



Fairfield Suisun Sewer District

2022 Sewer Rate and Capacity Charge Study Final Report

January 25, 2022





January 24, 2022

Mr. James Russell-Field
Director of Administrative Services
Fairfield Suisun Sewer District
1010 Chadbourne Rd.
Fairfield, CA 94534

Re: 2022 Sewer Rate and Capacity Charge Study

Dear Mr. Russell-Field,

Hildebrand Consulting is pleased to present this 2022 Sewer Rate and Capacity Charge Study (Study) that we performed for Fairfield Suisun Sewer District (District). We appreciate the fine assistance provided by you and all of the members of the District staff who participated in the Study.

If you or others at the District have any questions, please do not hesitate to contact me at:

mhildebrand@hildco.com
(510) 316-0621

We appreciate the opportunity to be of service to the District and look forward to the possibility of doing so again in the near future.

Sincerely,

Mark Hildebrand
Hildebrand Consulting, LLC

Enclosure

Executive Summary

Hildebrand Consulting, LLC was retained by Fairfield Suisun Sewer District (District) to conduct a comprehensive Sewer Rate and Capacity Charge Study (Study). The full report describes in detail the assumptions, procedures, and results of the Study, including conclusions and recommendations. The scope of this Study was to prepare a multi-year financial plan, update the cost-of-service analysis, review the District's existing rate structure, propose a 5-year rate program, and update the District's Capacity Charges.

This Study applied methodologies that are aligned with industry standard practices for rate setting as promulgated by the Water Environment Federation (WEF) and all applicable law, including California Constitution Article XIII D, Section 6(b), commonly known as Proposition 218.

Financial Plan

The Study began with development of a multi-year financial management plan that determined the level of annual rate revenue required to cover projected annual operating expenses, debt service (including coverage targets), and capital cost requirements while maintaining adequate reserves. Rate revenue is the revenue generated from customers for sewer service. In the District's case, rate revenue is collected from individual residential and commercial customers within the District.

The District's operating and maintenance expenses include all ongoing collection, treatment, disposal, and administrative expenses, and debt service payments. The financial plans' assumed annual operating and maintenance costs are based on the FY 2021/22 budget and are adjusted for future years based on inflation.

Between FY 2021/22 and FY 2025/26, the District is planning to increase its annual capital spending from a historical average of \$7.5 million to about \$19.8 million. Part of this increase is attributable to the 2022 Collection System Asset Management Plan which is expected to increase capital spending by \$5.9 million per year in order to proactively address sewer system rehabilitation needs associated with aging pipes, pump stations, and other system deficiencies. In addition to the annual sewer rehabilitation projects resulting from the Collection System Asset Management Plan, notable projects include the Peabody-Walters Relief Sewer Phase 2 (\$3.2 million), Bioenergy Generation Project (\$12.7 million), multiple phases of Electrical Replacement Project (totaling \$21.7 million), and the Suisun Force Main Rehabilitation (\$12 million).

All of the above information was entered into a financial planning model to produce a 10-year financial plan that evaluated the sufficiency of current revenues to meet current and estimated future financial obligations and determined the level of rate revenue increases necessary in each year of the planning period. Based upon the previously discussed financial data, assumptions, and reserve targets, this Study proposes a 5-year schedule of rate adjustments as shown in the table below.

Rate Adjustment Date	Rate Revenue Increase
July 1, 2022	5.0%
July 1, 2023	5.0%
July 1, 2024	5.0%
July 1, 2025	4.0%
July 1, 2026	4.0%

To be clear, the proposed rate revenue increases are necessary in order to support the District’s proposed capital spending program which more proactively addresses the need to reinvest in aging infrastructure.

Cost of Service and Rate Design

Revenue requirements calculated in the financial plan for FY 2022/23 were then used to perform a detailed cost-of-service analysis, which was conducted based upon principles outlined by the WEF, legal requirements (Proposition 218) and other generally accepted industry practices to develop rates that reflect the cost of providing service. A cost of service analysis (COSA) was used to allocate costs to each customer and customer class in proportion with service demands based on customer account and wastewater production data. This Study found that the structure of the District's current Sewer Service Charges is consistent with established and common practices. The only proposed general modification (aside from the COSA update for all rate components) is to establish a "Account Charge" for non-residential accounts which would represent a minimum monthly charge, even for those customers that don't have any water usage during a billing period. Such a minimum charge is reasonable given that the District incurs many fixed costs regardless of whether or not customers produce wastewater.

The table on the next page summarizes the proposed wastewater rate schedule to be effective July 1, 2022. The proposed wastewater rates will increase annually over a five-year period in accordance with the percent increases presented in the financial plan. A complete schedule of proposed wastewater rates for the five-year planning period are provided in the full report.

Proposed rate schedule to be effective July 1, 2022

Residential (monthly) ¹	\$45.02 per dwelling unit
Commercial	
Monthly Account Charge and Regular Strength Volumetric ² or High Strength Volumetric ³	\$11.97 per account per mo. \$3.60 per HCF \$6.23 per HCF
Case-by-Case ⁴	
Monthly Account Charge and Volumetric (direct connect) ⁵ <u>or</u> Volumetric (through local collection) and BOD (by weight) and TSS (by weight)	\$11.97 per account per mo. \$2,994.65 per MG \$4,398.40 per MG \$503.54 per 1000 lbs \$255.55 per 1000 lbs
Travis Air Force Base Volumetric	\$2.90 per HCF

¹ Single-family dwelling, multiple-family dwelling, trailer courts, and mobile home parks

² Offices, retail, stores, hotels, motels, schools, churches, hospitals, nursing homes, laundromats, dry cleaning, establishments, bars without dining facilities, car washes without auto steam cleaning facilities, other commercial or industrial customers not treated high strength or as case-by-case.

³ Commercial laundries, restaurants and bars with dining facilities, service stations with holding tank dumping facilities, car washes with auto steam cleaning facilities, bakeries and food processing, other commercial or industrial customers with concentrations greater than 200 milligrams per liter BOD or 265 milligrams per liter TSS, but less than the concentrations specified for case-by-case.

⁴ All commercial or industrial customers other than those specified as regular or high strength with flows greater than 0.005 MGD, or with concentrations greater than 65 mg/l BOD or 1,000 mg/l TSS; all intermittent customers; and any commercial or industrial customer requesting and paying the full cost of metering and testing.

⁵ For customers that deliver wastewater directly to collection system pipes of 12" or greater.

Capacity Charges

Capacity Charges are one-time fees charged to new or expanded connections to the District’s sewer system designed to help recover the costs of infrastructure and assets benefiting new development. The District’s current Capacity Charge is \$6,281 per “equivalent dwelling units” (EDU) and is assessed by calculating the estimated “equivalent dwelling units” (EDU) of new development.

California state law gives the District broad authority to charge Capacity Charges. The limitations of that authority are encompassed by the requirement that charges on new development bear a reasonable relationship to the needs created by, and the benefits accruing to that development. Government Code Section 66013 contains specific requirements related to the imposition of capacity fees (referred to as “capacity charges” in the code). In general, capacity fees must not exceed the estimated reasonable cost of providing service.

After considering the District’s situation and the applicability of various methods, this Study recommends using the Buy-In approach to calculate the Capacity Charges. The Buy-In approach provides the most reliable method for estimating the value of capacity in the District’s current and future infrastructure.

The Buy-In approach primarily relies on the value of the District current existing assets. Ultimately the approach uses the replacement cost of existing assets and then subtracts any applicable depreciation of those assets. The Buy-In Approach also subtracts any current outstanding debt principal and add current cash reserves that are designated for capital spending.

Capacity fees are assessed to new development based on estimated flows and loadings of the new development, which reflects the potential demand each new service connections could place on the water system. For purposes of this Study, it is assumed that residential dwelling units produce 178.4 gpd, 0.455 lbs per day of biochemical oxygen demand (BOD), and 0.321 lbs per day of total suspended solids (TSS).

Based on calculated unit cost of \$28.91 per gallons per day, \$3,169.89 per lbs BOD, and \$1,016.13 per lbs TSS, the Study calculated a new Capacity Charge of \$6,883 per

residential dwelling unit. Given the fact that most residential units have an equal potential for wastewater production, this Study proposes that all residential dwelling units (whether single family, multifamily or otherwise) pay the same rate.

The Capacity Charges are applied to non-residential accounts in accordance with the Sewer Capacity and Service Charge Ordinance (currently 05-01).

It is recommended that the District annually adjust the Capacity Charge for the effects of inflation using the Engineering News Record's Construction Cost Index (CCI) for the San Francisco area.

Conclusion

This Study used methodologies that are aligned with industry standard practices for rate setting as promulgated by WEF, AWWA and all applicable laws, including California's Proposition 218. The proposed annual adjustments to the rates will allow the District to continue to provide reliable sewer service to customers while meeting the state's mandates.

The Sewer Service Charges will need to be adopted in accordance with Proposition 218, which will require a detailed notice describing the proposed rates to be mailed to each affected property owner or customer at least 45 days prior to conducting a public hearing to adopt the rates.

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List of Acronyms

AWWA	American Water Works Association
BOD	biochemical oxygen demand
CAFR	Comprehensive Annual Financial Report
CCI	Engineering News Record's 20-cities Construction Cost Index
CIP	Capital improvement program
DCR	Debt service coverage ratio
ENR	<i>Engineering News Record</i> (periodical)
EDU	Equivalent single-family dwelling unit; a standard unit measure of sewer utility service based on the estimated volume of sewer flow from an average residential dwelling
ENR	Engineering News Record
FY	Fiscal year (which ends on June 30 for the District)
gpd	gallons per day
hcf	hundred cubic feet (748 gallons)
mg/l	milligrams per liter
mgd	millions of gallons per day
O&M	Operations and maintenance
R&R	repair and replacement
RCNLD	replacement cost new less depreciation
TSS	total suspended solids
SRF	state revolving fund (loan)
SWRCB	State Water Resources Control Board
WEF	Water Environment Federation
WWTP	wastewater treatment plant

Section 1. INTRODUCTION

Hildebrand Consulting, LLC was retained by Fairfield Suisun Sewer District (District) to conduct a comprehensive Sewer Rate and Capacity Charge Study (Study). This report describes in detail the assumptions, procedures, and results of the Study, including conclusions and recommendations.

1.1 DISTRICT BACKGROUND

The Fairfield-Suisun Sewer District (District) is a special district incorporated by an act of the California State Legislature in 1951, which serves all territory within the cities of Fairfield and Suisun City. The District is located in central Solano County, California, midway between San Francisco and Sacramento and has broad powers to finance, construct, and operate systems for the treatment, collection, and disposal of sewage and storm water within the District jurisdiction. The District currently serves a population of approximately 146,100, and contracts with the City of Fairfield and City of Suisun City for sewer billing and collections. Its Board of Directors is a ten-member body consisting of the members of the city councils of the two cities. The Board president is elected by the Board from among its members. The District's day-to-day operations are managed by the General Manager, who reports directly to the Board of Directors.

District Operations - Fairfield and Suisun City lie in a large valley surrounded by rolling hills. Fairfield is the Solano County seat and houses most county government activities while Suisun City is one of California's oldest cities. Suisun City sits approximately 15 feet above sea level, and a network of sloughs, navigable by small boats, extends from the city to San Francisco Bay. The District, owns and operates a system of sanitary sewers and pumping stations, used to oversee wastewater collection and treatment. The District's service area encompasses 48 square miles, and its facilities include 70 miles of 12-inch to 48-inch diameter sewers, 13 pumping stations and the regional

wastewater treatment plant (WWTP). The District owns all 12-inch and larger sewers in the service area, while the 10-inch and smaller sewers are owned by the Cities. While the District's treatment facilities are intended to have a build-out capacity of over 23 million gallons per day (mgd), current average dry weather flow to the plant ranges from 10 to 15 mgd. The District also maintains some storm drain assets in conjunction with the City of Fairfield and Suisun City, however the storm drain enterprise is not analyzed in this Study.

Major employers located within the District's boundaries include Travis Air Force Base, County of Solano, Anheuser-Busch Brewery, Jelly Belly, Producers Dairy Foods, North Bay Medical Center, Kaiser Permanente, other large manufacturers and industries, and shopping districts.

1.2 RATE STUDY BACKGROUND

The District's Board last approved rate adjustments on March 27, 2017 based on a study completed in 2016 and 2017. That action implemented five years of rate changes from FY 2017-18 through FY 2021-22. The District's most recent Long-Term Financial Plan shows that all three of the District's programs (Operations, Capital, and Drainage Maintenance) are adequately funded and legal debt covenants are being met. The Operations fund revenue source comes, primarily, from the Sewer Service Charge, which supports expenses and initiatives in the District's facilities. The Capacity Fund accounts revenue source comes primarily from Capacity Charges and pays for expenses to accommodate growth in the District's service area. The Drainage Maintenance primary revenue source is a fee charged to each property in the service area and pays expenses related to storm drain facilities (again, not part of this Study).

The District's Sewer Service Charges are stable with approximately 80% of rate revenue coming from residential customers who are billed a fixed fee on a monthly basis. Commercial and industrial customers comprise the remaining 20 percent of the total Sewer Service Charges and are billed based on water consumption.

1.3 SCOPE & OBJECTIVES OF STUDY

The scope of this Study was to prepare a multi-year financial plan, update the cost-of-service analysis, review the District’s existing rate structure, propose a 5-year rate program, and update the District’s Capacity Charges. The primary objectives of this Study were to:

- i. Develop a multi-year financial management plan that integrates the District’s operational and capital project funding needs;
- ii. Propose annual rate adjustments to the Sewer Service Charges that will ensure adequate revenues to meet the District’s ongoing service and financial obligations;
- iii. Determine the cost of providing sewer service to the District’s customers (including some large industrial customers) using equitable and industry-accepted methodologies;
- iv. Recommend specific modifications to the District’s existing rate structure in order to ensure that the District is equitably recovering the cost of service and comports with industry standards and California’s legal requirements; and
- v. Update the District’s Capacity Charge’s to ensure that growth is paying for the value of the assets that will serve them.

1.4 STUDY METHODOLOGY

This Study applied methodologies that are aligned with industry standard practices for rate setting as promulgated by the Water Environment Federation (WEF) and all applicable law, including California Constitution Article XIII D, Section 6(b), commonly known as Proposition 218.

The Study began with development of a multi-year financial management plan that determined the level of annual rate revenue required to cover projected annual operating expenses, debt service (including coverage targets), and capital cost requirements while maintaining adequate reserves. A financial planning model was customized to reflect the District’s financial dynamics and latest available data for the

sewer operations in order to develop a long-term financial management plan, inclusive of projected annual revenue requirements and corresponding annual rate adjustments.

Revenue requirements calculated in the financial plan for FY 2022/23 were then used to perform a detailed cost-of-service analysis. The cost-of-service analysis and rate structure design were conducted based upon principles outlined by the WEF, legal requirements (Proposition 218) and other generally accepted industry practices to develop rates that reflect the cost of providing service.

Recommendations for the financial plan and updated rate structure were presented to the District's Executive Committee and Board of Directors in January of 2022 and a Public Hearing to adopt the rates will be held in the spring of 2022.

Section 2. FINANCIAL PLAN

This Study's 10-year financial plan was developed through interactive work sessions with District staff. As a result of this process, the Study has produced a robust financial plan that will allow the District to meet revenue requirements and financial performance objectives throughout the projection period while striving to minimize rate increases. This includes maintaining prudent reserves and ensuring that the District's customers are all paying fair and equitable amounts for services provided.

2.1 FINANCIAL DATA & ASSUMPTIONS

The District provided historical and budgeted financial information associated with operation of the sewer system, including historical and budgeted operating costs, a multi-year capital improvement program (CIP), and outstanding debt service obligations. District staff also assisted in providing other assumptions and policies, operating and capital reserve targets, and escalation rates for operating costs (all of which are described in the following subsections).

