

SFPUC 10-YEAR FINANCIAL PLAN

FY 2022-23 to FY 2031-32

[Abstract](#)

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

February 2022

Financial Planning, SFPUC

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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 2022-23 to FY 2031-32 10-Year Financial Plan, these projections also include assumptions based on the pandemic economic recovery and the 2021 drought declaration.

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. As the effects of the pandemic continue into 2022, the SFPUC will continue to commit itself to financial prudence 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 revenue requirements required of each enterprise over the planning period. This represents both a significant commitment to the rebuilding of our infrastructure but also a forward view of the impact this spending has on the ratepayer. .

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

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

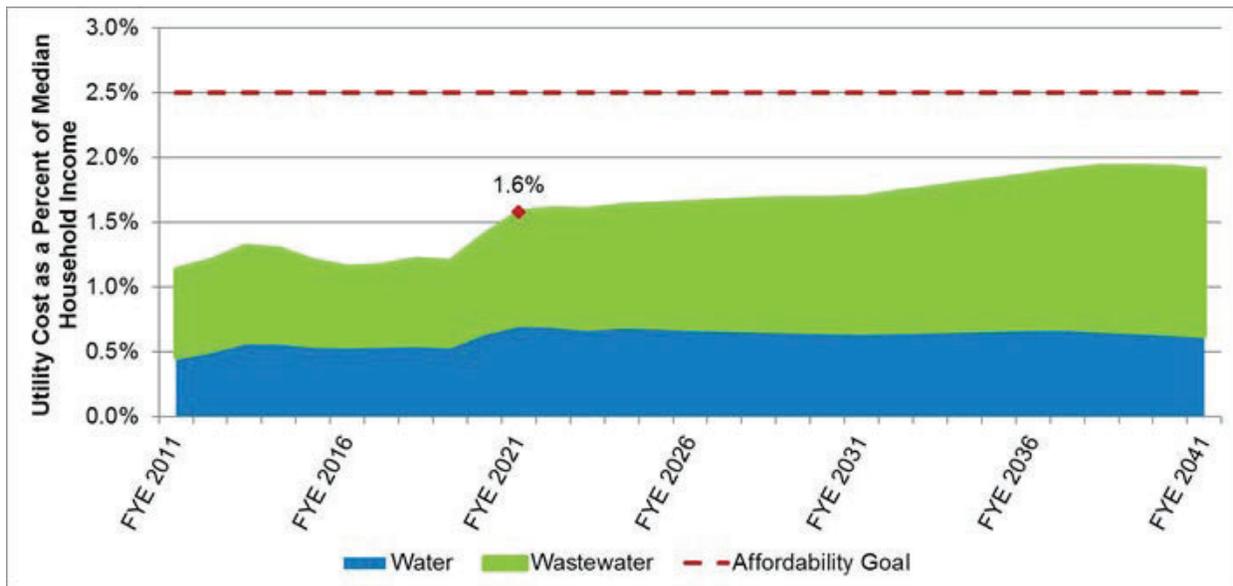
Financial ratios: metrics that assess whether an enterprise has sufficient resources to meet debt service coverage and fund balance reserve requirements

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.

Affordability

The SFPUC is making greater strides in this Plan update to put affordability and access at the forefront of its mission and strategic goals. Historically, the SFPUC’s affordability target has been to keep average monthly bills to less than 2.5 percent of the Median Household Income (MHI) denoted in the table below by the red dotted line. The SFPUC is currently meeting this target, as the average combined water and wastewater monthly bill of \$150 for FY 2021-22 was 1.6 percent of MHI.

Graph A: Average Bills as % of Median Household Income



Graph A shows projected future spending over the next 20 years increasing close to 2 percent of MHI, but still below the 2.5 percent threshold. While these increases remain less than 2.5 percent of the Median Household Income, this does not reflect the impact of SFPUC bill increases on our low-income customers, particularly given San Francisco’s high MHI. Households in the bottom 20 percent of San Francisco incomes (the “lowest quintile”) earn less than \$38,400, compared to the median \$110,000 in FY 2021-22. Therefore, a bill which is affordable to a median household may exacerbate financial stresses for lower income households. Graph B below shows that a household at the lowest quintile currently pays approximately 4.5 percent of their total income on combined water and sewer bills – nearly 3 times the percentage paid by a median household – and far above 2.5 percent.

Graph B: Average Bill as % of Lowest Quintile Income



This concerning discrepancy between how bills impact median versus low-income customers needs to better align with the SFPUC’s commitment to racial justice, formalized via “The SFPUC Racial Justice Resolution” passed in July 2020. Research conducted by a consultant hired by the SFPUC shows that San Francisco’s communities of color are more likely to be water-cost burdened (spend more than 2.5 percent of household income on water and sewer bills) than white households. This points to a need for the SFPUC to review the metric currently used to assess affordability – which focuses solely on the median household – to determine if other metrics, such as the lowest quintile income shown above, would be appropriate to gauge affordability. The consultant’s analysis is expected to be completed in the Spring of 2022 and will inform actionable steps the SFPUC can take to better serve its low income customers and San Francisco’s communities of color.

Over the past 18 months, SFPUC staff have worked to better support customers and all San Franciscans in affording and accessing SFPUC services, with a particular focus on the SFPUC’s commitment to racial equity. In FY 2020-21, the Agency established a Water, Power, Sewer as Human Rights Working Group, tasked with addressing structural inequities and barriers to affording and accessing SFPUC services. Some of the ongoing initiatives within the group include:

- Revitalizing and updating the Customer Assistance Program to streamline enrollment and increase participation;
- Developing recommendations to improve collections and severance processes to better support struggling customers and avoid disconnections wherever possible;
- Expanding access to critical services for unhoused San Franciscans;
- Identifying struggling communities for whom the SFPUC does not already offer support; and
- Creating an affordability and access policy to define a vision, goals, and framework for decision-making in support of the human right to affordable and accessible water, power, and sewer services.

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. The SFPUC's Financial Policies can be found on its website, at <https://sfpub.org/about-us/policies-plans/financial-plans-and-policies>.

SFPUC KEY FINANCIAL POLICIES

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

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

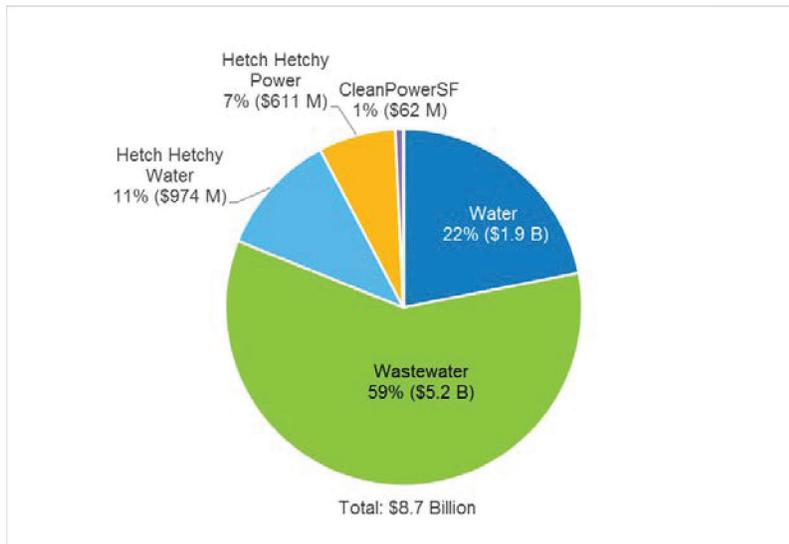
Adopted by the Commission in February 2012 and revised in 2017, the Ratepayer Assurance Policy establishes SFPUC’s guiding principles for prudent use of ratepayer funds, establishment of rates and charges, and transparency in budgeting and rate-setting processes. Prudent use of ratepayer funds ensures accountability to ratepayers regarding SFPUC’s mission statement, asset and personnel management, operating cost containment, and social and environmental stewardship.

