

Report for:  
**City of Arroyo Grande**

300 E Branch Street  
Arroyo Grande, CA 93420  
(805) 473-5400



# Report on Water and Wastewater Rate Study

Submitted By:

## **Tuckfield & Associates**

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FINANCIAL CONSULTING  
**TUCKFIELD & ASSOCIATES**  
MANAGEMENT CONSULTING

**December 2021**

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# Tuckfield & Associates

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December 7, 2021

Mr. Shane Taylor  
Utilities Manager  
City of Arroyo Grande  
300 E Branch Street  
Arroyo Grande, CA 93420

Dear Mr. Taylor:

I am pleased to present this Water and Wastewater Rate Study (Study) report for the City of Arroyo Grande (City). The water and wastewater water rates presented in this report have been developed based on cost of service principles and industry methods that result in fair and equitable rates for the users of the systems in accordance with Proposition 218.

This study included a review and analysis of the water and wastewater revenue and revenue requirements, number of customers, volumes, and current rate structure. The major objectives of the Study include the following.

- Generate positive levels of income in the Study period
- Maintain operating and capital reserves at or greater than target levels
- Maintain debt service coverage ratios at or greater than the minimum required
- Meet annual capital replacement spending from the water and wastewater rates and charges

This report presents the findings and recommendations for the financial plans and rates for the City's water and wastewater systems. Tables and figures throughout the report are provided to demonstrate the calculations.

It has been a pleasure to work with City staff during the performance of this study. If there are any questions, please contact me at (949) 760-9454.

Very Truly Yours,

TUCKFIELD & ASSOCIATES



G. Clayton Tuckfield  
President/Project Consultant

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# Water and Wastewater Rate Study

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# Executive Summary

The City of Arroyo Grande (City) retained Tuckfield & Associates to conduct a comprehensive Water and Wastewater Rate Study (Study). The objectives of the Study included determining water and wastewater rates for a five-year period through development of pro forma statements of revenues and revenue requirements for each system and through analyses to determine the costs of providing service. A second objective was to provide recommendations to improve the equity among ratepayers while incorporating local requirements and state laws.

## Enterprise Financial Plans

Forward-looking financial plans were developed for FY 2021-22 to FY 2025-26 (the “Study Period”) for each of the water and wastewater systems. The amount of revenue needed to recover the projected revenue requirements was determined for FY 2021-22 for each system. This revenue was then increased annually by various percentages that will create sustainable enterprises for each system over the Study Period. A summary of the proposed annual revenue increases for the water and wastewater systems are provided in Table ES-1.

Table ES-1  
Proposed Revenue Increases

Utility System	April 19 FY 21-22 [1]	January 1 FY 22-23	January 1 FY 23-24	January 1 FY 24-25	January 1 FY 25-26
<b>Water System (with CCB [2])</b>	6.4%	6.4%	6.4%	6.4%	6.4%
<b>Water System (without CCB [2])</b>	4.0%	4.0%	4.0%	4.0%	4.0%
<b>Wastewater System</b>	8.3%	8.3%	8.3%	8.3%	8.3%

[1] Increases this year may not match Tables ES-5 and ES-9 due to rate structure change and cost of service adjustments.

[2] Central Coast Blue project.

For the water system, the revenue increases were determined with and without the Central Coast Blue (CCB) project. CCB is a water sustainability project that will create a new, high quality, and reliable water supply for the City of Arroyo Grande and other agencies. The CCB project will provide a new advanced water purification facility to create a high-quality water source to supplement local supplies. The CCB project will allow these communities to have a more sustainable groundwater supply especially during multiple dry years.

The percentages in Table ES-1 are an indication of the increases needed in user charges of the utility systems. The increases are necessary to maintain the financial health of each system and to provide funding for the operation and maintenance (O&M) expenses, capital funding needs, debt service, and reserve requirements.

## Proposed Water Rates with Central Coast Blue

### Proposed Water Rate Structure and Rates

The City provided water billing information that was analyzed to determine user class characteristics and to project water revenue. The results indicate that total water consumption has declined from a high of over 1.4

million hundred cubic feet (HCF) in FY 2013-14 to about 1.0 million HCF in FY 2020-21. For the Single-family Residential (SFR) and Multifamily Residential (MFR) classifications, the decline in consumption resulted in a reduction of water sold in all tiers. In addition, the existing SFR Tier 2 break point that was established as the summer peak average consumption has decreased from 36 HCF bi-monthly to 22 HCF bi-monthly.

It is recommended that the tier break points be changed to reflect the new SFR and MFR consumption patterns. It is proposed that Tier 1 be revised from zero to 18 HCF to zero to 10 HCF, reflecting current indoor water consumption aggregated over the service area and not by individual home.

$$\text{Tier 1} = 2.31 \text{ pph} * 55 \text{ gpcd} * \frac{365 \text{ days}}{\text{year}} * \frac{1 \text{ HCF}}{748 \text{ gal}} * \frac{1 \text{ year}}{6 \text{ bills}} = \sim 10 \text{ HCF}$$

*pph* = persons per household from California Department of Finance estimates for 2021

*gpcd* = gallons per capita per day

It is further recommended that the upper Tier 2 break point be revised from 36 HCF to 22 HCF. The recommended SFR and MFR Tier restructuring is provided in Table ES-2 below.

Table ES-2  
Single-family Residential Current and Proposed Tiers

Tier	Current SFR Tiers	Current MFR Tiers	Proposed SFR and MFR Tiers
Tier 1	0 - 18 HCF	0 - 18 HCF	0 - 10 HCF
Tier 2	19 - 36 HCF	11 - 27 HCF	11 - 22 HCF
Tier 3	Over 36 HCF	Over 27 HCF	Over 22 HCF

The proposed water rate structure and rates with CCB are provided in Table ES-3 for implementation beginning April 19, 2022 and each January 1 thereafter for the Study Period.

