

BUILDING A BRIGHTER TOMORROW

ANNUAL REPORT FOR THE FISCAL YEAR ENDED JUNE 30, 2019



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

SAN FRANCISCO PUBLIC UTILITIES COMMISSION

(AS OF DATE OF PUBLICATION)

Ann Moller Caen, PRESIDENT | **Francesca Vietor**, VICE PRESIDENT
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WATER

We are the third largest municipal utility in California, serving 2.7 million residential, commercial, and industrial customers in the Bay Area. Approximately one-third of our delivered water goes to retail customers in San Francisco, while wholesale deliveries to 27 suburban agencies in Alameda, Santa Clara, and San Mateo counties comprise the other two-thirds.

POWER

For 100 years, we have been generating greenhouse gas-free hydropower as our city's full-service, publicly owned electric utility. In 2016, we launched CleanPowerSF, a community choice aggregation program, to introduce even more renewable energy from sources like wind and solar to the electric grid. Collectively, the two systems meet more than 70 percent of the electricity demand in San Francisco.

SEWER

We operate and maintain the City's water pollution control plants, pumping stations and collection system to protect public health and the environment. We maintain 1,900 miles of sewer mains and lateral and 27 pump stations that collect sewage and storm water, moving the wastewater to the three treatment plants for treatment and discharge to the San Francisco Bay and Pacific Ocean.

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DEAR CUSTOMERS AND STAKEHOLDERS,

It has been another extraordinary year at the San Francisco Public Utilities Commission (SFPUC). I am honored to lead such a dedicated team of field crews, operators, biologist, engineers, community liaisons and everyone else here at the SFPUC who work so hard on the behalf of this City's residents, businesses and visitors.

Our 2,600 employees at the SFPUC work every day to deliver high-quality and safe water, power, and wastewater services. Day or night, rain or shine, we strive to make the SFPUC reliable, resilient and dependable for the communities we serve.

It was a banner year for the **Water** Enterprise, starting with the long-awaited completion of the Calaveras Dam Replacement Project. The largest component of the Water System Improvement Program, the seismic upgrade project allowed water levels to return to capacity at the 31-billion-gallon reservoir for the first time since 1991. This seismic-improvement project represents a critical step forward ensuring long-term water reliability in the region.

In April, the SFPUC's **Power** team completed the largest and last major enrollment of CleanPowerSF, the City's community choice energy program. As a result of the enrollment, more than 370,000 businesses and residents are now enrolled in CleanPowerSF, which provides renewable energy services. Combined with the 100 percent greenhouse gas-free energy provided by the SFPUC's Hetch Hetchy Regional Power service, the agency now meets more than 70 percent of the electricity demand in San Francisco.

The **Wastewater** Enterprise continued to move forward with the Sewer System Improvement Program, one of the largest infrastructure improvement projects of its kind in the country. The 20-year citywide investment to upgrade the City's aging sewer infrastructure will ensure a reliable, sustainable and seismically safe sewer system.

Outside of the SFPUC's three services areas, the utility continues to be a leader in pioneering environmental justice and community partnership programs. This year, the SFPUC's **Community Benefits** team continued to strengthen its Social Impact Partnership program, which invites private sector firm partners to give back locally to the communities in which they are performing work on behalf of the SFPUC.

After a busy year, the SFPUC looks forward to an even more productive and collaborative future, ever focused on providing safe, reliable and efficient water, power and wastewater services for the communities it proudly serves.

On behalf of the SFPUC, I am pleased to present the Popular Annual Financial Report (PAFR) for the fiscal year ended June 30, 2019.



Harlan L. Kelly, Jr.
GENERAL MANAGER

A handwritten signature in black ink that reads "Harlan L. Kelly, Jr." The signature is written in a cursive, flowing style.



PROTECTING OUR RESOURCES

With more than 2.7 million customers throughout the Bay Area and beyond, the SFPUC's water services provide a critical lifeline for the region. But the agency's Water Enterprise has a mission that extends beyond providing safe, clean and healthy drinking water. We are also committed to finding new, sustainable water supplies to ensure we are being responsible with our most precious resource, particularly as we enter an uncertain future brought on by climate change.

In May 2019, the SFPUC celebrated the completion of the **Calaveras Dam Replacement Project**, reaching a crucial milestone for maintaining the region's local water reliability. The 31-billion-gallon reservoir had been kept well below capacity since 2001, due to concerns regarding seismic reliability of the original dam, which was built in 1925. As a result of the rehabilitation project, the SFPUC began filling the reservoir with water to levels not seen at the reservoir in almost 20 years.