The Ratepayer Assurance Policy also ensures operating cost containment, to the extent that costs are determined by the SFPUC. Budget proposals that increase these costs above the level of inflation must be deemed necessary, as they impact prudent use of ratepayer funds. The Policy also ensures this prudent use of ratepayer funds through carrying out asset management in a cost-effective manner and structuring its workforce effectively and efficiently to minimize personnel costs.

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

Graph C: SFPUC 10-Year Total CIPs FY 2022-23 to FY 2031-32



Each enterprise has a 10-Year Capital Improvement Plan (CIP) that forecasts 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 by safely handling sewer collection and treatment, and delivering clean energy for municipal services and to city residents and businesses through

CleanPowerSF. These investments make the overall utility system more reliable and resilient in the face of earthquakes, sea-level rise, droughts, and other unexpected challenges.

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 CIP funding. 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 \$1.9 billion in total spending, with \$621 million (33 percent) being revenue-funded and \$1.3 billion (67 percent) debt-financed.

The largest projects of the 2022-2031 Water Capital Improvement Plan are new local City Distribution Division (CDD) headquarters (\$348 million), local water pipeline replacements (\$460 million), water purification projects (\$266 million), and the Sunol Valley Water Treatment project (\$248 million).

Wastewater Enterprise Capital Improvement Program

The Wastewater Enterprise 10-Year Capital Improvement Plan is \$5.2 billion in total spending, with \$1.3 billion (25 percent) being revenue-funded and \$3.9 billion (75 percent) debt-financed.

The Wastewater Enterprise continues the Sewer System Improvement Program (SSIP) progress, which makes up \$3.5 billion of the \$5.2 billion Capital Improvement Plan.

Hetch Hetchy Water and Power Capital Improvement Program

All costs associated with water operations within Hetch Hetchy Water and Power are funded by the Water Enterprise, while all operations associated with power operations are funded by Power rates and

charges. 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 Capital Improvement Plan is \$974 million in total spending for the Hetchy Water Capital Program and \$611 million for the Power Enterprise Capital Program. Of the Hetchy Enterprise's overall capital spending in both sections, \$176 million is funded by Power revenues, \$473 million is financed by Water revenue bonds, and \$832 million is financed by Power revenue bonds.

The \$1.5 billion Hetch Hetchy Water and Power Capital Improvement Program represents a growing investment over ten years with greater amounts of funds allocated to Power infrastructure. The major projects included in the Power Enterprise Capital Program are SFO Substation Improvements (\$151 million) and Distribution Interface for Redevelopment Projects (\$129 million).

CleanPowerSF Capital Improvement Plan

CleanPowerSF's Capital Improvement Plan includes funding of \$62 million over the next 10 years. 79 percent of CleanPowerSF's CIP is the Local Renewal Energy Program, a \$49 million project over the plan period, with the remainder of \$13 million funding CleanPowerSF Customer Programs. 100 percent of CleanPowerSF's capital plan sources are customer revenues.

Forecasting Assumptions

Forecasting assumptions in this Plan have changed from prior Plan assumptions in that they reflect new drought conditions and calls for water conservation, and they reflect volumetric sales recoveries from the impact of the COVID-19 pandemic and its effects on the overall economy. The Plans for each Enterprise and CleanPowerSF are developed with a "baseline" volumetric sales forecasts based on the forecasting assumptions listed below. Further in this report, alternate assumptions from baseline inform revenue and rate sensitivity scenarios, where salient. These alternate forecast sensitivities are provided for conservative financial planning purposes. While these forecasts are informed by Enterprise operational and planning needs for supply purposes, they will deviate from forecasts used here for the Financial Plan, as the intended purpose for these volumetric sales forecasts are different and intended for financial planning, and rate setting purposes. While assumptions around the drought and economic recovery have the greatest impact for this iteration of the Plan, it is important to note that other assumptions—job growth, housing growth, pricing elasticity, and more—are also incorporated in the financial modeling of the Plan.

Drought Assumptions

In November 2021, the Mayor of San Francisco announced a water shortage emergency in accordance with recommendations from the SFPUC. As a response to this emergency declaration, the SFPUC called for a 10 percent voluntary water reduction across its service territory, effective immediately. In order to continue covering its cost of service, the SFPUC is required to institute a drought surcharge for retail water and wastewater customers of up to 5 percent on their bills as incorporated into current rate schedules. The drought surcharge will be effective April 1, 2022 and will end when the SFPUC rescinds the water shortage emergency declaration. For financial forecasting purposes, the SFPUC projects this declaration will last through the end of FY 2023-24. As a result of the drought surcharge and call for

conservation, the base case of the Plan assumes a 2 percent reduction in retail sales volumes between FY 2022-23 to FY 2031-32.

In the base case, the drought declaration is projected to have a significant impact on water and wastewater sales volumes over the next two years. In order to achieve the 10 percent reduction to water volumetric sales, the SFPUC projects a 5 percent sales volume decrease among retail customers, a 10 percent decrease among retail irrigation customers, and a 13.7 percent decrease among wholesale customers will be necessary through the end of FY 2023-24 to meet Agency wide water conservation targets. The current base case scenario included in the Plan assumes the drought surcharge will remain in place until FY 2023-24, followed by a two year recovery until FY 2025-26, after which sales volumes will return to normal.

Economic Recovery Assumptions

Since June 2021, when the City announced its re-opening from the COVID-19 shelter-in-place order, the City Economist has suggested the possibility of a slow and prolonged economic recovery. However as residents continue to stay home and businesses close back up in response to the surge associated with the Omicron variant, the impact to the SFPUC continues to be seen in the significant reductions to enterprise utilities' commercial sales volumes. General economic recovery is forecasted in water, wastewater, and Hetchy Power utility sales volumes gradually returning to pre-pandemic volumetric averages for residential and commercial customer classes in FY 2023-24. The projected timing of economic recovery is consistent with and informed by City Economist research and city-wide projections.

When compared to pre-pandemic averages (March 2018-June 2019), retail water usage during the COVID-19 shelter-in-place orders (March 2020-June 2021) for commercial customers was down 35 percent, municipal customers' usage decreased by 26 percent, and residential customers had 3 percent higher water usage. Total overall Hetchy power loads were down 18 percent from FY 2018-19, or pre-pandemic levels, and CleanPowerSF commercial loads were down 14 percent as of January 2022. These observed volumetric trends were the basis for forecasting sales volumes in each enterprise in addition to city-wide projections for economic recovery post-pandemic.