Table ES-3  
Proposed Water Fixed and Variable Charges with Central Coast Blue

	Current Rate	April 19, FY 21-22	January 1, FY 22-23	January 1, FY 23-24	January 1, FY 24-25	January 1, FY 25-26
Meter Size		Fixed Charge (\$ per month)				
5/8"	\$29.51	\$27.83	\$29.61	\$31.51	\$33.53	\$35.68
3/4"	\$31.67	\$30.57	\$32.53	\$34.61	\$36.83	\$39.19
1"	\$38.12	\$38.78	\$41.26	\$43.90	\$46.71	\$49.70
1.5"	\$46.73	\$49.73	\$52.91	\$56.30	\$59.90	\$63.73
2"	\$70.41	\$79.83	\$84.94	\$90.38	\$96.16	\$102.31
3"	\$244.74	\$301.53	\$320.83	\$341.36	\$363.21	\$386.46
4"	\$309.31	\$383.64	\$408.19	\$434.31	\$462.11	\$491.69
6"	\$459.96	\$575.23	\$612.04	\$651.21	\$692.89	\$737.23
8"	\$632.14	\$794.19	\$845.02	\$899.10	\$956.64	\$1,017.86
Service Fee per Add'l Unit	\$7.99	\$8.12	\$8.64	\$9.20	\$9.78	\$10.40
Fireline Size						
2"	\$3.74	\$4.49	\$4.78	\$5.09	\$5.42	\$5.77
3"	\$10.88	\$13.06	\$13.90	\$14.79	\$15.74	\$16.75
4"	\$23.18	\$27.82	\$29.60	\$31.49	\$33.51	\$35.65
6"	\$67.33	\$80.82	\$85.99	\$91.49	\$97.35	\$103.58
8"	\$143.48	\$172.23	\$183.25	\$194.98	\$207.46	\$220.74
10"	\$258.03	\$309.73	\$329.55	\$350.64	\$373.08	\$396.96
		Variable Charge (\$ per HCF)				
<b>Single-Family</b>						
Tier 1 - 0 to 18 units	\$3.78					
Tier 2 - 19 to 36 units	\$4.16					
Tier 3 - Over 36	\$5.55					
Tier 1 - 0 to 10 units		\$4.06	\$4.32	\$4.60	\$4.89	\$5.20
Tier 2 - 11 to 22 units		\$4.83	\$5.14	\$5.47	\$5.82	\$6.19
Tier 3 - Over 22		\$4.94	\$5.26	\$5.60	\$5.96	\$6.34
<b>Multifamily</b>						
Tier 1 - 0 to 18 units	\$3.78					
Tier 2 - 19 to 27 units	\$4.16					
Tier 3 - Over 27	\$5.55					
Tier 1 - 0 to 10 units		\$4.06	\$4.32	\$4.60	\$4.89	\$5.20
Tier 2 - 11 to 22 units		\$4.83	\$5.14	\$5.47	\$5.82	\$6.19
Tier 3 - Over 22		\$4.94	\$5.26	\$5.60	\$5.96	\$6.34
<b>Commercial</b>	\$3.95	\$4.40	\$4.68	\$4.98	\$5.30	\$5.64
<b>Irrigation</b>	\$4.21	\$4.97	\$5.29	\$5.63	\$5.99	\$6.37
<b>Hydrant</b>	\$6.13	\$7.92	\$8.43	\$8.97	\$9.54	\$10.15
<b>Wheeling</b>	\$2.04	\$2.37	\$2.52	\$2.68	\$2.85	\$3.03

## Water Bill Impacts with Central Coast Blue

Table ES-4 presents the impacts to SFR bills from the implementation of the proposed April 19, 2022 water rates with CCB. For a SFR customer using the average consumption of 19 HCF bi-monthly, the bill will increase from \$131.22 to \$139.73, an increase of \$8.51, or 6.5 percent.

Table ES-4

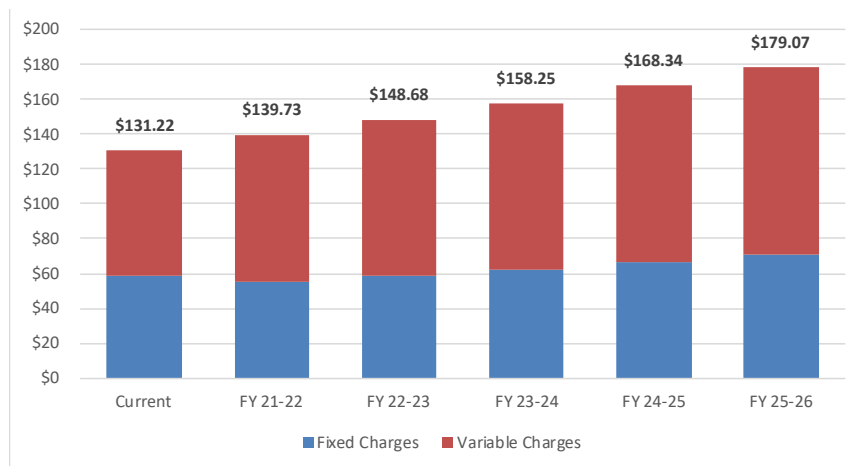
Comparison of Current Single-family Residential Bi-Monthly Bill with 5/8 -inch Meter with Proposed Bill Using April 2022 Water Rates with Central Coast Blue

Description	Use (HCF)	Current Bill			Proposed April 19, 2022 Bill				
		Service Charge	Volume Charge	Current Bill	Service Charge	Volume Charge	Proposed Bill	Dollar Difference	Percent Change
	0	\$59.02	\$0.00	\$59.02	\$55.66	\$0.00	\$55.66	(\$3.36)	-5.7%
Very Low	5	\$59.02	\$18.90	\$77.92	\$55.66	\$20.30	\$75.96	(\$1.96)	-2.5%
Low	10	\$59.02	\$37.80	\$96.82	\$55.66	\$40.60	\$96.26	(\$0.56)	-0.6%
Median	15	\$59.02	\$56.70	\$115.72	\$55.66	\$64.75	\$120.41	\$4.69	4.1%
Average	19	\$59.02	\$72.20	\$131.22	\$55.66	\$84.07	\$139.73	\$8.51	6.5%
High	30	\$59.02	\$117.96	\$176.98	\$55.66	\$138.08	\$193.74	\$16.76	9.5%
Very High	50	\$59.02	\$220.62	\$279.64	\$55.66	\$236.88	\$292.54	\$12.90	4.6%

Table ES-5 provides how SFR bills with a 5/8-inch meter using 19 HCF bi-monthly will escalate over time with implementation of the proposed water rates from Table ES-3.

