SFPUC 10-YEAR FINANCIAL PLAN

FY 2021-22 to FY 2030-31

Abstract

A discussion of key policies, strategic goals, and assumptions that guide the 10-Year Plan.

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Financial Planning, SFPUC

Contents

Introduction

The SFPUC is a department of the City and County of San Francisco and is responsible for utility services associated with operating and maintaining three enterprises: the Water Enterprise, the Wastewater Enterprise, and the Power Enterprise, which includes Hetch Hetchy Water and Power and CleanPowerSF.

The Financial Plan (Plan) is a summary of projected revenues, expenditures, fund balances, and financial ratios for each SFPUC enterprise over a rolling 10-year period. These long-term projections are updated annually, subject to change and provide an important snapshot of each enterprise's financial health. The Plan projections are based on key assumptions reflecting current Mayor and Commission policies, goals, and objectives. For the FY 2021-22 to FY 2030-31 10-Year Financial Plan, these projections also include assumptions based on the severe impacts caused by the COVID-19 pandemic, the shelter-in-place order and resulting economic recession.

Key Terms

Revenue requirements: *an estimated amount of net additional revenue required to cover operating, capital, and reserve expenses in a given year, after assuming existing revenues*

Financial ratios*: metrics that assess whether an enterprise has sufficient resources to meet debt service coverage and fund balance reserve requirements*

A key objective of the Plan is to promote SFPUC's Strategic Plan goal of Financial Sustainability by estimating future revenue requirements and financial ratios while providing a view of resulting rate changes. Consolidating these key financial indicators into the 10-Year Plan serves to inform the SFPUC's long-term planning decisions, such as the biennial operating and capital budgets, long-range capital planning, and capital financing strategies.

As an essential service City Department, the SFPUC has a responsibility to prioritize expanding access and minimizing the health and economic disparities that have been exacerbated by the COVID-19 pandemic. In February of 2020, Mayor London Breed declared San Francisco to be in a state of emergency and in March of 2020, residents were instructed to shelter-in-place. As the pandemic continues into 2021, the SFPUC will continue to commit itself to financial prudency and strategic rate design so as to also assist ratepayers disproportionately affected, particularly among Black, Indigenous, and people of color who have higher rates of infection and death due to the pandemic. In the SFPUC's Racial Justice Resolution, the department committed itself to the "fair treatment of people of all races, cultures and incomes" and to "centering the agency's programs and resource allocations on racial and social justice equity." As the SFPUC publishes its annual Plan update, as required by the City and County of San Francisco Charter Section 8B.123, the agency must work to undo years of historical racial, social, and economic injustices that have only deepened due to COVID-19. The Plan provides a long-range view of the resulting utility rates required of each enterprise, therefore wielding significant impact over the lives of ratepayers in the economic fallout of the pandemic for years to come.

Mission and Strategic Goals

SFPUC's mission is to provide customers with high-quality, efficient, and reliable water, power, and wastewater services in a manner that is inclusive of environmental and community interests, and that sustains the resources entrusted to our care. To ensure the agency has adequate resources to achieve this mission, each enterprise's operating and capital budget is developed with long-term strategic goals and objectives detailed in SFPUC's 2020 Strategic Plan.

SFPUC Key Financial Policies

- ✓ Debt Service Coverage Policy
- ✓ Capital Financing Policy
- ✓ Fund Balance Reserve Policy
- ✓ Ratepayer Assurance Policy

Financial Management Policies

Background

The Commission has adopted various policies that set requirements and parameters guiding SFPUC financial activities and decision-making. These policies demonstrate to ratepayers, credit markets, investors, and rating agencies that SFPUC is committed to financial sustainability and prudent stewardship of resources. The primary purpose of these policies is to ensure each enterprise retains sufficient funds for future infrastructure needs, replacement of aging facilities, bond reserves, and various operating expenses in a manner that mitigates unexpected rate changes. In 2017, the policies were revised following a comprehensive study to evaluate, strengthen, and clarify SFPUC's Financial Policies. Financial Policies are particularly important for long-term planning related to capital financing and risk management.

Capital Financing Policies

Debt Service Coverage Policy

Adopted by the Commission in March 2017, the Debt Service Coverage Policy requires the SFPUC to maintain higher debt service coverage ratios than those required to meet a bond's minimum indenture requirements. Debt service coverage ratios measure annual net revenues as a fraction of annual debt service. For example, a debt service ratio of 1.00x means that an issuer generates exactly enough in net revenues to pay its debt service obligations, with no excess funds left. Debt service ratios higher than 1.00x indicate the issuer has additional debt capacity.

Pursuant to covenants with bondholders, enterprise revenues pledged for debt service repayment must meet minimum requirements for two different coverage ratios: 1) Indenture Coverage, which includes the Enterprise's unrestricted fund balance in net revenues, must equal a minimum of 1.25x annual debt service and; 2) Current Coverage, which includes only current year annual revenues, must equal a minimum of 1.00x annual debt service The unrestricted fund balance included in Indenture Coverage includes funds available to minimize risk, not meant to be used for debt repayment. Current Coverage, a more standardized measurement used by rating agencies, is therefore a better indicator of the agency's ability to pay its debt service obligations.

Financial policies that impose higher standards than the minimum indenture requirements are essential to ensuring SFPUC maintains access to low-cost capital and retains financial flexibility to manage unanticipated economic impacts. Therefore, the Debt Service Coverage policy requires each SFPUC

enterprise to adopt budgets, rates, and financial plans that generate net revenues such that **Indenture Coverage shall equal a minimum of 1.35x annual debt service** and **Current Coverage shall equal a minimum of 1.10x annual debt service**.

Capital Financing Policy

Adopted by the Commission in March 2017, the Capital Financing Policy requires that a minimum ranging between **15 percent to 30 percent of each enterprise's capital budget be revenue-funded** (or "pay-as-you-go" funded) over the 10-year planning period. Unlike debt financing, use of revenue minimizes financial costs and does not impose significant debt burdens on future ratepayers. Therefore, using revenue funding for recurring infrastructure repair and replacement projects is a prudent and sustainable approach to funding ongoing capital investments. The appropriate mix of revenue versus debt financing varies based on the capital investment lifecycle of each enterprise.

Risk Management Policies

Fund Balance Reserve Policy

Adopted by the Commission in February 2017, the Fund Balance Reserve Policy requires that each enterprise Fund Balance Reserve maintain a **minimum amount of 90 days or 25 percent of annual Operations and Maintenance Expenses** (including programmatic projects, excluding debt service and revenue-funded capital) over the 10-year planning period.

The SFPUC faces several risks to revenue stability, including multi-year rate packages, economic recession, weather variability, drought, and highly volumetric rates. To ensure SFPUC can manage these risks and reduce susceptibility to emergency rate increases, each enterprise adopts budgets and establishes rates such that a reserve of undesignated fund balances provides sufficient capacity to bridge shortfalls in cash flow and cover unanticipated expenditures.

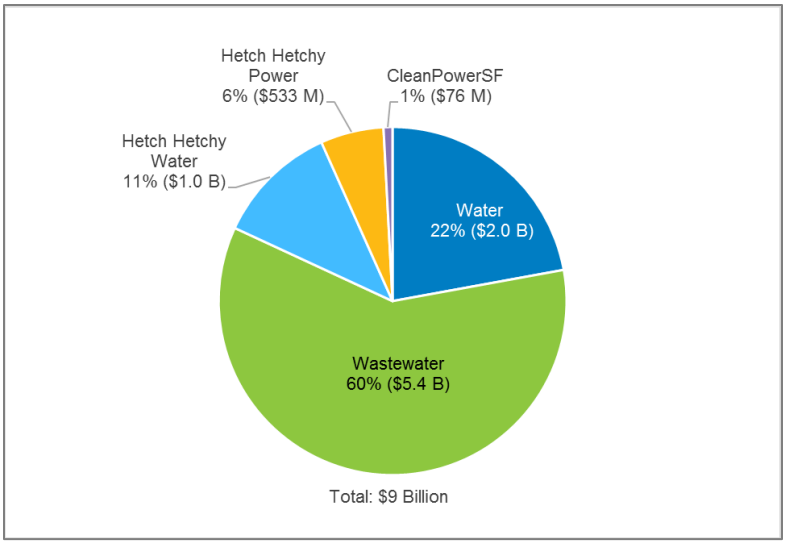
Ratepayer Assurance Policy

Adopted by the Commission in February 2012 and revised in 2017, the Ratepayer Assurance Policy establishes SFPUC's guiding principles for prudent use of ratepayer funds, establishment of rates and charges, and transparency in budgeting and rate-setting processes. Prudent use of ratepayer funds ensures accountability to ratepayers regarding SFPUC's mission statement, asset and personnel management, operating cost containment, and social and environmental stewardship. The Ratepayer Assurance Policy reinforces SFPUC's commitment to developing rates and charges that are affordable, predictable, easy to understand, based on cost of service, and that generate sufficient revenue for full cost recovery.

