial bank in non-interest bearing checking accounts covered by Federal Deposit Insurance Corporation depository insurance. These accounts were established as provided by the City's Administrative Code for revolving fund needs. The cash in transit was \$226 and \$241 at June 30, 2019 and 2018, respectively.

The Water Enterprise's cash, cash equivalents, and investments are shown on the accompanying Statements of Net Position as follows:

	2019	2018
Current assets:		
Cash and investments with City Treasury	\$ 405,558	358,768
Cash and investments outside City Treasury	254	274
Restricted cash and investments outside City Treasury	122,512	143,739
Non-current assets:		
Restricted cash and investments with City Treasury	2,224	102,011
Total cash, cash equivalents, and investments	<u>\$ 530,548</u>	<u>604,792</u>

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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, 2019 and 2018 were \$44,928 and \$14,282, respectively. Funds held by the trustee established under the 2003 Indenture are invested in “Permitted Investments” as defined in the Indenture. “Permitted Investments” include money market funds registered under the Federal Investment Company Act of 1940 and whose shares are registered under the Federal Securities 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, 2019 and 2018:

Wastewater's Cash and Investments outside City Treasury							
Investments	Credit Ratings (S&P/Moody's)	June 30, 2019		Investments exempt from fair value	Fair Value Measurements Using		
		Maturities	Fair Value		Quoted prices in active markets for identical (Level 1)	Significant other observable inputs (Level 2)	Unobservable Inputs (Level 3)
Commercial Paper	A-1/P-1	October 31, 2019	\$ 8,320	8,320	—	—	—
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	36,577	36,577	—	—	—
Money Market Funds	A-1+/P-1	< 90 days	23	23	—	—	—
Cash and Cash Equivalents	N/A		7	7	—	—	—
Total Restricted Cash and Investments outside City Treasury			\$ 44,928	44,928	—	—	—
Cash and Cash Equivalents	N/A		274	274	—	—	—
Total Cash and Investments outside City Treasury			\$ 274	274	—	—	—

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

The restricted cash and investments outside City Treasury as of June 30, 2019 and 2018 included a \$21 and \$70 unrealized gain due to changes in fair values on Commercial Paper.

The Wastewater Enterprise’s cash, cash equivalents, and investments are shown on the accompanying Statements of Net Position as follows:

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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

Hetch Hetchy

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, 2019 and 2018 were \$3,896 and \$3,815, respectively. The 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, 2019 included 2015 Series A bonds proceeds of \$2,167, certificates of participation proceeds of \$1,209, 2015 Series B bonds proceeds of \$510, commercial paper of \$10, and \$1 held at a commercial bank in a non-interest bearing checking account that is covered by depository insurance. The balance as of June 30, 2018 included 2015 Series A bonds proceeds of \$2,132, certificates of participation proceeds of \$1,177, 2015 Series B bonds proceeds of \$501, commercial paper of \$5, and \$10 held at a commercial bank in a non-interest bearing checking account that is covered by depository insurance.

Hetch Hetchy did not have any unrealized gain and loss in the restricted cash and investments outside City Treasury as of June 30, 2019 and 2018 due to changes in fair values on U.S. Agencies.

For fiscal year 2019, proceeds from 2015 Series A and B bonds held as restricted cash and investments outside City Treasury in the amount of \$2,677 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, 2019 were “AAAm” by S&P and “Aaa-mf” by Moody’s. For fiscal year 2018, proceeds from 2015 Series A and B bonds held as restricted cash and investments outside City Treasury in the amount of \$2,633 were invested in U.S. Treasury Money Market with maturity date less than 90 days, and \$5 in cash and cash equivalents. The credit ratings of the U.S. Treasury Money Market as of June 30, 2018 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, 2019 and 2018:

Hetchy Water and Hetchy Power's Cash and Investments outside City Treasury

Investments	Credit Ratings (S&P/Moody's)	June 30, 2019		Investments exempt from fair value	Fair Value Measurements Using		
		Maturities	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	\$ 3,886	3,886	–	–	–
Cash and Cash Equivalents	N/A		10	10	–	–	–
Total Restricted Cash and Investments outside City Treasury			\$ 3,896	3,896	–	–	–

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Notes to Basic Financial Statements
June 30, 2019 and 2018
(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, 2018		Investments exempt from fair value	Fair Value Measurements Using		
		Maturities	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		\$ 2	2	—	—	—
Total Cash and Investments outside City Treasury			\$ 2	2	—	—	—
Hetchy Power							
U.S. Agencies	AA+/Aaa	March 20, 2020	\$ 1,038	—	—	1,038	—
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	2,772	2,772	—	—	—
Cash and Cash Equivalents	N/A		5	5	—	—	—
Total Restricted Cash and Investments outside City Treasury			\$ 3,815	2,777	—	1,038	—
Cash and Cash Equivalents	N/A		8	8	—	—	—
Total Cash and Investments outside City Treasury			\$ 8	8	—	—	—

Hetch Water and Hetchy Power and CleanPowerSF cash, cash equivalents, and investments as of June 30, 2019 and 2018 are shown on the accompanying Statements of Net Position as follows:

	Hetchy Water	Hetchy Power	CleanPowerSF	Total 2019
Current assets:				
Cash and investments with City Treasury	\$ 77,433	188,787	25,514	291,734
Cash and investments outside City Treasury	1	—	—	1
Restricted cash and investments outside City Treasury	—	3,896	—	3,896
Non-current assets:				
Restricted cash and investments with City Treasury	12,673	19,195	—	31,868
Total cash, cash equivalents, and investments	\$ 90,107	211,878	25,514	327,499
	Hetchy Water	Hetchy Power	CleanPowerSF	Total 2018
Current assets:				
Cash and investments with City Treasury	\$ 78,283	184,193	12,395	274,871
Cash and investments outside City Treasury	2	8	—	10
Restricted cash and investments outside City Treasury	—	2,777	—	2,777
Non-current assets:				
Restricted cash and investments with City Treasury	18,137	23,283	—	41,420
Total cash, cash equivalents, and investments	\$ 96,422	211,299	12,395	320,116

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Notes to Basic Financial Statements
June 30, 2019 and 2018
(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, 2019 and 2018 consist of the following:

	<u>2018</u>	<u>Increases</u>	<u>Decreases</u>	<u>2019</u>
Capital assets not being depreciated and amortized:				
Land and rights-of-way	\$ 70,947	291	(10)	71,228
Intangible assets	5,162	—	—	5,162
Construction work in progress	2,161,089	638,405	(1,411,654) *	1,387,840
Total capital assets not being depreciated and amortized	<u>2,237,198</u>	<u>638,696</u>	<u>(1,411,664)</u>	<u>1,464,230</u>
Capital assets being depreciated and amortized:				
Facilities and improvements	8,568,323	1,374,144	(3,344)	9,939,123
Intangible assets	72,787	666	—	73,453
Machinery and equipment	516,657	28,330	(495)	544,492
Total capital assets being depreciated and amortized	<u>9,157,767</u>	<u>1,403,140</u> *	<u>(3,839)</u>	<u>10,557,068</u>
Less accumulated depreciation and amortization for:				
Facilities and improvements	(2,783,248)	(175,721)	1,254	(2,957,715)
Intangible assets	(40,993)	(2,769)	—	(43,762)
Machinery and equipment	(336,943)	(22,222)	437	(358,728)
Total accumulated depreciation and amortization	<u>(3,161,184)</u>	<u>(200,712)</u>	<u>1,691</u>	<u>(3,360,205)</u>
Total capital assets being depreciated and amortized, net	<u>5,996,583</u>	<u>1,202,428</u>	<u>(2,148)</u>	<u>7,196,863</u>
Total capital assets, net	<u>\$ 8,233,781</u>	<u>1,841,124</u>	<u>(1,413,812)</u>	<u>8,661,093</u>

* Decrease in construction work in progress is greater than increase in capital assets being depreciated is mainly explained by \$15,773 in capital project write-offs for Water, Wastewater, Hetchy Water and Hetchy Power.

	<u>2017</u>	<u>Increases</u>	<u>Decreases</u>	<u>2018</u>
Capital assets not being depreciated and amortized:				
Land and rights-of-way	\$ 67,301	6,150	(2,504)	70,947
Intangible assets	5,162	—	—	5,162
Construction work in progress	1,841,297	688,139	(368,347) *	2,161,089
Total capital assets not being depreciated and amortized	<u>1,913,760</u>	<u>694,289</u>	<u>(370,851)</u>	<u>2,237,198</u>
Capital assets being depreciated and amortized:				
Facilities and improvements	8,230,182	338,141	—	8,568,323
Intangible assets	68,799	3,988	—	72,787
Machinery and equipment	506,732	11,891	(1,966)	516,657
Total capital assets being depreciated and amortized	<u>8,805,713</u>	<u>354,020</u> *	<u>(1,966)</u>	<u>9,157,767</u>
Less accumulated depreciation and amortization for:				
Facilities and improvements	(2,614,991)	(168,257)	—	(2,783,248)
Intangible assets	(39,057)	(1,936)	—	(40,993)
Machinery and equipment	(315,540)	(23,264)	1,861	(336,943)
Total accumulated depreciation and amortization	<u>(2,969,588)</u>	<u>(193,457)</u>	<u>1,861</u>	<u>(3,161,184)</u>
Total capital assets being depreciated and amortized, net	<u>5,836,125</u>	<u>160,563</u>	<u>(105)</u>	<u>5,996,583</u>
Total capital assets, net	<u>\$ 7,749,885</u>	<u>854,852</u>	<u>(370,956)</u>	<u>8,233,781</u>

* Decrease in construction work in progress is greater than increase in capital assets being depreciated is mainly explained by \$12,464 in capital project write-offs for Water, Wastewater, Hetchy Water and Hetchy Power.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Notes to Basic Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Water Capital Assets – Water’s capital assets as of June 30, 2019 and 2018 consist of the following:

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

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

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

* Decrease in construction work in progress includes \$910 in capital project write-offs, mainly related to San Francisco Groundwater, San Joaquin Water System Improvement, and Sunol Valley Water System Improvement projects.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Notes to Basic Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Wastewater Capital Assets – Wastewater’s capital assets as of June 30, 2019 and 2018 consist of the following:

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

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

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

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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Notes to Basic Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Hetchy Water Capital Assets – Hetchy Water’s capital assets as of June 30, 2019 and 2018 consist of the following:

	2018	Increases	Decreases	2019
Capital assets not being depreciated and amortized:				
Land and rights-of-way	\$ 3,232	–	–	3,232
Intangible assets	6	–	–	6
Construction work in progress	28,326	21,241	(11,942) *	37,625
Total capital assets not being depreciated and amortized	31,564	21,241	(11,942)	40,863
Capital assets being depreciated and amortized:				
Facilities and improvements	249,678	5,686	(734)	254,630
Intangible assets	20,522	–	–	20,522
Machinery and equipment	26,499	433	–	26,932
Total capital assets being depreciated and amortized	296,699	6,119 *	(734)	302,084
Less accumulated depreciation and amortization for:				
Facilities and improvements	(162,067)	(3,950)	–	(166,017)
Intangible assets	(9,325)	(207)	–	(9,532)
Machinery and equipment	(17,072)	(1,223)	–	(18,295)
Total accumulated depreciation and amortization	(188,464)	(5,380)	–	(193,844)
Total capital assets being depreciated and amortized, net	108,235	739	(734)	108,240
Total capital assets, net	\$ 139,799	21,980	(12,676)	149,103

* Decrease in construction work in progress is greater than increase in capital assets being depreciated explained by \$5,948 in capital project write-offs, mainly related to Hetchy Water’s share of Mountain Tunnel Lining Project, 2018 Moccasin Storm Project, and San Joaquin Pipeline Rehabilitation Project.

	2017	Increases	Decreases	2018
Capital assets not being depreciated and amortized:				
Land and rights-of-way	\$ 3,055	177	–	3,232
Intangible assets	6	–	–	6
Construction work in progress	26,479	17,041	(15,194) *	28,326
Total capital assets not being depreciated and amortized	29,540	17,218	(15,194)	31,564
Capital assets being depreciated and amortized:				
Facilities and improvements	235,604	14,074	–	249,678
Intangible assets	20,522	–	–	20,522
Machinery and equipment	25,535	1,036	(72)	26,499
Total capital assets being depreciated and amortized	281,661	15,110	(72)	296,699
Less accumulated depreciation and amortization for:				
Facilities and improvements	(158,429)	(3,638)	–	(162,067)
Intangible assets	(9,118)	(207)	–	(9,325)
Machinery and equipment	(15,923)	(1,221)	72	(17,072)
Total accumulated depreciation and amortization	(183,470)	(5,066)	72	(188,464)
Total capital assets being depreciated and amortized, net	98,191	10,044	–	108,235
Total capital assets, net	\$ 127,731	27,262	(15,194)	139,799

* Decrease in construction work in progress includes \$28 in capital project write-offs, mainly related to Hetchy Water’s share of Communication Systems Upgrades, Road Improvement Project, and San Joaquin Pipeline Rehabilitation Project.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Notes to Basic Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Hetchy Power Capital Assets – Hetchy Power’s capital assets as of June 30, 2019 and 2018 consist of the following:

	<u>2018</u>	<u>Increases</u>	<u>Decreases</u>	<u>2019</u>
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	80,191	76,585	(34,791) *	121,985
Total capital assets not being depreciated and amortized	<u>83,571</u>	<u>76,585</u>	<u>(34,791)</u>	<u>125,365</u>
Capital assets being depreciated and amortized:				
Facilities and improvements	392,928	32,385	(581)	424,732
Intangible assets	25,193	–	–	25,193
Machinery and equipment	103,898	2,547	–	106,445
Total capital assets being depreciated and amortized	<u>522,019</u>	<u>34,932</u>	<u>(581)</u>	<u>556,370</u>
Less accumulated depreciation and amortization for:				
Facilities and improvements	(199,042)	(9,634)	244	(208,432)
Intangible assets	(11,512)	(254)	–	(11,766)
Machinery and equipment	(55,413)	(4,596)	–	(60,009)
Total accumulated depreciation and amortization	<u>(265,967)</u>	<u>(14,484)</u>	<u>244</u>	<u>(280,207)</u>
Total capital assets being depreciated and amortized, net	<u>256,052</u>	<u>20,448</u>	<u>(337)</u>	<u>276,163</u>
Total capital assets, net	<u>\$ 339,623</u>	<u>97,033</u>	<u>(35,128)</u>	<u>401,528</u>

* Decrease in construction work in progress included \$153 in capital project write-offs, mainly related to Hetchy Power’s share of 2018 Moccasin Storm Project, Other Powerhouse Projects, and Road Improvement Project.

	<u>2017</u>	<u>Increases</u>	<u>Decreases</u>	<u>2018</u>
Capital assets not being depreciated and amortized:				
Land and rights-of-way	\$ 1,732	217	–	1,949
Intangible assets	1,431	–	–	1,431
Construction work in progress	70,799	36,567	(27,175) *	80,191
Total capital assets not being depreciated and amortized	<u>73,962</u>	<u>36,784</u>	<u>(27,175)</u>	<u>83,571</u>
Capital assets being depreciated and amortized:				
Facilities and improvements	368,090	24,838	–	392,928
Intangible assets	25,193	–	–	25,193
Machinery and equipment	102,506	2,316	(924)	103,898
Total capital assets being depreciated and amortized	<u>495,789</u>	<u>27,154</u> *	<u>(924)</u>	<u>522,019</u>
Less accumulated depreciation and amortization for:				
Facilities and improvements	(189,829)	(9,213)	–	(199,042)
Intangible assets	(11,258)	(254)	–	(11,512)
Machinery and equipment	(51,674)	(4,582)	843	(55,413)
Total accumulated depreciation and amortization	<u>(252,761)</u>	<u>(14,049)</u>	<u>843</u>	<u>(265,967)</u>
Total capital assets being depreciated and amortized, net	<u>243,028</u>	<u>13,105</u>	<u>(81)</u>	<u>256,052</u>
Total capital assets, net	<u>\$ 316,990</u>	<u>49,889</u>	<u>(27,256)</u>	<u>339,623</u>

* Decrease in construction work in progress is greater than increase in capital assets being depreciated is explained by \$30 in capital project write-offs, mainly related to Hetchy Power’s share of Communication Systems Upgrades, and Road Improvement Project.

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

	<u>2019</u>			
	<u>Water</u>	<u>Wastewater</u>	<u>Hetchy Power</u>	<u>SFPUC Total</u>
Interest expensed	\$ 177,998	43,803	2,936	224,737
Interest included in construction work in progress	53,431	27,354	724	81,509
Total interest incurred	<u>\$ 231,429</u>	<u>71,157</u>	<u>3,660</u>	<u>306,246</u>

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

	2018			
	Water	Wastewater	Hetchy Power	SFPUC Total
Interest expensed	\$ 164,001	24,978	3,103	192,082
Interest included in construction work in progress	59,855	22,415	413	82,683
Total interest incurred	<u>\$ 223,856</u>	<u>47,393</u>	<u>3,516</u>	<u>274,765</u>

(5) Restricted Assets

Department-wide Business Type Activities

The following table summarizes the department-wide restricted assets as of June 30, 2019 and 2018.

	2019	2018
Cash and investments with City Treasury	\$ 517,977	179,485
Cash and investments outside City Treasury	171,336	161,836
Interest and other receivables	9,233	5,396
Total restricted assets	<u>\$ 698,546</u>	<u>346,717</u>

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;
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.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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, 2019 and 2018:

	<u>2019</u>	<u>2018</u>
Cash and investments with City Treasury:		
Water revenue bond construction fund	\$ 2,224	102,011
Cash and investments outside City Treasury:		
1991A Capital Appreciation Bond	2,576	2,534
2010B Water revenue bond fund	21,464	22,722
2010D Water revenue bond fund	2,900	3,711
2010E Water revenue bond fund	16,684	20,267
2010F Water revenue bond fund	—	1
2010G Water revenue bond fund	22,652	22,216
2011A Water revenue bond fund	1	2
2011B Water revenue bond fund	1,022	1,004
2011C Water revenue bond fund	1,185	1,164
2011D Water revenue bond fund	1,957	1,922
2012A Water revenue bond fund	2,927	2,960
2012B Water revenue bond fund	798	787
2012C1 Water revenue refunding bond fund	1,167	1,152
2012C2 Water revenue refunding bond fund	3,359	3,314
2012D Water revenue refunding bond fund	2,462	2,422
2015A Water revenue refunding bond fund	1	2
2016A Water revenue refunding bond fund	1	3
2016C Water revenue bond fund	—	1
2017A Water revenue bond fund	6,357	12,302
2017B Water revenue bond fund	11,503	18,687
2017C Water revenue bond fund	1,891	5,393
2017D Water revenue refunding bond fund	1	40
2017E Water revenue refunding bond fund	—	10
2017F Water revenue refunding bond fund	—	7
2017G Water revenue refunding bond fund	—	6
2009C Certificates of participation - 525 Golden Gate	1,796	1,745
2009D Certificates of participation - 525 Golden Gate	7,084	6,904
Commercial Paper - Tax Exempt	11	8
Commercial Paper - Taxable	27	23
Habitat reserve endowment fund	12,686	12,430
Total cash and investments outside City Treasury	<u>122,512</u>	<u>143,739</u>
Interest and other receivables:		
Water bond construction fund including capacity fee receivables	<u>3,798</u>	<u>4,491</u>
Total restricted assets	\$ <u>128,534</u>	<u>250,241</u>

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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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:

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, 2019 and 2018:

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

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 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 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 (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;

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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 Water and Hetchy Power maintains certain restricted cash and investment balances in trust. Restricted assets held in trust consist of the following as of June 30, 2019 and 2018:

	<u>2019</u>	<u>2018</u>
Hetchy Water		
Cash and investments with City Treasury:		
Hetch Hetchy bond construction fund	\$ 12,673	18,137
Interest receivable:		
Hetch Hetchy bond construction fund	66	—
Total restricted assets	\$ <u>12,739</u>	<u>18,137</u>
Hetchy Power		
Cash and investments with City Treasury:		
Hetch Hetchy bond construction fund	\$ 19,195	23,283
Cash and investments outside City Treasury:		
2009 Series C Certificates of Participation – 525 Golden Gate	245	237
2009 Series D Certificates of Participation – 525 Golden Gate	964	940
2015 Series A Revenue Bonds	2,167	2,132
2015 Series B Revenue Bonds	510	501
Commercial Paper	10	5
Total restricted cash and investments outside City Treasury	<u>3,896</u>	<u>3,815</u>
Interest receivable:		
Hetch Hetchy bond construction fund	196	174
Total restricted assets	\$ <u>23,287</u>	<u>27,272</u>

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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

(6) Short-Term Debt

Department-wide Business Type Activities

The following table summarizes the department-wide short-term debt.

	2018	Additions	Reductions	2019
Water	\$ 40,312	121,024	—	161,336
Wastewater	262,859	28,639	—	291,498
Hetchy Power	20,280	30,444	—	50,724
SFPUC Total	\$ 323,451	180,107	—	503,558

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, 2019 and 2018, amounts outstanding under Proposition E were \$161,336 and \$40,312, respectively. Commercial paper interest rates ranged from 0.8% to 2.8%.

With maturities up to 270 days, the 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 \$338,664 and \$459,688 in unused authorization as of June 30, 2019 and 2018, respectively. Significant Events of default as specified in the Reimbursement Agreements, or Revolving Credit Agreement include 1) payment defaults 2) material breach of warranty, representation, or other non-remedied breach of covenants as specified in the respective agreements (not cured within applicable grace periods) and 3) bankruptcy and insolvency events, which may result in all outstanding obligations to be immediately due and payable (unless waived by the respective Bank, if applicable); or issuance of a No-Issuance Notice, reduction in credit to outstanding amount plus interest coverage, and/or termination of the respective agreement. As of June 30, 2019, there were no such events describe herein.

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 \$291,498 and \$262,859 in commercial paper outstanding as of June 30, 2019 and 2018, respectively.

In accordance with GASB Statement No. 88, *Certain Disclosures Related to Debt*, Including Direct Borrowings and Direct Placements, the Wastewater Enterprise had \$458,502 and \$487,141 in unused authorization as of June 30, 2019 and 2018, respectively. Significant Events of default as specified in the Reimbursement Agreements, Revolving Credit and Term Loan Agreements, or Revolving Credit Agreements include 1) payment defaults 2) material breach of warranty, representation, or other non-remedied breach of covenants as specified in the respective agreements (not cured within applicable grace periods), and 3) bankruptcy and insolvency events, which may result in all outstanding obligations to be immediately due and payable (unless waived by the respective Bank, if applicable); or issuance of a No-Issuance Notice, reduction in credit to outstanding

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

amount plus interest coverage, and/or termination of the respective agreement. As of June 30, 2019, there were no such events described herein.

Hetchy Water Short-Term Debt

Hetchy Water had no commercial paper outstanding as of June 30, 2019 and 2018.

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 1.3% to 1.7% in fiscal year 2019. Hetchy Power had \$50,724 and \$20,280 commercial paper outstanding as of June 30, 2019 and 2018, respectively. The Power Enterprise had \$199,276 and \$69,720 in unused authorization as of June 30, 2019 and 2018, 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, 2019, there were no such events described herein.

CleanPowerSF Short-Term Debt

CleanPowerSF had no commercial paper outstanding as of June 30, 2019 and 2018.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

(7) Changes in Long-Term Liabilities

Department-wide Long-Term Liability activities for the years ended June 30, 2019 and 2018 are as follows:

	Interest rate	Maturity (Calendar Year)	2018	Additions	Reductions	2019	Due within one year
Revenue Bonds:							
2009A water revenue bonds	4.00 - 5.25 %	2019	\$ 16,885	—	(7,250)	9,635	9,635
2009B water revenue bonds	4.00 - 5.00	2019	14,910	—	(5,275)	9,635	9,635
2010A water revenue bonds	2.00 - 5.00	2019	3,035	—	(505)	2,530	2,530
2010A wastewater revenue bonds	4.00 - 5.00	2021	32,820	—	(7,630)	25,190	7,980
2010B water revenue bonds (Build America)	4.00 - 6.00	2040	396,190	—	(11,215)	384,975	11,555
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	63,735	—	(15,965)	47,770	16,780
2010E water revenue bonds (Build America)	4.90 - 6.00	2040	344,200	—	—	344,200	—
2010F water revenue bonds	3.00 - 5.50	2021	27,100	—	(3,125)	23,975	5,175
2010G water revenue bonds (Build America)	6.95	2050	351,470	—	—	351,470	—
2011A water revenue bonds	4.25 - 5.00	2041	322,480	—	—	322,480	—
2011B water revenue bonds	3.50 - 5.00	2041	18,315	—	(445)	17,870	700
2011C water revenue bonds	3.00 - 5.00	2041	19,475	—	—	19,475	760
2011D water revenue refunding bonds	4.00 - 5.00	2028	19,135	—	—	19,135	—
2012A water revenue bonds	4.00 - 5.00	2043	459,455	—	—	459,455	—
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	—
2012D water revenue refunding bonds	1.75 - 5.00	2019	24,040	—	(11,825)	12,215	12,215
2013A wastewater revenue bonds	1.00 - 5.00	2025	71,930	—	(13,380)	58,550	14,105
2013B wastewater revenue bonds	4.00 - 5.00	2042	331,585	—	—	331,585	—
2015A water revenue refunding bonds	2.00 - 5.00	2036	429,600	—	(3,220)	426,380	14,000
2015A Hetchy Power Revenue Bonds	4.00 - 5.00	2045	32,025	—	—	32,025	—
2015B Hetchy Power Revenue Bonds	3.00 - 4.00	2026	6,820	—	(730)	6,090	755
2016A water revenue refunding bonds	4.00 - 5.00	2039	763,005	—	—	763,005	—
2016B water revenue refunding bonds	1.50 - 5.00	2030	110,880	—	(5,980)	104,900	8,920
2016C water revenue bonds	0.87 - 4.19	2046	253,885	—	(5,525)	248,360	5,605
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	—	—	121,140	—
2017B water revenue bonds	5.00	2047	147,725	—	—	147,725	—
2017C water revenue bonds	5.00	2047	70,675	—	—	70,675	—
2017D water revenue refunding bonds	2.00 - 5.00	2035	350,305	—	(835)	349,470	860
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	34,280	—	(500)	33,780	500
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	—
Clean Renewable Energy Bonds	0.00	2022	2,109	—	(422)	1,687	422
Qualified Energy Conservation Bonds	4.74	2027	5,294	—	(529)	4,765	536
New Clean Renewable Energy Bonds 2012	4.74	2020	1,283	—	(570)	713	583
New Clean Renewable Energy Bonds 2015	4.62	2032	3,651	—	(229)	3,422	232
Less issuance discount			(228)	—	26	(202)	—
Add issuance premiums			481,154	68,958	(37,699)	512,413	—
Total revenue bonds payable			5,983,428	663,103	(132,828)	6,513,703	123,483
1991 Capital appreciation bonds	0.00	2019	6,725	304	(5,000)	2,029	2,029
2009C Certificates of Participation (COPs)	2.00 - 5.00	2022	19,835	—	(3,580)	16,255	3,765
2009C COPs issuance premiums			623	—	(221)	402	—
2009D COPs (Build America)	6.36 - 6.49	2041	129,550	—	—	129,550	—
State Revolving Fund Loans (CWSRF Loans)	1.60 - 1.80	2050	22,607	66,850	(1,425)	88,032	1,239
Other post-employment benefits obligations			261,853	17,239	(39,282)	239,810	—
Net Pension Liability			367,098	43,281	(103,533)	306,846	—
Accrued vacation and sick leave			21,052	16,862	(16,295)	21,619	12,391
Accrued workers' compensation			19,690	5,902	(5,843)	19,749	3,564
Damage claims liability			29,934	12,414	(12,187)	30,161	11,642
Wholesale balancing account			55,866	8,963	—	64,829	10,859
Pollution remediation obligations			7,014	3,000	(320)	9,694	—
Total			\$ 6,925,275	837,918	(320,514)	7,442,679	168,972

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

	Interest rate	Maturity (Calendar Year)	2017	Additions	Reductions	2018	Due within one year
Revenue Bonds:							
2009A water revenue bonds	4.00 - 5.25 %	2019	\$ 20,210	-	(3,325)	16,885	7,250
2009B water revenue bonds	4.00 - 5.00	2019	19,930	-	(5,020)	14,910	5,275
2010A water revenue bonds	2.00 - 5.00	2019	3,515	-	(480)	3,035	505
2010A wastewater revenue bonds	4.00 - 5.00	2021	40,115	-	(7,295)	32,820	7,630
2010B water revenue bonds (Build America)	4.00 - 6.00	2040	407,095	-	(10,905)	396,190	11,215
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	75,200	-	(11,465)	63,735	15,965
2010E water revenue bonds (Build America)	4.90 - 6.00	2040	344,200	-	-	344,200	-
2010F water revenue bonds	3.00 - 5.50	2021	30,335	-	(3,235)	27,100	3,125
2010G water revenue bonds (Build America)	6.95	2050	351,470	-	-	351,470	-
2011A water revenue bonds	4.25 - 5.00	2041	602,715	-	(280,235)	322,480	-
2011B water revenue bonds	3.50 - 5.00	2041	28,525	-	(10,210)	18,315	445
2011C water revenue bonds	3.00 - 5.00	2041	30,140	-	(10,665)	19,475	-
2011D water revenue refunding bonds	4.00 - 5.00	2028	47,165	-	(28,030)	19,135	-
2012A water revenue bonds	4.00 - 5.00	2043	591,610	-	(132,155)	459,455	-
2012B water revenue bonds	4.00 - 5.00	2043	16,520	-	-	16,520	-
2012C1 water revenue refunding bonds	4.00	2031	24,180	-	(15,715)	8,465	-
2012C2 water revenue refunding bonds	4.00 - 5.00	2032	69,570	-	-	69,570	-
2012D water revenue refunding bonds	1.75 - 5.00	2019	24,040	-	-	24,040	11,825
2013A wastewater revenue bonds	1.00 - 5.00	2025	84,650	-	(12,720)	71,930	13,380
2013B wastewater revenue bonds	4.00 - 5.00	2042	331,585	-	-	331,585	-
2015A water revenue refunding bonds	2.00 - 5.00	2036	429,600	-	-	429,600	3,220
2015A Hetchy Power Revenue Bonds	4.00 - 5.00	2045	32,025	-	-	32,025	-
2015B Hetchy Power Revenue Bonds	3.00 - 4.00	2026	7,530	-	(710)	6,820	730
2016A water revenue refunding bonds	4.00 - 5.00	2039	763,005	-	-	763,005	-
2016B water revenue refunding bonds	1.50 - 5.00	2030	119,425	-	(8,545)	110,880	5,980
2016C water revenue bonds	0.87 - 4.19	2046	259,350	-	(5,465)	253,885	5,525
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	-	121,140	-
2017B water revenue bonds	5.00	2047	-	147,725	-	147,725	-
2017C water revenue bonds	5.00	2047	-	70,675	-	70,675	-
2017D water revenue refunding bonds	2.00 - 5.00	2035	-	350,305	-	350,305	835
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	-	34,280	-	34,280	500
Clean Renewable Energy Bonds	0.00	2022	2,527	-	(418)	2,109	422
Qualified Energy Conservation Bonds	4.74	2027	5,817	-	(523)	5,294	529
New Clean Renewable Energy Bonds 2012	4.74	2020	1,839	-	(556)	1,283	570
New Clean Renewable Energy Bonds 2015	4.62	2032	3,877	-	(226)	3,651	229
Less issuance discount			(255)	-	27	(228)	-
Add issuance premiums			389,367	146,975	(55,188)	481,154	-
Total revenue bonds payable			5,657,792	928,695	(603,059)	5,983,428	95,155
1991 Capital appreciation bonds	0.00	2019	6,278	447	-	6,725	5,000
2009C Certificates of Participation (COPs)	2.00 - 5.00	2022	23,240	-	(3,405)	19,835	3,580
2009C COPs issuance premiums			883	-	(260)	623	-
2009D COPs (Build America)	6.36 - 6.49	2041	129,550	-	-	129,550	-
State Revolving Fund Loans (CWSRF Loans)	1.60 - 1.80	2050	-	22,607	-	22,607	296
Other post-employment benefits obligations			201,222	71,292	(10,661)	261,853	-
Net Pension Liability			448,275	57,649	(138,826)	367,098	-
Accrued vacation and sick leave			20,583	20,501	(20,032)	21,052	12,276
Accrued workers' compensation			17,638	6,712	(4,660)	19,690	3,576
Damage claims liability			27,325	11,062	(8,453)	29,934	11,869
Wholesale balancing account			43,471	12,395	-	55,866	415
Pollution remediation obligations			5,179	2,603	(768)	7,014	-
Total			\$ 6,581,436	1,133,963	(790,124)	6,925,275	132,167

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Notes to Basic Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Water Long-Term Liability activities for the years ended June 30, 2019 and 2018 are as follows:

	Interest rate	Maturity (Calendar Year)	2018	Additions	Reductions	2019	Due within one year
Revenue Bonds:							
2009A revenue bonds	4.00 - 5.25 %	2019	\$ 16,885	-	(7,250)	9,635	9,635
2009B revenue bonds	4.00 - 5.00	2019	14,910	-	(5,275)	9,635	9,635
2010A revenue bonds	2.00 - 5.00	2019	3,035	-	(505)	2,530	2,530
2010B revenue bonds (Build America)	4.00 - 6.00	2040	396,190	-	(11,215)	384,975	11,555
2010D revenue refunding bonds	3.00 - 5.00	2021	63,735	-	(15,965)	47,770	16,780
2010E revenue bonds (Build America)	4.90 - 6.00	2040	344,200	-	-	344,200	-
2010F revenue bonds	3.00 - 5.50	2021	27,100	-	(3,125)	23,975	5,175
2010G revenue bonds (Build America)	6.95	2050	351,470	-	-	351,470	-
2011A revenue bonds	4.25 - 5.00	2041	322,480	-	-	322,480	-
2011B revenue bonds	3.50 - 5.00	2041	18,315	-	(445)	17,870	700
2011C revenue bonds	3.00 - 5.00	2041	19,475	-	-	19,475	760
2011D revenue refunding bonds	4.00 - 5.00	2028	19,135	-	-	19,135	-
2012A revenue bonds	4.00 - 5.00	2043	459,455	-	-	459,455	-
2012B revenue bonds	4.00 - 5.00	2043	16,520	-	-	16,520	-
2012C1 revenue refunding bonds	4.00	2031	8,465	-	-	8,465	-
2012C2 revenue refunding bonds	4.00 - 5.00	2032	69,570	-	-	69,570	-
2012D revenue refunding bonds	1.75 - 5.00	2019	24,040	-	(11,825)	12,215	12,215
2015A revenue refunding bonds	2.00 - 5.00	2036	429,600	-	(3,220)	426,380	14,000
2016A revenue refunding bonds	4.00 - 5.00	2039	763,005	-	-	763,005	-
2016B revenue refunding bonds	1.50 - 5.00	2030	110,880	-	(5,980)	104,900	8,920
2016C revenue bonds	0.87 - 4.19	2046	253,885	-	(5,525)	248,360	5,605
2017A revenue bonds	5.00	2047	121,140	-	-	121,140	-
2017B revenue bonds	5.00	2047	147,725	-	-	147,725	-
2017C revenue bonds	5.00	2047	70,675	-	-	70,675	-
2017D revenue refunding bonds	2.00 - 5.00	2035	350,305	-	(835)	349,470	860
2017E revenue refunding bonds	4.00 - 5.00	2031	48,890	-	-	48,890	-
2017F revenue refunding bonds	5.00	2031	8,705	-	-	8,705	-
2017G revenue refunding bonds	2.03 - 2.91	2024	34,280	-	(500)	33,780	500
Less issuance discount			(166)	-	12	(154)	-
Add issuance premiums			395,137	-	(28,840)	366,297	-
Total revenue bonds payable			4,909,041	-	(100,493)	4,808,548	98,870
1991 Capital appreciation bonds	0.00	2019	6,725	304	(5,000)	2,029	2,029
2009C Certificates of Participation (COPs)	2.00 - 5.00	2022	14,162	-	(2,556)	11,606	2,688
2009C COPs issuance premiums			445	-	(158)	287	-
2009D COPs (Build America)	6.36 - 6.49	2041	92,499	-	-	92,499	-
Other post-employment benefits obligations			166,336	9,125	(24,690)	150,771	-
Net pension liability			209,003	25,430	(59,004)	175,429	-
Accrued vacation and sick leave			10,686	10,372	(10,958)	10,100	5,706
Accrued workers' compensation			10,957	2,707	(3,328)	10,336	1,949
Damage claims liability			13,402	4,768	(6,661)	11,509	3,872
Wholesale balancing account			55,866	8,963	-	64,829	10,859
Pollution remediation obligations			2,311	-	(117)	2,194	-
Total			\$ 5,491,433	61,669	(212,965)	5,340,137	125,973

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Notes to Basic Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

	Interest rate	Maturity (Calendar Year)	2017	Additions	Reductions	2018	Due within one year
Revenue Bonds:							
2009A revenue bonds	4.00 - 5.25 %	2019	\$ 20,210	-	(3,325)	16,885	7,250
2009B revenue bonds	4.00 - 5.00	2019	19,930	-	(5,020)	14,910	5,275
2010A revenue bonds	2.00 - 5.00	2019	3,515	-	(480)	3,035	505
2010B revenue bonds (Build America)	4.00 - 6.00	2040	407,095	-	(10,905)	396,190	11,215
2010D revenue refunding bonds	3.00 - 5.00	2021	75,200	-	(11,465)	63,735	15,965
2010E revenue bonds (Build America)	4.90 - 6.00	2040	344,200	-	-	344,200	-
2010F revenue bonds	3.00 - 5.50	2021	30,335	-	(3,235)	27,100	3,125
2010G revenue bonds (Build America)	6.95	2050	351,470	-	-	351,470	-
2011A revenue bonds	4.25 - 5.00	2041	602,715	-	(280,235)	322,480	-
2011B revenue bonds	3.50 - 5.00	2041	28,525	-	(10,210)	18,315	445
2011C revenue bonds	3.00 - 5.00	2041	30,140	-	(10,665)	19,475	-
2011D revenue refunding bonds	4.00 - 5.00	2028	47,165	-	(28,030)	19,135	-
2012A revenue bonds	4.00 - 5.00	2043	591,610	-	(132,155)	459,455	-
2012B revenue bonds	4.00 - 5.00	2043	16,520	-	-	16,520	-
2012C1 revenue refunding bonds	4.00	2031	24,180	-	(15,715)	8,465	-
2012C2 revenue refunding bonds	4.00 - 5.00	2032	69,570	-	-	69,570	-
2012D revenue refunding bonds	1.75 - 5.00	2019	24,040	-	-	24,040	11,825
2015A revenue refunding bonds	2.00 - 5.00	2036	429,600	-	-	429,600	3,220
2016A revenue refunding bonds	4.00 - 5.00	2039	763,005	-	-	763,005	-
2016B revenue refunding bonds	1.50 - 5.00	2030	119,425	-	(8,545)	110,880	5,980
2016C revenue bonds	0.87 - 4.19	2046	259,350	-	(5,465)	253,885	5,525
2017A revenue bonds	5.00	2047	-	121,140	-	121,140	-
2017B revenue bonds	5.00	2047	-	147,725	-	147,725	-
2017C revenue bonds	5.00	2047	-	70,675	-	70,675	-
2017D revenue refunding bonds	2.00 - 5.00	2035	-	350,305	-	350,305	835
2017E revenue refunding bonds	4.00 - 5.00	2031	-	48,890	-	48,890	-
2017F revenue refunding bonds	5.00	2031	-	8,705	-	8,705	-
2017G revenue refunding bonds	2.03 - 2.91	2024	-	34,280	-	34,280	500
Less issuance discount			(181)	-	15	(166)	-
Add issuance premiums			297,348	146,975	(49,186)	395,137	-
Total revenue bonds payable			4,554,967	928,695	(574,621)	4,909,041	71,665
1991 Capital appreciation bonds	0.00	2019	6,278	447	-	6,725	5,000
2009C Certificates of Participation (COPs)	2.00 - 5.00	2022	16,593	-	(2,431)	14,162	2,556
2009C COPs issuance premiums			630	-	(185)	445	-
2009D COPs (Build America)	6.36 - 6.49	2041	92,499	-	-	92,499	-
Other post-employment benefits obligations			121,330	51,778	(6,772)	166,336	-
Net pension liability			259,956	29,430	(80,383)	209,003	-
Accrued vacation and sick leave			11,011	10,202	(10,527)	10,686	6,125
Accrued workers' compensation			9,089	4,382	(2,514)	10,957	2,024
Damage claims liability			10,738	4,151	(1,487)	13,402	4,656
Wholesale balancing account			43,471	12,395	-	55,866	415
Pollution remediation obligations			2,468	-	(157)	2,311	-
Total			\$ 5,129,030	1,041,480	(679,077)	5,491,433	92,441

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

a) Capital Appreciation Bonds

The capital appreciation bonds mature from November 1, 2018 and November 1, 2019. The bonds were insured by Municipal Bond Insurance Association (MBIA) and carried "Aaa" and "AAA" ratings from Moody's and S&P, respectively. In February 2009, the bonds were further reinsured by National Public Finance Guarantees Corp. (NPFGC) and carried "Baa1" and "A" ratings from Moody's and S&P, respectively. On May 29, 2013, the SFPUC transferred \$2,500 to U.S. Bank, trustee of the 1991 Series A San Francisco Water Revenue Bonds (the Bonds), for the purpose of replacing the debt service reserve surety policy that had been satisfying the reserve requirement of the bonds. The surety policy had been provided by NPFGC. With this transfer, the surety policy is effectively terminated. The amount deposited with the U.S. Bank will continue to satisfy the reserve requirement on the bonds. Interest on the capital appreciation bonds is due upon

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

maturity and is recognized as annual interest expense over the life of the bonds using the interest method. The Water Enterprise has recognized \$2,029 and \$6,725 of unpaid principal and interest on the capital appreciation bonds as of June 30, 2019 and 2018, respectively, and has reported it as capital appreciation bonds in the accompanying statements of net position.

b) Water Revenue Bonds 2009 Series A

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

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

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

c) Water Revenue Bonds 2009 Series B

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

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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

will be sufficient to partially defease a portion of the 2009 Series B bonds maturing November 1, 2013 through 2018.

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

d) *Water Revenue Bonds 2010 Series ABC*

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

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

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

A portion of the proceeds of the 2016 Series B refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated October 1, 2016, to refund and legally defease a portion of the outstanding 2010 Series A bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem all of the maturities of the 2010 Series A bonds starting on November 1, 2020 and thereafter. As of June 30, 2019 and 2018, the principal amount of 2010 Series A bonds outstanding was \$2,530 and \$3,035, respectively.

The 2010 Series B Bonds in the par amount of \$417,720 were issued as taxable Build America Bonds (with Direct Pay Subsidy) to provide \$364,757 in new money for WSIP capital projects and pay financing costs. The 2010 Series B bonds were issued as serial and term bonds with coupons ranging from 4.0% to 6.0% and have a final maturity of 2040. The Series B bonds have a true

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

interest cost (net of federal subsidy) of 3.9%. As of June 30, 2019 and 2018, the principal amount outstanding was \$384,975 and \$396,190, respectively.

e) *Water Revenue Bonds 2010 Series DE*

In July 2010, the 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. As of June 30, 2019 and 2018, the principal amount of 2010 Series D bonds outstanding was \$47,770 and \$63,735, respectively.

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

f) *Water Revenue Bonds 2010 Series FG*

In December 2010, the 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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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

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

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

g) *Water Revenue Bonds 2011 Series ABCD*

In August 2011, the 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 2017 Series G refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated December 1, 2017, to refund and legally defease a portion of the outstanding 2011 Series A bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem the maturities of the 2011 Series A bonds starting on November 1, 2022 and thereafter. As of June 30, 2019 and 2018, the principal amount of 2011 Series A bonds outstanding was \$322,480.

The \$28,975 Series B bonds were issued as tax-exempt bonds to provide \$27,710 to finance improvements to certain up-country water storage and transmission facilities under the jurisdiction of Hetch Hetchy Water and Power and CleanPowerSF. The Series B bonds were issued

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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

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

On February 27, 2013, the Wholesale Water Customers BAWSCA made an early repayment of \$356,139 to the 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 refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated December 1, 2017, to refund and legally defease a portion of the outstanding 2011 Series C bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem the maturities of the 2011 Series C bonds starting on November 1, 2022 and thereafter. As of June 30, 2019 and 2018, the principal amount of 2011 Series C bonds outstanding was \$19,475.

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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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

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

In June 2012, the 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 refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated December 1, 2017, to refund and legally defease a portion of the outstanding 2012 Series A bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem the maturities of the 2012 Series A bonds starting on November 1, 2031 and thereafter. As of June 30, 2019 and 2018, the principal amount of 2012 Series A bonds outstanding was \$459,455.

The \$16,520 Series B bonds were issued as tax-exempt bonds to reimburse the 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%. As of June 30, 2019 and 2018, the principal amount of 2012 Series B bonds outstanding was \$16,520.

The \$93,750 Series C bonds were issued as tax-exempt bonds to provide \$101,147 to refund, on a current basis, a portion of the 2001 Series A bonds as well as refund, on an advance basis, a portion of the 2002 Series A bonds. The Series C bonds were issued as serial bonds with coupons ranging from 4.0% to 5.0% and have a final maturity of 2032. The Series C bonds have a true interest cost of 3.7%. A portion of the proceeds of the 2017 Series E refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated December 1, 2017, to refund and legally defease a portion of the outstanding 2012 Series C bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem the maturities of the 2012 Series C bonds starting on November 1, 2029 and thereafter. As of June 30, 2019 and 2018, the principal amount of 2012 Series C bonds outstanding was \$78,035.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

i) Water Revenue Refunding Bonds 2012 Series D

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

j) 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, 2019 and 2018, the principal amount of 2015 Series A bonds outstanding was \$426,380 and \$429,600.

k) Water Revenue Refunding Bonds 2016 Series AB

In October 2016, the 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, 2019 and 2018, the principal amount of 2016 Series AB bonds outstanding was \$867,905 and \$873,885, respectively.

l) 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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

provide \$19,975 of new money for WSIP capital projects. The bonds carried “Aa3” and “AA-” ratings from Moody’s and S&P, respectively. The 2016 Series C bonds include serial bonds with interest rates varying from 0.9% to 4.0% and have a final maturity in 2046, and two term bonds with 4.0% and 4.2% interest rates and final maturities of 2041 and 2046. The Series C bonds have a true interest cost of 3.9%. As of June 30, 2019 and 2018, the principal amount of 2016 Series C bonds outstanding was \$248,360 and \$253,885, respectively.

m) Water Revenue Bonds 2017 Series ABC

In December 2017, the 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 were issued as serial and term bonds with coupons of 5.0% and a final maturity of 2047. The Series A bonds have a true interest cost of 3.8%. As of June 30, 2019 and 2018, the principal amount of 2017 Series A bonds outstanding was \$121,140.

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

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

n) 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 SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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

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

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

In September 2017, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a Clean Water State Revolving Fund (CWSRF) Loan and Grant to fund the 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% 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, 2019 and 2018 was \$0.

p) Future Annual Debt Service of Revenue Bonds

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

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

* The SFPUC received IRS notice dated July 9, 2019 that the federal interest subsidies on the 2010 Series B bonds, 2010 Series E bonds, and 2010 Series G bonds are reduced by 5.9%, or a total reduction of \$23,530, due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same.

As defined in the Indentures, the principal and interest of the 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).

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

q) *Proposition A*

On November 5, 2002, the San Francisco voters passed Proposition A, which provides for the issuance of revenue bonds and/or other forms of indebtedness by the Commission in a principal amount not to exceed \$1,628,000 to finance the acquisition and construction of improvements to the City's Water System. As of June 30, 2019, there was no commercial paper outstanding pursuant to this authorization and \$1,348,335 of bonds had been issued in fiscal years 2006, 2010, and 2012; and in September 2017, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a Clean Water State Revolving Fund (CWSRF) Loan and Grant to fund the Water Enterprise's SF Westside Recycled Water Project in the amount of \$186,220 (which includes a \$15,000 grant) against Prop A. The total authorization against Prop A was \$1,348,335 as of June 30, 2019.

r) *Proposition E*

On November 5, 2002, the San Francisco voters passed Proposition E, which authorizes the Board of Supervisors' approval of the issuance of revenue bonds and/or other forms of indebtedness by the Commission to finance costs for the Commission's capital programs, including WSIP. As of June 30, 2019, the Board of Supervisors has authorized the issuance of \$4,234,873 in revenue bonds with \$3,278,440 issued against this authorization. Additionally, \$161,336 and \$40,312 in commercial paper was outstanding pursuant to this authorization as of June 30, 2019 and 2018, respectively.

s) *Events of Default and Remedies*

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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Notes to Basic Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Wastewater Long-Term Liability activities for the year ended June 30, 2019 and 2018 are as follows:

	Interest rate	Maturity (Calendar Year)	2018	Additions	Reductions	2019	Due within one year
Revenue bonds:							
2010 Series A	4.00 - 5.00 %	2021	\$ 32,820	-	(7,630)	25,190	7,980
2010 Series B (Build America)	4.65 - 5.82	2040	192,515	-	-	192,515	-
2013 Series A	1.00 - 5.00	2025	71,930	-	(13,380)	58,550	14,105
2013 Series B	4.00 - 5.00	2042	331,585	-	-	331,585	-
2016 Series A	4.00 - 5.00	2046	240,580	-	-	240,580	-
2016 Series B	4.00 - 5.00	2046	67,820	-	-	67,820	-
2018 Series A	4.00 - 5.00	2043	-	229,050	-	229,050	-
2018 Series B	5.00	2043	-	185,950	-	185,950	-
2018 Series C	2.13	2048	-	179,145	-	179,145	-
For issuance premiums			81,896	68,958	(8,630)	142,224	-
Total revenue bonds payable			1,019,146	663,103	(29,640)	1,652,609	22,085
2009 Series C Certificates of Participation (COPs)	2.00 - 5.00	2022	3,745	-	(676)	3,069	711
2009 Series C COPs issuance premiums			118	-	(42)	76	-
2009 Series D COPs (Build America)	6.36 - 6.49	2041	24,458	-	-	24,458	-
State Revolving Fund Loans (CWSRF Loans)	1.60 - 1.80	2050	22,607	66,850	(1,425)	88,032	1,239
Other post-employment benefits obligations			59,517	2,833	(8,783)	53,567	-
Net pension liability			100,973	12,620	(28,556)	85,037	-
Accrued vacation and sick leave			6,415	3,953	(3,091)	7,277	4,151
Accrued workers' compensation			5,784	1,944	(1,814)	5,914	1,031
Damage claims liability			14,066	4,699	(2,397)	16,368	7,013
Pollution remediation obligations			4,703	3,000	(203)	7,500	-
Total			<u>\$ 1,261,532</u>	<u>759,002</u>	<u>(76,627)</u>	<u>1,943,907</u>	<u>36,230</u>

	Interest rate	Maturity (Calendar Year)	2017	Additions	Reductions	2018	Due within one year
Revenue bonds:							
2010 Series A	4.00 - 5.00 %	2021	\$ 40,115	-	(7,295)	32,820	7,630
2010 Series B (Build America)	4.65 - 5.82	2040	192,515	-	-	192,515	-
2013 Series A	1.00 - 5.00	2025	84,650	-	(12,720)	71,930	13,380
2013 Series B	4.00 - 5.00	2042	331,585	-	-	331,585	-
2016 Series A	4.00 - 5.00	2046	240,580	-	-	240,580	-
2016 Series B	4.00 - 5.00	2046	67,820	-	-	67,820	-
For issuance premiums			87,660	-	(5,764)	81,896	-
Total revenue bonds payable			1,044,925	-	(25,779)	1,019,146	21,010
2009 Series C Certificates of Participation (COPs)	2.00 - 5.00	2022	4,388	-	(643)	3,745	676
2009 Series C COPs issuance premiums			167	-	(49)	118	-
2009 Series D COPs (Build America)	6.36 - 6.49	2041	24,458	-	-	24,458	-
State Revolving Fund Loans (CWSRF Loans)	1.60 - 1.80	2050	-	22,607	-	22,607	296
Other post-employment benefits obligations			51,670	10,270	(2,423)	59,517	-
Net pension liability			118,907	18,832	(36,766)	100,973	-
Accrued vacation and sick leave			5,949	4,081	(3,615)	6,415	3,766
Accrued workers' compensation			5,580	1,769	(1,565)	5,784	1,027
Damage claims liability			14,149	3,936	(4,019)	14,066	6,376
Pollution remediation obligations			2,711	2,603	(611)	4,703	-
Total			<u>\$ 1,272,904</u>	<u>64,098</u>	<u>(75,470)</u>	<u>1,261,532</u>	<u>33,151</u>

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. Bonds mature through October 1, 2021. The true

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

interest cost is 2.9%. As of June 30, 2019 and 2018, the 2010 Series A bonds' principal amount outstanding was \$25,190 and \$32,820, respectively.