A month after that announcement, the SFPUC completed interim repairs to the **Moccasin Reservoir**, which was damaged during a major storm event in March 2018. Work crews repaired erosion and improved access tower outlets and gate valves at the dam, allowing the reservoir to be restored to full capacity in June.

Along with repairing and upgrading important facilities in the region, the SFPUC explored new water sources while overseeing important conservation initiatives. Conservation assistance programs and public education

led by the SFPUC have resulted in San Francisco residents using 42 gallons of water per person, per day, one of the lowest consumption rates in California, according to the agency's **Water Resources Annual Report**.

The SFPUC also continued management of the City's pioneering non-potable water program and expanded a grant program to encourage additional non-potable water treatment and reuse practices in breweries and smaller buildings.

On the technology front, this year, the SFPUC installed **acoustic node devices** to fire hydrants as a pilot program to listen for and locate minute water flows during off-hours in the SFPUC's mains. The new technology helps to proactively detect and repair leaks in underground water pipes.

Whether reliably delivering water today or exploring innovative new options for the future, the SFPUC's water Enterprise team understands the importance of their mission and is committed to carry out those duties with excellence.

Save money while reducing plastic waste by drinking tap water. Learn how our water is some of the best in the nation at sfwater.org/drinktap.

2.7

MILLION
CUSTOMERS

42

GALLONS USED PER
PERSON PER DAY

1,000

WATER QUALITY
TESTS ANNUALLY

COMMITMENT TO CLEAN POWER

For more than 100 years, we have been providing safe, reliable and clean energy that meets our San Francisco values of equity, inclusion and commitment to environment sustainability. Between our **CleanPowerSF** and **Hetch Hetchy Power** retail electric service programs, the SFPUC meets more than 70 percent of the electricity demand in San Francisco. We are proud of our legacy and honored to be the power provider of choice for our residents and businesses.

The Hetch Hetchy power system continues to provide electricity for essential City functions, like City Hall, Muni vehicles, public libraries, schools and the San Francisco International Airport, as well as select residential development and businesses. In the past three years, City facilities have saved more than \$130 million in energy costs compared to Pacific Gas and Electric Company (PG&E) rates, all while receiving 100 percent greenhouse gas free electricity.

In April, we completed the largest and last major enrollment of CleanPowerSF, the City's community choice renewable energy program. The program now serves more than 375,000 customer accounts in San Francisco, and with a 96 percent participation rate, CleanPowerSF is clearly popular among businesses and residents.

In addition to the rollout of CleanPowerSF, the SFPUC took a major step toward energy independence with the

release of its preliminary public power options report. Prepared at the request of Mayor London N. Breed and the Board of Supervisors, the study examined the options the City should consider in light of PG&E filing for bankruptcy protection in January 2019, along with ongoing concerns with PG&E service, safety and reliability. The report, which represented the initial phase toward exploring the potential acquisition of PG&E assets in San Francisco, concluded that full energy independence is the best option for the City.

That sentiment is shared by San Francisco residents. According to a public poll carried out in April 2019, nearly 70 percent of residents support the SFPUC delivering electricity in the City.

San Francisco's residents, businesses and local leaders understand and appreciate the vital services provided by the SFPUC. National organizations do as well. In September 2018, the SFPUC received the Century Award from the American Public Power Association (APPA), an honor that celebrates the City's 100 years of producing clean, reliable energy for customers in San Francisco. The SFPUC has every intention of extending those great services for another 100 years.

Find out more about how San Francisco is a leader in the clean energy movement at ourcityyourpower.org.

5

20+

SOLAR PROJECTS
THROUGHOUT
SAN FRANCISCO

375,000

CLEANPOWERSF CUSTOMERS

70%

RESIDENTS SUPPORT
FOR SFPUC
OPERATING LOCAL GRID





EXPLORING INNOVATION

So much of the work carried out by our Wastewater Enterprise happens below the surface, hidden from most of our residents. But while the City was bustling aboveground, we were carrying out critical duties, embarking on new projects to help protect our residents and businesses from the risk of flooding while moving forward with important environmental sustainability programs.

In July, the Environmental Protection Agency (EPA) announced the SFPUC would receive a \$699 million loan to help finance its innovative **Southeast Treatment Plant Biosolids Digester Facilities Project**. The loan was the largest ever issued under the EPA's Water Infrastructure Finance and Innovation Act (WIFIA) program and will be a key funding mechanism for the project, which is a central focus of the SFPUC's **Sewer System Improvement Program**, a 20-year citywide investment to upgrade our aging wastewater infrastructure.