Capital Improvement Plan

Each enterprise has a 10-Year Capital Improvement Plan (CIP) that forecasts multibillion-dollar capital investments over the next 10 years. City Charter requires the annual adoption of the SFPUC 10-Year Capital Plan. Capital investments are essential to providing safe and reliable drinking water, protecting public health and the environment, and delivering clean energy for municipal services. These investments make the overall utility system more reliable and resilient in the face of earthquakes, sea-level rise, droughts, and other unexpected changes.

Graph A: SFPUC 10-Year Total CIPs FY 2021-22 to FY 2030-31



Every year, the CIPs are updated to reflect the capital priorities of each enterprise over the next 10-year horizon. Every other year, a biennial budget is adopted, which includes the adoption and appropriation of two years of funding for the CIP. Capital programs are intended to support capital investments for defined Level of Service goals in each enterprise, such as the implementation of local hire, job training, and job creation programs to benefit local communities.

Water Enterprise Capital Improvement Program

The Water Enterprise 10-Year Capital Improvement Plan is $2 billion in total spending, with 33 percent (or $668 million) being revenue-funded while 67 percent (or $1.3 billion) is debt-financed.

2022-2031 Water Capital Improvement Plan

The highest cost projects that are part of the 2022-2031 Water Capital Improvement Plan are new local City Distribution Division (CDD) headquarters ($335 million), local water pipeline replacements ($446 million), and authorization for upcountry improvements to purified water and other supplies ($265 million). The Water Capital Improvement Plan is $197 million less than the year prior. This change in cost is mainly due to reductions to Local Water Costs, specifically UW Buildings & Grounds Improvement and the Auxiliary Water Supply System. Despite these overall reductions to the Water Capital Improvement Plan, several projects did receive increases in spending. The Plan devotes an additional $7.8 million to dam structural upgrades and $4.7 million to the UW Water Transmission Program.

Wastewater Enterprise Capital Improvement Program

The Wastewater Enterprise 10-Year Capital Improvement Plan is $5.4 billion in total spending, with 25 percent (or $1.4 billion) being revenue-funded while 75 percent (or $4.1 billion) is debt-financed.

2022-2031 Wastewater Capital Improvement Plan

The Wastewater Enterprise continues the Sewer System Improvement Program (SSIP) progress, which makes up $3.2 billion of the $5.4 billion Capital Improvement Plan. Apart from SSIP, the highest cost projects that are part of the 2022-2031 Wastewater Capital Improvement Plan are Collection System Improvements ($1.6 billion). Overall, the Wastewater 10-Year Capital Plan increased by $297 million in comparison to the last 10-Year Capital Plan, which is mostly due to an additional $100 million going towards GRIT replacement and general improvements to the Southeast Plant. Other projects which increased in funding during the 10-year period include the expansion of the Repair and Replacement programs, flood resilience projects, and improvements to the Collection System such as interceptors, tunnels, and odor control.

Hetch Hetchy Water and Power Capital Improvement Program

The Hetch Hetchy Water and Power Enterprise ("Hetchy Enterprise") is responsible for providing reliable, high quality water and electric energy to the City and other customers. Hetchy Power consists of in-City power operations and all power utility wholesale and retail transactions. Hetchy Water operates, maintains, and improves water and power facilities, smaller dams and reservoirs, water transmission systems, power generation facilities, and power transmission assets all located in the upcountry (Sierra Nevada mountains and foothills).

All costs associated with water operations under the Hetchy Enterprise are covered by the Water Enterprise, while all operations associated with power are covered by the Power Enterprise. For joint operations, the Water Enterprise is responsible for 45 percent of operating and capital costs, while the Power Enterprise is responsible for the remaining 55 percent.

The Hetchy Enterprise's CIP is divided into two sections based on operations:

1. The Power Enterprise Capital Program undertakes projects both within the City of San Francisco as well as upcountry and is financed by Power revenues and Power revenue bonds. The Power CIP includes the renewable generation and energy efficiency projects critical to attain greenhouse gas reductions and begin climate change mitigation. Also, there are transmission and distribution projects consistent with the City's goal of establishing the SFPUC role as the electric service provider to City facilities and development projects.
2. The Hetchy Water Capital Program is financed by Water revenue bonds, Power revenue bonds, and Power revenues. The Hetchy Water CIP includes Water Infrastructure, Power Infrastructure, and joint Water (45 percent) and Power (55 percent) projects that are located upcountry and managed by Hetchy Water.

The Hetchy Enterprise Capital Improvement Plan is $1.03 billion in total spending for the Hetchy Water Capital Program and $533 million for the Power Enterprise Capital Program. Of the Hetchy Enterprise's overall capital spending in both sections, $174 million is funded by Power revenues, $538 million is financed by Water revenue bonds, and $854 million is financed by Power revenue bonds.

2022-2031 Hetchy Capital Plan

The $1.57 billion Hetchy Enterprise Capital Improvement Program represents a growing investment over ten years with greater amounts of funds allocated to Power infrastructure. The major projects that are part of the Hetchy Water Capital Program are Phase 2 of the O'Shaughnessy Dam Outlet Works ($112 million) and the San Joaquin Pipeline System Extension Program ($113 million). The major projects included in the Power Enterprise Capital Program are SFO Substation Improvements ($126 million) and Distribution Interface for Redevelopment Projects ($214 million). The Plan includes increased overall funding for upcountry water infrastructure by $9.3 million, totaling to $1.03 billion, and for down country power funding is decreased by $9.1 million, totaling to $533 million. The Plan includes increased funding for the Cherry Dam Spillway and Intake Tower Rehab Project and overall improvements to upcountry Hetch Hetchy Facilities.

CleanPowerSF Capital Improvement Plan

CleanPowerSF's Capital Improvement Plan includes funding of $76 million over the next 10 years, making up a very small share, 1 percent, of the SFPUC's total $9 billion plan. 83 percent of CleanPowerSF's CIP is the Local Renewal Energy Program, a $63 million project over the plan period, with the remainder of $13 million almost entirely going towards CleanPowerSF Customer Programs. 100 percent of CleanPowerSF's capital plan sources are customer revenues.

Forecasting Assumptions

Forecasting assumptions in this Plan update differ from assumptions in prior Plans to reflect the impact of COVID-19 and the shelter-in-place order issued in San Francisco on March 17, 2020. The impact to the SFPUC and other City departments was unprecedented and reflected in significant reductions to enterprise utilities' commercial sales volumes. When compared to pre-pandemic averages, weekly retail water delivery volumes for commercial customers were down as much as 30 percent; total weekly Hetchy power loads were down as much as 20 percent; and CleanPowerSF commercial loads were down as much as 15 percent. While shelter in place orders were in effect, weekly residential water delivery volumes were up to 5 percent higher than pre-pandemic averages, and CleanPowerSF residential volumes were up to 14 percent higher than pre-pandemic averages. These observed volumetric trends were the basis for re-forecasting sales volumes in each enterprise in addition to city-wide projections for economic recovery post-pandemic. Forecasting assumptions for the current Plan include city-wide economic recovery occurring from fiscal year 2022-2026 depending on customer classes. General economic recovery is forecasted in water, wastewater, and Hetchy Power utility sales volumes gradually returning to just under pre-pandemic volumetric averages for residential and commercial customer classes in fiscal year 2024 – with tourism reliant customers projected to more gradually return to pre-pandemic volumetric levels in fiscal year 2026. The projected timing of economic recovery is consistent with and informed by City Economist research and city-wide projections.

To reflect these sudden changes, the SFPUC altered usage forecasts, which continue to vary as the pandemic persists and the shelter-in-place orders takes new forms. These new forecasts were developed by observing volumetric weekly deliveries via meter and customer billing data across each Enterprise since the start of the pandemic and used to inform budget re-forecasting. The resulting changes from these observations are reflected in the projections section below for each Enterprise In addition to the above forecasting assumption changes. The projections included in this update are also based on key assumptions that reflect current Mayor and Commission policies, goals, and objectives. In general, SFPUC ensures that the Plan conforms with Commission-approved policies and that it incorporates current Operating Budgets, Capital Budgets, and CIP updates. Other critical forecasting assumptions focus on revenues primarily from utility sales on the Sources side of the Plans and expenditures on the Uses side of the Plans.The Uses side of the Plans are mainly comprise operations and maintenance expenditures and capital related expenditures, which are further subdivided into debt service and revenue-funded capital expense projections.

The Plans for each Enterprise and CleanPowerSF are developed with a "baseline" volumetric sales forecasts based on the forecasting approach previously discussed. Further in this report, alternate volumetric sales forecasts inform upward and downward sensitivities where salient. These alternate

volumetric sales forecasts sensitivities are provided for conservative financial planning purposes, and while informed by salient Enterprise specific volumetric forecasts, they will not reconcile as the intended purpose for these volumetric forecasts are different.