2.1.1 DISTRICT FUNDS

The District enterprise is comprised of three major funds that are used to manage funds in a transparent manner. While the financial plan model for this Study was developed with an understanding of those funds, the model did not attempt to replicate the movement of all moneys between funds. Rather the financial model was used to evaluate the financial condition of the District's sewer enterprise as a whole. The financial plan was developed to serve as a planning tool for managing overall financial needs, constraints, and opportunities, as well as for determining annual rate revenue needs. It is primarily a cash flow model and differs from the District's budgets and financial statements.

The following describes the purpose of each fund and how the financial plan model reflected the use of those funds.

Fund 1 – Fund 1 is the District’s primary fund and receives the Sewer Service Charge revenues. Fund 1 pays for all operating and maintenance expenditures, debt service and funds most replacement and replacement (R&R) capital projects (as opposed to growth-related capital spending, see Fund 2). Additional revenues into Fund 1 include miscellaneous fees, and interest earnings.

Within Fund 1, there are three reserves: the Operating Reserve, the Major Maintenance Reserve, and the Debt Reserve. The District’s policies regarding the target funding levels for these reserves are discussed in 2.1.3.

Fund 2 - The Capacity Fund (Fund 2) controls and tracks the use of Capacity Charge revenue. As described in Section 4, a portion of the District’s existing Capacity Charge revenue is considered restricted to fund growth-related projects, while the remainder of the existing Capacity Charge revenue is unrestricted and can fund any capital project, including R&R projects. The proposed changes to the Capacity Charge methodology will result in all future Capacity Charge revenue being unrestricted.

Fund 4 is the Drainage Maintenance Fund and is outside of the scope of this study.

2.1.2 BEGINNING FUND BALANCES

The FY 2021/22 beginning fund balances for each fund described in Section 2.1.1 are summarized in **Table 1**.

Table 1: FY 2021/22 Beginning Cash Balance

Fund 1	
Operating Reserve	\$5,090,000
Major Maintenance Reserve	\$38,574,000
Debt Reserve	\$1,069,000
<hr/>	
Total Fund 1:	\$44,733,000
Fund 2 - Restricted Capacity Fund:	\$12,431,000

2.1.3 RESERVE TARGETS

Reserves for utilities are cash balances that are maintained in order to (a) comply with contractual obligations (e.g., bond covenants), (b) protect the utility from unexpected financial events, and/or (c) accommodate operational and capital program cash flow needs. Often multiple reserves are maintained, each with a specific function. In addition to the direct benefits of financial stability, reserves can help utilities obtain higher credit rankings, which can then help qualify the utility for cheaper debt. Credit rating agencies evaluate utilities on their financial stability, which includes adherence to formally adopted reserve targets.

The following describes recommended reserve targets which are partially informed based on existing District reserve policies and are consistent with 1) the author’s industry experience for similar systems, 2) findings of reserve studies conducted by the American Water Works Association (AWWA), and 3) healthy reserve levels for public utilities per the evaluation criteria published by rating agencies (e.g., Fitch, Moody’s, and Standard & Poor’s).

It should be noted that the District is currently considering adopting separate formal reserve policies related to the City of Fairfield and City of Suisun City based on the on-going Collection System Asset Management Plan project.

Operating Reserve – The Operating Reserve is maintained in order to meet the liquidity and cash flow needs for the District’s day-to-day operations. This reserve ensures continuity of service regardless of short-term changes in cash flow or sudden increases in operating costs. Consistent with recent historical District practices, this Study recommends that the Operating Reserve continue to be maintained at twenty five percent (25%) of the annual operating budget, excluding debt service.

Given the FY 2021/22 operating budget of \$23.7 million, the targeted Operating Reserve for that year would be about \$5.9 million.

In the future the District may want to consider increasing the Operating Reserve target to 50 percent (50%), especially if the District elects to move the billing to the property tax roll (which will result in biannual revenue collection as opposed to monthly).

Major Maintenance Reserve – This Major Maintenance Reserve is intended to be used for both (a) catastrophic failure of critical infrastructure and (b) managing the inherent volatility of capital spending needs. The District has a formal policy (Resolution 2005-11) which requires an annual contribution of 1 percent of current facility replacement cost, (subject to availability of net operating income). While this policy is a useful guideline for promoting re-investment in the District’s aging infrastructure, the policy does not define a target level for the reserve.

Given the inherent volatility of capital spending (see Figure 3), it is recommended that the target amount of the Major Maintenance Reserve be equal to average annual capital spending projects over the next 5 years (rolling average). Given the average annual capital spending of about \$19.0 million over the next five years (see Section 2.1.10), the current target is proposed to be about \$19.0 million.

Given that this reserve is designed to smooth the inherent variability of the capital spending program, the reserve may be drawn down during years of higher-than-average capital spending and conversely the reserve should be built up during years when capital spending is below average. Such an approach can help reduce the need for large rate adjustments and help ensure continuous funding for capital replacement and rehabilitation projects.

Debt Reserve – The District’s loan covenants for its existing state revolving fund (SRF) require the District to maintain a debt reserve equal to one year of debt service. Based on current annual debt service (see Section 2.1.7), this reserve is maintained at about \$1.07 million.

2.1.4 CUSTOMER GROWTH

Based on planning numbers provided by the cities of Fairfield and Suisun City, the District expects the addition of between 400 and 630 new dwelling unit per year (see Schedule 7 of the District’s 2021/22 budget). This corresponds with growth rates of approximately 0.8 percent to 1.3 percent.

2.1.5 RATE REVENUES

Rate revenue is the revenue generated from customers for sewer service. In the District’s case, rate revenue is collected from individual residential and commercial customers within the District. This Study’s financial plan proposes annual rate revenue adjustments that will meet the District’s revenue requirements. Budget and projected rate revenues are listed in Schedule 1¹. The rate revenue used for FY2021/22 does not match the budget (which indicated a 6.7 percent increase over the previous year’s

¹ The rate revenue in Schedule 1 includes the proposed rate adjustment recommended by this Study, as described in Section 2.2

actuals) but rather assumes a 4.7 percent increase over the previous year's actuals (3.7 percent due to the rate increases and another 1 percent to account for growth).

2.1.6 NON-RATE REVENUES

In addition to rate revenue, the District receives other revenue, including miscellaneous fees, capacity charge revenue, and interest revenue on investments. Estimates of interest income were calculated annually based upon estimated average fund balances and historic effective return of 1.03 percent on cash and invested funds, which is consistent with the District's historical earnings. Projections of all other non-rate revenues were based on FY 2021/22 budgeted revenues. Budgeted revenues FY 2021/22 are depicted in Figure 2 below and listed in detail in **Schedule 1**.

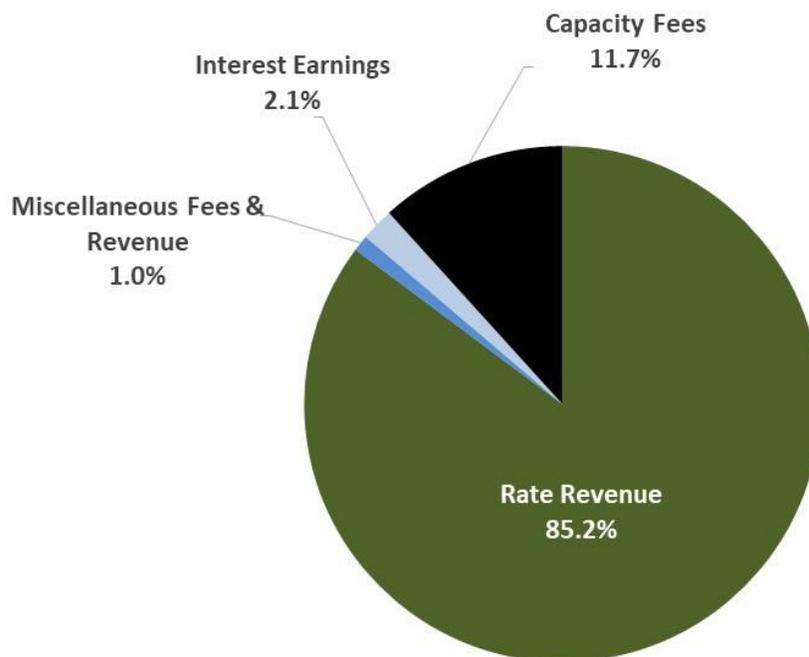


Figure 1: FY 2021/22 Budgeted Revenue Categories

2.1.7 OPERATION AND MAINTENANCE EXPENSES

The District’s operating and maintenance expenses include all ongoing collection, treatment, disposal, and administrative expenses, and debt service payments. The financial plans’ assumed annual operating and maintenance costs are based on the FY 2021/22 budget and are adjusted for future years based on inflation (see Section 2.1.8). Recent operating cost increases that may not have been fully anticipated by the 2017 rate study include increases to electricity costs (a new PG&E rate structure), biosolids processing expenses, chemical costs, , the implementation of social security, and a proactive pension funding plan to address unfunded accrued liabilities with CalPERS.

The District currently has two outstanding SRF loans. The combined annual debt service is \$1.07 million through 2032, at which time the combined annual debt service will drop to about \$333 thousand until FY2040.

Budgeted expense categories for FY 2021/22 are depicted in **Figure 2**. Budgeted and projected operating and debt expenses are listed in detail in **Schedule 2**. Capital program expenses are discussed in Section 2.1.10 and detailed in **Schedule 3**.

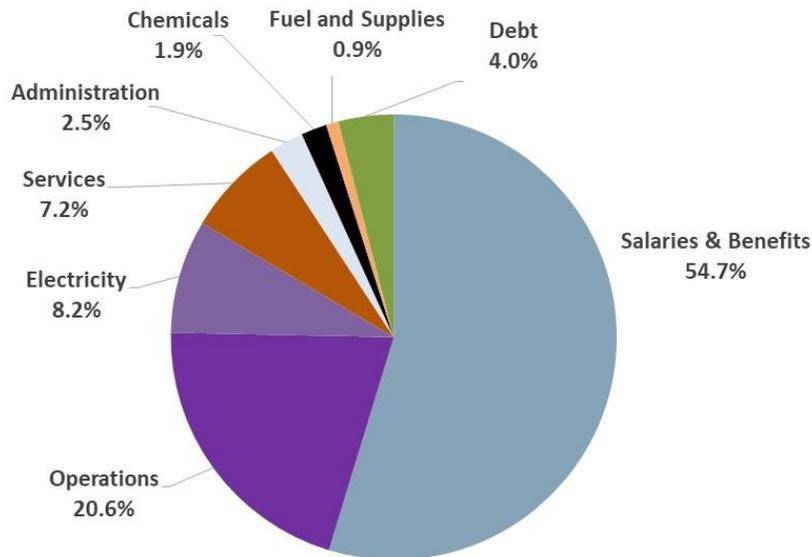


Figure 2: FY 2021/22 Budgeted Expense Categories

2.1.8 COST ESCALATION

Annual cost escalation factors for the various types of expenses were developed based upon a review of historical inflation trends, published inflation forecasts, industry experience, and discussions with District staff. During the projection period, most of the District's operating and capital expenses are projected to increase gradually at 3 percent per year. Exceptions include salaries (5 percent per year), utilities (4 percent per year), and chemicals (one-time 5 percent increase in FY2022/23 followed by 4 percent per year).

2.1.9 DEBT SERVICE COVERAGE

Debt service coverage is a measure of how easily an entity is able to afford its outstanding debt. Typically, SRF loans require a debt coverage ratio (DCR) of 1.1 to 1.2. The author of this study recommends maintaining a DCR of at least 1.5 to ensure access to favorable borrowing terms in the future. The District currently has very little debt relative to its net revenue and therefore has a very strong DCR (currently over 10.0). This financial plan does not propose any additional debt and therefore we expect that the District's DCR will remain strong through-out the planning period.

2.1.10 CAPITAL IMPROVEMENT PROGRAM

In recent years, (from FY 2018/19 to FY 2020/21) the District has averaged \$7.5 million in annual capital spending. Between FY 2021/22 and FY 2025/26, the District is planning to increase its annual spending to an average of about \$19.8 million. Part of this increase is attributable to the 2022 Collection System Asset Management Plan which is expected to increase capital spending by \$5.9 million per year in order to pro-actively address sewer system rehabilitation needs associated with aging pipes, pump stations, and other system deficiencies. The increase in capital spending related to the Collection System Asset Management Plan is coupled with an annual operating expense increase of \$300 thousand.

Figure 3 shows the recent historical capital spending and projected capital spending for the next 10 years. The projection is based on a capital spending forecast through FY 2028/29 provided by District staff and assumed spending levels from FY 2029/30 through FY 2031/32 (based on the average spending levels of the preceding 8 years). A detailed list of projected capital projects and associated costs is provided in **Schedule 2**. In addition to the annual sewer rehabilitation projects resulting from the Collection System Asset Management Plan, notable projects include the Peabody-Walters Relief Sewer Phase 2 (\$3.2 million), Bioenergy Generation Project (\$12.7 million), multiple phases of Electrical Replacement Project (totaling \$21.7 million), and the Suisun Force Main Rehabilitation (\$12 million).