Table ES-5

Single-family Residential Bi-monthly Water Bill Impacts with 5/8-inch Meter at 19 HCF Bi-monthly with Central Coast Blue

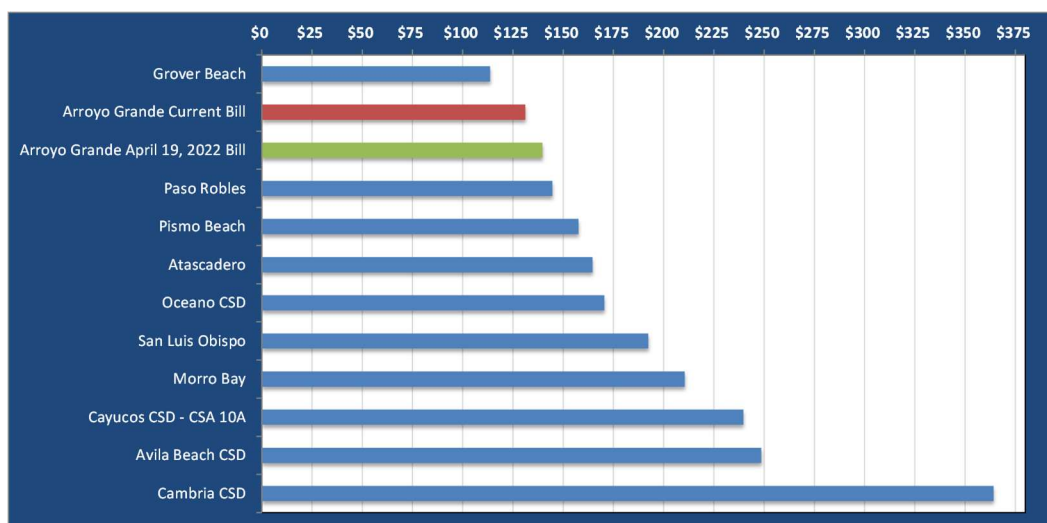


SFR Charges	Current	Proposed				
		FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
Fixed Charges	\$59.02	\$55.66	\$59.22	\$63.02	\$67.06	\$71.36
Variable Charges	\$72.20	\$84.07	\$89.46	\$95.23	\$101.28	\$107.71
Total Charges	\$131.22	\$139.73	\$148.68	\$158.25	\$168.34	\$179.07
Dollar Change		\$8.51	\$8.95	\$9.57	\$10.09	\$10.73
Percent Change		6.5%	6.4%	6.4%	6.4%	6.4%

Chart ES-1 has been prepared to compare Arroyo Grande's average SFR water bill with those of other communities at the same consumption. The chart indicates that with the April 2022 rates, an Arroyo Grande SFR customer with a bi-monthly consumption of 19 HCF will experience a bill that is among the lowest of the communities listed.

Chart ES-1

Single-family Residential Bi-Monthly Water Bills of Local Communities Using 19 HCF with Central Coast Blue



Note: Above table uses water rates in effect August 2021. Arroyo Grande April 2022 bill is based on the rate structure and rates in Table ES-3. Pismo Beach includes Special Water Tax.

## Water Bill Impacts without Central Coast Blue

Table ES-6 provides a comparison of the SFR bi-monthly bills with and without the CCB project at the average SFR consumption while also showing the dollar difference in the bills. The average SFR customer with a 5/8-inch meter using 19 HCF will pay \$2.27 more bi-monthly with the CCB project beginning April 19, 2022 and \$18.23 more bi-monthly beginning January 1, 2026.

Table ES-6

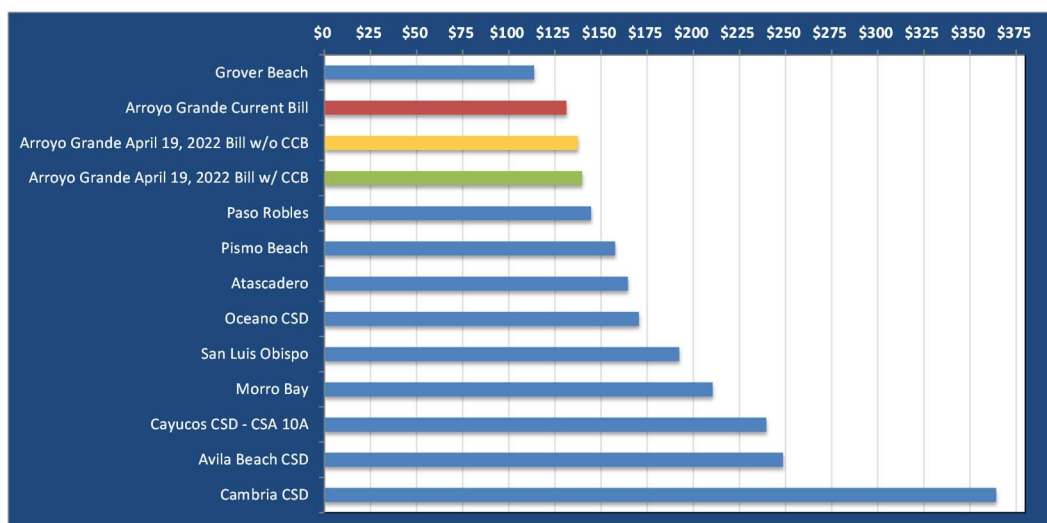
Impacts to Single-family Residential Bi-monthly Water Bills with and without Central Coast Blue at 19 HCF

Description	April 19 FY 21-22	January 1 FY 22-23	January 1 FY 23-24	January 1 FY 24-25	January 1 FY 25-26
Average Bill w/o CCB	\$137.46	\$142.96	\$148.63	\$154.59	\$160.84
Average Bill with CCB	\$139.73	\$148.68	\$158.25	\$168.34	\$179.07
Difference	\$2.27	\$5.72	\$9.62	\$13.75	\$18.23

Chart ES-2 provides a comparison of SFR bi-monthly bills with and without CCB to bills of other communities at the same consumption. The chart shows that Arroyo Grande SFR bills remains among the lowest communities listed with or without CCB.