Sources of Funds

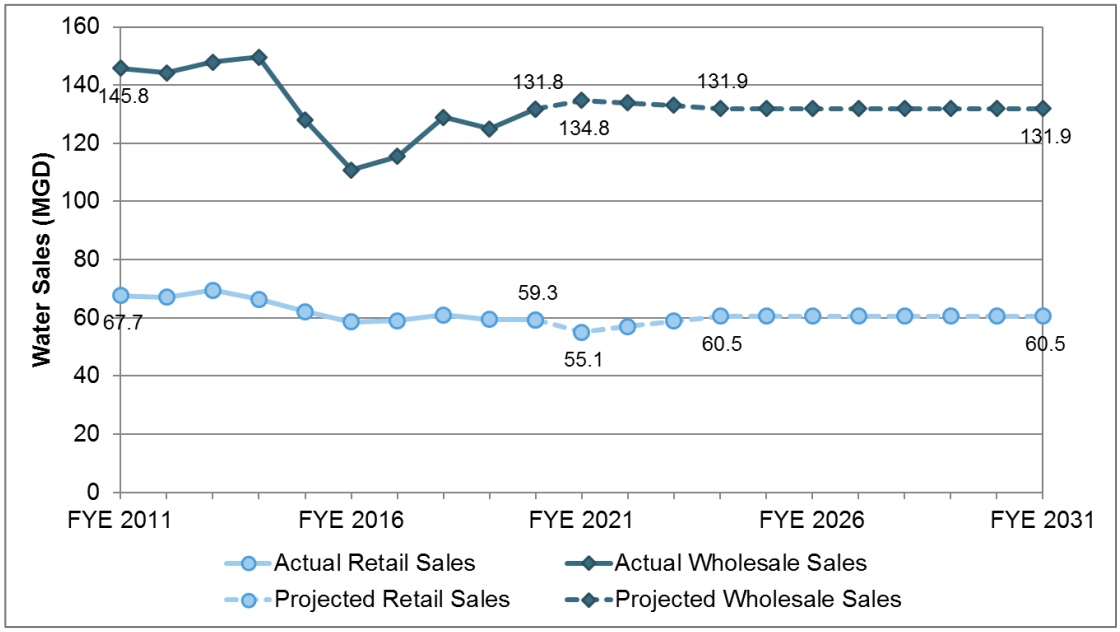
Water and Wastewater Sales Projections

The Water Enterprise and Wastewater Enterprise revenue projections are primarily driven by water and wastewater sales volume estimates. These estimates are dependent upon forecasted water and wastewater delivery volumes to SFPUC customers over the 10-year planning period and the adopted and projected rates applied to those volumes. The SFPUC water and wastewater sales volumes projections used here are for the purposes of financial planning and do not represent water supply estimates. These projections are informed by historic sales volume data and serve to provide a conservative basis for financial planning purposes. Additionally, while these financial planning volumes projections are informed by historic sales volumes data, past performance is not indicative of future results. Water and wastewater retail rates have been approved by the Commission in four-year intervals, with the last four year rate package adoption in 2018.

COVID-19 Changes to Forecasting

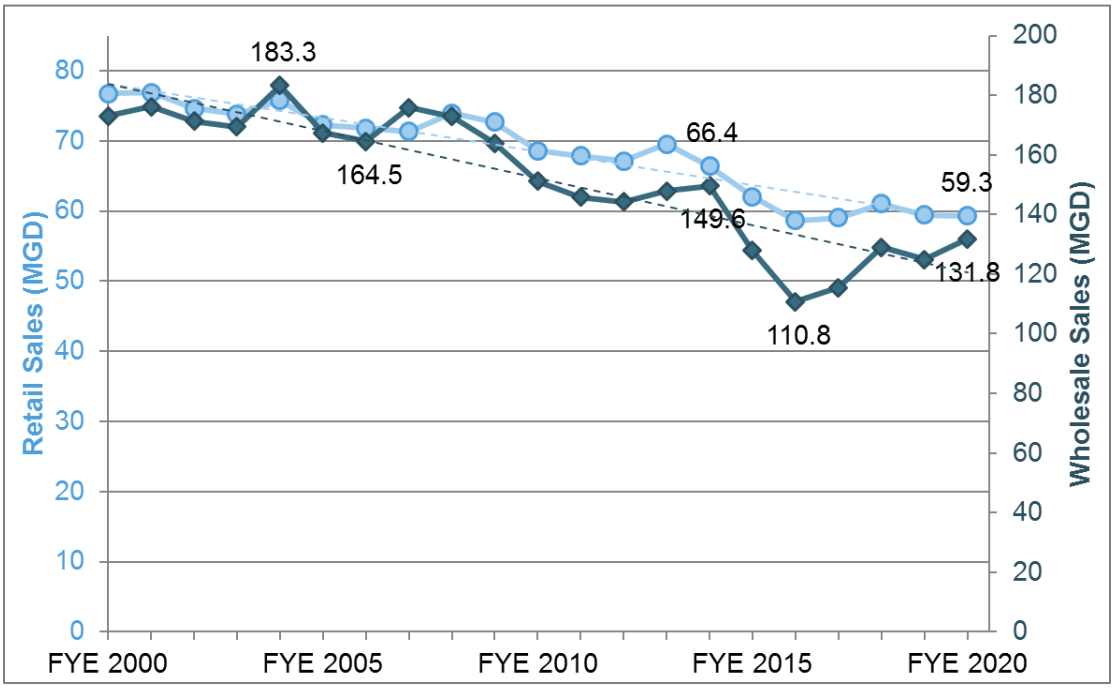
In order to understand the financial impact of COVID-19 on the enterprise, weekly volumetric loads were observed and compared to prior year loads from March 2020 onwards to help inform projections. According to these observations, weekly water deliveries for the Water Enterprise were down 30 percent for commercial customers and up 5 percent for residential customers since the beginning of the COVID-19 compared to three-year averages for that same week in past years. These changes, which were also used as a proxy for Wastewater Enterprise volumetric projections, informed the budget volume re-forecasts for both Enterprises. Given the approach to re-forecasted volumes with COVID-19 pandemic impacts and a return to a "new normal" post recovery in FY 2023-24, the total water volumes that support the adopted FY 2020-21 and FY 2021-22 budget are 3.3 percent and 1.4 percent respectively below pre-COVID-19 pandemic volumetric sales forecasts.

Graph B: Base Case Water Sales Projections



Previously, the SFPUC has forecasted flat or 0.5 percent average annual decreases in water and wastewater volumes for financial planning purpose in the 10-Year Financial Plan. The slight downward trend forecast is based on historic water sales volume data over the past 20 years (see Graph C). Various external events have materially contributed to historical declining water volumes, including the Great Recession and subsequent slow economic recovery, changing plumbing codes, and water conservation patterns continuing from the drought years through 2016. The SFPUC has incorporated longer term slight declines to account for these longer term observed trends as well as impacts of COVID-19. Since SFPUC assumes wastewater volumes to be a fixed percentage of water volumes (i.e. "flow factor"), a downward trend in water volumes suggests a comparable downward trend in wastewater volumes.

Graph C: Historic Water Sales Volume Data



Annual Rate Increases

Adopted rates for retail customers are applied to volumetric assumptions through FY 2021-22. Per City Charter, the SFPUC conducts a retail cost of service study for each enterprise at least every five years. The most recent cost of service study for water and wastewater was completed in 2018 and was the basis for four years of retail water and wastewater rates that were adopted by the Commission for FY 2018-19 through FY 2021-22. Projected retail water and wastewater rates increases after FY 2021-22 are based on the average revenue requirement increases needed, incorporating the projected base case scenario – with recovery by FY 2023-24 and steady usage through the remaining years – in the Plan, to balance the need to meet future enterprise revenue requirements and slightly exceed minimum financial ratios that support financial sustainability. In order to prioritize ratepayer affordability, the SFPUC strives to mitigate rate increases through evaluating prior rate changes and innovative strategies.

Hetch Hetchy Power Sales Projections

The Hetch Hetchy Water and Power Enterprise ("Hetchy Enterprise") revenue projections are primarily driven by power sales. These sales projections are dependent on forecasted volumetric electric loads

and the projected electric rates applied to those loads. Fundamentally, the 10-Year Financial Plan takes a conservative approach to power sales projections by including any existing loads in the FY 2021-22 budget year, and existing customer loads recovering to near pre-pandemic levels between now and 2026 depending on the customer. New load growth over and above existing loads are conservatively layered into the 10-year projection period with the addition of a 12-24 month delay of new customer loads due to the slowing of development projects across the City.