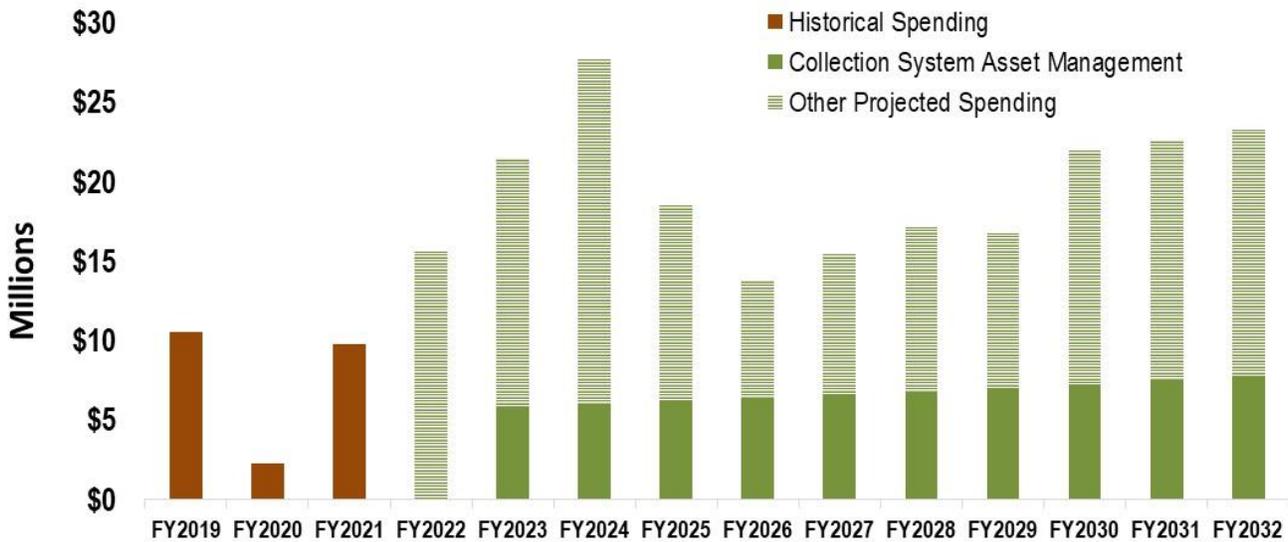


Figure 3: Historical and projected capital spending

2.1.11 FUTURE BORROWING ASSUMPTIONS

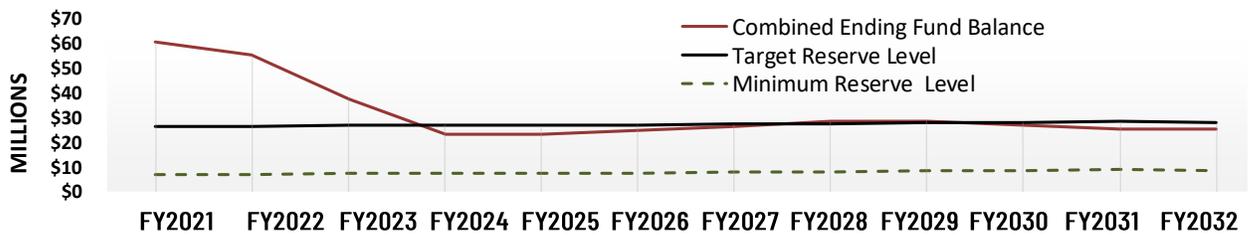
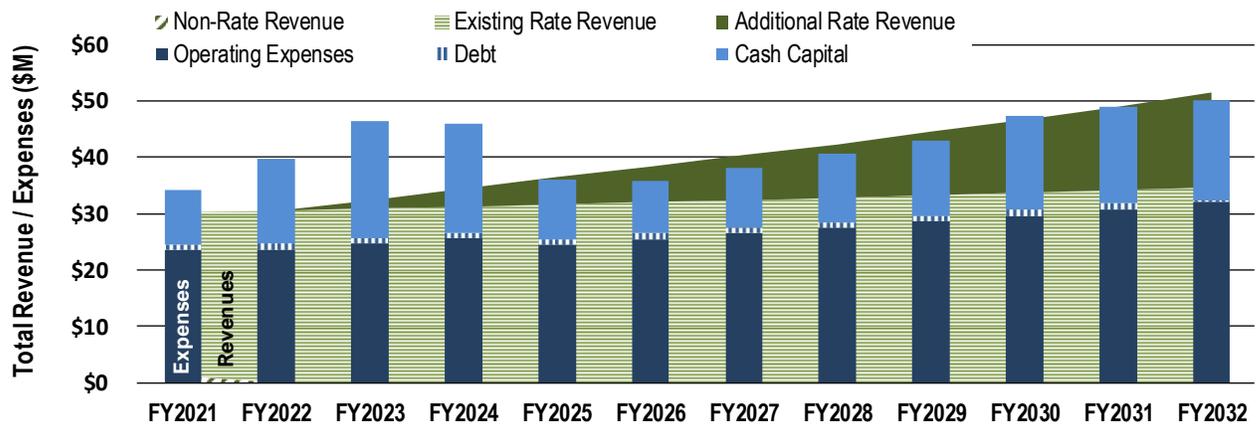
This financial study does not propose any new debt during the planning period because debt is most appropriate for financing anomalous “spikes” in capital spending. The District’s forecasted increase in capital spending is expected to be the “new normal” and is therefore most appropriately cash-financed.

2.2 PROPOSED RATE REVENUE INCREASES

All of the above information was entered into a financial planning model to produce a 10-year financial plan that evaluated the sufficiency of current revenues to meet current and estimated future financial obligations and determined the level of rate revenue increases necessary in each year of the planning period.

Based upon the previously discussed financial data, assumptions, and reserve targets, this Study proposes a 5-year schedule of rate adjustments as shown at the bottom of **Figure 4**. The numbers provided in **Schedule 4** (cash flow proforma) are summarized graphically in Figure 4. Note that the ending fund balance (red line below) represents the combined fund balance between Fund 1 and Fund 2. It is understood that the existing Fund 2 reserves are considered restricted and this Study projects that all existing Fund 2 reserves (\$12.3 million) will be expended on growth-related capital projects in the next ten years. Starting in FY 2022/23, capacity charge revenue will no longer be limited to growth-related capital projects (see Section 4.8). While there is no specific reserve policy for Fund 2, this Study projects that Fund 2 will maintain a level of at least \$2.4 million through FY2030/31 (which is more than the average growth-related capital spending during that period).

To be clear, the proposed rate revenue increases are necessary in order to support the District's proposed capital spending program which more proactively addresses the need to reinvest in aging infrastructure (see Section 2.1.10). The projected rate revenue increases starting in FY 2027/28 shown in Figure 4 are only estimates to demonstrate that, based on current forecasts, larger rate increases are not anticipated during that time period.



	Proposed				Forecasted							
Rate Revenue Increase:	5.0%	5.0%	5.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	
Debt Coverage Ratio:	11.34	11.58	10.69	12.77	16.10	15.86	16.75	17.70	18.69	19.76	20.85	70.73

Figure 4: Financial Plan Estimates with Recommended Rate Increases

Section 3. COST-OF-SERVICE & RATE STRUCTURE

This section of the report provides the cost-of-service analysis (COSA) and design of Sewer Service Charges intended to meet the District’s financial obligations for FY 2022/23 and beyond. Proposed Sewer Service Charges are intended to meet the utility’s financial needs, satisfy legal requirements, and achieve other rate-setting objectives. The Sewer Service Charge analyses and related recommendations address each of the following:

- Identification of Sewer Service Charge rate-setting objectives
- Evaluation of customer account and wastewater production data
- A COSA used to allocate costs to each customer and customer class in proportion with service demands
- Design of a Sewer Service Charge rate structure to meet revenue needs, satisfy legal requirements, and achieve rate-setting objectives in a fair and reasonable manner

3.1.1 RATE SETTING OBJECTIVES

There are two rate setting objectives that are primary and fundamental to guiding the rate-setting process. They include (1) Sewer Service Charges must generate sufficient revenue to meet the utility’s service and financial obligations, and (2) Sewer Service Charges must be calculated consistent with the requirements of the California Constitution, Article XIII D (Proposition 218) and relevant case law. Other rate-setting objectives are secondary and can be addressed so long as the primary objectives are first achieved. Beyond the primary objectives, other rate-setting objectives identified to help guide the rate design process included the following:

- Sewer Service Charges should be viewed as fair and equitable by the public
- Sewer Service Charges should be simple, understandable, and easy to administer

- Sewer Service Charges should strike an appropriate balance between fixed and usage-based charges, with consideration of:
 - Revenue stability
 - Affordability for basic usage

3.1.2 CURRENT SEWER SERVICE CHARGES

The District’s current Sewer Service Charges were last increased in July 2021 by between 2.6 percent to 7.0 percent (depending on the customer class and rate component). The current Sewer Service Charges are presented in Table 2. The Sewer Service Charges as assessed to all residential accounts based on the number of dwelling units. Non-residential accounts are billed for wastewater service based on actual monthly water usage.

Table 2: Current Sewer Service Charge Schedule

<u>Residential</u> ¹	\$43.35 per dwelling unit
<u>Commercial</u>	
Regular Strength ²	\$3.46 per HCF
High Strength ³	\$5.62 per HCF
<u>Case-by-Case</u>	
Flow	\$2,804.04 per MG
BOD	\$492.32 per lb
SS	\$209.18 per lb
<u>Travis Air Force Base</u>	\$2.71 per HCF

¹ Single-family dwelling, multiple-family dwelling, trailer courts, and mobile home parks

² Offices, retail, stores, hotels, motels, schools, churches, hospitals, nursing homes, laundromats, dry cleaning, establishments, bars without dining facilities, car washes without auto steam cleaning facilities, other commercial or industrial customers not treated high strength or as case-by-case.

³ Commercial laundries, restaurants and bars with dining facilities, service stations with holding tank dumping facilities, car washes with auto steam cleaning facilities, bakeries and food processing, other commercial or industrial customers with concentrations greater than 200 milligrams per liter BOD or 265 milligrams per liter TSS, but less than the concentrations specified for case-by-case.

⁴ All commercial or industrial customers other than those specified as regular or high strength with flows greater than 0.005 MGD, or with concentrations greater than 65 mg/l BOD or 1,000 mg/l TSS; all intermittent customers; and any commercial or industrial customer requesting and paying the full cost of metering and testing.

3.1.3 PROPOSED RATE STRUCTURE MODIFICATIONS

The structure of the District’s current Sewer Service Charges is consistent with established and common practices. The only proposed general modification (aside from the COSA update for all rate components) is to establish a “Account Charge” for non-residential accounts which would represent a minimum monthly charge, even for those customers that don’t have any water usage during a billing period. Such a minimum charge is reasonable given that the District incurs many fixed costs regardless of whether or not customers produce wastewater.

3.1.4 WASTEWATER FLOW AND LOADING ESTIMATES

Sewer Service Charges calculations are based on several factors related to wastewater service customers. Factors include the number of customers, customer classes, water usage (leading to estimated wastewater flows), and strength characteristics of wastewater as determined by biochemical oxygen demand (BOD) and total suspended solids (TSS). **Table 3** summarizes customer account and water usage data obtained from the utility billing system for FY 2020/21, as well as estimates of resulting wastewater flow and loading characteristics.

The flow and loading assumptions for residential wastewater flows have changed since the 2017 rate study. The current sewer flow have been estimated based on winter water

usage (January through March) based on the assumption that minimal irrigation occurs during those months and therefore most water usage is returned to the sewer. The BOD and TSS concentrations were inferred based on a mass balance calculation using the known BOD and TSS loading to the WWTP.

Non-residential wastewater flows are based on 90 percent of actual monthly water usage, as irrigation is generally separately metered, and it is reasonable to assume that most non-irrigation water demand ends up as wastewater.

Sewer Service Charge analyses consider the strength (loading) characteristics of wastewater entering treatment facilities. Strength factors for BOD and TSS are considered, as these factors play a role in the treatment operations. Each wastewater user is grouped into one of four possible strength categories: residential, Regular Strength commercial, High Strength commercial, and “Case-by-Case” industrial. The Case-by-Case customers are subject to site-specific high-strength surcharges due to their unique or heavy loading characteristics and/or high flow volumes.

The assumed BOD and TSS strength for each of the above categories is summarized in Table 3. The strength characteristics for the two general strength commercial categories and the assignment of different business types to each category are generally based on guidelines published by the California State Water Resources Control Board (SWRCB)². The strength characteristics for the Case-by-Case accounts is based on regular wastewater testing at each facility. Finally, the residential strengths have been inferred using on a mass balance calculation using the known loadings to the WWTP and the assumed strength for all non-residential accounts. While the resulting strength assumptions for residential wastewater is higher than the range provided by SWRCB guidelines, the historical trend of more efficient water usage by residential accounts supports the concept that residential strengths are higher now than they were in 1998.

² Revenue Guidelines, Appendix G, March 1998, SWRCB

Table 3: Wastewater Customer Account Data and Estimated Wastewater Flows and Loadings

Customer Class	No. of Accounts ¹	No. of Dwelling Units	Water Usage ¹ HCF	Rate of Return ²	Estimated Annual Wastewater Flow HCF	Estimated Annual Wastewater Flow MG	BOD Strength ³ mg/l	Annual BOD Loading lbs	TSS Strength ³ mg/l	Annual TSS Loading lbs
FAIRFIELD										
Residential										
Single Family	29,000	29,000	4,253,700	67%	2,866,540	2,144.2	300	5,370,100	205	3,658,700
Multi-family	450	8,050	614,100	82%	504,450	377.3	300	945,000	205	643,900
Mobile Homes	10	800	56,200	78%	44,020	32.9	300	82,500	205	56,200
Total Residential	29,460	37,850	4,924,000	69%	3,415,010	2,554.4		6,397,600		4,358,800
Commercial General										
Regular Strength	1,076	na	607,800	90%	547,020	409.2	150	511,900	150	511,900
Special Strength	153	na	84,700	90%	76,230	57.0	650	309,100	1,000	475,500
District-Billed Case-by-Case										
Abbot	1	na	1,400	100%	1,400	1.0	2,644	23,100	77	700
Anheuser Busch	1	na	266,000	100%	266,000	199.0	317	526,000	1,178	1,954,800
Aradagh Metal (Rexam)	1	na	54,300	100%	54,300	40.6	26	8,800	77	26,100
Ball Metal	1	na	47,700	100%	47,700	35.7	70	20,800	58	17,300
Clorox	1	na	19,300	100%	19,300	14.4	194	23,400	15	1,800
Courage	1	na	14,500	100%	14,500	10.8	86	7,800	281	25,400
FSUSD/Tolenas	1	na	500	100%	500	0.4	150	500	150	500
Jelly Belly	1	na	4,100	100%	4,100	3.1	150	3,800	150	3,800
Just Desserts	1	na	2,500	100%	2,500	1.9	2,348	36,600	58	900
Nippon	1	na	2,000	100%	2,000	1.5	545	6,800	238	3,000
Paradise Valley	1	na	41,100	100%	41,100	30.7	300	77,000	205	52,500
Producers	1	na	59,000	100%	59,000	44.1	1,303	479,600	203	74,700
Travis Air Force Base	1	na	338,300	100%	338,300	253.0	155	327,100	110	232,100
SUISUN										
Residential										
Single Family	8,050	8,048	936,800	67%	631,300	472.2	300	1,182,700	205	805,800
Multi-family	110	1,313	76,470	82%	62,820	47.0	300	117,700	205	80,200
Total Residential	8,160	9,361	1,013,270	69%	694,120	519.2		1,300,400		886,000
Commercial General										
Low Strength	116	na	46,700	90%	42,030	31.4	150	39,300	150	39,300
High Strength	22	na	16,700	90%	15,030	11.2	650	60,900	1,000	93,800
Totals	39,000	47,211	7,543,870		5,640,140	4,218.8		10,160,500		8,758,900

Notes:

¹ Based on utility billing system data for FY 2020/21.

² Value for residential categories based on annualized average winter water usage for residential accounts (based on January through March bills) and annual water usage. Values for Non-Residential categories based on common industry practices.

³ Based on mass balance calculations & SWRCB guidelines.

3.1.5 WASTEWATER COST-OF-SERVICE ANALYSIS AND RATE DESIGN

There are three steps to determining Sewer Service Charges. These are:

- Determine annual Sewer Service Charge revenue requirements
- Analyze the cost of providing service and proportionately allocate costs to each customer class and customer
- Design Sewer Service Charges to recover costs from each customer class and customer

The District's ten-year financial plan (see Section 2) was used to identify the wastewater rate revenue required to meet financial obligations for each fiscal year of the planning period. As presented in Section 2.2 of this report, a rate revenue increase of 5 percent is proposed for FY 2022/23. The rate structure updates that are proposed by this study will include this rate revenue increase for FY 2022/23.

Once the annual Sewer Service Charge revenue requirement has been determined, the next step in the rate-setting process is to evaluate the cost of providing service. The cost-of-service analysis (COSA) is intended to allocate the costs of providing wastewater service to customers in proportion to the extent to which each customer contributes to the utility's incursion of costs. The COSA evaluates the cost of providing wastewater services and allocates those costs to rate structure components to ensure the proposed rates are aligned with the costs to provide service.

To develop equitable Sewer Service Charges, the revenue requirement is allocated to various customer classifications according to the services provided and the demands placed on the wastewater system. This Study allocates a majority of wastewater costs based on water usage (wastewater flows) and sewage strength. Collection system costs are allocated entirely based on flow, whereas treatment costs are allocated on the basis of flow, BOD, & TSS. As discussed in Section 3.1.3, this Study also proposed that a new Account Charge capture the costs associated with account management.

The District's financial accounting structure allows for a clear segregation of costs between O&M, debt service and capital project costs, as well as between collection

system and treatment/disposal costs. However, the financial accounting structure does not lend itself to a simple segregation of costs into specific treatment components. As a result, this study has “functionalized” all of the wastewater utility’s costs as best as possible using professional judgment and standard industry practices.