(b) Wastewater Revenue Bonds 2010 Series B

During fiscal year 2010, the 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. Bonds mature through October 1, 2040. The true interest cost is 3.7%. As of June 30, 2019 and 2018, the 2010 Series B bonds' principal amount outstanding was \$192,515.

(c) Wastewater Revenue Bonds 2013 Series A

In January 2013, the 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. The 2013 Series A refunding bonds include serial bonds with interest rates varying from 1.0% to 5.0% and have a final maturity in October 2025. The Series A bonds have a true interest cost of 1.2%. The 2013 Series A bonds also refunded the remaining portion of the outstanding state revolving fund loans. The refunding resulted in the recognition of a deferred accounting loss of \$2,986, gross debt service savings of \$35,107 over the next 13 years, and an economic gain of \$32,783 or 15.4% of the refunded principal. As of June 30, 2019 and 2018, the principal amount outstanding of the 2013 Series A bonds was \$58,550 and \$71,930, respectively.

(d) Wastewater Revenue Bonds 2013 Series B

In February 2013, the 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. Bonds mature through October 1, 2042. The true interest cost is 3.6%. As of June 30, 2019 and 2018, the principal amount outstanding of the 2013 Series B bonds was \$331,585.

(e) Wastewater Revenue Bonds 2016 Series A

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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

(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. Bonds mature through October 1, 2046. The bonds have a true interest cost of 3.2%. As of June 30, 2019 and 2018, the principal amount outstanding of the 2016 Series B bonds was \$67,820.

(g) Wastewater Revenue Bonds 2018 Series A

In August 2018, the 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. Bonds mature through October 1, 2043. The bonds have a true interest cost of 3.4%. As of June 30, 2019, the principal amount outstanding of the 2018 Series A bonds was \$229,050.

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

(i) Wastewater Revenue Bonds 2018 Series C

In August 2018, the 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. Bonds mature through October 1, 2048. The Initial Mandatory Tender date of the 2018 Series C bonds is October 1, 2023. The bonds have a true interest cost of 2.2%. As of June 30, 2019, the principal amount outstanding of the 2016 Series B bonds was \$179,145.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

(j) 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, 2019. The interest before subsidy amounts include the interest for 2010 Series A and B, 2013 Series A and B, 2016 Series A and B, and 2018 Series A, B, and C bonds. The federal interest subsidy amounts represent 35% of the interest, excluding sequestration, for the 2010 Series B revenue bonds.

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

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

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).

(k) 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 \$4,893. As of June 30, 2019 and 2018, the principal amount outstanding of the loan was \$4,893.

(l) Southeast Plant (SEP) 521/522 and Disinfection Upgrade Project CWSRF Loan

In September 2017, then amended in December 2017 and May 2018, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a Clean Water State Revolving Fund ("CWSRF") Loan to fund the SEP 521/522 and Disinfection Upgrade Project of the Sewer System Improvement Program. The aggregate amount of the CWSRF loans is \$40,007. The loan bears an interest rate of 1.8% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; substantial completion is expected by July 2019. The CWSRF loan is secured on a parity lien basis with the Wastewater Enterprise's outstanding revenue bonds. The SFPUC has submitted requests for loan disbursements to date totaling \$37,661. As of June 30, 2019, the principal amount outstanding of the loan was \$37,661.

(m) North Point Facility Outfall Rehabilitation Project CWSRF Loan

In September 2017 the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a Clean Water State Revolving Fund ("CWSRF") Loan to fund the North Point Facility Outfall Rehabilitation Project of the Sewer System Improvement Program. The aggregate amount of the CWSRF loans is \$20,199. The loan bears an interest rate of 1.8% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; substantial completion occurred in February 2018. The CWSRF loans is secured on a parity lien basis with the Wastewater Enterprise's outstanding revenue bonds. The SFPUC has received loan disbursements to date totaling \$17,706. As of June 30, 2019 and 2018 the principal amount outstanding of the loan was \$17,098 and \$17,714, respectively.

(n) SEP Primary/Secondary Clarifier Upgrade Project CWSRF Loan

In September 2017 the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a Clean Water State Revolving Fund ("CWSRF") Loan to fund the SEP Primary/Secondary Clarifier Upgrade Project of the Sewer System Improvement Program. The aggregate amount of the CWSRF loans is \$34,446. The loan bears an interest rate of 1.8% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; substantial completion occurred in June 2018. The CWSRF loan is secured on a parity lien basis with the Wastewater Enterprise's outstanding revenue bonds. The SFPUC has received proceeds from loan disbursements to date totaling \$29,197. As of June 30, 2019 and 2018, the principal amount outstanding of the loan was \$28,380 and \$0.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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

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

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

(p) 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 (“CWSRF”) Loans entered into with the California State Water Resources Control Board. The loan will bear a fixed interest rate of 3.09% for a 35-year term, with loan repayment expected to begin in fiscal year 2026, after substantial completion of project construction. The SFPUC has not submitted any requests for loan disbursements to date and there is no outstanding loan principal as of June 30, 2019.

(q) 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, 2019, there were no such events described herein.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Notes to Basic Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Hetchy Water Long-Term Liability activities for the years ended June 30, 2019 and 2018 are as follows:

	<u>2018</u>	<u>Additions</u>	<u>Reductions</u>	<u>2019</u>	<u>Due within one year</u>
Other post-employment benefits obligations	\$ 15,872	2,054	(2,522)	15,404	—
Net pension liability	25,216	2,212	(7,038)	20,390	—
Accrued vacation and sick leave	1,323	662	(597)	1,388	859
Accrued workers' compensation	989	462	(213)	1,238	201
Damage claims liability	233	323	(332)	224	70
Total	<u>\$ 43,633</u>	<u>5,713</u>	<u>(10,702)</u>	<u>38,644</u>	<u>1,130</u>

	<u>2017</u>	<u>Additions</u>	<u>Reductions</u>	<u>2018</u>	<u>Due within one year</u>
Other post-employment benefits obligations	\$ 11,280	5,238	(646)	15,872	—
Net pension liability	31,235	3,639	(9,658)	25,216	—
Accrued vacation and sick leave	1,188	1,655	(1,520)	1,323	835
Accrued workers' compensation	999	207	(217)	989	174
Damage claims liability	586	786	(1,139)	233	110
Total	<u>\$ 45,288</u>	<u>11,525</u>	<u>(13,180)</u>	<u>43,633</u>	<u>1,119</u>

Hetchy Power Long-Term Liability activities for the years ended June 30, 2019 and 2018 are as follows:

	<u>Interest Rate</u>	<u>Maturity (Calendar Year)</u>	<u>2018</u>	<u>Additions</u>	<u>Reductions</u>	<u>2019</u>	<u>Due within one year</u>
Bonds:							
Clean Renewable Energy Bonds	0.00 %	2022	\$ 2,109	—	(422)	1,687	422
Qualified Energy Conservation Bonds	4.74	2027	5,294	—	(529)	4,765	536
New Clean Renewable Energy Bonds 2012	4.74	2020	1,283	—	(570)	713	583
New Clean Renewable Energy Bonds 2015	4.62	2032	3,651	—	(229)	3,422	232
2015 Series A Revenue Bonds	4.00 - 5.00	2045	32,025	—	—	32,025	—
2015 Series B Revenue Bonds	3.00 - 4.00	2026	6,820	—	(730)	6,090	755
Less issuance discount			(62)	—	14	(48)	—
Add issuance premiums			4,121	—	(229)	3,892	—
Total bonds payable			<u>55,241</u>	<u>—</u>	<u>(2,695)</u>	<u>52,546</u>	<u>2,528</u>
2009 Series C Certificates of Participation (COPs)	2.00 - 5.00	2022	1,928	—	(348)	1,580	366
2009 Series C COPs issuance premiums			60	—	(21)	39	—
2009 Series D COPs (Build America)	6.36 - 6.49	2041	12,593	—	—	12,593	—
Other post-employment benefits obligations			19,400	2,510	(3,084)	18,826	—
Net pension liability			30,819	2,703	(8,602)	24,920	—
Accrued vacation and sick leave			2,564	1,679	(1,600)	2,643	1,533
Accrued workers' compensation			1,960	789	(488)	2,261	383
Damage claims liability			2,233	2,580	(2,760)	2,053	684
Total			<u>\$ 126,798</u>	<u>10,261</u>	<u>(19,598)</u>	<u>117,461</u>	<u>5,494</u>

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

	<u>Interest Rate</u>	<u>Maturity (Calendar Year)</u>	<u>2017</u>	<u>Additions</u>	<u>Reductions</u>	<u>2018</u>	<u>Due within one year</u>
Bonds:							
Clean Renewable Energy Bonds	0.00 %	2022	\$ 2,527	—	(418)	2,109	422
Qualified Energy Conservation Bonds	4.74	2027	5,817	—	(523)	5,294	529
New Clean Renewable Energy Bonds 2012	4.74	2020	1,839	—	(556)	1,283	570
New Clean Renewable Energy Bonds 2015	4.62	2032	3,877	—	(226)	3,651	229
2015 Series A Revenue Bonds	4.00 - 5.00	2045	32,025	—	—	32,025	—
2015 Series B Revenue Bonds	3.00 - 4.00	2026	7,530	—	(710)	6,820	730
Less issuance discount			(74)	—	12	(62)	—
Add issuance premiums			4,359	—	(238)	4,121	—
Total bonds payable			57,900	—	(2,659)	55,241	2,480
2009 Series C Certificates of Participation (COPs)	2.00 - 5.00	2022	2,259	—	(331)	1,928	348
2009 Series C COPs issuance premiums			86	—	(26)	60	—
2009 Series D COPs (Build America)	6.36 - 6.49	2041	12,593	—	—	12,593	—
Other post-employment benefits obligations			16,855	3,335	(790)	19,400	—
Net pension liability			38,177	4,447	(11,805)	30,819	—
Accrued vacation and sick leave			2,397	4,495	(4,328)	2,564	1,504
Accrued workers' compensation			1,970	354	(364)	1,960	351
Damage claims liability			1,852	2,189	(1,808)	2,233	727
Total			\$ 134,089	14,820	(22,111)	126,798	5,410

CleanPowerSF Long-Term Liability activities for the years ended June 30, 2019 and 2018 are as follows:

	<u>2018</u>	<u>Additions</u>	<u>Reductions</u>	<u>2019</u>	<u>Due within one year</u>
Other post-employment benefits obligations	\$ 728	717	(203)	1,242	—
Net pension liability	1,087	316	(333)	1,070	—
Accrued vacation and sick leave	64	196	(49)	211	142
Damage claims liability	—	44	(37)	7	3
Total	\$ 1,879	1,273	(622)	2,530	145

	<u>2017</u>	<u>Additions</u>	<u>Reductions</u>	<u>2018</u>	<u>Due within one year</u>
Other post-employment benefits obligations	\$ 87	671	(30)	728	—
Net pension liability	—	1,301	(214)	1,087	—
Accrued vacation and sick leave	38	68	(42)	64	46
Total	\$ 125	2,040	(286)	1,879	46

GASB Statement No. 88 Implemented in Fiscal Year 2019

In March 2018, the GASB issued Statement No. 88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*. GASB Statement No. 88 establishes additional financial statement note disclosure requirements related to debt obligations of governments, including direct borrowings and direct placements. This Statement applies to all Hetchy Power bonds and is discussed in each bond.

(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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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.

Significant events of default as specified in the Equipment Lease/Purchase Agreement, include 1) payment defaults, 2) material breach of warranty, representation, or covenants of the Equipment Lease/Purchase Agreement (not cured within applicable grace periods) and 3) bankruptcy and insolvency events, which could cause acceleration of all Rental Payments. Assets constructed by the projects funded from proceeds of this debt obligation are pledged as collateral. As of June 30, 2019, there were no such events described herein.

The future annual debt service relating to the CREBs outstanding as of June 30, 2019 is as follows:

Fiscal years ending June 30:	<u>Principal</u>
2020	\$ 422
2021	422
2022	422
2023	<u>421</u>
	1,687
Less: Current portion	(422)
Less: Unamortized bond discount	<u>(48)</u>
Long-term portion as of June 30, 2019	\$ <u><u>1,217</u></u>

(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.

Significant events of default as specified in the Equipment Lease/Purchase Agreement, include 1) payment defaults, 2) material breach of warranty, representation, or covenants of the Equipment Lease/Purchase Agreement (not cured within applicable grace periods) and 3) bankruptcy and insolvency events, which could cause acceleration of all Rental Payments. Assets constructed by the projects funded from proceeds of this debt obligation are pledged as collateral. As of June 30, 2019, there were no such events described herein.

The future annual debt service relating to the QECBs outstanding as of June 30, 2019 is as follows:

Fiscal years ending June 30:	<u>Principal</u>	<u>Interest before subsidy</u>	<u>Federal interest subsidy*</u>	<u>Interest net of subsidy</u>
2020	\$ 536	219	(154)	65
2021	542	194	(136)	58
2022	549	168	(118)	50
2023	555	142	(100)	42
2024	562	116	(81)	35
2025-2028	<u>2,021</u>	<u>193</u>	<u>(137)</u>	<u>56</u>
	4,765	1,032	(726)	306
Less: Current portion	<u>(536)</u>			
Long-term portion as of June 30, 2019	\$ <u><u>4,229</u></u>			

* The SFPUC received IRS notice dated July 9, 2019 that the federal interest subsidy is reduced by 5.9% or a total reduction of \$46 due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

(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 thence after.

Significant events of default as specified in the Equipment Lease/Purchase Agreement, include 1) payment defaults 2) material breach of warranty, representation, or covenants of the Equipment Lease/Purchase Agreement (not cured within applicable grace periods) and 3) bankruptcy and insolvency events, which could cause acceleration of all Rental Payments. Assets constructed by the projects funded from proceeds of this debt obligation are pledged as collateral. As of June 30, 2019, there were no such events described herein.

The future annual debt service relating to the 2012 NCREBs outstanding as of June 30, 2019 is as follows:

Fiscal years ending June 30:	<u>Principal</u>	<u>Interest before subsidy</u>	<u>Federal interest subsidy*</u>	<u>Interest net of subsidy</u>
2020	\$ 583	27	(18)	9
2021	130	3	(2)	1
	<u>713</u>	<u>30</u>	<u>(20)</u>	<u>10</u>
Less: Current portion	(583)			
Long-term portion as of June 30, 2019	<u>\$ 130</u>			

* The SFPUC received IRS notice dated July 9, 2019 that the federal interest subsidy is reduced by 5.9% or a total reduction of \$1 due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same.

(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.

Significant events of default as specified in the Equipment Lease/Purchase Agreement, include 1) payment defaults 2) material breach of warranty, representation, or covenants of the Equipment Lease/Purchase Agreement (not cured within applicable grace periods) and 3) bankruptcy and insolvency events, which could cause acceleration of all Rental Payments. Assets constructed by the projects funded from proceeds of this debt obligation are pledged as collateral. As of June 30, 2019, there were no such events described herein.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Notes to Basic Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

The future annual debt service relating to the 2015 NCREBs outstanding as of June 30, 2019 is as follows:

Fiscal years ending June 30:	<u>Principal</u>	<u>Interest before subsidy</u>	<u>Federal interest subsidy*</u>	<u>Interest net of subsidy</u>
2020	\$ 232	155	(102)	53
2021	235	145	(95)	50
2022	239	134	(88)	46
2023	242	123	(81)	42
2024	245	111	(73)	38
2025-2029	1,279	384	(253)	131
2030-2033	950	88	(59)	29
	<u>3,422</u>	<u>1,140</u>	<u>(751)</u>	<u>389</u>
Less: Current portion	(232)			
Long-term portion as of June 30, 2019	<u>\$ 3,190</u>			

* The SFPUC received IRS notice dated July 9, 2019 that the federal interest subsidy is reduced by 5.9% or a total reduction of \$47 due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same.

(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, 2019, the outstanding principal amount was \$38,115.

Significant events of default as specified in the Power Enterprise Indenture (applicable to Power Revenue Bonds) 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, 2019, there were no such events described herein.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

The future annual debt service relating to the 2015 Series AB Bonds outstanding as of June 30, 2019 are as follows:

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

Fiscal years ending June 30:	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2020	\$ —	1,593	1,593
2021	—	1,593	1,593
2022	—	1,593	1,593
2023	—	1,593	1,593
2024	—	1,593	1,593
2025-2029	2,925	7,778	10,703
2030-2034	6,225	6,527	12,752
2035-2039	7,940	4,765	12,705
2040-2044	10,135	2,516	12,651
2045-2046	4,800	243	5,043
	<u>32,025</u>	<u>29,794</u>	<u>61,819</u>
Add: Unamortized bond premium	3,560		
Long-term portion as of June 30, 2019	<u>\$ 35,585</u>		

Hetchy Power - Power Revenue Bonds 2015 Series B

Fiscal years ending June 30:	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2020	\$ 755	220	975
2021	785	189	974
2022	815	157	972
2023	850	124	974
2024	880	93	973
2025-2027	2,005	89	2,094
	<u>6,090</u>	<u>872</u>	<u>6,962</u>
Less: Current portion	(755)		
Add: Unamortized bond premium	332		
Long-term portion as of June 30, 2019	<u>\$ 5,667</u>		

(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.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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%).

Water Enterprise

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

<u>Certificates of Participation 2009 Series C (Tax-Exempt)</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
Fiscal years ending June 30:			
2020	\$ 2,688	513	3,201
2021	2,824	375	3,199
2022	2,970	230	3,200
2023	3,124	78	3,202
	<u>11,606</u>	<u>1,196</u>	<u>12,802</u>
Less: Current portion	(2,688)		
Add: Unamortized bond premiums	287		
Long-term portion as of June 30, 2019	<u>\$ 9,205</u>		

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

* The SFPUC received IRS notice dated July 9, 2019 that the federal interest subsidy on the 2009 Series D bonds is reduced by 5.9%, or a total reduction of \$1,821, due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same.

Wastewater Enterprise

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

<u>Certificates of Participation 2009 Series C (Tax-Exempt)</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
Fiscal years ending June 30:			
2020	\$ 711	136	847
2021	747	99	846
2022	785	61	846
2023	826	21	847
	<u>3,069</u>	<u>317</u>	<u>3,386</u>
Less: Current portion	(711)		
Add: Unamortized bond premiums	76		
Long-term portion as of June 30, 2019	<u>\$ 2,434</u>		

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Notes to Basic Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

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

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

Hetchy Power

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

<u>Certificates of Participation 2009 Series C (Tax-Exempt)</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
Fiscal years ending June 30:			
2020	\$ 366	70	436
2021	384	51	435
2022	405	31	436
2023	425	10	435
	<u>1,580</u>	<u>162</u>	<u>1,742</u>
Less: Current portion	(366)		
Add: Unamortized bond premium	39		
Long-term portion as of June 30, 2019	\$ <u>1,253</u>		

<u>Certificates of Participation 2009 Series D (Taxable BABs)</u>	<u>Principal</u>	<u>Interest before Federal interest subsidy</u>	<u>Federal interest subsidy*</u>	<u>Interest net of subsidy</u>
Fiscal years ending June 30:				
2020	\$ —	812	(268)	544
2021	—	812	(268)	544
2022	—	812	(268)	544
2023	—	812	(268)	544
2024	445	798	(263)	535
2025-2029	2,520	3,533	(1,164)	2,369
2030-2034	3,099	2,637	(868)	1,769
2035-2039	3,822	1,519	(500)	1,019
2040-2042	2,707	271	(87)	184
Total		<u>12,006</u>	<u>(3,954)</u>	<u>8,052</u>
Long-term portion as of June 30, 2019	\$ <u>12,593</u>			

* The SFPUC received IRS notice dated July 9, 2019 that the federal interest subsidy is reduced by 5.9% or a total reduction of \$248 due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

(9) Revenue Pledge

Department-wide Business Type Activities

Department-wide revenue pledge for the years ended June 30, 2019 and 2018 are as follows:

	<u>2019</u>	<u>2018</u>
Bonds issued with revenue pledge	\$ 6,478,856	5,898,751
Clean Water State Revolving Fund (CWSRF) loans with revenue pledge	89,456	—
Principal and interest remaining due at the end of the year	10,544,715	9,711,917
Principal and interest paid during the year	326,769	285,786
Net revenues for the year ended June 30	501,782	499,944
Funds available for debt service	857,640	876,817

Water Revenue Pledge

The Water Enterprise has pledged future revenues to repay various revenue bonds. Proceeds from the revenue bonds provided financing for various capital construction projects, and to refund previously issued bonds. The bonds are payable solely from revenues of the Water Enterprise through the fiscal year ending 2051.

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

	<u>2019</u>	<u>2018</u>
Bonds issued with revenue pledge	\$ 4,746,890	4,760,930
Principal and interest remaining due at the end of the year	7,727,793	8,023,429
Principal and interest paid during the year	261,638	233,959
Net revenues for the year ended June 30	311,619	312,831
Funds available for debt service	532,981	499,583

Wastewater Revenue Pledge

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

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

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

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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

for 2015 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 revenue bonds are payable through fiscal year 2046 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 2019 and 2018, applicable net revenues, and funds available for debt service are as follows:

Hetchy Power	2019	2018
Bonds issued with revenue pledge	\$ 64,871	64,871
Principal and interest remaining due at the end of the year	81,570	86,356
Principal and interest paid during the year*	4,784	4,824
Net revenues for the year ended June 30	39,798	30,687
Funds available for debt service	71,013	67,212

* Per Indenture, debt service for coverage is calculated using the amount of principal and interest paid during the year for the 2015 series AB power revenue bonds, which has a senior lien on power enterprise revenues; principal and interest paid during the year for the 2015 Series AB power revenue bonds was \$2,569.

(10) 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 Note 10(b), of this report. The WSA continues much of the rate setting, accounting, and dispute resolution provisions contained in the expired contract, and has emergency and drought-pricing adjustment provisions.

Pursuant to the terms of the WSA, the 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 2019 and 2018, the WRR, net of adjustments, charged to such wholesale customers was \$253,235 and \$248,085, respectively. Such amounts are subject to final review by the Wholesale Customers, along with a trailing wholesale balancing account compliance audit of the WRR calculation.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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 \$64,829 and \$55,866 for the years ended June 30, 2019 and 2018, respectively, an increase of \$8,963. Refer to the compliance audit report for the final balancing account available at <https://www.sfwater.org/index.aspx?page=345>.

In addition to advancing funds to acquire the pre-2009 assets as discussed previously, the 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 \$9,542, and the level annual payment including principal and interest is approximately \$1,159. The Wholesale Customers made the first annual payment as of June 30, 2015, and will end on June 30, 2024.

(11) Other Non-Operating Revenues - Hetchy Power Trans Bay Cable Construction and Licensing Fees

In 2007, the Board of Supervisors adopted the resolution to enter into two non-exclusive licenses with the Trans Bay Cable LLC (the Licensee) for the Trans Bay 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 to use the payments for study and development of two City-owned transmission projects, a Newark-San Francisco project, and a Potrero-Embarcadero project. Of the \$3,500, only \$1,904 has been spent to date. For fiscal years ended June 30, 2019 and 2018, expenses were \$0 and \$2, respectively.

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 Hetchy Power received the first installment of \$2,000. As of June 30, 2019, cumulative revenues to date of \$20,134 were recorded, with \$2,522 and \$2,434 recorded in fiscal years 2019 and 2018, respectively. 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, 2019, cumulative expenses of \$7,480 have been incurred, with \$1,702 and \$648 in fiscal years 2019 and 2018, respectively.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

(12) Employee Benefits

a) Pension Plan

The SFPUC participates in a cost-sharing multiple-employer defined benefit pension Plan (the Plan). The Plan is administered by the San Francisco City and County Employees' Retirement System (SFERS). For purposes of measuring the net pension liability, deferred outflows/inflows of resources related to pensions, pension expense, information about the fiduciary net position of the SFERS plans, and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by Cheiron, the consulting actuary for the Plan. Benefit payments (including refunds of employee contributions) are recognized when currently due and payable in accordance with the benefit terms. Investments are reported at fair value.

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

San Francisco Employees' Retirement System (SFERS) – Cost Sharing

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

The City is an employer of the plan with a proportionate share of 94.10% as of June 30, 2018 (measurement date), and 94.07% as of June 30, 2017 (measurement date). SFPUC's allocation percentage was determined based on its employer contributions divided by the City's total employer contributions for fiscal years 2018 and 2017. 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. As of June 30, 2018 (measurement date), SFPUC's allocation of the City's proportionate share was 7.61%: 4.35% for Water, 2.11% for Wastewater, 1.12% for Hetchy Water and Hetchy Power and 0.03% for CleanPowerSF. As of June 30, 2017 (measurement date), SFPUC's allocation of the City's proportionate share was 7.81%: 4.45% for Water, 2.15% for Wastewater, 1.19% for Hetchy Water and Hetchy Power and 0.02% for CleanPowerSF.

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 by writing to the San Francisco Employees' Retirement System, 1145 Market Street, 5th Floor, San Francisco, CA 94103 or by calling (415) 487-7000.

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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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 – Contributions are made to the basic plan by both the City and the participating employees. Employee contributions are mandatory as required by the Charter. Employee contribution rates varied from 7.5% to 13.0% as a percentage of gross covered salary in fiscal years 2019 and 2018. Most employee groups agreed through collective bargaining for employees to contribute the full amount of the employee contributions on a pretax basis. The City is required to contribute at an actuarially determined rate. Based on the July 1, 2017 actuarial report, the required employer contribution rate for fiscal year 2019 was 18.81% to 23.31%. Based on the July 1, 2016 actuarial report, the required employer contribution rate for fiscal year 2018 was 18.96% to 23.46%.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

Employer contributions and employee contributions made by the employer to the Plan are recognized when due and the employer has made a formal commitment to provide the contributions. The City's proportionate share of employer contributions recognized by the Retirement System in fiscal years ended June 30, 2018 and 2017 (measurement years) were \$582,568 and \$519,073, respectively. The SFPUC's allocation of employer contributions for fiscal years 2018 and 2017 (measurement periods) were \$45,530 and \$42,487, respectively. The Water Enterprise's allocation of employer contributions for fiscal years 2018 and 2017 (measurement periods) were \$25,922 and \$24,638, respectively. The Wastewater Enterprise's allocation of employer contributions for fiscal years 2018 and 2017 (measurement periods) were \$12,523 and \$11,270, respectively. Hetchy Water's allocation of employer contributions for fiscal years 2018 and 2017 (measurement periods) were \$3,128 and \$2,961, respectively. Hetchy Power's allocation of employer contributions for fiscal years 2018 and 2017 (measurement periods) were \$3,822 and \$3,618, respectively. CleanPowerSF's allocation of employer contributions for fiscal years 2018 and 2017 (measurement periods) were \$135 and \$0, respectively.

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

Fiscal Year 2019

As of June 30, 2019, the City reported net pension liabilities for its proportionate share of the pension liability of the Plan of \$4,030,207. The City's net pension liability for the Plan is measured as the proportionate share of the net pension liability. The net pension liability of the Plan is measured as of June 30, 2018 (measurement date), and the total pension liability for the Plan used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2017 rolled forward to June 30, 2018 using standard update procedures. The City's proportion of the net pension liability was based on a projection of the City's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. The SFPUC's allocation of the City's proportionate share of the net pension liability for the plan as of June 30 2019 was \$306,846, of which \$175,429 for Water Enterprise, \$85,037 for Wastewater Enterprise, \$20,390 for Hetchy Water, \$24,920 for Hetchy Power and \$1,070 for CleanPowerSF.

For the year ended June 30, 2019, the City's recognized pension expense was \$488,255 including amortization of deferred outflow/inflow related pension items. SFPUC's allocation of pension expense including amortization of deferred outflow/inflow related pension items were \$29,827 of which \$17,730 for the Water Enterprise, \$8,858 for the Wastewater Enterprise, \$1,344 for Hetchy Water, \$1,643 for Hetchy Power, and \$252 for CleanPowerSF. Pension expense decreased from the prior year, largely due to the impact of actual investment earnings.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

At June 30, 2019, SFPUC's reported deferred outflows of resources and deferred inflows of resources related to pensions were the following:

Schedule of Deferred Outflows of Resources						
Fiscal Year 2019			Hetchy	Hetchy		SFPUC
	Water	Wastewater	Water	Power	CleanPowerSF	Total
Pension contribution subsequent to the measurement date	\$ 26,440	12,816	3,073	3,756	161	46,246
Differences between expected and actual experience	1,423	690	166	202	9	2,490
Changes in assumptions	27,353	13,259	3,179	3,886	167	47,844
Change in employer's proportion	249	121	29	35	2	436
Total \$	55,465	26,886	6,447	7,879	339	97,016

Schedule of Deferred Inflows of Resources						
Fiscal Year 2019			Hetchy	Hetchy		SFPUC
	Water	Wastewater	Water	Power	CleanPowerSF	Total
Differences between expected and actual experience	\$ 4,965	2,407	577	705	30	8,684
Net difference between projected and actual earnings on pension plan investments	28,198	13,669	3,278	4,005	172	49,322
Change in employer's proportion	167	81	19	24	1	292
Total \$	33,330	16,157	3,874	4,734	203	58,298

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						SFPUC Total
	Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF		
2020	\$ 11,196	5,427	1,301	1,591	68	19,583	
2021	4,923	2,387	572	700	30	8,612	
2022	(14,428)	(6,994)	(1,677)	(2,049)	(88)	(25,236)	
2023	(5,996)	(2,907)	(696)	(853)	(35)	(10,487)	
Total \$	(4,305)	(2,087)	(500)	(611)	(25)	(7,528)	

Fiscal Year 2018

As of June 30, 2018, the City reported net pension liabilities for its proportionate share of the pension liability of the Plan of \$4,697,129. The City's net pension liability for the Plan is measured as the proportionate share of the net pension liability. The net pension liability of the Plan is measured as of June 30, 2017 (measurement date), and the total pension liability for the Plan used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2016 rolled forward to June 30, 2017 using standard update procedures. The City's proportion of the net pension liability was based on a projection of the City's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. The SFPUC's allocation of the City's proportionate share of the net pension liability for the plan as of June 30 2018 was \$367,098 of which \$209,003 for the Water Enterprise, \$100,973 for the Wastewater Enterprise, \$25,216 for the Hetchy Water, \$30,819 for the Hetchy Power, and \$1,087 for the CleanPowerSF.

For the years ended June 30, 2018, the City's recognized pension expense was \$732,895 including amortization of deferred outflow/inflow related pension items. SFPUC's allocation of pension expense including amortization of deferred outflows and inflows related pension items were \$44,367: \$22,240 for the Water Enterprise, \$15,005 for the Wastewater Enterprise,

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

\$2,765 for Hetchy Water, \$3,379 for Hetchy Power, and \$978 for CleanPowerSF. Pension expense decreased from the prior year, largely due to the impact of actual investment earnings.

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

Schedule of Deferred Outflows of Resources						
Fiscal Year 2018	Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
Pension contribution subsequent to the measurement date	\$ 25,922	12,523	3,127	3,823	135	45,530
Differences between expected and actual experience	1,939	937	234	286	10	3,406
Changes in assumptions	33,889	16,373	4,089	4,997	176	59,524
Change in employer's proportion	312	151	38	46	2	549
Total \$	62,062	29,984	7,488	9,152	323	109,009

Schedule of Deferred Inflows of Resources						
Fiscal Year 2018	Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
Differences between expected and actual experience	\$ 6,310	3,048	761	931	33	11,083
Changes in assumptions	614	297	74	91	3	1,079
Net difference between projected and actual earnings on pension plan investments	7,797	3,767	942	1,149	41	13,696
Change in employer's proportion	342	165	41	51	2	601
Total \$	15,063	7,277	1,818	2,222	79	26,459

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					SFPUC Total
	Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	
2019	\$ 969	468	117	143	5	1,702
2020	17,568	8,487	2,120	2,590	91	30,856
2021	11,157	5,391	1,346	1,645	58	19,597
2022	(8,617)	(4,162)	(1,040)	(1,271)	(45)	(15,135)
Total \$	21,077	10,184	2,543	3,107	109	37,020

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Notes to Basic Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Actuarial Assumptions

Fiscal Year 2019

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

Key Actuarial Assumptions

Valuation Date	June 30, 2017 updated to June 30, 2018
Measurement Date	June 30, 2018
Actuarial Cost Method	Entry-Age Normal Cost Method
Expected Rate of Return	7.50%
Municipal Bond Yield	3.58% as of June 30, 2017 3.87% as of June 30, 2018 Bond Buyer 20-Bond GO Index, June 29, 2017 and June 28, 2018
Inflation	3.00%
Salary Increases	3.50% plus merit component based on employee classification and years of service
Discount Rate	7.50% as of June 30, 2017 7.50% as of June 30, 2018
Administrative Expenses	0.60% of payroll as of June 30, 2017 0.60% of payroll as of June 30, 2018

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

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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

Fiscal Year 2018

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

Key Actuarial Assumptions

Valuation Date	June 30, 2016 updated to June 30, 2017
Measurement Date	June 30, 2017
Actuarial Cost Method	Entry-Age Normal Cost Method
Expected Rate of Return	7.50%
Municipal Bond Yield	2.85% as of June 30, 2016 3.85% as of June 30, 2017 Bond Buyer 20-Bond GO Index, June 30, 2016 and June 29, 2017
Inflation	3.25%
Salary Increases	3.75% plus merit component based on employee classification and years of service
Discount Rate	7.50% as of June 30, 2016 7.50% as of June 30, 2017
Administrative Expenses	0.60% of payroll as of June 30, 2016 0.60% of payroll as of June 30, 2017

		Old 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, 2016	2.00%	2.70%	3.30%	4.40%
Basic COLA	June 30, 2017	2.00%	2.70%	3.30%	4.40%

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

Discount Rate

Fiscal Year 2019

The beginning and end of year measurements are based on different assumptions and contribution methods that may result in different discount rates. The discount rate was 7.50% as of June 30, 2018 (measurement date) and June 30, 2017 (measurement date), respectively.

The discount rate used to measure the Total Pension Liability as of the June 30, 2018 was 7.50%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will continue to be made at the rates specified in the Charter. Employer contributions were assumed to be made in accordance with the contribution policy in effect for July 1, 2017 actuarial valuation. That policy includes contributions equal to the employer portion of the Entry Age normal costs for members as of the valuation date, a payment for the expected administrative expenses, and an amortization payment on the unfunded actuarial liability.

The amortization payment is based on closed periods that vary in length depending on the source. Charter amendments prior to July 1, 2014 are amortized over 20 years. After July 1, 2014, any Charter changes to active member benefits are amortized over 15 years and changes to inactive member benefits, including Supplemental COLAs, are amortized over 5 years. The remaining Unfunded Actuarial Liability not attributable to Charter amendments as of

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

July 1, 2013 is amortized over a 19-year period commencing July 1, 2014. Experience gains and losses and assumption or method changes on or after July 1, 2014 are amortized over 20 years. For the July 1, 2016 valuation, the increase in the Unfunded Actuarial Liability attributable to the Supplemental COLAs granted on July 1, 2013 and July 1, 2014 are amortized over 17-years and 5-years respectively. All amortization schedules are established as a level percentage of payroll, so payments increase 3.50% each year. The Unfunded Actuarial Liability is based on an Actuarial Value of Assets that smooths investment gains and losses over five years and a measurement of the Actuarial Liability that excludes the value of any future Supplemental COLAs.

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

Because the probability of a Supplemental COLA depends on the current funded level of the System for certain members, Cheiron developed an assumption as of the June 30, 2018 for the probability and amount of Supplemental COLA for each future year. We have assumed that a full Supplemental COLA will be paid to all Post 97 Retirees effective July 1, 2018. The table below shows the net assumed Supplemental COLA for members with a 2.00% Basic COLA for sample years.

Assumed Supplemental COLA for Members with a 2.00% Basic COLA

<u>Fiscal years</u>	<u>96 - Prop C</u>	<u>Before 11/6/96 or After Prop C</u>
2019	0.750 %	0.000 %
2022	0.750	0.290
2025	0.750	0.350
2028	0.750	0.360
2031+	0.750	0.380

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

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

The long-term expected rate of return on pension plan investments was 7.50%. It was set by the Retirement Board after consideration of both expected future returns and historical returns experienced by the Retirement System. Expected future returns were determined by using a building-block method in which best-estimate ranges of expected future real rates of return

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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 %	5.4 %
Private Equity	18.0	6.6
Real Assets	17.0	4.5
Hedge Funds/Absolute Returns	15.0	3.7
Private Credit	10.0	4.6
Treasuries	6.0	0.5
Liquid Credit	3.0	3.3
Total	100.0	

Fiscal Year 2018

The beginning and end of year measurements are based on different assumptions and contribution methods that may result in different discount rates. The discount rate was 7.50% as of June 30, 2017 (measurement date) and June 30, 2016 (measurement date), respectively.

The discount rate used to measure the Total Pension Liability as of the June 30, 2017 measurement date was 7.50%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will continue to be made at the rates specified in the Charter. Employer contributions were assumed to be made in accordance with the contribution policy in effect for July 1, 2016 actuarial valuation. That policy includes contributions equal to the employer portion of the Entry Age normal costs for members as of the valuation date, a payment for the expected administrative expenses, and an amortization payment on the unfunded actuarial liability.

The amortization payment is based on closed periods that vary in length depending on the source. Charter amendments prior to July 1, 2014 are amortized over 20 years. After July 1, 2014, any Charter changes to active member benefits are amortized over 15 years and changes to inactive member benefits, including Supplemental COLAs, are amortized over 5 years. The remaining Unfunded Actuarial Liability not attributable to Charter amendments as of July 1, 2013 is amortized over a 19-year period commencing July 1, 2014. Experience gains and losses and assumption or method changes on or after July 1, 2014 are amortized over 20 years. For the July 1, 2016 valuation, the increase in the Unfunded Actuarial Liability attributable to the Supplemental COLAs granted on July 1, 2013 and July 1, 2014 are amortized over 17-years and 5-years, respectively. All amortization schedules are established as a level percentage of payroll so payments increase 3.75% each year. The Unfunded Actuarial Liability is based on an Actuarial Value of Assets that smooths investment gains and losses over five years and a measurement of the Actuarial Liability that excludes the value of any future Supplemental COLAs.

While the contributions and measure of Actuarial Liability in the valuation do not anticipate any future Supplemental COLAs, the projected contributions for the determination of the discount rate include the anticipated future amortization payments on future Supplemental COLAs for current members when they are expected to be granted. For members who worked after November 6, 1996 and before Proposition C passed, a Supplemental COLA is granted if the

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

actual investment earnings during the year exceed the expected investment earnings on the Actuarial Value of Assets. For members who did not work after November 6, 1996 and before Proposition C passed, the Market Value of Assets must also exceed the actuarial liability at the beginning of the year for a Supplemental COLA to be granted. When a Supplemental COLA is granted, the amount depends on the amount of excess earnings and the basic COLA amount for each membership group. The large majority of members receive a 1.50% Supplemental COLA when granted.

Because the probability of a Supplemental COLA depends on the current funded level of the System for certain members, Cheiron developed an assumption as of the June 30, 2017 measurement date for the probability and amount of Supplemental COLA for each future year. The table below shows the net assumed Supplemental COLA for members with a 2.00% Basic COLA for sample years.

Assumed Supplemental COLA for Members with a 2.00% Basic COLA

<u>Fiscal years</u>	<u>96 - Prop C</u>	<u>Before 11/6/96 or After Prop C</u>
2018	0.750 %	0.000 %
2023	0.750	0.290
2028	0.750	0.350
2033	0.750	0.380
2038+	0.750	0.380

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

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

The long-term expected rate of return on pension plan investments was 7.50%. It was set by the Retirement Board after consideration of both expected future returns and historical returns experienced by the Retirement System. Expected future returns were determined by using a building-block method in which best-estimate ranges of expected future real rates of return were developed for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(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:

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

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

The SFPUC’s allocation of the employer’s proportionate share of the net pension liability for the Plan, calculated using the discount rate, as well as what SFPUC’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.

<u>Fiscal Year 2019</u>	<u>Water</u>	<u>Wastewater</u>	<u>Hetchy Water</u>	<u>Hetchy Power</u>	<u>CleanPowerSF</u>	<u>SFPUC Total</u>
1% Decrease Share of NPL @ 6.50%	\$ 328,561	159,265	38,187	46,673	2,004	574,690
Share of NPL @ 7.50%	175,429	85,037	20,390	24,920	1,070	306,846
1% Increase Share of NPL @ 8.50%	48,802	23,656	5,672	6,933	298	85,361

<u>Fiscal Year 2018</u>	<u>Water</u>	<u>Wastewater</u>	<u>Hetchy Water</u>	<u>Hetchy Power</u>	<u>CleanPowerSF</u>	<u>SFPUC Total</u>
1% Decrease Share of NPL @ 6.50%	\$ 358,055	172,984	43,199	52,798	1,862	628,898
Share of NPL @ 7.50%	209,003	100,973	25,216	30,819	1,087	367,098
1% Increase Share of NPL @ 8.50%	85,673	41,390	10,336	12,633	445	150,477

b) Other Post-Employment Benefits

The SFPUC participates in the City’s single-employer defined benefit plan (the Plan). The Plan is maintained by the City and is administered through the City’s Health Service System. It provides 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.

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

The SFPUC’s allocation percentage of the Plan was determined based on its percentage of citywide “pay-as-you-go” contributions for the year ended June 30, 2018. SFPUC’s net OPEB liability, deferred outflows/inflows of resources related to OPEB, amortization of deferred

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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, 2018 (measurement date) was 6.66%: 4.19% for the Water Enterprise, 1.49% for the Wastewater Enterprise, 0.43% for Hetchy Water, 0.52% for Hetchy Power, and 0.03% for CleanPowerSF. The SFPUC's proportionate share of the City's OPEB elements as of June 30, 2017 (measurement date) was 7.04%: 4.47% for the Water Enterprise, 1.60% for the Wastewater Enterprise, 0.43% for Hetchy Water, 0.52% for Hetchy Power, and 0.02% for CleanPowerSF.

Benefit

Fiscal Year 2019

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

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

¹ Age 53 with 20 years of credited service, age 60 with 10 years of credited service, or age 65 for Miscellaneous members hired on or after January 7, 2012.

² No service requirement for Safety members retiring under the industrial disability benefit or for surviving spouses/domestic partners of those killed in the line of duty.

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

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.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

Fiscal Year 2018

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

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

¹ Age 53 with 20 years of credited service, age 60 with 10 years of credited service, or age 65 for Miscellaneous members hire on or after January 7, 2012.

² No service requirement for Safety members retiring under the industrial disability benefit or for surviving spouses/domestic partners of those killed in the line of duty.

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

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

Medical:	PPO – City Health Plan (self-insured) HMO – Kaiser (fully-insured) and Blue Shield (flex-funded)
Dental:	Delta Dental & DeltaCare USA
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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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 2019

For the fiscal year ended June 30, 2019, the City’s funding was based on “pay-as-you-go” plus a contribution of \$32,786 to the Retiree Healthcare Trust Fund. The “pay-as-you-go” portion paid by the City was \$185,839 for a total contribution of \$218,625 for the fiscal year ended June 30, 2019. The SFPUC’s proportionate share of contributions for fiscal year 2019 was \$14,559: \$9,154 for Water Enterprise, \$3,252 for the Wastewater Enterprise, \$935 for Hetchy Water, \$1,143 for Hetchy Power, and \$75 for CleanPowerSF.

Fiscal Year 2018

For the fiscal year ending June 30, 2018, the City’s funding was based on “pay-as-you-go” plus a contribution of \$25,839 to the Retiree Healthcare Trust Fund. The “pay-as-you-go” portion paid by the City was \$178,019 for a total contribution of \$203,858 for the fiscal year ending June 30, 2018. The SFPUC’s proportionate share of contributions for fiscal year 2018 was \$14,360: \$9,122 for Water Enterprise, \$3,264 for the Wastewater Enterprise, \$870 for Hetchy Water, \$1,064 for Hetchy Power, and \$40 for CleanPowerSF.

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

Fiscal Year 2019

As of June 30, 2019, the City reported net OPEB liabilities related to the Plan of \$3,600,967. The SFPUC’s proportionate share of the City’s net OPEB liability as of June 30, 2019 was \$239,810: \$150,771 for Water Enterprise, \$53,567 for the Wastewater Enterprise, \$15,404 for Hetchy Water, \$18,826 for Hetchy Power, and \$1,242 for CleanPowerSF.

For the year ended June 30, 2019, the City’s recognized OPEB expense was \$320,332. 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 \$7,792: \$3,284 for Water Enterprise, \$768 for the Wastewater Enterprise, \$1,397 for Hetchy Water, \$1,708 for Hetchy Power, and \$635 for CleanPowerSF.

As of June 30, 2019, Hetch Hetchy’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						
	Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
Fiscal Year 2019						
Contribution subsequent to measurement date	\$ 9,154	3,252	935	1,143	75	14,559
Changes in assumptions	3,988	1,417	408	498	33	6,344
Total \$	13,142	4,669	1,343	1,641	108	20,903

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Notes to Basic Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

Schedule of Deferred Inflows of Resources						
Fiscal Year 2019	<u>Water</u>	<u>Wastewater</u>	<u>Hetchy Water</u>	<u>Hetchy Power</u>	<u>CleanPowerSF</u>	<u>SFPUC Total</u>
Differences between expected and actual experience	\$ 13,843	4,918	1,415	1,729	114	22,019
Net difference between projected and actual earnings on pension plan investments	140	49	14	17	1	221
Total	\$ 13,983	4,967	1,429	1,746	115	22,240

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:

<u>Fiscal years</u>	<u>Water</u>	<u>Wastewater</u>	<u>Hetchy Water</u>	<u>Hetchy Power</u>	<u>CleanPowerSF</u>	<u>SFPUC Total</u>
2020	\$ (1,693)	(602)	(173)	(211)	(14)	(2,693)
2021	(1,693)	(602)	(173)	(211)	(14)	(2,693)
2022	(1,693)	(602)	(173)	(211)	(14)	(2,693)
2023	(1,629)	(578)	(167)	(205)	(14)	(2,593)
2024	(1,643)	(583)	(168)	(205)	(13)	(2,612)
Thereafter	(1,644)	(583)	(167)	(205)	(13)	(2,612)
Total	\$ (9,995)	(3,550)	(1,021)	(1,248)	(82)	(15,896)

Fiscal Year 2018

As of June 30, 2018, the City reported net OPEB liabilities related to the Plan of \$3,717,207. The SFPUC's proportionate share of the City's net OPEB liability as of June 30, 2018 was \$261,853: \$166,336 for Water Enterprise, \$59,517 for the Wastewater Enterprise, \$15,872 for Hetchy Water, \$19,400 for Hetchy Power, and \$728 for CleanPowerSF.

For the year ended June 30, 2018, the City's recognized OPEB expense was \$355,186. Amortization of the City's deferred inflow is included as a component of OPEB expense. The SFPUC's proportionate share of the City's OPEB expense was \$25,020: \$15,894 for Water Enterprise, \$5,687 for the Wastewater Enterprise, \$1,516 for Hetchy Water, \$1,854 for Hetchy Power, and \$69 for CleanPowerSF.

As of June 30, 2018, the SFPUC's reported deferred outflows/inflows of resources related to OPEB from the following sources:

<u>Deferred Outflows of Resources</u>	<u>Water</u>	<u>Wastewater</u>	<u>Hetchy Water</u>	<u>Hetchy Power</u>	<u>CleanPowerSF</u>	<u>SFPUC Total</u>
Contributions subsequent to measurement date	\$ 9,122	3,264	870	1,064	40	14,360
<u>Deferred Inflows of Resources</u>						
Net difference between projected and actual earnings on plan investments	\$ 268	96	26	31	1	422

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

Amounts reported as deferred outflows, exclusive of contributions made after the measurement date, and deferred inflows of resources will be amortized annually and recognized in OPEB expense as follows:

<u>Fiscal years</u>	<u>Water</u>	<u>Wastewater</u>	<u>Hetchy Water</u>	<u>Hetchy Power</u>	<u>CleanPowerSF</u>	<u>SFPUC Total</u>
2019	\$ (67)	(24)	(6)	(8)	(1)	(106)
2020	(67)	(24)	(6)	(8)	—	(105)
2021	(67)	(24)	(6)	(8)	—	(105)
2022	(67)	(24)	(8)	(7)	—	(106)
Total	\$ (268)	(96)	(26)	(31)	(1)	(422)

Actuarial Assumptions

Fiscal Year 2019

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

Key Actuarial Assumptions

Valuation Date	June 30, 2018
Measurement Date	June 30, 2018
Actuarial Cost Method	The Entry Age Actuarial Cost Method is used to measure the Plan's Total OPEB Liability
Healthcare Cost Trend Rates	Pre-Medicare trend starts at 6.50% and trends down to ultimate rate of 3.93% in 2076 Medicare trend starts at 7.5% and trends down to ultimate rate of 3.93% in 2076 10-County average trend starts at 5.90% and trends down to ultimate rate of 3.93% in 2076 Vision and expenses trend remains a flat 3.5% for all years
Expected Rate of Return on Plan Assets	7.40%
Discount Rate	7.40%
Salary Increase Rate	Wage Inflation Component: 3.50% Additional Merit Component (dependent on years of service): Police: 1.50% - 8.00% Fire: 1.50% - 15.00% Muni Drivers: 0.00% - 15.00% Craft: 0.00% - 3.50% Misc: 0.00% - 5.25%
Inflation Rate	Wage Inflation: 3.50% compounded annually Consumer Price Inflation: 2.75% compounded annually
Mortality Tables	Base mortality tables are developed by multiplying a published table by an adjustment factor developed in SFERS experience study for the period ending June 30, 2014. Non-Annuitant - CalPERS employee mortality tables without scale BB projection

Gender	Adjustment Factor	Base Year
Female	0.918	2009
Male	0.948	2009

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

Gender	Adjustment Factor	Base Year
Female	1.014	2009
Male	0.909	2009

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

Gender	Adjustment Factor	Base Year
Female	1.066	2006
Male	0.942	2006

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

Gender	Adjustment Factor	Base Year
Female	0.983	2009
Male	0.909	2009

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Notes to Basic Financial Statements
June 30, 2019 and 2018
(Dollars in thousands, unless otherwise stated)

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

Fiscal Year 2018

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

Key Actuarial Assumptions

Valuation Date	June 30, 2016 updated to June 30, 2017
Measurement Date	June 30, 2017
Actuarial Cost Method	The Entry Age Actuarial Cost Method is used to measure the Plan's Total OPEB Liability
Healthcare Cost Trend Rates	Pre-Medicare trend starts at 7.25% and trends down to ultimate rate of 4.5% Medicare trend starts at 7.0% and trends down to ultimate rate of 4.5% 10-County average trend starts at 6.0% and trends down to ultimate rate of 4.5%
Expected Rate of Return on Plan Assets	7.50%
Discount Rate	7.50%
Salary Increase Rate	Wage Inflation Component: 3.50% Additional Merit Component (dependent on years of service): Police: 0.00% - 8.00% Fire: 0.00% - 15.00% Muni Drivers: 0.00% - 15.00% Craft: 0.00% - 3.50% Misc: 0.00% - 5.25%
Inflation Rate	Wage Inflation: 3.50% compounded annually Consumer Price Inflation: 3.00% compounded annually
Mortality Tables	Base mortality tables are developed by multiplying a published table by an adjustment factor developed in SFERS experience study for the period ending June 30, 2014. Non-Annuitant - CalPERS employee mortality tables without scale BB projection

Gender	Adjustment Factor	Base Year
Female	0.918	2009
Male	0.948	2009

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

Gender	Adjustment Factor	Base Year
Female	1.014	2009
Male	0.909	2009

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

Gender	Adjustment Factor	Base Year
Female	1.066	2006
Male	0.942	2006

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

Gender	Adjustment Factor	Base Year
Female	0.983	2009
Male	0.909	2009

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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

The following presents 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, 2019 and June 30, 2018:

	<u>Water</u>	<u>Wastewater</u>	<u>Hetchy Water</u>	<u>Hetchy Power</u>	<u>CleanPowerSF</u>	<u>Total 2019</u>
1% Decrease	\$ 131,045	46,558	13,388	16,364	1,079	208,434
Healthcare Trend	150,771	53,567	15,404	18,826	1,242	239,810
1% Increase	175,236	62,259	17,903	21,882	1,443	278,723

	<u>Water</u>	<u>Wastewater</u>	<u>Water</u>	<u>Power</u>	<u>CleanPowerSF</u>	<u>Total 2018</u>
1% Decrease	\$ 145,162	51,941	13,852	16,930	635	228,520
Healthcare Trend	166,336	59,517	15,872	19,400	728	261,853
1% Increase	192,510	68,883	18,370	22,453	842	303,058

Discount Rate

Fiscal Year 2019

The discount rate used to measure the total OPEB liability as of June 30, 2018 was 7.40%. 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 7.40% based on expected future returns and historical returns experienced by the Trust Fund. Expected future returns were determined based on 10-year and 20-year capital market assumptions for the Trust Fund's asset allocation. Target allocation for each major asset class are summarized in the following table:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>20-year Expected Return</u>
Equities		
U.S. Equities	41.0 %	7.3 %
Developed Market Equity (non-U.S.)	20.0	7.1
Emerging Market Equity	16.0	9.4
Credit		
High Yield Bonds	3.0	5.4
Bank Loans	3.0	5.0
Emerging Market Bonds	3.0	4.9
Rate Securities		
Investment Grade Bonds	9.0	3.6
Treasury Inflation Protected Securities	5.0	3.3
Total	<u>100.0</u>	

The asset allocation targets summarized above have a 20-year return estimate of 7.50%, which was weighted against a 10-year model estimating a 6.30% return, resulting in the ultimate long-term expected rate of return of 7.40%.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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

	<u>Water</u>	<u>Wastewater</u>	<u>Hetchy Water</u>	<u>Hetchy Power</u>	<u>CleanPowerSF</u>	<u>SFPUC Total</u>
1% Decrease 6.40%	\$ 173,339	61,585	17,709	21,645	1,427	275,705
Discount Rate 7.40%	150,771	53,567	15,404	18,826	1,242	239,810
1% Increase 8.40%	132,306	47,006	13,517	16,521	1,089	210,439

Fiscal Year 2018

The discount rate used to measure the total OPEB liability as of June 30, 2017 was 7.50%. 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 7.50% based on expected future returns and historical returns experienced by the Trust Fund. Expected future returns were determined based on 10-year and 20-year capital market assumptions for the Trust Fund's asset allocation. Target allocation for each major asset class are summarized in the following table:

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

The asset allocation targets summarized above have a 20-year return estimate of 7.75%, which was weighted against a 10-year model estimating a 6.59% return, resulting in the ultimate long-term expected rate of return of 7.50%.