COVID-19 Changes to Forecasting

Forecasts are lower than those in prior Plans to account for COVID-19 changes to volumetric loads. Changes to Hetch Hetchy volumetric loads, as observed since the beginning of the pandemic, were down approximately 20 percent in comparison to "normal" or average weekly deliveries pre-pandemic. Changes to the budget that reflected the impact of COVID-19 assumed this 20 percent decrease in deliveries for one quarter in FY 2020-21 and a gradual recovery to just under historical electric utility volumes in FY 2022-23 for most customers, and recovery for particularly impacted customers – such as the SFMTA and Port – in FY 2023-24, with recovery in FY 2025-26 for SFO to account for continued weakness in the tourism sector. The total electric utility sales volumes that support the adopted FY 2020-21 and FY 2021-22 are 12 percent and 10 percent respectively below sales volume forecasts for the fiscal years developed pre-COVID-19 pandemic.

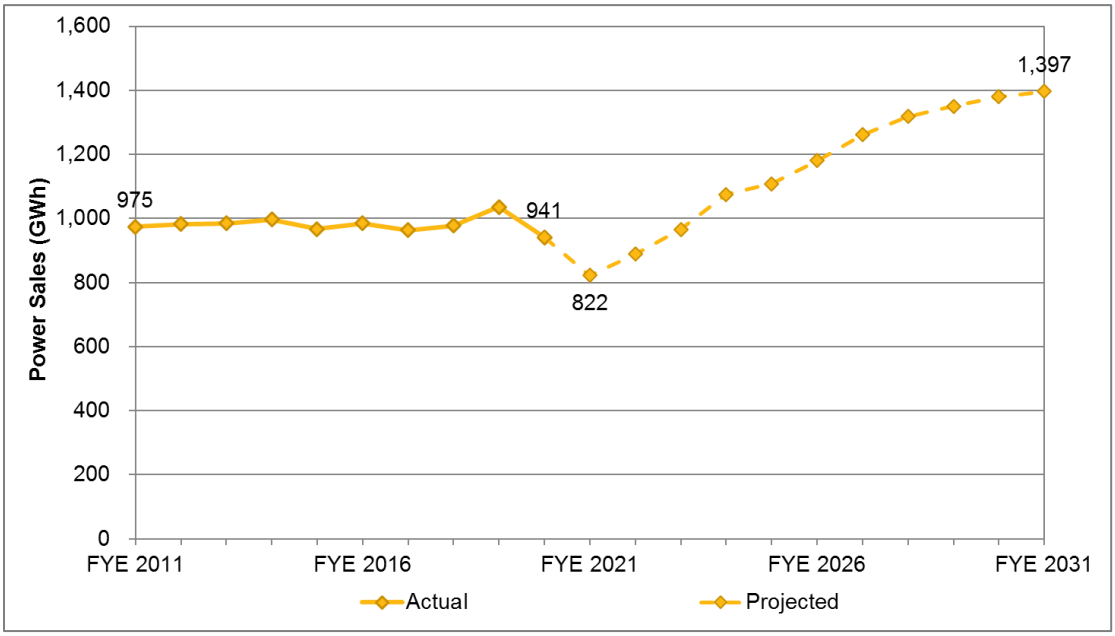
Power Load Growth Projections

Municipal power load projections are based on biennial budgets and are updated annually. Excluding SFO Airport, municipal customers, which represent half of the municipal power load, assumes no electric load growth over the 10-year planning period. Airport load growth is, on average, projected to grow 5.1 percent annually from FY 2021-22 through FY 2030-31. The Airport's projected load growth is related to construction of a new terminal and associated facilities.

The Plan previously assumed some new retail power customer loads associated with former PG&E customers that transferred and became Hetch Hetchy Power Customers. These transfer loads were only included in the Plan once the customer entered a control contract with SFPUC. Other than this small addition of committed customers over the next few years, future loads associated with new transfer customers are projected flat over the 10-year planning period. Only existing customers are assumed moving forward.

Retail electric load growth is also associated with redevelopment area customer growth in the southeastern portion of San Francisco. Adjustments were made to these projections in comparison to prior plans that incorporated city wide projections on timing for economic recovery post COVID-19 pandemic. This growth includes City-controlled entities and areas managed by the City's former redevelopment agency, which are SFPUC power customers. Load forecasts are based on construction schedules of the various projects. Current redevelopment area customers include Hunters Point, Transbay Transit Center, Alice Griffith, Candlestick, Treasure Island/Yerba Buena Island, Pier 70, and HOPE SF (Potrero and Sunnydale).

Graph D: Historic and Projected Hetchy Power Sales Volumes



Annual Power Rate Increases

Adopted rates for distinct customer classes are applied to electric load assumptions through FY 2021-22. The approved power rates as segmented by customer class include: General Use Municipal Electric (GUSE), enterprise municipal, and retail residential and commercial rates. Per City Charter, the SFPUC conducts a cost of service study for the Power Enterprise at least every five years. The last power cost of service study was completed in 2016 and provided an underlying rationale for Power Enterprise rates. GUSE rates are currently set below the cost of service but are projected to gradually increase and eventually reach the cost of service over time. GUSE rates are adopted for two years in the biennial budget cycle and have been adopted through FY 2020-21. These GUSE rates are assumed to increase by 1 cent per kWh each year over the planning period, or 8.3% annually, on average over the period. The next power cost of service study is currently underway and will result in recommendations that may affect power rates thereafter.

Enterprise Rates, which are paid by certain municipal customers, are consistent with comparable PG&E rates. Historically, PG&E rates increase on average about 3 percent each year, as is consistent with actual rate increases observed over the past five years. This year, however, the SFPUC assumes a 0 percent increase in PG&E rates for FY 2021-22 and FY 2022-23, resuming with the 3 percent increase in years FY 2023-24 to FY 2030-31. This divergence from the 3 percent average in FY 2021-22 and FY 2022-23 is due to projected PG&E rate changes during this period.

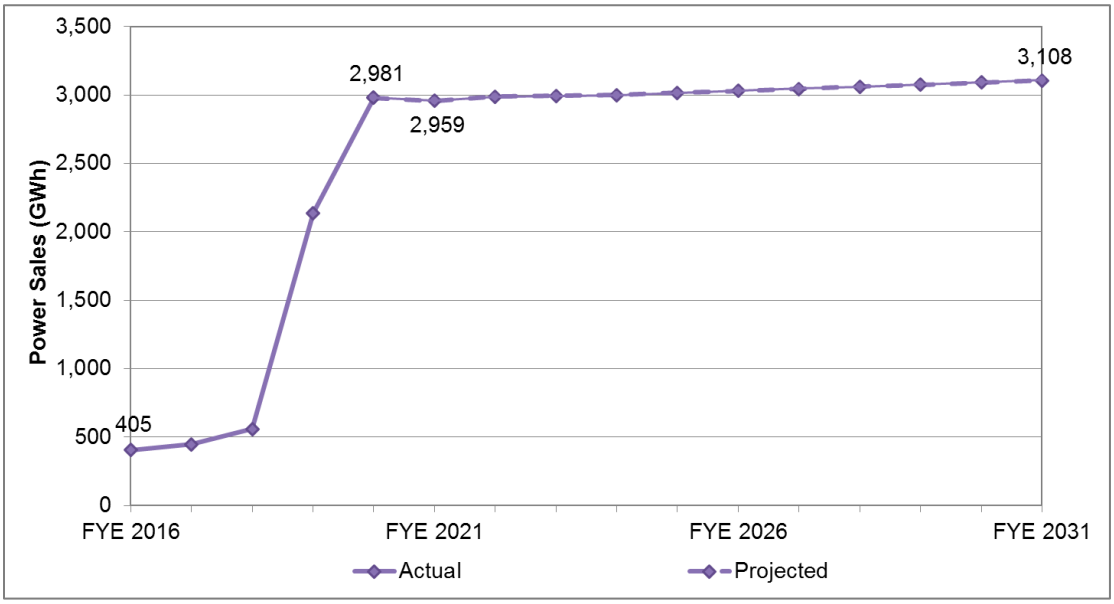
CleanPowerSF Sales Projections

CleanPowerSF sales projections are a function of projected electric loads and projected rates applied to those loads over the planning period. In Graph E you can see the significant growth in historical CleanPowerSF from 2016 through 2020 as phased enrollment successfully grew the Program to its current size. The sales projections in the Plan includes an incidental load growth of 0.5 percent per year,

reflective of overall growth from electrification and other longer term electric trend projections, but no significant additional customer enrollments.

Changes to weekly loads since the start of the pandemic for CleanPowerSF mirrored those of the Water Enterprise, with 20 percent decreases from commercial customers and 14 percent increases from residential when compared against pre-pandemic formulated projections or baseline projections. Budget re-forecasts for FY 2019-20 assumed loads would bottom out at 89 percent of baseline totals, with FY 2020-21 and FY 2021-22 increasing to 3.3 and 2.1 percent respectively above pre-COVID volumetric sales forecasts.