Table 4 summarizes how the FY 2022/23 revenue requirement (totaling \$31.97 million) has been functionalized. The revenue requirements include various functional categories of operating and maintenance costs, debt service obligations, and capital costs, offsetting non-rate revenues and the use of available reserves. Each of these costs (and offsetting revenues) has been assigned to one or more of the following functions:

- Customer costs, such as meter reading and billing, are fixed costs that tend to vary as a function of the number of customers being served. Customer costs are allocated to all customers equally (regardless of size).
- Local collection costs include the cost of maintaining and operating the local collection system (defined as collection pipes with a diameter smaller than 12”) that connects directly to individual services. All existing Case-by-Case accounts currently deliver their wastewater directly to collection pipes that are 12” or larger (i.e., they don’t use the local collection system) and therefore are not allocated these costs. In the event that a new Case-by-Case account joins the system and utilizes a local collection system (i.e., discharges to a collection pipe of smaller than 12”), that user would be subject to a higher Volumetric rate (see Table 8).
- General collection costs include costs associated with operating and maintaining the sewer collection system of pipes that are 12” and larger.
- Treatment costs are those costs that are charged for operating the WWTP. Treatment costs are further allocated between flow, BOD, and TSS (see Table 5).

Table 4: Functionalization of Costs

	FY 2022/23 Forecast	Customer Costs	Local Collection Costs	General Collection Costs	Treatment Costs	Customer Costs	Local Collection Costs	General Collection Costs	Treatment Costs
Operations & Maintenance	\$12,181,000	20%			80%	\$2,436,000			\$9,745,000
Laboratory Department	\$789,000				100%				\$789,000
District Sewer Lines	\$901,000			100%				\$901,000	
City of Suisun City Sewer Line	\$63,000		100%				\$63,000		
City of Fairfield Sewer Lines	\$296,000		100%				\$296,000		
Local Sewer Maintenance	\$2,461,000		100%				\$2,461,000		
Plant Major Maintenance	\$793,000				100%				\$793,000
Regulatory	\$1,116,000				100%				\$1,116,000
Finance & Human Resources	\$1,667,000	100%				\$1,667,000			
Community Outreach	\$55,000	100%				\$55,000			
Administration	\$3,454,000	40%	12%	10%	38%	\$1,382,000	\$417,000	\$329,000	\$1,326,000
Other Post Retirement Benefit	\$658,000			50%	50%			\$329,000	\$329,000
Project Planning	\$139,000			50%	50%			\$70,000	\$70,000
New Development Review/Inspect	\$151,000	100%				\$151,000			
Collection System Master Plan	\$67,000			100%				\$67,000	
Capital Improvement Program (cash)	\$20,555,000	20%	20%	20%	40%	\$4,111,000	\$4,111,000	\$4,111,000	\$8,222,000
Debt	\$987,000				100%				\$987,000
Non-Rate Revenue	-\$745,000	20%	16%	13%	51%	-\$146,000	-\$120,000	-\$95,000	-\$383,000
Contract Rate Revenue ¹	-\$176,000	20%	16%	13%	51%	-\$35,000	-\$28,000	-\$22,000	-\$91,000
Change in Fund Balance	-\$13,446,000	20%	16%	13%	51%	-\$2,640,000	-\$2,173,000	-\$1,718,000	-\$6,915,000
Total Rate Revenue Requirement:	\$31,966,000					\$6,981,000	\$5,027,000	\$3,972,000	\$15,988,000

¹This includes hauled waste billing, regulatory compliance fees and sewer service charges that are collected through the property tax roll.

The allocations result in 21.8 percent of costs assigned to the customer component, 15.7 percent to the local collection function, 12.4 percent to the general collection function, and 50.0 percent to the treatment function. The customer costs are allocated on a per-account basis, both collection components are allowed based on wastewater flows, and the treatment costs are allocated through a combination of flow and strength.

Table 5 summarizes the allocation of annual Sewer Service Charge revenue requirements to the functions shown in Table 4. This table shows that treatment costs are further broken down into the variable components of flow, BOD and TSS. Allocation to these various treatment parameters are consistent with cost structures, prior rate studies, and rate setting practices. Once total costs are allocated, unit costs were determined by dividing the total cost for each component by the number of units identified in Table 3. These units include number of customer accounts, gallons for wastewater flow volume, and pounds of BOD and TSS in the wastewater influent.

Unit costs are applied to the annual wastewater flows, as well as BOD and TSS loadings associated with each customer class to arrive at the allocation of total costs to each customer class.

Table 6 presents the allocation of costs to each user class (or individual customers the Case-by-Case accounts).

Table 7 presents the Sewer Service Charges and usage rates for each customer class. As summarized in the “Calculated Rate” column, residential customers will continue to pay a fixed monthly service charge (which includes all cost categories previously discussed), general commercial customers will pay a fixed monthly Account Charge in addition to a variable Usage Charge (with the rate depending on whether they are Regular Strength or High Strength), and Case-by-Case customers will pay a fixed monthly Account Charge as well as a unit rate based on actual measured flows (HCF of wastewater) and loadings (pounds of BOD and TSS).

Table 5: Determination of Unit Costs

Cost Category	Parameter Allocation Percentages ¹	Annual Cost Allocated to Each Parameter	Total Quantities	Unit Cost for Each Parameter
Account Charge		\$6,981,000	48,590 Accts & DUs ²	\$143.67 / Account per year
Usage Charge Costs for Collection				
Local Collection		\$5,027,000	4,789,440 HCF of wastewater	\$1.05 / HCF
General Collection		\$3,972,000	5,636,040 HCF of wastewater	\$0.70 / HCF
Usage Charge Costs for Treatment				
Flow	54%	\$8,633,500	5,640,140 HCF of wastewater	\$1.53 / HCF
BOD	32%	\$5,116,200	10,160,500 lbs of BOD	\$503.54 / thousand lbs
SS	14%	\$2,238,300	8,758,900 lbs of TSS	\$255.55 / thousand lbs
Total FY 2021/22 Wastewater Rate Revenue Requirement		\$31,968,000		

Notes:

¹ Parameter allocations based on the District's 2005 "Cost of Service and Rate Study" (Brown & Caldwell, Table 4.2) and is consistent with the Consultant's experience of cost allocations for similar studies.

² Customer costs are allocated per dwelling unit for residential and per account for non-residential

Table 6: Wastewater Allocation of Annual Costs to Users

Count	Customer Class	Account Charges	Collection Charge		Flow	Treatment Charges		Allocation of Total Costs	
		\$143.67 /Acct. or DU	Local	General		BOD	SS		
			\$1.05.00 / HCF	\$0.7 / HCF	\$1.53 / HCF	\$503.54 / 1000 lbs	\$255.55 / 1000 lbs		
Residential									
47,211	Dwelling Units	Total Residential	\$6,782,880	\$4,312,950	\$2,895,910	\$6,289,950	\$3,876,240	\$1,340,290	\$25,498,220
Commercial General									
1,192	Accounts	Regular Strength	\$171,260	\$618,270	\$415,130	\$901,670	\$277,550	\$140,860	\$2,524,740
175	Accounts	Special Strength	\$25,140	\$95,790	\$64,320	\$139,690	\$186,310	\$145,480	\$656,730
District-Billed Case-by-Case									
1	Account	Abbot	\$143.67	\$0	\$990	\$2,140	\$11,630	\$180	\$15,080
1	Account	Anheuser Busch	\$143.67	\$0	\$187,460	\$407,170	\$264,860	\$499,540	\$1,359,170
1	Account	Aradagh Metal (Rexam)	\$143.67	\$0	\$38,270	\$83,120	\$4,430	\$6,670	\$132,630
1	Account	Ball Metal	\$143.67	\$0	\$33,620	\$73,020	\$10,470	\$4,420	\$121,670
1	Account	Clorox	\$143.67	\$0	\$13,600	\$29,540	\$11,780	\$460	\$55,520
1	Account	Courage	\$143.67	\$0	\$10,220	\$22,200	\$3,930	\$6,490	\$42,980
1	Account	FSUSD/Tolenas	\$143.67	\$0	\$350	\$770	\$250	\$130	\$1,640
1	Account	Jelly Belly	\$143.67	\$0	\$2,890	\$6,280	\$1,910	\$970	\$12,190
1	Account	Just Desserts	\$143.67	\$0	\$1,760	\$3,830	\$18,430	\$230	\$24,390
1	Account	Nippon	\$143.67	\$0	\$1,410	\$3,060	\$3,420	\$770	\$8,800
1	Account	Paradise Valley	\$143.67	\$0	\$28,970	\$62,910	\$38,770	\$13,420	\$144,210
1	Account	Producers	\$143.67	\$0	\$41,580	\$90,310	\$241,500	\$19,090	\$392,620
1	Account	Travis Air Force Base	\$143.67	\$0	\$238,420	\$517,840	\$164,710	\$59,310	\$980,420
48,591	Totals:		\$6,981,100	\$5,027,000	\$3,974,900	\$8,633,500	\$5,116,200	\$2,238,300	\$31,971,000

Notes:

¹ Unit costs from previous table are multiplied by the wastewater flow, the BOD loading, or the TSS loading for each customer class. Calculations are rounded.

Table 7: Wastewater Rate Determination

Count	Customer Class	Metric	BOD Strength (mg/l)	TSS Strength (mg/l)	Calculated Rate ¹	Estimated Total Annual Revenue
Residential						
47,211	Dwelling Units	47,200 Dwelling Units	300	205	\$45.02 / Dwelling Unit	\$25,499,300
Commercial General						
1,192	Accounts Regular Strength	654,500 HCF Annual Water	150	150	\$3.60 / HCF water \$143.67 / Account/DU	\$2,356,200 \$171,300
175	Accounts Special Strength	101,400 HCF Annual Water	650	1,000	\$6.23 / HCF water \$143.67 / Account/DU	\$631,700 \$25,100
District-Billed Case-by-Case						
1	Account Abbot	1,400 HCF Annual Water	2,644	77	\$10.77 \$143.67 / Account/DU	\$15,100
1	Account Anheuser Busch	266,000 HCF Annual Water	317	1,178	\$5.11	\$1,359,200
1	Account Aradagh Metal (Rexam)	54,300 HCF Annual Water	26	77	\$2.44 \$3.29 / HCF of water	\$132,600
1	Account Ball Metal	47,700 HCF Annual Water	70	58	\$2.55 (with local collection)	\$121,700
1	Account Clorox	19,300 HCF Annual Water	194	15	\$2.88	\$55,500
1	Account Courage	14,500 HCF Annual Water	86	281	\$2.96 \$2.24 / HCF of water	\$43,000
1	Account FSUSD/Tolenas	500 HCF Annual Water	150	150	\$3.29 (without local collection)	\$1,600
1	Account Jelly Belly	4,100 HCF Annual Water	150	150	\$2.97	\$12,200
1	Account Just Desserts	2,500 HCF Annual Water	2,348	58	\$9.76	\$24,400
1	Account Nippon	2,000 HCF Annual Water	545	238	\$4.40 \$503.54 / 1000 lbs BOD	\$8,800
1	Account Paradise Valley	41,100 HCF Annual Water	300	205	\$3.51	\$144,200
1	Account Producers	59,000 HCF Annual Water	1,303	203	\$6.65 \$255.55 / 1000 lbs TSS	\$392,600
Travis Air Force Base						
1	Account Travis Air Force Base	338,300 HCF Annual Water	155	110	\$2.90 \$2.90 / HCF water	\$980,400
48,591 Accts / DUs					Total:	\$31,974,900

Notes:

¹ Wastewater usage rates apply to actual monthly water use for general commercial customers and measured wastewater flows for Case-by-Case customers.

3.1.6 PROPOSED WASTEWATER RATE SCHEDULE

Table 8 summarizes the proposed wastewater rate schedule starting on July 1, 2022.

Table 8: Proposed Sewer Service Charges for FY 2022/23, effective on July 1, 2022

Residential (monthly) ¹	\$45.02 per dwelling unit
Commercial	
Monthly Account Charge and Regular Strength Volumetric ² or High Strength Volumetric ³	\$11.97 per account per mo. \$3.60 per HCF \$6.23 per HCF
Case-by-Case ⁴	
Monthly Account Charge and Volumetric (direct connect) ⁵ or Volumetric (through local collection) and BOD (by weight) and TSS (by weight)	\$11.97 per account per mo. \$2,994.65 per MG \$4,398.40 per MG \$503.54 per 1000 lbs \$255.55 per 1000 lbs
Travis Air Force Base Volumetric	\$2.90 per HCF

¹ Single-family dwelling, multiple-family dwelling, trailer courts, and mobile home parks

² Offices, retail, stores, hotels, motels, schools, churches, hospitals, nursing homes, laundromats, dry cleaning, establishments, bars without dining facilities, car washes without auto steam cleaning facilities, other commercial or industrial customers not treated high strength or as case-by-case.

³ Commercial laundries, restaurants and bars with dining facilities, service stations with holding tank dumping facilities, car washes with auto steam cleaning facilities, bakeries and food processing, other commercial or industrial customers with concentrations greater than 200 milligrams per liter BOD or 265 milligrams per liter TSS, but less than the concentrations specified for case-by-case.

⁴ All commercial or industrial customers other than those specified as regular or high strength with flows greater than 0.005 MGD, or with concentrations greater than 65 mg/l BOD or 1,000 mg/l TSS; all intermittent customers; and any commercial or industrial customer requesting and paying the full cost of metering and testing.

⁵ For customers that deliver wastewater directly to collection system pipes of 12" or greater.

An example of the bill calculation for a Case-by-Case customer is provided below.

Example Case-by-Case customer monthly bill calculation

Measured monthly flow = 0.31 MG

Measured BOD = 500 lbs

Measured TSS = 333 lbs

$$\begin{aligned} &= \text{Monthly Account charge} + \text{Flow charge (gravity rate)} + \text{BOD charge} + \text{TSS charge} \\ &= \$11.97 + (0.31 \text{ MG} \times \$2,994.65) + (1.0 \text{ thousand lbs BOD} \times \$503.54) + (0.333 \text{ thousand} \\ &\text{ lbs} \times \$255.55) \\ &= \$11.97 + \$934.08 + \$503.54 + \$85.18 \\ &= \mathbf{\$1,534.78} \end{aligned}$$

The proposed wastewater rates reflect the cost of providing wastewater service to customers. In particular, the proposed wastewater rates reflect a proportionate distribution of costs to all customers and customer classes, and better reflect the cost of providing service.

The proposed wastewater rates will increase annually in accordance with the percent increases presented in Section 2.2 to continue to meet service and financial obligations. A complete schedule of proposed wastewater rates for the five-year planning period are provided as Schedule 5.

Section 4. CAPACITY CHARGES

The following section updates the District’s existing Capacity Charges, which are one-time fees charged to new or expanded connections to the District’s sewer system designed to help recover the costs of infrastructure and assets benefiting new development. The following were the objectives for this update of the District’s Capacity Charges:

- Provide independent review of the District’s current system of sewer capacity fees;
- Develop updated capacity fees that recover the costs of infrastructure and assets that benefit new development;
- Ensure that the fees equitably recover costs from new connections;
- Confirm that the fees continue to be consistent with industry-standard practices and comply with government code.

4.1 EXISTING CAPACITY CHARGES

The District’s current fees are assessed by calculating the estimated “equivalent dwelling units” (EDU) of new development, based on the assumption that single family homes typically produce 230 gallons per day (gpd) and have wastewater strengths of 260 mg/l for BOD and 220 mg/l for TSS. The current fee per EDU is \$6,281.

Based on Ordinance 05-01 (circa 2005), non-single family residential accounts are charged as follows:

- Multi-family dwellings are charged 1 EDU for the first living unit and 0.60 EDUs for each additional living unit.
- Hotels and trailer parks are charged 1 EDU for the first unit and 0.50 EDUs for each additional living unit/trailer space.