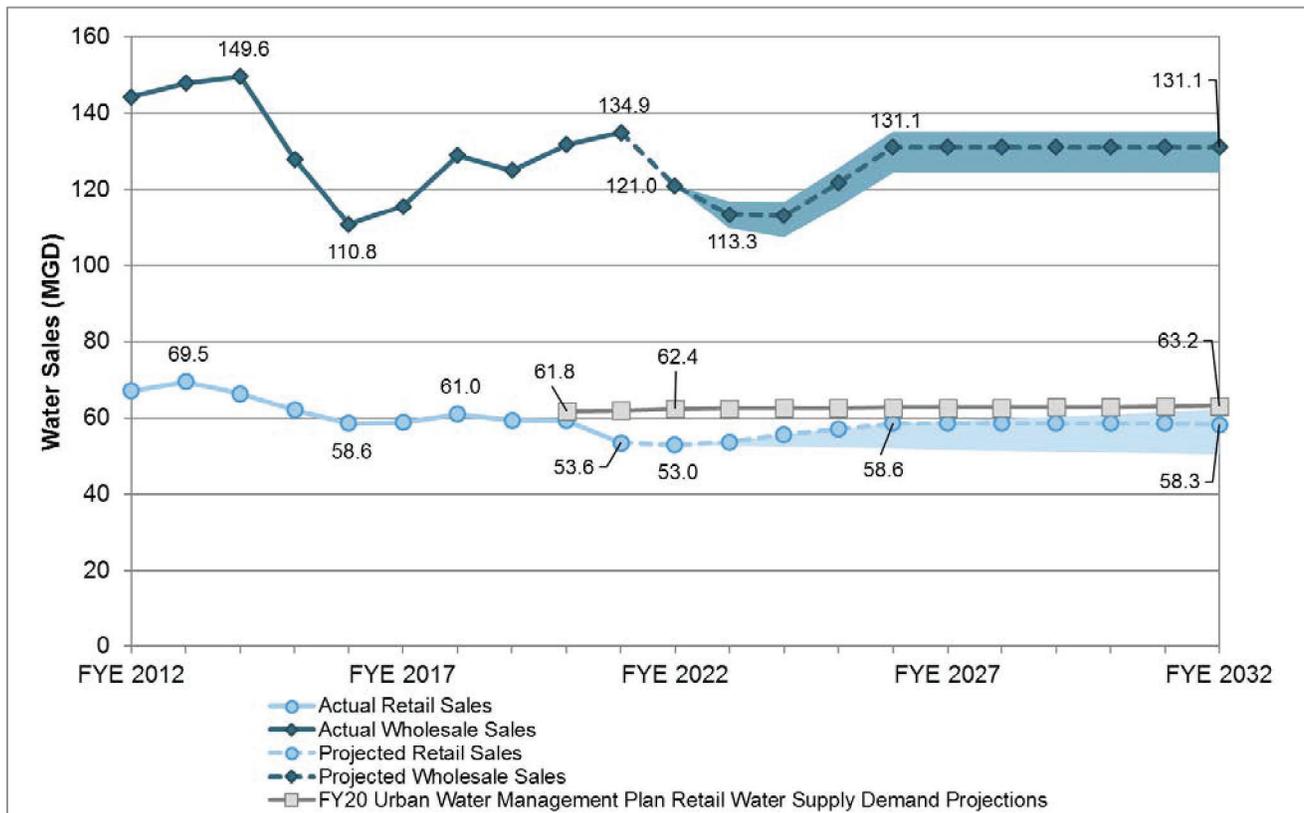
To reflect the economic impacts of the pandemic, the SFPUC continues to monitor usage forecasts which continue to vary as the pandemic persists and public health orders take new forms. The resulting changes from these observations are reflected in the projections section below for each Enterprise. The 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 comprised of operations and maintenance expenditures and capital related expenditures, which are further subdivided into debt service and revenue-funded capital expense projections.

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. Graph D seen below distinguishes between the SFPUC water and wastewater sales volumes projections used for the purposes of financial planning and water supply estimates from the 2020 Urban Water Management Planning report, prepared every five years for the Water Enterprise. Water and Wastewater sales volumes projections, made for financial planning purposes, take a more conservative approach to estimates, in the case of revenue shortfalls that the SFPUC needs to prepare for. Additionally, while these financial planning volumes projections are informed by historic sales volumes data, past performance is not indicative of future results. The Water Enterprise's demands forecasts use higher estimates, as can be seen in the grey line of Graph D below, in the case of high demand among the SFPUC service territory. 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.

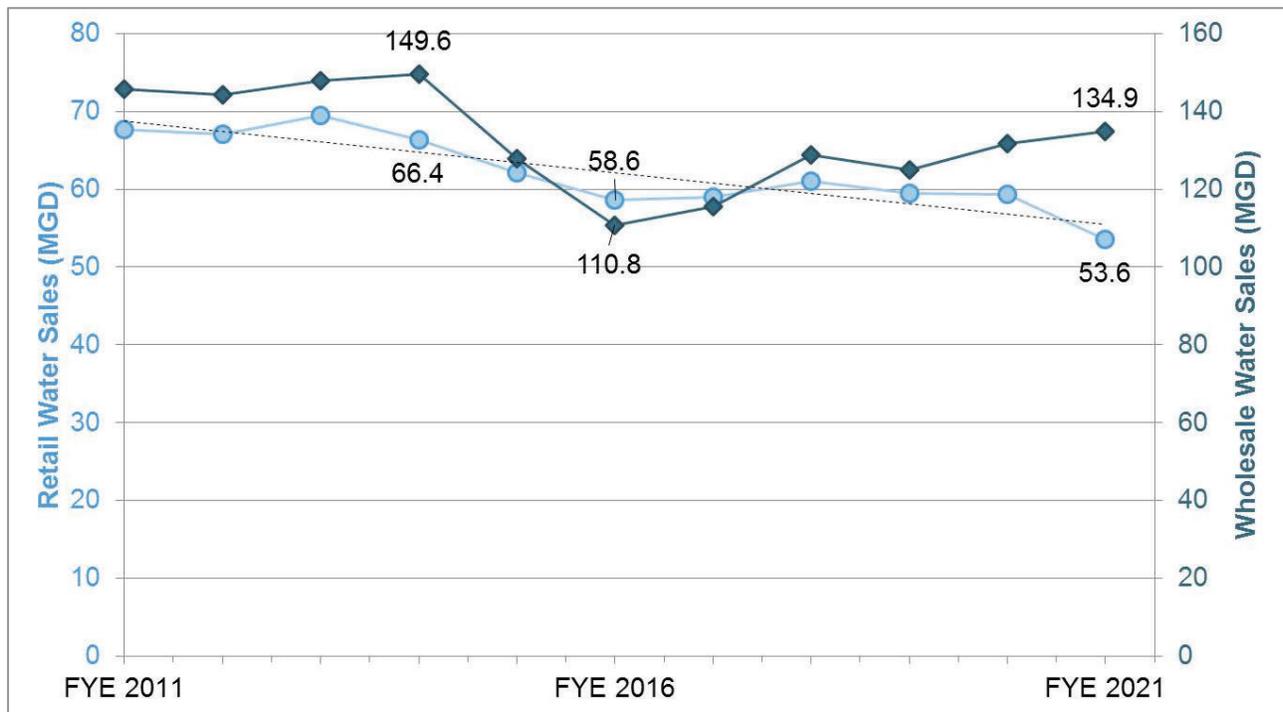
Graph D: Base Case Water Sales Projections