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

	<u>Water</u>	<u>Wastewater</u>	<u>Hetchy Water</u>	<u>Hetchy Power</u>	<u>CleanPowerSF</u>	<u>SFPUC Total</u>
1% Decrease 6.50%	\$ 190,549	68,181	18,183	22,224	833	299,970
Discount Rate 7.50%	166,336	59,517	15,872	19,400	728	261,853
1% Increase 8.50%	146,479	52,412	13,978	17,084	640	230,593

(13) 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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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 for the years ended June 30, 2019 and 2018:

<u>Fiscal Years</u>	<u>Water</u>		<u>Wastewater</u>		<u>Hetchy Water</u>		<u>Hetchy Power</u>		<u>CleanPowerSF</u>		<u>SFPUC Total</u>
2019	\$ 42,407	49.6%	25,658	30.0%	3,735	4.4%	11,696	13.7%	1,928	2.3%	85,424
2018	42,392	50.7%	26,473	31.6%	3,499	4.2%	11,310	13.5%	—	0.0%	83,674

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, 2019 and 2018:

	<u>2019</u>				
	<u>Water</u>	<u>Wastewater</u>	<u>Hetchy Water</u>	<u>Hetchy Power</u>	<u>SFPUC Total</u>
Allocable share of expenses	\$ 46	21	4	12	83
Allocable share of prepayment	3,399	1,210	164	793	5,566

	<u>2018</u>				
	<u>Water</u>	<u>Wastewater</u>	<u>Hetchy Water</u>	<u>Hetchy Power</u>	<u>SFPUC Total</u>
Allocable share of expenses	\$ 45	23	4	12	84
Allocable share of prepayment	3,445	1,231	168	805	5,649

Water Enterprise

The Water Enterprise purchases water from Hetch Hetchy Water. The amounts, totaling \$33,578 and \$32,600 for the years ended June 30, 2019 and 2018, respectively, have been included in the services provided by other departments in the accompanying financial statements.

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

The Water Enterprise sold water to the Wastewater Enterprise at retail rates. This amount, totaling \$1,266 and \$1,073 for the years ended June 30, 2019 and 2018, respectively, have been included in services provided by other departments 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 2019 and 2018, the Water Enterprise delivered water for fire hydrant purposes totaling \$7 and \$13, respectively, based on metered usage and applicable water rates, and the amount has been excluded from operating revenues in the accompanying financial statements.

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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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

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

Wastewater Enterprise

The Wastewater purchases electricity from Hetch Hetchy Power at market rates. This amount, totaling \$10,907 and \$10,195 for the years ended June 30, 2019 and 2018, respectively, has been included in services provided by other departments in the accompanying financial statements.

The Wastewater Enterprise purchases water from Water Enterprise at retail rates. This amount, totaling \$1,266 and \$1,073 for the years ended June 30, 2019 and 2018, respectively, has been included in services provided by other departments in the accompanying financial statements.

The Wastewater Enterprise provides sewer services to other City departments at non-residential rates established by the Commission, and through the Customer Services Department, bills and collects sewer service charges on behalf of the 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 \$13,884 and \$14,417 for the years ended June 30, 2019 and 2018, respectively, have been included in services provided by other departments in the accompanying financial statements.

A variety of other City departments provide services such as purchasing, legal, data processing, telecommunications, and human resources to the Wastewater Enterprise and charge amounts designed to recover those departments' costs. These charges totaling approximately \$10,571 and \$10,689 for the years ended June 30, 2019 and 2018, respectively, have been included in services provided by other departments in the accompanying financial statements.

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

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

Hetchy Water

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 overhead allocation paid to the General

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

Fund of the City is included in other operating expenses in the accompanying financial statements. Hetchy Water overhead costs were \$0 and \$29 for the years ended June 30, 2019 and 2018.

The Water Enterprise purchases water from Hetchy Water. Included in the operating revenues are the water assessment fees of \$33,578 and \$32,600 for the years ended June 30, 2019 and 2018, 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 \$1,622 and \$1,572 for the years ended June 30, 2019 and 2018, respectively, have been included in services provided by other departments in the accompanying financial statements.

Hetchy Water received \$20,000 and \$30,000 for the years ended June 30, 2019 and 2018, respectively, from the Water Enterprise to fund upcountry projects.

Hetchy Power

As of June 30, 2019 and 2018, operating revenues in sales of power to departments within the City were \$97,715 and \$90,019, respectively. Hetchy Power overhead costs were \$0 and \$90 for the years ended June 30, 2019 and 2018.

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 \$6,833 and \$5,848 for the years ended June 30, 2019 and 2018, respectively, have been included in services provided by other departments in the accompanying financial statements.

The Water Enterprise also purchases electricity and gas from Hetchy Power. This amount totaled \$9,480 and \$9,047 for the years ended June 30, 2019 and 2018, respectively.

The Wastewater Enterprise purchases electricity and gas from Hetchy Power. This amount totaled \$10,907 and \$10,195 for the years ended June 30, 2019 and 2018, respectively.

Hetchy Power facilitates all electric and gas service connections between PG&E and City departments. In this capacity, Hetchy Power facilitates and coordinates the terms and payment for the service connections that are performed by PG&E. As of June 30, 2019, and 2018, there was no outstanding amount due from City departments related to this work. In the event Hetchy Power received money from PG&E after project completion, monies are to be refunded to the City departments for their respective credits.

Due from other City departments was \$9,850 and \$10,732 with elimination of a \$3,731 and \$5,601 working capital loan to CleanPowerSF for the years ended June 30, 2019 and 2018, 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, 2019 and 2018, projects completed or under way throughout the City amounted to \$5,569 and \$6,254, respectively, and are recorded as due from other government agencies.

Besides funding the SEA projects, in fiscal year 2010, Hetch Hetchy funded a project for the Treasure Island Development Authority and recorded \$2,599 as due from other government agencies. Hetchy

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

Power and the Moscone Center have renegotiated the memoranda of understanding to extend the payment terms of the receivables to match the useful life of underlying assets.

As of June 30, 2019, and 2018, Hetchy Power recorded receivables of \$955 and \$1,061, respectively, due from the Wastewater Enterprise for its share of costs relating to SFPUC Headquarters Living Machine System. Details of due from other City departments are as follows:

	<u>2019</u>	<u>2018</u>
Moscone Center	\$ 5,569	6,075
San Francisco General Hospital	—	179
Total SEA-related projects	<u>5,569</u>	<u>6,254</u>
Treasure Island Development Authority	2,599	2,599
Wastewater - 525 Golden Gate Headquarters Project	955	1,061
San Francisco Recreation and Park	629	734
Department of Public Works	<u>98</u>	<u>84</u>
Total due from other City departments	9,850	10,732
Less: current portion	(817)	(980)
Long-term portion as of June 30, net	<u>\$ 9,033</u>	<u>9,752</u>

CleanPowerSF

As of June 30, 2019, and 2018, operating revenue in sales of power to Hetchy Power were \$572 and \$0, respectively. Operating expenses in purchase of power from Hetchy Power were \$3,026 and \$3,501, 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 \$3,208 and \$1,545 for the years ended June 30, 2019 and 2018, 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 \$1,840 and \$207 for the years ended June 30, 2019 and 2018, respectively.

(14) 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.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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

a) General Liability

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

The changes for the general liability (damage claims) for the years ended June 30, 2019 and 2018 are as follows:

	2019					
	Water	Wastewater	Hetchy Water	Hetchy Power	CleanPowerSF	SFPUC Total
Beginning of year	\$ 13,402	14,066	233	2,233	-	29,934
Claims and changes in estimates	4,768	4,699	314	2,400	44	12,225
Claims paid	(6,661)	(2,397)	(323)	(2,580)	(37)	(11,998)
End of year	\$ 11,509	16,368	224	2,053	7	30,161

	2018*				
	Water	Wastewater	Hetchy Water	Hetchy Power	SFPUC Total
Beginning of year	\$ 10,738	14,149	586	1,852	27,325
Claims and changes in estimates	4,151	3,936	786	2,189	11,062
Claims paid	(1,487)	(4,019)	(1,139)	(1,808)	(8,453)
End of year	\$ 13,402	14,066	233	2,233	29,934

* CleanPowerSF had no general liability as of June 30, 2018.

b) Property and Electronic Data Processing

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 is 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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

officials, or (4) high-value, mission-critical property or equipment. The Electronic Data Processing policy protects selected high-value electronic property in case of damage or loss.

c) Workers' Compensation

The City actuarially determines and allocates workers' compensation costs to the 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.

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

	2019*				
	Water	Wastewater	Hetchy	Hetchy	SFPUC
			Water	Power	Total
Beginning of year	\$ 10,957	5,784	989	1,960	19,690
Claims and changes in estimates	2,707	1,944	462	789	5,902
Claims paid	(3,328)	(1,814)	(213)	(488)	(5,843)
End of year	\$ 10,336	5,914	1,238	2,261	19,749

	2018*				
	Water	Wastewater	Hetchy	Hetchy	SFPUC
			Water	Power	Total
Beginning of year	\$ 9,089	5,580	999	1,970	17,638
Claims and changes in estimates	4,382	1,769	207	354	6,712
Claims paid	(2,514)	(1,565)	(217)	(364)	(4,660)
End of year	\$ 10,957	5,784	989	1,960	19,690

* CleanPowerSF had no workers' compensation liability as of June 30, 2019 and 2018.

d) Surety Bonds

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

e) Errors and Omissions, Professional Liability

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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

f) *Public Officials Liability, Employment Practices Liability*

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

g) *Builders' Risk*

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

h) *Crime*

The 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.

i) *Energy Risk Management*

Similar to other electric utilities with a heavy reliance on hydro-electric 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.

j) *Enterprise Risk Management*

The Power Enterprise adopted the ISO 31000 standard for the Hetchy Power and CleanPowerSF program as the framework for implementing Enterprise Risk Management (ERM). The Power 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 Power Enterprise's current and expanding business allowing for increased operational resiliency and the ability to capitalize on opportunities.

(15) 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, 2019 and 2018, the Water Enterprise had outstanding commitments with third parties of \$237,663 and \$290,923, respectively. Wastewater Enterprise had outstanding commitments with third parties of \$269,132 in 2019 and \$226,025 in 2018. Hetch Hetchy had outstanding commitments with third parties of \$96,467 in 2019, and \$113,361 in 2018.

Hetchy Water

To meet certain requirements of the Don Pedro Reservoir operating license, the City entered into an agreement with the MID and 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 \$5,687 and \$4,793 for fiscal years 2019 and 2018, 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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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

District Sales

In April 1988, Hetchy Power entered into two separate long-term power sales agreements (the Agreement) with the two irrigation districts, the MID and TID, which expired June 30, 2015. In April 2015, the Commission and the Board of Supervisors approved the extension of both agreements for one year to June 30, 2016. A second extension agreement was subsequently approved to extend both agreements for an additional year to June 30, 2017, with an automatic six months extension through December 31, 2017. Terms and conditions for the MID extension agreement were the same as the original agreement. The second extension agreement for TID removed the District's rights to excess energy from the project and terminated those conditions with the first extension agreement on June 30, 2016. Extended agreements for MID and TID expired on December 31, 2017.

The SFPUC will continue to comply with the Raker Act by making Hetch Hetchy generated hydropower available at cost to MID and TID for their agricultural pumping and municipal loads as energy from the Hetch Hetchy project is available after meeting the SFPUC's municipal load obligations.

For fiscal year 2018, energy sales to the Districts totaled 46,651 Megawatt hours (MWh) or \$2,636. There were no sales to the Districts in fiscal year 2019 primarily due to purchase agreement with MID and TID ended on December 31, 2017.

1987 Interconnection Agreement and 2015 Replacement Agreements

In 1987, the City entered into an interconnection agreement with PG&E to provide transmission, distribution, and other support services for the City's use of PG&E's transmission and distribution system to deliver the City's Hetchy power and purchases to the City's customers. The renegotiated agreement in 2007 expired on July 1, 2015. In December 2014, PG&E filed several separate replacement service and facilities agreements with the FERC for its approval. By FERC order, the City is currently taking transmission service on PG&E's transmission system using the CAISO Open-Access Transmission Tariff and is taking distribution service under PG&E's Wholesale Distribution Tariff pursuant to PG&E's replacement agreements, but subject to waiver of certain terms and conditions and subject to refund by PG&E, pending the FERC's final decision. During fiscal years 2019 and 2018, Hetchy Power purchased \$10,404 and \$9,570, respectively, of distribution services and other support services from PG&E under the terms of the replacement agreements and the 1987 Interconnection Agreement.

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 2019 and 2018, Hetchy Power purchased \$8,269 and \$6,656 of power and other related products, respectively. Sales of excess power, after meeting Hetch Hetchy's obligations, were \$0 for 2019 and 15,900 MWh, or \$668, for 2018, respectively.

Power Purchase Agreement (PPA)

Hetchy Power (Buyer) purchases energy, capacity, and environmental attributes from a solar photovoltaic project located at Sunset Reservoir (the facility) pursuant to the 2009 25-year PPA

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

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 2019, the facility generated 6,427 MWh and the rate was at \$306/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 2019 and 2018, purchases of energy under the Agreement were \$1,957, or 6,427 MWh, and \$2,015, or 6,887 MWh, respectively.

CleanPowerSF

CleanPowerSF began serving customers in May 2016 and entered into contracts with Calpine Energy Services L.P. (Calpine) and Shiloh I Wind Project LLC (Shiloh) to purchase renewable and conventional energy and resource adequacy capacity to meet its retail sales obligations. Both contracts feature 10-year master agreements under which multiple transactions may be executed. CleanPowerSF had executed two multi-year transactions with Calpine (three-year term) and Shiloh (five-year term). The Calpine required a reserve balance of \$2,663 and \$3,049 as of June 30, 2019 and 2018, respectively, which is equivalent to two months' worth of estimated payment. CleanPowerSF's obligation to maintain the reserve balance under the Calpine contract expired upon the payment of the final invoice on June 6, 2019. As of June 30, 2019, and 2018, total electricity purchased from Calpine and Shiloh were \$34,271 and \$19,796, respectively.

Since its launch, CleanPowerSF has added multiple additional short-term and medium-term contracts to purchase renewable, carbon-free and conventional energy and resource adequacy capacity, as well as long-term contracts for renewable energy with sPower and Terra-Gen. These contracts have been entered to allow CleanPowerSF to both meet its existing retail sales obligations and to support future retail sales from the citywide expansion of the CleanPowerSF program. Citywide enrollment was substantively completed with the enrollment of residential accounts in April 2019. The total power purchase cost, net of wholesale sales in fiscal year 2019 equaled \$119,812. The total contract cost of long-term renewable energy contracts with sPower (a 22-year contract starting delivery in July 2019) and Terra-Gen (a 15-year contract starting delivery in December 2020) are \$219,219 and \$102,339, respectively, over each contract's term. Additional short-term and medium-term contracts (of commitments ranging from less than 1 year to 5 years) for renewable, carbon-free and conventional energy and resource adequacy capacity executed during 2019 totaled \$44,623.

CleanPowerSF entered into a contract with Noble Americas Energy Solutions in November 2015 for a three-year term, not to exceed \$5,600 to provide data management, billing administration and customer care services. On December 1, 2016, Noble Americas Energy Solutions was acquired by Calpine Corporation and was renamed Calpine Energy Solutions. Subsequently, CleanPowerSF's contract was assigned to Calpine Energy Solutions under its new name and ownership. In August 2018, CleanPowerSF exercised its option under the contract to extend the term for three years, through October 31, 2021, and increased the contract's not-to-exceed value to \$18,769. During fiscal year 2019 and 2018, amounts paid were \$2,602 and \$1,526, respectively.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

CleanPowerSF Guarantee

In March 2018, CleanPowerSF entered into a five-year, \$75,000 Credit Agreement with J.P. Morgan Chase in order for the program to secure letters of credit to guarantee certain payment obligations of CleanPowerSF and to meet working capital needs of CleanPowerSF, if necessary. The Credit Agreement is secured by CleanPowerSF net revenues; there is no pledge of or Lien on CleanPowerSF net revenues that ranks senior to the obligations of the Credit Agreement. The letters of credit, issued by J.P. Morgan Chase, were in the amount of \$21,410 and \$18,091 as of June 30, 2019 and 2018, respectively. There was no draw against the Credit Agreement during fiscal years 2019 and 2018. The unused credit under the credit agreement was \$53,590 and \$56,909 during fiscal years 2019 and 2018, 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 Credit Agreement include 1) non-payment 2) material breach of warranty representation, or other non-remedied breach of covenants as specified in the respective agreement 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.

b) Grants

Grants that the SFPUC 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 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, 2019 and 2018, the Water Enterprise recorded \$2,194 and \$2,311 in pollution remediation liability, respectively. This decrease of \$117 in pollution remediation liability in fiscal year 2019 is for expenses relating to the excavation of contaminated soil that contained polycyclic aromatic hydrocarbons from the Pacific Rod & Gun Club site in the Lake Merced area, and remediation activities for the 17th and Folsom site. As of June 30, 2019, the pollution remediation liability of \$2,194 consisted of \$1,291 for the Pacific Rod & Gun Club site, and \$903 for the 17th and Folsom site. As of June 30, 2018, the pollution remediation liability of \$2,311 consisted of \$1,375 for the Pacific Rod & Gun Club site, and \$936 for the 17th and Folsom site.

Wastewater

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

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2019 and 2018

(Dollars in thousands, unless otherwise stated)

Hetch Hetchy

Hetch Hetchy had no pollution remediation liability as of June 30, 2019 and 2018.

(16) Subsequent Events

a) *Purchase of Watershed Property in Alameda County – Water*

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

b) *Water Revenue Bonds Rating Change – Water*

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

c) *2019 Water Revenue Bonds Series ABC Issuance – Water*

On January 9, 2020, the SFPUC issued its San Francisco Water Revenue Bonds, 2019 Sub-Series A (Green Bonds), Sub-Series B (Hetch Hetchy), and Sub-Series C (Local Water Main) in an aggregated principal amount of \$656,955. The Bonds were issued to (i) refund and defease all or portion of the 2010 Sub-Series F, the 2011 Sub-Series A, B and C, and the 2012 Sub-Series A water revenue bonds of the SFPUC and (ii) pay the cost of issuance of the 2019 Series ABC Bonds.



Photo by: Robin Scheswohl

Installation of the underground vault for electrical duct bank which is the site of the future ferry landing near the Warriors stadium.



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

Required Supplementary Information
(Unaudited)

Schedules of the Proportionate Share of the Net Pension Liability

Schedules of Employer Contributions – Pension Plan

Schedules of Changes in Other Postemployment Benefits Liability and related Ratios
Other Postemployment 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



Photo by Robin Scheswohl

The Ocean Beach Erosion Control project uses bulldozers and dump trucks to dig up and ferry 75,000 tons of sand in an effort to temporarily replenish precious coastline lost due to the forces of nature and accelerated by the effect of climate change.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Required Supplementary Information (Unaudited)
Schedules of the Proportionate Share of the Net Pension Liability
Fiscal Years Ended 2015 to 2019
(In thousands)

City - San Francisco Employee's Retirement

System (SFERS) Plan	2015*	2016**	2017**	2018	2019
Proportion of net pension liability	93.78%	93.90%	94.22%	94.07%	94.10%
Proportionate share of the net pension liability (asset)	\$ 1,660,365	2,156,049	5,476,654	4,697,131	4,030,207
Covered payroll	\$ 2,398,979	2,529,879	2,681,695	2,880,112	3,045,153
Proportionate share of the net pension liability as a percentage of covered payroll	69.21%	85.22%	204.22%	163.09%	132.35%
Plan fiduciary net position as a percentage of total pension liability	91.84%	89.90%	77.61%	81.78%	85.20%

Water

Proportion of net pension liability	5.08%	5.00%	4.75%	4.45%	4.35%
Proportionate share of the net pension liability (asset)	\$ 84,374	108,024	259,956	209,003	175,429

Wastewater

Proportion of net pension liability	2.27%	2.20%	2.17%	2.15%	2.11%
Proportionate share of the net pension liability (asset)	\$ 37,615	48,177	118,907	100,973	85,037

Hetchy Water

Proportion of net pension liability	0.56%	0.57%	0.57%	0.54%	0.50%
Proportionate share of the net pension liability (asset)	\$ 9,242	12,093	31,235	25,216	20,390

Hetchy Power

Proportion of net pension liability	0.68%	0.69%	0.70%	0.65%	0.62%
Proportionate share of the net pension liability (asset)	\$ 11,295	14,781	38,177	30,819	24,920

CleanPowerSF

Proportion of net pension liability				0.02%	0.03%
Proportionate share of the net pension liability (asset)	\$			1,087	1,070

Data not available - CleanPowerSF launched in May 2016.

SFPUC Total

Proportion of net pension liability	8.59%	8.46%	8.19%	7.81%	7.61%
Proportionate share of the net pension liability (asset)	\$ 142,526	183,075	448,275	367,098	306,846

* Fiscal year 2015 was the first year of implementation of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*.

**Changes of Assumptions for fiscal year 2017, the discount rate was increased from 7.46% to 7.50%. For fiscal year 2016, the discount rate was reduced from 7.58% to 7.46%. The impact of benefit changes for the year ended June 30, 2017, which was \$1.22 billion, for the City SFERS Plan was recognized immediately as pension expense.

Source: Office of the Controller, City and County of San Francisco City.

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 2019
(In thousands)

City - SFERS Plan	2015*	2016	2017	2018	2019
Actuarially determined contributions ^{1**}	\$ 556,511	496,343	519,073	582,568	607,408
Contributions in relations to the actuarially determined contributions ¹	<u>(556,511)</u>	<u>(496,343)</u>	<u>(519,073)</u>	<u>(582,568)</u>	<u>(607,408)</u>
Contribution deficiency (excess)	\$ —	—	—	—	—
Covered payroll	\$ 2,529,879	2,681,695	2,880,112	3,045,153	3,186,405
Contributions as a percentage of covered payroll	22.00%	18.51%	18.02%	19.13%	19.06%
Water					
Actuarially determined contributions ¹	\$ 28,280	24,497	24,638	25,922	26,440
Contributions in relations to the actuarially determined contributions ¹	<u>(28,280)</u>	<u>(24,497)</u>	<u>(24,638)</u>	<u>(25,922)</u>	<u>(26,440)</u>
Contribution deficiency (excess)	\$ —	—	—	—	—
Wastewater					
Actuarially determined contributions ¹	\$ 12,608	10,930	11,270	12,523	12,816
Contributions in relations to the actuarially determined contributions ¹	<u>(12,608)</u>	<u>(10,930)</u>	<u>(11,270)</u>	<u>(12,523)</u>	<u>(12,816)</u>
Contribution deficiency (excess)	\$ —	—	—	—	—
Hetchy Water					
Actuarially determined contributions ¹	\$ 3,097	2,806	2,961	3,128	3,073
Contributions in relations to the actuarially determined contributions ¹	<u>(3,097)</u>	<u>(2,806)</u>	<u>(2,961)</u>	<u>(3,128)</u>	<u>(3,073)</u>
Contribution deficiency (excess)	\$ —	—	—	—	—
Hetchy Power					
Actuarially determined contributions ¹	\$ 3,786	3,430	3,618	3,822	3,756
Contributions in relations to the actuarially determined contributions ¹	<u>(3,786)</u>	<u>(3,430)</u>	<u>(3,618)</u>	<u>(3,822)</u>	<u>(3,756)</u>
Contribution deficiency (excess)	\$ —	—	—	—	—
CleanPowerSF					
Actuarially determined contributions ¹	\$	Data not available - CleanPowerSF launched in May 2016.		135	161
Contributions in relations to the actuarially determined contributions ¹	\$			<u>(135)</u>	<u>(161)</u>
Contribution deficiency (excess)	\$			<u>—</u>	<u>—</u>
SFPUC Total					
Actuarially determined contributions ¹	\$ 47,771	41,663	42,487	45,530	46,246
Contributions in relations to the actuarially determined contributions ¹	<u>(47,771)</u>	<u>(41,663)</u>	<u>(42,487)</u>	<u>(45,530)</u>	<u>(46,246)</u>
Contribution deficiency (excess)	\$ —	—	—	—	—

(continued)

¹Contractually 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.

** 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.

Source: Office of the Controller, City and County of San Francisco City.

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 2019
(In thousands)

Methods and assumptions used to determine FY 2019 contribution rates to SFERS Plan

Valuation date.....	July 1, 2017 updated to June 30, 2018
Actuarial cost method.....	Entry-age normal cost method
Amortization method.....	Level annual percentage of payroll
Remaining amortization period.....	Closed 15-year period
Asset valuation method.....	5 year smoothed market
Investment rate of return.....	7.50% (net of investment expenses)
Inflation.....	3.25% compounded annually
Projection salary increase.....	Wage inflation component: 3.75%

Methods and assumptions used to determine FY 2018 contribution rates to SFERS Plan

Valuation date.....	July 1, 2016 updated to June 30, 2017
Actuarial cost method.....	Entry-age normal cost method
Amortization method.....	Level annual percentage of payroll
Remaining amortization period.....	Closed 15-year period
Asset valuation method.....	5 year smoothed market
Investment rate of return.....	7.50% (net of investment expenses)
Inflation.....	3.25% compounded annually
Projection salary increase.....	Wage inflation component: 3.75%

Methods and assumptions used to determine FY 2017 contribution rates to SFERS Plan

Valuation date.....	July 1, 2015 updated to June 30, 2016
Actuarial cost method.....	Entry-age normal cost method
Amortization method.....	Level annual percentage of payroll
Remaining amortization period.....	Closed 15-year period
Asset valuation method.....	5 year smoothed market
Investment rate of return.....	7.50% (net of investment expenses)
Inflation.....	3.25% compounded annually
Projection salary increase.....	Wage inflation component: 3.75%

Methods and assumptions used to determine FY 2016 contribution rates to SFERS Plan

Valuation date.....	July 1, 2014 updated to June 30, 2015
Actuarial cost method.....	Entry-age normal cost method
Amortization method.....	Level annual percentage of payroll
Remaining amortization period.....	Closed 15-year period
Asset valuation method.....	5 year smoothed market
Investment rate of return.....	7.50% (net of investment expenses)
Inflation.....	3.25% compounded annually
Projection salary increase.....	Wage inflation component: 3.75%

Methods and assumptions used to determine FY 2015 contribution rates to SFERS Plan

Valuation date.....	July 1, 2013 updated to June 30, 2014
Actuarial cost method.....	Entry-age normal cost method
Amortization method.....	Level annual percentage of payroll
Remaining amortization period.....	Rolling 15-year period
Asset valuation method.....	5 year smoothed market
Investment rate of return.....	7.58% (net of investment expenses)
Inflation.....	3.33% compounded annually
Projection salary increase.....	Wage inflation component: 3.83%

See accompanying auditors' report.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Required Supplementary Information (Unaudited)
Schedules of Changes in Other Postemployment Benefits Liability and Related Ratios
Other Postemployment Healthcare Benefits Plan
Fiscal Years Ended 2018 to 2019
(In thousands)

City Plan	2018*	2019
Total Other Postemployment Benefits (OPEB) Liability		
Service Cost	\$ 125,195	127,850
Interest (includes interest on service cost)	272,942	290,029
Differences between expected and actual experience	—	(385,732)
Changes of assumptions	—	111,119
Benefits payments, including refunds of member contributions	(165,470)	(178,019)
Net change in total OPEB liability	232,667	(34,753)
Total OPEB liability - beginning	3,659,019	3,891,686
Total OPEB liability - ending	<u>\$ 3,891,686</u>	<u>3,856,933</u>
Plan fiduciary net position		
Contributions - employer	\$ 183,898	203,858
Contributions - member	31,686	41,682
Net investment income	17,368	14,105
Benefit payments, including refunds of member contributions	(165,470)	(178,019)
Administrative expense	(109)	(137)
Net change in plan fiduciary net position	67,373	81,489
Plan fiduciary net position - beginning	107,104	174,477
Plan fiduciary net position - ending	174,477	255,966
Net OPEB liability - ending	<u>\$ 3,717,209</u>	<u>3,600,967</u>
Plan fiduciary net position as a percentage of the total OPEB liability	4.48%	6.64%
Covered payroll	\$ 3,393,658	3,583,448
Net OPEB liability as a percentage of covered payroll	109.53%	100.49%
	*Data not available	
Water		
Proportion of net OPEB liability	\$ 166,336	150,771
Percentage of proportion of net OPEB liability	4.47%	4.19%
Wastewater		
Proportion of net OPEB liability	\$ 59,517	53,567
Percentage of proportion of net OPEB liability	1.60%	1.49%
Hetchy Water		
Proportion of net OPEB liability	\$ 15,872	15,404
Percentage of proportion of net OPEB liability	0.43%	0.43%
Hetchy Power		
Proportion of net OPEB liability	\$ 19,400	18,826
Percentage of proportion of net OPEB liability	0.52%	0.52%
CleanPowerSF		
Proportion of net OPEB liability	\$ 728	1,242
Percentage of proportion of net OPEB liability	0.02%	0.03%
SFPUC Total		
Proportion of net OPEB liability	\$ 261,853	239,810
Percentage of proportion of net OPEB liability	7.04%	6.66%

*Fiscal year 2018 was the first year of implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*.

Source: Office of the Controller, City and County of San Francisco City.

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, 2019 and 2018
(In thousands)

	Water		Wastewater		Hetchy Water		Hetchy Power		CleanPowerSF		Eliminations		SFPUC Total	
	2019-18 \$ Change	2019-18 % Change	2019-18 \$ Change	2019-18 % Change	2019-18 \$ Change	2019-18 % Change	2019-18 \$ Change	2019-18 % Change	2019-18 \$ Change	2019-18 % Change	2019-18 \$ Change	2019-18 % Change	2019-18 \$ Change	2019-18 % Change
Assets														
Current assets:														
Cash and investments with City Treasury.....\$	46,790	13.0	45,002	27.4	(850)	(1.1)	4,594	2.5	13,119	105.8	–	–	108,655	13.6
Cash and investments outside City Treasury.....	(20)	(7.3)	12	4.6	(1)	(50.0)	(8)	(100.0)	–	–	–	–	(17)	(3.1)
Receivables:														
Charges for services (net of allowance for doubtful accounts of \$1,733, \$2,308, \$0, \$19, and \$585 in 2019 and \$2,211, \$2,585, \$0, \$52 and \$306 in 2018).....	1,316	2.4	2,866	9.3	51	182.1	(1,469)	(20.2)	29,418	547.7	–	–	32,182	33.0
Due from other City departments, current portion.....	346	117.7	104	89.7	–	–	(163)	(16.6)	–	–	2	1.8	289	22.6
Due from other governments.....	(214)	(65.8)	21,795	126.4	2,858	5,392.5	394	190.3	–	–	–	–	24,833	139.3
Interest	1,355	105.1	403	38.3	186	70.7	711	110.9	138	233.9	–	–	2,793	84.6
Restricted interest and other receivable (net of allowance for doubtful accounts of \$5, \$19, \$0, \$0 and \$0 in 2019 and \$51, \$191, \$0, \$0 and \$0 in 2018).....	(696)	(15.5)	3,989	545.7	66	100.0	22	12.6	–	–	–	–	3,381	62.7
Total current receivables.....	2,107	3.5	29,157	58.2	3,161	918.9	(505)	(5.4)	29,556	544.3	2	1.8	63,478	50.7
Prepaid charges, advances, and other receivables, current portion.....	874	60.9	12	10.3	–	–	2,525	232.1	106	4.3	–	–	3,517	63.5
Inventory.....	(135)	(2.4)	202	9.7	12	6.5	1,202	559.1	–	–	–	–	1,281	15.9
Restricted cash and investments outside City Treasury, current portion.....	(21,227)	(14.8)	30,646	214.6	–	–	1,119	40.3	–	–	–	–	10,538	6.6
Total current assets.....	28,389	5.0	105,031	45.5	2,322	2.9	8,927	4.5	42,781	211.1	2	1.8	187,452	17.1
Non-current assets:														
Restricted cash and investments with City Treasury.....	(99,787)	(97.8)	447,831	1,242.1	(5,464)	(30.1)	(4,088)	(17.6)	–	–	–	–	338,492	188.6
Restricted cash and investments outside City Treasury, less current portion.....	–	–	–	–	–	–	(1,038)	(100.0)	–	–	–	–	(1,038)	(100.0)
Restricted interest and other receivable, and prepaid (net of allowance for doubtful accounts of \$9, \$31, \$0, \$0, and \$0 in 2019 and \$0 in 2018)..	3	100.0	453	100.0	–	–	–	–	–	–	–	–	456	100.0
Charges for services, less current portion (net of allowance for doubtful accounts of \$662, \$567, \$0, \$0, and \$0 in 2019 and \$0 in 2018).....	(602)	(76.1)	(482)	(59.5)	–	–	–	–	–	–	–	–	(1,084)	(67.7)
Prepaid charges, advances, and other receivables, less current portion.....	176	5.1	(20)	(1.7)	(4)	(2.4)	(13)	(1.6)	–	–	–	–	139	2.5
Capital assets, not being depreciated and amortized.....	(937,445)	(65.5)	113,384	16.4	9,299	29.5	41,794	50.0	–	–	–	–	(772,968)	(34.6)
Capital assets, net of accumulated depreciation and amortization.....	1,062,870	27.7	117,294	6.5	5	0.0	20,111	7.9	–	–	–	–	1,200,280	20.0
Due from other City departments, less current portion.....	–	–	–	–	–	–	(2,589)	(16.9)	–	–	1,974	30.1	(615)	(7.0)
Total non-current assets.....	25,215	0.5	678,460	26.8	3,836	2.4	54,177	14.3	–	–	1,974	30.1	763,662	9.1
Total assets.....	53,604	0.9	783,491	28.4	6,158	2.6	63,104	10.9	42,781	211.1	1,976	29.7	951,114	10.0
Deferred outflows of resources														
Unamortized loss on refunding of debt.....	(11,194)	(7.5)	(174)	(34.8)	–	–	–	–	–	–	–	–	(11,368)	(7.5)
Pensions.....	(6,597)	(10.6)	(3,098)	(10.3)	(1,041)	(13.9)	(1,273)	(13.9)	16	5.0	–	–	(11,993)	(11.0)
Other post-employment benefits.....	4,020	44.1	1,405	43.0	473	54.4	577	54.2	68	170.0	–	–	6,543	45.6
Total deferred outflows of resources.....\$	(13,771)	(6.2)	(1,867)	(5.5)	(568)	(6.8)	(696)	(6.8)	84	23.1	–	–	(16,818)	(6.1)

(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, 2019 and 2018
(In thousands)

	Water		Wastewater		Hetchy Water		Hetchy Power		CleanPowerSF		Eliminations		SFPUC Total	
	2019-18 \$ Change	2019-18 % Change	2019-18 \$ Change	2019-18 % Change	2019-18 \$ Change	2019-18 % Change	2019-18 \$ Change	2019-18 % Change	2019-18 \$ Change	2019-18 % Change	2019-18 \$ Change	2019-18 % Change	2019-18 \$ Change	2019-18 % Change
Liabilities														
Current liabilities:														
Accounts payable.....	\$ (2,930)	(18.8)	52	0.3	(210)	(25.9)	(375)	(2.6)	12,130	297.3	—	—	8,667	16.3
Accrued payroll.....	283	4.2	258	5.9	7	1.1	150	9.1	106	200.0	—	—	804	6.0
Accrued vacation and sick leave, current portion.....	(419)	(6.8)	385	10.2	24	2.9	29	1.9	96	208.7	—	—	115	0.9
Accrued workers' compensation, current portion.....	(75)	(3.7)	4	0.4	27	15.5	32	9.1	—	—	—	—	(12)	(0.3)
Due to other City departments, current portion.....	(96)	(100.0)	(2)	(1.8)	—	—	—	—	—	—	2	1.8	(96)	(100.0)
Damage claims liability, current portion.....	(784)	(16.8)	637	10.0	(40)	(36.4)	(43)	(5.9)	3	100.0	—	—	(227)	(1.9)
Unearned revenues, refunds, and other, current portion.....	2,700	15.5	468	11.2	6	75.0	(2,261)	(36.1)	469	642.5	—	—	1,382	5.0
Bond and loan interest payable.....	(481)	(1.2)	6,958	60.4	—	—	17	3.2	—	—	—	—	6,494	12.8
Bonds, current portion.....	27,205	38.0	1,075	5.1	—	—	48	1.9	—	—	—	—	28,328	29.8
Capital appreciation bonds, current portion.....	(2,971)	(59.4)	—	—	—	—	—	—	—	—	—	—	(2,971)	(59.4)
Certificates of participation, current portion.....	132	5.2	35	5.2	—	—	18	5.2	—	—	—	—	185	5.2
Commercial paper.....	121,024	300.2	28,639	10.9	—	—	30,444	150.1	—	—	—	—	180,107	55.7
Wholesale balancing account, current portion.....	10,444	2,516.6	—	—	—	—	—	—	—	—	—	—	10,444	2,516.6
State revolving funds loans payable, current portion.....	—	—	943	318.6	—	—	—	—	—	—	—	—	943	318.6
Current liabilities payable from restricted assets.....	(13,967)	(30.4)	(5,789)	(11.9)	(2,066)	(32.3)	(138)	(2.5)	—	—	—	—	(21,960)	(20.6)
Total current liabilities.....	140,065	54.5	33,663	8.8	(2,252)	(25.1)	27,921	51.7	12,804	301.1	2	1.8	212,203	30.0
Long-term liabilities:														
Other post-employment benefits obligations.....	(15,565)	(9.4)	(5,950)	(10.0)	(468)	(2.9)	(574)	(3.0)	514	70.6	—	—	(22,043)	(8.4)
Net pension liability.....	(33,574)	(16.1)	(15,936)	(15.8)	(4,826)	(19.1)	(5,899)	(19.1)	(17)	(1.6)	—	—	(60,252)	(16.4)
Accrued vacation and sick leave, less current portion.....	(167)	(3.7)	477	18.0	41	8.4	50	4.7	51	283.3	—	—	452	5.2
Accrued workers' compensation, less current portion.....	(546)	(6.1)	126	2.6	222	27.2	269	16.7	—	—	—	—	71	0.4
Due to other City departments, less current portion.....	—	—	(104)	(10.9)	—	—	350	100.0	(1,870)	(33.4)	1,974	30.1	350	100.0
Damage claims liability, less current portion.....	(1,109)	(12.7)	1,665	21.7	31	25.2	(137)	(9.1)	4	100.0	—	—	454	2.5
Unearned revenues, refunds, and other, less current portion...	—	—	—	—	—	—	242	6.8	—	—	—	—	242	5.8
Bonds, less current portion.....	(127,698)	(2.6)	632,388	63.4	—	—	(2,743)	(5.2)	—	—	—	—	501,947	8.5
Capital appreciation bonds, less current portion.....	(1,725)	(100.0)	—	—	—	—	—	—	—	—	—	—	(1,725)	(100.0)
Certificates of participation, less current portion.....	(2,846)	(2.7)	(753)	(2.7)	—	—	(387)	(2.7)	—	—	—	—	(3,986)	(2.7)
Wholesale balancing account, less current portion.....	(1,481)	(2.7)	—	—	—	—	—	—	—	—	—	—	(1,481)	(2.7)
State revolving funds loans payable, less current portion.....	—	—	64,482	289.0	—	—	—	—	—	—	—	—	64,482	289.0
Pollution remediation obligations.....	(117)	(5.1)	2,797	59.5	—	—	—	—	—	—	—	—	2,680	38.2
Total long-term liabilities.....	(184,828)	(3.4)	679,192	55.2	(5,000)	(11.6)	(8,829)	(7.1)	(1,318)	(17.7)	1,974	30.1	481,191	7.1
Total liabilities.....	(44,763)	(0.8)	712,855	44.2	(7,252)	(13.9)	19,092	10.7	11,486	98.3	1,976	29.7	693,394	9.2
Deferred inflows of resources														
Related to pensions.....	18,267	121.3	8,880	122.0	2,056	113.1	2,512	113.1	124	157.0	—	—	31,839	120.3
Other post-employment benefits.....	13,715	5,117.5	4,871	5,074.0	1,403	5,396.2	1,715	5,532.3	114	11,400.0	—	—	21,818	5,170.1
Total deferred inflows of resources.....	31,982	208.6	13,751	186.5	3,459	187.6	4,227	187.6	238	297.5	—	—	53,657	199.6
Net position														
Net investment in capital assets.....	58,981	11.7	(38,961)	(3.3)	9,304	6.7	30,616	11.3	—	—	—	—	59,940	2.9
Restricted for debt service.....	(6,740)	(29.4)	(33)	(2.5)	—	—	311	37.3	—	—	—	—	(6,462)	(25.8)
Restricted for capital projects.....	(32,978)	(100.0)	18,505	100.0	(3,311)	(28.3)	—	—	—	—	—	—	(17,784)	(39.8)
Unrestricted.....	33,351	(47.1)	75,507	39,740.5	3,390	8.4	8,162	6.1	31,141	351.5	—	—	151,551	133.7
Total net position.....	\$ 52,614	10.7	55,018	4.7	9,383	4.9	39,089	9.6	31,141	351.5	—	—	187,245	8.2

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, 2019 and 2018
(In thousands)

	Water		Wastewater		Hetchy Water		Hetchy Power		CleanPowerSF		SFPUC Total	
	2019-18 \$ Change	2019-18 % Change	2019-18 \$ Change	2019-18 % Change	2019-18 \$ Change	2019-18 % Change	2019-18 \$ Change	2019-18 % Change	2019-18 \$ Change	2019-18 % Change	2019-18 \$ Change	2019-18 % Change
Operating revenues:												
Charges for services.....	\$ 14,565	2.9	14,724	4.9	453	1.4	24,737	20.8	128,252	324.1	182,731	18.5
Rents and concessions.....	104	0.8	91	14.9	(8)	(6.0)	(11)	(6.7)	–	–	176	1.3
Capacity fees.....	648	37.7	1,091	18.9	–	–	–	–	–	–	1,739	23.2
Other revenues.....	1,435	9.0	79	1.4	–	–	–	–	–	–	1,514	7.0
Total operating revenues.....	<u>16,752</u>	<u>3.2</u>	<u>15,985</u>	<u>5.1</u>	<u>445</u>	<u>1.3</u>	<u>24,726</u>	<u>20.8</u>	<u>128,252</u>	<u>324.1</u>	<u>186,160</u>	<u>18.0</u>
Operating expenses:												
Personnel services.....	(16,701)	(13.0)	(11,284)	(12.3)	(809)	(5.6)	2,633	7.5	2,462	114.5	(23,699)	(8.7)
Contractual services.....	(416)	(2.9)	2,979	18.5	(319)	(20.9)	560	10.1	2,620	121.0	5,424	13.8
Transmission/distribution and other power costs.....	–	–	–	–	–	–	13,004	53.7	65	28.1	13,069	53.4
Purchased electricity.....	–	–	–	–	–	–	(2)	(0.0)	92,476	307.6	92,474	229.7
Materials and supplies.....	(2,515)	(15.8)	407	4.3	32	2.9	(869)	(56.4)	51	100.0	(2,894)	(10.3)
Depreciation and amortization.....	2,064	1.7	4,442	8.0	314	6.2	435	3.1	–	–	7,255	3.8
Services provided by other departments.....	2,891	5.1	255	0.7	50	3.2	985	16.8	1,663	107.6	5,844	5.7
General and administrative and other.....	1,624	4.5	24,108	81.8	11,245	70.2	(13,453)	(58.4)	(481)	(21.2)	23,043	21.5
Total operating expenses.....	<u>(13,053)</u>	<u>(3.5)</u>	<u>20,907</u>	<u>8.8</u>	<u>10,513</u>	<u>26.4</u>	<u>3,293</u>	<u>2.8</u>	<u>98,856</u>	<u>257.2</u>	<u>120,516</u>	<u>14.9</u>
Operating income (loss).....	<u>29,805</u>	<u>19.2</u>	<u>(4,922)</u>	<u>(6.5)</u>	<u>(10,068)</u>	<u>(161.6)</u>	<u>21,433</u>	<u>3,827.3</u>	<u>29,396</u>	<u>2,578.6</u>	<u>65,644</u>	<u>29.0</u>
Non-operating revenues (expenses):												
Federal and state grants.....	(397)	(66.5)	235	100.0	1,934	184.2	406	100.0	–	–	2,178	132.2
Interest and investment income.....	9,202	142.7	18,384	793.4	2,452	1,124.8	4,346	171.3	561	322.4	34,945	298.8
Interest expenses.....	(13,997)	(8.5)	(18,825)	(75.4)	–	–	167	5.4	(29)	(28.7)	(32,684)	(17.0)
Amortization of premium, discount, refunding loss, and issuance costs....	4,248	31.4	297	5.5	–	–	(11)	(4.4)	–	–	4,534	23.6
Net gain (loss) from sale of assets.....	1,550	213.2	(984)	(32,800.0)	(6)	(100.0)	(403)	(822.4)	–	–	157	20.2
Net gain from transfer of assets.....	–	–	619	100.0	–	–	–	–	–	–	619	100.0
Other non-operating revenues.....	(7,818)	(20.7)	(23)	(0.4)	(152)	(84.0)	477	4.8	(1)	(100.0)	(7,517)	(14.1)
Other Non-operating expenses.....	532	27.7	388	93.7	68	100.0	716	41.5	–	–	1,704	41.3
Net non-operating revenues (expenses).....	<u>(6,680)</u>	<u>(6.3)</u>	<u>91</u>	<u>0.7</u>	<u>4,296</u>	<u>309.7</u>	<u>5,698</u>	<u>71.0</u>	<u>531</u>	<u>717.6</u>	<u>3,936</u>	<u>3.6</u>
Change in net position before transfers.....	<u>23,125</u>	<u>47.6</u>	<u>(4,831)</u>	<u>(7.6)</u>	<u>(5,772)</u>	<u>(119.1)</u>	<u>27,131</u>	<u>363.3</u>	<u>29,927</u>	<u>2,465.2</u>	<u>69,580</u>	<u>59.8</u>
Transfers from the City and County of San Francisco.....	818	214.1	–	–	(10,000)	(33.3)	4,435	5,097.7	–	–	(4,747)	(15.6)
Transfers to the City and County of San Francisco.....	11,034	35.2	22,964	85.2	–	–	480	93.8	–	–	34,478	58.6
Net transfers.....	<u>11,852</u>	<u>38.2</u>	<u>22,964</u>	<u>85.2</u>	<u>(10,000)</u>	<u>(33.3)</u>	<u>4,915</u>	<u>1,156.5</u>	<u>–</u>	<u>–</u>	<u>29,731</u>	<u>104.8</u>
Change in net position.....	<u>34,977</u>	<u>198.3</u>	<u>18,133</u>	<u>49.2</u>	<u>(15,772)</u>	<u>(62.7)</u>	<u>32,046</u>	<u>455.0</u>	<u>29,927</u>	<u>2,465.2</u>	<u>99,311</u>	<u>112.9</u>
Net position at beginning of year:												
Beginning of year, as previously reported.....	(11,743)	(2.3)	27,862	2.4	23,434	13.9	4,940	1.2	642	7.8	45,135	2.0
Cumulative effect of accounting change due to error.....	–	–	6,767	100.0	–	–	–	–	–	–	6,767	100.0
Cumulative effect of accounting change*.....	<u>29,380</u>	<u>100.0</u>	<u>2,256</u>	<u>100.0</u>	<u>1,721</u>	<u>100.0</u>	<u>2,103</u>	<u>100.0</u>	<u>572</u>	<u>100.0</u>	<u>36,032</u>	<u>100.0</u>
Beginning of year as restated.....	<u>17,637</u>	<u>3.7</u>	<u>36,885</u>	<u>3.2</u>	<u>25,155</u>	<u>15.1</u>	<u>7,043</u>	<u>1.8</u>	<u>1,214</u>	<u>15.9</u>	<u>87,934</u>	<u>4.0</u>
Net position at end of year.....	<u>\$ 52,614</u>	<u>10.7</u>	<u>55,018</u>	<u>4.7</u>	<u>9,383</u>	<u>4.9</u>	<u>39,089</u>	<u>9.6</u>	<u>31,141</u>	<u>351.5</u>	<u>187,245</u>	<u>8.2</u>

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

See accompanying auditors' report.



Photo by: Robin Scheswohl

Regional Groundwater Storage and Recovery Project at Lake Merced Golf Course.



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



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 & 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.



Photo by: Robin Scheswohl

The renovated community gardens and new rain gardens in McLaren Park.