- Non-residential Regular Strength are charged 1 EDU for each $\frac{1}{4}$ acre (including lands appurtenant to the premises, including parking areas)
- Non-residential Special Strength are charged 2.25 EDUs for the first acre and 0.5625 EDUs for each additional $\frac{1}{4}$ acre.
- Case-by-Case capacity fees are calculated for (1) those customers with flows greater than 5,000 gpd, (2) those customers with concentrations greater than 650 mg/l BOD or 1,000 mg/l TSS, (3) customers with intermittent use, or (4) any non-residential customer requesting and paying the full cost of projecting flows and concentrations of discharge. The highest number of connection units obtained by dividing the Maximum Sustained³ connection units by 1.3 or the Maximum Day connection units by 1.6, whichever is higher. The number of connection units for both the Maximum Sustained and Maximum Day loading conditions are obtained by dividing the projected daily wastewater discharge flow by 350 and multiplying the result thereof by the following:
 - 0.60 plus 0.30 times each 200 mg/l of BOD concentration of projected sewage discharge, plus 0.10 times each 265 mg/l of TSS concentration of projected sewage discharge. The following minimums apply: One connection unit per building, 200 mg/l of BOD, 265 mg/l of TSS. The formula for assigning connection units is based on allocation of capital costs in the ratio of sixty percent to flow, thirty percent to BOD, and ten percent to TSS.
- For properties which contain customers in more than one customer class (multiple-use customers) capacity fees are calculated based on the pro-rata proportion of building square footage used by each customer class.

³ “Maximum Sustained” means the maximum consecutive 5-day average loading (for flow, BOD, and SS), i.e., loadings from the maximum consecutive 5-day discharge period during the calendar year from a given discharger.

It is worth noting that some industrial customers only paid for limited capacity when they joined the system and consequently agreed to pay a capacity surcharge on any unpurchased capacity used during any month. The surcharge is calculated based on 7.0% times the then-prevailing Capacity Charge divided by 12 (months) and multiplied by the number of unpurchased capacity units used during any month.

4.2 CAPACITY CHARGE AUTHORITY

California state law gives the District broad authority to charge Capacity Charges. The limitations of that authority are encompassed by the requirement that charges on new development bear a reasonable relationship to the needs created by, and the benefits accruing to that development. California courts use that reasonableness standard to evaluate the constitutionality of exactions on new development, including capacity fees.

Government Code Section 66013 (see **Schedule 6**) contains specific requirements related to the imposition of capacity fees (referred to as “capacity charges” in the code). In general, capacity fees must not exceed the estimated reasonable cost of providing service.

4.3 INTRODUCTION TO FEE METHODOLOGIES

There are various methods that can be used to calculate capacity fees. Each method has varying advantages and disadvantages, as well as applicability in a given situation. Within all of the available methodologies there are two primary approaches. Other methodologies are typically a combination of these two methods. The two primary methods are described below to illustrate the different perspectives that can be used to determine appropriate fees.

4.3.1 SYSTEM BUY-IN METHODOLOGY

The system Buy-In method is based on the average investment in the capital facilities by current customers. The ‘Buy-In’ concept means that existing system users, through service charges and fees, have financed a valuable public capital facility. The charge is

designed to recognize the previous investments into the capacity/condition of the system and equitably charge developers for “joining” the system. The Buy-In fee is calculated by establishing the system’s current fixed asset value (accounting for depreciation), adding applicable assets (such as designated cash reserves), and deducting relevant liabilities (long-term debt, loans, etc.). The number of available units of service is then divided into this value (considered to be the utility’s equity) to establish the capacity fees. By calculating the capacity fees in this manner, new development buys into the existing capital facilities on par with existing development. The cost of future repair and replacement of the existing assets are then shared equally by all customers going forward (through Sewer Service Charges). The system Buy-In methodology has four distinct advantages:

- The Buy-In methodology is a common and generally well accepted methodology for calculating capacity fees. The method is popular with developers in part because it can result in lower fees than other methods (since the capacity that is being purchased has been partially depreciated).
- The Buy-In methodology is simple because it includes only the cost of existing facilities and excludes the costs of future or planned facilities; therefore, it does not require a formal capital improvement program.
- The Buy-In methodology includes only the cost of existing facilities and excludes the cost of future or planned facilities; it therefore does not require a formal capital improvement plan to support the fee calculation.
- Capacity fees based on the Buy-In method are a reimbursement for past capital costs. Therefore, the use (as defined in the Government Code) of the fee is to reimburse the District. Once reimbursed, the District is able to spend fee revenue as it desires (normally on capital projects), and the requirement for detailed accounting of fee revenues is greatly simplified.

The system Buy-In method is best applied in areas that are largely buildout and with infrastructure already in place.

4.3.2 INCREMENTAL METHODOLOGY

The Incremental cost methodology is also a common approach for capacity fees, particularly for communities experiencing considerable new infrastructure growth. The approach is based on the cost of new or planned capital facilities. The cost of growth-related facilities is allocated to the new development to be served by the facilities. The assumption is that the existing system is being used at full capacity by existing customers and that any new development will necessitate expansion of the system. As such, new customers pay for the Incremental costs for expanding the system.

The Incremental methodology is based on the cost of adding new capacity, which is derived from the District's capital improvement plan or master plan. To the extent that expansion-related projects also rehabilitate or improve the existing system (e.g., an aging 4" line is replaced with a new 6" line or a new transmission line is added where no line previously existed but also provides some redundancy value to the existing system), a portion of the cost of the project should be borne by existing customers. As a result, it is fairly common for only a portion of new capital facility costs to be included in fee calculations. The amount of capacity that will be provided by those projects is either based on an engineering analysis of the cumulative capacity provided by the totality of the projects or simply based on the amount of growth that those projects are designed to serve.

Capacity fees based on the Incremental cost methodology are subject to statutory accounting requirements because fee revenue must be accounted for until the specific capital improvements are constructed. For reference, **Schedule 6** includes Government Code Section 66013 et. seq. which includes the statutory requirements for accounting for capacity fees.

4.3.3 HYBRID METHODOLOGY

In some cases, the capacity fee calculation combines both existing and planned facilities into fee calculations. This is often done when new development benefits from both surplus capacity in existing facilities, but also requires new facilities to provide required capacity. The hybrid approach recognizes that new customers are benefitting

in part from the available facilities that are already in place and the additional capacity that will be built in order to accommodate them. As such, capacity fees that are calculated using the hybrid method reflect the weighted average unit cost of the Buy-In methodology and the Incremental methodology.

4.4 RECOMMENDED STUDY METHODOLOGY

After considering the District's situation and the applicability of various methods, this Study recommends using the Buy-In approach because the District has reliable cost data for their existing assets. While the District has completed a study of the cost of future expansion projects (2020 Collection System Master Plan), the amount of new capacity that will be created by those projects is not easily derived. It is also worth noting that the capacity of the District's existing WWTP was built to meet build-out demands, meaning that the WWTP will not require further expansion. In short, we have found that the Buy-In approach provides the most reliable method for estimating the value of capacity in the District's current and future infrastructure.

4.5 SOURCE DATA

The following data was used for calculating the proposed Retail Capacity Charges:

- District budget ("Budget and Long-Term Financial Plan, Fiscal Year 2021-22" (Schedule 5))
 - This plan provided the estimated replacement cost of existing assets based on the District's financial tracking of assets value and depreciation.
- Debt service schedules for:
 - CWSRF 8172-110
 - CWSRF 5208-110
- Asset register ("Capital Assets_Draft")
- District cash balances ("FY 2019-20 Cash Balances by Fund")

- “Capital and Operating Cost Allocation Update”, Fairfield Suisun Sewer District, 2002 (provides allocation of costs between flow, BOD and TSS)

4.6 UNIT COST CALCULATION

As previously explained, the Buy-In approach is primarily based on the value of existing assets. The approach uses the replacement cost of existing assets (by apply cost escalation factors to the original cost) and then subtracts any applicable depreciation of those assets. This metric is commonly referred to as “replacement cost net less depreciation” (RCNLD). By way of example, an asset with an estimated useful life of 40 years that was purchased 20 years ago and has a current replacement value of \$1 million would have an RCNLD value of \$500 thousand. While the District has not historically maintained a detailed asset register of all its assets (with original costs and estimated useful life), the financial records do track the replacement value of the District’s assets⁴. The average depreciation of District’s assets was estimated based on a partial asset register⁵ which indicates that the average depreciation of registered District assets is 59.1 percent.

In addition to the RCNLD of current assets, the Buy-In Approach subtracts any current outstanding debt principal. This is done since that the debt service on those outstanding balances will be paid for by Sewer Service Charges by current and new customers, and therefore those costs must be excluded to avoid double collection.

Finally, current cash reserves that are designated for capital spending are also added to the value of the system. While those reserves are not physical assets, it’s appropriate to add reserves to the system value since a utility with material reserves is more valuable to a new customer than a utility that has no reserves. In other words, the

⁴ See Budget and Long-Term Financial Plan, Fiscal Year 2021-22, Schedule 5

⁵ “Capital Assets_Draft” last updated in October 2021. It is assumed that this asset register provides a representative “cross-section” of District assets.

Capacity Charge would, in part, reimburse previous rate payers for the cost of building those reserves.

The sum of the values described above are summarized in Table 9.

Table 9 - Calculation of Existing Sewer System Value

Replacement Cost ¹	\$706,412,000
Estimated Depreciation ²	59.1%
Replacement Cost Net Less Depreciation (RCNLD)	\$417,516,000
Less outstanding principal on long-term debt:	-\$11,440,000
Plus existing Major Maintenance Fund reserves: ³	\$40,567,000
Total System Value:	\$446,643,000

¹ From District's Budget and Long-Term Financial Plan, Fiscal Year 2021-22, Schedule 5

² Estimated based on available asset register

³ Per "FY 2019-20 Cash Balances by Fund" and includes reserves available for rehabilitation projects

Table 10 shows the calculation of the unit costs for the Capacity Charges.

1. First the System Value is allocated to three functions (flow, BOD and TSS) based on the relative value of system assets which serve these three functions. While it is outside of the scope of the current study to conduct a detailed analysis of the function and value of system assets, such as study was conducted by a licensed engineer in 2002 (see Table 10). It is worth noting that the allocation percentages cited in Table 10 are based on the relative value of assets in the system while the allocation percentages cited in Table 5 are estimated of the relative operating costs associated with these three functions.
2. Next the capacity of the existing system to meet flow and loadings demands is estimated based on current customer demands (as summarized in Table 3).
3. Finally, the unit cost for each function is calculated by dividing the respective system values by the flow or loading metric. For example, the value of \$334 million assigned to flow-related assets is divided by the current flow of 11.56 million gpd to yield a unit cost of \$28.91 per gpd.

Table 10 - Calculation of Capacity Unit Costs

	Total	Flow (HCF per year)	BOD (lbs/year)	SS (lbs/year)
		Functional Allocation ¹		
		74.81%	19.73%	5.46%
Existing System Value:	\$446,643,000	\$334,134,000	\$88,123,000	\$24,387,000
Estimated Current Flow & Loadings ² :		11,558,000 gpd	27,800 (lbs/year)	24,000 (lbs/year)
Unit Cost:		\$28.91 \$/ gpd	\$3,169.89 \$/ annual lbs	\$1,016.13 \$/ annual lbs

¹ Source: "Capital and Operating Cost Allocation Update", Table 9A, Wm. Lea Fischer, Consulting Engineer, May 2, 2002

² Flow and loadings based on current usage and strength assumptions as summarized in Table 3.

4.7 PROPOSED CAPACITY CHARGES

Capacity fees are assessed to new development based on estimated flows and loadings of the new development, which reflects the potential demand each new service connections could place on the water system. For purposes of this Study, it is assumed that residential dwelling units produce 178.4 gpd, 0.455 lbs per day of BOD, and 0.321 lbs per day of TSS (consistent with the data from Table 3).

178.4 gpd x \$28.91 / gpd + 0.455 lbs BOD x \$3,169.89 per lbs BOD+ 0.321 lbs TSS x \$1,016.13 per lbs TSS=

\$5,158 + \$1,416 + \$309 = **\$6,883 per residential dwelling unit**

Given the fact that most residential units have an equal potential for wastewater production, this Study proposes that all residential dwelling units (whether single family, multifamily or otherwise) pay the same rate.

The Capacity Charges are applied to non-residential accounts in accordance with the Sewer Capacity and Service Charge Ordinance (currently 05-01).

4.8 ADMINISTRATION AND UPDATES

As previously explained in Section 4.3.1, the District is not responsible for reporting the use of the Capacity Charge revenue collected under the Buy-In approach. Given that the previous methodology (for current Capacity Charges) was calculated using a hybrid approach, we recommend (out of an abundance of caution) that all existing Fund 2 reserves be used to fund growth-related projects. Any future Capacity Charge revenues collected under the proposed fee structure can be used to fund any type of capital project (including repair and replacement projects). Capacity Charge revenues should not be used to fund operating costs.

It is recommended that the District annually adjust the Capacity Charge for the effects of inflation using the Engineering News Record's Construction Cost Index (CCI) for the San Francisco area.

Section 5. CONCLUSION

This Study used methodologies that are aligned with industry standard practices for rate setting as promulgated by WEF, AWWA and all applicable laws, including California’s Proposition 218. The proposed annual adjustments to the rates will allow the District to continue to provide reliable sewer service to customers while meeting the state’s mandates.

The Sewer Service Charges will need to be adopted in accordance with Proposition 218, which will require a detailed notice describing the proposed rates to be mailed to each affected property owner or customer at least 45 days prior to conducting a public hearing to adopt the rates.

SCHEDULES

Schedule 1 - Budgeted and Projected Cash Inflows – Funds 1 and 2

Schedule 2 - Budgeted and Projected Cash Outflows – Fund 1

Schedule 3 – 5-Year Capital Spending Plan

Schedule 4 - Cash Flow Pro Formas – Funds 1 and 2

Schedule 5 – 5-Year Rate Schedule

Schedule 6 – Government Code 66013 et. seq.