Graph E: Historic and Projected CleanPowerSF Sales Volumes



Rate Changes

The Plan assumes projected rate changes in March and July 2021. The CleanPowerSF rate change in March is expected to follow PG&E's March 2021 rate change and falls within a 1 percent range of comparable PG&E rates. The projected rate change in July 2021 is modeled to recover costs and meet obligations. Subsequent rate changes are assumed each January starting January 2023.

Uses of Funds

Operating and Maintenance Expenditure Assumptions

The 10-Year Financial Plan for all enterprises assumes an annual 3 percent increase in operating and maintenance expenditures. This assumed annual increase represents a proxy for the long-term average annual rate of inflation, as well as an assumption for increased operation and program spending.

Operating and maintenance expenditures are primarily spent on salaries and fringe benefits for operating, administrative, and support personnel. Generally, these personnel costs make up a large part of budgeted expenses. In FY 2019-20, personnel costs were 34 percent of Water Enterprise, 40 percent of Wastewater Enterprise, 38 percent of Hetchy Enterprise, and 6 percent of CleanPowerSF budgeted expenses. A significant portion of operating and maintenance expenditures for the Hetchy Enterprise

and CleanPowerSF are purchases of power and related charges. These power purchases make up 41 percent of FY 2019-20 budgeted expenses for the Hetch Hetchy Enterprise and 83 percent for CleanPowerSF.

Capital Financing Expenditure Assumptions

A variety of capital financing decisions are made each time the SFPUC issues debt to finance capital projects, and a number of similar assumptions are incorporated in the planning process to project future debt service. There are high levels of uncertainty in projecting future debt service costs given the extended capital project planning horizon; therefore, debt service cost assumptions should be sufficiently conservative so as to mitigate risk and be reasonable in both historical context and current market expectations. The key assumptions governing new capital financing projections are discussed below.

Debt service expenses in FY 2020-21 make up 37 percent of Water Enterprise expenses, 22 percent of Wastewater Enterprise expenses, and 2 percent of Hetchy Enterprise expenses. These expenses are projected to grow over the planning period given the increasing cost of capital programs and the increased funding of these programs with long term debt.

Fixed Interest Rates

Fixed-rate debt is a form of debt wherein the interest rate is fixed throughout the life of the debt. Historically, the SFPUC assumed its fixed-rate debt to have a 5 percent interest rate for future debt financing. This assumption is based on the ten-year historical average of a municipal interest rate index. Over the last 10 years, this annual proxy debt cost was observed by Montague DeRose & Associates, a municipal advisory firm hired by the SFPUC, as ranging between about 3.25 percent and 5.25 percent, with an average and median rate of 4.09 percent and 4.08 percent, respectively. Given the historical rates of issued debt, the SFPUC has lowered its interest rate assumptions on future debt issuance as follows:

FY 22 – FY 23:	**3.75 percent**
FY 24 – FY 26:	**4.00 percent**
FY 27 – FY 31:	**4.50 percent**

Given the SFPUC's success in selling revenue bonds at interest rates considerably lower than the 5.00 percent assumed rate, these assumptions remain conservative but more closely aligned with the near-term low interest rate environment currently observed.

The SFPUC's fixed-rate debt includes fixed-rate revenue bonds, fixed-rate direct loans, and short-term Notes. Fixed-rate revenue bonds typically have long repayment periods and market-rate interest levels. Fixed-rate direct loans, such as Water Infrastructure Finance and Innovation Act (WIFIA) and State Revolving Fund loans, provide financing at below-market interest rates and over longer terms in some cases. The current plan assumes one lump sum WIFIA loan disbursement in FY 2024-25. In advance of WIFIA loan disbursement, we also plan on using and issuing Bond Anticipation Notes (BANs), which are small short-term bonds that have fixed market interest rates and are often issued in advance of larger long-term bonds. The SFPUC assumes all long-term fixed-rate debt, including WIFIA loans, to be amortized over a 30-year term. While 40-year debt will be considered, 30 years represents a more conservative planning assumption.

Variable Interest Rates

Variable-rate debt is a form of debt wherein the interest rate changes depending on market conditions throughout the life of the debt.

The SFPUC's variable-rate debt includes variable-rate revenue bonds and Commercial Paper. Variable-rate bonds typically have long repayment periods and generally provide financing at lower costs than fixed-rate bonds. All variable-rate bonds are assumed to be amortized over a 25-year term. To mitigate interest rate risk and ensure financial sustainability, SFPUC's debt management policies stipulate that no more than 25 percent of any enterprise's long-term debt be in variable-rate mode. The Wastewater Enterprise is the only Enterprise that has outstanding long-term variable rate debt, which makes up 11 percent of the Enterprise's debt portfolio as of FY 2019-20.

Commercial Paper ("CP") is a form of short-term variable-rate debt that is refunded by revenue bonds. While CP has a maturity of 270 days or less, principal payments on maturing CP are usually funded by issuing new CP, a process referred to as "rolling" or "remarketing" the CP. Bank credit, typically in the form of a letter of credit or liquidity facility, is used to guarantee that funds are available to pay investors at each maturity in the unlikely event of a failed remarketing or inability of the SFPUC to fulfill CP repayment. Commercial paper interest rates are currently assumed to be 1 percent.

Issuance Costs and Capitalized Interest

Bond Issuance costs are projected at 0.25 percent of the par amount of each issuance, plus bond underwriting fees at 0.15 percent of the par amount of each issuance. Issuance costs include underwriting fees, legal fees, financial advisory fees, credit enhancement fees, and other miscellaneous fees typically associated with a bond financing. Other issuance costs include the costs of interim, short-term funding for projects by each enterprise's Commercial Paper Program, such as accrued interest and credit bank and dealer fees associated with outstanding commercial notes. These costs are not treated as part of the bond issuance costs cited above, but instead are fixed costs related to the Commercial Paper Program, and are costs that are added to each bond issuance when it occurs. The projections assume that interest during project construction is funded out of debt proceeds for a period of 30 months (called "capitalized interest"). The fundamental principle behind capitalized interest is not to pass on capital financing costs to rate payers until the project is completed and placed into service.

Debt Service Reserve

New debt issuances do not include funds for a debt service reserve fund because the strong AA credit quality of the SFPUC provides sufficient market assurances on debt service repayment. The Water, Wastewater, and Power indentures do not require a debt service reserve be funded.

Timing of Debt Issuance

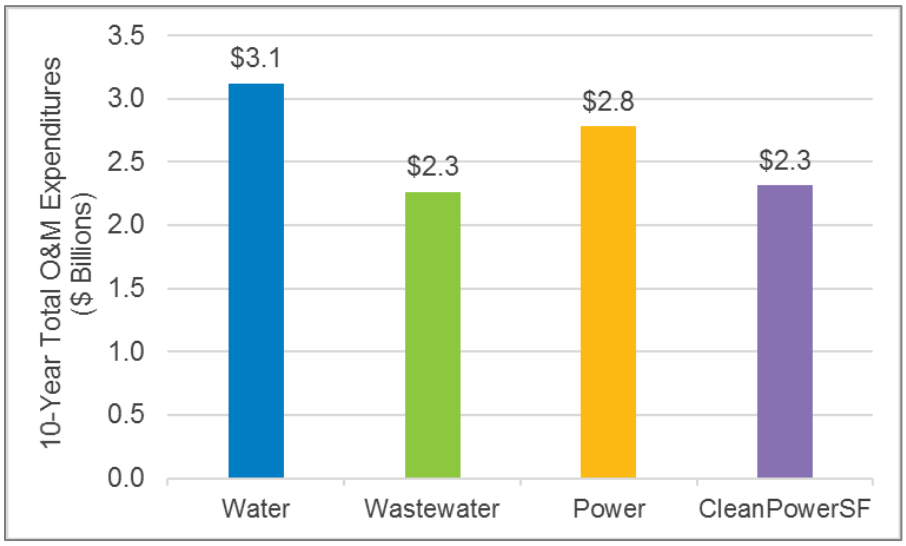
The timing and cadence of debt issuance is typically reflective of the projected financing needs of each enterprise over the 10-Year Financial Plans. The debt issuance schedule reflects coordination with the needs of capital project managers and the reality of contract bidding and execution. Timing and issuance amounts are subject to market conditions and actual project spending. Issuance amounts do not include estimates for future refunding opportunities. The following table shows the assumed debt issuances for each enterprise for the Plan.