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



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

Financial Trends

Comparative Highlights of Revenues & Expenses

Changes in Net Position

Summary of Net Position by Component

Investments in Capital Assets



Photo by: Robin Scheswohl

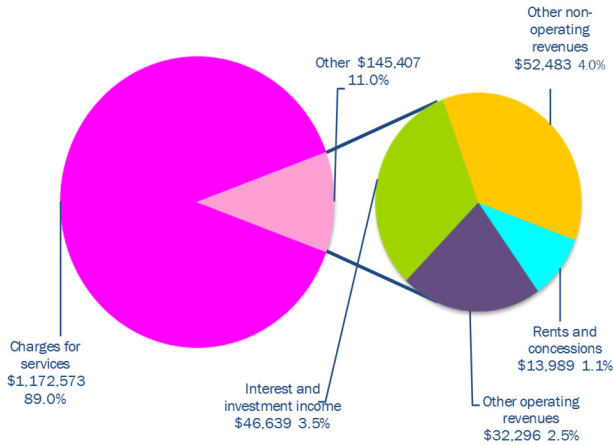
Lower Crystal Springs Dam



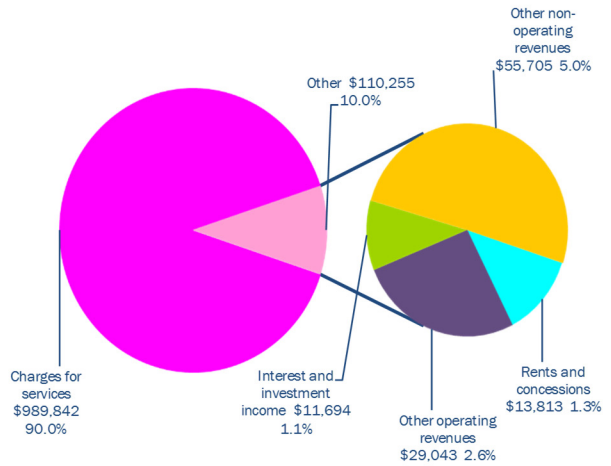
San Francisco
Water Power Sewer
Services of the San Francisco Public Utilities Commission

Financial Trends
 Department-wide
 Comparative Highlights of Revenues & Expenses
 Fiscal Years Ended 2019 and 2018
 (Dollars in Thousands)

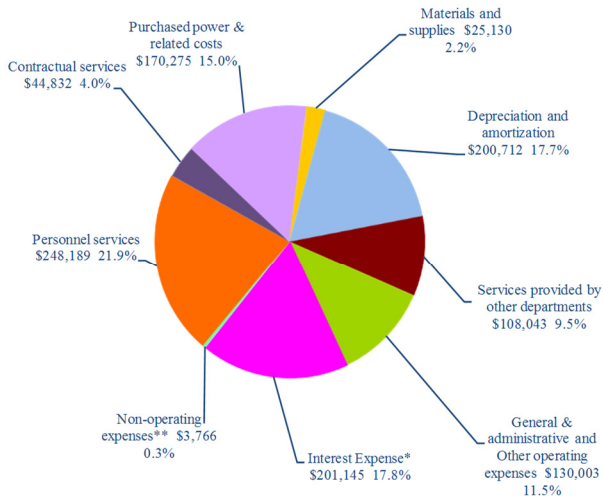
2019 Revenues - \$1,317,980



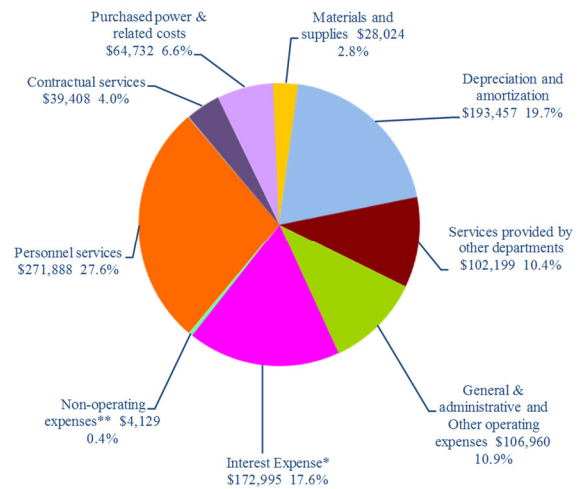
2018 Revenues - \$1,100,097



2019 Expenses - \$1,132,095



2018 Expenses - \$983,792



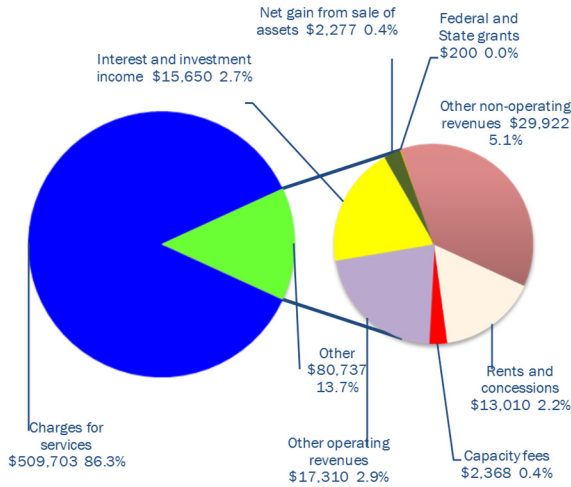
* Interest expenses are net of amortization of premium, discount, refunding loss, and issuance costs.

** Other non-operating expenses include net loss from sale of assets.

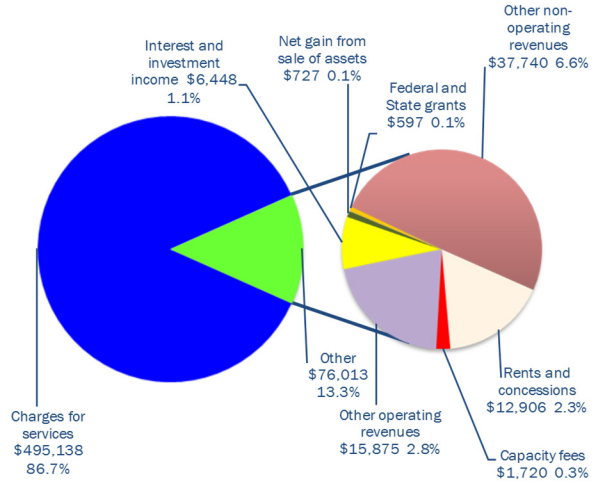
Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

Financial Trends
 Water Fund
 Comparative Highlights of Revenues & Expenses
 Fiscal Years Ended 2019 and 2018
 (Dollars in Thousands)

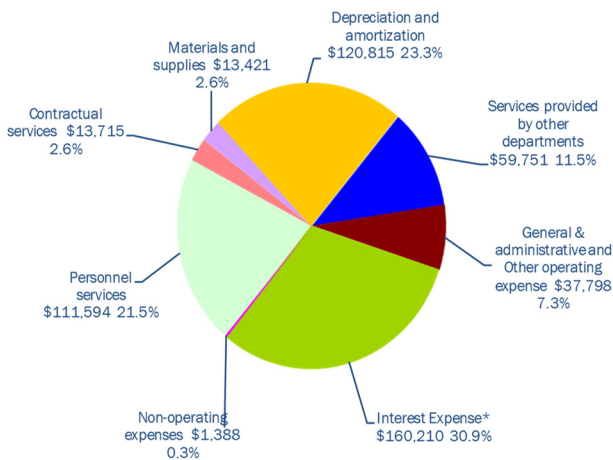
2019 Revenues - \$590,440



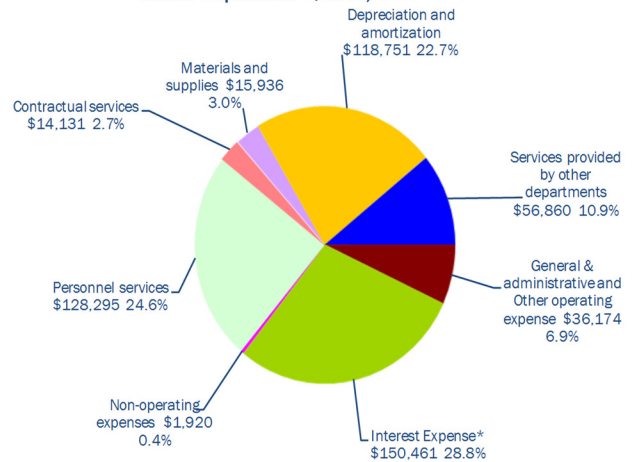
2018 Revenues - \$571,151



2019 Expenses - \$518,692



2018 Expenses - \$522,528

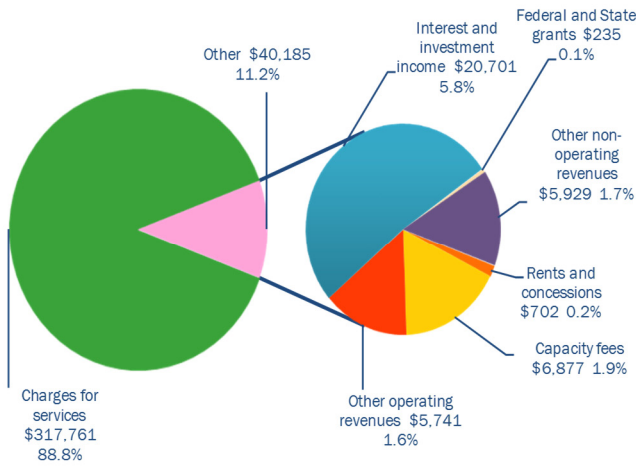


* Interest expenses are net of amortization of premium, discount, refunding loss, and issuance costs.

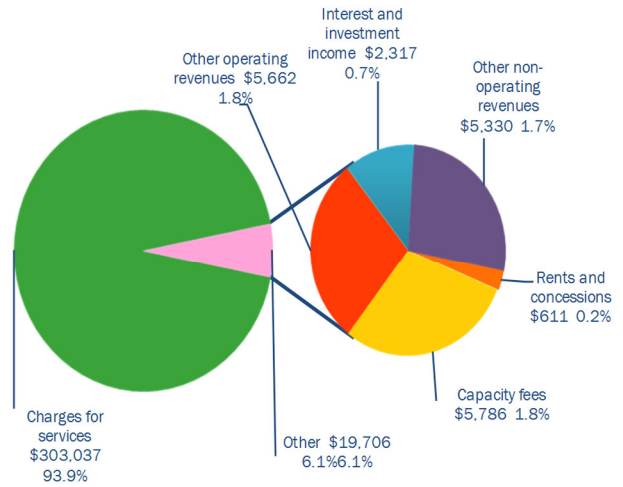
Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

Financial Trends
 Wastewater Fund
 Comparative Highlights of Revenues & Expenses
 Fiscal Years Ended 2019 and 2018
 (Dollars in Thousands)

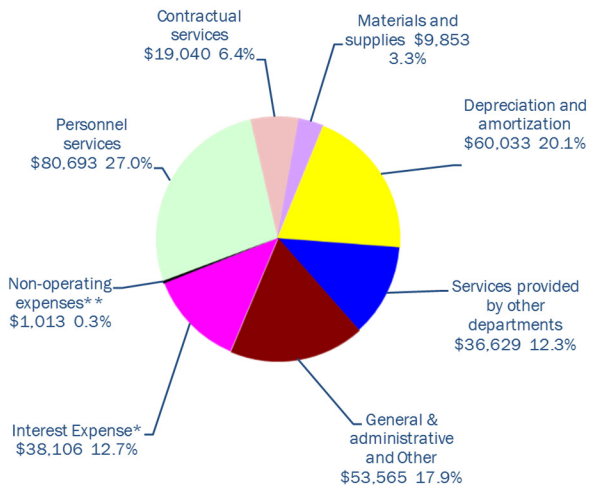
2019 Revenues - \$357,946



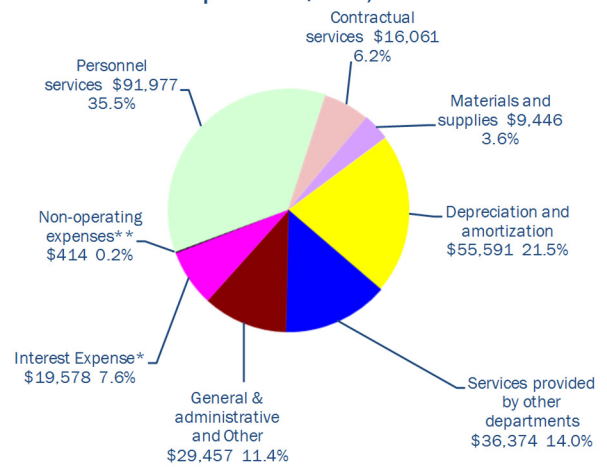
2018 Revenues - \$322,743



2019 Expenses - \$298,932



2018 Expenses - \$258,898

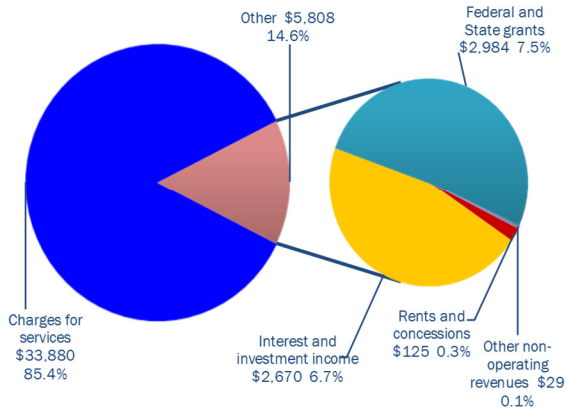


* Interest expenses are net of amortization of premium, refunding loss, and issuance costs.
 ** Other non-operating expenses include net loss from sale of assets.

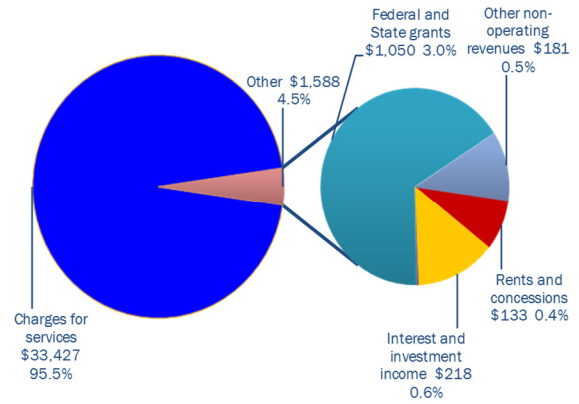
Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

Financial Trends
 Hetchy Water Fund
 Comparative Highlights of Revenues & Expenses
 Fiscal Years Ended 2019 and 2018
 (Dollars in Thousands)

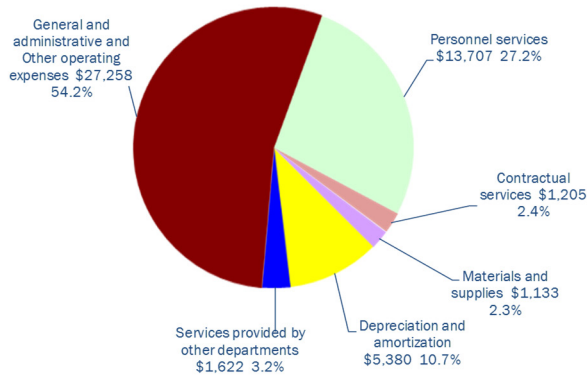
2019 Revenues - \$39,688



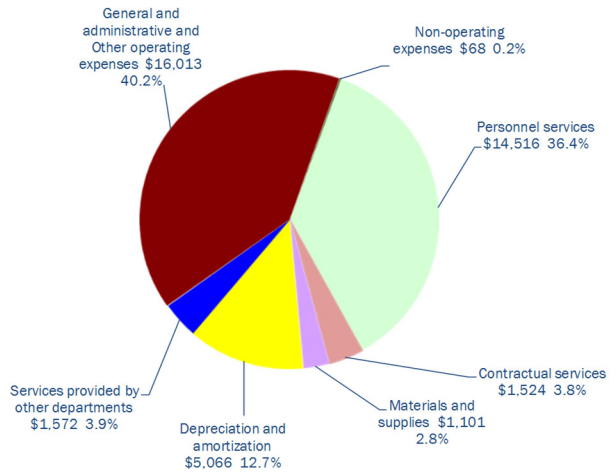
2018 Revenues - \$35,015



2019 Expenses - \$50,305



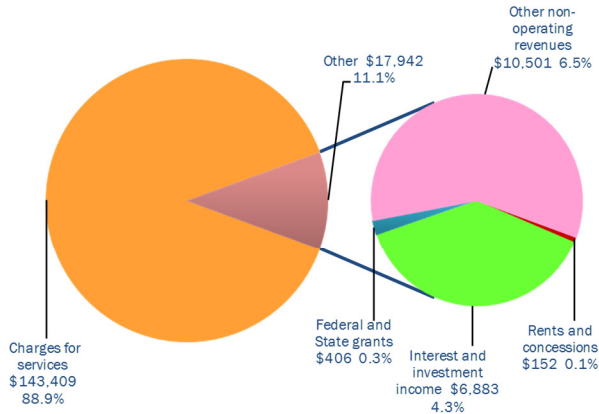
2018 Expenses - \$39,860



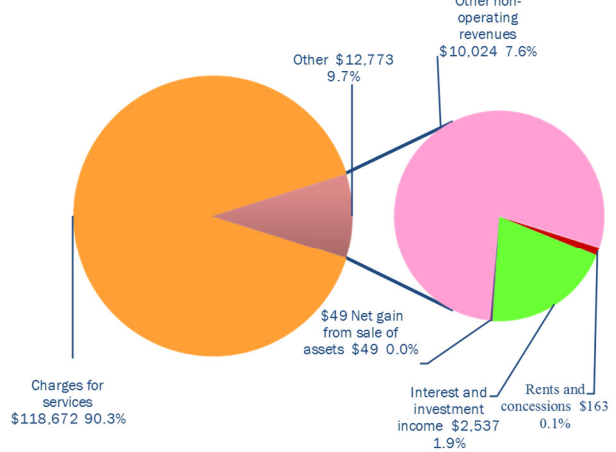
Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

Financial Trends
 Hetchy Power Fund
 Comparative Highlights of Revenues & Expenses
 Fiscal Years Ended 2019 and 2018
 (Dollars in Thousands)

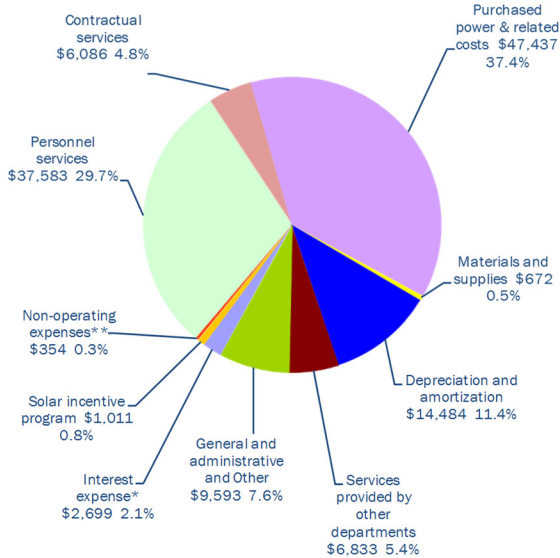
2019 Revenues - \$161,351



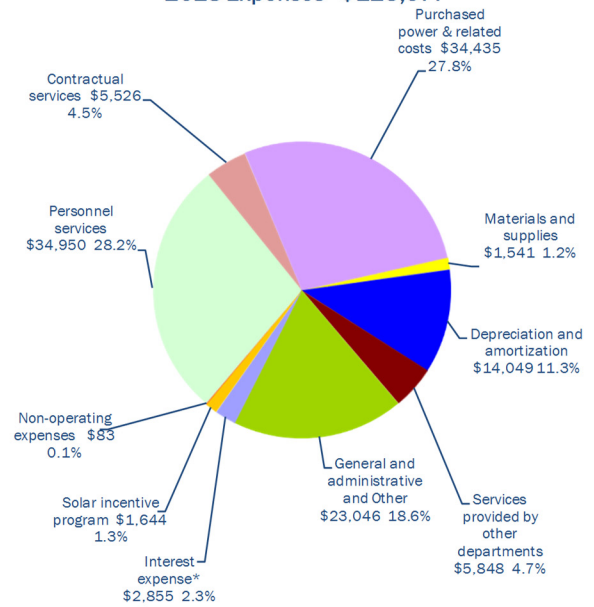
2018 Revenues - \$131,445



2019 Expenses - \$126,752



2018 Expenses - \$123,977



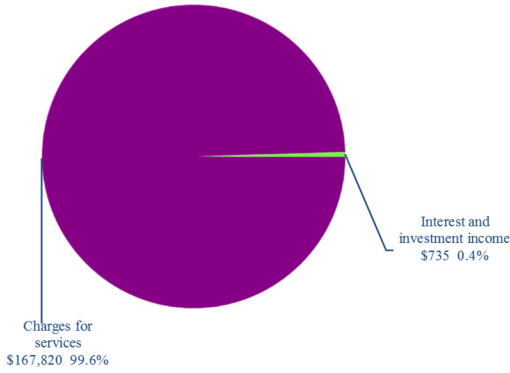
* Interest expenses are net of amortization of premium, discount, and issuance costs.

** Other non-operating expenses included net loss from sale of assets.

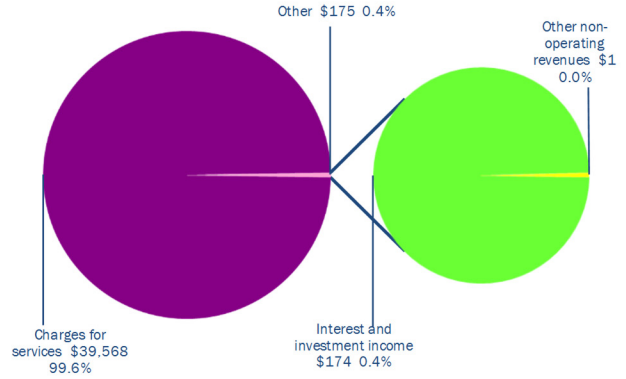
Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

Financial Trends
 CleanPowerSF
 Comparative Highlights of Revenues & Expenses
 Fiscal Years Ended 2019 and 2018
 (Dollars in Thousands)

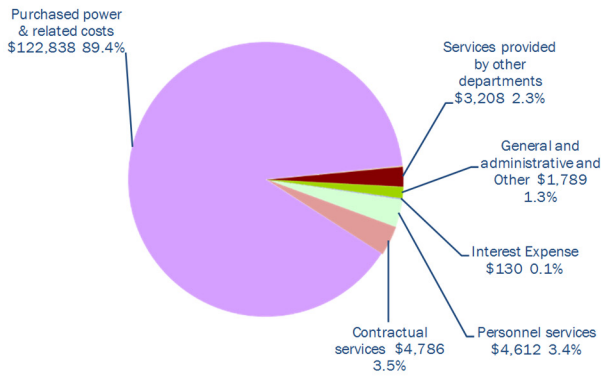
2019 Revenues - \$168,555



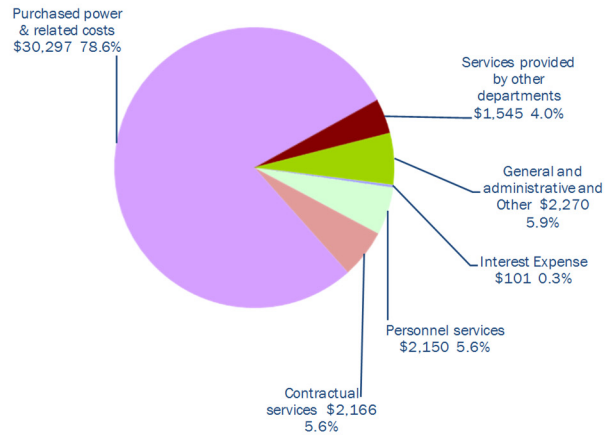
2018 Revenues - \$39,743



2019 Expenses - \$137,414



2018 Expenses - \$38,529



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 2010 to 2019
 (Dollars in Thousands)

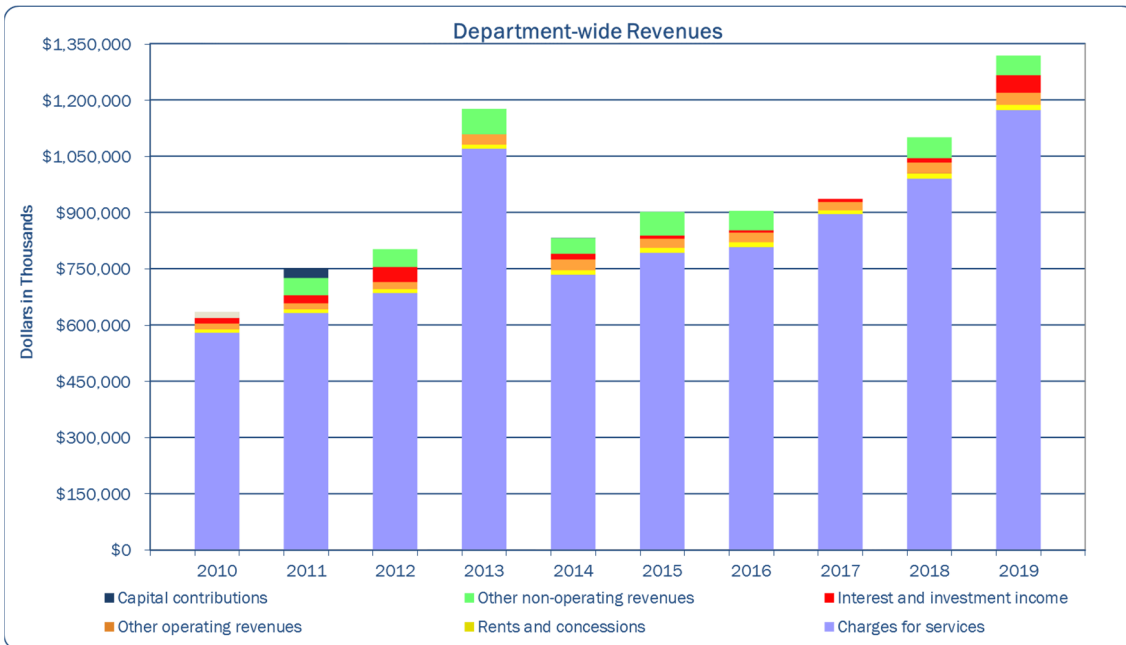
Revenues:	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Charges for services	\$ 579,077	631,753	684,863	1,069,674	733,746	792,199	807,259	895,472	989,842	1,172,573
Rents and concessions	8,829	9,643	10,447	10,736	11,727	13,336	13,096	9,734	13,813	13,989
Other operating revenues	15,745	16,250	19,061	27,541	28,944	24,317	25,672	22,445	29,043	32,296
Subtotal operating revenues	603,651	657,646	714,371	1,107,951	774,417	829,852	846,027	927,651	1,032,698	1,218,858
Interest and investment income	14,617	21,395	39,888	38	15,083	8,175	6,060	8,511	11,694	46,639
Other non-operating revenues	16,582	45,957	47,729	67,989	41,946	63,430	51,972	58,422	55,705	52,483
Capital contributions	-	26,154*	-	-	678**	-	-	-	-	-
Subtotal non-operating revenues	31,199	93,506	87,617	68,027	57,707	71,605	58,032	66,933	67,399	99,122
Total revenues	\$ 634,850	751,152	801,988	1,175,978	832,124	901,457	904,059	994,584	1,100,097	1,317,980

(Continued)

* Include transfers of \$6,510 in inventory and \$11,747 in capital assets for the auxiliary water supply system (AWSS) from the Fire Department. Include net transfers of \$7,897 in cash for the AWSS from the City and County of San Francisco.

** Include transfer of \$678 in capital asset from the Department of Emergency Management.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

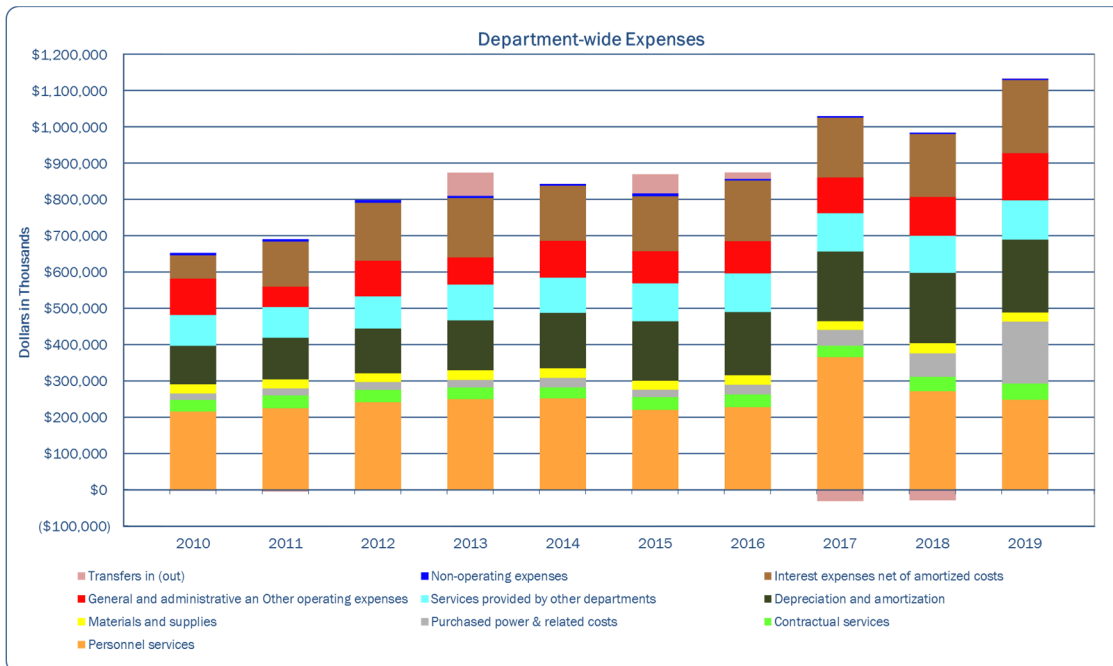


Financial Trends
 Department-wide - Changes in Net Position
 Fiscal Years Ended 2010 to 2019
 (Dollars in Thousands)

Expenses:	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Personnel services	\$ 215,695	224,794	241,621	249,927	252,068	220,385	227,930	365,494	271,888	248,189
Contractual services	32,189	35,334	33,911	32,082	30,133	35,216	34,915	31,563	39,408	44,832
Purchased power & related costs	17,726	19,269	21,539	20,891	26,215	20,296	26,792	43,407	64,732	170,275
Materials and supplies	25,146	24,884	23,963	26,557	26,411	24,842	26,128	23,972	28,024	25,130
Depreciation and amortization	105,950	114,676	123,249	137,252	152,742	163,525	173,978	191,997	193,457	200,712
Services provided by other departments	84,890	84,422	88,511	98,533	96,918	104,535	106,476	105,417	102,199	108,043
General and administrative and Other operating expenses	100,273	56,352	98,235	74,917	101,473	88,559	88,615	98,327	106,960	130,003
Subtotal operating expenses	581,869	559,731	631,029	640,159	685,960	657,358	684,834	860,177	806,668	927,184
Interest expenses	63,885	123,982	150,217	169,105	165,345	161,712	178,864	179,819	192,183	224,867
Amortization of premium, discount, refunding loss, and issuance costs	-	-	9,339	(5,607)	(13,908)	(10,554)	(11,950)	(15,090)	(19,188)	(23,722)
Non-operating expenses	7,094	6,892	7,908	5,986	5,206	7,916	4,439	4,466	4,129	3,766 ^^
Subtotal non-operating expenses	70,979	130,874	167,464	169,484	156,643	159,074	171,353	169,195	177,124	204,911
Total expenses	652,848	690,605	798,493	809,643	842,603	816,432	856,187	1,029,372	983,792	1,132,095
Change in net position before transfers and extraordinary item	(17,998)	60,547	3,495	366,335	(10,479)	85,025	47,872	(34,788)	116,305	185,885
Transfers in (out)	(1,893)	(4,490)	485	64,176 #	386	52,806	17,899	(30,644)	(28,371)	1,360
Extraordinary item:										
Rim fire – loss	-	-	-	-	(6,843)	-	-	-	-	-
Change in net position	(19,891)	56,057	3,980	430,511	(16,936)	137,831	65,771	(65,432)	87,934	187,245
Net position at beginning of year										
Beginning of year, as previously reported	1,917,281	1,897,390	1,953,447	1,971,500	2,366,565	2,349,629	2,225,451	2,292,646	2,225,790	2,270,925
Cumulative effect of accounting change due to error	-	-	-	-	-	-	-	-	(6,767)	-
Cumulative effect of accounting change	-	-	(21,373) ^	(35,446) ^	-	(262,009) ~	-	-	(36,032) Δ	-
Less: CleanPowerSF beginning net position	-	-	-	-	-	-	-	(1,424)	-	-
Beginning of year as restated	1,917,281	1,897,390	1,932,074	1,936,054	2,366,565	2,087,620	2,225,451	2,291,222	2,182,991	2,270,925
Net position at end of year	\$ 1,897,390	1,953,447	1,936,054	2,366,565	2,349,629	2,225,451	2,291,222	2,225,790	2,270,925	2,458,170

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.
 ^The beginning net position for fiscal years 2012 and 2013 have been restated for the retrospective application of GASB Statement No. 65.
 ^^Non-operating expense includes net loss from sales of assets.
 ~The beginning net position for fiscal year 2015 has been restated for the application of GASB Statement No. 68.
 Δ The beginning net position for 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
Water - Changes in Net Position
Fiscal Years Ended 2010 to 2019
(Dollars in Thousands)

Revenues:	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Charges for services	\$ 248,369	271,387	324,169	700,513 [^]	354,827	400,023	393,582	438,207	495,138	509,703
Rents and concessions	8,584	9,388	9,398	9,599	10,675	12,284	12,081	8,813	12,906	13,010
Other operating revenues	8,265	7,620	8,534	11,358	14,380	13,740	13,853	13,311	17,595	19,678
Subtotal operating revenues	265,218	288,395	342,101	721,470	379,882	426,047	419,516	460,331	525,639	542,391
Interest and investment income	9,823	17,283	33,450	(281)	10,907	5,789	3,595	4,331	6,448	15,650
Other non-operating revenues	5,851	31,499	34,180	37,921	29,197	47,314	31,253	37,405	39,064	32,399
Capital contributions	-	26,154 [*]	-	-	310 ^{**}	-	-	-	-	-
Subtotal non-operating revenues	15,674	74,936	67,630	37,640	40,414	53,103	34,848	41,736	45,512	48,049
Total revenues	\$ 280,892	363,331	409,731	759,110	420,296	479,150	454,364	502,067	571,151	590,440

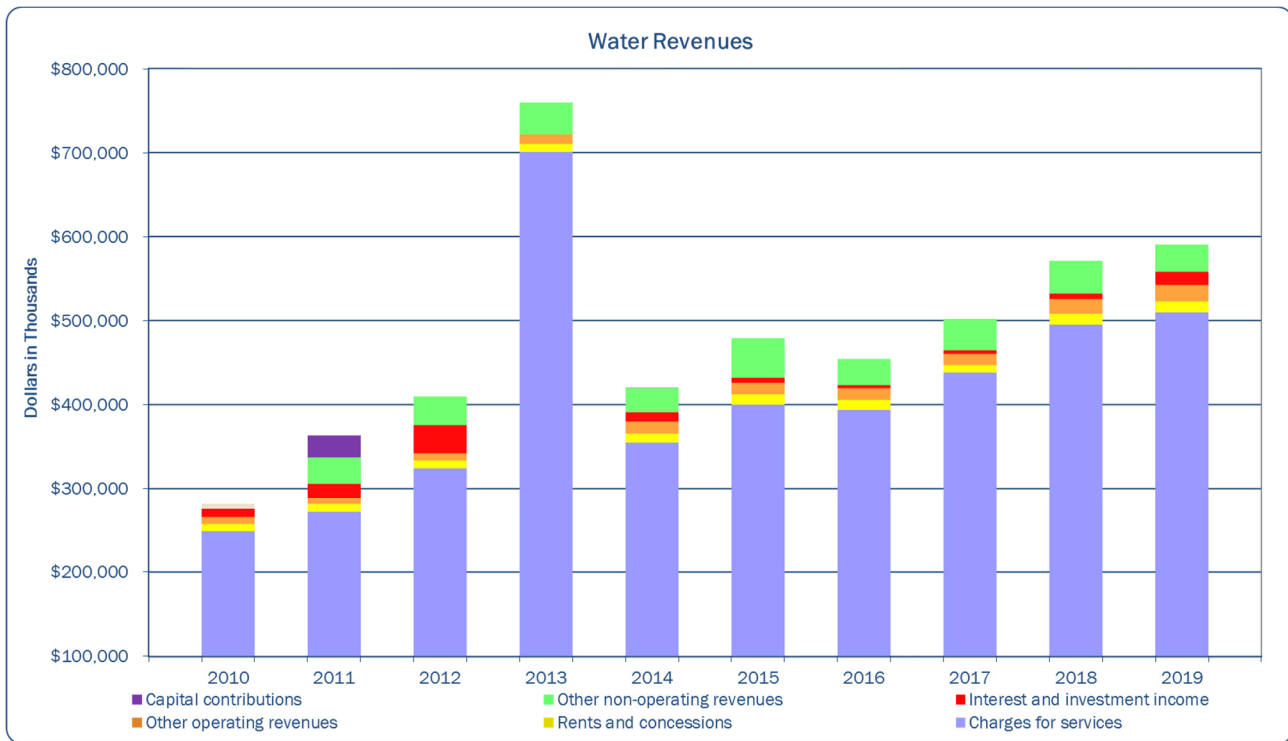
(Continued)

* Include transfers of \$6,510 in inventory and \$11,747 in capital assets for the AWSS from the Fire Department. Include net transfers of \$7,897 in cash for the AWSS from the City and County of San Francisco.

** Include transfer of \$310 in capital asset from the Department of Emergency Management.

[^] Include a one-time early repayment of \$356,139 from BAWSCA for capital costs recovery.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.

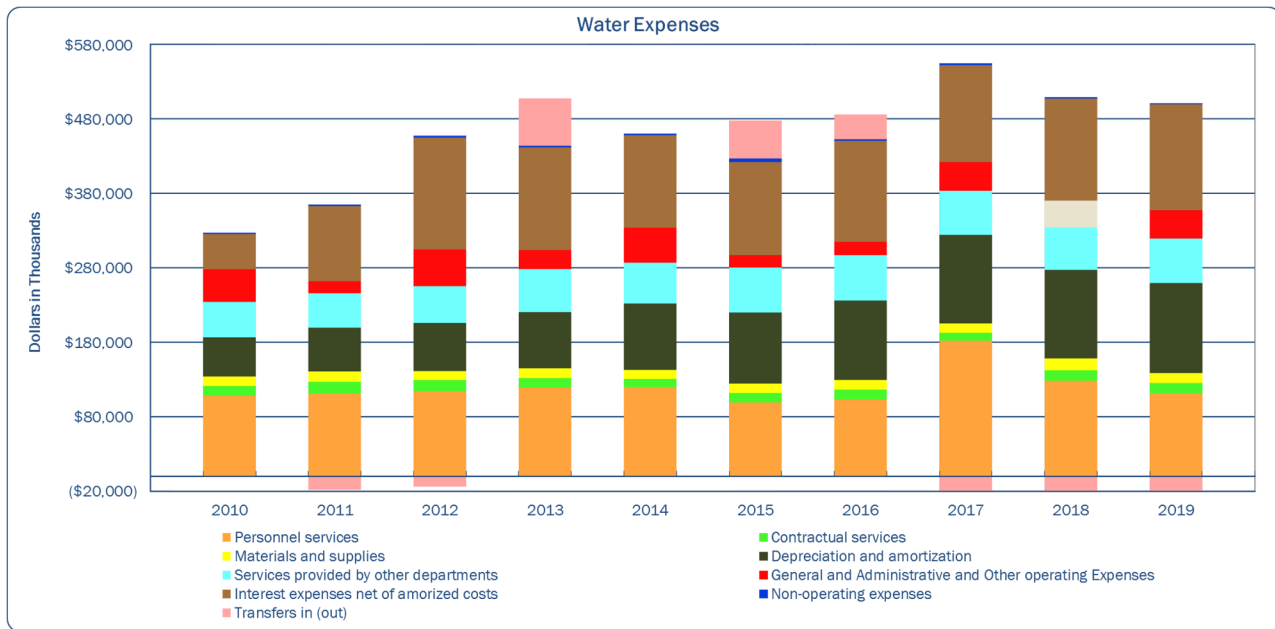


Financial Trends
 Water - Changes in Net Position
 Fiscal Years Ended 2010 to 2019
 (Dollars in Thousands)

Expenses:	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Personnel services	\$ 108,178	111,363	114,337	119,151	119,849	99,192	103,027	182,034	128,295	111,594
Contractual services	13,087	15,586	14,838	12,819	10,921	12,729	13,451	10,664	14,131	13,715
Materials and supplies	12,748	13,839	12,140	13,074	12,154	12,667	12,896	12,564	15,936	13,421
Depreciation and amortization	52,571	58,752	64,595	75,448	89,026	95,384	106,666	118,826	118,751	120,815
Services provided by other departments	47,574	46,308	49,395	57,684	54,856	60,365	60,868	59,173	56,860	59,751
General and administrative and Other operating expenses	43,812	16,079	49,257 *	25,563	46,749	16,613	17,878	38,566	36,174	37,798
Subtotal operating expenses	277,970	261,927	304,562	303,739	333,555	296,950	314,786	421,827	370,147	357,094
Interest expenses	47,272	100,875	131,334	147,741	136,645	137,106	153,258	148,075	164,001	177,998
Amortization of premium, discount, refunding loss, and issuance costs	-	-	9,363	(5,002)	(6,169)	(6,100)	(8,849)	(9,029)	(13,540)	(17,788)
Non-operating expenses	1,773	2,121	2,661	2,327	2,089	4,829	2,210	2,607	1,920	1,388
Subtotal non-operating expenses	49,045	102,996	143,358	145,066	132,565	135,835	146,619	141,653	152,381	161,598
Total expenses	327,015	364,923	447,920	448,805	466,120	432,785	461,405	563,480	522,528	518,692
Change in net position before transfers	(46,123)	(1,592)	(38,189)	310,305	(45,824)	46,365	(7,041)	(61,413)	48,623	71,748
Transfers in (out)	(493)	(17,834)	(13,585)	63,484 #	405	50,995	33,244	(59,988)	(30,986)	(19,134)
Change in net position	(46,616)	(19,426)	(51,774)	373,789	(45,419)	97,360	26,203	(121,401)	17,637	52,614
Net position at beginning of year										
Beginning of year, as previously reported	462,300	415,684	396,258	358,495	699,631	654,212 **	596,465	622,668	501,267 Δ	489,524
Cumulative effect of accounting change	-	-	(18,642) ~	(32,653) ~	-	(155,107) **	-	-	(29,380)	-
Beginning of year as restated	462,300	415,684	377,616	325,842	699,631	499,105	596,465	622,668	471,887	489,524
Net Position at end of year	\$ 415,684	396,258	325,842	699,631	654,212	596,465	622,668	501,267	489,524	542,138

* Increase in other operating expenses due to construction contract expenses net of capitalization for higher construction activities.
 # 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.
 ~ The beginning net position for fiscal years 2012 and 2013 have been restated for the retrospective application of GASB Statement No. 65.
 ** The beginning net position for fiscal year 2015 has been restated for the application of GASB Statement No. 68.
 Δ The beginning net position for 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.



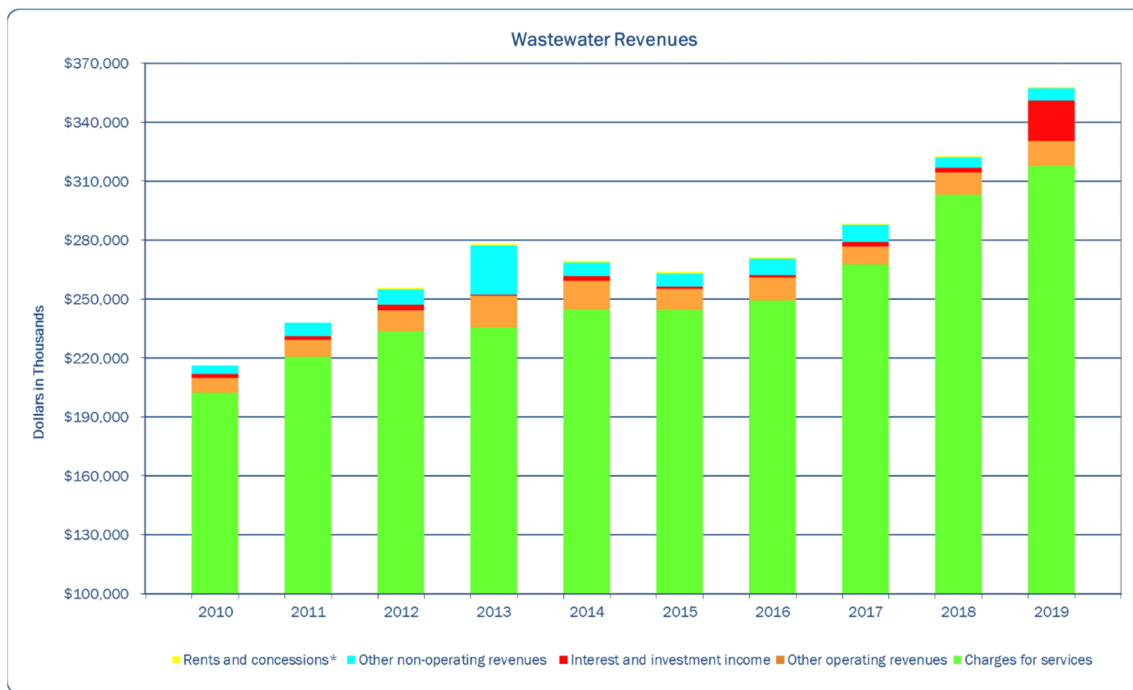
Financial Trends
Wastewater - Changes in Net Position
 Fiscal Years Ended 2010 to 2019
 (Dollars in Thousands)

Revenues:	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Charges for services	\$ 202,363	220,586	233,628	235,479	244,705	244,604	249,203	267,601	303,037	317,761
Rents and concessions*	–	–	806	892	828	821	753	606	611	702
Other operating revenues	7,480	8,630	10,527	16,183	14,564	10,577	11,819	9,134	11,448	12,618
Subtotal operating revenues	209,843	229,216	244,961	252,554	260,097	256,002	261,775	277,341	315,096	331,081
Interest and investment income	2,056	1,927	2,975	524	2,400	1,207	1,185	2,327	2,317	20,701
Other non-operating revenues	4,236	6,841	7,692	24,886	6,882	6,564	8,263	8,633	5,330	6,164
Subtotal non-operating revenues	6,292	8,768	10,667	25,410	9,282	7,771	9,448	10,960	7,647	26,865
Total revenues	\$ 216,135	237,984	255,628	277,964	269,379	263,773	271,223	288,301	322,743	357,946

(Continued)

* Beginning fiscal year 2012, the amounts for rents and concessions are reclassified from other operating revenues.

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 2010 to 2019
(Dollars in Thousands)

Expenses:	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Personnel services	\$ 70,992	73,630	82,709	84,155	85,114	76,396	79,088	115,288	91,977	80,693
Contractual services	12,018	12,577	13,257	13,418	14,314	13,841	15,069	13,825	16,061	19,040
Materials and supplies	9,888	8,338	8,921	10,481	10,830	9,815	10,192	8,736	9,446	9,853
Depreciation and amortization	40,748	42,217	44,799	46,347	48,402	50,254	50,799	55,441	55,591	60,033
Services provided by other departments	32,305	32,689	33,292	34,141	35,274	36,212	36,157	36,832	36,374	36,629
General and administrative and Other operating expenses	19,561	9,633 **	12,879 **	19,718	22,406	29,967	30,248	14,098	29,457	53,565
Subtotal operating expenses	185,512	179,084	195,857	208,260	216,340	216,485	221,553	244,220	238,906	259,813
Interest expenses	15,891	22,545	18,798	19,723	27,126	22,791	22,251	28,474	24,978	43,803
Amortization of premium, refunding loss, and issuance costs	—	—	(62)	(612)	(7,711)	(5,347)	(2,979)	(5,806)	(5,400)	(5,697)
Non-operating expenses	—	300	1,962	566	533	280	485	383	414	1,013 ^^
Subtotal non-operating expenses	15,891	22,845	20,698	19,677	19,948	17,724	19,757	23,051	19,992	39,119
Total expenses	201,403	201,929	216,555	227,937	236,288	234,209	241,310	267,271	258,898	298,932
Change in net position before transfers	14,732	36,055	39,073	50,027	33,091	29,564	29,913	21,030	63,845	59,014
Transfers in (out)	* — *	(110)	(1)	888	19	(232)	(16,025)	(30,707)	(26,960)	(3,996)
Change in net position	14,732	35,945	39,072	50,915	33,110	29,332	13,888	(9,677)	36,885	55,018
Net position at beginning of year										
Beginning of year, as previously reported	1,010,604	1,025,336	1,061,281	1,100,353	1,148,757	1,181,867	1,142,052	1,155,940	1,146,263	1,174,125
Cumulative effect of accounting change due to error	—	—	—	—	—	—	—	—	(6,767)	—
Cumulative effect of accounting change	—	—	(2,511) ^	(2,511) ^	—	(69,147) ~	—	—	(2,256) ∆	—
Beginning of year as restated	1,010,604	1,025,336	1,058,770	1,097,842	1,148,757	1,112,720	1,142,052	1,155,940	1,137,240	1,174,125
Net Position at end of year	\$ 1,025,336	1,061,281	1,097,842	1,148,757	1,181,867	1,142,052	1,155,940	1,146,263	1,174,125	1,229,143

* No refunding loss and transfers in (out) from fiscal year 2010.

** The decrease in fiscal year ended 2011 was due to lower damage claims expenses, and the increase in fiscal year ended 2012 was mainly due to the estimated judgment and claims liability cost.

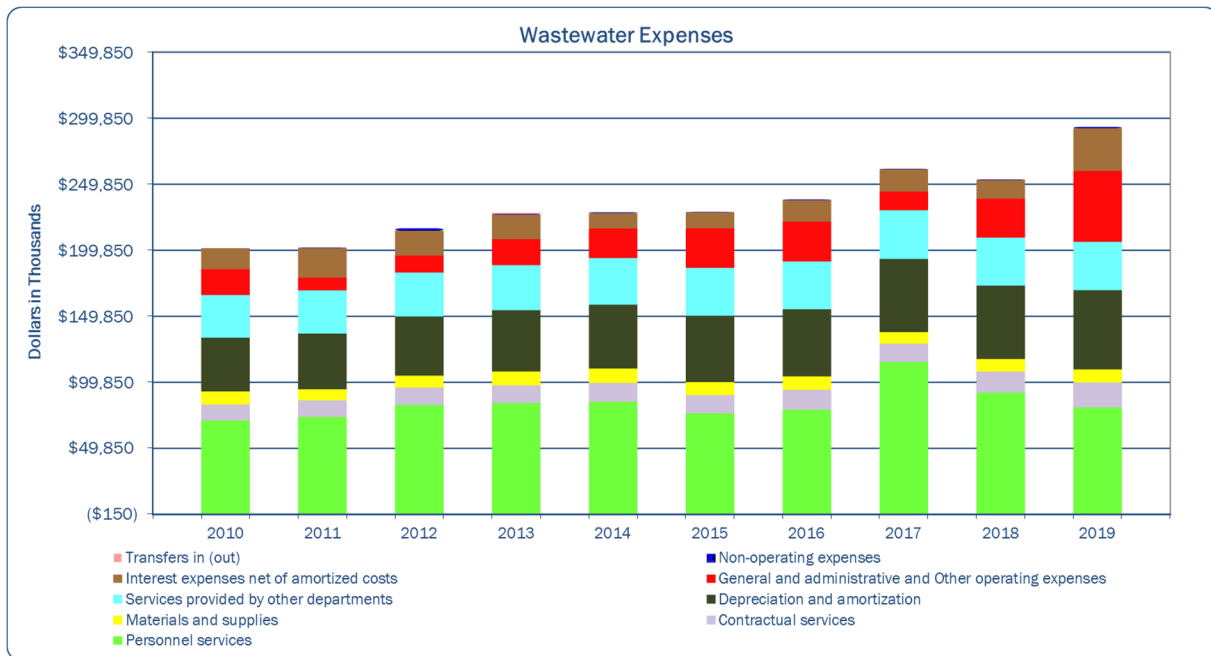
^ The beginning net position for fiscal years 2012 and 2013 have been restated for the retrospective application of GASB Statement No. 65.

^^ Non-operating expense includes net loss from sales of assets.