Changes to Water Sales Volume Forecasting

In order to understand the financial impact of the pandemic on the Water Enterprise, weekly volumetric loads were observed and compared to prior year loads from March 2020 onwards to help inform projections. Currently water sales projections assume a 10 percent reduction in irrigation, 5 percent reduction in retail, and 13.7 percent reduction in wholesale usage through the end of FY 2021-22. In FY 2022-23 and FY 2023-24, water sales volumes are assumed to reach 91 percent and 92 percent respectively of pre-pandemic projections. The City Economist assumes that following FY 2023-24, the commercial sector and associated city revenues will recover to pre-pandemic levels, and the SFPUC has adjusted its water sales projections accordingly. These changes, which were also used as a proxy for Wastewater Enterprise volumetric projections, informed the budget volume re-forecasts for both Enterprises. 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

Graph E: Historic Water Sales Volume Data



downward trend forecast is based on historic water sales volume data over the past 20 years (see Graph E). 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 pandemic economic impacts. 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.

Water and Wastewater Rates

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 volume scenario – with recovery by FY 2023-24 and steady usage through FY 2031-32. This balances 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 minimize future rate increases by balancing the needs of the enterprise with ratepayer affordability. No retail rate increase was assumed in FY 2022-23, as the next rate setting effort will follow the next cost of service study in 2023. Wholesale water rates are set on an annual basis and are adopted by the Commission. The annual rate setting process for wholesale water customers is established by contract under the long term Water Supply Agreement with wholesale customers.

Hetch Hetchy Power Sales Projections

Hetch Hetchy Water and Power (“Power 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. The 10-Year Financial Plan incorporates power sales projections by including existing loads for FY 2022-23 with existing customer loads recovering to near pre-pandemic levels by 2026 depending on the customer. New load growth over and above existing loads are layered into the 10-year projection period with the addition of a 12-24 month delay of new customer load assumptions beyond the Power planning timeframes to allow for unexpected delays to building energization. The Plan base case assumes overall loads to resume 98 percent recovery to pre-COVID loads. The base case scenario assumes a one year delay in infill and redevelopment load growth, seeing increases in loads starting FY 2023-24.

Changes to Power Load Forecasting

Forecasts are lower than those in prior Plans to account for slower economic recovery to volumetric loads. Changes to Hetch Hetchy volumetric loads, as observed since the beginning of the pandemic, were down approximately 18 percent in comparison to “normal” or average deliveries pre-pandemic. The SFPUC assumes volumetric loads to return to “pre-pandemic” levels in FY 2023-24.

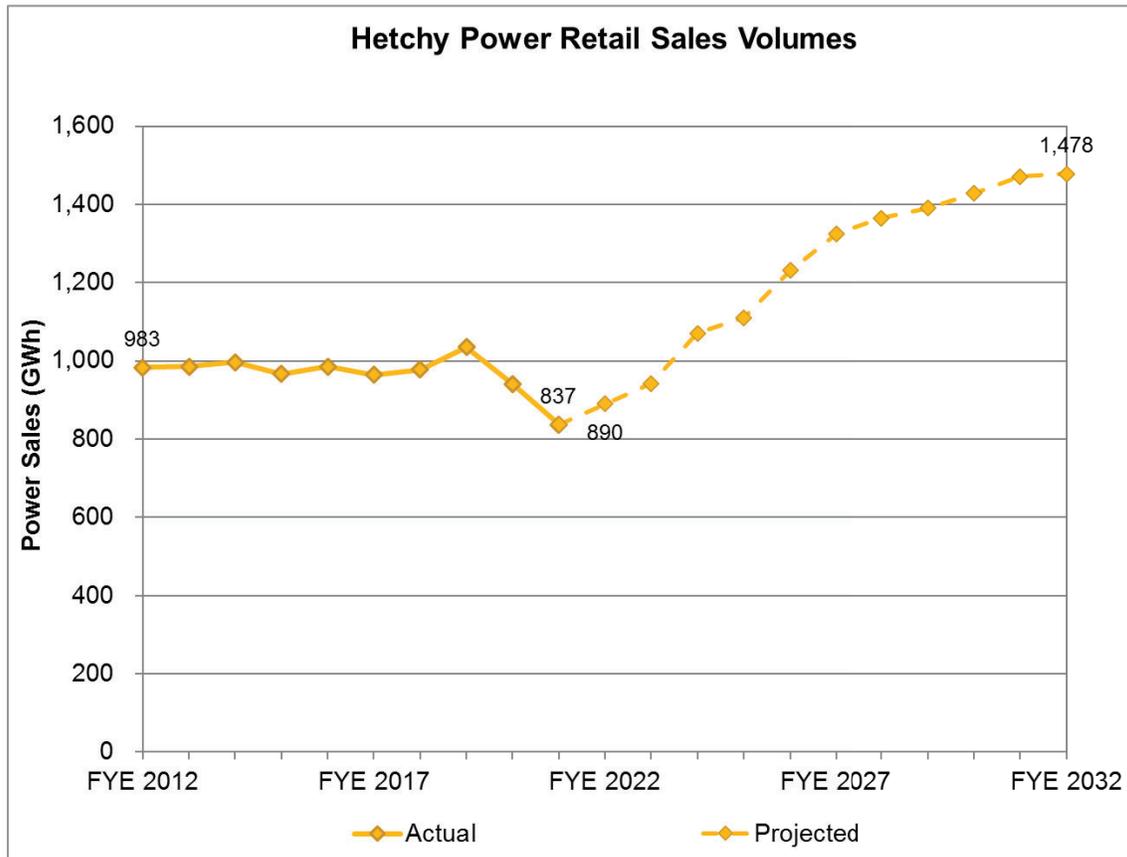
Power Load Growth Projections

Municipal power load projections are based on biennial budgets and are updated annually. This Plan update assumes larger load growth from SFMTA and SFO airport. The SFMTA load growth is expected to grow over the projection period due to a bus electrification pilot and central subway station project. Current base airport loads are projected to reach 98 percent of pre-pandemic actuals in FY 2025-26, and we project total airport loads to grow 4.4 percent annually on average growth over the projection period given load growth from new terminals and associated facilities, and other projects from the airport’s master plan. Most Hetchy customers are seeing only a slight load growth projection over the ten years of the Plan. One such customer expecting slight load growth is the SFPUC’s Wastewater Enterprise, as work is being done on the Southeast Plant during the years of the Plan.

Retail electric load growth is also associated with large redevelopment projects and 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 Sunnysdale). This Plan update assumes an average annual load growth of 12.3 percent and 27 percent for Infill and Redevelopment customers respectively over the projection period.