Along with making key long-term investments, the Wastewater Enterprise continued to partner with local community members on the popular **Adopt a Drain** program. Started in 2016, the program allows San Franciscans to "adopt" one of the City's 25,000 catch basin drains. This year, the SFPUC launched its new **Drains in Need** feature, a data-driven effort to identify the City's catch-basins most in need of maintenance and cleaning. The City is realizing real payoffs from those efforts. Since the launch of the program, work orders for street flooding issues are down 36 percent below anticipated levels, according to City data.

To complement that initiative, the SFPUC embarked on several other storm management programs this fiscal year. In February, we launched a **new grant program to fund green infrastructure projects** on public and private properties throughout San Francisco. The initial funding component for the Green Infrastructure Grant Program will include \$6.4 million over the next two years to encourage owners of large parcels to construct green infrastructure projects that better manage stormwater on their property. Similar to our popular Adopt-A-Drain program, the SFPUC launched the **Rain Guardians** program that enables San Franciscans to become "guardians" of the City's new rain gardens, which 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 sewer system.

Additionally, the SFPUC worked with the Board of Supervisors on a new flood map zone ordinance. Existing homeowners that fall within the flood map zones will be required to disclose that information to potential buyers or tenants. The ordinance would help prospective homeowners make informed decisions about their future, while also providing existing homeowners with the steps they need to take to protect themselves from the risk of flooding from extreme rain events.

Is your property on the Flood Map? Visit sfplanninggis.org/floodmap to find out.

\$6.4 MILLION
GREEN INFRASTRUCTURE
GRANT PROGRAM

36%
REDUCED FLOODING
FROM ADOPT-A-DRAIN

10 BILLION
GALLONS OF ANNUAL
RAINFALL IN SF

DOING OUR PART

At the SFPUC, we understand that our mission entails something bigger than providing water, power and wastewater services. We must be integral parts of the communities we serve, supporting positive impacts that go beyond the duties of our utility.

That is why we became the first public agency in the country to establish a Community Benefit program, with an implicit focus on partnering with service area residents and local leaders to build strong, sustainable and vibrant communities. We're especially committed to working with communities in the neighborhoods most impacted by our operations.

This year, the Community Benefits team saw the continued growth of our **Social Impact Partnership (SIP)** program, which invites private sector firm partners to give back locally to the communities in which they are performing work on behalf of the SFPUC.

Initiatives supported by that program include the **Maisin Scholarship**, which helps San Francisco public high school graduates from the Bayview Hunters Point communities afford college and achieve their education and career goals. Other SIP programs **Climate Education for Hunters Point Youth**, which supports hands-on climate change education for low-income African-American women, and **Water Education for East Palo Alto Youth**, where we partnered with environmental engineering firm Brown and Caldwell to support 125 youth leading a Water Equity Campaign.

In addition, the Community Benefits team supported ongoing efforts like the **College Hill Learning Garden**, an education and demonstration garden created to teach students about water, food, energy and waste systems. The garden offers free field trips for about 4,000 third through fifth-grade students each year in San Francisco.

With an eye towards the future, the SFPUC and the Board of Supervisors moved forward on a new **Southeast Community Facility** at 1550 Evans Avenue. Set to open in 2021, the new facility will include a large, state-of-the-art special events space and multi-purpose community space for meetings, events, and recreation such as dance classes, gatherings and day care services. The new facility will also provide a wide range of social services supporting workforce development and education for Southeast residents of all ages.

The SFPUC strives to be a thoughtful, responsible neighbor that cares deeply for the wellbeing, health and security of the communities it serves. By working together with our residents, we can redefine what it means to be a public utility in the 21st century.

See how our partners are joining us to make an impact at sfwater.org/socialimpactpartners.

9

125

YOUTH CAMPAIGN
LEADERS SUPPORTED

4,000

STUDENTS PER YEAR
AT LEARNING GARDEN

2021

OPENING YEAR FOR
COMMUNITY CENTER



KEEPING OUR RATES AFFORDABLE

Single-Family Residential FY 2018-2019

Average Monthly Water and Sewer Bill.	\$111.64
Cost per Person/Day.	\$1.58
Total Cost per Gallon, Water and Sewer.	\$0.029
Total Combined Bill as % of San Francisco Median Household Income.	1.35%

Calculation is based on the average monthly water usage of 5.30 ccf (hundred cubic feet).

FINANCIAL PERFORMANCE

Since 2010, this report has won the prestigious “Award for Outstanding Achievement in Popular Annual Financial Reporting” from the Government Finance Officers Association.