Chart ES-2

Single-family Residential Bi-Monthly Water Bills of Local Communities Using 19 HCF with and without Central Coast Blue



Note: Above table uses water rates in effect August 2021. Arroyo Grande April 2022 bill is based on the rate structure and rates in Table 24. Pismo Beach includes Special Water Tax.

## Proposed Wastewater Rates

### Proposed Wastewater Rate Structure and Rates

It is recommended that the current wastewater rate structure be retained for the proposed wastewater rates. The current rate structure places an emphasis on recovering the City's wastewater costs on a volumetric basis. Table ES-7 presents the wastewater rates for the next five years.

Table ES-7

#### Proposed Wastewater Fixed and Variable Charges

Meter Size	Current	April 19, FY 21-22	January 1, FY 22-23	January 1, FY 23-24	January 1, FY 24-25	January 1, FY 25-26
Fixed Charge (\$ per month)						
All Customers [1]	\$2.40	\$2.62	\$2.84	\$3.08	\$3.34	\$3.62
Variable Charge (\$ per HCF) [2]						
Single-family Residential	\$0.67	\$0.72	\$0.78	\$0.84	\$0.91	\$0.99
Multifamily Residential	\$0.94	\$1.04	\$1.12	\$1.21	\$1.31	\$1.42
Non-Residential	\$1.32	\$1.40	\$1.52	\$1.65	\$1.79	\$1.94

[1] Fixed charge per month per account and to each additional unit.

[2] Charged on the basis of water consumption read through the meter.

## Wastewater Bill Impacts

As shown in Table ES-8, a SFR customer using 19 HCF bi-monthly will have a wastewater bill that will increase from \$68.49 to \$69.88, an increase of \$1.39 or 2.0 percent. The current and proposed bills include the current South San Luis Obispo County Sanitation District (SSLOCSD) wastewater treatment charge of \$25.48 monthly.

Table ES-8

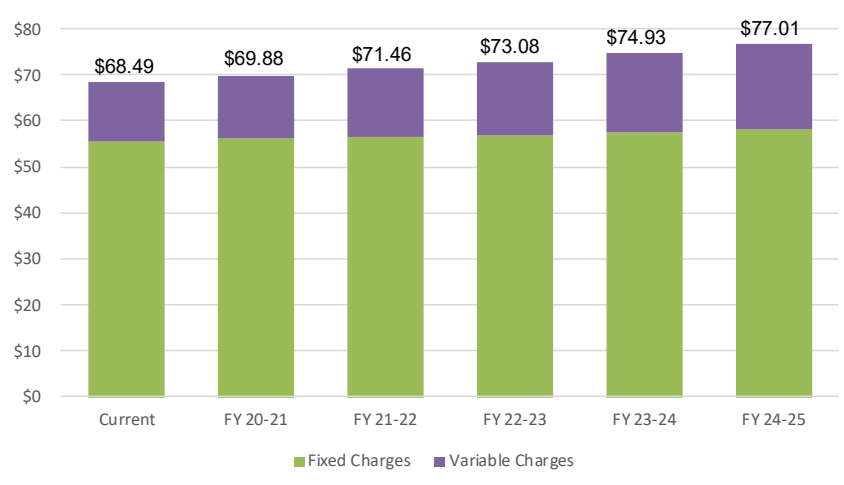
Comparison of Current Single-family Residential Bi-monthly Wastewater Bill with Proposed Bill Using April 2022 Wastewater Rates

Description	Use (HCF)	Service Charge	San District Charge	Volume Charge	Current Bill	Service Charge	San District Charge	Volume Charge	Proposed Bill	Dollar Difference	Percent Change
	0	\$4.80	\$50.96	\$0.00	\$55.76	\$5.24	\$50.96	\$0.00	\$56.20	\$0.44	0.8%
Very Low	5	\$4.80	\$50.96	\$3.35	\$59.11	\$5.24	\$50.96	\$3.60	\$59.80	\$0.69	1.2%
Low	10	\$4.80	\$50.96	\$6.70	\$62.46	\$5.24	\$50.96	\$7.20	\$63.40	\$0.94	1.5%
Median	13	\$4.80	\$50.96	\$8.71	\$64.47	\$5.24	\$50.96	\$9.36	\$65.56	\$1.09	1.7%
Average	19	\$4.80	\$50.96	\$12.73	\$68.49	\$5.24	\$50.96	\$13.68	\$69.88	\$1.39	2.0%
High	30	\$4.80	\$50.96	\$20.10	\$75.86	\$5.24	\$50.96	\$21.60	\$77.80	\$1.94	2.6%
Very High	50	\$4.80	\$50.96	\$33.50	\$89.26	\$5.24	\$50.96	\$36.00	\$92.20	\$2.94	3.3%

Table ES-9 below provides how wastewater bills will escalate over the next five years with the implementation of the wastewater rates from Table ES-7. The table includes charges from SSLOCSD.

Table ES-9

Single-family Residential Bi-monthly Wastewater Bill Impacts at 19 HCF



SFR Charges	Current	Proposed				
		FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
Fixed Charges	\$4.80	\$5.24	\$5.68	\$6.16	\$6.68	\$7.24
Variable Charges	\$12.73	\$13.68	\$14.82	\$15.96	\$17.29	\$18.81
SSLOCSD Charge	\$50.96	\$50.96	\$50.96	\$50.96	\$50.96	\$50.96
Total Charges	\$68.49	\$69.88	\$71.46	\$73.08	\$74.93	\$77.01
Dollar Change		\$1.39	\$1.58	\$1.62	\$1.85	\$2.08
Percent Change		2.0%	2.3%	2.3%	2.5%	2.8%

Note: Assumes constant South San Luis Obispo County Sanitation District (SSLOCSD) charges.