	Water	Wastewater	Power
FY22	-	$697M	$95M
FY23	$556M	$676M	-
FY24	-	-	$214M
FY25	$495M	$837M	-
FY26	-	-	-
FY27	-	$1,100M	$238M
FY28	$360M	-	-
FY29	-	$702M	-
FY30	-	-	-
FY31	$159M	$519M	$209M

10-Year Financial Plan

The 10-Year Financial Plan provides a view of resulting enterprise revenue requirements and forecasts annual sources and uses of funds over the 10-year planning period. Sources are projected operating revenue streams such as water, wastewater, and power sales, as well as non-operating and capital revenues such as state and federal grants or general obligation bonds from the City. Uses are projected expenses such as operations and maintenance, debt service, and revenue-funded projects. These cash flow projections help each enterprise evaluate its performance on various financial sustainability metrics established in SFPUC's Financial Management Policies, including fund balance reserve levels, debt service coverage, and revenue-funded capital. Graph F displays the total operations and maintenance expenditures for each enterprise over the course of the Plan.

Graph F: Projected Total Operations and Maintenance FY 2022-31



Water Enterprise

The Water Enterprise's financial forecast (Appendix A) results in an average annual retail rate increase of 4.1 percent annually over the Plan (Chart A) and an average annual rate increase of 4.1 percent for wholesale customers. This compares to the retail and wholesale average annual rate increases of 5.9 percent and 5.0 percent, respectively, from the previously adopted FY21 10-Year Financial Plan. Adopted retail rate increase in FY 2021-22 is 7.9 percent, while projected annual rate changes decline to 3.0 percent for subsequent years of the Plan, reflecting slower expenditure growth. Wholesale rates are not projected to increase until FY 2022-23 as the SFPUC plans to use the wholesale balancing account to keep wholesale rates stable.

Chart A: Adopted and Projected Water Enterprise Rate Increases

	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	Average Annual
Rate Increase - Retail	7.9%	7.0%	4.0%	4.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	4.1%
Rate Increase - Wholesale	0.0%	2.2%	16.2%	3.3%	8.3%	0.0%	7.0%	1.2%	0.0%	3.1%	4.1%

Based on the Plan, the Water Enterprise's fund balance reserve is projected to remain higher than the minimum level required by SFPUC's Fund Balance Reserve Policy of 90 days or 25 percent of operating and maintenance expenses. Over the next 10 years, the Water Enterprise fund balance is projected to range from a high of 68 percent of operating expenses in FY 2021-22 to a low of 40 percent in FY 2025-26, slightly lower levels than past years. Maintaining higher levels of fund balance reserves provides the Water Enterprise flexibility to fund expenses using reserves instead of annual revenues and explains the negative annual net revenues projected over the next 10 years.

The Water Enterprise's debt service coverage is projected to remain higher than minimum levels required by SFPUC's Debt Service Coverage Policyof 1.35x annual debt service for Indenture Coverage and 1.10x for Current Coverage. Over the next 10 years, Indenture Coverage is projected to range from a high of 1.83x in FY 2021-22 to a low of 1.54x in FY 2027-28. Current Coverage is projected to range from a high of 1.24x in FY 2024-25 to a low of 1.12x in FY 2022-23. These debt service coverage levels provide additional assurance of financial flexibility and are markers of credit strength.

These higher levels of debt service coverage reflect that even as the need for capital financing increases, the Water Enterprise ensures financial sustainability by maintaining a large share of revenue-funded capital projects. The SFPUC aims to fund annual repair and replacement projects with revenues. The Water Enterprise's revenue-funding is currently within the range required by SFPUC's Capital Financing Policies of 15 percent to 30 percent of the enterprise's capital budget. Over the next 10 years, revenue-funding is projected to be on average 28 percent of the capital budget for the Water Enterprise.

Wastewater Enterprise

The Wastewater Enterprise's financial forecast (Appendix B) results in an average annual rate increase of 5.0 percent annually over the Plan (Chart B). The Wastewater financial forecast follows many of the trends from the Water Enterprise, including an overall average annual rate increase that has declined from the 7.5 percent average annual rate increase from the previously adopted FY21 10-Year Financial Plan gradual decrease in total wastewater charges over the 10-year period, primarily driven by annual rate decreases. Adopted rate increase is 8.0 percent through FY 2021-22, while projected annual rate changes decline to 4.0 percent in subsequent years of the Plan.

Chart B: Adopted and Projected Wastewater Enterprise Rate Increases

	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	Average Annual
Retail Rate Increase	8.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	4.0%	4.0%	4.0%	5.0%

Over the next 10 years, the Wastewater Enterprise's fund balance reserve is projected to remain higher than the minimum level required by SFPUC's Fund Balance Reserve Policy of 90 days or 25 percent of operating and maintenance expenses. Throughout the 10-year planning period, the Wastewater Enterprise fund balance is projected to range from a high of 100 percent of operating expenses in FY 2021-22 to a low of 29 percent in FY 2030-31.

The Wastewater Enterprise's debt service coverage is projected to remain significantly higher than minimum levels required by SFPUC's Debt Service Coverage Policy of 1.35x annual debt service for Indenture Coverage and 1.10x for Current Coverage. Over the next 10 years, Indenture Coverage is projected to range from a high of 4.55x in FY 2021-22 to a low 1.95x in FY 2030-31. Current Coverage is projected to range from a high of 2.32x in FY 2021-22 to a low of 1.43x in FY 3030-31.

These high levels of debt service coverage reflect that even as capital financing needs increase, the Wastewater Enterprise promotes financial sustainability by maintaining a significant share of its capital project financing with revenues. The Wastewater Enterprise's amount of revenue-funding is currently within the range required by SFPUC's Capital Financing Policies of 15 percent to 30 percent of the enterprise's capital budget. Over the next 10 years, revenue-funding is projected to be on average 25 percent of the capital budget for the Wastewater Enterprise.

Hetch Hetchy Water and Power Enterprise

The financial forecast for the Hetch Hetchy Water and Power Enterprise ("Hetchy Enterprise") (Appendix C) includes an average annual General Use Municipal Electric rate increase of 8.3 percent annually over the Plan (Chart C). The financial forecast projects an overall increase in power sales revenues over the 10-year period, primarily driven by customer load growth and annual rate increases.

Chart C: Adopted and Projected General Use Municipal Electric Rate Increases

	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	Average Annual
General Use Municipal Electric Rate Increase	12.1%	10.8%	9.7%	8.9%	8.1%	7.5%	7.0%	6.5%	6.1%	5.8%	8.3%

The Hetchy Enterprise's fund balance is projected to remain higher than the minimum level required by SFPUC's Fund Balance Reserve Policy of 90 days or 25 percent of operating and maintenance expenses. Throughout the 10-year planning period, fund balance is projected to range from a high of 45 percent of operating expenses in FY 2021-22 to a low of 32 percent in FY 2024-25.

The Hetchy Enterprise's debt service coverage is currently higher than minimum levels required by SFPUC's Debt Service Coverage Policy of 1.35x annual debt service for Indenture Coverage and 1.10x for Current Coverage. Over the next 10 years, Indenture Coverage is projected to range from a high of 30.38x in FY 2021-22 to a low of 3.91x in FY 2029-30. Current Coverage is projected to range from a high of 2.64x in FY 2025-26 to a low of 1.12x in FY 2023-24. These debt service coverage levels provide additional assurance of financial flexibility and are markers of credit strength.

These high levels of debt service coverage reflect that even as the need for capital financing increases, the Hetchy Enterprise encourages financial sustainability by maintaining a share of revenue-funded capital projects. The Hetchy Enterprise's amount of revenue-funding is currently within the range required by SFPUC's Capital Financing Policies of 15 percent to 30 percent of the enterprise's capital budget. Over the next 10 years, revenue-funding is projected to be on average 17 percent of the capital budget for the Hetchy Enterprise. Incorporated into this Plan are the following: WSA Amendments, which shift power to water financing**,** as well as Proposition A power bond financing authority.

CleanPowerSF

After significant customer base expansion in FY 2018-19 and FY 2019-20, the resulting ten year forecast shows maintenance and stability of power revenues. This is a function of the Program having completed major phases of customer enrollment and the assumption of annual rate increases. The financial forecast for CleanPowerSF (Appendix D) projects fund balance to remain higher than the minimum level required by SFPUC's Fund Balance Reserve Policy of 90 days or 25 percent of operating and maintenance expenses. Throughout the 10-year planning period, fund balance is projected to range from a high of 61 percent of operating expenses in FY 2030-31 to a low of 25 percent in FY 2023-24.

Sensitivities

Water and Wastewater Enterprises

Long-range financial forecasts, such as those used in the Plan, can be difficult as a variety of scenarios can impact forecast accuracy. Drought, recessions, flooding, and various other factors can all lead to varying water sales volumes. COVID-19 and the subsequent shelter-in-place order forced the Water and Wastewater Enterprises to revisit former assumptions to account for the new usage patterns and projected sales volumes. To account for potential scenarios and long term effects of the pandemic, this Plan forecasts gradual economic recovery by FY 2023-24 to overall sales volume levels to slightly below pre-pandemic levels, defined here as the average usage from FY 2016-17 to FY 2018-19, retaining this same usage level through the end of the Plan.