This award recognizes our commitment to increase public awareness by providing an overview of our financial condition. The financial information for this report is drawn from the audited financial statements in the SFPUC’s **Fiscal Year 2019 Comprehensive Annual Financial Report (CAFR)**, using the full accrual basis of accounting and providing complete financial information and disclosures in conformance with generally accepted accounting principles (GAAP). PAFR is not audited and is presented on a non-GAAP basis as note disclosures have been excluded in the report. Our CAFR, which provides complete financial information and disclosures in conformance with GAAP, is available online at sfwater.org/finance.

Credit Ratings

Fiscal Year	2019	2018	2017
Water			
Standard & Poor’s	AA-	AA-	AA-
Moody’s Investors Service	Aa3	Aa3	Aa3
Average Borrowing Rate*	3.63%	3.50%	3.96%
Power			
Fitch	AA-	AA-	AA-
Standard & Poor’s	AA	A+	A+
Average Borrowing Rate*	3.44%	3.22%	3.15%
Sewer			
Standard & Poor’s	AA	AA	AA
Moody’s Investors Service	Aa3	Aa3	Aa3
Average Borrowing Rate*	3.37%	3.27%	3.04%

*Average Borrowing Rate: Weighted average interest rate on outstanding debt as of 6/30/19.

The **Comparative Consolidated Net Position** provide information about the nature and amount of resources and obligations at a specific point in time. SFPUC continued to reflect a strong and healthy financial condition over the last several fiscal years.

There are five components in the Statement of Net Position, which is intended to present what the entity owns (assets), owes (liabilities) and its residual or net position.

1. Assets are resources with present service capacity that the government presently owns or controls.
2. Deferred outflow of resources is a consumption of net assets by the government that is applicable to a future reporting period—for example, amortization of refunding loss to future periods.
3. Liabilities are present obligations to sacrifice resources that the government has little or no discretion to avoid, such as debts owed, and represent claims against assets.
4. Deferred inflow of resources is an acquisition of net assets by the government that is applicable to a future reporting period—for example, amortization of net difference in pension projected versus actual earnings.
5. Net position is the residual of all other elements presented in a Statement of Net Position, i.e., the residual interest in the items owned or controlled after deducting debts. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position is improving or worsening.

The **Comparative Revenues and Expenses** report all of SFPUC's revenues and expenses for the periods shown. SFPUC strives to achieve strong financial performance and effectively controls its operating costs to not exceed revenues.

DEFINITIONS

- **Capital Assets:** Include depreciable, amortizable, non-amortizable and non-depreciable facilities and buildings, improvement, machinery and equipment, intangible assets, land and rights-of-way as well as construction work in progress, net of depreciation and amortization.
- **Current and Other Assets:** Assets easily converted to cash or consumed within one year: cash, investments, receivables, and prepaid expenses.
- **Long-term Debt Outstanding:** Payments due on debt that are more than 12 months in the future.
- **Current Liabilities:** Payments due on obligations owed by SFPUC within the next 12 months.
- **Net Position:** Net difference between assets and deferred outflows of resources, and liabilities and deferred inflows of resources.
- **Change in Net Position:** The total of net income (loss), net of transfers, and cumulative effect of accounting change.
- **Depreciation and Amortization Expense:** If an asset is expected to produce a benefit in future periods, some of these costs must be deferred rather than treated as a current expense.
- **Income (Loss):** The difference between total revenues less total expenses.
- **Non-operating Revenues and Expenses:** Revenues and expenses that are incidental to SFPUC's main purpose and derived from activities not directly related to SFPUC's operations such as: license fees and penalties, interest earnings and costs associated with debt.
- **Operating Expenses:** Expenses incurred in the provision of water, sewer, and power services.
- **Operating Revenues:** Revenues for the sale of water, sewer, and power services to customers, services, inspections, and programs provided by SFPUC.
- **Transfers in:** Funds recovered from other city departments to support various programs and projects or monies received for property or services not in the normal course of business.
- **Transfers out:** Funds provided to other city departments to support various programs and projects or monies paid for property or services not in the normal course of business.