The total bill for a customer receiving wastewater service from the City is the sum of the City's charges and the SSLOCSD treatment charge. The percentage increases for the City's wastewater rates, which excludes the SSLOCSD charges, are shown in table ES-1. When the City's charges for residential wastewater service are combined with the SSLOCSD charge, the wastewater bill increases by the percentages shown in Table ES-9.

Chart ES-3 has been prepared to compare Arroyo Grande's average SFR wastewater bill with those of other communities at 19 HCF. The chart indicates that Arroyo Grande's SFR wastewater bill is among the lowest of the communities listed.

Chart ES-3

Single-family Residential Bi-Monthly Wastewater Bills of Local Communities at 19 HCF



Note: Above table uses wastewater rates in effect August 2021. Arroyo Grande April 2022 bill is based on the rate structure and rates in Table ES-7.

# Introduction

The City of Arroyo Grande (City) retained Tuckfield & Associates to conduct a comprehensive Water and Wastewater Rate Study (Study) for its water and wastewater enterprise systems. This Study develops pro forma statements of revenues and revenue requirements for each enterprise, determines the cost of providing service to customers, and designs new water and wastewater rates and charges for implementation.

## Background

The City of Arroyo Grande was incorporated as a general law City in 1911 and is located in San Luis Obispo County along the Arroyo Grande Creek, more than 180 miles northwest of Los Angeles. The City provides water and wastewater service to a 5.5 square mile service area serving a population of approximately 17,900. Water and wastewater revenues and expenses are accounted for separately in enterprise funds of the City.

The water utility obtains its water supply from nine wells and from surface water obtained from the Lopez Reservoir Project. Groundwater is pumped from the Santa Maria Ground Water Basin. Based on the current Groundwater Management Agreement, the City has an entitlement to 1,323 acre-feet. Groundwater is also pumped from the Pismo Formation and the current pumping capability from this source is 160 acre-feet per year.

The City also receives an entitlement of 2,290 acre-feet of surface water from the Lopez Reservoir Project through an August 2000 water supply contract with the San Luis Obispo County Flood Control and Water Conservation District. Surplus water from the reservoir may also be purchased by the City when such supplies are available, though it is not considered to be a firm supply for the City.

Storage facilities presently include six above ground or partially buried water tanks with a storage capacity of approximately 6.7 million gallons. The transmission and distribution system include over 87 miles of pipeline ranging in size from 2-inch to 16-inch, six booster pump stations, approximately 6,755 meters, and about 900 public fire hydrants.

The wastewater system consists of sewer pipe, lift stations, and general utility assets used to collect the City's wastewater. The wastewater is collected through a system of 5 lift stations and sewer pipe ranging in size from 6-inch to 24-inch and is delivered to a trunk sewer provided by the South San Luis Obispo County Sanitation District (SSLOCSD). The City is a member agency of the SSLOCSD to provide wastewater collection (via the trunk sewer), wastewater treatment, and disposal services. Arroyo Grande is one of three member agencies of SSLOCSD receiving similar services.

## Objectives

The objectives of this Study are to (1) review the current and future financial status of each of the water and wastewater enterprises, (2) make any adjustments to the revenue being received to ensure that the financial obligations are being met now and in the future, including adequate reserves and debt service coverage, and (3) design water and wastewater rates that generate the required revenue while being fair and equitable for its customers.

## Scope of the Study

This Study includes the findings and recommendations of analyzing each of the water and wastewater system's financial status and related Capital Improvement Program (CIP) projects. Historical trends were analyzed from data supplied by the City showing the number of customers, volumes, revenue, and revenue requirements.

Revenue requirements of each enterprise includes operation and maintenance (O&M) expense, routine capital outlays, CIP funding, debt service, and additions to reserves. Changing conditions such as additional facilities, system growth, employee additions/reductions, and non-recurring maintenance expenditures are recognized. Inflation for ongoing expenditures is included to reflect cost escalation.

The financial plan and rates developed herein are based on funding of the CIP and estimates of O&M expenses provided by the City. Deviation from the financial plans, construction cost estimates and funding requirements, major operational changes, or other financial policy changes that were not foreseen, may result in the need for lower or higher revenue than anticipated. It is suggested that the City conduct an update to the rate study at least every three years for prudent rate planning.

## Assumptions

Several assumptions were used to conduct the Study for the period FY 2021-22 to FY 2025-26. The assumptions included growth rates in customer accounts and related consumption, interest earnings rate, and expense inflation factors used for projecting revenue and expense. The financial planning assumptions are provided in Table 1.

Table 1  
Assumptions and Planning Factors

Description	Value
<b>Annual Account &amp; Demand growth [1]</b>	
Residential	0.5%
All Other	0.0%
<b>Interest earnings on fund reserves (annual)</b>	0.5%
<b>Cost Escalation</b>	
Personnel Services [2]	3.5%
Benefits	8.0%
Electrical Power	3.0%
Chemicals	3.0%
Purchased Water	3.0%
Personnel Transfers	4.0%
All Other Operations & Maintenance	2.0%
Capital	3.0%

[1] Annualized growth in water accounts is based on historical information provided by staff.

[2] Personnel Services growth in staffing, promotions, and inflation is 3.5% annually.

## Reserve Policy

The City's reserve policy goals were developed in the previous rate study in 2014. The reserve goals provide a means to meet unanticipated reductions in revenues, meet changes in the costs of providing services, provide for fixed asset repair and replacement, natural disaster needs, and other issues. The reserves also provide guidelines to maintain the financial health and stability of the enterprise funds. The reserve types and the amount of reserves used in this Study are discussed below.

### Operating Reserve

The purpose of the Operating Reserve is to provide working capital to meet cash flow needs during normal operations and support the operation, maintenance and administration of the utility. This reserve ensures that operations can continue should there be significant events that impact cash flows. The target balance to be maintained is 90 days (25 percent) of the current annual operating expense budget.