Graph F: Historic and Projected Hetchy



Power Rates

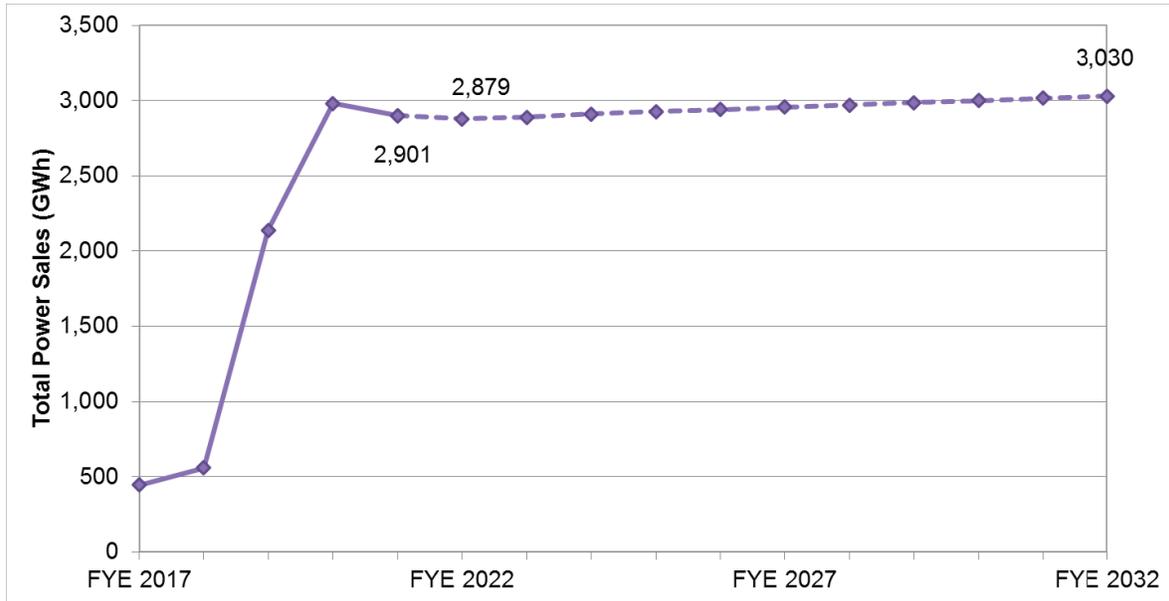
Adopted rates for customer classes are applied to electric load assumptions through FY 2021-22. Per the City Charter, the SFPUC conducts a cost of service study for the Power Enterprise at least every five years. A cost of service study is currently underway and will inform Hetch Hetchy Power rates starting in FY 2022-23. As a result, the Hetch Hetchy revenue forecasts assume estimates of the future power rates based on currently-available data and policy direction. In particular, the rates study is expected to modernize and standardize the current rates structure and gradually transition all customers to cost-of-service rates within the next 2-4 years.

CleanPowerSF Sales Projections

CleanPowerSF sales projections are a function of projected electric loads and projected rates over the planning period. In Graph G you can see the significant growth in historical CleanPowerSF from 2017 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 0.4 percent in FY 2022-23 and 0.8 percent in FY 2023-24 based on monthly load projections, before returning to a standard 0.5 percent per year

starting in FY 2024-25, reflective of overall growth from electrification, population growth, and other longer term electric trend projections, but no significant Mirroring sales projections, CleanPowerSF revenues are expected to increase by 0.5 percent starting in FY 2024-25 for the remaining years of the Plan.

Graph G: Historic and Projected CleanPowerSF



CleanPowerSF Rates

The outcome of the 2021 Power Rates Study will determine CleanPowerSF rates starting July 1, 2022. Historically, CleanPowerSF rates have been set to follow PG&E rate changes, pegged to a certain percentage above or below PG&E rates, in order to maintain competitiveness. Future rates, as determined by the Rates Study, will aim to support long term financial sustainability and de-couple from PG&E, so that CleanPowerSF is no longer subject to the rate volatility from PG&E rate changes and is able to set rates based on its operations. This goal is reflected in the revenue forecasts in the plan, which are set to cover CleanPowerSF’s operating and capital expenditures, with sufficient contribution to reserves.

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.

10-Year Capital Plan Assumptions

The FY 2022-23 through FY 2031-32 10-Year Capital Plan has been developed and updated to identify each Enterprise’s long term capital needs over a ten year period. In this year’s Capital Budget process an important objective was delineated, to put together a Capital Plan that aligns more with the reality of project deliverability in terms of timing and sizing of capital projects. It was determined that such a

review in Capital Plan development needed more time and resources to execute as envisioned, and a more detailed process is underway for the FY 2023-24 through FY 2032-33 10-Year Capital Plan update. As a result, the current 10-Year Capital Plan is put forth with a portion identified as “unfunded”. This is modeled in the 10 Year Financial Plan with up to 15% lowerbonds financing over the ten year projection period in comparison to a “fully funded” 10-Year Capital Plan where all sources are identified. Below are charts that summarize the totals included in each Enterprise’s 10-Year Capital Plan as well as some of the key capital project areas.

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.

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 incorporated its interest rate assumptions on future debt issuance as follows:

FY 23 – FY 24:	3.75 percent
FY 25 – FY 27:	4.00 percent
FY 28 – FY 32:	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 made up 11 percent of the Enterprise's debt portfolio as of FY 20-21.

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

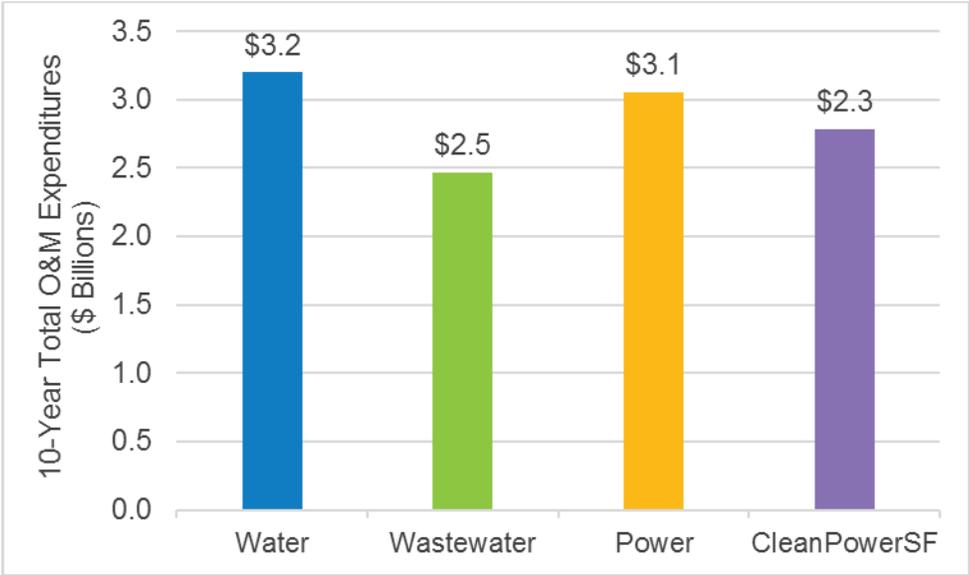
The timing and cadence of debt issuance is typically reflective of the projected financing needs of each enterprise over the 10-Year Financial Plans. The debt issuance schedule reflects coordination with the needs of capital project managers and the reality of contract bidding and execution. Timing and 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 revenue bond issuances for each enterprise for the Plan.