A CLOSER LOOK AT THE NUMBERS

SFPUC By the Numbers

Miles	1,719 miles of Water mains 993 miles of Sanitary sewers
Millions of gallons (MG).....	260,723 MG water reservoir storage 71,272 MG water production
Millions of gallons per day (MGD)	67,319 MGD water consumption 91.3 MGD sewer treatment
San Francisco Population	887,463
San Francisco Personal Income per Capita	\$130,961
SFPUC Website	sfwater.org

SFPUC Assets (DOLLARS IN MILLIONS)

Fiscal Year	2019	2018	Change
Cash & Investments	\$ 1,596	1,140	456
Charges for Services Receivables	131	99	32
Capital Assets.....	8,661	8,234	427
Others.....	91	55	36
Total Assets.....	\$ 10,479	9,528	951

Assets increased by \$951 or 10%, of which \$456 increase in cash from the issuance of the Wastewater bonds, \$427 additional construction and capital improvements, \$32 in charges of services receivables from higher electricity sales due to the completion of citywide enrollment for CleanPowerSF, and \$36 in other receivables mainly from work for other government entities and interest income. Liabilities increased by \$693 or 9.2% was explained by an increase of \$768 in outstanding debts, offset by \$75 in other liabilities such as payables to other government entities, net pension liability and other post-employment benefits.

SFPUC Liabilities (DOLLARS IN MILLIONS)

Fiscal Year	2019	2018	Change
Capital Appreciation Bonds....	\$ 2	6	(4)
Certificates of Participation	146	150	(4)
Commercial Papers.....	503	323	180
Bonds.....	6,513	5,983	530
State Revolving Fund Loans.....	88	22	66
Others.....	946	1,021	(75)
Total Liabilities.....	\$ 8,198	7,505	693

Total revenues and transfers in increased by \$213 due to adopted increases in water and wastewater rates, and new revenue sources from the CleanPowerSF Program. Total expenses and transfers out increased by \$113, as compared to prior year. This was primarily due to increase of \$92 in power purchase from higher enrollments from CleanPowerSF, \$33 in interest expenses, net of premium, discount, refunding loss, and issuance costs and \$23 mainly due to lower capitalization of projects and higher project capital project spending, offset by a decrease of \$35 in transfers out.

FINANCIALS AT A GLANCE

SFPUC By the Numbers (DOLLARS IN MILLIONS, UNLESS OTHERWISE STATED)

	Water	Wastewater	Hetchy Water*	Power	CleanPowerSF*	SFPUC
Standard & Poor's Bond Rating	AA-	AA	N/A	AA	N/A	N/A
Moody's Investors Service	Aa3	Aa3	N/A	N/A	N/A	N/A
Fitch	N/A	N/A	N/A	AA-	N/A	N/A
Current Ratio	1.51 times	0.81 times	12.18 times	2.52 times	3.68 times	1.40 times
Debt Ratio	93.6%	65.6%	18.4%	30.9%	36.8%	78.2%
Debt Service Coverage	2.04	4.20	N/A	27.64	N/A	N/A
Total Assets	\$ 5,993.1	3,543.6	243.5	640.7	63.0	10,479.2
Deferred Outflows of Resources	\$ 207.7	31.9	7.8	9.5	0.4	257.3
Total Liabilities	\$ 5,611.3	2,325.2	44.8	198.1	23.2	8,197.9
Deferred Inflows of Resources	\$ 47.3	21.1	5.3	6.5	0.3	80.5
Net Position	\$ 542.1	1,229.1	201.1	445.7	40.0	2,458.0
Number of Customer Accounts	175,805	173,956	5	3,747	376,128	729,641
Capital Budget	\$ 292.2	706.6	69.4	71.1	N/A	1,139.3
Adopted Annual Operating Budget	\$ 570.1	343.2	42.6	183.7	157.0	1,296.6

*Credit ratings and debt service coverage are only applicable to outstanding debt.

DEFINITIONS

- **Current Ratio** measures the enterprise's ability to pay short-term obligations with its current assets. It is defined as current assets divided by current liabilities.
- **Debt Ratio** measures how much of the enterprise's assets are financed by debt. It is defined as total liabilities divided by total assets.

- **Debt Service Coverage** measures the enterprise's ability to meet both legal and policy-driven revenue obligations associated with debt. To ensure that the SFPUC retains financial flexibility for contingencies, it has adopted and implemented financial policies that impose higher standards than the bond indenture minimum debt service coverage requirements of 1.00x (current) and 1.25x (indenture).