### Capital Reserve

The purpose of the Capital Reserve is to fund future replacement of assets and CIP projects. The Capital reserves are used to fund the construction of the projects as the projects progress and the funds are expended. The reserve target has been established at \$500,000 each for the water and wastewater systems.

### Facility Fund Reserve

Revenue from water and wastewater development fees (capacity charges) are received and set aside to be used only for system expansion. The reserves remain in a separate account and are only spent on capital improvement projects that are specifically identified for which the fee was collected. There are no specific target balances for the funds.

### Lopez Fund Reserve

The Lopez Fund accounts for the revenue and expenditures of the surface water purchases from the County. Revenues are collected through the water rates in sufficient amounts to provide for a transfer of revenue to meet the expenses in the Lopez Fund. A reserve is maintained in the fund at least equal to annual Lopez debt service.

## Beginning Balances and Reserve Targets

As of June 30, 2021, the City's beginning reserve balances are listed in Table 2. The reserves are used in developing the financial plans for the water and wastewater utility systems. The Target Reserves are also provided in the table.

Table 2  
June 30, 2021 Beginning Fund Balances and Reserve Targets

Reserve Type	Water		Wastewater	
	Reserve Balance	Reserve Target	Reserve Balance	Reserve Target
Operating Fund Reserve	\$3,423,733	\$950,000	\$511,446	\$228,000
Capital Reserve	\$500,000	\$500,000	\$500,000	\$500,000
Facility Fund Reserve	\$202,040	\$0	\$334,917	\$0
Lopez Fund	\$1,703,434	\$1,280,100	\$0	\$0
Total	\$5,829,207	\$2,730,100	\$1,346,363	\$728,000

## Water Financial Planning

Financial planning for the water system includes identifying and projecting revenues and revenue requirements for a five-year planning period. This section discusses current water rates, current user classifications, projected revenues and revenue requirements, capital improvement expenditures and financing sources, and proposed revenue adjustments.

### Current Water Rates

Table 3 provides the current water rates of the water system. The current rate structure was established with the City's last rate study in 2014. The water rates consist of fixed and variable charges to residential and non-residential customers. Fixed charges are shown in the table as monthly charges and bills are mailed to customers bi-monthly. All customers are charged a fixed charge that varies by meter size.

Table 3  
Current Water Rates

Meter Size	Meter Fixed Charge (\$/mo)	Fireline Charge (\$/mo)	Customer Class	Variable Variable Rate (\$/HCF)
5/8"	\$29.51		Single-Family	
3/4"	\$31.67		Tier 1 - 0 to 18 units	\$3.78
1"	\$38.12		Tier 2 - 19 to 36 units	\$4.16
1.5"	\$46.73		Tier 3 - Over 36 units	\$5.55
2"	\$70.41	\$3.74	Multifamily	
3"	\$244.74	\$10.88	Tier 1 - 0 to 18 units	\$3.78
4"	\$309.31	\$23.18	Tier 2 - 19 to 27 units	\$4.16
6"	\$459.96	\$67.33	Tier 3 - Over 27 units	\$5.55
8"	\$632.14	\$143.48	Commercial	\$3.95
10"		\$258.03	Irrigation	\$4.21
Service Fee for Add'l Unit	\$7.99		Hydrant	\$6.13
			Wheeling	\$2.04

Single-family residential (SFR) and Multifamily residential (MFR) customers are charged for consumption using a bi-monthly three-tier variable rate structure. Tier 1 for both residential types include usage per dwelling unit from zero to 18 hundred cubic feet (HCF). Tier 2 is consumption from 19 to 36 HCF for SFR and 19 to 27 HCF for MFR. Tier 3 is consumption over Tier 2. Non-residential customers are charged a uniform rate for water consumed.

## Water User Classifications

### Number of Customers

The City classifies water customers as SFR, MFR, Commercial, Irrigation, Hydrant (construction), and Wheeling. SFR customers account for about 90 percent of the total customers served (excluding fire accounts) by the water system. Growth is projected to occur only in SFR and MFR dwelling units at a rate of 0.50 percent annually or about 30 SFR units and 9 MFR units added each year, following the assumptions listed in Table 1. Table 4 provides the historical and projected average number of customers by classification.

Table 4  
Historical and Projected Average Number of Water Customers by Classification

Customer Class	Historical	Projected				
	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
<b>Number of Accounts</b>						
Single-Family [1]	6,007	6,037	6,067	6,097	6,127	6,158
Multifamily	117	118	118	119	119	120
Commercial	434	436	436	436	436	436
Irrigation	165	165	165	165	165	165
Hydrant	1	1	1	1	1	1
Wheeling	1	1	1	1	1	1
<b>Total Accounts</b>	6,725	6,758	6,788	6,819	6,849	6,881
<b>Fire Protection</b>						
Public Fire Hydrants	909	909	909	909	909	909
Private Firelines	132	132	132	132	132	132
<b>Total Fire Protection</b>	1,041	1,041	1,041	1,041	1,041	1,041
<b>Number of Dwelling Units</b>						
Single-Family [1]	6,007	6,037	6,067	6,097	6,127	6,158
Multifamily [1]	1,697	1,705	1,714	1,723	1,731	1,740

[1] Residential accounts/units are forecast to increase based on the assumed growth rate of 0.5% annually.

### Number of Water Meters

Table 5 provides a summary of the current and projected average number of water customers by meter size. The majority of customers have 5/8-inch meters (83 percent) installed at the service location. It is assumed that all new SFR customers will have 1-inch meters installed and this is the minimum size for new meter installations for the City's customer base.

Table 5  
Historical and Projected Average Number of Water Customers by Meter Size

Description	Historical	Projected				
	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
Active Water Meters/Accounts [1]						
5/8"	5,633	5,633	5,633	5,633	5,633	5,633
3/4"	326	326	326	326	326	326
1"	530	561	591	622	652	683
1.5"	127	127	127	127	127	128
2"	77	79	79	79	79	79
3"	23	23	23	23	23	23
4"	5	5	5	5	5	5
6"	4	4	4	4	4	4
<b>Total Accounts</b>	6,725	6,758	6,788	6,819	6,849	6,881

[1] Historical water accounts for FY 20-21 were provided through City billing records.