	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	Total
Water	\$406M	-	\$352M	-	\$440M	-	-	-	\$385M	-	\$1.6B
WWE	\$546M	\$407M	\$640M	\$522M	-	\$724M	-	-	-	\$710M	\$3.5B
Power	\$110M	-	-	\$256M	-	-	\$239M	-	-	-	\$605M

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 H displays the total operations and maintenance expenditures for each enterprise over the course of the Plan.

Graph H: Projected Total Operations and Maintenance Expenditures



The Water Enterprise’s financial forecast (Appendix A) results in an average annual retail rate increase of 2.1 percent annually over the Plan (Chart A) and an average annual rate increase of 3.6 percent for wholesale customers. This compares to the retail and wholesale average annual rate increases of 4.1 from the previously adopted FY22 10-Year Financial Plan. There will be no retail rate increase in FY 2022-23, while average projected annual rate changes increase to 2.3 percent for subsequent years of the Plan, reflecting higher expenditure growth. Wholesale rates are projected to see an increase in FY 2022-23 of 15.9 percent.

Chart A: Adopted and Projected Water Enterprise Rate Increases

	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	Avg. Annual
Rate Increase - Retail	0.0%	5.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.1%
Rate Increase - Wholesale	15.9%	11.2%	0.0%	0.0%	0.2%	2.6%	1.7%	2.9%	0.2%	1.4%	3.6%

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 51 percent of operating expenses in FY 2023-24 to a low of 45 percent in FY 2025-26.

The Water Enterprise’s debt service coverage is projected to remain 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 1.77x in FY 2024-25 to a low of 1.54x in FY 2022-23. Current Coverage is projected to range from a high of 1.24x in FY 2024-25 to a low of 1.13x 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 at 24% of the 10-Year Capital Plan is currently within the range required by SFPUC’s Capital Financing Policies of 15 percent to 30 percent of the total capital plan.

Wastewater Enterprise

The Wastewater Enterprise’s financial forecast (Appendix B) results in an average annual rate increase of 5.2 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 increased from the 5.0 percent average annual rate increase from the previously adopted FY22 10-Year Financial Plan. There is no adopted rate increase for FY 2022-23.

Chart B: Adopted and Projected Wastewater Enterprise Rate Increases

	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	Avg. Annual
Rate Increase - Retail	0.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	5.0%	5.0%	5.2%

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 72 percent of operating expenses in FY 2023-24 to a low of 31 percent in FY 2031-32.

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 3.50x in FY 2023-24 to a low 1.81x in FY 2031-32. Current Coverage is projected to range from a high of 2.15x in FY 2025-26 to a low of 1.51x in FY 2031-32.

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. Throughout the course of the Plan, debt service coverage is decreasing for the Wastewater Enterprise, meeting its policy targets. The Wastewater Enterprise’s revenue-funding at 20% of the 10-Year Capital Plan is currently within the range required by SFPUC’s Capital Financing Policies of 15 percent to 30 percent of the total capital plan.

Hetch Hetchy Water and Power

The 2021 Power Rates Study is currently underway and will inform rate increases starting in FY 2022-23 for the Power Enterprise including CleanPowerSF. Because final rates will not be approved by the Commission until Spring 2022, this section instead discusses the projected average annual revenue requirement increases rather than rate increases. The revenue requirement increase is the total increase in revenues needed to fully fund operations and maintenance costs, capital expenses as well as meeting all financial policies, including funding sufficient reserves. A derived average annual retail rate increase of 3.9 percent is projected over the ten year period, with higher increases in the earlier years of the Plan.

Chart C: Projected Power Enterprise Derived Average Annual Retail Rate Increase from Revenue Requirement Increases

	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	Avg. Annual
Derived Avg Annual Retail Rate	9.8%	8.4%	3.4%	3.1%	2.3%	1.5%	1.5%	2.5%	2.8%	3.3%	3.9%

The Power 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 56 percent of operating expenses in FY 2027-28 to a low of 37 percent in FY 2022-23.

The Power 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 30.94x in FY 2022-23 to a low of 4.09x in FY 2031-32. Current Coverage is projected to range from a high of 6.24x in FY 2023-24 to a low of 1.11x in FY 2022-23.

The Enterprise's revenue-funding at 16 percent of the 10-Year Capital Plan is currently within the range required by SFPUC's Capital Financing Policies of 15 percent to 30 percent of the total capital plan. 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 through 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 that CleanPowerSF will begin setting rates to cost of service. 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 58 percent of operating expenses in FY 2028-29 to a low of 25 percent in FY 2023-24.

Sensitivities

Water and Wastewater Enterprises

Sensitivity to Drought Declaration

If drought conditions recede and the Commission ends its drought declaration, the drought surcharge that is currently assumed to be in place through FY 2023-24 would also end. If we assume the drought declaration ends before the start of the FY 2022-23, and there is no drought surcharge, and all else was equal in the Plan, revenues would be \$10.6 million less than the Water Enterprise base plan, and \$19 million in less than the Wastewater Enterprise base plan, primarily impacting the budget years of FY 2022-23 and 2023-24. Retail and wholesale water volumes would both increase by 3 percent in the first two years of the Plan, while billed wastewater volumes would increase by 2 percent.

Downside Scenario

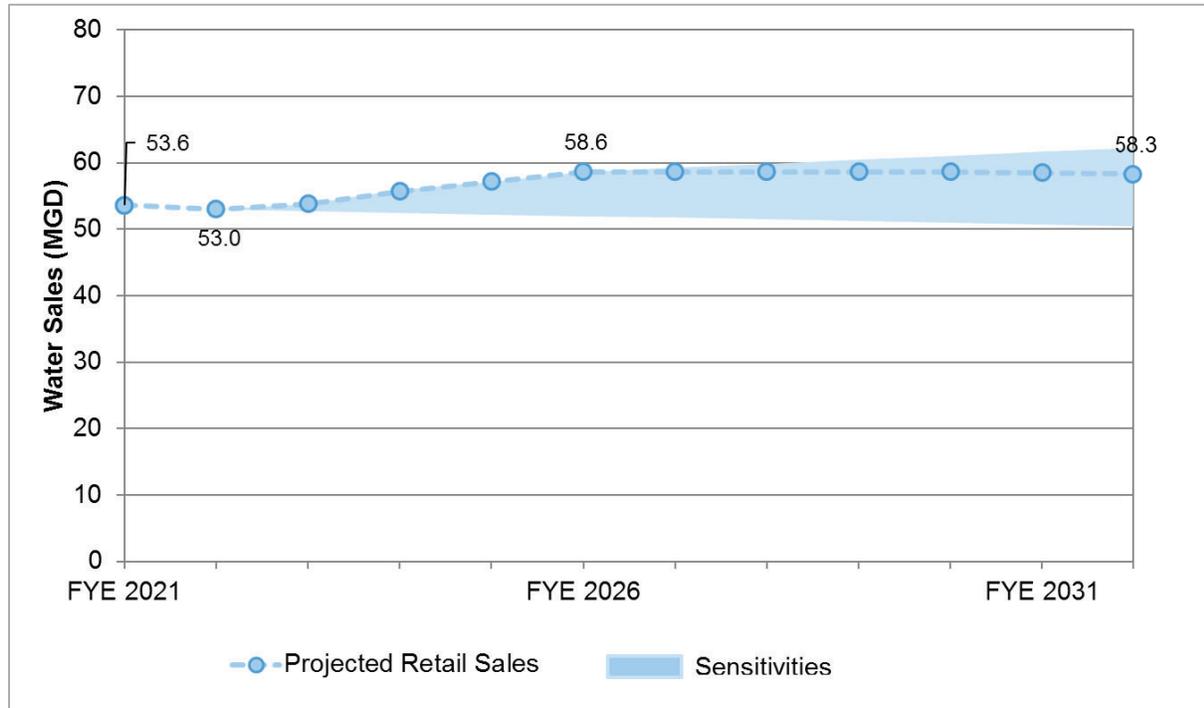
The downside scenario assumes a 0.5 percent average annual decline in sales volumes through FY 2024-25, rather than the flat, steady state for the remaining years of the Plan as described in the base case. In prior years, this 0.5 percent annual decline was considered the "base case scenario," or the 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 0.2 percent higher than the base case scenario over the ten year 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 0.03 percent lower than the base case scenario over the ten year period.