Budgeted and Projected Cash Inflows for Fund 1 and Fund 2

Schedule 1

	FY2022/23	FY2023/24	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32
1 Growth in Sewer Accounts	0.84%	1.21%	1.34%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
2 Proposed Sewer Rate Increase	5.0%	5.0%	5.0%	4.0%	4.0%	TBD	TBD	TBD	TBD	TBD
Rate Revenue										
3 Sewer Service Charge	\$30,613,000	\$32,401,000	\$34,413,000	\$36,596,000	\$38,426,000	\$40,346,000	\$42,362,000	\$44,478,000	\$46,700,000	\$49,033,000
4 Increase due to growth	257,000	392,000	462,000	366,000	383,000	402,000	422,000	443,000	465,000	488,000
5 Increase due to rate adjustments	1,531,000	1,620,000	1,721,000	1,464,000	1,537,000	1,614,000	1,694,000	1,779,000	1,868,000	1,961,000
6 Total Rate Revenue	\$32,401,000	\$34,413,000	\$36,596,000	\$38,426,000	\$40,346,000	\$42,362,000	\$44,478,000	\$46,700,000	\$49,033,000	\$51,482,000
Other Revenue:										
8 Lease Income	101,000	102,010	103,030	104,060	105,101	106,152	107,214	108,286	109,369	109,369
9 Interest - Investments	546,000	432,000	275,000	250,000	271,000	284,000	292,000	315,000	296,000	282,000
10 Miscellaneous Income	11,110	11,221	11,333	11,447	11,561	11,677	11,793	11,911	12,031	12,031
11 Biosolids Host & Facility Charge	254,520	257,065	259,636	262,232	264,855	267,503	270,178	272,880	275,609	275,609
12 Capacity Charges	2,737,000	3,937,000	4,371,000	3,254,000	3,241,000	3,241,000	3,241,000	3,241,000	3,241,000	3,241,000
13 Capacity Surcharge Revenue	176,000	176,000	176,000	176,000	176,000	176,000	176,000	176,000	176,000	176,000
14 Total Other Revenue	\$3,825,630	\$4,915,296	\$5,195,999	\$4,057,739	\$4,069,517	\$4,086,332	\$4,098,185	\$4,125,077	\$4,110,008	\$4,096,008
15 TOTAL REVENUE	\$36,226,630	\$39,328,296	\$41,791,999	\$42,483,739	\$44,415,517	\$46,448,332	\$48,576,185	\$50,825,077	\$53,143,008	\$55,578,008

Budgeted and Projected Cash Outflows - Fund 1 (1 of 4)

Schedule 2

	FY2022/23	FY2023/24	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33
Operations & Maintenance											
Salaries	\$3,790,000	\$3,979,000	\$4,178,000	\$4,387,000	\$4,606,000	\$4,837,000	\$5,079,000	\$5,332,000	\$5,599,000	\$5,879,000	\$6,173,000
Shift Differential	17,000	18,000	19,000	19,000	20,000	21,000	23,000	24,000	25,000	26,000	27,000
Overtime	63,000	66,000	69,000	73,000	77,000	80,000	84,000	89,000	93,000	98,000	103,000
Leave Time	536,000	562,000	590,000	620,000	651,000	683,000	718,000	754,000	791,000	831,000	872,000
Leave Payouts	103,000	106,000	109,000	113,000	116,000	119,000	123,000	127,000	130,000	134,000	138,000
State Unemployment Reimbursement	3,000	3,000	3,000	3,000	3,000	4,000	4,000	4,000	4,000	4,000	4,000
Benefit Allocation	2,079,000	2,141,000	2,206,000	2,272,000	2,340,000	2,410,000	2,482,000	2,557,000	2,634,000	2,713,000	2,794,000
Uniform Services	24,000	24,000	25,000	26,000	27,000	27,000	28,000	29,000	30,000	31,000	32,000
Consulting Services	14,000	15,000	15,000	16,000	16,000	17,000	17,000	18,000	18,000	19,000	19,000
Other Contract Services	34,000	35,000	36,000	38,000	39,000	40,000	41,000	42,000	44,000	45,000	46,000
Office Supplies	10,000	11,000	11,000	11,000	12,000	12,000	12,000	13,000	13,000	13,000	14,000
Printing/Binding/Advertising	3,000	3,000	3,000	3,000	3,000	4,000	4,000	4,000	4,000	4,000	4,000
Organization Dues	10,000	11,000	11,000	11,000	12,000	12,000	12,000	13,000	13,000	13,000	14,000
Gasoline	26,000	27,000	28,000	29,000	30,000	32,000	33,000	34,000	36,000	37,000	38,000
Diesel Fuel	36,000	38,000	39,000	41,000	43,000	44,000	46,000	48,000	50,000	52,000	54,000
Telephone	12,000	13,000	13,000	14,000	15,000	15,000	16,000	16,000	17,000	18,000	18,000
Lease	7,000	7,000	8,000	8,000	8,000	8,000	9,000	9,000	9,000	9,000	10,000
Computer hardware/software	8,000	8,000	9,000	9,000	9,000	10,000	10,000	10,000	10,000	11,000	11,000
Employee Conferences, Meetings/Trainings,	15,000	16,000	16,000	17,000	17,000	18,000	18,000	19,000	20,000	20,000	21,000
Safety Apparel & Supplies	10,000	11,000	11,000	11,000	12,000	12,000	12,000	13,000	13,000	13,000	14,000
Chemicals - Polymer	294,000	306,000	318,000	331,000	344,000	358,000	372,000	387,000	402,000	418,000	435,000
Chemicals - Ferric Chloride	173,000	180,000	187,000	195,000	203,000	211,000	219,000	228,000	237,000	247,000	256,000
Chemicals - Hypochlorite	16,000	16,000	17,000	18,000	18,000	19,000	20,000	21,000	22,000	22,000	23,000
Electricity	2,109,000	2,193,000	2,281,000	2,372,000	2,467,000	2,566,000	2,668,000	2,775,000	2,886,000	3,001,000	3,121,000
Landfill Fees	52,000	53,000	55,000	56,000	58,000	60,000	61,000	63,000	65,000	67,000	69,000
Vehicle Maintenance	10,000	11,000	11,000	11,000	12,000	12,000	12,000	13,000	13,000	13,000	14,000
Natural Gas	130,000	135,000	141,000	146,000	152,000	158,000	164,000	171,000	178,000	185,000	192,000
Tools	15,000	16,000	16,000	17,000	17,000	18,000	18,000	19,000	20,000	20,000	21,000
Trash	50,000	52,000	54,000	56,000	58,000	61,000	63,000	66,000	68,000	71,000	74,000
Water	26,000	27,000	28,000	29,000	30,000	32,000	33,000	34,000	36,000	37,000	38,000
Landscaping Services	11,000	12,000	12,000	12,000	13,000	13,000	14,000	14,000	14,000	15,000	15,000
Biosolids Management	1,648,000	1,697,000	1,748,000	1,801,000	1,855,000	1,910,000	1,968,000	2,027,000	2,088,000	2,150,000	2,215,000
Repair & Maintenance	309,000	318,000	328,000	338,000	348,000	358,000	369,000	380,000	391,000	403,000	415,000
Program Cost Allocation	530,000	546,000	563,000	580,000	597,000	615,000	633,000	652,000	672,000	692,000	713,000
Laboratory Department											
Salaries	356,000	374,000	393,000	412,000	433,000	455,000	477,000	501,000	526,000	553,000	580,000
Overtime	3,000	3,000	3,000	3,000	3,000	3,000	3,000	4,000	4,000	4,000	4,000
Leave Time	47,000	50,000	52,000	55,000	57,000	60,000	63,000	66,000	70,000	73,000	77,000
Leave Payouts	22,000	22,000	23,000	24,000	24,000	25,000	26,000	27,000	27,000	28,000	29,000
Benefit Allocation	190,000	196,000	202,000	208,000	214,000	220,000	227,000	234,000	241,000	248,000	255,000
Consulting Services	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Organization Dues	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Computer hardware/software	27,000	28,000	28,000	29,000	30,000	31,000	32,000	33,000	34,000	35,000	36,000
Employee Conferences, Meetings/Trainings,	4,000	4,000	4,000	4,000	4,000	5,000	5,000	5,000	5,000	5,000	5,000
Operating Permits/Cert.	7,000	7,000	8,000	8,000	8,000	8,000	9,000	9,000	9,000	9,000	10,000
Vehicle Maintenance	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Laboratory Testings/Supplies	113,000	117,000	120,000	124,000	128,000	131,000	135,000	139,000	144,000	148,000	152,000
Vehicles & Plant Equipment	15,000	16,000	16,000	17,000	17,000	18,000	18,000	19,000	20,000	20,000	21,000
Information Systems											
Salaries	165,000	173,000	182,000	191,000	200,000	210,000	221,000	232,000	244,000	256,000	269,000
Leave Time	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	3,000
Benefit Allocation	67,000	69,000	71,000	73,000	75,000	78,000	80,000	82,000	85,000	87,000	90,000
Consulting Services	134,000	138,000	142,000	146,000	151,000	155,000	160,000	165,000	170,000	175,000	180,000
Office Supplies	0	0	0	0	0	0	0	0	0	0	0
Computer hardware/software	113,000	117,000	120,000	124,000	128,000	131,000	135,000	139,000	144,000	148,000	152,000
Program Cost Allocation	(478,000)	(492,000)	(507,000)	(522,000)	(538,000)	(554,000)	(570,000)	(587,000)	(605,000)	(623,000)	(642,000)



Budgeted and Projected Cash Outflows - Fund 1 (2 of 4)

Schedule 2

	FY2022/23	FY2023/24	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33
District Sewer Lines											
Salaries	195,000	205,000	215,000	226,000	237,000	249,000	261,000	274,000	288,000	303,000	318,000
Overtime	4,000	4,000	4,000	4,000	5,000	5,000	5,000	5,000	6,000	6,000	6,000
Leave Time	32,000	33,000	35,000	36,000	38,000	40,000	42,000	44,000	47,000	49,000	51,000
Benefit Allocation	98,000	101,000	104,000	107,000	110,000	113,000	117,000	120,000	124,000	128,000	131,000
Consulting Services	21,000	21,000	22,000	23,000	23,000	24,000	25,000	25,000	26,000	27,000	28,000
Other Contract Services	5,000	5,000	5,000	6,000	6,000	6,000	6,000	6,000	7,000	7,000	7,000
Printing/Binding/Advertising	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Repair & Maintenance	515,000	530,000	546,000	563,000	580,000	597,000	615,000	633,000	652,000	672,000	692,000
Underground Svc Alert (USA)	4,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	6,000	6,000	6,000
Computer hardware/software	28,000	28,000	29,000	30,000	31,000	32,000	33,000	34,000	35,000	36,000	37,000
City of Suisun City Sewer Line											
Salaries	38,000	40,000	42,000	44,000	46,000	48,000	51,000	53,000	56,000	59,000	62,000
Leave Time	3,000	3,000	3,000	4,000	4,000	4,000	4,000	4,000	5,000	5,000	5,000
Benefit Allocation	22,000	22,000	23,000	24,000	24,000	25,000	26,000	27,000	28,000	28,000	29,000
City of Fairfield Sewer Lines											
Salaries	171,000	180,000	189,000	198,000	208,000	218,000	229,000	241,000	253,000	265,000	279,000
Overtime	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	3,000
Leave Time	20,000	21,000	22,000	23,000	24,000	25,000	27,000	28,000	29,000	31,000	32,000
Benefit Allocation	92,000	95,000	97,000	100,000	103,000	106,000	110,000	113,000	116,000	120,000	123,000
Vehicle Maintenance	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Repair & Maintenance	10,000	11,000	11,000	11,000	12,000	12,000	12,000	13,000	13,000	13,000	14,000
Local Sewer Maintenance											
Sewer Line Maint - Fairfield	2,063,000	2,125,000	2,189,000	2,255,000	2,322,000	2,392,000	2,464,000	2,538,000	2,614,000	2,692,000	2,773,000
Sewer Line Maint - Suisun	398,000	410,000	422,000	435,000	448,000	461,000	475,000	489,000	504,000	519,000	535,000
Plant Major Maintenance											
Salaries	403,000	424,000	445,000	467,000	490,000	515,000	541,000	568,000	596,000	626,000	657,000
Overtime	4,000	4,000	4,000	4,000	4,000	5,000	5,000	5,000	5,000	6,000	6,000
Leave Time	86,000	90,000	95,000	100,000	105,000	110,000	115,000	121,000	127,000	134,000	140,000
Repair & Maintenance	0	0	0	0	0	0	0	0	0	0	0
Asset Management (new)	300,000	309,000	318,000	328,000	338,000	348,000	358,000	369,000	380,000	391,000	403,000
Regulatory											
Salaries	409,000	429,000	451,000	473,000	497,000	522,000	548,000	575,000	604,000	634,000	666,000
Leave Time	37,000	39,000	41,000	43,000	45,000	47,000	49,000	52,000	54,000	57,000	60,000
Benefit Allocation	197,000	203,000	209,000	215,000	221,000	228,000	235,000	242,000	249,000	257,000	264,000
Consulting Services	82,000	85,000	87,000	90,000	93,000	96,000	98,000	101,000	104,000	108,000	111,000
Other Contract Services	62,000	64,000	66,000	68,000	70,000	72,000	74,000	76,000	78,000	81,000	83,000
Office Supplies	0	0	0	0	0	0	0	0	0	0	0
Organization Dues	77,000	80,000	82,000	84,000	87,000	90,000	92,000	95,000	98,000	101,000	104,000
Computer hardware/software	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Employee Conferences, Meetings/Trainings	3,000	3,000	3,000	3,000	3,000	4,000	4,000	4,000	4,000	4,000	4,000
Operating Permits/Cert.	227,000	233,000	240,000	248,000	255,000	263,000	271,000	279,000	287,000	296,000	305,000
Laboratory Testings/Supplies	21,000	21,000	22,000	23,000	23,000	24,000	25,000	26,000	26,000	27,000	28,000
Safety											
Salaries	97,000	102,000	107,000	112,000	118,000	124,000	130,000	136,000	143,000	150,000	158,000
Benefit Allocation	44,000	45,000	46,000	48,000	49,000	51,000	52,000	54,000	55,000	57,000	59,000
Safety Apparel & Supplies	36,000	37,000	38,000	39,000	41,000	42,000	43,000	44,000	46,000	47,000	48,000
Program Cost Allocation	(175,000)	(180,000)	(186,000)	(191,000)	(197,000)	(203,000)	(209,000)	(215,000)	(222,000)	(228,000)	(235,000)

Budgeted and Projected Cash Outflows - Fund 1 (3 of 4)

Schedule 2

	FY2022/23	FY2023/24	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33
Finance & Human Resources											
Salaries	544,000	571,000	600,000	630,000	662,000	695,000	729,000	766,000	804,000	844,000	887,000
Overtime	1,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Leave Time	53,000	55,000	58,000	61,000	64,000	67,000	70,000	74,000	78,000	81,000	86,000
Leave Payouts	15,000	16,000	16,000	17,000	17,000	18,000	18,000	19,000	20,000	20,000	21,000
Benefit Allocation	269,000	277,000	286,000	294,000	303,000	312,000	322,000	331,000	341,000	351,000	362,000
Banking Services/Trustee Fees	31,000	32,000	33,000	34,000	35,000	36,000	37,000	38,000	39,000	40,000	42,000
Audit Services	8,000	8,000	8,000	8,000	9,000	9,000	9,000	10,000	10,000	10,000	10,000
Utility Billing Charges - FF	536,000	557,000	579,000	602,000	627,000	652,000	678,000	705,000	733,000	762,000	793,000
Utility Billing Charges - SS	151,000	157,000	163,000	170,000	176,000	183,000	191,000	198,000	206,000	215,000	223,000
Consulting Services	22,000	22,000	23,000	24,000	24,000	25,000	26,000	27,000	27,000	28,000	29,000
Other Contract Services	21,000	21,000	22,000	23,000	23,000	24,000	25,000	25,000	26,000	27,000	28,000
Office Supplies	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Printing/Binding/Advertising	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Organization Dues	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Computer hardware/software	10,000	11,000	11,000	11,000	12,000	12,000	12,000	13,000	13,000	13,000	14,000
Employee Conferences, Meetings/Trainings,	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Miscellaneous Expense	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Operating Permits/Cert.	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Community Outreach											
Salaries	33,000	34,000	36,000	38,000	40,000	42,000	44,000	46,000	48,000	51,000	53,000
Leave Time	6,000	7,000	7,000	7,000	8,000	8,000	8,000	9,000	9,000	10,000	10,000
Benefit Allocation	15,000	16,000	16,000	17,000	17,000	18,000	18,000	19,000	19,000	20,000	20,000
Consulting Services	21,000	21,000	22,000	23,000	23,000	24,000	25,000	25,000	26,000	27,000	28,000
Other Contract Services	14,000	15,000	15,000	16,000	16,000	17,000	17,000	18,000	18,000	19,000	19,000
Office Supplies	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Printing/Binding/Advertising	19,000	19,000	20,000	20,000	21,000	21,000	22,000	23,000	23,000	24,000	25,000
Organization Dues	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Program Cost Allocation	(109,000)	(112,000)	(116,000)	(119,000)	(123,000)	(126,000)	(130,000)	(134,000)	(138,000)	(142,000)	(147,000)
Program Cost Allocation	55,000	56,000	58,000	60,000	61,000	63,000	65,000	67,000	69,000	71,000	73,000
Administration											
Salaries	304,000	319,000	335,000	352,000	369,000	388,000	407,000	428,000	449,000	471,000	495,000
Leave Time	32,000	33,000	35,000	36,000	38,000	40,000	42,000	44,000	47,000	49,000	51,000
Accrued Benefits	9,000	10,000	10,000	10,000	10,000	11,000	11,000	11,000	12,000	12,000	12,000
Leave Payouts	26,000	27,000	27,000	28,000	29,000	30,000	31,000	32,000	33,000	34,000	35,000
Medicare	111,000	114,000	118,000	121,000	125,000	129,000	132,000	136,000	141,000	145,000	149,000
Social Security Contribution	474,000	489,000	503,000	518,000	534,000	550,000	566,000	583,000	601,000	619,000	637,000
PERS Contribution	1,564,000	1,610,000	1,659,000	1,709,000	1,760,000	1,813,000	1,867,000	1,923,000	1,981,000	2,040,000	2,101,000
Deferred Compensation	366,000	377,000	388,000	400,000	412,000	424,000	437,000	450,000	463,000	477,000	491,000
Social Security Administration Fee - 218	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Life Insurance	43,000	44,000	46,000	47,000	48,000	50,000	51,000	53,000	55,000	56,000	58,000
Health Insurance	1,338,000	1,378,000	1,420,000	1,462,000	1,506,000	1,551,000	1,598,000	1,646,000	1,695,000	1,746,000	1,799,000
Flexible Benefits	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Employee Assistance Program	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Phone Allowance	32,000	33,000	34,000	35,000	36,000	37,000	38,000	39,000	40,000	41,000	42,000
Auto Allowance	7,000	7,000	8,000	8,000	8,000	8,000	9,000	9,000	9,000	9,000	10,000
Benefit Allocation	(3,474,000)	(3,579,000)	(3,686,000)	(3,796,000)	(3,910,000)	(4,028,000)	(4,148,000)	(4,273,000)	(4,401,000)	(4,533,000)	(4,669,000)
Insurance Premiums	258,000	265,000	273,000	281,000	290,000	299,000	307,000	317,000	326,000	336,000	346,000
Insurance Claims	3,000	3,000	3,000	3,000	3,000	4,000	4,000	4,000	4,000	4,000	4,000
Legal Services	15,000	16,000	16,000	17,000	17,000	18,000	18,000	19,000	20,000	20,000	21,000
Consulting Services	108,000	111,000	115,000	118,000	122,000	125,000	129,000	133,000	137,000	141,000	145,000
Other Contract Services	52,000	53,000	55,000	56,000	58,000	60,000	61,000	63,000	65,000	67,000	69,000
Office Supplies	26,000	27,000	27,000	28,000	29,000	30,000	31,000	32,000	33,000	34,000	35,000
Printing/Binding/Advertising	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Organization Dues	62,000	64,000	66,000	68,000	70,000	72,000	74,000	76,000	78,000	81,000	83,000
Telephone	19,000	19,000	20,000	21,000	22,000	23,000	24,000	25,000	26,000	27,000	28,000
Lease	4,000	4,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	6,000	6,000
Property Tax	4,000	4,000	4,000	4,000	4,000	5,000	5,000	5,000	5,000	5,000	5,000
Computer hardware/software	13,000	14,000	14,000	15,000	15,000	16,000	16,000	16,000	17,000	17,000	18,000