FIVE-YEAR COMPARATIVE CONSOLIDATED NET POSITION

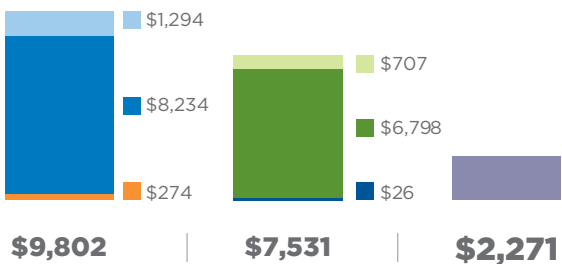
(DOLLARS IN MILLIONS)

- Current & other assets
 - Capital assets
 - Deferred outflows of resources
- Current liabilities
 - Long-term liabilities
 - Deferred inflows of resources
- Net position

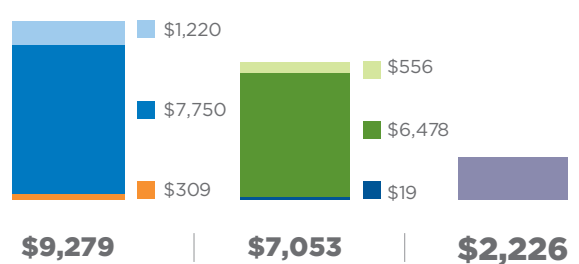
2019



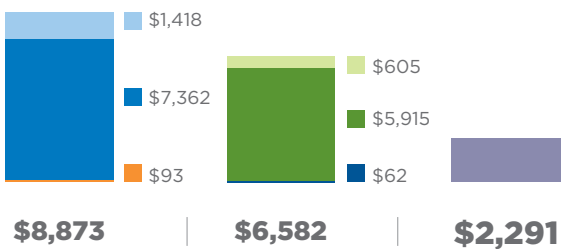
2018



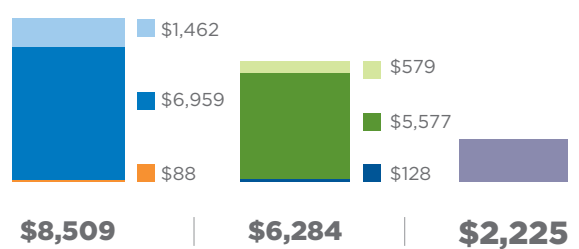
2017



2016



2015



FIVE-YEAR COMPARATIVE REVENUES AND EXPENSES

(DOLLARS IN MILLIONS)

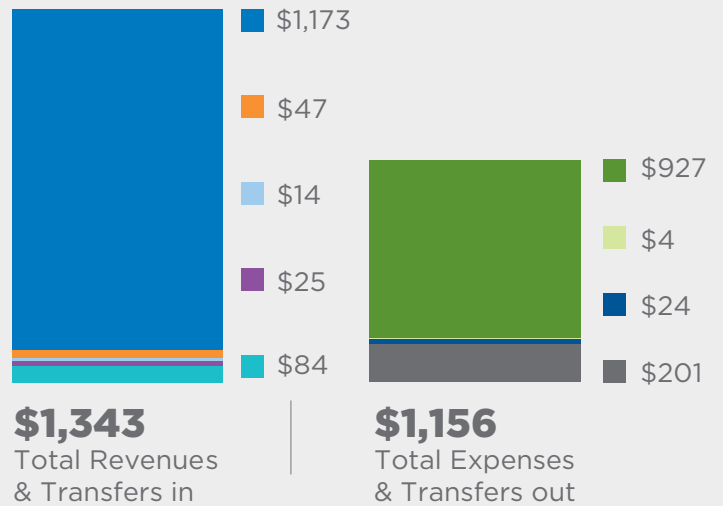
Revenues & Transfers in

- Charges for services
- Interest & investment Income
- Rents & concessions
- Transfers in
- Others

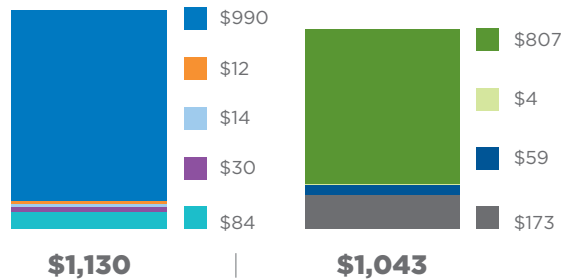
Expenses & Transfers out

- Operating expenses
- Non-operating expenses
- Transfers out
- Interest expenses, Amortization of premium, discount, refunding loss & issuance costs