~ The beginning net position for fiscal year 2015 has been restated for the 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.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



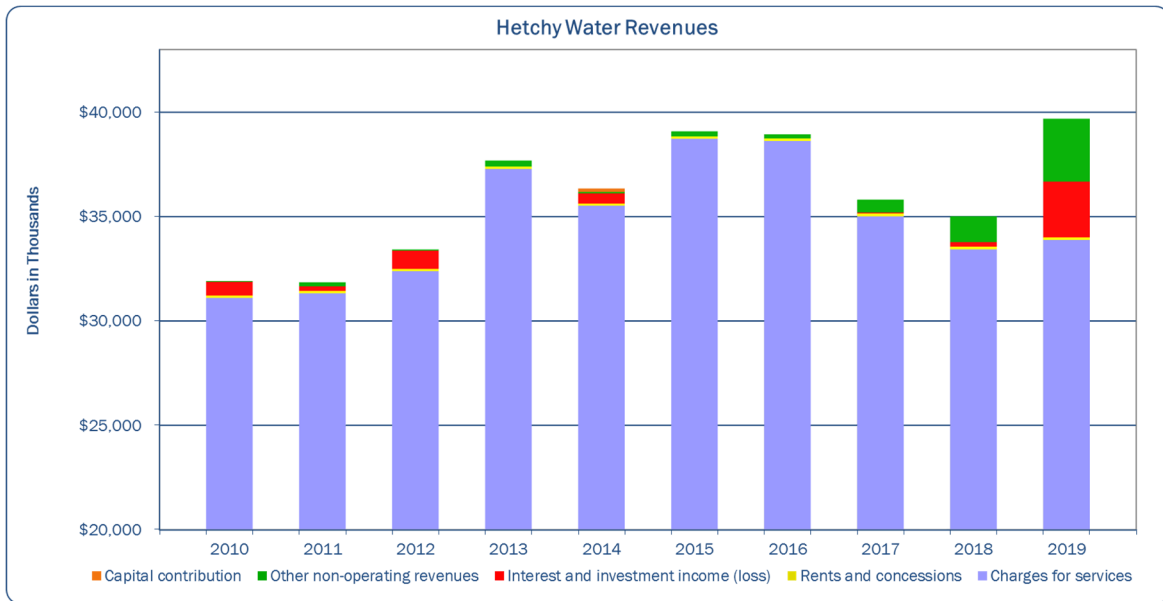
Financial Trends
Hetchy Water - Changes in Net Position
Fiscal Years Ended 2010 to 2019
(Dollars in Thousands)

Revenues:	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Charges for services	31,109	31,326	32,386	37,284	35,521	38,731	38,624	35,008	33,427	33,880
Rents and concessions	110	115	109	110	101	104	118	142	133	125
Subtotal operating revenues	31,219	31,441	32,495	37,394	35,622	38,835	38,742	35,150	33,560	34,005
Interest and investment income (loss)	657	220	874	(344)	487	(74)	(38)	46	218	2,670
Other non-operating revenues	39	193	57	290	69	250	200	616	1,237	3,013
Capital contribution	-	-	-	-	166*	-	-	-	-	-
Subtotal non-operating revenues	696	413	931	(54)	722	176	162	662	1,455	5,683
Total revenues	31,915	31,854	33,426	37,340	36,344	39,011	38,904	35,812	35,015	39,688

(Continued)

* Include transfer of \$166 in capital asset from the Department of Emergency Management.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



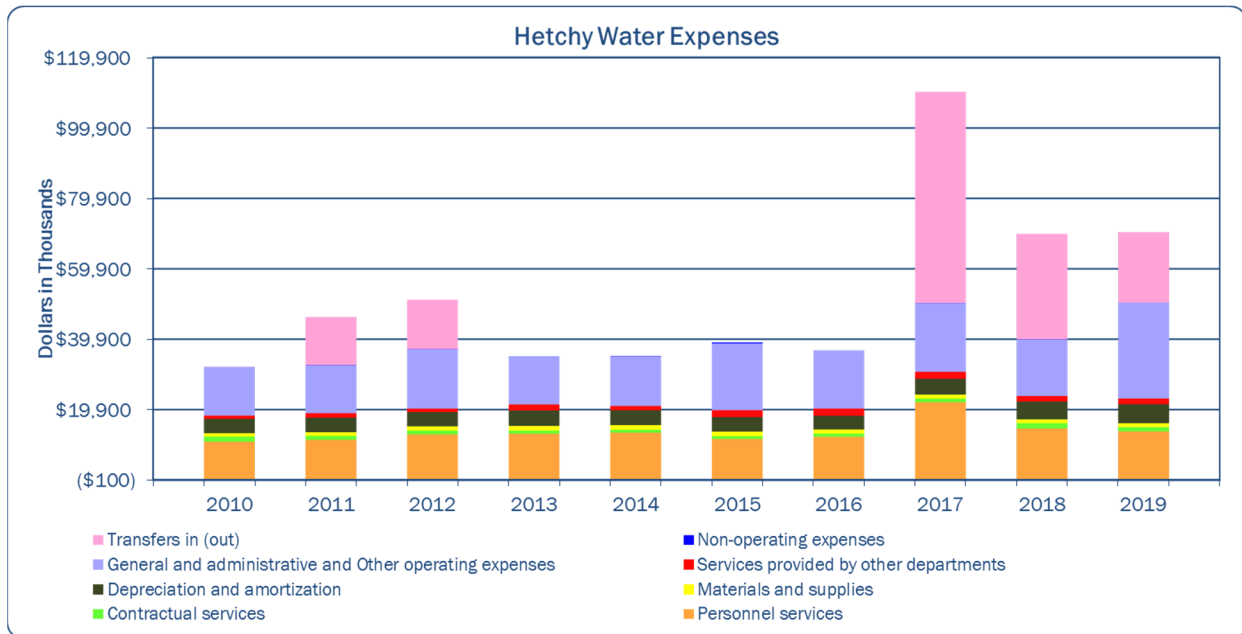
Financial Trends
Hetchy Water - Changes in Net Position
Fiscal Years Ended 2010 to 2019
(Dollars in Thousands)

Expenses:	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Personnel services	\$ 10,770	11,327	12,856	13,057	13,343	11,557	12,183	21,998	14,516	13,707
Contractual services	1,457	1,108	1,090	889	835	794	902	1,017	1,524	1,205
Materials and supplies	970	1,069	1,208	1,331	1,352	1,321	1,191	1,161	1,101	1,133
Depreciation and amortization	4,092	4,125	4,059	4,378	4,186	4,102	3,874	4,505	5,066	5,380
Services provided by other departments	924	1,261	984	1,706	1,211	1,979	2,054	1,962	1,572	1,622
General and administrative and Other operating expenses	13,840	13,589	16,806	13,540	14,098	18,948	16,332	19,456	16,013	27,258
Subtotal operating expenses	32,053	32,479	37,003	34,901	35,025	38,701	36,536	50,099	39,792	50,305
Non-operating expenses	—	68	68	68	99	313	68	68	68	—
Total expenses	32,053	32,547	37,071	34,969	35,124	39,014	36,604	50,167	39,860	50,305
Change in net position before transfers and extraordinary item	(138)	(693)	(3,645)	2,371	1,220	(3)	2,300	(14,355)	(4,845)	(10,617)
Transfers in (out)	—	13,638	14,073	—	—	—	—	60,000	30,000	20,000
Extraordinary item: Rim fire – loss	—	—	—	—	(2,709)	—	—	—	—	—
Change in net position	(138)	12,945	10,428	2,371	(1,489)	(3)	2,300	45,645	25,155	9,383
Net position at beginning of year										
Beginning of year, as previously reported	113,287	113,149	126,094	136,522	138,893	137,404	120,411	122,711	168,356	191,790
Cumulative effect of accounting change	—	—	—	—	—	(16,990) [#]	—	—	(1,721) [△]	—
Beginning of year as restated	113,287	113,149	126,094	136,522	138,893	120,414	120,411	122,711	166,635	191,790
Net position at end of year	\$ 113,149	126,094	136,522	138,893	137,404	120,411	122,711	168,356	191,790	201,173

[#] The beginning net position for fiscal year 2015 has been restated for the 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.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



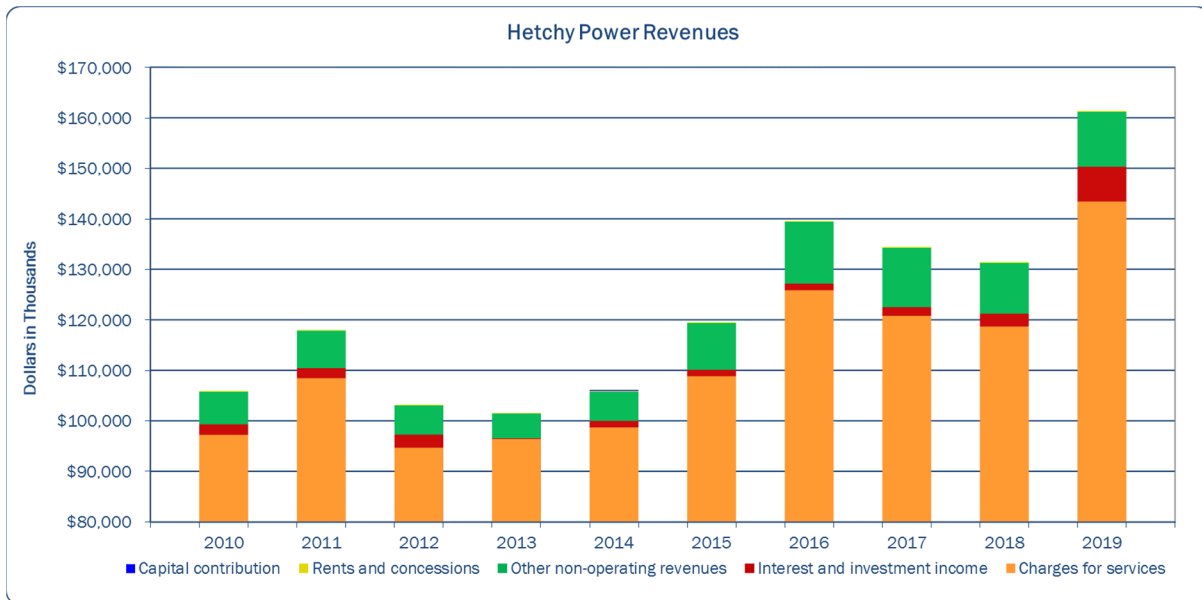
Financial Trends
 Hetchy Power - Changes in Net Position
 Fiscal Years Ended 2010 to 2019
 (Dollars in Thousands)

Revenues:	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Charges for services	\$ 97,236	108,454	94,680	96,398	98,693	108,841	125,850	120,789	118,672	143,409
Rents and concessions	135	140	134	135	123	127	144	173	163	152
Subtotal operating revenues	97,371	108,594	94,814	96,533	98,816	108,968	125,994	120,962	118,835	143,561
Interest and investment income	2,081	1,965	2,589	139	1,289	1,253	1,318	1,718	2,537	6,883
Other non-operating revenues	6,456	7,424	5,800	4,892	5,798	9,302	12,256	11,764	10,073	10,907
Capital contribution	-	-	-	-	202*	-	-	-	-	-
Subtotal non-operating revenues	8,537	9,389	8,389	5,031	7,289	10,555	13,574	13,482	12,610	17,790
Total revenues	\$ 105,908	117,983	103,203	101,564	106,105	119,523	139,568	134,444	131,445	161,351

(Continued)

* Include transfer of \$202 in capital asset from the Department of Emergency Management.

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 2010 to 2019
 (Dollars in Thousands)

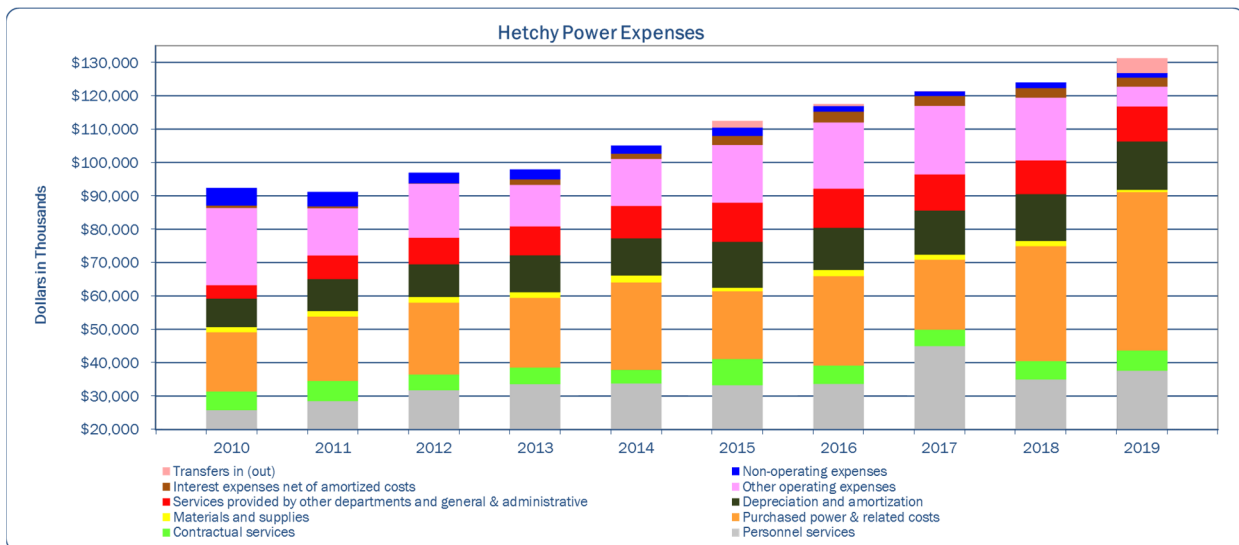
Expenses:	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Personnel services	\$ 25,755	28,474	31,719	33,564	33,762	33,240	33,632	44,961	34,950	37,583
Contractual services	5,627	6,063	4,726	4,956	4,063	7,852	5,493	4,916	5,526	6,086
Purchased power & related costs	17,726	19,269	21,539	20,891	26,215	20,296	26,792	20,970	34,435	47,437
Materials and supplies	1,540	1,638	1,694	1,671	2,075	1,039	1,849	1,510	1,541	672
Depreciation and amortization	8,539	9,582	9,796	11,079	11,128	13,785	12,639	13,225	14,049	14,484
Services provided by other departments and general & administrative	4,018	7,101	7,947	8,665	9,711	11,717	11,716	10,818	10,086	10,493
Other operating expenses	23,129	14,114	16,186	12,433	14,086	17,293	19,838	20,535	18,808	5,933
Subtotal operating expenses	86,334	86,241	93,607	93,259	101,040	105,222	111,959	116,935	119,395	122,688
Interest expenses	722	562	85	1,641	1,574	1,815	3,355	3,200	3,103	2,936
Amortization of premium, discount, and issuance costs	—	—	38	7	(28)	893	(122)	(255)	(248)	(237)
Non-operating expenses	5,321	4,403	3,217	3,025	2,485	2,494	1,676	1,408	1,727	1,365
Total expenses	92,377	91,206	96,947	97,932	105,071	110,424	116,868	121,288	123,977	126,752
Change in net position before transfers and extraordinary item	13,531	26,777	6,256	3,632	1,034	9,099	22,700	13,156	7,468	34,599
Transfers in (out)	(1,400)	(184)	(2)	(196)	(38)	2,043	680	51	(425)	4,490
Extraordinary item: Rim fire – loss	—	—	—	—	(4,134)	—	—	—	—	—
Change in net position	12,131	26,593	6,254	3,436	(3,138)	11,142	23,380	13,207	7,043	39,089
Net position at beginning of year										
Beginning of year, as previously reported	331,090	343,221	369,814	376,130	379,284	376,146	366,523	389,903	401,686	406,626
Cumulative effect of accounting change	—	—	(220) *	(282) *	—	(20,765) ^	—	—	(2,103) △	—
Less: CleanPowerSF beginning net position	—	—	—	—	—	—	—	(1,424)	—	—
Beginning of year as restated	331,090	343,221	369,594	375,848	379,284	355,381	366,523	388,479	399,583	406,626
Net position at end of year	\$ 343,221	369,814	375,848	379,284	376,146	366,523	389,903	401,686	406,626	445,715

* The beginning net position for fiscal years 2012 and 2013 have been restated for the retrospective application of GASB Statement No. 65.

^ The beginning net position for fiscal year 2015 has been restated for the 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.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



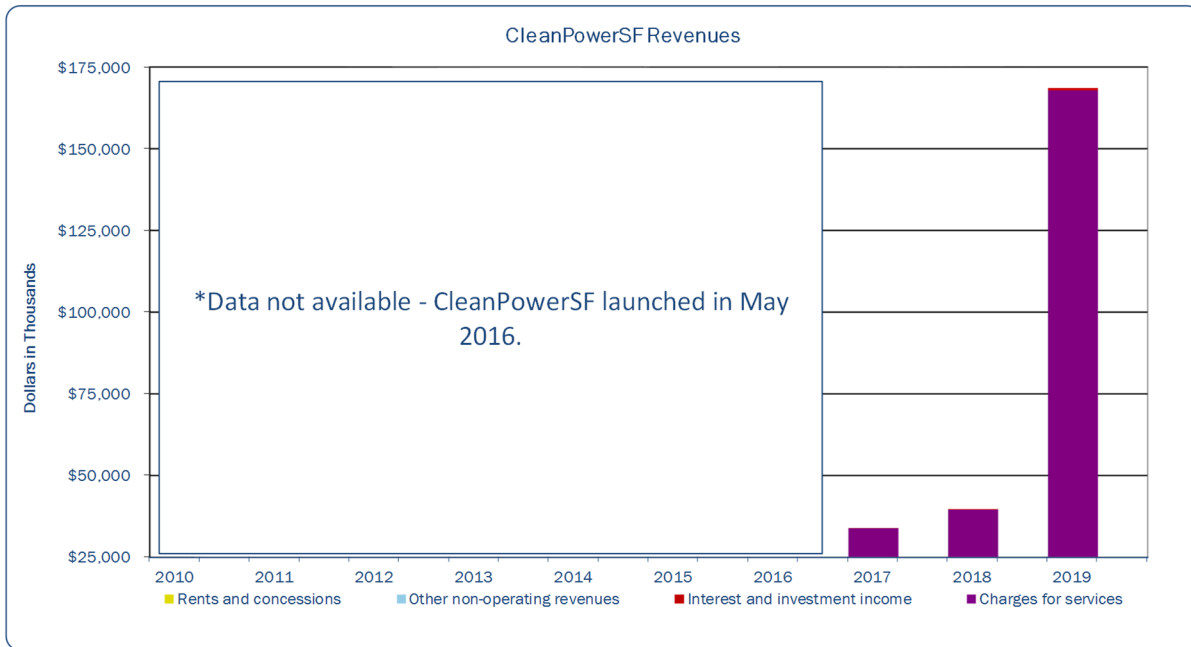
Financial Trend
 CleanPowerSF - Changes in Net Position
 Fiscal Years Ended 2017 to 2019
 (Dollars in Thousands)

Revenues:	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Charges for services	*Data not available - CleanPowerSF launched in May 2016.							33,867	39,568	167,820
Rents and concessions								–	–	–
Subtotal operating revenues								33,867	39,568	167,820
Interest and investment income								89	174	735
Other non-operating revenues								4	1	–
Subtotal non-operating revenues								93	175	735
Total revenues								33,960	39,743	168,555

(Continued)

* CleanPowerSF was presented as part of Hetchy Power in fiscal year 2016.

Source: City and County of San Francisco Financial System and San Francisco Public Utilities Commission Audited Financial Statements.



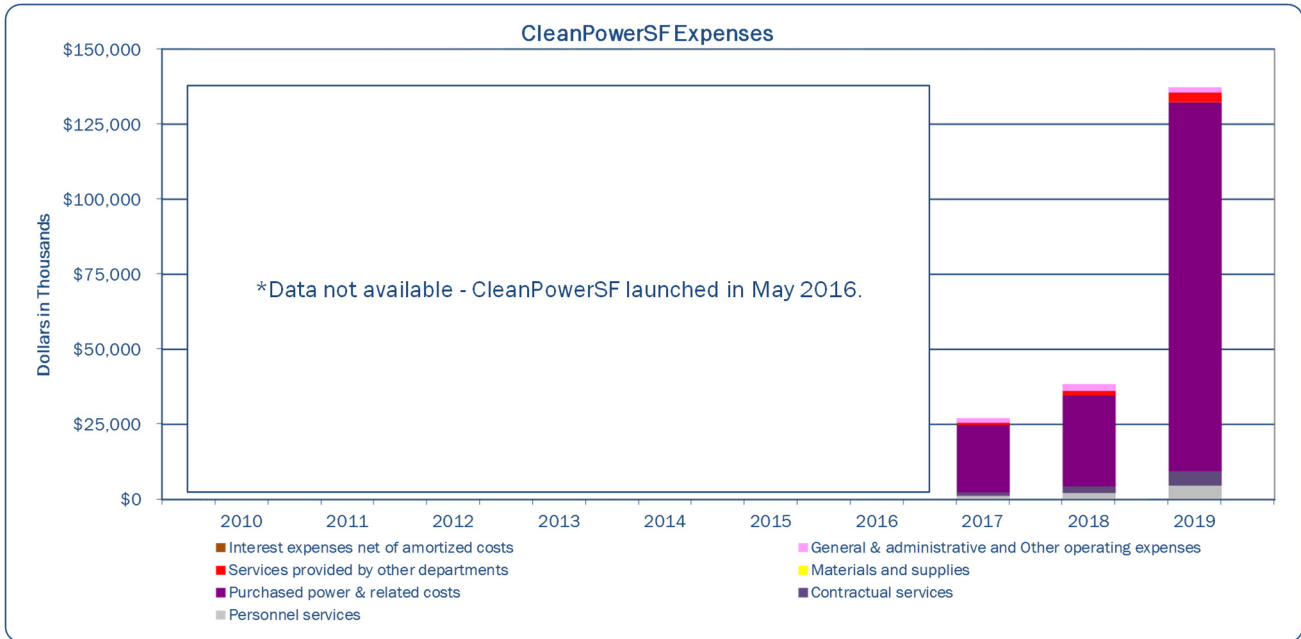
Financial Trend
CleanPowerSF - Changes in Net Position
Fiscal Years Ended 2017 to 2019
(Dollars in Thousands)

Expenses:	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Personnel services	\$							1,213	2,150	4,612
Contractual services								1,141	2,166	4,786
Purchased power & related costs								22,437	30,297	122,838
Materials and supplies								1	-	51
Services provided by other departments								734	1,545	3,208
General & administrative and other operating expenses								1,570	2,270	1,789
Subtotal operating expenses								27,096	38,428	137,284
Interest expenses								70	101	130
Total expenses								27,166	38,529	137,414
Change in net position								6,794	1,214	31,141
Net position at beginning of year										
Beginning of year, as previously reported								1,424	8,218	8,860
Cumulative effect of accounting change								-	(572) [△]	
Beginning of year as restated								1,424	7,646	8,860
Net position at end of year	\$							8,218	8,860	40,001

*Data not available - CleanPowerSF launched in May 2016.

* CleanPowerSF was presented as part of Hetchy Power in fiscal year 2016.
 △ The beginning net position for 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.

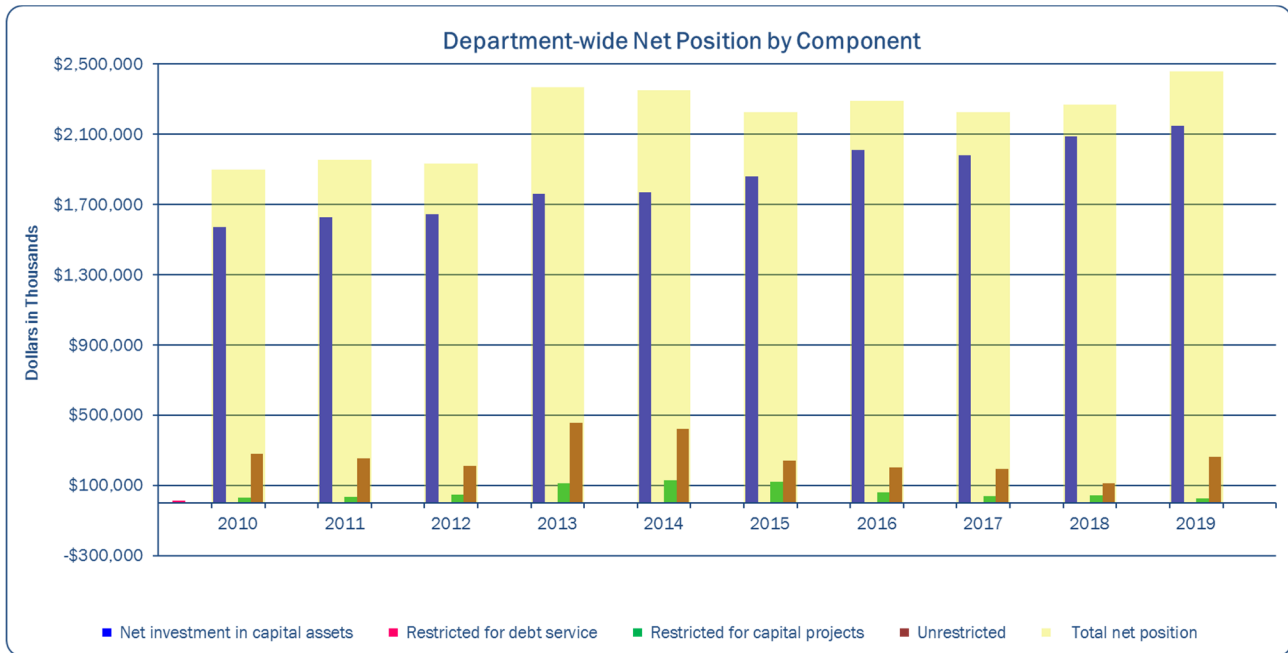


Department-wide - Summary of Net Position by Component
 Fiscal Years Ended 2010 to 2019
 (Dollars in Thousands)

	2010	2011	2012 [^]	2013 [^]	2014	2015 [*]	2016	2017	2018 [△]	2019
Net investment in capital assets \$	1,572,805	1,627,228	1,645,558	1,762,526	1,769,815	1,859,439	2,011,814	1,979,445	2,087,816	2,147,756
Restricted for debt service	13,550	31,775	28,240	33,683	25,990	1,704	13,409	12,451	25,079	18,617
Restricted for capital projects	30,191	37,244	47,734	114,299	131,590	120,496	60,357	39,557	44,690	26,906
Unrestricted	280,844	257,200	214,522	456,057	422,234	243,812	205,642	194,337	113,340	264,891
Total net position	\$ 1,897,390	1,953,447	1,936,054	2,366,565	2,349,629	2,225,451	2,291,222	2,225,790	2,270,925	2,458,170

[^] The beginning net position for fiscal years 2012 and 2013 have been restated for the retrospective application of GASB Statement No. 65.
^{*} The beginning net position for fiscal year 2015 have been restated for the cumulative effect of accounting change per GASB Statement No. 68.
[△] The beginning net position for 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.

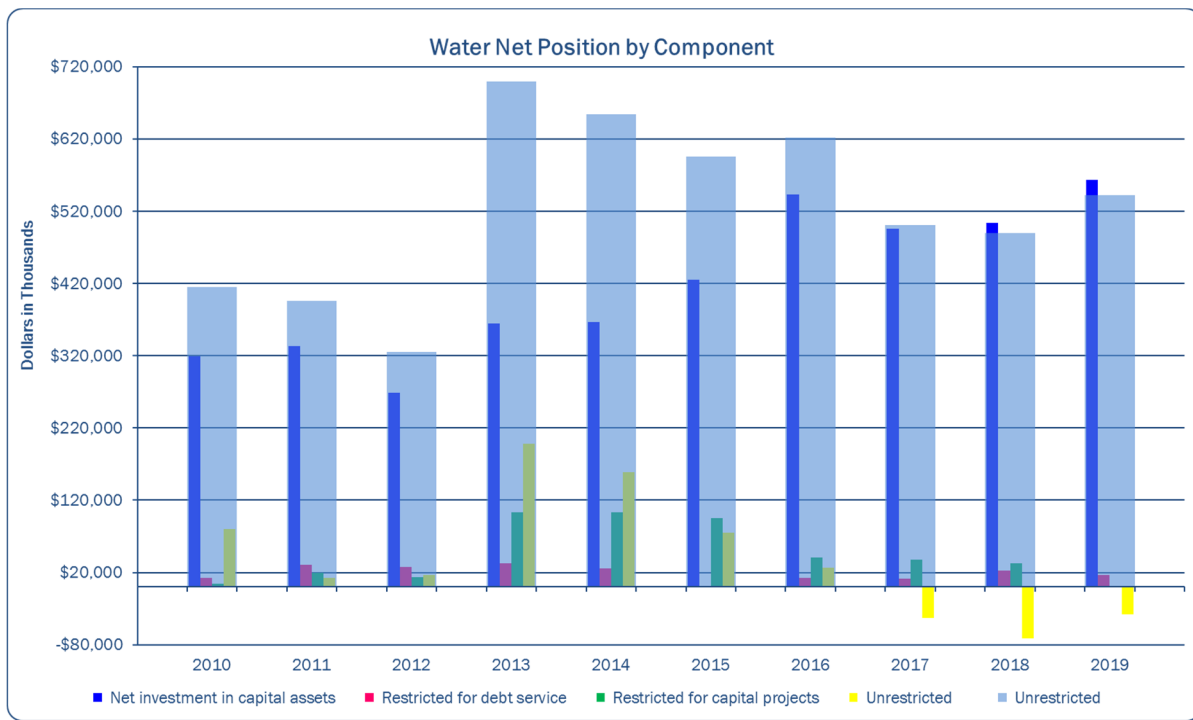


Financial Trends
Water - Summary of Net Position by Component
Fiscal Years Ended 2010 to 2019
(Dollars in Thousands)

	2010	2011	2012 [^]	2013 [^]	2014	2015 [*]	2016	2017	2018 [△]	2019
Net investment in capital assets	\$ 319,581	333,386	268,614	364,863	366,799	425,073	543,327	495,868	504,476	563,457
Restricted for debt service	12,073	30,840	27,213	32,723	25,356	1,053	12,122	10,989	22,933	16,193
Restricted for capital projects	4,346	19,163	13,665	103,616	103,154	95,735	40,743	37,904	32,978	-
Unrestricted	79,684	12,869	16,350	198,429	158,903	74,604	26,476	(43,494)	(70,863)	(37,512)
Total net position	\$ 415,684	396,258	325,842	699,631	654,212	596,465	622,668	501,267	489,524	542,138

[^] The beginning net position for fiscal years 2012 and 2013 have been restated for the retrospective application of GASB Statement No. 65.
^{*} The beginning net position for fiscal year 2015 have been restated for the cumulative effect of accounting change per GASB Statement No. 68.
[△] The beginning net position for 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.

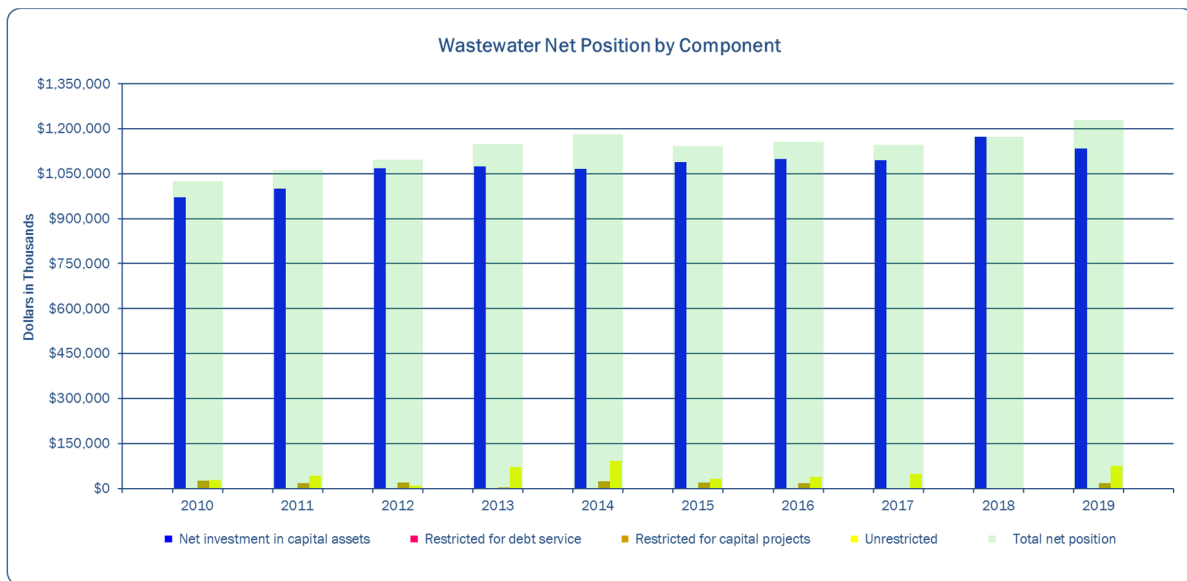


Financial Trends
Wastewater - Summary of Net Position by Component
Fiscal Years Ended 2010 to 2019
(Dollars in Thousands)

	2010	2011	2012 [^]	2013 [^]	2014	2015 [*]	2016	2017	2018 [△]	2019
Net investment in capital assets	\$ 970,526	1,000,242	1,067,586	1,074,526	1,066,814	1,088,552	1,098,723	1,095,165	1,172,623	1,133,662
Restricted for debt service	1,477	935	1,027	960	634	349	981	977	1,312	1,279
Restricted for capital projects	25,845	18,081	19,787	2,931	22,929	20,327	18,205	1,653	-	18,505
Unrestricted	27,488	42,023	9,442	70,340	91,490	32,824	38,031	48,468	190	75,697
Total net position	\$ 1,025,336	1,061,281	1,097,842	1,148,757	1,181,867	1,142,052	1,155,940	1,146,263	1,174,125	1,229,143

[^] The beginning net position for fiscal years 2012 and 2013 have been restated for the retrospective application of GASB Statement No. 65.
^{*} The beginning net position for fiscal year 2015 have been restated for the cumulative effect of accounting change per GASB Statement No. 68.
[△] The beginning net position for 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.

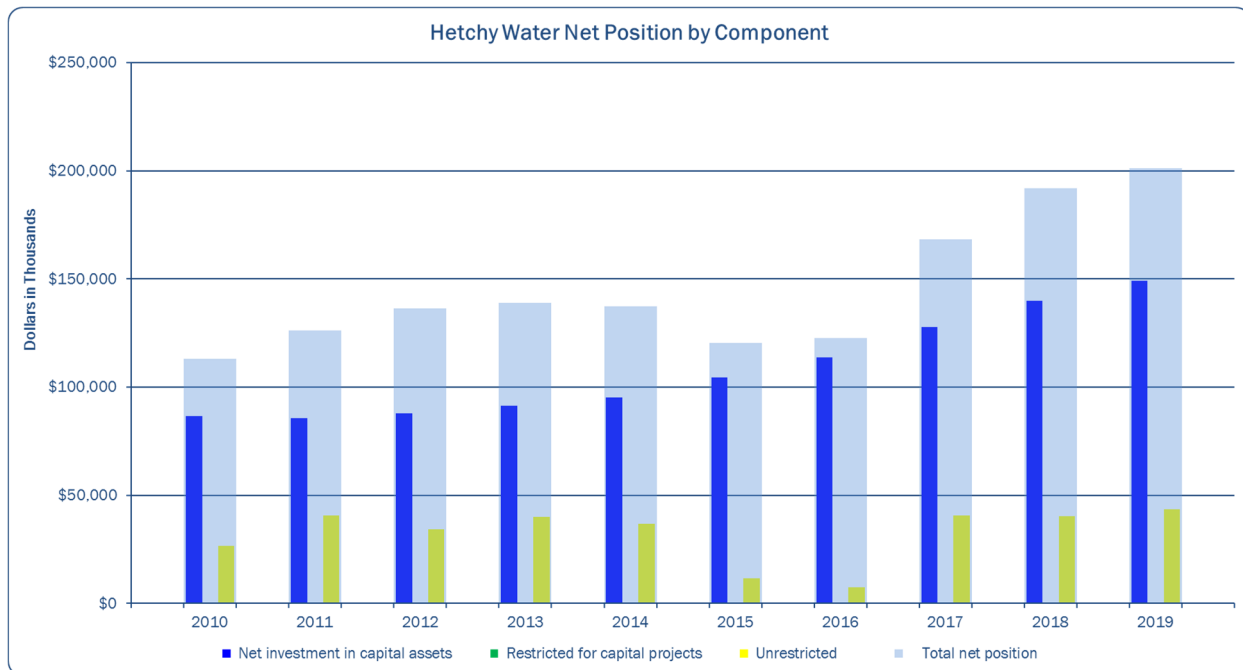


Financial Trends
Hetchy Water - Summary of Net Position by Component
Fiscal Years Ended 2010 to 2019
(Dollars in Thousands)

	2010	2011	2012	2013	2014	2015*	2016	2017	2018 [△]	2019
Net investment in capital assets	\$ 86,634	85,508	87,941	91,228	95,186	104,330	113,867	127,731	139,799	149,103
Restricted for capital projects	—	—	14,170	7,752	5,507	4,434	1,409	—	11,712	8,401
Unrestricted	26,515	40,586	34,411	39,913	36,711	11,647	7,435	40,625	40,279	43,669
Total net position	\$ 113,149	126,094	136,522	138,893	137,404	120,411	122,711	168,356	191,790	201,173

* The beginning net position for fiscal year 2015 have been restated for the cumulative effect of accounting change per GASB Statement No. 68.
 △ The beginning net position for 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.

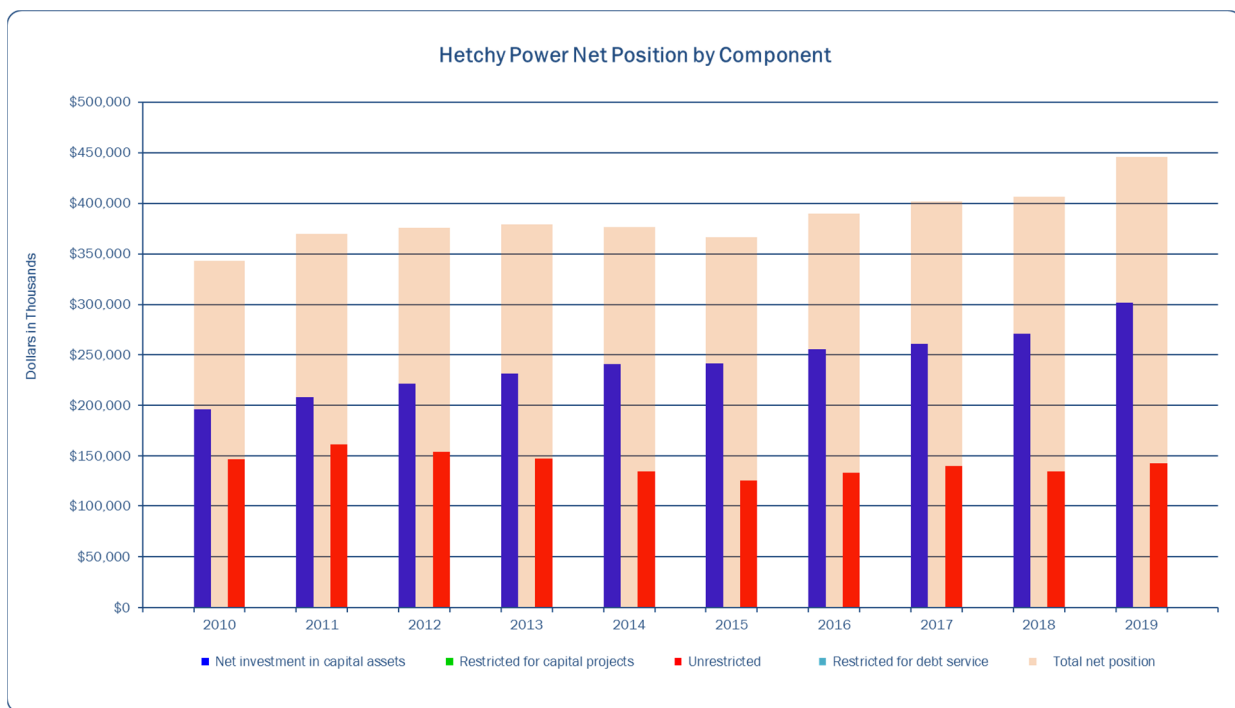


Financial Trends
Hetchy Power - Summary of Net Position by Component
Fiscal Years Ended 2010 to 2019
(Dollars in Thousands)

	2010	2011	2012 [^]	2013 [^]	2014	2015 [*]	2016	2017	2018 [△]	2019
Net investment in capital assets	\$ 196,064	208,092	221,417	231,909	241,016	241,484	255,897	260,681	270,918	301,534
Restricted for debt service	—	—	—	—	—	302	306	485	834	1,145
Restricted for capital projects	—	—	112	—	—	—	—	—	—	—
Unrestricted	147,157	161,722	154,319	147,375	135,130	124,737	133,700	140,520	134,874	143,036
Total net position	\$ 343,221	369,814	375,848	379,284	376,146	366,523	389,903	401,686	406,626	445,715

[^] The beginning net position for fiscal years 2012 and 2013 have been restated for the retrospective application of GASB Statement No. 65.
^{*} The beginning net position for fiscal year 2015 have been restated for the cumulative effect of accounting change per GASB Statement No. 68.
[△] The beginning net position for 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.



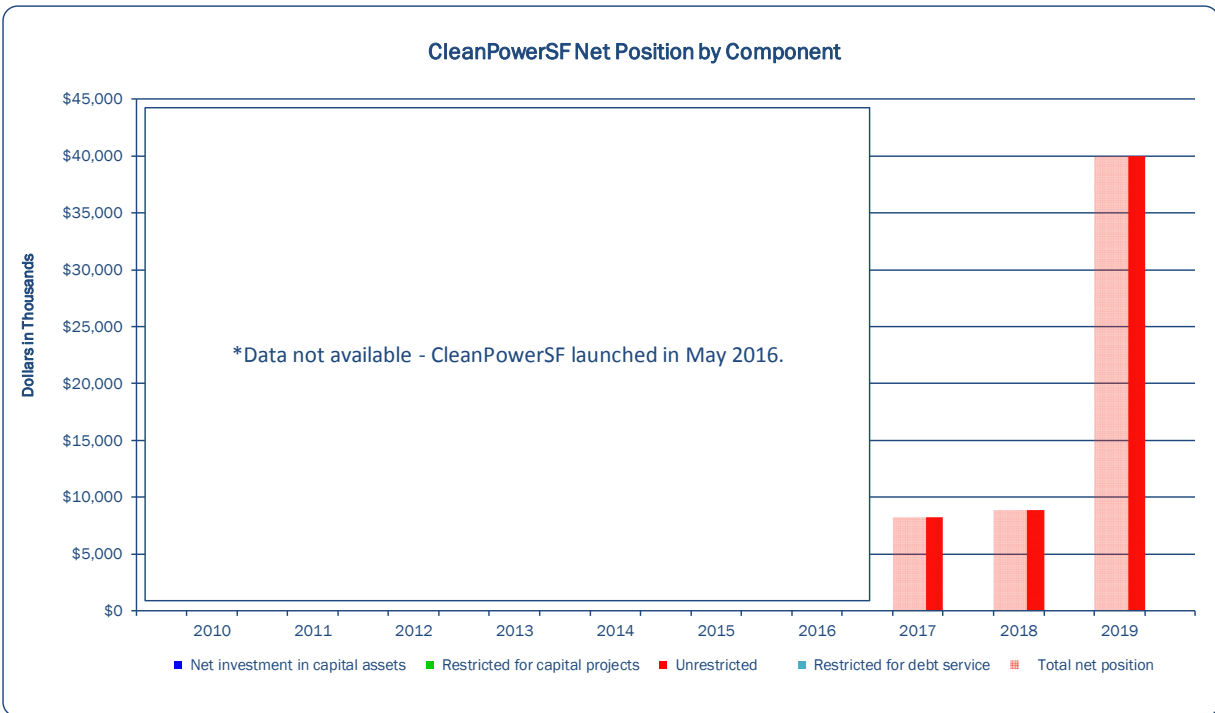
Financial Trend
CleanPowerSF - Summary of Net Position by Component
Fiscal Years Ended 2017 to 2019
(Dollars in Thousands)

	2010	2011	2012	2013	2014	2015	2016	2017	2018 [△]	2019
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
Total net position								8,218	8,860	40,001

* CleanPowerSF was presented as part of Hetchy Power in fiscal year 2016.

△ The beginning net position for 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.

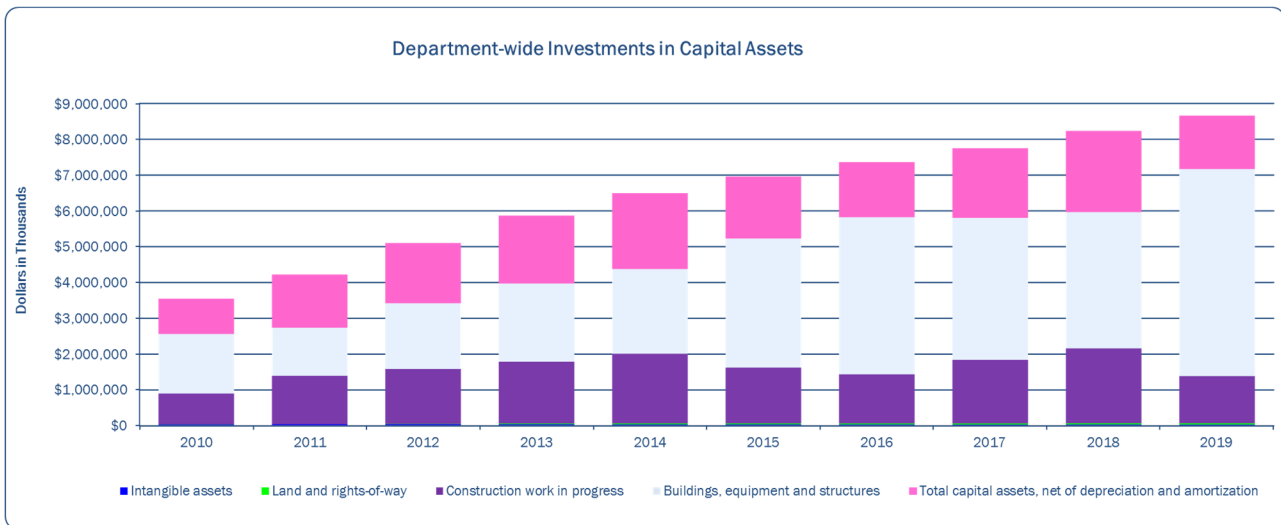


Financial Trends
Department-wide Investments in Capital Assets
Summary of Intangible Assets, Property, Plant and Equipment
Fiscal Years Ended 2010 to 2019
(Dollars in Thousands)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Buildings, equipment and structures	\$ 4,470,809	4,752,922	5,555,284	6,238,702	6,790,353	7,800,455	8,565,038	8,736,914	9,084,980	10,483,615
Less accumulated depreciation	(1,907,161)	(2,013,982)	(2,133,525)	(2,266,290)	(2,413,969)	(2,572,737)	(2,742,700)	(2,930,531)	(3,120,191)	(3,316,443)
Subtotal	2,563,648	2,738,940	3,421,759	3,972,412	4,376,384	5,227,718	5,822,338	5,806,383	5,964,789	7,167,172
Intangible assets, net of amortization*	39,240	44,636	44,596	41,525	39,122	38,885	36,674	34,904	36,956	34,853
Land and rights-of-way	43,582	44,687	50,641	64,764	67,290	67,213	67,213	67,301	70,947	71,228
Construction work in progress	901,265	1,395,510	1,586,702	1,789,980	2,012,810	1,625,592	1,436,187	1,841,297	2,161,089	1,387,840
Total capital assets, net of depreciation and amortization	\$ 3,547,735	4,223,773	5,103,698	5,868,681	6,495,606	6,959,408	7,362,412	7,749,885	8,233,781	8,661,093

* 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.

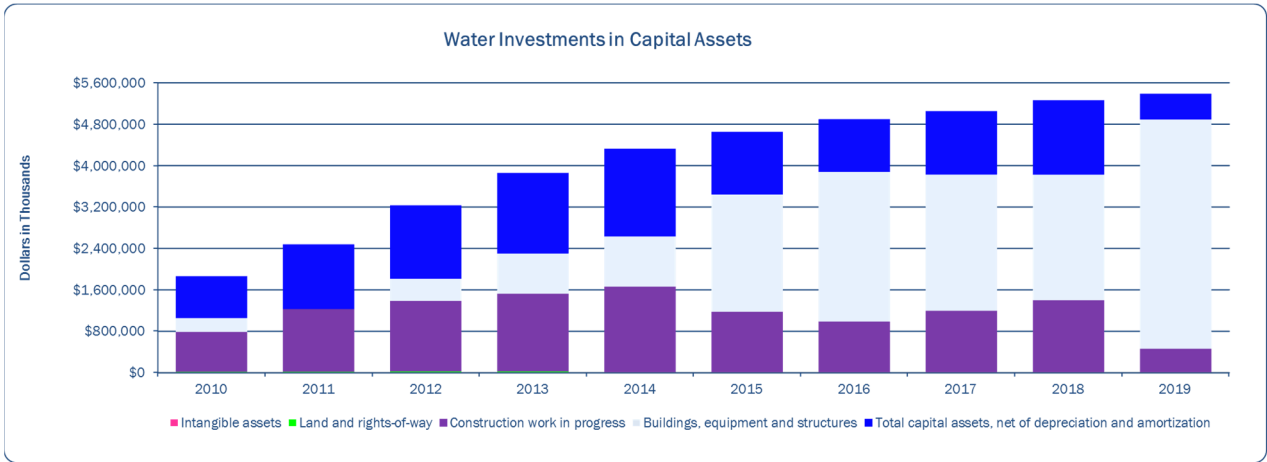


Financial Trends
Water - Investments in Capital Assets
Summary of Intangible Assets, Property, Plant and Equipment
Fiscal Years Ended 2010 to 2019
(Dollars in Thousands)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Buildings, equipment and structures	\$ 1,744,214	1,965,019	2,618,140	3,177,874	3,594,412	4,497,411	5,036,587	5,100,680	5,217,106	6,399,688
Less accumulated depreciation	(689,587)	(741,708)	(804,377)	(876,972)	(962,863)	(1,054,987)	(1,158,520)	(1,274,504)	(1,391,274)	(1,509,481)
Subtotal	1,054,627	1,223,311	1,813,763	2,300,902	2,631,549	3,442,424	3,878,067	3,826,176	3,825,832	4,890,207
Intangible assets, net of amortization*	4,652	9,191	9,832	8,030	6,896	7,244	5,843	4,671	7,321	5,816
Land and rights-of-way	17,707	18,812	24,711	24,307	26,811	26,811	26,811	26,777	30,029	30,029
Construction work in progress	787,367	1,228,574	1,385,860	1,525,689	1,662,294	1,176,805	987,780	1,195,840	1,400,051	462,606
Total capital assets, net of depreciation and amortization	\$ 1,864,353	2,479,888	3,234,166	3,858,928	4,327,550	4,653,284	4,898,501	5,053,464	5,263,233	5,388,658

* 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.