Budgeted and Projected Cash Outflows - Fund 1 (4 of 4)

Schedule 2

	FY2022/23	FY2023/24	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33
Board Member Fees	21,000	21,000	22,000	23,000	23,000	24,000	25,000	25,000	26,000	27,000	28,000
Board Members, Meetings, Conference	21,000	21,000	22,000	23,000	23,000	24,000	25,000	25,000	26,000	27,000	28,000
Employee Conferences, Meetings/Trainings,	10,000	11,000	11,000	11,000	12,000	12,000	12,000	13,000	13,000	13,000	14,000
Safety Apparel & Supplies	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Expense	5,000	5,000	5,000	6,000	6,000	6,000	6,000	6,000	7,000	7,000	7,000
Other Benefit Costs											
Other Post Employment Benefit	658,000	678,000	698,000	719,000	741,000	763,000	786,000	809,000	834,000	859,000	885,000
Annual PERS Allocation	2,000,000	2,000,000	0	0	0	0	0	0	0	0	0
Project Planning											
Consulting Services	31,000	32,000	33,000	34,000	35,000	36,000	37,000	38,000	39,000	40,000	42,000
Program Cost Allocation	108,000	111,000	115,000	118,000	122,000	125,000	129,000	133,000	137,000	141,000	145,000
New Development Review/Inspect											
Salaries	111,000	117,000	122,000	129,000	135,000	142,000	149,000	156,000	164,000	172,000	181,000
Overtime	0	0	0	0	0	0	0	0	0	0	0
Leave Time	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Benefit Allocation	39,000	41,000	42,000	43,000	44,000	46,000	47,000	49,000	50,000	52,000	53,000
Collection System Master Plan											
Other Contract Services	67,000	69,000	71,000	73,000	75,000	78,000	80,000	82,000	85,000	87,000	90,000
Existing Debt Service	987,000	987,000	987,000	987,000	987,000	987,000	987,000	987,000	987,000	250,000	250,000
Total Operating Expenses	\$25,787,000	\$26,656,000	\$25,559,000	\$26,508,000	\$27,481,000	\$28,508,000	\$29,561,000	\$30,668,000	\$31,819,000	\$32,274,000	\$33,519,000

5-Year Capital Spending Plan

Schedule 3

	FY2022/23	FY2023/24	FY2024/25	FY2025/26	FY2026/27	Funding	Sewer Service Charges	Capacity Charges
1 Treatment	\$725,600	\$1,287,200	\$631,800	\$795,500	\$644,200	100%		
2 Conveyance	\$226,000	\$452,000	\$352,000	\$144,500	\$593,000	100%		
3 Collections--Cleaning and Inspection	\$720,700	\$791,900	\$763,700	\$786,200	\$809,400	100%		
4 Vehicles/Heavy Equipment	\$143,000	\$58,000	\$58,000	\$58,000	\$93,000	100%		
5 Portable Equipment	\$285,000	\$85,000	\$105,000	\$65,000	\$25,000	100%		
6 Peabody/Walters Relief Sewer - Phase 2	\$2,400,000	\$0	\$0	\$0	\$0	100%		
7 Bioenergy Generation Project (25% funding)	\$1,350,000	\$1,200,000	\$0	\$0	\$0	100%		
8 Flow Monitoring	\$0	\$0	\$50,000	\$0	\$0	100%		
9 Collection System Master Plan and Technical Services	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	100%		
10 Cordelia Pump Station Expansion	\$0	\$1,000,000	\$0	\$0	\$0	100%		
11 Lopes Lift Station/Force Main Capacity Improvements	\$0	\$500,000	\$1,200,000	\$0	\$0	100%		
12 Peabody/Walters Relief Sewer - Phase 3	\$0	\$0	\$0	\$0	\$0	100%		
13 Bioenergy Generation Project (75% funding)	\$4,050,000	\$3,600,000	\$0	\$0	\$0	100%		
14 Gravity Sewer Line Rehabilitation	\$350,000	\$361,000	\$372,000	\$383,000	\$394,000	100%		
15 Primary Clarifier Rehabilitation No. 2 and 4	\$1,100,000	\$0	\$0	\$0	\$0	100%		
16 Digester 1 Cleaning/Rehab	\$150,000	\$0	\$0	\$0	\$0	100%		
17 Suisun Pump Station Electrical Reliability	\$1,500,000	\$0	\$0	\$0	\$0	60%	40%	
18 Electrical Replacement Project - Phase II	\$400,000	\$5,000,000	\$1,500,000	\$0	\$0	75%	25%	
19 Nutrient Treatment Alternatives Analysis	\$100,000	\$0	\$0	\$0	\$0	100%		
20 SCADA System Evaluation and Upgrade	\$50,000	\$0	\$0	\$0	\$0	100%		
21 Cathodic Protection Rehabilitation	\$100,000	\$50,000	\$100,000	\$50,000	\$100,000	100%		
22 Treatment Plant Security Upgrades	\$150,000	\$0	\$0	\$0	\$0	100%		
23 Suisun Force Main Rehabilitation	\$300,000	\$6,000,000	\$6,000,000	\$0	\$0	50%	50%	
24 Primary Clarifier Safety Improvements	\$300,000	\$0	\$0	\$0	\$0	100%		
25 Treatment Plant Pavement Rehabilitation	\$250,000	\$0	\$250,000	\$0	\$250,000	100%		
26 Pump Station Pavement Rehabilitation	\$250,000	\$0	\$0	\$0	\$0	100%		
27 Structural Rehab Project (Crack Sealing, Spalling patching)	\$200,000	\$0	\$0	\$0	\$0	100%		
28 Coatings and Linings	\$100,000	\$300,000	\$0	\$0	\$0	100%		
29 LED Retrofit - Phase III (pump stations)	\$100,000	\$0	\$0	\$0	\$0	100%		
30 Seismic Evaluation	\$150,000	\$0	\$0	\$0	\$0	100%		
31 Blower Building and Digester Building Bathroom Upgrade	\$40,000	\$0	\$0	\$0	\$0	100%		
32 Pump Station Wet Well Rehabilitation	\$0	\$350,000	\$0	\$0	\$0	100%		
33 Electrical Replacement Project - Phase III	\$0	\$0	\$200,000	\$4,000,000	\$0	75%	25%	
34 Electrical Replacement Project - 12kV Distribution	\$0	\$0	\$0	\$500,000	\$5,000,000	75%	25%	
35 Asset Management (new)	\$5,900,000	\$5,900,000	\$5,900,000	\$5,900,000	\$5,900,000	100%		
36 Total Capital Spending (FY2022 dollars)	\$21,405,300	\$26,950,100	\$17,497,500	\$12,697,200	\$13,823,600			



Fairfield Suisun Sewer District
2022 Sewer Rate and Capacity Charge Study

Schedules

Cash Flow Proforma

Fund 1 - Operating Fund (1 of 3)

Schedule 4

	Budget FY2022	Forecast FY2023	Forecast FY2024	Forecast FY2025	Forecast FY2026	Forecast FY2027	Forecast FY2028	Forecast FY2029	Forecast FY2030	Forecast FY2031	Forecast FY2032	
1	Rate Revenue Increase:		5.00%	5.00%	5.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	
Rate Revenue												
2	Service Charge Revenue	\$30,613,000	\$30,613,000	\$32,401,000	\$34,413,000	\$36,596,000	\$38,426,000	\$40,346,000	\$42,362,000	\$44,478,000	\$46,700,000	\$49,033,000
3	Change due to growth & use		\$257,000	\$392,000	\$462,000	\$366,000	\$383,000	\$402,000	\$422,000	\$443,000	\$465,000	\$488,000
4	Increase due to rate adjustments		\$1,531,000	\$1,620,000	\$1,721,000	\$1,464,000	\$1,537,000	\$1,614,000	\$1,694,000	\$1,779,000	\$1,868,000	\$1,961,000
Non-Rate Revenues												
5	Miscellaneous Fees	\$252,000	\$255,000	\$257,000	\$260,000	\$262,000	\$265,000	\$268,000	\$270,000	\$273,000	\$276,000	\$276,000
6	Interest Earnings	\$116,108	\$130,000	\$75,000	\$77,000	\$74,000	\$77,000	\$79,000	\$82,000	\$85,000	\$88,000	\$91,000
7	Operating Revenue	\$111,000	\$112,000	\$113,000	\$114,000	\$116,000	\$117,000	\$118,000	\$119,000	\$120,000	\$121,000	\$121,000
8	Total Revenue	\$31,092,108	\$32,898,000	\$34,858,000	\$37,047,000	\$38,878,000	\$40,805,000	\$42,827,000	\$44,949,000	\$47,178,000	\$49,518,000	\$51,970,000
O&M Costs												
9	Salaries & Benefits	\$13,484,000	\$13,972,000	\$14,483,000	\$13,016,000	\$13,573,000	\$14,155,000	\$14,764,000	\$15,400,000	\$16,064,000	\$16,759,000	\$17,485,000
10	Administration	\$604,000	\$623,000	\$642,000	\$661,000	\$681,000	\$702,000	\$724,000	\$746,000	\$768,000	\$792,000	\$816,000
11	Services	\$1,782,000	\$1,843,000	\$1,906,000	\$1,971,000	\$2,038,000	\$2,108,000	\$2,180,000	\$2,255,000	\$2,332,000	\$2,412,000	\$2,495,000
12	Electricity	\$2,028,000	\$2,109,000	\$2,193,000	\$2,281,000	\$2,372,000	\$2,467,000	\$2,566,000	\$2,668,000	\$2,775,000	\$2,886,000	\$3,001,000
13	Chemicals	\$460,000	\$483,000	\$502,000	\$522,000	\$543,000	\$565,000	\$588,000	\$611,000	\$636,000	\$661,000	\$687,000
14	Operations	\$5,081,000	\$5,234,000	\$5,391,000	\$5,553,000	\$5,719,000	\$5,891,000	\$6,067,000	\$6,250,000	\$6,437,000	\$6,630,000	\$6,829,000
15	Fuel and Supplies	\$221,000	\$229,000	\$238,000	\$247,000	\$256,000	\$266,000	\$276,000	\$287,000	\$298,000	\$310,000	\$322,000
16	Asset Management O&M	\$0	\$300,000	\$309,000	\$318,000	\$328,000	\$338,000	\$348,000	\$358,000	\$369,000	\$380,000	\$391,000
17	Total Operating Expenses	\$23,660,000	\$24,793,000	\$25,664,000	\$24,569,000	\$25,510,000	\$26,492,000	\$27,513,000	\$28,575,000	\$29,679,000	\$30,830,000	\$32,026,000
Capital Costs												
18	Existing Debt Service	\$987,000	\$987,000	\$987,000	\$987,000	\$987,000	\$987,000	\$987,000	\$987,000	\$987,000	\$987,000	\$250,000
19	Transfer Out to Major Maintenance	\$0	\$12,454,000	\$7,989,000	\$11,765,000	\$12,145,000	\$13,081,000	\$14,072,000	\$15,121,000	\$16,236,000	\$17,413,000	\$20,132,000
20	Total Revenue Requirement	\$24,647,000	\$38,234,000	\$34,640,000	\$37,321,000	\$38,642,000	\$40,560,000	\$42,572,000	\$44,683,000	\$46,902,000	\$49,230,000	\$52,408,000
21	Beginning Year Balance	\$6,158,895	\$12,604,000	\$7,268,000	\$7,486,000	\$7,212,000	\$7,448,000	\$7,693,000	\$7,948,000	\$8,214,000	\$8,490,000	\$8,778,000
22	Surplus/(Shortfall)	\$6,445,108	(\$5,336,000)	\$218,000	(\$274,000)	\$236,000	\$245,000	\$255,000	\$266,000	\$276,000	\$288,000	(\$438,000)
23	End of Year Balance	\$12,604,003	\$7,268,000	\$7,486,000	\$7,212,000	\$7,448,000	\$7,693,000	\$7,948,000	\$8,214,000	\$8,490,000	\$8,778,000	\$8,340,000
24	Reserve Target	\$6,985,000	\$7,268,000	\$7,486,000	\$7,212,000	\$7,448,000	\$7,693,000	\$7,948,000	\$8,214,000	\$8,490,000	\$8,778,000	\$8,340,000
25	Available Cash	\$5,619,003	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debt Coverage Calculations												
26	Revenue Available for Debt Service	\$8,055,108	\$8,353,000	\$9,361,000	\$12,530,000	\$13,435,000	\$14,411,000	\$15,437,000	\$16,517,000	\$17,662,000	\$18,849,000	\$20,109,000
27	Total Yearly Parity Debt Payment	\$1,070,000	\$1,070,000	\$1,070,000	\$1,070,000	\$1,070,000	\$1,070,000	\$1,070,000	\$1,070,000	\$1,070,000	\$1,070,000	\$333,000
28	Debt Coverage Ratio (without Impac	7.53	7.81	8.75	11.71	12.56	13.47	14.43	15.44	16.51	17.62	60.39