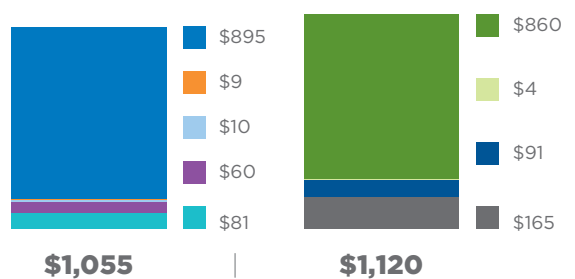
2019



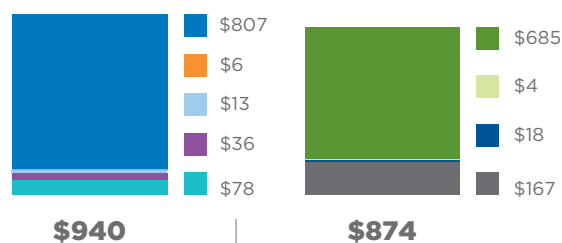
2018



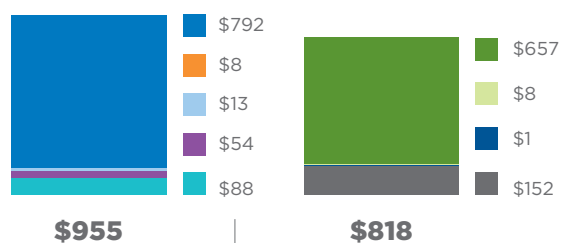
2017



2016

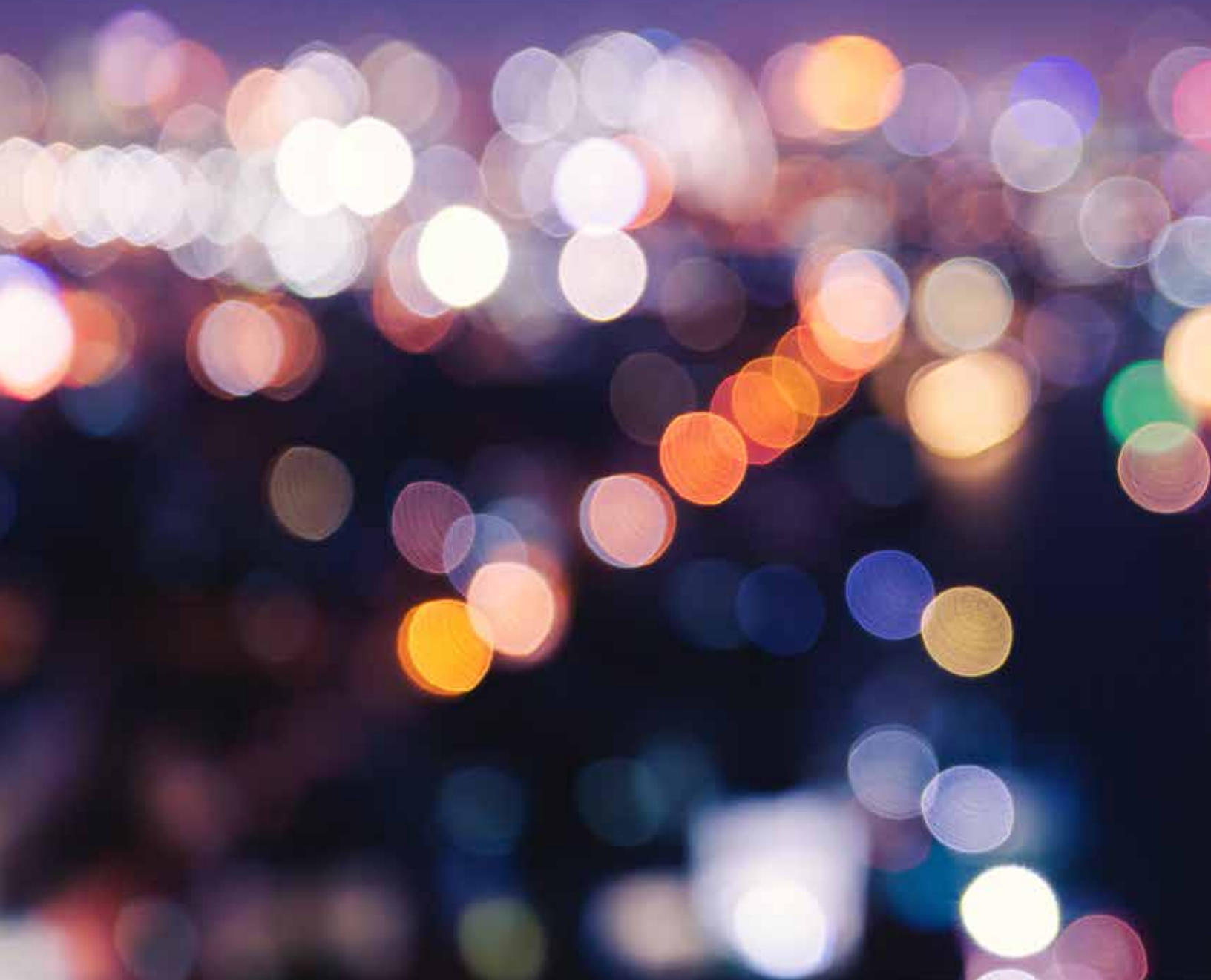


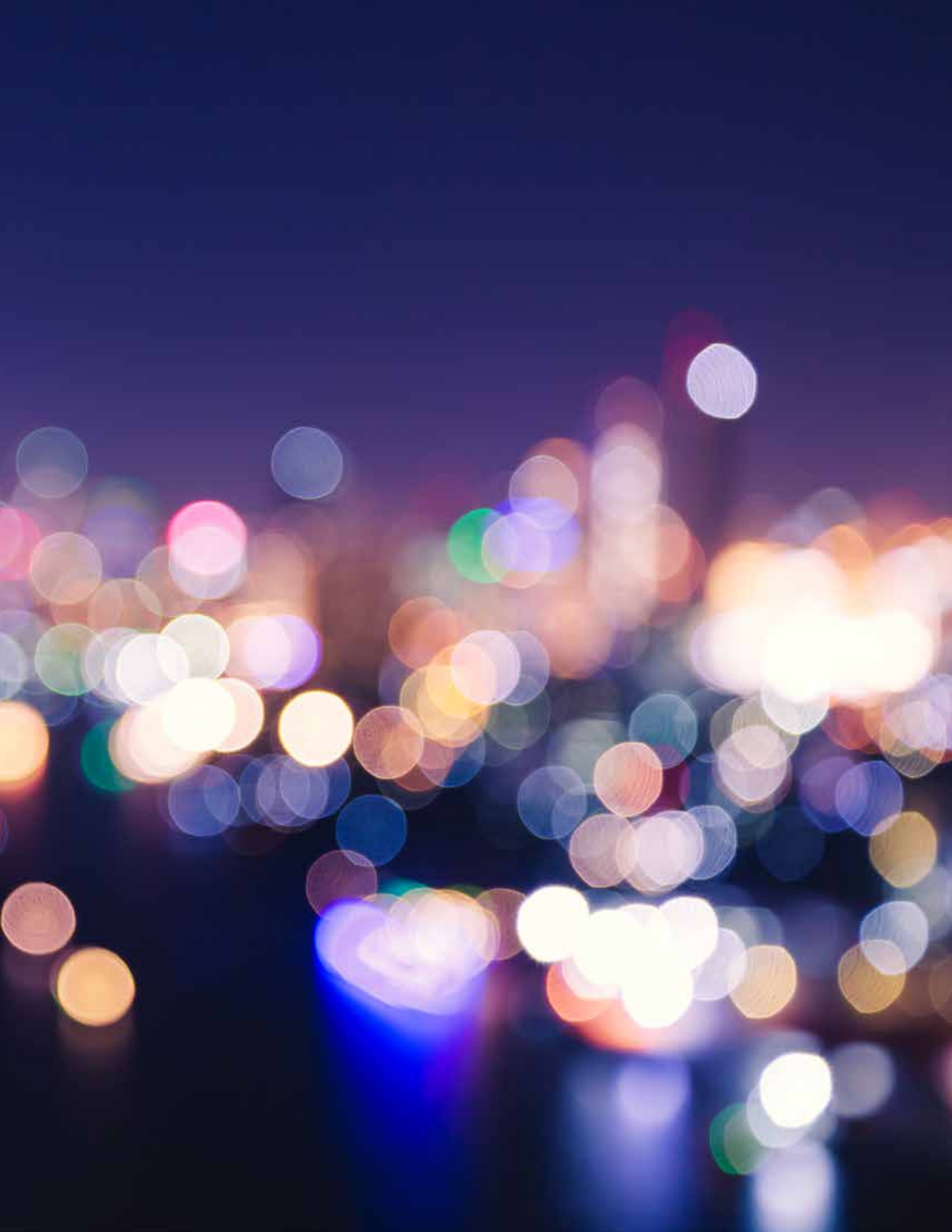
2015



OUR MISSION

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







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

如果您需要中文協助, 請致電: (415) 554-3289.

Si necesita asistencia en español llame
(415) 554-3289.

Kung kailangan ninyo ng tulong o salin sa wikang
Filipino, tumawag lamang po sa (415) 554-3289.

SFPUC Communications Division
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