## Water Sales Volumes

Table 6 provides the historical and projected water sales volume by customer classification. Water sales volumes were projected by recognizing the growth in the number of accounts and the FY 2020-21 water use per customer.

Table 6  
Historical and Projected Water Consumption (in HCF)

Description	Historical	Projected <sup>[1]</sup>				
	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
Single-Family	686,416	689,844	693,272	696,700	700,128	703,671
Multifamily	104,384	104,876	105,430	105,983	106,475	107,029
Commercial	110,492	111,001	111,001	111,001	111,001	111,001
Irrigation	91,207	91,207	91,207	91,207	91,207	91,207
Hydrant	114	114	114	114	114	114
Wheeling	11,000	11,000	11,000	11,000	11,000	11,000
<b>Total Consumption</b>	1,003,613	1,008,042	1,012,024	1,016,005	1,019,925	1,024,022

[1] Forecast assumes that the use per customer from FY 20-21 is applied to the number of customers. Consumption increases due to the growth in customers.

## Water Financial Plan

The financial plan provides the means of analyzing the revenue and revenue requirements of the water system and its impact on reserves as well as the ability to fund on-going O&M expense and capital infrastructure requirements. This section of the Report discusses the projection of revenue, O&M expenses, capital

improvement needs of the water system and its financing, debt service requirements, and revenue adjustments needed to maintain a sustainable water enterprise.

## Water Revenues

The Water Fund receives revenue from several sources. Operating revenue is received from rates and charges for water service. Revenue from water rates is projected by applying the current water rates to the projected number of accounts and consumption volume. Table 7 presents the projected revenue from current water rates of the water system.

Table 7  
Projected Rate-based Water Revenue Using Existing Rates

Description	Projected				
	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
<b>Water Service Revenues</b>					
Fixed Charges <sup>[1]</sup>	\$2,621,425	\$2,635,148	\$2,649,329	\$2,663,052	\$2,677,793
Variable Charges <sup>[2]</sup>	4,022,315	4,038,225	4,054,133	4,069,809	4,086,181
Subtotal Revenues From Current Rates	\$6,643,740	\$6,673,373	\$6,703,462	\$6,732,861	\$6,763,974
Fire Protection Revenues	71,756	71,756	71,756	71,756	71,756
Total Revenues From Current Rates	\$6,715,496	\$6,745,129	\$6,775,218	\$6,804,617	\$6,835,730

[1] FY 21-22 and forecast revenue calculated by multiplying current water service rate by the number of projected meters.

[2] FY 21-22 and forecast revenue calculated by multiplying projected water sales by the current variable rates.

## Miscellaneous Water Revenue

Miscellaneous revenues are received from several sources including collections from delinquent accounts, meter installations, late payment fees, American Rescue Plan Act (ARPA) funds, and other sources. Table 8 below provides sources of miscellaneous revenue.

Table 8  
Projected Miscellaneous Water Revenue

Description	Budget		Projected		
	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
Collections Credit Bureau	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500
Meter Installation	15,000	15,000	15,000	15,000	15,000
Utility Billing Late Payment Fees	45,000	45,000	45,000	45,000	45,000
ARPA Funds	332,750	147,500	-	578,700	291,200
Transfer In - Water Availability Fund	720,000	700,000	-	-	-
Total Miscellaneous Revenues	\$1,114,250	\$909,000	\$61,500	\$640,200	\$352,700

## Water Revenue Requirements

Revenue requirements of the water system include O&M expense, CCB Water Supply, Transfer to Lopez Fund for purchased water, annual CIP funding, and debt service. Each of these items are discussed below.



### Water Operation and Maintenance Expense

O&M expenses are an on-going obligation of the water system and such costs are normally met from water service revenue. O&M includes the cost to operate and maintain the water supply, reservoirs, and distribution system facilities. Costs also include technical services and other general and administrative expenses.

O&M has been projected recognizing the major expense categories of personnel services, electric power expense, chemicals, all other expenses, and capital outlay. Personnel costs consist of salaries and benefits expense of those personnel directly involved with providing water service. Salaries and wages are projected to increase by 3.5 percent annually, while benefits expense is projected to increase by 8 percent annually. Electric power expense is projected to increase annually by 3 percent while chemicals expense increases also by 3 percent annually. Personnel Transfers increase annually by 4 percent. All other O&M expense is projected to increase by 2 percent annually. Capital outlay is projected to increase by 3 percent annually. Table 9 provides a summary of the O&M expenses for the Study Period. A detailed summary of the budgeted and projected O&M expense is provided in Appendix A-1.

Table 9  
Projected Water Operation and Maintenance Expense

Description	Budget	Budget	Projected		
	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
Administration	\$2,748,945	\$2,662,640	\$2,744,189	\$2,828,821	\$2,916,686
Water Production	205,800	209,700	217,964	227,150	236,825
Water Distribution	845,500	783,800	815,371	848,556	883,494
Subtotal Water System O&M Expense	\$3,800,245	\$3,656,140	\$3,777,524	\$3,904,527	\$4,037,005
Central Coast Blue Water Supply	-	-	131,073	532,155	548,120
Lopez Water Supply	3,740,113	3,852,316	3,926,482	4,002,873	4,081,556
Total Water System O&M Expense	7,540,358	7,508,456	7,835,079	8,439,555	8,666,681

### Central Coast Blue Water Supply

Central Coast Blue (CCB) is a water sustainability project that will create a new, high quality, and reliable water supply for the City of Arroyo Grande and other agencies. The CCB project will provide a new advanced water purification facility to create a high-quality water source to supplement local supplies. The cities of Arroyo Grande, Pismo Beach, and Grover Beach are in discussions to design and build Phase 1 of the project. The CCB project will allow these communities to have a more sustainable groundwater supply especially during multiple dry years. City staff has assumed that the water enterprise fund will support the City's 25 percent share of the project cost and the water rates designed with the CCB project will support the pipelines, storage, advance treatment, recycled water pump station, and injection wells. The CCB annual O&M expense is shown in Table 9.