Fund 1 - Major Maintenance Reserve

Cash Flow Proforma (2 of 3)

Schedule 4

	Budget FY 2022	Forecast FY 2023	Forecast FY 2024	Forecast FY 2025	Forecast FY 2026	Forecast FY 2027	Forecast FY 2028	Forecast FY 2029	Forecast FY 2030	Forecast FY 2031	Forecast FY 2032
1 Beginning Balance	\$38,574,000	\$24,039,000	\$16,186,000	\$5,074,000	\$6,508,000	\$9,505,000	\$11,949,000	\$13,872,000	\$15,761,000	\$15,572,000	\$15,958,000
Revenues											
2 Transfer in from Operating Fund	\$0	\$12,454,000	\$7,989,000	\$11,765,000	\$12,145,000	\$13,081,000	\$14,072,000	\$15,121,000	\$16,236,000	\$17,413,000	\$20,132,000
3 Interest Earnings	\$623,000	\$248,000	\$167,000	\$52,000	\$67,000	\$98,000	\$123,000	\$143,000	\$163,000	\$161,000	\$165,000
4 Total Revenues	623,000	12,702,000	8,156,000	11,817,000	12,212,000	13,179,000	14,195,000	15,264,000	16,399,000	17,574,000	20,297,000
Expenditures											
5 SSC-Funded Capital Spending	15,158,000	20,555,000	19,268,000	10,383,000	9,215,000	10,735,000	12,272,000	13,375,000	16,588,000	17,188,000	17,806,000
6 Surplus/(Shortfall)	(14,535,000)	(7,853,000)	(11,112,000)	1,434,000	2,997,000	2,444,000	1,923,000	1,889,000	(189,000)	386,000	2,491,000
7 Reserve Ending Balance	\$24,039,000	\$16,186,000	\$5,074,000	\$6,508,000	\$9,505,000	\$11,949,000	\$13,872,000	\$15,761,000	\$15,572,000	\$15,958,000	\$18,449,000
8 <i>Reserve Target</i>	\$19,442,000	\$19,442,000	\$19,442,000	\$19,442,000	\$19,442,000	\$19,442,000	\$19,442,000	\$19,442,000	\$19,442,000	\$19,442,000	\$19,442,000
9 <i>Available Cash</i>	\$4,597,000	(\$3,256,000)	(\$14,368,000)	(\$12,934,000)	(\$9,937,000)	(\$7,493,000)	(\$5,570,000)	(\$3,681,000)	(\$3,870,000)	(\$3,484,000)	(\$993,000)

Fund 2- Capacity Fund

Cash Flow Proforma (3 of 3)

	Budget FY 2022	Forecast FY 2023	Forecast FY 2024	Forecast FY 2025	Forecast FY 2026	Forecast FY 2027	Forecast FY 2028	Forecast FY 2029	Forecast FY 2030	Forecast FY 2031	Forecast FY 2032
1 Beginning Balance	\$12,431,000	\$16,236,000	\$18,384,000	\$14,113,000	\$10,542,000	\$9,339,000	\$7,945,000	\$6,495,000	\$6,479,000	\$4,526,000	\$2,495,000
Revenues											
2 Capacity Charge Revenue	\$4,034,000	\$2,737,000	\$3,937,000	\$4,371,000	\$3,254,000	\$3,241,000	\$3,241,000	\$3,241,000	\$3,241,000	\$3,241,000	\$3,241,000
3 Capacity Surcharge Revenue	\$176,000	\$176,000	\$176,000	\$176,000	\$176,000	\$176,000	\$176,000	\$176,000	\$176,000	\$176,000	\$176,000
4 Interest Earnings	\$128,000	\$168,000	\$190,000	\$146,000	\$109,000	\$96,000	\$82,000	\$67,000	\$67,000	\$47,000	\$26,000
5 Total Revenues	4,338,000	3,081,000	4,303,000	4,693,000	3,539,000	3,513,000	3,499,000	3,484,000	3,484,000	3,464,000	3,443,000
Expenditures											
6 Capacity Charge-Funded Capital	\$450,000	\$850,000	\$8,491,000	\$8,181,000	\$4,659,000	\$4,824,000	\$4,866,000	\$3,417,000	\$5,354,000	\$5,412,000	\$5,472,000
7 Existing Debt Service	\$83,000	\$83,000	\$83,000	\$83,000	\$83,000	\$83,000	\$83,000	\$83,000	\$83,000	\$83,000	\$83,000
8 Total Expenses	533,000	933,000	8,574,000	8,264,000	4,742,000	4,907,000	4,949,000	3,500,000	5,437,000	5,495,000	5,555,000
9 Surplus/(Shortfall)	3,805,000	2,148,000	(4,271,000)	(3,571,000)	(1,203,000)	(1,394,000)	(1,450,000)	(16,000)	(1,953,000)	(2,031,000)	(2,112,000)
10 Capital Fund Ending Balance	\$16,236,000	\$18,384,000	\$14,113,000	\$10,542,000	\$9,339,000	\$7,945,000	\$6,495,000	\$6,479,000	\$4,526,000	\$2,495,000	\$383,000

Schedule 5 - Proposed 5-Year Rate Schedule

Effective Date:	July 1, 2022	July 1, 2023	July 1, 2024	July 1, 2025	July 1, 2026	
Residential (monthly) ¹	\$45.02	\$47.27	\$49.63	\$51.62	\$53.68	per dwelling unit
Commercial						
Monthly Account Charge and Regular Strength Volumetric ² or High Strength Volumetric ³	\$11.97	\$12.57	\$13.20	\$13.73	\$14.28	per account per mo.
Regular Strength Volumetric ² or High Strength Volumetric ³	\$3.60	\$3.78	\$3.97	\$4.13	\$4.30	per HCF
High Strength Volumetric ³	\$6.23	\$6.54	\$6.87	\$7.14	\$7.43	per HCF
Case-by-Case ⁴						
Monthly Account Charge and Volumetric (direct connect) ⁵ or Volumetric (through local collection) and BOD (by weight) and TSS (by weight)	\$11.97	\$12.57	\$13.20	\$13.73	\$14.28	per account per mo.
Volumetric (direct connect) ⁵ or Volumetric (through local collection) and BOD (by weight) and TSS (by weight)	\$2,994.65	\$3,144.39	\$3,301.61	\$3,433.67	\$3,571.02	per MG
Volumetric (through local collection) and BOD (by weight) and TSS (by weight)	\$4,398.40	\$4,618.32	\$4,849.24	\$5,043.21	\$5,244.94	per MG
BOD (by weight) and TSS (by weight)	\$503.54	\$528.72	\$555.16	\$577.37	\$600.46	per 1000 lbs
TSS (by weight)	\$255.55	\$268.33	\$281.75	\$293.02	\$304.74	per 1000 lbs
Travis Air Force Base (volumetric)	\$2.90	\$3.05	\$3.20	\$3.33	\$3.46	per HCF

¹ Single-family dwelling, multiple-family dwelling, trailer courts, and mobile home parks

² Offices, retail, stores, hotels, motels, schools, churches, hospitals, nursing homes, laundromats, dry cleaning, establishments, bars without dining facilities, car washes without auto steam cleaning facilities, other commercial or industrial customers not treated high strength or as case-by-case.

³ Commercial laundries, restaurants and bars with dining facilities, service stations with holding tank dumping facilities, car washes with auto steam cleaning facilities, bakeries and food processing, other commercial or industrial customers with concentrations greater than 200 milligrams per liter BOD or 265 milligrams per liter TSS, but less than the concentrations specified for case-by-case.

⁴ All commercial or industrial customers other than those specified as regular or high strength with flows greater than 0.005 MGD, or with concentrations greater than 65 mg/l BOD or 1,000 mg/l TSS; all intermittent customers; and any commercial or industrial customer requesting and paying the full cost of metering and testing.

⁵ For customers that deliver wastewater directly to collection system pipes of 12" or greater.

Schedule 6

GOVERNMENT CODE SECTIONS 66013, 66016, 66022, AND 66023

66013. (a) Notwithstanding any other provision of law, when a local agency imposes fees for water connections or sewer connections, or imposes capacity charges, those fees or charges shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed, unless a question regarding the amount of the fee or charge imposed in excess of the estimated reasonable cost of providing the services or materials is submitted to, and approved by, a popular vote of two-thirds of those electors voting on the issue.

(b) As used in this section:

(1) "Sewer connection" means the connection of a structure or project to a public sewer system.

(2) "Water connection" means the connection of a structure or project to a public water system, as defined in subdivision (f) of Section 116275 of the Health and Safety Code.

(3) "Capacity charge" means a charge for facilities in existence at the time a charge is imposed or charges for new facilities to be constructed in the future that are of benefit to the person or property being charged.

(4) "Local agency" means a local agency as defined in Section 66000.

(5) "Fee" means a fee for the physical facilities necessary to make a water connection or sewer connection, including, but not limited to, meters, meter boxes, and pipelines from the structure or project to a water distribution line or sewer main, and that does not exceed the estimated reasonable cost of labor and materials for installation of those facilities.

(c) A local agency receiving payment of a charge as specified in paragraph (3) of subdivision (b) shall deposit it in a separate capital facilities fund with other charges received, and account for the charges in a manner to avoid any commingling with other moneys of the local agency, except for investments, and shall expend those charges solely for the purposes for which the charges were collected.

Any interest income earned from the investment of moneys in the capital facilities fund shall be deposited in that fund.

(d) For a fund established pursuant to subdivision (c), a local agency shall make available to the public, within 180 days after the last day of each fiscal year, the following information for that fiscal year:

(1) A description of the charges deposited in the fund.

(2) The beginning and ending balance of the fund and the interest earned from investment of moneys in the fund.

(3) The amount of charges collected in that fiscal year.

(4) An identification of all of the following:

(A) Each public improvement on which charges were expended and the amount of the expenditure for each improvement, including the percentage of the total cost of the public improvement that was funded with those charges if more than one source of funding was used.

(B) Each public improvement on which charges were expended that was completed during that fiscal year.

(C) Each public improvement that is anticipated to be undertaken in the following fiscal year.

(5) A description of each interfund transfer or loan made from the capital facilities fund. The information provided, in the case of an interfund transfer, shall identify the public improvements on which the transferred moneys are, or will be, expended. The information, in the case of an interfund loan, shall include the date on which the loan will be repaid, and the rate of interest that the fund will receive on the loan.

(e) The information required pursuant to subdivision (d) may be included in the local agency's annual financial report.

(f) The provisions of subdivisions (c) and (d) shall not apply to any of the following:

(1) Moneys received to construct public facilities pursuant to a contract between a local agency and a person or entity, including, but not limited to, a reimbursement agreement pursuant to Section 66003.

(2) Charges that are used to pay existing debt service or which are subject to a contract with a trustee for bondholders that requires a different accounting of the charges, or charges that are used to reimburse the local agency or to reimburse a person or entity who advanced funds under a reimbursement agreement or contract for facilities in existence at the time the charges are collected.

(3) Charges collected on or before December 31, 1998.

(g) Any judicial action or proceeding to attack, review, set aside, void, or annul the ordinance, resolution, or motion imposing a fee or capacity charge subject to this section shall be brought pursuant to Section 66022.

(h) Fees and charges subject to this section are not subject to the provisions of Chapter 5 (commencing with Section 66000), but are subject to the provisions of Sections 66016, 66022, and 66023.

(i) The provisions of subdivisions (c) and (d) shall only apply to capacity charges levied pursuant to this section.

66016. (a) Prior to levying a new fee or service charge, or prior to approving an increase in an existing fee or service charge, a local agency shall hold at least one open and public meeting, at which oral or written presentations can be made, as part of a regularly scheduled meeting. Notice of the time and place of the meeting, including a general explanation of the matter to be considered, and a statement that the data

required by this section is available, shall be mailed at least 14 days prior to the meeting to any interested party who files a written request with the local agency for mailed notice of the meeting on new or increased fees or service charges. Any written request for mailed notices shall be valid for one year from the date on which it is filed unless a renewal request is filed. Renewal requests for mailed notices shall be filed on or before April 1 of each year. The legislative body may establish a reasonable annual charge for sending notices based on the estimated cost of providing the service. At least 10 days prior to the meeting, the local agency shall make available to the public data indicating the amount of cost, or estimated cost, required to provide the service for which the fee or service charge is levied and the revenue sources anticipated to provide the service, including General Fund revenues. Unless there has been voter approval, as prescribed by Section 66013 or 66014, no local agency shall levy a new fee or service charge or increase an existing fee or service charge to an amount which exceeds the estimated amount required to provide the service for which the fee or service charge is levied. If, however, the fees or service charges create revenues in excess of actual cost, those revenues shall be used to reduce the fee or service charge creating the excess.

(b) Any action by a local agency to levy a new fee or service charge or to approve an increase in an existing fee or service charge shall be taken only by ordinance or resolution. The legislative body of a local agency shall not delegate the authority to adopt a new fee or service charge, or to increase a fee or service charge.

(c) Any costs incurred by a local agency in conducting the meeting or meetings required pursuant to subdivision (a) may be recovered from fees charged for the services which were the subject of the meeting.

(d) This section shall apply only to fees and charges as described in Sections 51287, 56383, 57004, 65104, 65456, 65863.7, 65909.5, 66013, 66014, and 66451.2 of this code, Sections 17951, 19132.3, and 19852 of the Health and Safety Code, Section 41901 of the Public Resources Code, and Section 21671.5 of the Public Utilities Code.

(e) Any judicial action or proceeding to attack, review, set aside, void, or annul the ordinance, resolution, or motion levying a fee or service charge subject to this section shall be brought pursuant to Section 66022.

66022. (a) Any judicial action or proceeding to attack, review, set aside, void, or annul an ordinance, resolution, or motion adopting a new fee or service charge, or modifying or amending an existing fee or service charge, adopted by a local agency, as defined in Section 66000, shall be commenced within 120 days of the effective date of the ordinance, resolution, or motion.

If an ordinance, resolution, or motion provides for an automatic adjustment in a fee or service charge, and the automatic adjustment results in an increase in the amount of a fee or service charge, any action or proceeding to attack, review, set aside, void, or annul the increase shall be commenced within 120 days of the effective date of the increase.

(b) Any action by a local agency or interested person under this section shall be brought pursuant to Chapter 9 (commencing with Section 860) of Title 10 of Part 2 of the Code of Civil Procedure.

(c) This section shall apply only to fees, capacity charges, and service charges described in and subject to Sections 66013 and 66014.

66023. (a) Any person may request an audit in order to determine whether any fee or charge levied by a local agency exceeds the amount reasonably necessary to cover the cost of any product or service provided by the local agency. If a person makes that request, the legislative body of the local agency may retain an independent auditor to conduct an audit to determine whether the fee or charge is reasonable.

(b) Any costs incurred by a local agency in having an audit conducted by an independent auditor pursuant to subdivision (a) may be recovered from the person who requests the audit.

(c) Any audit conducted by an independent auditor to determine whether a fee or charge levied by a local agency exceeds the amount reasonably necessary to cover the cost of providing the product or service shall conform to generally accepted auditing standards.

(d) The procedures specified in this section shall be alternative and in addition to those specified in Section 54985.

(e) The Legislature finds and declares that oversight of local agency fees is a matter of statewide interest and concern. It is, therefore, the intent of the Legislature that this chapter shall supersede all conflicting local laws and shall apply in charter cities.

(f) This section shall not be construed as granting any additional authority to any local agency to levy any fee or charge which is not otherwise authorized by another provision of law, nor shall its provisions be construed as granting authority to any local agency to levy a new fee or charge when other provisions of law specifically prohibit the levy of a fee or charge.