Downside Scenario

The downside scenario assumes a 0.5 percent average annual decline in sales volumes through FY 2024-25, rather than the flat, steady state for the remaining years of the Plan as described in the base case. In prior years, this 0.5 percent annual decline was considered the "base case scenario," or the benchmark for financial projections. Holding all things equal, the resulting retail water rate change, to achieve a similar base case fund balance target as a percentage of expenditures in FY 2030-31, is an average annual rate change of 4.3 percent over the ten years, or 0.2 percent higher than the base case scenario average annual rate change of 4.1 percent over the same period.

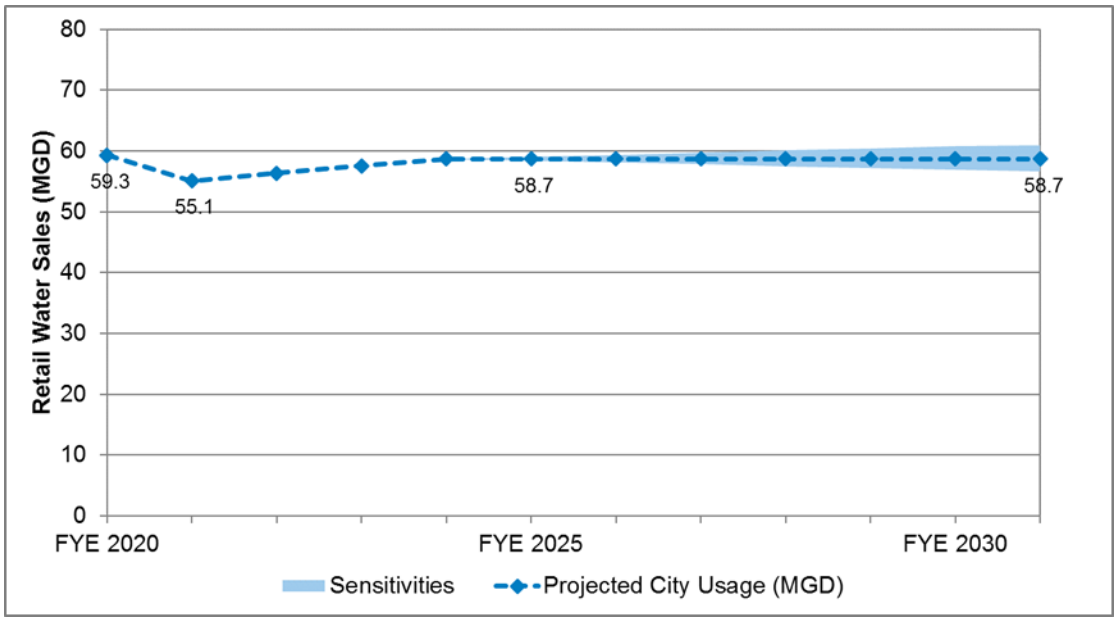
Upside Scenario

The upside sensitivity scenario assumes the same recovery as the "base case" scenario described above through FY 2023-24, and then an average annual increase of 0.6 percent from FY 2024-25 to FY 2029-30, with a slightly lower increase of 0.13 percent in FY 2030- 31. This upward sensitivity scenario is informed by an approximate average annual growth rate in long-term retail water demand forecasts in an externally produced study conducted for the Water Enterprise's update to the Urban Water

Management Plan. Graph G shows the upward and downside sensitivity scenarios as compared to the base case.

Holding all things equal, the resulting retail water rate change, to achieve a similar base case fund balance target as a percentage of expenditures in FY 2030-31, is an average annual rate change of 4.12 percent over the ten years, or 0.03 percent lower than the base case scenario average annual rate change over the same period.

Graph G: Water Retail Sales Sensitivities (MGD)



Hetch Hetchy Water and Power Enterprise

The 10-Year Financial Plan base case assumes overall loads to resume 98 percent recovery to pre-COVID loads. The base case scenario assumes a two year delay in redevelopment load growth, seeing increases in loads starting FY 2022-23. The Plan assumes general use municipal rate rise by $0.01 per year, or 8.3 percent average annual growth over the Plan period. Enterprise rates are modeled as PG&E's October 2019 tariff rates escalated by 3 percent per year starting July 2020 (FY 2020-21), except during Calender Years 2022 and 2023.

Power Upside Scenario

The upside scenario assumes new infill customers from additional housing developments and facility upgrades expected to come online in FY 2021-22 and that redevelopment load growth will begin in FY 2021-22 rather than FY 2022-23 as modeled in the base case scenario. The additional revenue impact of this load growth is projected to be $150 million from FY 2021-22 to FY 2030-31.

Power Downside Scenario

This downside scenario delays SFO recovery by 9 months, resulting in a revenue loss of about $18 million. For redevelopment loads, the downside scenario projects a 20 percent overall reduction, resulting in a $65 million revenue loss. The overall recovery in the downside scenario is only 95 percent

for loads impacted by COVID-19, compared to 98 percent recovery in base case, resulting in a $33 million revenue loss for FY 2021-22 to FY 2030-31.

CleanPowerSF

CleanPowerSF's sensitivities examine several likely scenarios related to changes in the customer base, electric vehicle (EV) usage, and PG&E generation rates. Unlike the sensitivity scenarios of the Water and Wastewater Enterprises which could result in rate changes, CleanPowerSF's scenarios are more relevant to resulting revenue impact. The base case for CleanPowerSF assumes a 0.5 percent load growth per year. The following sensitivity scenarios were modeled for CleanPowerSF while holding all else equal with the base case of the Plan.

CleanPowerSF Upside Scenario

The June 2019 Mayor's EV Working Group report set a 2030 electric vehicle (EV) adoption target of 100 percent, defined as all new vehicle registrations in San Francisco be EVs by that date. This sensitivity assumes that the goal is met and 100 percent of the new EV related charging associated with the goal is supplied by the CleanPowerSF program. CleanPowerSF revenues associated with EV adoption are a result of the associated increase in electricity demand resulting from this EV charging. Assuming a 0 percent 2022 rate increase and a 3 percent increase each year thereafter, the upside revenue from this scenario is $203 million over the base case 10-year Financial Plan.

Conclusion

The 10-Year Financial Plan abides by all SFPUC policies and reflects the latest financial projections, providing updated insight into each enterprise's financial health through projected revenues, expenditures, fund balances, and financial ratios. These budget, capital, and financial planning efforts were further informed by the work of the Financial Resiliency Project, an agency wide effort launched in FY 2019-20 to better understand the impacts of the COVID-19 related recession. As COVID-19 and the shelter-in-place order continue into FY 2020-21, the SFPUC will remain vigilant to retool this Plan as necessary to inform strategic decision-making. While the effects of the pandemic on the years ahead are unknown, the SFPUC is a financially strong institution that will continue to respond to the needs of customers, ensuring issues are addressed in ways that align with the department's mission and core values.

Appendices

Appendix A: Water Enterprise 10-Year Financial Forecast -- Base Case

($M)	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031
Beginning Fund Balance	**$ 238.4**	**$ 216.3**	**$ 168.7**	**$ 160.5**	**$ 160.6**	**$ 143.3**	**$ 148.1**	**$ 159.8**	**$ 164.1**	**$ 178.7**
Sources										
Retail Water Sales	323.3	352.5	373.3	387.4	399.0	410.9	424.3	436.0	449.0	462.5
Wholesale Water Sales	270.4	272.1	308.5	320.9	346.1	348.0	371.1	375.7	376.4	387.1
Other Miscellaneous Income	63.4	60.7	60.8	61.3	61.6	62.0	62.8	63.3	63.8	64.6
Total Sources	**$ 657.1**	**$ 685.3**	**$ 742.6**	**$ 769.5**	**$ 806.7**	**$ 821.0**	**$ 858.1**	**$ 875.0**	**$ 889.2**	**$ 914.2**
Uses										
Operations & Maintenance	272.4	282.4	289.6	300.3	309.2	317.8	325.5	333.0	342.4	349.3
Hetchy Transfer	45.8	46.8	48.4	49.9	51.6	53.2	54.8	56.5	58.3	60.0
Debt Service	307.6	335.0	339.2	340.6	379.6	380.1	409.4	408.8	410.5	433.6
Revenue-Funded Projects	57.2	68.6	73.6	78.6	83.7	65.1	56.6	72.3	63.3	49.2
Total Uses	**$ 683.0**	**$ 732.9**	**$ 750.8**	**$ 769.5**	**$ 824.0**	**$ 816.1**	**$ 846.4**	**$ 870.7**	**$ 874.6**	**$ 892.0**
Net Revenues	**$ (25.8)**	**$ (47.6)**	**$ (8.1)**	**$ 0.1**	**$ (17.3)**	**$ 4.8**	**$ 11.7**	**$ 4.3**	**$ 14.6**	**$ 22.2**
Ending Fund Balance	**$ 212.6**	**$ 168.7**	**$ 160.5**	**$ 160.6**	**$ 143.3**	**$ 148.1**	**$ 159.8**	**$ 164.1**	**$ 178.7**	**$ 200.9**
Rate Increase - Retail	7.9%	7.0%	4.0%	4.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Rate Increase - Wholesale	0.0%	2.2%	16.2%	3.3%	8.3%	0.0%	7.0%	1.2%	0.0%	3.1%
Fund Balance as % of Op. Expenses	68%	51%	48%	46%	40%	40%	42%	42%	45%	49%
Debt Service Coverage (Current)	1.18	1.12	1.20	1.24	1.18	1.19	1.17	1.19	1.19	1.17
Debt Service Coverage (Indenture)	1.83	1.67	1.70	1.71	1.61	1.57	1.54	1.58	1.59	1.58
Revenue-Funded % of Capital	28%									