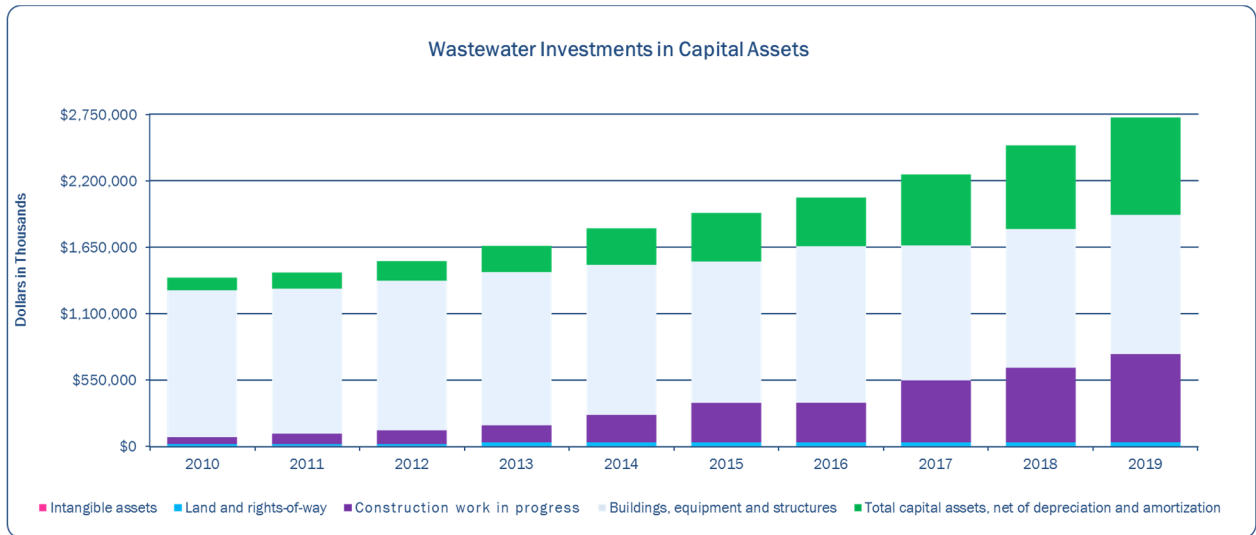


Financial Trends
Wastewater - Investments in Capital Assets
Summary of Intangible Assets, Property, Plant and Equipment
Fiscal Years Ended 2010 to 2019
(Dollars in Thousands)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Buildings, equipment and structures	\$ 2,200,989	2,255,442	2,365,601	2,481,895	2,588,575	2,665,863	2,842,648	2,904,499	3,094,871	3,271,188
Less accumulated depreciation	(907,647)	(949,154)	(992,972)	(1,038,309)	(1,085,418)	(1,134,843)	(1,185,275)	(1,240,172)	(1,295,323)	(1,354,209)
Subtotal	1,293,342	1,306,288	1,372,629	1,443,586	1,503,157	1,531,020	1,657,373	1,664,327	1,799,548	1,916,979
Intangible assets, net of amortization*	4,587	5,793	5,595	4,809	4,023	3,921	3,594	3,457	3,320	3,183
Land and rights-of-way	21,210	21,210	21,210	35,737	35,737	35,737	35,737	35,737	35,737	36,018
Construction work in progress	78,473	107,176	134,703	176,711	262,642	362,110	362,958	548,179	652,521	765,624
Total capital assets, net of depreciation and amortization	\$ 1,397,612	1,440,467	1,534,137	1,660,843	1,805,559	1,932,788	2,059,662	2,251,700	2,491,126	2,721,804

* 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.

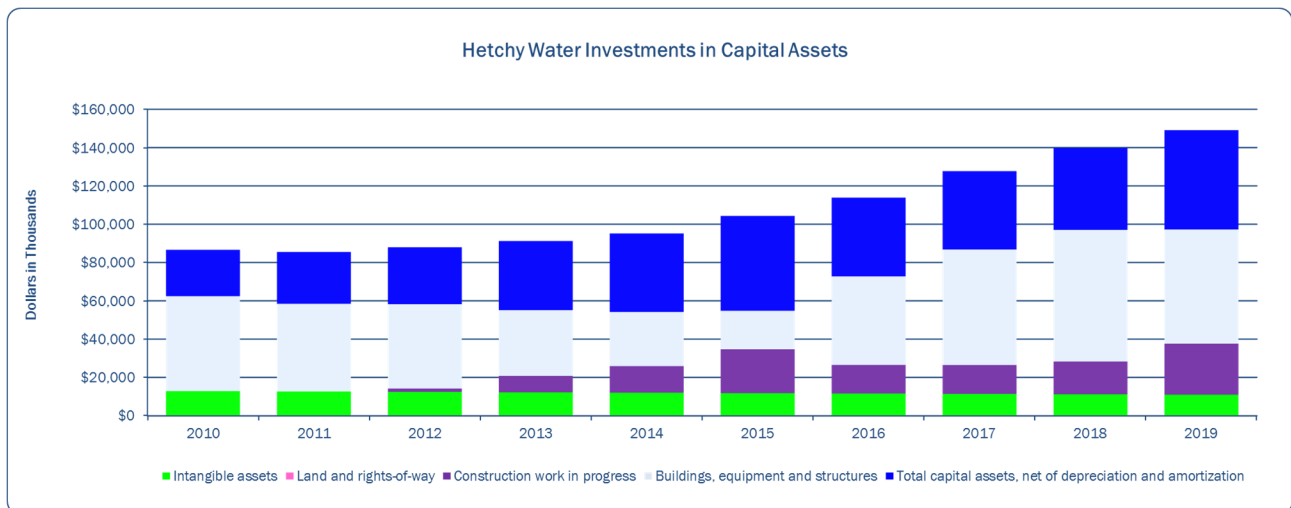


Financial Trends
Hetchy Water - Investments in Capital Assets
Summary of Intangible Assets, Property, Plant and Equipment
Fiscal Years Ended 2010 to 2019
(Dollars in Thousands)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Buildings, equipment and structures	\$ 209,448	209,336	212,935	213,936	216,910	221,345	242,936	261,139	276,177	281,562
Less accumulated depreciation	(147,019)	(150,912)	(154,688)	(158,796)	(162,724)	(166,546)	(170,199)	(174,352)	(179,139)	(184,312)
Subtotal	62,429	58,424	58,247	55,140	54,186	54,799	72,737	86,787	97,038	97,250
Intangible assets, net of amortization*	12,860	12,653	12,446	12,239	12,032	11,825	11,618	11,410	11,203	10,996
Land and rights-of-way	3,003	3,003	3,028	3,028	3,038	3,003	3,003	3,055	3,232	3,232
Construction work in progress	8,342	11,428	14,220	20,821	25,922	34,703	26,509	26,479	28,326	37,625
Total capital assets, net of depreciation and amortization	\$ 86,634	85,508	87,941	91,228	95,178	104,330	113,867	127,731	139,799	149,103

* 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 2010 to 2019
(Dollars in Thousands)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Buildings, equipment and structures	\$ 316,158	323,125	358,608	364,997	390,456	415,836	442,867	470,596	496,826	531,177
Less accumulated depreciation	(162,908)	(172,208)	(181,488)	(192,213)	(202,964)	(216,361)	(228,706)	(241,503)	(254,455)	(268,441)
Subtotal	153,250	150,917	177,120	172,784	187,492	199,475	214,161	229,093	242,371	262,736
Intangible assets, net of amortization*	17,141	16,999	16,723	16,447	16,171	15,895	15,619	15,366	15,112	14,858
Land and rights-of-way	1,662	1,662	1,692	1,692	1,704	1,662	1,662	1,732	1,949	1,949
Construction work in progress	27,083	48,332	51,919	66,759	61,952	51,974	58,940	70,799	80,191	121,985
Total capital assets, net of depreciation and amortization	\$ 199,136	217,910	247,454	257,682	267,319	269,006	290,382	316,990	339,623	401,528

* 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.

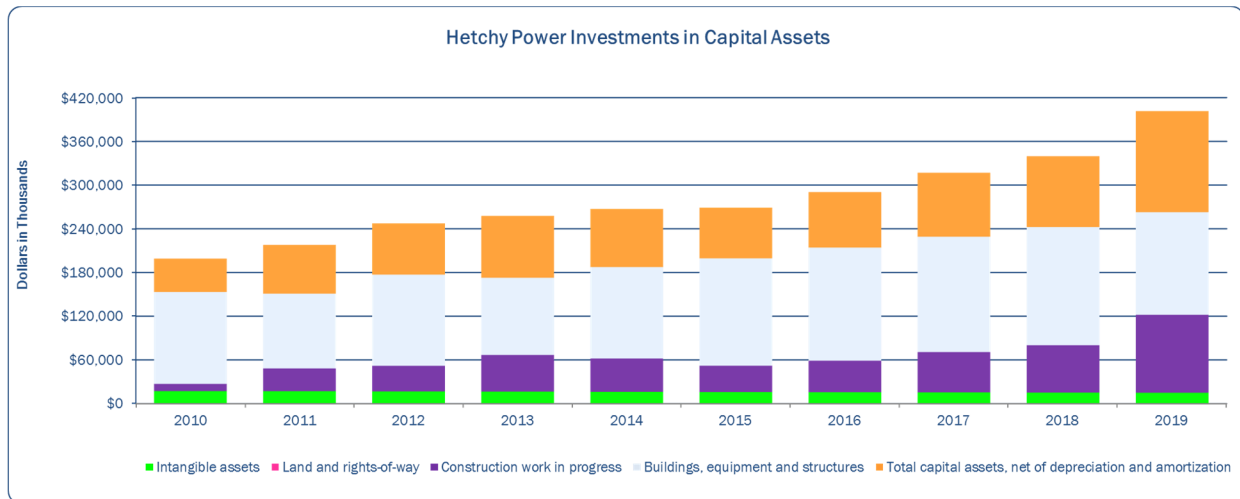




Photo by: Robin Scheswohl

Southeast Treatment Plant



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

Revenue Capacity

Water Rates History

Wastewater Rates History

Hetchy Power Electric Rates History

CleanPowerSF Electric Rates History

Net Revenue and Debt Service Coverage

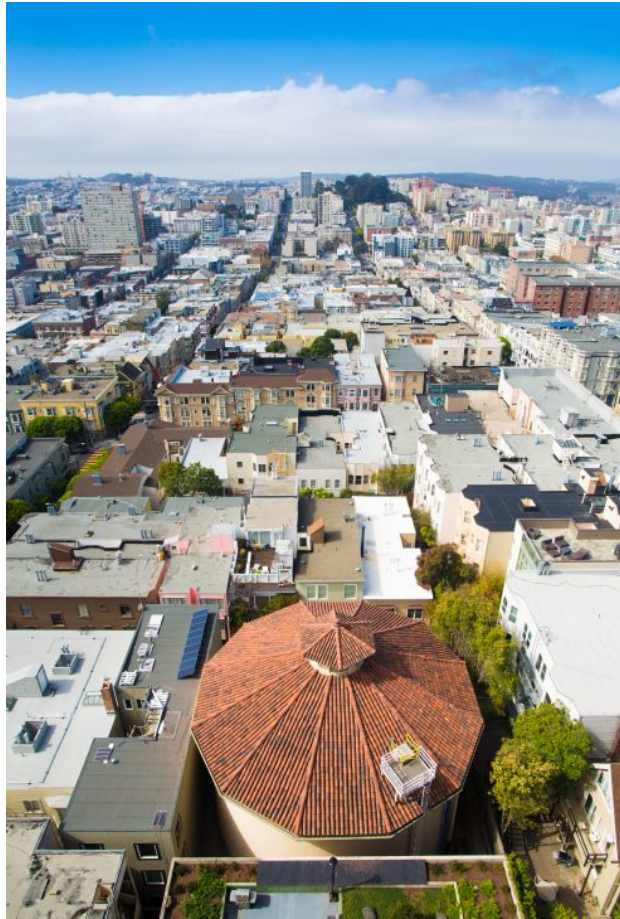


Photo by: Robin Scheswohl

Jones Street Water Tank

Revenue Capacity
Water Rate History
Fiscal Years Ended 2010 to 2019

Rates Per Hundred Cubic Feet

Fiscal Years Ended June 30	Service Charge (\$) ¹	Retail								Wholesale	
		Single-Family			Multiple-Family			Non-Residential		Volume Charge (\$/ccf)	% Increase /(Decrease)
		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)		
2010	5.40	2.61	3.48	17.1	2.87	3.82	10.2	3.35	14.7	1.65	15.4
2011	6.20	3.09	4.12	17.6	3.28	4.37	14.5	3.89	16.1	1.90	15.2
2012	7.00	3.50	4.60	12.5	3.70	4.90	12.7	4.52	16.2	2.63	38.4
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)

Fiscal Years Ended June 30	Service Charge (\$) ¹	Retail								Wholesale	
		Single-Family			Multiple-Family			Non-Residential		Volume Charge (\$/ccf)	% Increase /(Decrease)
		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)		
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

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 2010 to 2019**

Rates Per Hundred Cubic Feet

Fiscal Years Ended June 30	Single-Family			Multiple-Family			Non-Residential			
	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)	Chemical Oxygen Demand Charge (\$/lb)	Suspended Solids Charge (\$/lb)	Oil and Grease Charge (\$/lb)
2010 ¹	6.05	8.35	22.1	5.66	7.45	34.2	6.55	0.22	0.88	1.10
2011	6.91	9.21	12.2	6.51	8.68	15.4	6.55	0.22	0.88	1.10
2012	7.16	9.55	3.6	7.49	9.99	15.1	6.55	0.22	0.88	1.10
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			Multiple-Family			Non-Residential			
	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)	Chemical Oxygen Demand Charge (\$/lb)	Suspended Solids Charge (\$/lb)	Oil and Grease Charge (\$/lb)
2015 ^{2,3}	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 ⁵	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	Single-Family			Multiple-Family			Non-Residential			
	Service Charge (\$) ⁶	Volume Charge (\$/ccf)	% Increase/ (Decrease) ⁴	Volume Charge (\$/ccf)	% Increase/ (Decrease) ⁴	Volume Charge (\$/ccf)	Chemical Oxygen Demand Charge (\$/lb)	Suspend ed Solids Charge (\$/lb)	Oil and Grease Charge (\$/lb)	
2019 ⁷	0.98	13.06	4.5	13.06	3.5	7.84	0.52	1.30	1.33	

¹ Single-Family Residential and Multiple-Family Residential rates were differentiated effective July 1, 2009, and then combined effective July 1, 2019.

² Effective July 1, 2015, the Single-Family Residential Tier 1 rate structure changed from 0-3 ccf to 0-4 ccf.

³ Rates approved on May 13, 2014.

⁴ 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).

⁵ Effective July 1, 2017, no tiers for wastewater volumetric charges for single-family and multi-family residential wastewater.

⁶ Effective July 1, 2018, all wastewater customers pay a monthly service charge per account.

⁷ 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 2010 to 2019**

Rates Per Kilowatt Hour	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Residential*										
Residential Services - Multi-family	\$ 0.17643	0.18259	0.18581	0.18590	0.20052	0.20526	0.21784	0.23073	0.22894	0.23298
Residential - Public Power										
Tier 1	N/A	N/A	0.10689	0.10931	0.11200	0.11451	0.11705	0.13391	0.14198	0.14610
Tier 2	N/A	N/A	0.12152	0.12427	0.12733	0.13018	0.13306	0.15222	0.16139	0.16607
Tier 3	N/A	N/A	0.24877	0.25440	0.26065	0.26649	0.27238	0.31160	0.33037	0.33995
Commercial										
Small General Service	0.17886	0.18075	0.18098	0.18531	0.19717	0.21152	0.22560	0.23020	0.23786	0.24931
Medium General Demand-Metered Service	0.15816	0.16041	0.16013	0.15876	0.17573	0.18503	0.19667	0.20346	0.21265	0.21889
Medium General Demand-Metered TOU** Service	0.13490	0.13033	0.12724	0.12833	0.13953	0.14761	0.15049	0.15893	0.16176	0.16709
Industrial										
Service to Customers with equal to or greater than Demand of 1,000 Kilowatts or More - Secondary Voltage	0.13330	0.13552	0.13478	0.13170	0.14434	0.15216	0.15969	0.16868	0.17553	0.18279
Service to Customers with equal to or greater than Demand of 1,000 Kilowatts or More - Primary Voltage	0.12335	0.12450	0.12247	0.11990	0.13169	0.13908	0.14498	0.15229	0.15874	0.16466
Service to Customers with equal to or greater than Demand of 1,000 Kilowatts or More - Transmission Voltage	0.09762	0.09794	0.09907	0.09431	0.10383	0.10608	0.10743	0.11719	0.12501	0.12786
General Fund City Departments#	0.03750	0.03750	0.03750	0.04250	0.04750	0.05750	0.06750	0.07250	0.07750	0.07377
Streetlights	0.12206	0.12173	0.12153	0.13085	0.13840	0.15045	0.15712	0.15874	0.16451	0.17354
Traffic Signals	0.13046	0.13571	0.13571	0.14111	0.14762	0.15866	0.17187	0.18018	0.18432	0.18945

* 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 of April through June for residential, commercial and industrial rates. Rates are subject to change at any time.

Source: San Francisco Public Utilities Commission Rates Schedules & Fees and PG&E electric rates schedules.

**Revenue Capacity
CleanPowerSF Electric Rate History
Fiscal Years Ended 2016 to 2019**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Rates per Kilowatt-hour										
Residential										
E-1 (Green)							0.07267	0.07267	0.06836	0.07163
E-1 (SuperGreen)							0.09267	0.09267	0.08836	0.08663
E-6 (Green)							0.06719	0.06693	0.05868	0.06612
E-6 (SuperGreen)							0.08719	0.08693	0.07868	0.08112
E-TOUA (Green)							N/A	0.06801	0.06283	0.06548
E-TOUA (SuperGreen)							N/A	0.08801	0.08283	0.08048
E-TOUB (Green)							N/A	0.06819	0.06285	0.06460
E-TOUB (SuperGreen)							N/A	0.08819	0.08285	0.07960
E-TOUC* (Green)							N/A	N/A	N/A	0.07010
E-TOUC* (SuperGreen)							N/A	N/A	N/A	0.08510
EVA (Green)							0.05837	0.05822	0.05350	0.05358
EVA (SuperGreen)							0.07837	0.07822	0.07350	0.06858
EVB (Green)							N/A	0.04747	0.04263	0.03889
EVB (SuperGreen)							N/A	0.06747	0.06263	0.05389
Commercial										
A-1 (Green)							0.07772	0.07740	0.07447	0.07919
A-1 (SuperGreen)							0.09772	0.09740	0.08847	0.08919
A-1X (Green)							0.07770	0.07751	0.07509	0.07954
A-1X (SuperGreen)							0.09770	0.09751	0.08909	0.08954
A-6 (Green)							0.08883	0.08820	0.08631	0.09491
A-6 (SuperGreen)							0.10883	0.10820	0.10031	0.10491
A-10S (Non Time of Use - Green)							0.07940	0.07940	0.07674	0.08355
A-10S (Non Time of Use - SuperGreen)							0.09940	0.09940	0.09074	0.08855
A-10SX (Time of Use - Green)							0.07899	0.07813	0.07579	0.08322
A-10SX (Time of Use - SuperGreen)							0.09899	0.09813	0.08979	0.08822
E-19S (Green)							0.07925	0.07853	0.07658	0.08336
E-19S (SuperGreen)							0.09925	0.09853	0.09058	0.08836
E-19SV (Green)							0.07368	0.07304	0.07104	0.07670
E-19SV (SuperGreen)							0.09368	0.09304	0.08504	0.08170
E-20P (Green)							0.07005	0.06895	0.06729	0.07300
E-20P (SuperGreen)							0.09005	0.08895	0.08129	0.08300
E-20S (Green)							0.07502	0.07395	0.07167	0.07774
E-20S (SuperGreen)							0.09502	0.09395	0.08567	0.08774

*Data not available - CleanPowerSF launched in May 2016.

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 2016 to 2019. 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.

May exclude new rates due to insufficient data for average rate calculation

Source: San Francisco Public Utilities Commission and PG&E Joint Rate Comparisons.

Revenue Capacity
Water - Net Revenue and Debt Service Coverage
Fiscal Years Ended 2010 to 2019
(Dollars in Thousands)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Operating and investment revenue	\$ 275,041	305,678	375,551	721,189	390,789	431,836	423,111	464,662	532,087	558,041
Less operating and maintenance expenses	(277,970)	(261,927)	(304,562)	(303,739)	(333,555)	(296,950)	(314,786)	(421,827)	(370,147)	(357,094)
Adjustment to investing activities ¹	2,896	325	(784)	258	(2,438)	732	635	111	(1,245)	(4,821)
Depreciation and non-cash expenses	60,448	60,619	72,264	78,323	95,355	98,192	107,268	121,375	119,624	122,248
Changes in working capital	17,320	21,052	16,714	52,193	46,088	(37,175)	(11,062)	63,520	31,060	(11,073)
Appropriated fund balance	—	—	—	—	—	—	23,994	10,747	1,452	4,318
Net revenue ⁴	77,735	125,747	159,183	548,224	196,239	196,635	229,160	238,588	312,831	311,619
Other available funds ²	60,951	44,130	27,473	26,744	287,522	248,390	162,733	155,852	186,752	221,362
Funds available for revenue debt service	\$ 138,686	169,877	186,656	574,968	483,761	445,025	391,893	394,440	499,583	532,981
Revenue debt service ³	\$ 69,621	86,554	122,289	248,530	141,325	192,312	219,195	207,812	233,959	261,638
Revenue debt service coverage	1.99	1.96	1.53	2.31	3.42	2.31	1.79	1.90	2.14	2.04

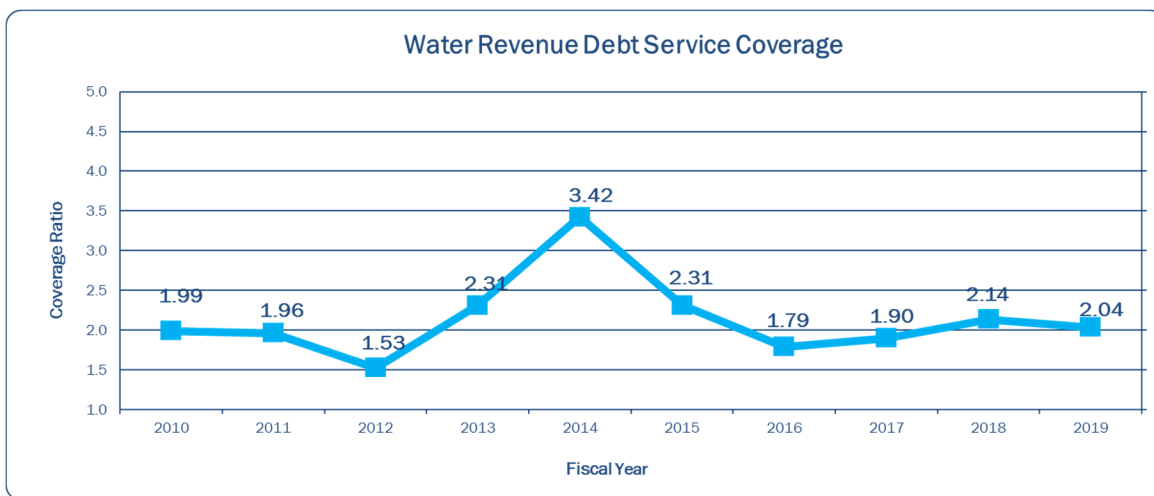
¹ Adjustment of investing activities and non-operating revenues to a cash basis.

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.

Source: San Francisco Public Utilities Commission Annual Disclosure Reports.



Revenue Capacity
Wastewater - Net Revenue and Debt Service Coverage
Fiscal Years Ended 2010 to 2019
(Dollars in Thousands)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Operating and investment revenue	\$ 211,899	231,143	247,130	253,078	262,497	257,209	262,960	279,668	317,413	351,782
Less operating and maintenance expenses	(185,512)	(179,084)	(195,857)	(208,260)	(216,340)	(216,485)	(221,553)	(244,220)	(238,906)	(259,813)
Adjustment to investing activities ¹	225	108	(299)	337	(601)	127	(12)	251	(489)	(8,047)
Depreciation and non-cash expenses	52,912	44,232	46,271	52,108	50,717	51,773	56,285	57,998	60,072	68,568
Changes in working capital	976	5,633	21,375	(13,795)	12,908	3,923	2,404	26,292	18,336	(2,125)
State revolving fund loan payments	(16,505)	(16,503)	(10,983)	(9,421)	- ^	-	-	-	-	-
Net revenue	63,995	85,529	107,637	74,047	109,181	96,547	100,084	119,989	156,426	150,365
Other available funds ²	49,272	22,769	50,761	80,094	109,807	134,413	139,847	131,554	153,596	103,281
Funds available for revenue debt service	\$ 113,267	108,298	158,398	154,141	218,988	230,960	239,931	251,543	310,022	253,646
Revenue debt service*	\$ 50,313	41,839 ³	42,190	37,921	48,932	48,878	60,022	48,769**	47,003	60,347
Revenue debt service coverage	2.25	2.59	3.75	4.06	4.48	4.73	4.00	5.16	6.60	4.20

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.

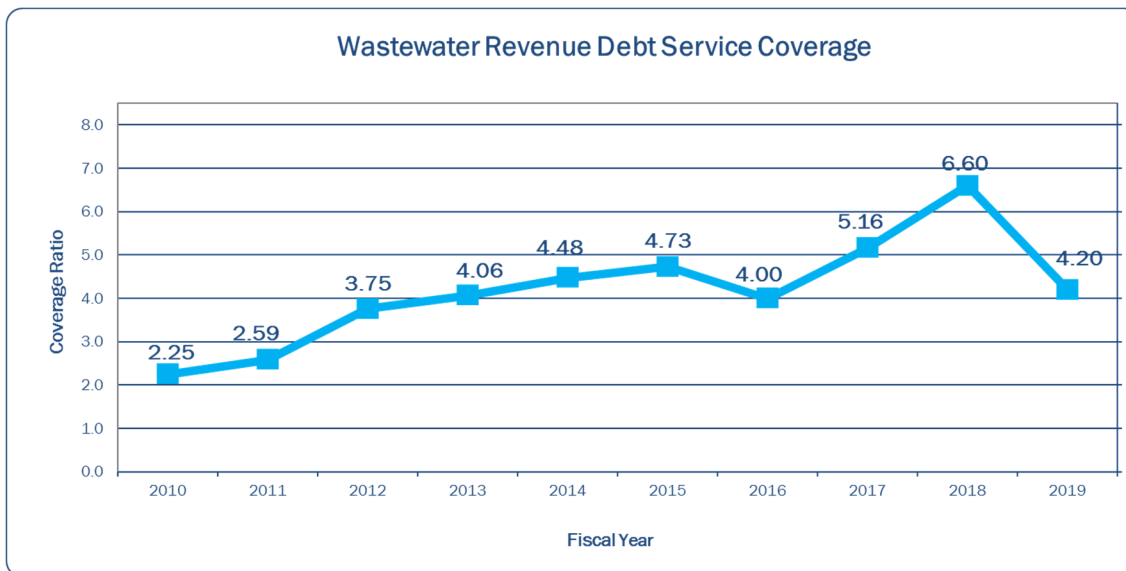
³ Effective on October 2, 2010, pursuant to the First Amendment to Indenture, dated May 1, 2010, between U.S. Bank National Association (the "Trustee") and the Commission, for the purpose of determining the amount of interest coming due during any 12-month period ending June 30 on any series of bonds that were issued as Build America Bonds, such amount will be reduced by an amount equal to the federal interest subsidy the Commission is scheduled to receive during such 12-month period ending June 30.

^ 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.

Source: San Francisco Public Utilities Commission Annual Disclosure Reports.



Revenue Capacity
 Hetchy Power - Net Revenue and Debt Service Coverage
 Fiscal Years Ended 2015 to 2019
 (Dollars in Thousands)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Operating and investment revenue	No senior lien debt service coverage prior to fiscal year 2015					\$ 117,704	122,954	122,187	122,251	152,873
Less operating and maintenance expenses						(105,222)	(110,012)	(116,935)	(119,395)	(122,688)
Adjustment to investing activities*						(8)	11	29	419	(2,606)
Depreciation and non-cash expenses						17,654	15,331	14,208	14,131	14,604
Changes in working capital						7,037	(9,214)	11,740	13,281	(2,386)
Net revenue						37,165	19,070	31,229	30,687	39,798
Other available funds Δ						14,031	13,974	32,199	36,525	31,215
Funds available for revenue debt service						\$ 51,196	33,044	63,428	67,212	71,013
Revenue debt service**						\$ N/A	N/A	N/A	2,570	2,569
Revenue debt service coverage						N/A	N/A	N/A	26.15	27.64

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.

* 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.

Δ Starting fiscal year 2019, other available funds is 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.

Source: San Francisco Public Utilities Commission Annual Disclosure Reports.

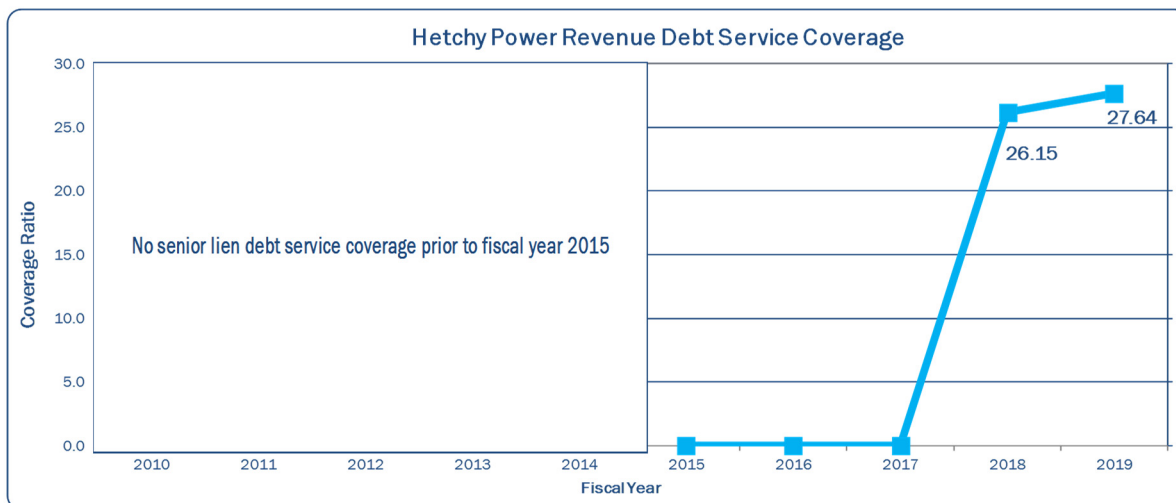




Photo by: Robin Scheswohl

The “Stormwater Schoolyard” is a pilot project with the aim of facilitating increased stormwater management and schoolyard greening initiatives to San Francisco Unified School District schools.



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



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

Debt Capacity

Debt Ratings

Summary of Debt Outstanding

History of Outstanding Debt by Type

Department-wide - Principal and Interest Payments for Debt Issues

Water - Principal and Interest Payments for Debt Issues

Wastewater - Principal and Interest Payments for Debt Issues

Hetchy Power - Principal and Interest Payments for Debt Issues



Photo By: Robin Scheswohl

The SFPUC is proposing the Mountain Tunnel Improvements Project to improve the condition of the existing Mountain Tunnel, and to ensure the tunnel's continued ability to provide quality drinking water reliably to its 2.7 million customers in the Sierra Foothills and San Francisco Bay Area.



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

**Debt Capacity
Debt Ratings
As of June 30, 2019**

Debt by Type	Ratings by	
	Moody's Investors Service	Standard & Poor's
Water		
Revenue bonds	Aa3	AA-
Commercial paper - \$500 million tax-exempt/taxable		
\$200 million Sumitomo Mitsui Letter of Credit	P-1	A-1
\$100 million Bank of America Letter of Credit	P-1	A-1
\$100 million Barclays PLC 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	Aa3	AA
Commercial paper - \$750 million tax-exempt		
\$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 Barclays Letter of Credit	P-1	A-1
\$100 million State Street Liquidity Facility	P-1	A-1+
\$100 million Sumitomo Mitsui Letter of Credit	P-1	A-1
\$75 million MUFG (formerly the Bank of Tokyo) 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.

Source: Rating agency reports.

**Water, Wastewater, and Hetchy Power
Revenue Bonds Credit Ratings
Fiscal Years Ended 2010 to 2019**

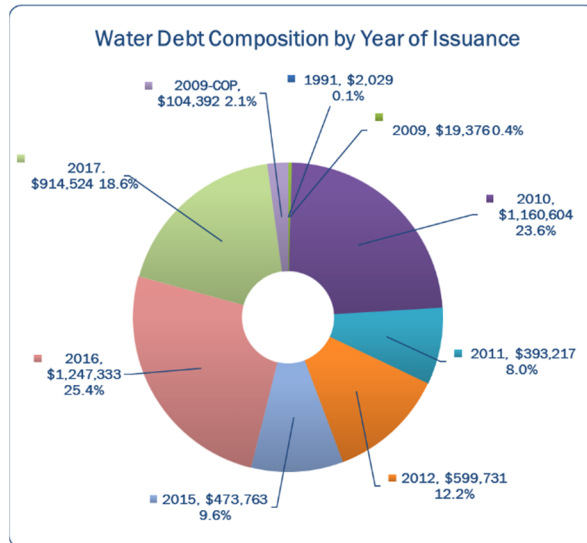
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Moody's Investors Service										
Water	Aa2	Aa2	Aa3	Aa3	Aa3	Aa3	Aa3	Aa3	Aa3	Aa3
Wastewater	Aa3	Aa3	Aa3	Aa3	Aa3	Aa3	Aa3	Aa3	Aa3	Aa3
Standard & Poor's										
Water	AA-	AA-	AA-	AA-	AA-	AA-	AA-	AA-	AA-	AA-
Wastewater	AA-	AA-	AA-	AA-	AA-	AA-	AA	AA	AA	AA
Hetchy Power	Zero debt prior to fiscal year 2015					A+	A+	A+	A+	AA

Debt Capacity
Water - Summary of Debt Outstanding (Exclude Commercial Paper)
As of June 30, 2019
(Dollars in Thousands)

Revenue Bonds and Certificates of Participation

Revenue bonds	Amount	Use of proceeds
1991 Series A (Capital Appreciation Bonds)	\$ 2,029	Repair and Replacement of Water Facilities
2009 Series A	9,667	Water System Improvement Program and refunding of commercial paper
2009 Series B	9,709	Water System Improvement Program
2010 Series A	2,553	Advanced Meter Infrastructure Project
2010 Series B (Build America Bonds)	384,975	Water System Improvement Program
2010 Series D	48,839	Water System Improvement Program and partial refunding of 2002A Bonds
2010 Series E (Build America Bonds)	345,473	Water System Improvement Program
2010 Series F	24,156	Water System Improvement Program
2010 Series G (Build America Bonds)	354,608	Water System Improvement Program
2011 Series A	334,415	Water System Improvement Program
2011 Series B	18,485	Hetchy Water Improvements
2011 Series C	20,162	Local Water Main Replacement Project
2011 Series D	20,155	Partial refunding of 2001A Bonds and 2002B Bonds
2012 Series A	485,932	Water System Improvement Program
2012 Series B	16,802	Capital Project Litigation Settlement
2012 Series C1	9,140	Refunded remainder of 2001A Bonds and partial refunding of 2002A Bonds
2012 Series C2	75,567	Refunded remainder of 2001A Bonds and partial refunding of 2002A Bonds
2012 Series D	12,290	Refunded remainder of 2002B Bonds
2015 Series A	473,763	Refunded remainder of 2006A Bonds and partial refunding of 2009A Bonds
2016 Series A	884,421	Refunded portion of 2009A, 2009B and 2010F Bonds
2016 Series B	114,706	Refunded remainder of 2006B and 2006C Bonds and portion of 2010A
2016 Series C	248,206	Refund all of outstanding taxable commercial paper notes.
2017 Series A	139,772	Water System Improvement Program
2017 Series B	170,524	Non Water System Improvement Program (Non-WSIP)
2017 Series C	81,583	Hetchy Water Improvements
2017 Series D	419,822	Refund 2011A and 2012A Bonds
2017 Series E	58,633	Refund 2011C, 2011D and 2012C1 Bonds
2017 Series F	10,410	Refund 2011B Bonds
2017 Series G	33,780	Refund 2011A Bonds
Total revenue bonds	4,810,577	
Certificates of participation (COPs)		
2009 Series C	11,893	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)	104,392	
Total Water debt outstanding	\$ 4,914,969	

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.

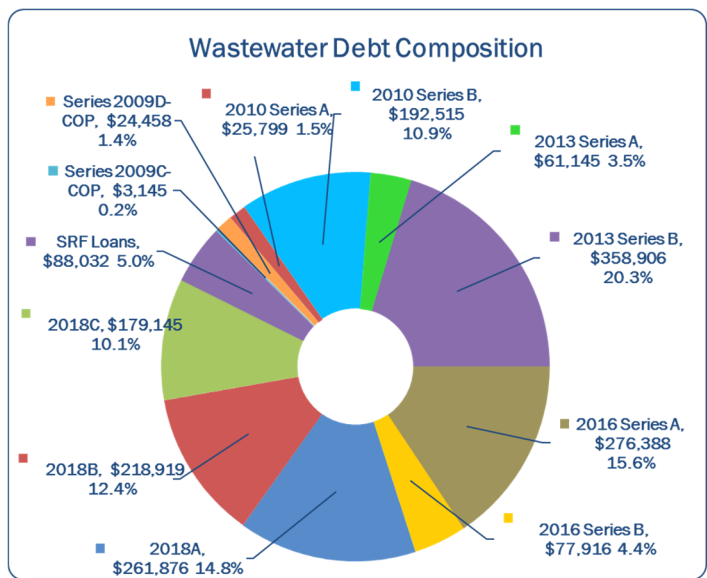


Debt Capacity
Wastewater - Summary of Debt Outstanding (Exclude Commercial Paper)
As of June 30, 2019
(Dollars in Thousands)

Revenue Bonds, Loans and Certificates of Participation

Revenue bonds	Amount	Use of proceeds
2010 Series A	\$ 25,799	Clean Water Capital Improvement Programs
2010 Series B (Build America Bonds)	192,515	Clean Water Capital Improvement Programs
2013 Series A	61,145	Refunded the remaining portion of the 2003 Series A bonds
2013 Series B	358,906	Sewer System Improvement Program
2016 Series A	276,388	Sewer System Improvement Program
2016 Series B	77,916	Sewer System Improvement Program
2018 Series A	261,876	Sewer System Improvement Program
2018 Series B	218,919	Sewer System Improvement Program
2018 Series C	179,145	Sewer System Improvement Program
Total revenue bonds	<u>1,652,609</u>	
State of California revolving fund loans	88,032	Sewer System Improvement Program
Certificates of participation (COPs)		
2009 Series C	3,145	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)	<u>27,603</u>	
Total Wastewater debt outstanding	<u>\$ 1,768,244</u>	

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.

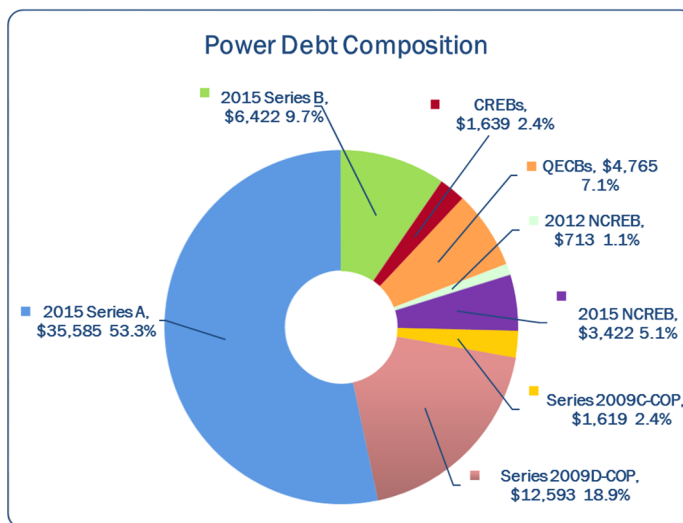


Debt Capacity
Power - Summary of Debt Outstanding (Exclude Commercial Paper)
As of June 30, 2019
(Dollars in Thousands)

Bonds and Certificates of Participation

Revenue Bonds	Amount	Use of proceeds
2015 Series A (Green)	\$ 35,585	Hetch Hetchy facilities
2015 Series B	<u>6,422</u>	Hetch Hetchy facilities
Total revenue bonds	42,007	
Other Bonds		
Clean Renewable Energy Bonds (CREBs)	1,639	Solar energy equipment on city facilities
Qualified Energy Conservation Bonds (QECBs)	4,765	525 Golden Gate Avenue green energy
2012 New Clean Renewable Energy Bonds (NCREBs)	713	City facilities renewable energy
2015 New Clean Renewable Energy Bonds (NCREBs)	<u>3,422</u>	City facilities renewable energy
Total other bonds	10,539	
Certificates of participation (COPs)		
2009 Series C	1,619	525 Golden Gate Avenue Headquarters Building
2009 Series D (Build America Bonds)	<u>12,593</u>	525 Golden Gate Avenue Headquarters Building
Total certificates of participation (COPs)	14,212	
Total Hetchy Power debt outstanding	\$ <u>66,758</u>	

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.



Debt Capacity
History of Outstanding Debt by Type - Principal Only (Exclude Commercial Paper)
Fiscal Years Ended 2010 to 2019
(Dollars in Thousands)

Department-wide

Fiscal Year Ended	Revenue Bonds^	Capital Appreciation Bonds*	State Revolving Fund Loans	Certificates of Participation^	Total
2010	\$ 2,780,157	\$ 3,878	\$ 61,140	\$ 171,562	\$ 3,016,737
2011	3,692,941	4,155	46,492	171,029	3,914,617
2012	4,990,472	4,450	36,898	170,483	5,202,303
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

Water

Fiscal Year Ended	Revenue Bonds^	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)
2010	\$ 2,257,205	\$ 3,878	\$ 122,496	\$ 2,383,579	2,521,579	\$ 0.95	172,680	\$ 13.80
2011	3,198,490	4,155	122,115	3,324,760	2,514,582	1.32	173,033	19.21
2012	4,505,296	4,450	121,726	4,631,472	2,535,093	1.83	173,453	26.70
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	2,707,716	1.86	175,054	28.69
2019 ***	4,808,548	2,029	104,392	4,914,969	2,735,036	1.80	175,805	27.96

Wastewater

Fiscal Year Ended	Revenue Bonds^	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)
2010	\$ 517,642	\$ 61,140	\$ 32,390	\$ 611,172	805,235	\$ 0.76	162,737	\$ 3.76
2011	489,549	46,492	32,289	568,330	812,826	0.70	163,041	3.49
2012	465,792	36,898	32,186	534,876	825,863	0.65	163,316	3.28
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	1,070,074	883,305	1.21	163,976	6.53
2019 ***	1,652,609	88,032	27,603	1,768,244	887,463	1.99	173,956	10.16

Power

Fiscal Years Ended	Bonds^	Certificates of Participation^	Total	Number of Customer Accounts	Debt per Customer Account (in thousands)
2010	\$ 5,310	\$ 16,676	\$ 21,986	2,256	\$ 9.75
2011	4,902	16,625	21,527	2,270	9.48
2012	19,384	16,571	35,955	2,260	15.91
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	72,838	3,068	23.74
2018	55,241	14,581	69,822	3,547	19.68
2019	52,546	14,212	66,758	3,747	17.82

*No annual payments for Series 1991A Capital Appreciation Bonds.
 ** Population updated from last year's CAFR with newly available data.
 *** 2019 population was estimated by multiplying 2018 population by the 2018 and 2019 population growth rate.
 ^ Bonds 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 Care and Billing System, Audited Financial Statements, Office of the Controller, City and County of San Francisco and BAWSCA.org.

Debt Capacity
Department-wide - Principal and Interest Payments for Debt Issues*
 (Exclude Commercial Paper)
 (Dollars in Thousands)

Payments Due for FY Ended	Water			Wastewater			Power			SFPUC Total		
	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
2020	\$ 103,587	203,038	306,625	24,035	64,511	88,546	2,894	2,554	5,448	130,516	270,103	400,619
2021	111,214	198,430	309,644	26,174	64,077	90,251	2,498	2,486	4,984	139,886	264,993	404,879
2022	116,395	193,358	309,753	26,020	62,976	88,996	2,430	2,421	4,851	144,845	258,755	403,599
2023	124,534	188,156	312,690	37,568	61,581	99,149	2,493	2,355	4,848	164,595	252,092	416,687
2024	130,312	182,696	313,008	40,208	61,561	101,769	2,132	2,294	4,426	172,652	246,550	419,202
2025	135,982	176,962	312,944	40,318	61,450	101,768	2,190	2,229	4,419	178,490	240,641	419,131
2026	146,725	170,682	317,407	42,140	59,655	101,795	2,255	2,161	4,416	191,120	232,498	423,619
2027	152,705	163,799	316,504	44,064	57,761	101,825	2,321	2,092	4,413	199,090	223,652	422,742
2028	158,462	156,549	315,011	46,092	55,722	101,814	2,099	2,011	4,110	206,653	214,281	420,935
2029	166,083	148,931	315,014	48,222	53,582	101,804	1,884	1,930	3,814	216,189	204,442	420,631
2030	174,905	140,893	315,798	50,458	51,330	101,788	1,961	1,848	3,809	227,324	194,071	421,395
2031	181,884	132,836	314,720	52,814	48,964	101,778	2,049	1,759	3,808	236,747	183,559	420,306
2032	191,540	124,605	316,145	55,288	46,475	101,763	2,133	1,669	3,802	248,961	172,749	421,710
2033	195,027	115,747	310,774	57,885	43,859	101,744	2,088	1,573	3,661	255,000	161,178	416,178
2034	204,176	106,523	310,699	60,540	41,197	101,737	2,043	1,477	3,520	266,759	149,196	415,955
2035	212,290	96,965	309,255	63,233	38,486	101,719	2,137	1,377	3,514	277,660	136,829	414,489
2036	228,553	86,901	315,454	66,053	35,655	101,708	2,241	1,272	3,513	296,847	123,829	420,676
2037	242,160	76,191	318,351	69,009	32,685	101,694	2,348	1,162	3,510	313,517	110,039	423,556
2038	223,444	65,622	289,066	72,022	29,651	101,673	2,461	1,047	3,508	297,927	96,320	394,247
2039	233,364	55,663	289,027	75,100	26,550	101,650	2,575	926	3,501	311,039	83,139	394,178
2040	243,280	45,515	288,795	78,245	23,386	101,631	2,700	801	3,501	324,225	69,703	393,928
2041	202,566	35,860	238,426	81,460	20,155	101,615	2,827	668	3,495	286,853	56,683	343,536
2042	158,866	27,858	186,724	84,815	16,785	101,600	2,961	531	3,492	246,642	45,174	291,816
2043	109,595	21,635	131,230	86,432	13,306	99,738	2,125	405	2,530	198,152	35,346	233,498
2044	115,015	16,199	131,214	51,403	10,515	61,918	2,230	296	2,526	168,648	27,010	195,658
2045	52,620	12,187	64,807	53,465	8,448	61,913	2,340	181	2,521	108,425	20,816	129,241
2046	55,100	9,672	64,772	55,569	6,350	61,919	2,460	62	2,522	113,129	16,084	129,213
2047	57,705	7,039	64,744	57,748	4,162	61,910	-	-	-	115,453	11,201	126,654
2048	45,560	4,593	50,153	39,034	2,310	41,344	-	-	-	84,594	6,902	91,496
2049	23,845	2,935	26,780	38,520	802	39,322	-	-	-	62,365	3,737	66,102
2050	24,945	1,798	26,743	1,807	36	1,843	-	-	-	26,752	1,834	28,586
2051	26,100	608	26,708	203	3	207	-	-	-	26,303	611	26,915
Total	\$ 4,548,539	2,970,446	7,518,985	1,625,944	1,103,987	2,729,931	62,875	39,585	102,460	6,237,358	4,114,019	10,351,375

May not total due to rounding.