Graph G: Water Retail Sales Sensitivities



Hetch Hetchy Power

Sensitivity to Increased Volume Growth

The upside scenario assumes redevelopment and infill projects coming online one year sooner than they are in the current plan, driven by favorable economic recovery and successful project execution. This would result in a growth of \$8 million in power revenues in FY 2023-24, and of \$56 million in the remaining years of the Plan.

All Enterprises

Sensitivity to Fully Funded 10-Year Capital Plan

Included in the base case Plan for each of the Enterprises is a partially funded 10-Year Capital Plan. If we held all other things within the Plans as equal and fully funded the 10-Year Capital Plan it would increase the overall projected expenditures needed to cover capital costs over the financial plans' ten year projection period. The following is a description of the rates needed as they compare to projected base plan rates in order to achieve an ending FY 2032-32 reserve position that approximates the Base Plan's ending reserve position.

Water Enterprise

A fully funded Water Enterprise 10-Year Capital Plan would result in an average annual retail rate change of 2.7 percent over the Financial Plan's ten year projection period. This is an 0.6 percent average

annual rate increase over the base financial plan and is needed to cover the resulting capital expenditure impacts over the projection period.

Chart D: Water Enterprise Fully Funded Capital Improvement Plan

	Average Annual Retail Rate Change	Total 10 Year Capital Plan	10 Year Capital Plan and % Funded
Fully Funded Capital Plan Sensitivity	2.7%	\$1.9B	100%
Base Plan	2.1%	\$1.9B	90%

Wastewater Enterprise

A fully funded Wastewater Enterprise 10-Year Capital Plan would result in an average annual rate change of 5.7 percent over the Financial Plan’s ten year projection period. This is a 0.5 percent average annual rate increase over the base financial plan and is needed to cover the resulting capital expenditure impacts over the projection period.

Chart E: Wastewater Enterprise Fully Funded Capital Improvement Plan

	Average Annual Retail Rate Change	Total 10 Year Capital Plan	10 Year Capital Plan and % Funded
Fully Funded Capital Plan Sensitivity	5.7%	\$5.2B	100%
Base Plan	5.2%	\$5.2B	85%

Hetch Hetchy Power

A fully funded Hetch Hetchy Power Enterprise 10-Year Capital Plan would result in an average annual rate change of 4.6 percent over the Financial Plan’s ten year projection period. This is a 0.7 percent average annual rate increase over the base financial plan and is needed to cover the resulting capital expenditure impacts over the projection period.

Chart F: Hetch Hetchy Power Enterprise Fully Funded Capital Improvement Plan

	Average Annual Retail Rate Change	Total 10 Year Capital Plan	10 Year Capital Plan and % Funded
Fully Funded Capital Plan Sensitivity	4.6%	\$1.5B	100%
Base Plan	3.9%	\$1.5B	83%

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. The focus on drought, pandemic economic recovery, and affordability were some of the many considerations at the forefront of this year’s Plan update.

Appendices

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

	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032
Beginning Fund Balance	\$ 236.1	\$ 177.9	\$ 181.5	\$ 179.0	\$ 174.5	\$ 187.8	\$ 202.1	\$ 203.2	\$ 196.6	\$ 206.0
Sources										
Retail Water Sales	326.0	368.6	383.4	399.8	407.8	416.9	424.2	432.8	441.5	451.4
Wholesale Water Sales	264.3	294.3	318.0	342.0	342.6	351.9	356.7	366.9	368.2	373.7
Other Miscellaneous Income	59.8	59.8	60.3	60.4	60.7	61.4	61.8	62.1	62.8	63.0
Total Sources	\$ 650.1	\$ 722.7	\$ 761.7	\$ 802.3	\$ 811.2	\$ 830.2	\$ 842.7	\$ 861.8	\$ 872.5	\$ 888.1
Uses										
Operations & Maintenance	276.6	282.7	293.1	301.8	310.1	317.4	324.9	333.8	342.8	352.4
Hechty Transfer	49.5	49.1	52.6	54.2	55.8	57.4	59.1	61.0	62.7	64.7
Debt Service	335.0	339.2	339.9	367.1	366.8	384.5	385.4	410.2	408.4	409.1
Revenue-Funded Projects	47.1	48.1	78.6	83.6	65.1	56.6	72.3	63.3	49.2	57.2
Total Uses	\$ 708.2	\$ 719.1	\$ 764.3	\$ 806.7	\$ 797.9	\$ 815.9	\$ 841.7	\$ 868.3	\$ 863.1	\$ 883.3
Net Revenues	\$ (58.1)	\$ 3.6	\$ (2.6)	\$ (4.4)	\$ 13.3	\$ 14.3	\$ 1.0	\$ (6.5)	\$ 9.3	\$ 4.8
Ending Fund Balance	\$ 177.9	\$ 181.5	\$ 179.0	\$ 174.5	\$ 187.8	\$ 202.1	\$ 203.2	\$ 196.6	\$ 206.0	\$ 210.8
Rate Increase - Retail	0.0%	5.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Rate Increase - Wholesale	15.9%	11.2%	0.0%	0.0%	0.2%	2.6%	1.7%	2.9%	0.2%	1.4%
Fund Balance as % of Op. Expenses	55%	55%	52%	49%	51%	54%	53%	50%	51%	51%
Debt Service Coverage (Current)	1.13	1.17	1.24	1.23	1.23	1.20	1.20	1.15	1.15	1.16
Debt Service Coverage (Indenture)	1.54	1.69	1.77	1.72	1.70	1.68	1.73	1.64	1.63	1.66
Revenue-Funded % of Capital	24%									
Water Sales - Retail (MGD)	53.8	55.7	57.1	58.6	58.6	58.6	58.6	58.6	58.6	58.6
Water Sales - Wholesale (MGD)	113.3	113.1	121.8	131.1	131.1	131.1	131.1	131.1	131.1	131.1
Single Family Res. Monthly Average (CCF)	4.8	4.7	4.8	4.9	4.9	4.8	4.8	4.8	4.8	4.8