Appendix B: Wastewater Enterprise 10-Year Financial Forecast – Base Case

($M)	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031
Beginning Fund Balance	**$ 203.0**	**$ 201.1**	**$ 185.7**	**$ 178.4**	**$ 165.0**	**$ 165.2**	**$ 168.6**	**$ 172.9**	**$ 161.1**	**$ 133.8**
Sources										
Sewer Charges	383.1	413.1	445.1	466.1	489.3	513.7	540.9	561.1	583.6	607.1
Interest Income	5.8	1.0	0.9	0.9	0.8	0.8	1.1	1.1	1.0	1.3
Federal Bond Interest Subsidy	4.0	4.0	3.9	3.7	3.6	3.4	3.2	3.1	2.9	2.7
Other Miscellaneous Income	14.7	15.3	15.5	15.8	16.0	16.3	16.6	16.8	17.1	17.5
Total Sources	**$ 407.7**	**$ 433.4**	**$ 465.4**	**$ 486.5**	**$ 509.7**	**$ 534.3**	**$ 561.8**	**$ 582.1**	**$ 604.7**	**$ 628.5**
Uses										
Operations & Maintenance	201.1	206.9	212.9	219.0	225.3	231.8	238.4	245.3	252.4	263.5
Debt Service	93.6	113.5	129.0	147.6	148.4	160.6	177.9	204.7	233.0	272.4
Revenue-Funded Projects	114.9	128.4	130.8	133.3	135.9	138.5	141.1	143.8	146.6	149.4
Total Uses	**$ 409.6**	**$ 448.8**	**$ 472.7**	**$ 499.9**	**$ 509.5**	**$ 530.8**	**$ 557.5**	**$ 593.9**	**$ 632.0**	**$ 685.3**
Net Revenues	**$ (1.9)**	**$ (15.4)**	**$ (7.3)**	**$ (13.5)**	**$ 0.2**	**$ 3.4**	**$ 4.3**	**$ (11.8)**	**$ (27.4)**	**$ (56.8)**
Ending Fund Balance	**$ 201.1**	**$ 185.7**	**$ 178.4**	**$ 165.0**	**$ 165.2**	**$ 168.6**	**$ 172.9**	**$ 161.1**	**$ 133.8**	**$ 77.0**
Retail Rate Increase	8.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	4.0%	4.0%	4.0%
Fund Balance as % of Op. Expenses	100%	90%	84%	75%	73%	73%	73%	66%	53%	29%
Debt Service Coverage (Current)	2.32	2.26	2.18	1.96	2.09	2.14	2.04	1.82	1.65	1.43
Debt Service Coverage (Indenture)	4.55	4.22	3.75	3.25	3.27	3.28	3.08	2.74	2.39	1.95
Revenue-Funded % of Capital	25%									

Appendix C: Hetch Hetchy Water and Power Enterprise 10-Year Financial Forecast – Base Case

($M)	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031
Beginning Fund Balance	**$ 77.3**	**$ 78.0**	**$ 74.3**	**$ 67.9**	**$ 66.7**	**$ 72.2**	**$ 72.9**	**$ 84.0**	**$ 91.5**	**$ 88.8**
Sources										
Power Sales - Municipal General Fund Rates	30.7	37.0	43.2	46.8	50.5	54.1	57.8	61.4	65.0	68.7
Power Sales - Municipal Enterprise Rates	90.6	98.0	109.4	116.7	124.0	132.3	138.8	143.8	149.4	157.3
Power Sales - Retail	12.8	14.9	21.1	23.8	36.5	50.6	62.6	72.0	80.3	82.7
Power Sales - Wholesale	18.2	14.5	12.0	10.9	10.5	9.3	8.8	8.8	8.8	8.9
Gas & Steam Sales	14.7	15.1	15.5	16.0	16.5	17.0	17.5	18.0	18.6	19.1
Water Sales	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
Hetchy Transfer	45.8	46.8	48.4	49.9	51.6	53.2	54.8	56.5	58.3	60.0
Other Misc Income	13.6	9.7	10.6	11.0	11.2	11.4	11.8	12.1	12.4	12.9
Total Sources	**$ 226.6**	**$ 236.4**	**$ 260.3**	**$ 275.4**	**$ 300.9**	**$ 328.1**	**$ 352.4**	**$ 372.8**	**$ 393.1**	**$ 410.0**
Uses										
Operations & Maintenance	224.1	230.9	248.9	258.6	271.4	282.0	296.3	309.5	322.6	335.5
Debt Service	3.9	4.3	10.2	10.2	11.0	24.8	24.5	25.2	41.5	41.5
Revenue-Funded Projects	(2.2)	4.9	7.6	7.8	13.1	20.7	20.7	30.7	31.7	32.7
Total Uses	**$ 225.9**	**$ 240.1**	**$ 266.7**	**$ 276.6**	**$ 295.4**	**$ 327.4**	**$ 341.4**	**$ 365.4**	**$ 395.8**	**$ 409.6**
Net Revenues	**$ 0.7**	**$ (3.7)**	**$ (6.4)**	**$ (1.2)**	**$ 5.5**	**$ 0.7**	**$ 11.0**	**$ 7.5**	**$ (2.7)**	**$ 0.4**
Ending Fund Balance	**$ 78.0**	**$ 74.3**	**$ 67.9**	**$ 66.7**	**$ 72.2**	**$ 72.9**	**$ 84.0**	**$ 91.5**	**$ 88.8**	**$ 89.1**
Fund Balance as % of Power Op. Expenses	45%	41%	34%	32%	33%	32%	35%	36%	34%	33%
Debt Service Coverage (Current)	1.18	1.25	1.12	1.59	2.64	1.84	2.27	2.49	1.68	1.78
Debt Service Coverage (Indenture)	30.38	28.43	9.11	9.05	9.46	4.91	5.36	5.87	3.91	3.94
Revenue-Funded % of Capital	17%									

Appendix D: CleanPowerSF 10-Year Financial Forecast -- Base Case

($M)	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031
Beginning Fund Balance	**$ 62.1**	**$ 62.6**	**$ 59.8**	**$ 54.8**	**$ 59.1**	**$ 69.3**	**$ 87.1**	**$ 112.6**	**$ 127.2**	**$ 127.2**
Sources										
Power Sales	224.1	218.1	214.8	222.3	230.1	238.2	246.6	255.2	264.1	273.4
Interest Earnings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Sources	**$ 224.1**	**$ 218.1**	**$ 214.8**	**$ 222.3**	**$ 230.1**	**$ 238.2**	**$ 246.6**	**$ 255.2**	**$ 264.1**	**$ 273.4**
Uses										
Supply	193.1	192.5	191.4	189.4	191.1	191.9	192.3	193.9	194.1	194.4
Operating Costs	28.1	27.0	27.0	27.0	27.1	27.1	27.2	27.2	27.3	27.3
Debt Service	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Revenue-Funded Projects	2.4	1.5	1.4	1.6	1.7	1.5	1.6	19.5	42.7	42.7
Total Uses	**$ 223.6**	**$ 220.9**	**$ 219.8**	**$ 218.0**	**$ 219.9**	**$ 220.5**	**$ 221.1**	**$ 240.6**	**$ 264.1**	**$ 264.4**
Net Revenues	**$ 0.6**	**$ (2.8)**	**$ (5.0)**	**$ 4.3**	**$ 10.3**	**$ 17.8**	**$ 25.5**	**$ 14.6**	**$ 0.1**	**$ 9.0**
General Reserve										
Ending Fund Balance	**$ 62.6**	**$ 59.8**	**$ 54.8**	**$ 59.1**	**$ 69.3**	**$ 87.1**	**$ 112.6**	**$ 127.2**	**$ 127.2**	**$ 136.2**
Fund Balance as % of Operating Expenses	28%	27%	25%	27%	32%	40%	51%	58%	57%	61%