* Principal and interest (net of federal interest subsidy) includes bonds, COPs and state revolving funds.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity
Water - Principal and Interest Payments for Debt Issues
(Exclude Commercial Paper)
(Dollars in Thousands)

Principal Payments												
Payments Due for FY Ended	Capital Appreciation Bonds*			COPs Series 2009C	COPs Series 2009D	2010A	2010B	2010D	2010E	2010F	2010G	2011A
	1991A	2009A	2009B	2009C	2009D	2010A	2010B	2010D	2010E	2010F	2010G	2011A
2020	\$ 2,029	9,635	9,635	2,688	—	2,530	11,555	16,780	—	5,175	—	—
2021	—	—	—	2,824	—	—	11,920	17,640	—	5,405	—	15,760
2022	—	—	—	2,970	—	—	12,330	13,350	—	13,395	—	16,550
2023	—	—	—	3,124	—	—	12,780	—	12,745	—	—	—
2024	—	—	—	—	3,267	—	13,245	—	13,165	—	—	—
2025	—	—	—	—	3,402	—	13,725	—	13,610	—	—	—
2026	—	—	—	—	3,545	—	14,225	—	14,080	—	—	—
2027	—	—	—	—	3,695	—	14,765	—	14,585	—	—	—
2028	—	—	—	—	3,852	—	15,355	—	15,125	—	—	—
2029	—	—	—	—	4,013	—	15,965	—	15,715	—	—	—
2030	—	—	—	—	4,180	—	16,600	—	16,340	—	—	—
2031	—	—	—	—	4,359	—	17,260	—	16,990	—	—	—
2032	—	—	—	—	4,545	—	17,945	—	17,665	—	11,060	26,960
2033	—	—	—	—	4,737	—	18,660	—	18,365	—	11,575	—
2034	—	—	—	—	4,941	—	19,405	—	19,095	—	12,110	—
2035	—	—	—	—	5,155	—	20,175	—	19,855	—	12,665	—
2036	—	—	—	—	5,373	—	20,980	—	20,645	—	13,255	32,540
2037	—	—	—	—	5,605	—	21,810	—	21,470	—	13,865	34,000
2038	—	—	—	—	5,844	—	22,680	—	22,320	—	14,505	35,695
2039	—	—	—	—	6,094	—	23,580	—	23,210	—	15,175	37,485
2040	—	—	—	—	6,355	—	24,520	—	24,130	—	15,880	39,170
2041	—	—	—	—	6,626	—	25,495	—	25,090	—	16,610	41,130
2042	—	—	—	—	6,911	—	—	—	—	—	17,380	43,190
2043	—	—	—	—	—	—	—	—	—	—	18,180	—
2044	—	—	—	—	—	—	—	—	—	—	19,025	—
2045	—	—	—	—	—	—	—	—	—	—	19,900	—
2046	—	—	—	—	—	—	—	—	—	—	20,820	—
2047	—	—	—	—	—	—	—	—	—	—	21,785	—
2048	—	—	—	—	—	—	—	—	—	—	22,790	—
2049	—	—	—	—	—	—	—	—	—	—	23,845	—
2050	—	—	—	—	—	—	—	—	—	—	24,945	—
2051	—	—	—	—	—	—	—	—	—	—	26,100	—
Total	\$ 2,029	9,635	9,635	11,606	92,499	2,530	384,975	47,770	344,200	23,975	351,470	322,480

(Continued)

*The amount represents net present value of 1991A Capital Appreciation Bonds' principal and interest payments. May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity
Water - Principal and Interest Payments for Debt Issues
 (Exclude Commercial Paper)
 (Dollars in Thousands)

Principal Payments											
Payments Due for FY Ended	2011B	2011C	2011D	2012A	2012B	2012C1	2012C2	2012D	2015A	2016A	2016B
2020	\$ 700	760	—	—	—	—	—	12,215	14,000	—	8,920
2021	730	795	—	—	—	—	—	—	14,635	19,955	14,455
2022	755	825	—	—	—	—	—	—	15,325	23,315	10,015
2023	—	—	6,060	—	—	—	—	—	16,045	32,790	12,530
2024	—	—	6,375	—	—	—	—	—	28,070	23,590	13,175
2025	—	—	6,700	—	—	—	—	—	29,485	24,800	13,720
2026	—	—	—	—	—	—	7,275	—	30,990	26,050	7,715
2027	—	—	—	—	—	—	7,650	—	20,945	38,150	8,015
2028	—	—	—	—	—	—	8,040	—	20,530	46,305	3,815
2029	—	—	—	—	—	—	8,450	—	21,580	48,655	3,990
2030	—	—	—	—	—	—	8,880	—	22,685	51,135	4,180
2031	—	—	—	—	—	—	9,340	—	23,810	53,460	4,370
2032	—	—	—	—	975	8,465	9,770	—	25,000	34,135	—
2033	1,255	1,370	—	—	1,015	—	10,165	—	26,280	35,875	—
2034	1,315	1,435	—	—	1,055	—	—	—	27,490	37,710	—
2035	1,375	1,495	—	—	1,105	—	—	—	28,610	39,670	—
2036	1,440	1,570	—	27,375	1,160	—	—	—	29,765	41,745	—
2037	1,515	1,650	—	43,615	1,215	—	—	—	31,135	43,670	—
2038	1,590	1,735	—	48,695	1,260	—	—	—	—	45,455	—
2039	1,670	1,820	—	50,930	1,315	—	—	—	—	47,305	—
2040	1,755	1,910	—	53,010	1,370	—	—	—	—	49,235	—
2041	1,840	2,005	—	55,175	1,425	—	—	—	—	—	—
2042	1,930	2,105	—	57,425	1,480	—	—	—	—	—	—
2043	—	—	—	60,075	1,540	—	—	—	—	—	—
2044	—	—	—	63,155	1,605	—	—	—	—	—	—
2045	—	—	—	—	—	—	—	—	—	—	—
2046	—	—	—	—	—	—	—	—	—	—	—
2047	—	—	—	—	—	—	—	—	—	—	—
2048	—	—	—	—	—	—	—	—	—	—	—
2049	—	—	—	—	—	—	—	—	—	—	—
2050	—	—	—	—	—	—	—	—	—	—	—
2051	—	—	—	—	—	—	—	—	—	—	—
Total	\$ 17,870	19,475	19,135	459,455	16,520	8,465	69,570	12,215	426,380	763,005	104,900

(Continued)

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity
Water - Principal and Interest Payments for Debt Issues
(Exclude Commercial Paper)
(Dollars in Thousands)

Principal Payments									
Payments Due for FY Ended	2016C	2017A	2017B	2017C	2017D	2017E	2017F	2017G	Total Principal Payments
2020	\$ 5,605	—	—	—	860	—	—	500	103,587
2021	5,705	—	—	—	890	—	—	500	111,214
2022	5,820	—	—	—	925	—	—	820	116,395
2023	5,955	2,325	2,835	1,355	1,455	765	700	13,070	124,534
2024	6,105	2,445	2,985	1,425	1,270	795	735	13,665	130,312
2025	6,275	2,570	3,135	1,500	10,230	835	770	5,225	135,982
2026	6,455	2,705	3,295	1,575	20,515	7,425	875	—	146,725
2027	6,645	2,840	3,465	1,660	21,540	7,830	920	—	152,705
2028	6,850	2,990	3,645	1,745	22,615	6,630	965	—	158,462
2029	7,075	3,140	3,830	1,830	23,740	7,080	1,020	—	166,083
2030	7,310	3,300	4,025	1,925	24,935	8,555	855	—	174,905
2031	7,565	3,470	4,230	2,025	26,140	7,960	905	—	181,884
2032	7,835	3,650	4,450	2,130	14,980	1,015	960	—	191,540
2033	8,120	3,835	4,680	2,240	46,855	—	—	—	195,027
2034	8,435	4,035	4,920	2,355	59,875	—	—	—	204,176
2035	8,760	4,240	5,170	2,475	61,540	—	—	—	212,290
2036	9,110	4,455	5,435	2,600	11,105	—	—	—	228,553
2037	9,475	4,685	5,715	2,735	—	—	—	—	242,160
2038	9,860	4,925	6,005	2,875	—	—	—	—	223,444
2039	10,265	5,180	6,315	3,020	—	—	—	—	233,364
2040	10,685	5,445	6,640	3,175	—	—	—	—	243,280
2041	11,125	5,725	6,980	3,340	—	—	—	—	202,566
2042	11,585	6,015	7,335	3,510	—	—	—	—	158,866
2043	12,070	6,325	7,715	3,690	—	—	—	—	109,595
2044	12,590	6,650	8,110	3,880	—	—	—	—	115,015
2045	13,125	6,990	8,525	4,080	—	—	—	—	52,620
2046	13,685	7,350	8,960	4,285	—	—	—	—	55,100
2047	14,270	7,725	9,420	4,505	—	—	—	—	57,705
2048	—	8,125	9,905	4,740	—	—	—	—	45,560
2049	—	—	—	—	—	—	—	—	23,845
2050	—	—	—	—	—	—	—	—	24,945
2051	—	—	—	—	—	—	—	—	26,100
Total	\$ 248,360	121,140	147,725	70,675	349,470	48,890	8,705	33,780	4,548,539

(Continued)

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity
Water - Principal and Interest Payments for Debt Issues
(Exclude Commercial Paper)
(Dollars in Thousands)

Interest Payments												
Payments Due for FY Ended			COPs					2010E		2010G		
	2009A	2009B	Series 2009C	2009D Before Subsidy	2010A	2010B Before Subsidy	2010D	Before Subsidy	2010F	Before Subsidy	2011A	2011B
2020	\$ 193	241	513	5,968	63	22,211	1,702	20,062	990	24,427	15,572	845
2021	—	—	375	5,968	—	21,648	841	20,062	778	24,427	15,178	816
2022	—	—	230	5,968	—	21,020	200	20,062	335	24,427	14,370	787
2023	—	—	78	5,968	—	20,329	—	19,748	—	24,427	13,956	771
2024	—	—	—	5,864	—	19,613	—	19,104	—	24,427	13,956	771
2025	—	—	—	5,653	—	18,871	—	18,417	—	24,427	13,956	771
2026	—	—	—	5,430	—	18,102	—	17,691	—	24,427	13,956	771
2027	—	—	—	5,201	—	17,269	—	16,917	—	24,427	13,956	771
2028	—	—	—	4,960	—	16,365	—	16,084	—	24,427	13,956	771
2029	—	—	—	4,710	—	15,426	—	15,182	—	24,427	13,956	771
2030	—	—	—	4,450	—	14,448	—	14,219	—	24,428	13,956	771
2031	—	—	—	4,176	—	13,433	—	13,219	—	24,428	13,956	771
2032	—	—	—	3,887	—	12,376	—	12,180	—	24,043	13,383	771
2033	—	—	—	3,585	—	11,278	—	11,099	—	23,256	12,810	743
2034	—	—	—	3,272	—	10,136	—	9,976	—	22,433	12,810	685
2035	—	—	—	2,944	—	8,950	—	8,809	—	21,572	12,810	621
2036	—	—	—	2,602	—	7,714	—	7,593	—	20,672	12,078	551
2037	—	—	—	2,247	—	6,430	—	6,329	—	19,729	10,496	477
2038	—	—	—	1,875	—	5,096	—	5,015	—	18,743	8,754	400
2039	—	—	—	1,488	—	3,708	—	3,650	—	17,712	7,018	318
2040	—	—	—	1,084	—	2,265	—	2,229	—	16,633	5,195	232
2041	—	—	—	664	—	765	—	753	—	15,504	3,188	143
2042	—	—	—	224	—	—	—	—	—	14,323	1,080	48
2043	—	—	—	—	—	—	—	—	—	13,087	—	—
2044	—	—	—	—	—	—	—	—	—	11,794	—	—
2045	—	—	—	—	—	—	—	—	—	10,441	—	—
2046	—	—	—	—	—	—	—	—	—	9,026	—	—
2047	—	—	—	—	—	—	—	—	—	7,546	—	—
2048	—	—	—	—	—	—	—	—	—	5,997	—	—
2049	—	—	—	—	—	—	—	—	—	4,376	—	—
2050	—	—	—	—	—	—	—	—	—	2,681	—	—
2051	—	—	—	—	—	—	—	—	—	907	—	—
Total	\$ 193	241	1,196	88,188	63	287,453	2,743	278,400	2,103	573,601	270,348	14,379

(Continued)

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity
Water - Principal and Interest Payments for Debt Issues
(Exclude Commercial Paper)
(Dollars in Thousands)

Interest Payments

Payments Due for FY Ended	2011C	2011D	2012A	2012B	2012C1	2012C2	2012D	2015A	2016A	2016B	2016C	2017A
2020	\$ 921	957	20,807	683	339	3,279	221	19,757	35,758	4,454	8,967	6,057
2021	890	957	20,807	683	339	3,279	—	19,124	35,260	3,880	8,866	6,057
2022	857	957	20,807	683	339	3,279	—	18,430	34,178	3,274	8,748	6,057
2023	841	805	20,807	683	339	3,279	—	17,708	32,776	2,723	8,614	5,999
2024	841	494	20,807	683	339	3,279	—	16,643	31,366	2,099	8,463	5,880
2025	841	168	20,807	684	339	3,280	—	15,223	30,157	1,569	8,298	5,754
2026	841	—	20,807	684	339	3,098	—	13,721	28,885	1,209	8,118	5,622
2027	841	—	20,807	684	338	2,724	—	12,421	27,280	894	7,925	5,484
2028	841	—	20,807	684	338	2,332	—	11,385	25,169	639	7,719	5,338
2029	841	—	20,807	684	338	1,920	—	10,332	22,795	464	7,498	5,185
2030	841	—	20,807	684	338	1,487	—	9,225	20,300	279	7,260	5,024
2031	841	—	20,808	684	338	1,031	—	8,097	17,952	87	7,007	4,855
2032	841	—	20,808	664	169	602	—	6,915	16,030	—	6,738	4,676
2033	810	—	20,808	624	—	203	—	5,632	14,280	—	6,448	4,489
2034	747	—	20,808	583	—	—	—	4,425	12,440	—	6,138	4,293
2035	677	—	20,808	534	—	—	—	3,303	10,506	—	5,809	4,086
2036	601	—	20,123	477	—	—	—	2,145	8,470	—	5,463	3,868
2037	520	—	18,348	424	—	—	—	778	6,554	—	5,098	3,640
2038	435	—	16,040	375	—	—	—	—	4,771	—	4,712	3,400
2039	347	—	13,805	323	—	—	—	—	2,916	—	4,306	3,147
2040	253	—	11,726	269	—	—	—	—	985	—	3,883	2,881
2041	155	—	9,562	214	—	—	—	—	—	—	3,443	2,602
2042	53	—	7,310	155	—	—	—	—	—	—	2,985	2,309
2043	—	—	4,660	95	—	—	—	—	—	—	2,499	2,000
2044	—	—	1,579	31	—	—	—	—	—	—	1,983	1,676
2045	—	—	—	—	—	—	—	—	—	—	1,445	1,335
2046	—	—	—	—	—	—	—	—	—	—	884	976
2047	—	—	—	—	—	—	—	—	—	—	299	599
2048	—	—	—	—	—	—	—	—	—	—	—	203
2049	—	—	—	—	—	—	—	—	—	—	—	—
2050	—	—	—	—	—	—	—	—	—	—	—	—
2051	—	—	—	—	—	—	—	—	—	—	—	—
Total	\$ 15,674	4,338	436,070	12,971	4,232	33,072	221	195,264	418,828	21,571	159,614	113,492

(Continued)

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity
Water - Principal and Interest Payments for Debt Issues
(Exclude Commercial Paper)
(Dollars in Thousands)

							Interest Payments			
Payments Due for FY Ended	2017B	2017C	2017D	2017E	2017F	2017G	Federal Interest Subsidy	Total Interest Payments Net of Subsidy	Total Principal & Interest Payments	
2020	\$ 7,386	3,534	17,321	2,395	435	915	(23,933)	203,038	306,625	
2021	7,386	3,534	17,290	2,395	435	904	(23,748)	198,430	309,644	
2022	7,386	3,534	17,254	2,395	435	888	(23,541)	193,358	309,753	
2023	7,315	3,500	17,199	2,376	418	706	(23,211)	188,156	312,690	
2024	7,170	3,430	17,131	2,337	382	344	(22,728)	182,696	313,008	
2025	7,017	3,357	16,843	2,296	344	76	(22,187)	176,962	312,944	
2026	6,856	3,280	16,074	2,090	303	—	(21,623)	170,682	317,407	
2027	6,687	3,200	15,023	1,709	258	—	(21,017)	163,799	316,504	
2028	6,509	3,114	13,919	1,347	211	—	(20,366)	156,549	315,011	
2029	6,323	3,025	12,760	1,004	162	—	(19,677)	148,931	315,014	
2030	6,126	2,931	11,543	613	115	—	(18,953)	140,893	315,798	
2031	5,920	2,832	10,307	220	71	—	(18,198)	132,836	314,720	
2032	5,703	2,729	9,331	20	24	—	(17,286)	124,605	316,145	
2033	5,475	2,619	7,797	—	—	—	(16,211)	115,747	310,774	
2034	5,235	2,504	5,129	—	—	—	(15,090)	106,523	310,699	
2035	4,982	2,384	2,094	—	—	—	(13,923)	96,965	309,255	
2036	4,717	2,257	278	—	—	—	(12,707)	86,901	315,454	
2037	4,438	2,123	—	—	—	—	(11,440)	76,191	318,351	
2038	4,145	1,983	—	—	—	—	(10,121)	65,622	289,066	
2039	3,837	1,836	—	—	—	—	(8,747)	55,663	289,027	
2040	3,514	1,681	—	—	—	—	(7,315)	45,515	288,795	
2041	3,173	1,518	—	—	—	—	(5,824)	35,860	238,426	
2042	2,815	1,347	—	—	—	—	(4,791)	27,858	186,724	
2043	2,438	1,166	—	—	—	—	(4,310)	21,635	131,230	
2044	2,043	978	—	—	—	—	(3,884)	16,199	131,214	
2045	1,627	779	—	—	—	—	(3,439)	12,187	64,807	
2046	1,190	569	—	—	—	—	(2,973)	9,672	64,772	
2047	731	350	—	—	—	—	(2,485)	7,039	64,744	
2048	248	119	—	—	—	—	(1,975)	4,593	50,153	
2049	—	—	—	—	—	—	(1,441)	2,935	26,780	
2050	—	—	—	—	—	—	(883)	1,798	26,743	
2051	—	—	—	—	—	—	(299)	608	26,708	
Total	\$ 138,392	66,211	207,292	21,197	3,594	3,832	(404,326)	2,970,446	7,518,985	

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity
Wastewater - 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	2010A	2010B	2013A	2013B
2020	\$ 1,239	711	—	7,980	—	14,105	—
2021	2,187	747	—	8,390	—	14,850	—
2022	2,355	785	—	8,820	—	14,060	—
2023	2,397	826	—	—	7,280	13,090	—
2024	2,439	—	864	—	7,505	575	8,835
2025	2,483	—	900	—	7,745	610	9,280
2026	2,528	—	937	—	8,000	1,260	9,130
2027	2,572	—	977	—	8,270	—	10,915
2028	2,619	—	1,018	—	8,560	—	11,475
2029	2,666	—	1,061	—	8,860	—	12,065
2030	2,713	—	1,105	—	9,180	—	12,680
2031	2,762	—	1,152	—	9,520	—	13,330
2032	2,811	—	1,202	—	9,875	—	14,015
2033	2,862	—	1,253	—	10,250	—	14,735
2034	2,913	—	1,307	—	10,640	—	15,415
2035	2,965	—	1,363	—	11,045	—	16,045
2036	3,018	—	1,420	—	11,470	—	16,695
2037	3,072	—	1,482	—	11,910	—	17,375
2038	3,127	—	1,545	—	12,365	—	18,090
2039	3,183	—	1,612	—	12,845	—	18,820
2040	3,240	—	1,680	—	13,340	—	19,590
2041	3,298	—	1,752	—	13,855	—	20,390
2042	3,357	—	1,828	—	—	—	35,625
2043	3,417	—	—	—	—	—	37,080
2044	3,478	—	—	—	—	—	—
2045	3,540	—	—	—	—	—	—
2046	3,604	—	—	—	—	—	—
2047	3,668	—	—	—	—	—	—
2048	3,734	—	—	—	—	—	—
2049	1,775	—	—	—	—	—	—
2050	1,807	—	—	—	—	—	—
2051	203	—	—	—	—	—	—
Total	\$ 88,032	3,069	24,458	25,190	192,515	58,550	331,585

(Continued)

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity
Wastewater - Principal and Interest Payments for Debt Issues
(Exclude Commercial Paper)
(Dollars in Thousands)

Principal Payments						
Payments Due for FY Ended	2016A	2016B	2018A	2018B	2018C	Total Principal Payments
2020	\$ —	—	—	—	—	24,035
2021	—	—	—	—	—	26,174
2022	—	—	—	—	—	26,020
2023	—	—	7,715	6,260	—	37,568
2024	5,475	1,545	7,160	5,810	—	40,208
2025	5,760	1,625	6,580	5,335	—	40,318
2026	6,055	1,705	6,915	5,610	—	42,140
2027	6,365	1,795	7,270	5,900	—	44,064
2028	6,690	1,885	7,645	6,200	—	46,092
2029	7,035	1,980	8,035	6,520	—	48,222
2030	7,395	2,085	8,445	6,855	—	50,458
2031	7,775	2,190	8,880	7,205	—	52,814
2032	8,170	2,305	9,335	7,575	—	55,288
2033	8,590	2,420	9,815	7,960	—	57,885
2034	9,030	2,545	10,315	8,375	—	60,540
2035	9,495	2,675	10,845	8,800	—	63,233
2036	9,980	2,815	11,400	9,255	—	66,053
2037	10,495	2,960	11,985	9,730	—	69,009
2038	10,975	3,095	12,600	10,225	—	72,022
2039	11,425	3,220	13,245	10,750	—	75,100
2040	11,890	3,350	13,880	11,275	—	78,245
2041	12,375	3,490	14,510	11,790	—	81,460
2042	12,880	3,630	15,170	12,325	—	84,815
2043	13,405	3,780	15,860	12,890	—	86,432
2044	13,955	3,935	11,445	9,305	9,285	51,403
2045	14,520	4,095	—	—	31,310	53,465
2046	15,115	4,260	—	—	32,590	55,569
2047	15,730	4,435	—	—	33,915	57,748
2048	—	—	—	—	35,300	39,034
2049	—	—	—	—	36,745	38,520
2050	—	—	—	—	—	1,807
2051	—	—	—	—	—	203
Total	\$ <u>240,580</u>	<u>67,820</u>	<u>229,050</u>	<u>185,950</u>	<u>179,145</u>	<u>1,625,944</u>

(Continued)

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity
Wastewater - 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	2010A	2010B Before Subsidy	2013A	2013B	2016A
2020	\$ 787	136	1,578	1,060	10,685	2,381	14,428	10,646
2021	1,474	99	1,578	651	10,685	1,707	14,428	10,646
2022	1,513	61	1,578	220	10,685	1,035	14,428	10,646
2023	1,471	20	1,578	—	10,516	405	14,428	10,646
2024	1,428	—	1,551	—	10,169	89	14,207	10,509
2025	1,384	—	1,494	—	9,801	63	13,754	10,228
2026	1,340	—	1,436	—	9,409	25	13,294	9,963
2027	1,295	—	1,375	—	8,992	—	12,793	9,683
2028	1,249	—	1,312	—	8,550	—	12,233	9,356
2029	1,202	—	1,246	—	8,084	—	11,645	9,013
2030	1,154	—	1,177	—	7,592	—	11,026	8,652
2031	1,106	—	1,104	—	7,073	—	10,376	8,273
2032	1,056	—	1,027	—	6,523	—	9,692	7,875
2033	1,006	—	948	—	5,945	—	8,973	7,455
2034	955	—	865	—	5,344	—	8,297	7,015
2035	903	—	778	—	4,720	—	7,667	6,552
2036	850	—	689	—	4,073	—	7,013	6,066
2037	796	—	594	—	3,397	—	6,331	5,553
2038	741	—	496	—	2,690	—	5,622	5,071
2039	685	—	393	—	1,957	—	4,884	4,623
2040	628	—	287	—	1,194	—	4,116	4,157
2041	570	—	175	—	403	—	3,316	3,672
2042	511	—	59	—	—	—	2,196	3,167
2043	451	—	—	—	—	—	741	2,641
2044	389	—	—	—	—	—	—	2,094
2045	327	—	—	—	—	—	—	1,524
2046	264	—	—	—	—	—	—	932
2047	199	—	—	—	—	—	—	314
2048	134	—	—	—	—	—	—	—
2049	67	—	—	—	—	—	—	—
2050	35	—	—	—	—	—	—	—
2051	3	—	—	—	—	—	—	—
Total	\$ 25,971	316	23,318	1,931	148,487	5,705	225,888	186,972

(Continued)

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity
Wastewater - Principal and Interest Payments for Debt Issues
(Exclude Commercial Paper)
(Dollars in Thousands)

Interest Payments

Payments Due for FY Ended	2016B	2018A	2018B	2018C	Federal Interest Subsidy	Total Interest Payments Net of Subsidy	Total Principal & Interest Payments
2020	\$ 3,001	10,744	9,298	3,807	(4,039)	64,511	88,546
2021	3,001	10,744	9,298	3,806	(4,039)	64,077	90,251
2022	3,001	10,744	9,298	3,807	(4,039)	62,976	88,996
2023	3,001	10,551	9,141	3,807	(3,984)	61,581	99,149
2024	2,962	10,179	8,839	5,486	(3,860)	61,561	101,769
2025	2,883	9,836	8,561	7,166	(3,720)	61,450	101,768
2026	2,809	9,498	8,287	7,166	(3,572)	59,655	101,795
2027	2,729	9,144	7,999	7,166	(3,414)	57,761	101,825
2028	2,637	8,771	7,697	7,166	(3,248)	55,722	101,814
2029	2,541	8,379	7,379	7,166	(3,072)	53,582	101,804
2030	2,439	7,967	7,044	7,166	(2,889)	51,330	101,788
2031	2,333	7,534	6,693	7,166	(2,694)	48,964	101,778
2032	2,220	7,078	6,323	7,166	(2,486)	46,475	101,763
2033	2,101	6,599	5,935	7,166	(2,270)	43,859	101,744
2034	1,977	6,096	5,527	7,166	(2,045)	41,197	101,737
2035	1,847	5,567	5,097	7,166	(1,811)	38,486	101,719
2036	1,710	5,011	4,646	7,166	(1,568)	35,655	101,708
2037	1,565	4,426	4,171	7,166	(1,314)	32,685	101,694
2038	1,430	3,812	3,672	7,166	(1,049)	29,651	101,673
2039	1,303	3,166	3,148	7,166	(774)	26,550	101,650
2040	1,172	2,557	2,597	7,166	(487)	23,386	101,631
2041	1,035	1,989	2,021	7,166	(191)	20,155	101,615
2042	893	1,396	1,418	7,166	(20)	16,785	101,600
2043	745	775	788	7,166	—	13,306	99,738
2044	590	229	233	6,980	—	10,515	61,918
2045	429	—	—	6,168	—	8,448	61,913
2046	264	—	—	4,890	—	6,350	61,919
2047	88	—	—	3,560	—	4,162	61,910
2048	—	—	—	2,176	—	2,310	41,344
2049	—	—	—	735	—	802	39,322
2050	—	—	—	—	—	36	1,843
2051	—	—	—	—	—	3	207
Total	\$ 52,709	162,792	145,109	181,374	(56,584)	1,103,986	2,729,930

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity
Power - Principal and Interest Payments for Debt Issues
(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	New Clean Renewable Energy Bonds 2012	2015A	2015B	New Clean Renewable Energy Bonds 2015	Total Principal Payments
2020	\$ 422	366	—	536	583	—	755	232	2,894
2021	422	384	—	542	130	—	785	235	2,498
2022	422	405	—	549	—	—	815	239	2,430
2023	421	425	—	555	—	—	850	242	2,493
2024	—	—	445	562	—	—	880	245	2,132
2025	—	—	463	569	—	—	910	248	2,190
2026	—	—	483	575	—	—	945	252	2,255
2027	—	—	503	582	—	830	150	256	2,321
2028	—	—	524	295	—	1,020	—	260	2,099
2029	—	—	546	—	—	1,075	—	263	1,884
2030	—	—	569	—	—	1,125	—	267	1,961
2031	—	—	593	—	—	1,185	—	271	2,049
2032	—	—	619	—	—	1,240	—	274	2,133
2033	—	—	645	—	—	1,305	—	138	2,088
2034	—	—	673	—	—	1,370	—	—	2,043
2035	—	—	702	—	—	1,435	—	—	2,137
2036	—	—	731	—	—	1,510	—	—	2,241
2037	—	—	763	—	—	1,585	—	—	2,348
2038	—	—	796	—	—	1,665	—	—	2,461
2039	—	—	830	—	—	1,745	—	—	2,575
2040	—	—	865	—	—	1,835	—	—	2,700
2041	—	—	902	—	—	1,925	—	—	2,827
2042	—	—	941	—	—	2,020	—	—	2,961
2043	—	—	—	—	—	2,125	—	—	2,125
2044	—	—	—	—	—	2,230	—	—	2,230
2045	—	—	—	—	—	2,340	—	—	2,340
2046	—	—	—	—	—	2,460	—	—	2,460
Total	\$ 1,687	1,580	12,593	4,765	713	32,025	6,090	3,422	62,875

(Continued)

May not total due to rounding.

*No interest payments are required.

Source: San Francisco Public Utilities Commission Official Statements.

Debt Capacity
Power - Principal and Interest Payments for Debt Issues
(Dollars in Thousands)

Interest Payments

Payments Due for FY Ended	COPs Series 2009C	COPs 2009D Before Subsidy	QECBs 2011 Before Subsidy	NCREBs 2012 Before Subsidy	2015A	2015B	NCREBs 2015 Before Subsidy	Federal Interest Subsidy	Total Interest Payments Net of Subsidy	Total Principal & Interest Payments
2020	\$ 70	812	219	27	1,593	220	155	(542)	2,554	5,448
2021	51	812	194	3	1,593	189	145	(501)	2,486	4,984
2022	31	812	168	—	1,593	157	134	(474)	2,421	4,851
2023	10	812	142	—	1,593	124	123	(449)	2,355	4,848
2024	—	798	116	—	1,593	93	111	(417)	2,294	4,426
2025	—	769	89	—	1,593	62	100	(383)	2,229	4,419
2026	—	739	62	—	1,593	25	88	(346)	2,161	4,416
2027	—	709	35	—	1,576	3	78	(309)	2,092	4,413
2028	—	675	7	—	1,534	—	65	(270)	2,011	4,110
2029	—	641	—	—	1,482	—	53	(246)	1,930	3,814
2030	—	606	—	—	1,427	—	41	(226)	1,848	3,809
2031	—	568	—	—	1,369	—	28	(206)	1,759	3,808
2032	—	530	—	—	1,308	—	16	(185)	1,669	3,802
2033	—	488	—	—	1,245	—	3	(163)	1,573	3,661
2034	—	446	—	—	1,178	—	—	(147)	1,477	3,520
2035	—	401	—	—	1,108	—	—	(132)	1,377	3,514
2036	—	354	—	—	1,034	—	—	(116)	1,272	3,513
2037	—	306	—	—	957	—	—	(101)	1,162	3,510
2038	—	255	—	—	876	—	—	(84)	1,047	3,508
2039	—	203	—	—	790	—	—	(67)	926	3,501
2040	—	148	—	—	701	—	—	(48)	801	3,501
2041	—	90	—	—	607	—	—	(30)	668	3,495
2042	—	32	—	—	508	—	—	(9)	531	3,492
2043	—	—	—	—	405	—	—	—	405	2,530
2044	—	—	—	—	296	—	—	—	296	2,526
2045	—	—	—	—	181	—	—	—	181	2,521
2046	—	—	—	—	62	—	—	—	62	2,522
Total	\$ 162	12,006	1,032	30	29,794	872	1,140	(5,451)	39,585	102,460

May not total due to rounding.

Source: San Francisco Public Utilities Commission Official Statements.



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

Demographic and Economic Information

City and County of San Francisco Economic and General Information

Summary of Accounts by Type of Customer

Water Accounts and Billings

Historical Water Sales in Hundred Cubic Feet

Historical Water Sales in Millions of Gallons per Day

Historical Water Sales in Millions of Gallons

Wholesale Water Customers

Accounts and Billings by Type of Customer

Historical Hetchy Water Sales

Historical Hetchy Power Electric Sales

Historical CleanPowerSF Electric Sales



Photo by: Robin Scheswohl

Warnerville Substation



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

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 “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.



During the calendar year 2018, the total number of jobs in the region increased by 21,600. The biggest job gains were in professional and business services, information technology and trade, transportation and utilities. Median home prices in the San Francisco area have been among the most expensive in the country every year since 2007. As of September 2019, the median price of homes in San Francisco increased by \$28,000 from \$1,550,000 to \$1,578,000 a 1.8% increase from last year. While residents are quite wealthy with household median income of \$112,376 in 2019, home prices far exceeded local incomes. A typical home costs approximately 14 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 887,463 as of fiscal year 2019. The table reflects the population and per capita personal income of the City, as estimated based on the U.S. Census Bureau.

¹ Per capita personal income for 2018 and 2019 was estimated by dividing the estimated personal income for 2018 and 2019 by the reported and estimated population in 2018 and 2019, respectively. 2019 was estimated by multiplying the latest quarterly State income by 1,000 and dividing by the estimated 2019 population. Fiscal year 2017 and 2018 is updated from last year's CAFR with newly available data.

CITY AND COUNTY OF SAN FRANCISCO Population and Income - Fiscal Years 2014-2019		
Fiscal Year	Population ¹	Per Capita Personal Income ¹
2014	852,469	90,600
2015	862,004	103,867
2016	876,103	109,760
2017	879,166	120,576
2018	883,305	127,304
2019	887,463	130,961

San Francisco Conventions and Tourism

According to the San Francisco Travel Association (the “Travel Association”), a non-profit membership organization, during the calendar year 2018 approximately 25.8 million people visited the City, up 1.2% from 2017, generating approximately \$10 billion for local businesses, an increase of 2.3% from previous year. Visitors in San Francisco spend on average \$25.5 million daily or \$1.06 million per hour, creating 82,538 jobs to support the city and the Bay Area. Although hotel occupancy rates decreased for 2018 from 83.7% to 82.2%, with the completion of the Moscone Center in January 2019, it is projected to increase by 1.2%.



Moscone Center Expansion

The Moscone Center celebrated \$551 million expansion completion early January 2019. With over 504,000 square foot of exhibit space and 82 meeting rooms, the center is a brand-new start-of-the-art building. Like the SFPUC headquarter building located at 525 Golden Gate Avenue, the Moscone Center also meet the certification of Leadership in Energy and Environmental Design (LEED) building. With one of the largest rooftop solar panel array in San Francisco, the Center provides approximately 20% of its own power. Besides solar power, the Center reuses approximately 15 million gallons of water annually for landscaping, street cleaning and toilet flushing.

San Francisco Employment

According to the California Employment Development Department, the unemployment rate for the City was 2.3% for June 2019 compared with an unadjusted unemployment rate of 4.2% for the State.

Tables below summarizes information on the civilian labor, employment, and unemployment in the City; and employment by industry from calendar years 2014 to 2018.

CITY AND COUNTY OF SAN FRANCISCO					
Civilian Labor Force, Employment, and Unemployment ¹					
June 2018 and 2019 ²					
Year	Area	Labor Force	Employment	Unemployment	Unemployment Rate
June 2019	San Francisco	579,500	565,900	13,600	2.3%
	State	19,297,400	18,493,900	803,500	4.2%
June 2018 ³	San Francisco	573,300	558,600	14,700	2.6%
	State	19,395,600	18,545,400	850,100	4.4%

¹ Labor force data reflects the March 2018 benchmark and Census 2010 population controls at the state level.

² Data not seasonally adjusted.

³ June 2018 data is updated from last year's CAFR with newly available data.

Source: California Employment Development Department, Labor Market Information Division.

CITY AND COUNTY OF SAN FRANCISCO					
Estimated Average Annual Employment by Sector - Calendar Years 2014-2018 ¹					
	2014	2015	2016	2017	2018
Total Farm	200	200	100	200	200
Total Nonfarm	633,300	675,000	703,400	719,300	740,900
Professional & Business Services	168,800	183,400	190,600	194,700	203,600
Leisure & Hospitality	90,200	93,900	97,300	96,900	96,200
Government	89,500	92,100	94,300	96,600	98,100
Educational & Health Services	83,000	85,700	87,700	89,000	91,200
Trade, Transportation & Utilities	70,700	75,600	78,800	81,000	84,000
Financial Activities	50,200	53,600	56,100	56,300	57,700
Information	28,300	35,200	39,000	43,000	46,600
Manufacturing & Construction	27,000	29,400	32,600	34,300	35,700
Other Services	25,800	26,300	27,100	27,700	28,000
Total All Industries	633,500	675,200	703,500	719,500	741,100

¹ Calendar year 2017 and prior is updated from last year's CAFR 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
San Francisco Unified School District	Public Education
State of California	State Government
United States Postal Service	Mailing and Shipping
University of California, San Francisco	Health Sciences University and Medical Center
5,000 - 9,999 Employees	
Kaiser Permanente	Health Care System
Salesforce	Customer Relationship Management Software
Sutter Health	Health Care System
Uber Technologies Inc.	Ride-Sharing Service
Wells Fargo Bank	Financial Services
1,000 - 4,999 Employees	
Academy of Art University	Art and Design University
Accenture	Management Consulting Company
Airbnb Inc.	Online Vacation Rental Services
Allied Universal	Security Systems, Guarding Services
Amazon	Ecommerce and Cloud Computing
Cisco Systems Inc.	Computer networking equipment
City College of San Francisco	Community College
Deloitte	Accounting, Audit, Tax, Advisory, Consulting
Dignity Health	Health Care System
First Republic Bank	Financial Services
Gap Inc.	Apparel Retail
PG&E Corp.	Electric and Gas Energy Company
San Francisco State University	Public State University
University of San Francisco	University Education
Yelp Inc.	Online Business Review Site

Source: San Francisco Business Times.

San Francisco Taxable Sales

The following table provides information on taxable sales for the City for calendar years 2014 through 2018. Total retail sales increased in 2018 by approximately \$538 million compared to 2017.

CITY AND COUNTY OF SAN FRANCISCO					
Taxable Sales - Calendar Years 2014-2018 ¹					
(\$ in Thousands)					
	2014	2015	2016	2017	2018
Building Material/Garden Equipment/Supplies \$	537,424	588,279	586,373	605,711	681,369
Clothing and Clothing Accessories Stores	2,168,822	2,163,743	2,132,167	2,056,070	2,046,414
Food and Beverage Stores	782,750	830,061	843,717	863,215	856,217
Food Services and Drinking Places	4,104,185	4,441,352	4,670,360	4,743,633	4,844,464
Gasoline Stations	611,354	471,496	428,473	490,255	583,480
General Merchandise Stores	864,009	865,959	837,698	814,324	790,845
Home Furnishings and Appliance Stores	938,256	1,010,769	965,919	916,777	1,018,006
Motor Vehicle and Parts Dealers	588,769	565,639	573,965	628,666	674,008
Other Retail Stores ²	2,037,646	2,136,115	2,223,654	2,373,545	2,535,667
Retails Stores Total	\$ 12,633,215	13,073,413	13,262,326	13,492,196	14,030,470
All Other Outlets not listed above	5,836,514	5,839,079	6,174,841	5,981,674	6,312,252
Total All Outlets	\$ 18,469,729	18,912,492	19,437,167	19,473,870	20,342,722

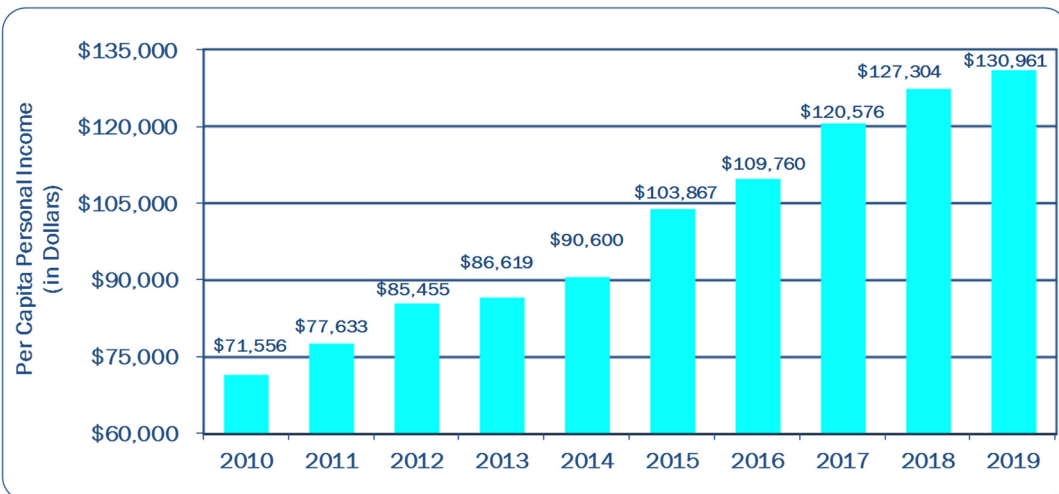
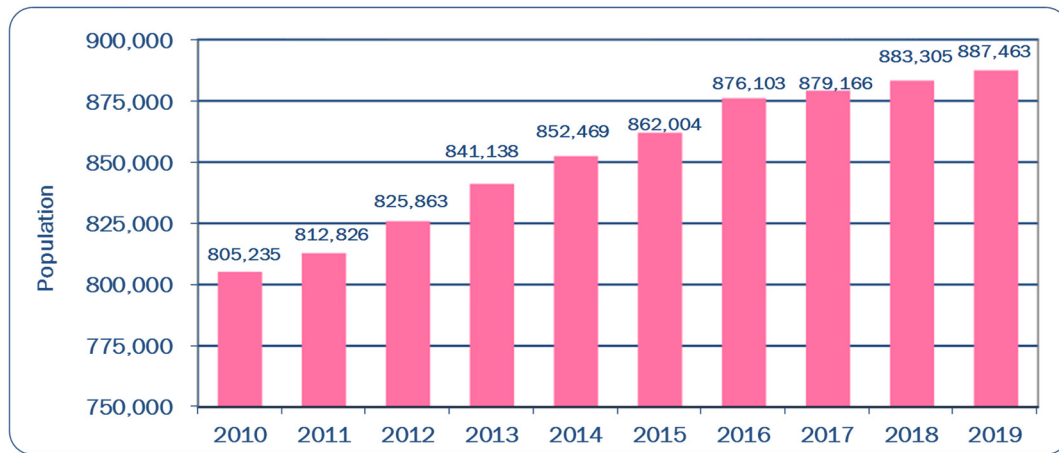
¹ The latest data as of calendar year 2018 is presented.

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 2010 to 2019**

Year	Population ¹	Personal Income (In Thousands) ²	Per Capita Personal income ²
2010	805,235	\$ 57,619,120	\$ 71,556
2011	812,826	63,102,121	77,633
2012	825,863	70,573,974	85,455
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	883,305	112,447,995 ⁴	127,304 ⁵
2019	887,463 ³	116,222,759 ⁴	130,961 ⁵



¹ US Census Bureau, fiscal years 2017 and 2018 were updated from last year's CAFR with newly available data.

² US Bureau of Economic Analysis, fiscal years 2017 and 2018 were updated from last year's CAFR with newly available data.

³ 2019 population was estimated by multiplying the estimated 2018 population by the 2018 to 2019 population growth rate.

⁴ Personal income was estimated by assuming that its percentage of state personal income in fiscal years 2018 and 2019 remained at the 2018 level of 4.47 percent.

⁵ Per capita personal income for 2018 and 2019 was estimated by dividing the estimated personal income for 2018 and 2019 by the reported and estimated population in 2018 and 2019, respectively. 2019 was estimated by multiplying the latest quarterly City income by 1,000 and dividing by the estimated 2019 population.

Source: Office of the Controller, City and County of San Francisco.

**Demographic & Economic Information
San Francisco City and County Principal Employers**

Employer	2018 ¹			2009		
	Employees	Rank	Percentage of Total City Employment	Employees	Rank	Percentage of Total City Employment ²
University of California, San Francisco	34,690	1	6.1 %	24,759	2	5.8 %
City and County of San Francisco	32,749	2	5.8	26,554	1	6.2
San Francisco Unified School District	10,506	3	1.8	5,313	7	1.2
Salesforce	8,000	4	1.4	—	—	—
Wells Fargo Bank	7,747	5	1.4	9,214	3	2.2
Kaiser Permanente	6,659	6	1.2	5,629	5	1.3
Sutter Health	5,359	7	0.9	—	—	—
Uber Technologies Inc.	5,000	8	0.9	—	—	—
Gap, Inc.	4,000	9	0.7	3,804	10	0.9
Pacific Gas & Electric Corporation	3,800	10	0.7	4,394	9	1.0
California Pacific Medical Center	—	—	—	6,800	4	1.6
State of California	—	—	—	5,555	6	1.3
United States Postal Service	—	—	—	4,697	8	1.1
Total	118,510		20.8 %	96,719		18.4 %
Total City Employment			569,500			524,300

¹The latest data as of calendar year 2018 is presented.

² Percentages have been restated based on updated employment information, and as a result, may differ from amounts reported in the Comprehensive Annual Financial Report for the City and County of San Francisco.

Source: Total City and County of San Francisco employee count is obtained from the State of California Employee Development Department. All other data is obtained from the San Francisco Business Times Book of Lists.

Demographic & Economic Information
 Summary of Water and Sewer Accounts by Type of Customer
 Fiscal Years Ended 2010 to 2019

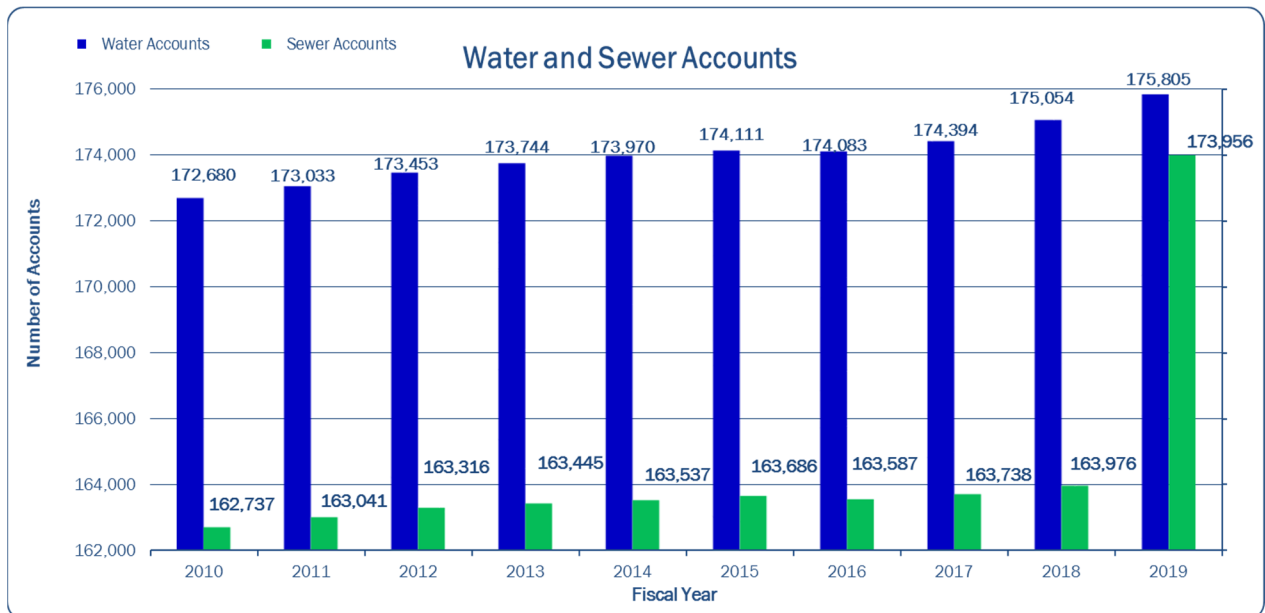
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Water Account Types										
Retail - San Francisco										
Multi-Family Residential	40,844	40,919	40,990	41,121	41,165	41,279	41,369	41,594	42,101	42,482
Single-Family Residential	109,440	109,705	109,957	110,062	110,144	110,140	110,050	110,118	110,153	110,413
Commercial	20,153	20,166	20,245	20,270	20,354	20,384	20,320	20,344	20,429	20,512
Industrial	85	85	84	83	82	81	81	80	80	81
Municipal	1,768	1,775	1,795	1,826	1,843	1,849	1,885	1,882	1,915	1,939
Subtotal	172,290	172,650	173,071	173,362	173,588	173,733	173,705	174,018	174,678	175,427
Retail - Other										
Commercial	101	92	90	89	88	85	85	83	86	87
Municipal	1	1	1	1	1	1	1	1	1	3
Other	3	3	3	3	3	3	3	3	3	2
Residential	204	206	207	208	212	211	211	211	208	208
Subtotal	309	302	301	301	304	300	300	298	298	300
Wholesale										
Private utilities	21	21	21	21	21	22	22	22	22	22
Public utilities	60	60	60	60	57	56	56	56	56	56
Subtotal	81	81	81	81	78	78	78	78	78	78
Total water accounts	172,680	173,033	173,453	173,744	173,970	174,111	174,083	174,394	175,054	175,805
Sewer Account Types										
Retail & Resale										
Multi-Family Residential	36,271	36,269	36,275	36,301	36,248	36,313	36,293	36,323	36,326	36,387
Single-Family Residential	110,324	110,608	110,875	111,007	111,125	111,173	111,137	111,268	111,385	111,681
Commercial ^{2,3}	15,416	15,439	15,439	15,400	15,430	15,460	15,411	15,388	15,494	24,802
Municipal	717	716	719	729	725	731	738	751	763	772
Suburban (Watershed Keepers)	9	9	8	8	9	9	8	8	8	8
Unmetered Properties ¹	No data prior to fiscal year 2019									306
Total sewer accounts	162,737	163,041	163,316	163,445	163,537	163,686	163,587	163,738	163,976	173,956

¹ Beginning in fiscal year 2019, Unmetered Properties accounts are included.

² Beginning fiscal year 2011, the Presidio Trust Accounts are under Multi-Family Residential and Commercial account type.

³ 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.

Source: San Francisco Public Utilities Commission Water Sewer System and Customer Care and Billing System as of June 30, 2019 and Rate Schedules.



Demographic & Economic Information

Summary of Hetchy Water, Hetchy Power and CleanPowerSF Accounts by Type of Customer

Fiscal Years Ended 2010 to 2019

Hetchy Water

Accounts	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Upcountry Water Sales	7	7	7	7	7	7	6	5	5	5

Source: San Francisco Public Utilities Commission Customer Care and Billing System.

Hetchy Power

Electric Meters	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
City Agencies	1,429	1,437	1,437	1,449	1,470	1,480	1,494	1,491	1,511	1,499
Non-City Agencies*	786	791	780	766	758	783	1,090**	1,536**	1,996**	2,209**
Moccasin/City of Riverbank	39	40	41	40	41	40	41	39	38	37
Modesto/Turlock Irrigation Districts	2	2	2	2	2	2	2	2	2	2
Total accounts	2,256	2,270	2,260	2,257	2,271	2,305	2,627	3,068	3,547	3,747
Gas and Steam Meters										
Nature Gas (City Agencies)	346	350	343	346	351	352	359	351	355	352
Steam (City Agencies)	11	11	11	12	12	12	12	12	12	12
Total accounts	357	361	354	358	363	364	371	363	367	364

* Non-City Agencies include electric retail and municipal customers such as Moscone tenants, Exploratorium, and Yerba Buena Gardens.

** Increases from fiscal years 2016 to 2019 are new accounts in the Hunter's Point Shipyard Redevelopment Project, Alice Griffith Redevelopment Project and the Distributed Antenna System.

Source: San Francisco Public Utilities Commission Power Enterprise Billing System.

CleanPowerSF

Account	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Residential							364	69,492	74,160	343,807 ^
Commercial										
Small Commercial Service							6,256	6,169	6,422	27,750
Medium Commercial Service							541	504	688	2,428
Large Commercial Service							299	314	336	1,812
Agricultural							—	3	7	25
Street and Outdoor Lighting							—	—	—	306
Commercial Subtotal							7,096	6,990	7,453	32,321
Total accounts							7,460	76,482	81,613	376,128

^ increase is from completion of citywide enrollment.

Source: Calpine's customer snapshot reports. Calpine obtains the data from PG&E.

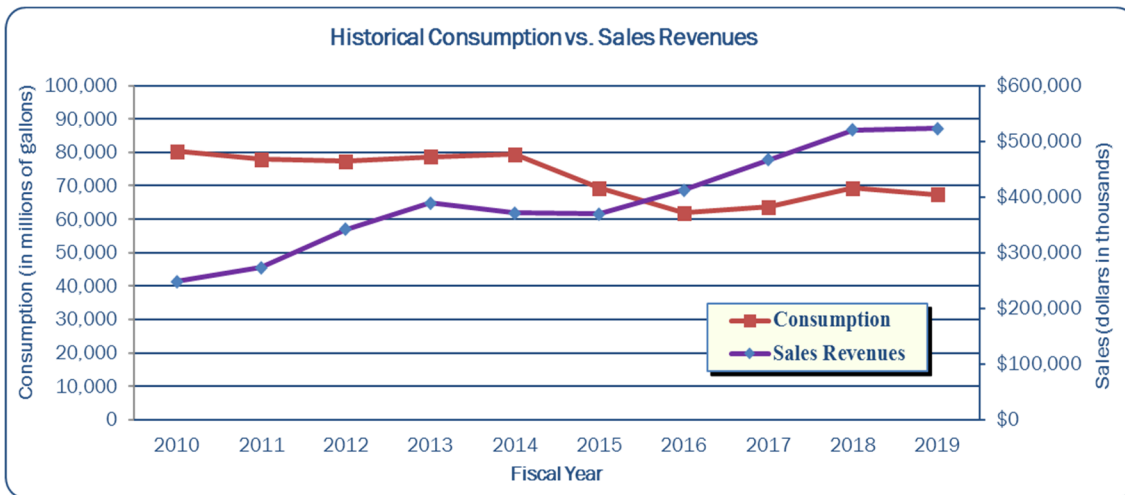
**Demographic & Economic Information
Water Accounts and Billings
Fiscal Years Ended 2010 to 2019
(Dollars in Thousands)**

Fiscal Year ¹	Number of Consumer Accounts	Water Consumed (CCF) ^{#*}	Water Consumed (MG) ^{##**}	Service Charges Billed (\$)	Water Charges Billed (\$)	Total Amount Billed (\$)
2010	172,680	107,309,005	80,267	21,191	226,806	247,997
2011	173,033	104,148,869	77,904	23,625	249,414	273,039
2012	173,453	103,435,144	77,369	26,267	315,713	341,980
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	175,805	89,997,393	67,319	44,104	478,448	522,552

* Hundred cubic feet = 748 gallons
 ** Millions of gallons

¹ Beginning in fiscal year 2011, total amount billed excludes BAWSCA fees and surcharge, and collections designated for Wholesale Coverage Reserve.
 # Consumption data updated from fiscal years 2011 to 2018.

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 2010 to 2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2019 % of Total
Retail Customers											
Multi-Family Residential	12,203,512	12,260,606	12,139,673	11,857,405	11,790,707	10,923,723	10,511,291	10,730,224	11,088,325	11,001,321	12.2%
Single-Family Residential	8,023,052	7,849,371	7,854,469	7,848,355	8,124,179	7,056,525	6,674,624	6,765,508	6,954,084	6,766,191	7.5%
Commercial ^{1,3}	9,505,871	9,428,821	9,387,963	9,369,923	9,249,884	8,881,095	8,486,990	8,286,580	8,539,377	8,145,347	9.1%
Industrial	83,063	87,068	90,174	91,641	96,073	100,995	94,178	92,846	86,555	84,142	0.1%
Municipal ^{2,3,4,6}	2,004,065	1,651,602	1,584,640	1,764,467	1,818,869	1,351,523	1,252,031	1,519,354	1,582,906	1,592,205	1.8%
Suburban Retail ^{2,3}	1,691,900	1,739,343	1,773,498	2,082,763	2,090,360	1,860,949	1,556,586	1,397,568	1,524,511	1,426,850	1.6%
Retail water sales	33,511,463	33,016,811	32,830,417	33,014,554	33,170,072	30,174,810	28,575,700	28,792,081	29,775,757	29,016,056	32.2%
Wholesale Customers											
California Water Service ⁵	15,889,763	15,719,285	16,081,904	16,104,269	16,478,539	14,177,253	11,442,469	11,853,307	13,437,872	12,823,623	14.2%
Hayward Municipal Water	8,418,044	8,308,740	7,610,980	7,552,956	7,402,067	6,634,616	5,979,616	6,281,522	7,101,954	6,821,848	7.6%
City of Palo Alto	5,362,543	5,440,236	5,561,559	5,528,554	5,520,468	4,671,433	4,006,084	4,382,560	4,859,576	4,600,987	5.1%
City of Sunnyvale	4,838,316	3,968,975	4,406,804	4,653,481	4,169,463	3,801,695	3,816,230	3,966,024	4,615,487	4,281,432	4.8%
City of Redwood City	4,689,257	4,462,944	4,420,594	4,541,338	4,457,196	3,909,265	3,484,888	3,764,419	4,109,993	3,945,340	4.4%
Alameda County Water District	5,274,040	3,920,455	3,953,054	4,423,129	5,837,509	3,885,891	2,924,129	3,039,722	3,875,669	3,745,166	4.2%
City of Mountain View	4,365,076	4,208,860	4,273,100	4,436,942	4,405,542	3,715,499	3,285,167	3,374,726	3,679,915	3,551,507	3.9%
City of Milpitas	3,065,570	2,979,835	3,027,111	3,137,125	3,244,023	2,556,289	2,199,649	2,361,244	2,544,956	2,504,392	2.8%
City of San Jose	2,015,340	2,051,706	2,138,714	2,197,501	2,263,880	2,189,406	1,990,436	2,017,559	2,198,147	2,104,452	2.3%
Esterro Municipal Improvement District	2,392,875	2,272,167	1,982,291	1,977,026	1,983,373	1,942,828	1,755,953	1,869,684	2,064,667	1,966,799	2.2%
All Other Wholesale Customers ^{5,6}	17,486,718	17,798,855	17,148,616	17,599,683	17,251,767	14,965,959	13,323,145	13,466,407	14,425,326	14,635,791	16.3%
Wholesale water sales	73,797,542	71,132,058	70,604,727	72,152,004	73,013,827	62,450,134	54,207,766	56,377,174	62,913,563	60,981,337	67.8%
Total water sales	107,309,005	104,148,869	103,435,144	105,166,558	106,183,899	92,624,944	82,783,466	85,169,254	92,689,320	89,997,393	100.0%
% Change from prior year	-7.1%	-2.9%	-0.7%	1.6%	1.0%	-12.8%	-10.6%	2.9%	8.8%	-2.9%	
Number of accounts	172,680	173,033	173,453	173,744	173,970	174,111	174,083	174,394	175,054	175,805	
Retail	172,599	172,952	173,372	173,663	173,892	174,033	174,005	174,316	174,976	175,727	
Wholesale	81	81	81	81	78	78	78	78	78	78	

¹ Includes Docks & Ships under Commercial.