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

(\$M)	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032
Beginning Fund Balance	\$ 160.3	\$ 140.3	\$ 149.5	\$ 142.9	\$ 152.7	\$ 149.4	\$ 140.6	\$ 117.9	\$ 102.3	\$ 89.5
Sources										
Sewer Charges	368.2	420.6	454.9	494.3	524.2	558.7	589.3	624.8	656.3	693.0
Interest Income	0.8	0.7	0.7	0.7	0.8	1.0	0.9	0.8	1.0	0.8
Federal Bond Interest Subsidy	4.0	3.9	3.7	3.6	3.4	3.3	3.1	2.9	2.7	2.5
Other Miscellaneous Income	10.4	10.5	10.5	10.6	10.7	10.8	10.9	10.9	11.0	11.1
Total Sources	\$ 383.4	\$ 435.6	\$ 469.9	\$ 509.2	\$ 539.0	\$ 573.7	\$ 604.2	\$ 639.4	\$ 671.0	\$ 707.5
Uses										
Operations & Maintenance	201.2	207.8	212.6	218.7	225.1	231.6	238.3	245.2	252.4	259.8
Debt Service	113.5	119.8	135.6	149.9	184.0	215.0	250.1	268.7	287.6	311.2
Revenue-Funded Projects	88.7	98.7	128.4	130.8	133.3	135.9	138.5	141.1	143.8	146.6
Total Uses	\$ 403.4	\$ 426.3	\$ 476.5	\$ 499.4	\$ 542.3	\$ 582.5	\$ 626.9	\$ 655.1	\$ 683.8	\$ 717.6
Net Revenues	\$ (20.0)	\$ 9.3	\$ (6.7)	\$ 9.8	\$ (3.3)	\$ (8.7)	\$ (22.7)	\$ (15.6)	\$ (12.8)	\$ (10.1)
Ending Fund Balance	\$ 140.3	\$ 149.5	\$ 142.9	\$ 152.7	\$ 149.4	\$ 140.6	\$ 117.9	\$ 102.3	\$ 89.5	\$ 79.4
Retail Rate Increase	0.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	5.0%	5.0%
Fund Balance as % of Op. Expenses	70%	72%	67%	70%	66%	61%	49%	42%	35%	31%
Debt Service Coverage (Current)	1.79	2.17	2.13	2.15	1.86	1.73	1.57	1.57	1.55	1.51
Debt Service Coverage (Indenture)	3.35	3.50	3.36	3.21	2.77	2.48	2.17	2.03	1.92	1.81
Revenue-Funded % of Capital	20%									
Billed Discharge Volumes (MGD)	44.1	45.5	46.5	47.7	47.8	47.9	47.8	47.8	47.8	48.0

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

	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032
Beginning Fund Balance	\$ 75.1	\$ 71.1	\$ 82.2	\$ 97.3	\$ 111.2	\$ 127.8	\$ 143.1	\$ 138.5	\$ 136.1	\$ 136.2
Sources										
Power Sales - Retail	155.8	192.1	206.1	235.4	259.1	271.0	280.3	294.9	312.3	324.1
Power Sales - Wholesale	18.3	15.1	15.9	13.1	11.2	10.6	10.1	10.0	9.7	10.0
Gas & Steam Sales	13.3	13.7	14.1	14.6	15.0	15.4	15.9	16.4	16.9	17.4
Water Sales	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
Hetchy Transfer	49.5	49.1	52.6	54.2	55.8	57.4	59.1	61.0	62.7	64.7
Other Misc Income	9.1	9.7	10.0	10.3	10.6	11.0	11.3	11.6	12.2	12.3
Total Sources	\$ 246.3	\$ 279.9	\$ 298.9	\$ 327.7	\$ 352.0	\$ 365.7	\$ 377.1	\$ 394.2	\$ 414.1	\$ 428.7
Uses										
Operations & Maintenance	241.4	257.8	265.5	283.8	297.8	313.2	325.8	340.4	355.7	371.9
Debt Service	3.9	3.5	10.5	17.0	16.9	16.6	31.9	31.8	31.8	47.2
Revenue-Funded Projects	4.9	7.6	7.8	13.0	20.7	20.7	24.1	24.3	26.4	26.4
Total Uses	\$ 250.2	\$ 268.8	\$ 283.8	\$ 313.8	\$ 335.4	\$ 350.4	\$ 381.8	\$ 396.5	\$ 413.9	\$ 445.5
Net Revenues	\$ (3.9)	\$ 11.1	\$ 15.1	\$ 13.9	\$ 16.6	\$ 15.3	\$ (4.7)	\$ (2.4)	\$ 0.2	\$ (16.8)
Ending Fund Balance	\$ 71.1	\$ 82.2	\$ 97.3	\$ 111.2	\$ 127.8	\$ 143.1	\$ 138.5	\$ 136.1	\$ 136.2	\$ 119.4
Fund Balance as % of Power Op. Expense	37%	40%	46%	49%	53%	56%	52%	49%	47%	39%
Debt Service Coverage (Current)	1.11	6.24	3.13	2.55	3.17	3.14	1.59	1.67	1.82	1.19
Debt Service Coverage (Indenture)	30.94	36.13	11.97	8.73	10.24	11.17	6.12	6.05	6.12	4.09
Revenue-Funded % of Capital	16%									

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

(\$M)	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032
Beginning Fund Balance	\$ 68.2	\$ 102.7	\$ 113.8	\$ 121.3	\$ 120.4	\$ 122.3	\$ 124.9	\$ 128.5	\$ 132.1	\$ 110.9
Sources										
Power Sales	315.2	279.6	281.0	282.4	283.9	285.3	286.7	288.1	289.6	291.0
Interest Earnings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Sources	\$ 315.2	\$ 279.6	\$ 281.0	\$ 282.4	\$ 283.9	\$ 285.3	\$ 286.7	\$ 288.1	\$ 289.6	\$ 291.0
Uses										
Supply	251.1	237.8	242.3	251.5	249.5	249.5	249.1	249.5	256.6	236.8
Operating Costs	28.0	28.6	29.3	30.0	30.8	31.6	32.4	33.3	34.2	34.9
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	1.6	2.2	1.9	1.9	1.6	1.6	1.6	1.8	20.0	28.3
Total Uses	\$ 280.7	\$ 268.6	\$ 273.5	\$ 283.4	\$ 281.9	\$ 282.7	\$ 283.1	\$ 284.6	\$ 310.8	\$ 300.0
Net Revenues	\$ 34.5	\$ 11.1	\$ 7.6	\$ (1.0)	\$ 1.9	\$ 2.6	\$ 3.6	\$ 3.6	\$ (21.2)	\$ (9.0)
General Reserve and Operating Fund Transfer										
Ending Fund Balance	\$ 102.7	\$ 113.8	\$ 121.3	\$ 120.4	\$ 122.3	\$ 124.9	\$ 128.5	\$ 132.1	\$ 110.9	\$ 101.9
Fund Balance as % of Operating Expenses	37%	43%	45%	43%	44%	44%	46%	47%	38%	38%
Revenue-Funded % of Capital	100%									