² San Francisco International Airport was historically included as a Municipal customer. Starting fiscal year 2011 and thereafter, the account was restated to Suburban Retail, as water sales represent resale to their tenants and not for its own consumption.

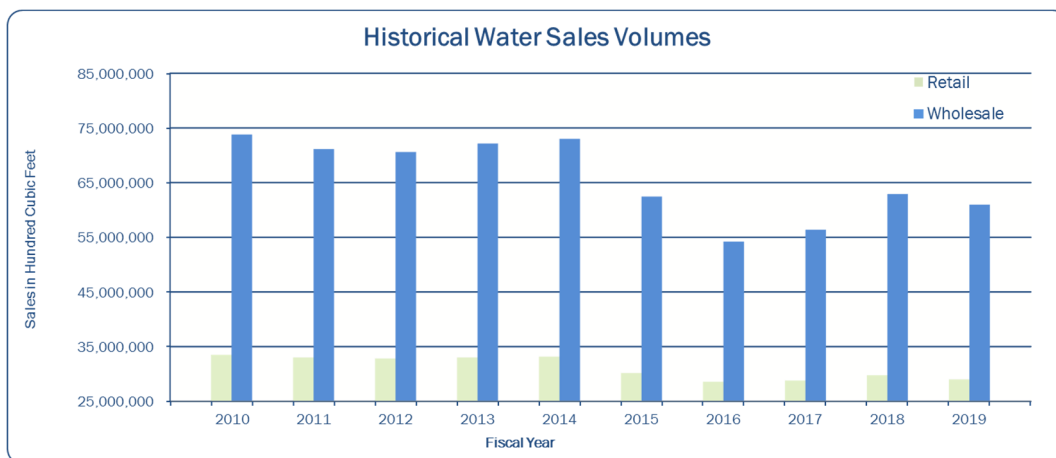
³ Master-metered Treasure Island water sales were included under Commercial from fiscal year 2011 and 2012 and under Suburban Retail from fiscal year 2013 to fiscal year 2016. Beginning in fiscal year 2017, they have been classified under Municipal. Current Treasure Island usage represents purchases 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.

⁵ 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.

⁶ Water sales usage for Sharp Park updated for Municipal in Retail Customers category in fiscal year 2010 and 2011 and for All Other Wholesale Customers in Wholesale Customers category in fiscal year 2010 to 2018.

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 2010 to 2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2019 % of Total
Retail Customers											
Multi-Family Residential	25.0	25.1	24.8	24.3	24.2	22.4	21.5	22.0	22.7	22.5	12.2%
Single-Family Residential	16.4	16.1	16.1	16.1	16.6	14.5	13.6	13.9	14.3	13.9	7.5%
Commercial ^{1,3}	19.5	19.3	19.2	19.2	19.0	18.2	17.3	17.0	17.5	16.7	9.1%
Industrial	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1%
Municipal ^{2,3,4,6}	4.1	3.4	3.2	3.6	3.7	2.8	2.6	3.1	3.2	3.3	1.8%
Suburban Retail ^{2,3}	3.5	3.6	3.6	4.3	4.3	3.8	3.2	2.9	3.1	2.9	1.6%
Retail water sales	68.7	67.7	67.1	67.7	68.0	61.9	58.4	59.1	61.1	59.5	32.2%
Wholesale Customers											
California Water Service ⁵	32.6	32.2	32.9	33.0	33.8	29.1	23.4	24.3	27.5	26.3	14.2%
Hayward Municipal Water	17.3	17.0	15.6	15.5	15.2	13.6	12.2	12.9	14.6	14.0	7.6%
City of Palo Alto	11.0	11.1	11.4	11.3	11.3	9.6	8.2	9.0	10.0	9.4	5.1%
City of Sunnyvale	9.9	8.1	9.0	9.5	8.5	7.8	7.8	8.1	9.5	8.8	4.8%
City of Redwood City	9.6	9.1	9.1	9.3	9.1	8.0	7.1	7.7	8.4	8.1	4.4%
Alameda County Water District	10.8	8.0	8.1	9.1	12.0	8.0	6.0	6.2	7.9	7.7	4.2%
City of Mountain View	8.9	8.6	8.7	9.1	9.0	7.6	6.7	6.9	7.5	7.3	3.9%
City of Milpitas	6.3	6.1	6.2	6.4	6.6	5.2	4.5	4.8	5.2	5.1	2.8%
City of San Jose	4.1	4.3	4.4	4.5	4.6	4.5	4.1	4.1	4.5	4.3	2.3%
Estero Municipal Improvement District	4.9	4.7	4.1	4.1	4.1	4.0	3.6	3.8	4.2	4.0	2.2%
All Other Wholesale Customers ^{5,6}	35.8	36.5	35.1	36.1	35.4	30.7	27.3	27.6	29.6	30.0	16.3%
Wholesale water sales	151.2	145.8	144.6	147.9	149.7	128.0	110.8	115.5	128.9	125.0	67.8%
Total water sales	219.9	213.5	211.7	215.6	217.7	189.9	169.2	174.6	190.0	184.5	100.0%
% Change from prior year	-7.1%	-2.9%	-0.7%	1.6%	1.0%	-12.8%	-10.6%	2.9%	8.8%	-2.9%	
Number of accounts	172,680	173,033	173,453	173,744	173,970	174,111	174,083	174,394	175,054	175,805	
Retail	172,599	172,952	173,372	173,663	173,892	174,033	174,005	174,316	174,976	175,727	
Wholesale	81	81	81	81	78	78	78	78	78	78	

¹ Includes Docks & Ships under Commercial.

² San Francisco International Airport was historically included as a Municipal customer. Starting fiscal year 2011 and thereafter, the account was restated to Suburban Retail, as water sales represent resale to their tenants and not for its own consumption.

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.

⁵ 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.

⁶ Water sales usage for Sharp Park updated for Municipal in Retail Customers category in fiscal year 2010 and 2011 and for All Other Wholesale Customers in Wholesale Customers category in fiscal year 2010 to 2018.

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 2010 to 2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2019 % of Total
Retail Customers											
Multi-Family Residential	9,128	9,171	9,080	8,869	8,819	8,171	7,862	8,026	8,294	8,229	12.2%
Single-Family Residential	6,001	5,871	5,875	5,871	6,077	5,278	4,993	5,061	5,202	5,061	7.5%
Commercial ^{1,3}	7,110	7,053	7,022	7,009	6,919	6,643	6,348	6,198	6,387	6,093	9.1%
Industrial	62	65	67	69	72	76	70	69	65	63	0.1%
Municipal ^{2,3,4,6}	1,499	1,235	1,185	1,320	1,361	1,011	937	1,136	1,184	1,191	1.8%
Suburban Retail ^{2,3}	1,266	1,301	1,327	1,558	1,564	1,392	1,164	1,045	1,140	1,067	1.6%
Retail water sales	25,067	24,696	24,557	24,695	24,811	22,571	21,375	21,536	22,272	21,704	32.2%
Wholesale Customers											
California Water Service ⁵	11,886	11,758	12,029	12,046	12,326	10,605	8,559	8,866	10,052	9,592	14.2%
Hayward Municipal Water	6,297	6,215	5,693	5,650	5,537	4,963	4,473	4,699	5,312	5,103	7.6%
City of Palo Alto	4,011	4,069	4,160	4,135	4,129	3,494	2,997	3,278	3,635	3,442	5.1%
City of Sunnyvale	3,619	2,969	3,296	3,481	3,119	2,844	2,855	2,967	3,452	3,203	4.8%
City of Redwood City	3,508	3,338	3,307	3,397	3,334	2,924	2,607	2,816	3,074	2,951	4.4%
Alameda County Water District	3,945	2,933	2,957	3,309	4,366	2,907	2,187	2,274	2,899	2,801	4.2%
City of Mountain View	3,265	3,148	3,196	3,319	3,295	2,779	2,457	2,524	2,753	2,657	3.9%
City of Milpitas	2,293	2,229	2,264	2,347	2,427	1,912	1,645	1,766	1,904	1,873	2.8%
City of San Jose	1,507	1,535	1,600	1,644	1,693	1,638	1,489	1,509	1,644	1,574	2.3%
Estero Municipal Improvement District	1,790	1,700	1,483	1,479	1,484	1,453	1,313	1,399	1,544	1,471	2.2%
All Other Wholesale Customers ^{5,6}	13,080	13,314	12,827	13,165	12,904	11,195	9,966	10,073	10,790	10,948	16.4%
Wholesale water sales	55,200	53,207	52,812	53,970	54,614	46,713	40,548	42,170	47,059	45,615	67.8%
Total water sales	80,267	77,904	77,369	78,665	79,425	69,284	61,923	63,706	69,331	67,319	100.0%
% Change from prior year	-7.1%	-2.9%	-0.7%	1.6%	1.0%	-12.8%	-10.6%	2.9%	8.8%	-2.9%	
Number of accounts	172,680	173,033	173,453	173,744	173,970	174,111	174,083	174,394	175,054	175,805	
Retail	172,599	172,952	173,372	173,663	173,892	174,033	174,005	174,316	174,976	175,727	
Wholesale	81	81	81	81	78	78	78	78	78	78	

¹ Includes Docks & Ships under Commercial.

² San Francisco International Airport was historically included as a Municipal customer. Starting fiscal year 2011 and thereafter, the account was restated to Suburban Retail, as water sales represent resale to their tenants and not for its own consumption.

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.

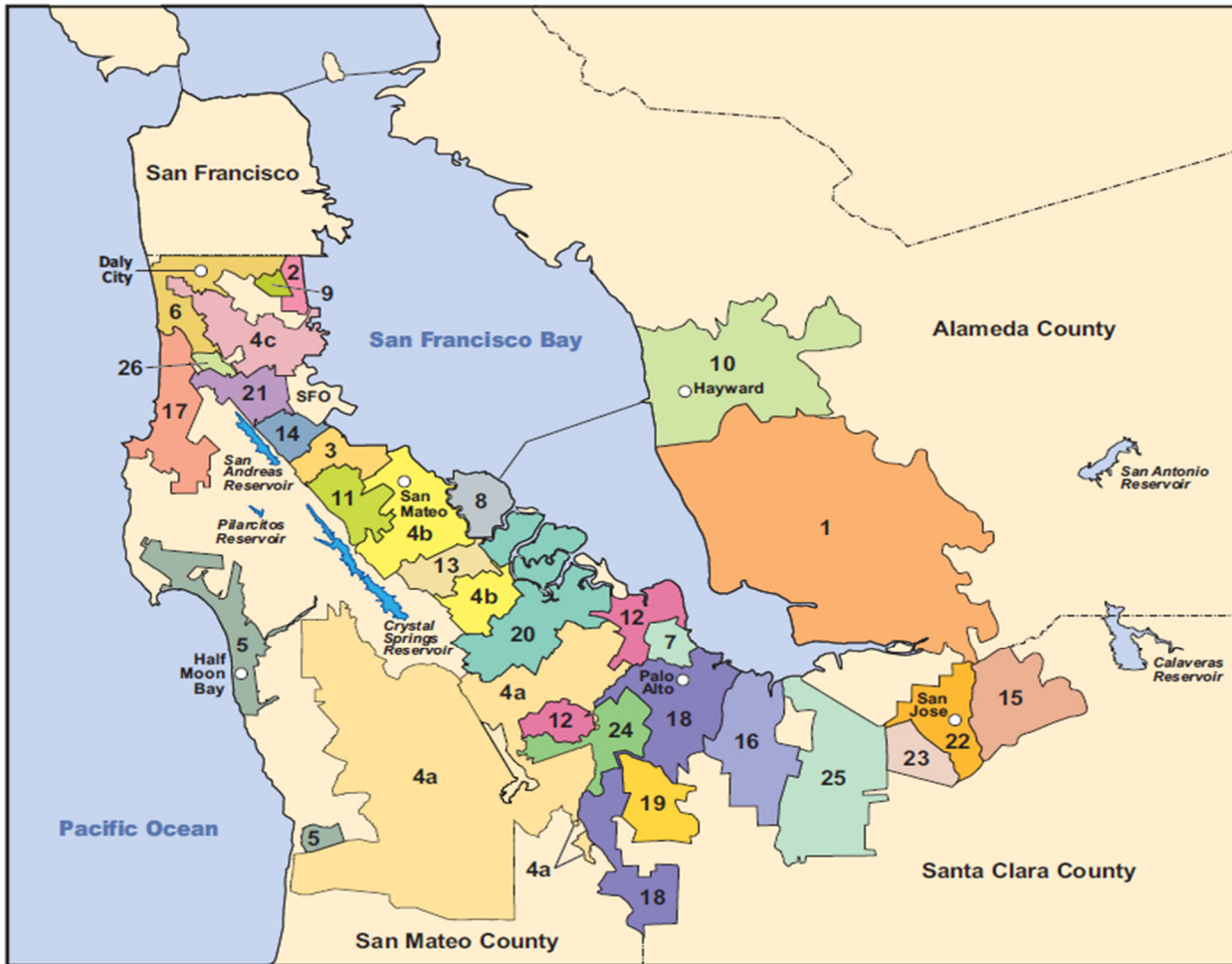
⁴ Beginning in fiscal year 2017, recycled water sales to Harding Park are included under Municipal.

⁵ 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.

⁶ Water sales usage for Sharp Park updated for Municipal in Retail Customers category in fiscal year 2010 and 2011 and for All Other Wholesale Customers in Wholesale Customers category in fiscal year 2010 to 2018.

Source: Rate Schedules, Summary of Annual Water Sales reports, San Francisco Public Utilities Commission Customer Care and Billing System.

Wholesale Water Customers



Agency Name:

- | | |
|------------------------------------------------------------|---------------------------------------|
| 1. Alameda County Water District | 13. Mid-Peninsula Water District |
| 2. City of Brisbane | 14. City of Millbrae |
| 3. City of Burlingame | 15. City of Milpitas |
| 4a. California Water Service Company - Bear Gulch | 16. City of Mountain View |
| 4b. California Water Service Company - Mid-Peninsula | 17. North Coast County Water District |
| 4c. California Water Service Company - South San Francisco | 18. City of Palo Alto |
| 5. Coastside County Water District | 19. Purissima Hills Water District |
| 6. City of Daly City | 20. City of Redwood City |
| 7. City of East Palo Alto | 21. City of San Bruno |
| 8. Estero Municipal Improvement District | 22. San Jose Municipal Water System |
| 9. Guadalupe Valley Municipal Improvement District | 23. City of Santa Clara |
| 10. City of Hayward | 24. Stanford University |
| 11. Town of Hillsborough | 25. City of Sunnyvale |
| 12. City of Menlo Park | 26. Westborough Water District |

* Cordilleras Mutual Water is a SFPUC Wholesale Customer but not part of BAWSCA member.

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 2010 to 2019
(Dollars in Thousands)

Customer Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Multiple-Family Residential										
Number of accounts	40,844	40,919	40,990	41,121	41,165	41,279	41,369	41,594	42,101	42,482
Billings	\$ 43,741	50,143	55,929	61,681	65,880	68,517	74,055	83,180	91,994	97,879
Single-Family Residential										
Number of accounts	109,440	109,705	109,957	110,062	110,144	110,140	110,050	110,118	110,153	110,413
Billings	\$ 31,565	36,508	41,240	46,361	51,586	50,670	54,209	60,424	66,304	69,840
Commercial¹										
Number of accounts	20,153	20,166	20,245	20,270	20,354	20,384	20,320	20,344	20,429	20,512
Billings	\$ 35,860	41,227	47,620	53,710	56,522	58,416	63,080	67,748	74,720	76,950
Industrial										
Number of accounts	85	85	84	83	82	81	81	80	80	81
Billings	\$ 310	375	447	511	568	644	677	736	738	796
Municipal²										
Number of accounts	1,768	1,775	1,795	1,826	1,843	1,849	1,885	1,882	1,916	1,939
Billings	\$ 6,534	6,477	7,030	8,663	9,455	8,719	9,274	11,999	13,147	14,253
Suburban Retail										
Number of accounts	309	302	301	301	304	300	300	298	297	300
Billings	\$ 5,187	6,096	7,105	7,525	8,023	8,122	7,845	8,836	10,466	10,313
Wholesale³										
Number of accounts	81	81	81	81	78	78	78	78	78	78
Billings	\$ 124,800	132,213	182,609	211,071	178,954	174,655	203,005	233,356	262,764	252,521
Total										
Number of accounts	172,680	173,033	173,453	173,744	173,970	174,111	174,083	174,394	175,054	175,805
Billings	\$ 247,997	273,039	341,980	389,522	370,988	369,743	412,145	466,279	520,133	522,552
Percentage of Revenue										
Residential	30.4%	31.7%	28.3%	27.7%	31.7%	32.2%	31.1%	30.8%	30.4%	32.1%
Non-residential ⁴	19.3%	19.8%	18.2%	18.1%	20.1%	20.5%	19.6%	19.2%	19.0%	19.6%
Wholesale	50.3%	48.5%	53.5%	54.2%	48.2%	47.3%	49.3%	50.0%	50.5%	48.3%

¹ Includes Docks & Ships and Builders & Contractors under Commercial.

² Beginning in fiscal year 2017, Treasure Island and Harding Park recycled water revenues are included in Municipal.

³ Beginning in fiscal year 2011, total amount billed excludes BAWSCA fees and surcharge, and collections designated for Wholesale Coverage Reserve.

⁴ 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 2010 to 2019
(Dollars in Thousands)

Customer Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Multiple-Family Residential¹										
Number of accounts	36,271	36,269	36,275	36,301	36,248	36,313	36,293	36,323	36,326	36,387
Hundred cubic feet	11,332,818	11,413,151	11,305,560	11,034,590	10,979,262	10,199,389	9,854,965	9,996,526	10,282,601	10,222,770
Millions of gallons per day	23.2	23.4	23.1	22.6	22.5	20.9	20.1	20.2	21.1	20.9
Billings	\$ 70,499	82,056	93,264	95,607	99,603	100,178	101,730	110,829	126,789	133,454
Single-Family Residential										
Number of accounts	110,324	110,608	110,875	111,007	111,125	111,173	111,137	111,268	111,385	111,681
Hundred cubic feet	7,122,250	6,974,162	6,976,856	6,975,869	7,220,346	6,296,323	5,993,115	6,058,304	6,228,159	6,067,155
Millions of gallons per day	14.6	14.3	14.3	14.3	14.8	12.9	12.2	12.3	12.8	12.4
Billings	\$ 49,103	53,466	55,776	58,683	64,377	61,048	61,177	66,661	76,534	79,971
Commercial¹										
Number of accounts	15,416	15,439	15,439	15,400	15,430	15,460	15,411	15,388	15,494	24,802
Hundred cubic feet	7,825,402	7,957,137	7,883,555	7,816,146	7,931,611	7,594,556	7,366,932	7,171,298	7,230,465	6,978,016
Millions of gallons per day	16.0	16.3	16.1	16.0	16.3	15.6	15.1	15.1	14.8	14.3
Billings	\$ 75,329	76,784	75,604	74,978	76,740	76,042	77,387	80,968	89,803	91,069
Municipal²										
Number of accounts	717	716	719	729	725	731	738	751	763	772
Hundred cubic feet	729,376	705,525	681,755	701,162	657,708	570,386	588,044	578,015	589,621	585,833
Millions of gallons per day	1.5	1.4	1.4	1.4	1.3	1.2	1.2	1.2	1.2	1.2
Billings	\$ 6,784	6,519	6,316	6,520	6,205	5,534	5,965	7,586	7,163	9,002
Suburban Retail (Watershed Keepers)										
Number of accounts	9	9	8	8	9	9	8	8	8	8
Hundred cubic feet	387	423	322	298	303	259	200	221	321	217
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	3	2	2	2	4	3
Unmetered Properties*										
Number of accounts										306
Hundred cubic feet										N/A
Millions of gallons per day										N/A
Billings										82
Total										
Number of accounts	162,737	163,041	163,316	163,445	163,537	163,686	163,587	163,738	163,976	173,956
Hundred cubic feet	27,010,233	27,050,398	26,848,048	26,528,064	26,789,230	24,660,912	23,803,256	23,804,362	24,331,167	23,853,991
Millions of gallons per day	55.3	55.4	54.9	54.3	54.9	50.6	48.6	48.8	49.9	48.8
Billings	\$ 201,717	218,828	230,962	235,790	246,927	242,804	246,261	266,046	300,293	313,581
Percentage of Revenue										
Residential	59.3%	61.9%	64.5%	65.4%	66.4%	66.4%	66.2%	66.7%	67.7%	68.1%
Non-residential	40.7%	38.1%	35.5%	34.6%	33.6%	33.6%	33.8%	33.3%	32.3%	31.9%

¹ Beginning in fiscal year 2011, Presidio Trust Accounts are under Multi-Family Residential and Commercial.

² Beginning in fiscal year 2017, Treasure Island revenues are included under Municipal.

* Beginning in fiscal year 2019, Unmetered Properties accounts are included.

The numbers of customer accounts prior to fiscal year 2010 are estimated. Fiscal year 2010 and thereafter reflect actuals from the Customer Care and Billing System.

Source: San Francisco Public Utilities Commission Customer Care and Billing System.

Demographic & Economic Information
 Historical Hetchy Water Sales
 Fiscal Years Ended 2010 to 2019

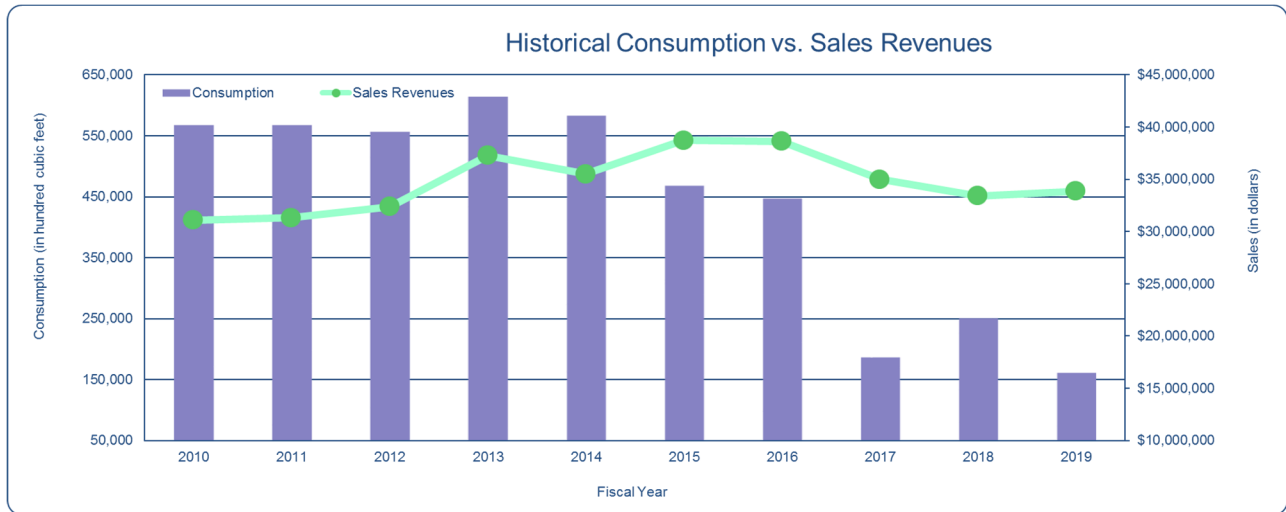
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Sales*										
Groveland Community Services District \$	125,235	122,296	138,957	157,635	151,969	121,840	163,525	168,757	168,377	147,448
Lawrence Livermore	1,225,852	1,437,565	1,592,083	2,035,808	2,037,396	1,787,240	1,836,447	211,771	630,097	132,893
State of California	2,650	10,542	9,151	7,415	7,875	8,960	9,429	11,430	13,625	13,392
Other Residential Customers	9,021	8,697	6,606	11,581	15,165	13,391	14,368	15,680	14,726	7,943
Water Assessment	29,746,506	29,746,507	30,638,901	35,071,901	33,309,058	36,800,000	36,600,000	34,600,000	32,600,000	33,578,000
Total sales	\$ 31,109,264	31,325,607	32,385,699	37,284,340	35,521,463	38,731,431	38,623,769	35,007,638	33,426,825	33,879,676
Consumption (hundred cubic feet)**										
Groveland Community Services District	199,209	194,097	181,530	210,561	200,328	156,801	161,249	154,319	166,624	143,437
Lawrence Livermore	365,189	368,771	371,466	398,026	376,662	307,606	282,531	28,389	81,029	14,267
State of California	643	2,462	1,839	3,466	3,026	1,174	1,230	1,302	1,459	1,346
Other Residential Customers	2,611	2,155	2,188	2,209	2,749	2,248	2,152	2,085	1,803	1,986
Total consumption	567,652	567,485	557,023	614,261	582,764	467,829	447,162	186,095	250,915	161,036

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 2010 to 2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Sales (Megawatt hours)										
General Fund Rate Subsidized **	393,030	387,645	378,503	365,234	367,904	359,519	373,114	366,880	375,327	366,867
Enterprise Rate **	471,034	481,921	485,204	484,628	493,254	487,869	495,272	484,070	471,554	477,477
Western Systems Power Pool	298,549	568,157	143,675	131,200	2,400	- #	9,520	29,050	15,900	-
Modesto/Turlock Irrigation Districts	286,908	459,320	277,838	227,544	103,489	115,026	377,981	152,321	46,651	-
Non-city Agencies*	84,378	87,142	101,128	116,996	117,289	101,605	99,568	95,297	112,157	146,527
Moccasin/City of Riverbank	9,578	7,652	7,552	7,808	9,206	25,472	30,451	9,114	9,650	8,235
Total sales	1,543,477	1,991,837	1,393,900	1,333,410	1,093,542	1,089,491	1,385,906	1,136,732	1,031,239	999,106
Purchases**	132,000	16,252	125,033	38,702	76,905	45,465	113,154	808	188,052	157,227
Generation ~	1,447,863	1,988,582	1,332,957	1,312,446	1,032,589	988,649	1,532,068	1,726,072	1,302,461	1,212,348
Total purchases/generation	1,579,863	2,004,834	1,457,990	1,351,148	1,109,494	1,034,114	1,645,222	1,726,880	1,490,513	1,369,575
Banked/(Withdrawal) ◊	(11,318)	(12,527)	(21,978)	6,707	17,102	78,391	-	-	-	-
Sales (Dollars in thousands)***										
General Fund Rate Subsidized **	\$ 14,081	13,858	13,595	13,330	15,006	18,125	22,151	23,668	26,591	28,766
Enterprise Rate **	50,016	52,483	52,512	52,955	60,766	65,022	65,897	67,627	67,598	73,224
Western Systems Power Pool	10,106	16,292	3,817	5,143	127	- #	157	755	688	-
Modesto/Turlock Irrigation Districts	7,530	10,566	7,340	6,538	3,431	4,488	13,634	7,700	2,612	-
Non-city Agencies*	11,535	12,143	13,810	14,815	16,305	14,628	15,610	16,350	19,359	23,258
Moccasin/City of Riverbank	534	449	457	486	607	1,100	1,095	550	577	539
Total sales	\$ 93,802	105,791	91,531	93,267	96,242	103,363	118,544	116,650	117,425	125,787
Purchases**	\$ 328	1,233	4,754	2,494	4,408	2,045	5,546	1,859	8,671	11,832
Average Sale per KWh (in Dollars)										
General Fund Rate Subsidized **	\$ 0.0358	0.0357	0.0359	0.0365	0.0408	0.0504	0.0594	0.0645	0.0708	0.0784
Enterprise Rate **	0.1062	0.1089	0.1082	0.1093	0.1232	0.1333	0.1331	0.1397	0.1434	0.1534
Western Systems Power Pool	0.0339	0.0287	0.0266	0.0392	0.0529	0.0000	0.0165	0.0260	0.0433	-
Modesto/Turlock Irrigation Districts	0.0262	0.0230	0.0264	0.0287	0.0332	0.0390	0.0361	0.0506	0.0560	-
Non-city Agencies*	0.1367	0.1393	0.1366	0.1266	0.1390	0.1440	0.1568	0.1716	0.1726	0.1587
Moccasin/City of Riverbank	0.0558	0.0587	0.0605	0.0622	0.0659	0.0432	0.0360	0.0603	0.0598	0.0655
Total average sale per KWh	\$ 0.0608	0.0531	0.0657	0.0699	0.0880	0.0949	0.0855	0.1026	0.1139	0.1259
Average Purchase per KWh**	0.0025	0.0759	0.0380	0.0644	0.0573	0.0450	0.0490	2.3007	0.0461	0.0753
Surplus Sales vs. Purchase**										
Net WSPS Sales - Purchases (MWh)	166,549	551,905	18,642	92,498	(74,505)	(45,465)	(103,634)	N/A	(172,152)	(157,227)
Surplus WSPS Sales minus Purchases, \$1,000s	\$ 9,778	15,059	(937)	2,649	(4,281)	(2,045)	(5,389)	N/A	(7,983)	(11,832)
Net Surplus Revenue/(Cost) (\$/KWh)	\$ 0.0314	(0.0472)	(0.0115)	(0.0252)	(0.0044)	(0.0450)	(0.0325)	N/A	(0.0028)	(0.0753)
Number of meters										
Electric	2,256	2,270	2,260	2,257	2,271	2,305	2,627	3,068	3,547	3,747

* Non-city Agencies include electric retail and municipal customers such as Moscone tenants, Exploratorium, and Yerba Buena Gardens.

** Purchases include Western Systems Power Pool (WSPS), Spot Market with Modesto Irrigation District, Sunset Reservoir Photovoltaic generation. Decrease in fiscal year 2017 was due to no purchases with WSPS.

*** 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.

No sales in fiscal years 2015 and 2019 due to no excess power for sale.

◊ Closure of the energy bank with PG&E in fiscal year 2015.

◊ Purchase agreement ended on December 2017

Excludes sales to CleanPowerSF and CAISO.

Source: San Francisco Public Utilities Commission Power Enterprise Billing System.

Demographic & Economic Information
 Historical CleanPowerSF Electric Sales
 Fiscal Years Ended 2016 to 2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Power Sales (Megawatt hours)										
Residential							163	148,220	233,515	433,541
Commercial										
Small Commercial Service							14,985	111,618	116,296	484,704
Medium Commercial Service							14,129	92,718	88,924	417,703
Large Commercial Service							12,999	93,968	118,327	797,052
Agricultural							—	42	1,293	6,043
Street and Outdoor Lighting							—	—	38	1,452
Commercial Subtotal							42,113	298,346	324,878	1,706,954
Total Power Sales							42,276	446,566	558,393	2,140,495
Sales (Dollars in thousands)										
Residential	\$						14	10,782	15,993	30,787
Commercial										
Small Commercial Service							1,226	8,649	8,716	38,830
Medium Commercial Service							1,386	7,278	6,809	34,254
Large Commercial Service							1,109	6,860	8,611	62,595
Agricultural							—	3	59	329
Street and Outdoor Lighting							—	—	3	113
Commercial Subtotal							3,721	22,790	24,198	136,121
Total Sales	\$						3,735	33,572	40,191	166,908
Average Sale (in Dollars per Kilowatt hour)										
Residential	\$						0.08334	0.07274	0.06849	0.07101
Commercial										
Small Commercial Service							0.08181	0.07749	0.07495	0.08011
Medium Commercial Service							0.09812	0.07850	0.07657	0.08201
Large Commercial Service							0.08530	0.07300	0.07277	0.07853
Agricultural							—	0.06597	0.04563	0.05444
Street and Outdoor Lighting							—	—	0.07256	0.07782
Commercial Subtotal							0.08836	0.07639	0.07448	0.07974
Total Average Sales	\$						0.08834	0.07518	0.07198	0.07798

Data not available - CleanPowerSF launched in May 2016.

Source: CleanPowerSF Management Reports.



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

Operating Information

Budgeted Full-Time Equivalent (FTEs) Employees by Division

Operating and Capacity Indicators

Major Water Wholesale, Retail and Sewer Customer Accounts by Revenue

Major Electric Retail and Wholesale Customer Accounts by Revenue

Performance Measures



Photo by: Robin Scheswohl

Don Pedro Reservoir

Operating Information
Budgeted Full-Time Equivalent (FTEs) Employees by Division
Fiscal Years Ended 2010 to 2019

Enterprises and Bureaus	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Water Enterprise										
City Distribution & Water Administration	257	258	260	260	259	260	268	276	291	304
Natural Resources	67	69	71	81	81	82	82	84	85	86
Water Quality	78	78	78	76	76	76	81	82	83	85
Water Resources	21	26	26	25	25	24	24	23	23	23
Water Supply & Treatment	231	235	234	236	236	229	229	232	232	229
Total Water	654	666	669	678	677	671	684	697	714	727
Wastewater Enterprise										
Administration	14	13	12	12	12	11	14	12	12	12
Source Control* & Wastewater Labs	69	66	66	66	66	66	66	65	66	59
Environmental Engineering	43	43	50	50	51	53	53	54	54	58
Maintenance	141	131	143	146	147	141	141	137	138	135
Operations	144	128	117	117	117	114	115	114	114	111
Planning & Regulation	8	43	43	43	43	47	47	46	47	46
Sewer Operations	42	49	51	51	51	51	51	51	51	59
Total Wastewater	461	473	482	485	487	483	487	479	482	480
Hetch Hetchy Water and Power Enterprise										
Hetchy Water										
Water Project Operations	176	185	192	195	195	201	207	203	206	211
Hetchy Power										
Energy Services	62	27	29	30	30	30	30	29	30	27
Long Range Planning & Light, Heat, and Power	26	51	53	53	53	51	51	52	52	54
Power Administration	5	22	23	23	23	23	23	20	21	21
Subtotal Hetchy Power	93	100	105	106	106	104	104	101	103	102
Total Hetch Hetchy Water and Power	269	285	297	301	301	305	311	304	309	313
CleanPowerSF										
Administration	Data not available - CleanPowerSF launched in May 2016.							9	11	13
Total CleanPowerSF								9	11	13
Bureaus										
Business Services Admin, AIC [#] , and Financial Services	63	65	69	70	70	71	71	73	73	73
Customer Services	111	106	106	106	106	106	106	103	103	104
Communications	21	21	22	22	22	22	22	22	22	21
General Manager and Others [^]	8	13	13	13	13	11	11	12	13	18
Strategic Planning, Real Estate Services, and Community Benefits	13	12	17	17	18	18	18	18	18	17
Human Resource Services	51	52	55	57	57	58	59	58	58	58
Information Technology Services	71	73	73	74	74	78	78	78	78	78
Infrastructure	400	385	382	369	368	384	389	385	385	380
Total Bureaus	738	727	737	728	728	748	754	749	750	749
Total SFPUC annually budgeted positions ~	2,122	2,151	2,185	2,192	2,193	2,207	2,236	2,238	2,266	2,282
Annual Salary Ordinance Positions (AAO) ~	2,324	2,359	2,396	2,404	2,404	2,430	2,456	2,473	2,493	2,542

* Fiscal year 2014 and prior is known as BERM, acronym for Bureau of Environmental Regulation Management.

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 & 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 2010 to 2019

Water	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Water mains (miles)^	1,235	1,235	1,240 *	1,240	1,240	1,240	1,718 ^	1,717	1,718	1,719
Water main breaks repaired	82	58	74	113	116	97	136	102	133	168
New service installations	478	251	494	350	1,144	837	710	1,162	733	628
Meter installed and replaced	1,243	990	956	994	1,030	1,360	1,395	2,209	1,888	1,699
Responses to fire alarms	13	26	29	37	28	22	20	20	24	13
Production and Consumption (millions of gallons)										
Water production	80,300	79,215	81,252	79,935	80,582	69,553	64,454	68,995	73,330	71,272
Average daily production	220	217	222	219	221	191	176	189	201	195
Maximum daily production	326	312	298	302	300	255	242	283	272	275
Water consumption#	80,267	78,011	77,390	78,695	79,453	69,306	61,932	63,706	69,344	67,319
Average daily consumption#	219.9	213.7	211.7	215.6	217.7	189.9	169.2	174.6	190.0	184.5
Watershed area (acres)										
Alameda	36,895	37,055	37,314	37,314	37,314	37,314	37,314	37,314	37,314	37,314
Peninsula	22,854	22,854	22,854	22,854	22,854	22,854	22,854	22,854	22,854	22,854
Total	59,749	59,909	60,168	60,168	60,168	60,168	60,168	60,168	60,168	60,168
Reservoir storage (millions of gallons)**										
Calaveras	13,222	13,644	8,418	6,337	5,488	6,491	8,774	11,986	8,220	13,026
Crystal Springs	17,114	17,189	15,486	17,191	16,707	17,380	17,103	17,385	16,192	17,015
Pilarcitos	773	849	784	864	815	767	783	872	773	838
San Andreas	5,625	5,392	4,968	5,622	5,603	5,626	5,786	5,935	5,587	5,483
San Antonio	15,558	15,483	15,395	13,456	13,579	14,433	14,927	14,576	13,263	14,835
Total	52,292	52,557	45,051	43,470	42,192	44,697	47,373	50,754	44,035	51,197
Treatment plant average capacity (millions of gallons)										
Harry Tracy	35.5	44.4	22.1	26.0	21.2	29.3	35.9	45.3	33.2	38.0
Sunol Valley	32.2	35.8	29.1	22.3	10.0 ***	16.9	27.0	39.6	16.5	26.1
Total	67.7	80.2	51.2	48.3	31.2	46.2	62.9	84.9	49.7	64.1

* 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 year 2014 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 reduces treatment costs and conserves 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.

^^ Starting fiscal year 2016, water mains (miles) includes suburban.

Consumption data updated from fiscal years 2010 to 2014.

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 2010 to 2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Wastewater										
Sanitary sewers (miles)	993	993	993	993	993	993	993	993	993	993
Transport/storage sewers (miles)	17	17	17	24	17	17	17	17	17	17
Sewer breaks repaired	309	558	550	927	861	1,663	1,520	1,481	912	819
Inspection performed (miles)	127	109	125	135	90	156	80	93	135	215
Sewer replaced (miles)	3.0	9.2	12.7	20.6	12.8	14.9	19.5	13.6	11.0	11.4
Responses to customer calls	13,634	15,271	9,951	7,124	8,697	16,190	10,863	8,260	8,410	7,885
Treatment plant/ facilities average daily flow (millions of gallons per day)										
Oceanside plant	17.4	19.7	18.4	16.5	15.4	15.6	16.0	18.4	15.3	16.5
North Point plant	3.2	4.1	2.4	4.8	3.1	4.7	7.1	11.8	2.7	4.2
Southeast plant	70.4	73.0	65.5	67.0	66.4	64.4	65.4	74.7	61.9	70.2
Yerba Buena & Treasure Island	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
Total	91.4	97.2	86.6	88.6	85.2	85.0	88.8	105.2	80.2	91.3
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	115,349	111,945	113,973	117,359	114,354	110,745	117,424	111,755	117,231	113,020
Lake Eleanor	8,065	8,217	7,428	7,671	7,731	7,731	8,677	7,610	8,186	8,677
Lake Lloyd (Cherry)	88,248	87,478	86,962	85,358	72,627	64,025	88,478	77,951 [△]	83,067	87,829
Total	211,662	207,640	208,363	210,388	194,712	182,501	214,579	197,316	208,484	209,526
Hetchy Power										
Hydroelectric generation (megawatt hours)										
Holm	649,707	843,926	529,520	533,719	382,689	436,499	654,952	919,492	431,659	508,060
Kirkwood	452,770	710,174	461,569	440,950	318,379	283,922	528,724	482,996	510,888	401,779
Moccasin	337,370	418,871	326,535	327,054	320,577	255,778	338,005	319,691	356,004	295,766
Moccasin Low-Head #	6,094	12,108	3,442	2,775	22	—	1,359	—	—	—
Total	1,445,941	1,985,079	1,321,066	1,304,498	1,021,667**	976,199**	1,523,040 [^]	1,722,179 [^]	1,298,551**	1,205,605

* 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, 2018 and 2019.

[^] 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
Major Water and Sewer Customer Accounts by Revenue
Fiscal Years Ended 2010 to 2019
(Dollars in Thousands)

Customer Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Water Wholesale Customers										
California Water Service Company	\$ 26,432	29,987	42,512	47,655	47,436	46,911	48,792	57,541	63,489	60,859
Hayward Municipal Water System	14,066	15,957	20,176	21,475	21,193	21,475	21,475	28,613	32,316	31,103
City of Palo Alto	9,050	10,528	14,761	16,389	15,855	15,743	16,946	19,975	21,985	21,134
City of Sunnyvale	8,143	7,706	11,573	13,767	12,201	12,885	15,600	17,810	21,265	19,800
City of Redwood City	7,931	8,680	11,763	13,488	12,847	13,151	14,661	17,169	18,781	18,190
Alameda County Water District	9,028	7,766	10,732	13,274	16,141	13,213	13,847	14,366	16,947	16,849
City of Mountain View	7,291	8,082	11,187	13,059	12,691	12,407	13,750	15,340	16,791	16,248
City of Daly City							8,804	12,555	13,076	12,642
City of Milpitas	5,151	5,752	7,953	9,267	9,311	8,612	9,389	10,722	11,509	11,494
ESD/San Jose Municipal Water System			5,625	6,494	6,512	7,185	8,222	9,307	10,182	9,652
Water Retail Customers										
San Francisco International Airport	2,066	2,462	2,748	2,938	3,046	3,095	3,220	3,907	4,452	4,880
NASA Shared Services Center (NSSC)	838	988	1,341	1,548	1,551	1,484	1,347	1,741	2,514	2,243
Parkmerced Investors Properties, LLC	740	1,079	976	1,082	1,311	1,393	1,449	1,678	1,840	2,088
University of California, San Francisco	1,073	1,351	1,331	1,318	1,364	1,100	1,435	1,534	1,689	1,694
Recreation & Parks Department								1,393	1,397	1,353
Public Health Department			526	624	628	672	808	1,040	1,168	1,157
NRG Energy Center San Francisco	453	560	596	670	669	704	839	915	925	1,039
SFPUC Wastewater Enterprise										960
Golden Gate National Cemetery						649	839	836	946	900
Hilton Hotel							912	653	653	856
Sewer Retail Customers										
Parkmerced Investors Properties, LLC	1,367	2,010	1,860	1,921	2,281	2,326	2,248	2,493	2,790	3,098
University of California, San Francisco	2,893	2,840	2,564	2,120	2,078	1,882	2,266	2,068	2,360	2,414
Public Health Department	935	931	897	941	897	647	1,041	1,334	1,547	1,461
Hilton Hotel	947	620	842	815	911	873	1,261	864	1,346	1,121
NRG Energy Center San Francisco	843	899	822	819	779	782	874	926	970	1,043
San Francisco State University						601	618	648	860	810
The Stonestown Properties								595	722	761
Hyatt Corporation	884	855	674	701	671	607	579	640	743	694
St. Francis Hotel										571
Bayside Village										569

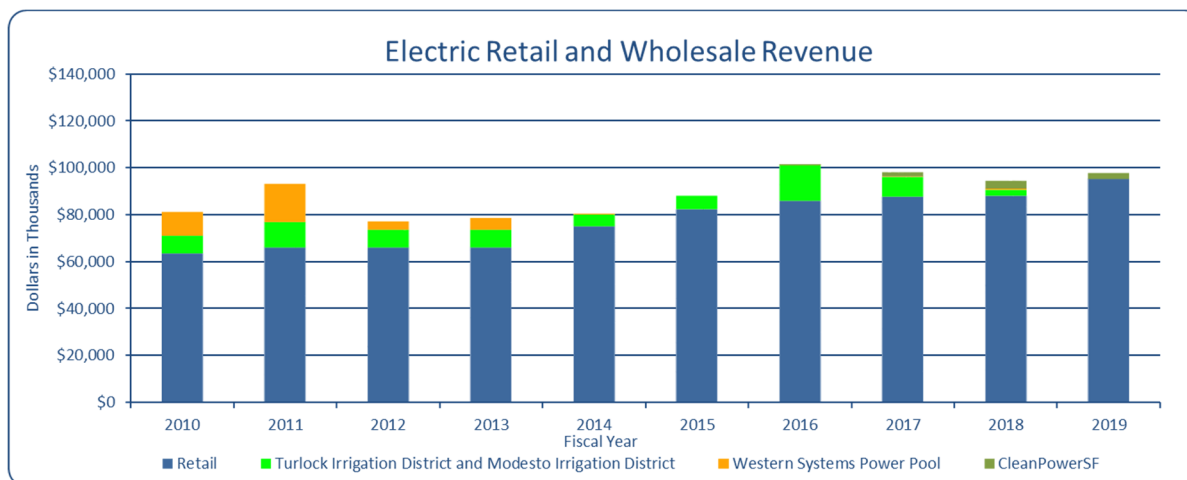
Source: San Francisco Public Utilities Commission Water Sewer System and Customer Care and Billing System.

Operating Information
Major Electric Retail and Wholesale Customer Accounts by Revenue
Fiscal Years Ended 2010 to 2019
(Dollars in Thousands)

Customer Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Retail Customers											
San Francisco International Airport	\$ 32,234	33,895	33,659	33,244	39,199	41,614	42,687	43,070	43,434	44,574	
SFPUC - Wastewater Enterprise	8,080	8,731	8,388	8,180	8,861	9,748	9,847	10,397	9,979	10,687	
Administrative Services Agency	2,138	2,141	2,100	2,508	3,025	4,386	5,419	5,442	5,743	9,739	
SFPUC - Water Enterprise	6,513	6,413	7,250	8,009	8,582	8,640	7,954	8,950	8,592	9,369	
Municipal Transportation Agency	4,470	4,292	4,387	4,805	5,403	6,466	7,631	8,193	8,594	8,249	
Department of Public Health	1,958	2,087	2,058	983	1,319	1,878	2,842	3,125	3,470	4,837	
San Francisco Unified School District	1,340	1,335	1,294	1,444	1,588	1,864	2,214	2,285	2,394	2,252	
Port of San Francisco	1,264	1,369	1,229	1,369	1,563	1,971	1,941	1,983	2,294	2,236	
City-owned Parking Garages	1,770	1,774	1,618	1,689	1,780	1,876	1,910	1,924	1,960	1,857	
San Francisco Housing Authority	3,742	4,008	4,031	3,846	3,562	3,557	3,188	2,024	1,439	1,233	
Wholesale Customers											
CleanPowerSF	Data not available - CleanPowerSF launched in May 2016.						293	1,851	3,342	2,277	
Modesto Irrigation District	2,437	3,264	2,718	2,283	1,879 *	2,666	6,345	8,003	2,422	— ^Δ	
Western Systems Power Pool	10,106	16,292	3,817	5,143	127 *	— ^Δ	50	237	668	— ^Δ	
Turlock Irrigation District	5,093	7,302	4,622	5,100	3,263 *	3,331	8,615	387	— ^Δ	— ^Δ	

* Reflects reduced power generation and power available for sale.
 Δ No sales during the fiscal years.

Source: San Francisco Public Utilities Commission Power Enterprise Billing System.



Operating Information
Performance Measures
Fiscal Year 2019

	Target	Projection	Actual
1. Reliable Service and Assets			
Number of dry weather main sewer overflows per 100 miles of main sewer	≤ to 4	3	2.5
Percent of in-city service connections without water for more than 4 hours due to an unplanned outage	≤ to 0.1%	0%	0.85%
Percent of streetlight outages complying with 48-hour SFPUC response goal; complex streetlights evaluated	Meeting target at 100%	90	71
System renewal and replacement rates for in-City water distribution mains	≥ to 15 miles/year 1.25%	13.0 miles 1.08%	11.2 miles 0.93%
System renewal and replacement rates for Wastewater pipelines	≥ to 15 miles/year 1.5%	15 miles 1.5%	11.4 miles 1.14%
2. Organizational Excellence			
Number of employees over the maximum permissible overtime threshold (25% of straight time)	0.0	1.0	27.0
3. Effective Workforce			
Number of promotions	248	248	299
Time to hire (days)	206	206	226
4. Financial Sustainability			
Average residential Power bill as a percent of median income in San Francisco	0.53%	0.53%	0.56%
Average residential Wastewater bill as a percent of median income in San Francisco	1.4%	0.75%	0.74%
Average residential Water bill as a percent of median income in San Francisco	1.1%	0.62%	0.62%
Operating cost coverage (total operational revenues/total operating costs) for Power	1.12	1.12	1.14
Operating cost coverage (total operational revenues/total operating costs) for Wastewater	1.92	1.92	1.96
Operating cost coverage (total operational revenues/total operating costs) for Water	2.04	2.04	2.07
Power debt service coverage - Indentured Coverage	1.35x	11.03x	27.64x
Wastewater debt service coverage - Indentured Coverage	1.35x	5.79x	4.20x
Water debt service coverage - Indentured Coverage	1.35x	1.89x	2.04x
5. Stakeholder and Community Interest			
Number of adults and children who have participated in transformative engagement through SFPUC sponsored education programs	4000	2970	3272
Percent of eligible customers enrolled in California Alternate Rates for Energy (CARE) for CleanPowerSF Customers	90%	90%	61%
Percent of Eligible electric customers receiving low-income discount rate	37.5%	27.5%	23%
Percent of eligible households enrolled in Community Assistance Program (CAP)	1) ≥ to 4.62% or 2) ≥ to 1,200	4.56%	4.50%
Percent of retail customers rating the SFPUC as "good" or better on a customer survey	≥ to 90%	90%	88.36%
Percentage of customer inquiry calls received via CleanPowerSF Call Center answered within 20 seconds	80% of all calls will be answered within 20 seconds	80%	81%
Percentage of customer inquiry calls received via Customer Service Bureau Call Center answered within 20 seconds	80% of all calls will be answered within 20 seconds	80%	64%
6. Environmental Stewardship			
Average water used by San Francisco residential customers (Gallons Per Capita Per Day - gpcd)	≤ to 50 gpcd	41.7	41.2
Gallons of stormwater removed annually from the combined sewer system by green infrastructure	67 million gallons (mg)	67 mg	65 mg
Percent of biogas going to beneficial uses - Oceanside Plant	≥ to 75%	5%	0.3%
Percent of biogas going to beneficial uses - Southeast Plant	≥ to 75%	50%	46%
Percent of biosolids going to beneficial use	Meeting target at 100%	100%	99.7%
Percent of CleanPowerSF customer account retention rate	≥ to 90%	95%	97.0%
Percent of retail sales receiving greenhouse gas free power	Meeting target at 100%	100%	100%
Percent of water supplied by alternative sources to system as a whole	≥ to 3.4%	2.9%	2.8%

Source: 2020 Strategic Plan



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.

Cover photo by: Robin Scheswohl

如果您需要中文翻譯, 請致電: (415) 554-3289.

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

Communications Division
Date of Publication: January 2020

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