### Transfer to Lopez Fund

The Water Fund makes a transfer of funds to the Lopez Fund equal to the cost of purchased water expense. The total expenses for Lopez water supply include Lopez O&M, capital outlay, Lopez Dam 2011A bond debt service, and State Revolving Fund (SRF) loan debt service. The transfer in FY 2021-22 and FY 2022-23 are as budgeted by the City. Future Lopez O&M expense is projected to increase by 3 percent annually and capital outlay and debt service payments are projected to remain constant. The Lopez Water Supply expenses are shown in Table 9 and Appendix A-1.

## Water Annual CIP Funding

The Water Fund pays for annual capital needs of the water system identified in the City's CIP plan. The amount spent annually is irregular and depends on other financing sources to meet the expenditure needs of the City's CIP. The amount spent in each year of the Study is further discussed below in the Water CIP section.

## Debt Service

The City does not have any outstanding debt on the water system other than the debt service payments associated with the Lopez purchased water expense. Under the City's contract with the County, the City is required to set water rates to provide a 25% coverage factor on the Lopez Dam 2011A bonds debt service. The required coverage ratio is 100 percent after inclusion of this factor.

However, with the construction of the CCB project, the City will incur new debt service from a State Revolving Fund (SRF) loan with a 1 percent interest rate and 30 year term. With this new debt, it is assumed that the required debt service coverage ratio would be 125% and this is included in the water rate adjustments.

## Water Capital Improvement Program

The City has developed a CIP provided in Table 10 that lists capital expenditures for FY 2021-22 through FY 2025-26. Over this period the City projects that it would spend over \$4.7 million. The major improvements include phased main replacements, Central Coast Blue project, and other projects including service line replacements, SCADA software acquisition, and studies. The CIP is planned to be funded from the Water Fund with the exception of the CCB project construction which will be financed using an SRF loan.

Table 10  
Water Capital Improvement Program

Description	Budget	Projected			
	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
<b>Current Capital Improvement Program (CIP) Projects [1]</b>					
Galvanized Service Replacement	\$96,826	\$0	\$0	\$0	\$0
Phased Main Replacement - Fair Oaks, Elm-Alder	232,750	-	-	-	-
Fuel Management System/Dispenser Replacement	10,940	-	-	-	-
Andre Drive / Los Cierros Court Interconnect	100,000	-	-	-	-
SCADA Software/Electronics Upgrade	240,100	-	-	-	-
Corporation Yard Renovations	15,000	15,000	15,000	15,000	15,000
Reservoir 4 Exterior Coating	-	147,500	-	-	-
Financial Management Software	-	75,000	20,000	-	-
Phased Main Replacement - S Halcyon Road, Cornwall-Fair Oaks	-	-	673,500	-	-
Water Master Plan Update	-	-	100,000	-	-
Phased Main Replacement - Cornwall, S Halcyon-El Camino Real	-	-	-	578,700	-
Phased Main Replacement - Hwy 101 Xng, El Camino Real-W Branch	-	-	-	-	291,200
Rate Study Update	-	-	-	-	30,000
Central Coast Blue Project Pre-Construction	1,531,181	540,971	-	-	-
<b>Total Water CIP</b>	<b>\$2,226,797</b>	<b>\$778,471</b>	<b>\$808,500</b>	<b>\$593,700</b>	<b>\$336,200</b>

[1] CIP Source: FY 21-22 City CIP document. Represents only Water Fund portion of project.

## Water Financial Plan

A financial plan has been prepared that includes the revenues and revenue requirements that were identified for the water system. The financial plan, presented in Table 11, incorporates specific financial planning goals to provide guidance to maintain the health of the water utility on an on-going basis.

Table 11  
Water Financial Plan

Description	Projected				
	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
<b>Proposed Revenue Increase (April 19)</b>	<b>6.4%</b>				
<b>Proposed Revenue Increase (January 1)</b>		<b>6.4%</b>	<b>6.4%</b>	<b>6.4%</b>	<b>6.4%</b>
<b>Water Fund - 640</b>					
<b>Revenue</b>					
Revenues from Existing Water Rates [1]	\$6,715,496	\$6,745,129	\$6,775,218	\$6,804,617	\$6,835,730
Total Additional Water Sales Revenue [2]	35,816	623,070	1,099,518	1,610,458	2,158,850
Miscellaneous Income [3]	1,114,250	909,000	61,500	640,200	352,700
Interest Income [4]	15,302	13,088	8,457	6,515	6,236
<b>Total Revenues</b>	<b>\$7,880,864</b>	<b>\$8,290,287</b>	<b>\$7,944,693</b>	<b>\$9,061,790</b>	<b>\$9,353,516</b>
<b>Expenditures</b>					
Operation and Maintenance Expense	\$3,800,245	\$3,656,140	\$3,777,524	\$3,904,527	\$4,037,005
Central Coast Blue O&M	-	-	131,073	532,155	548,120
Transfer to Lopez Fund	3,740,113	3,852,316	3,926,482	4,002,873	4,081,556
Capital Improvement Funding	2,226,797	778,471	808,500	593,700	336,200
Central Coast Blue Debt Service	-	-	-	106,173	424,692
<b>Total Expenditures</b>	<b>\$9,767,155</b>	<b>\$8,286,927</b>	<b>\$8,643,579</b>	<b>\$9,139,428</b>	<b>\$9,427,573</b>
<b>Net Funds Available</b>	<b>(\$1,886,291)</b>	<b>\$3,360</b>	<b>(\$698,886)</b>	<b>(\$77,638)</b>	<b>(\$74,057)</b>
<b>Available Reserves</b>					
Beginning available reserves [5]	\$3,923,733	\$2,037,442	\$2,040,802	\$1,341,916	\$1,264,278
<b>Ending available reserves</b>	<b>\$2,037,442</b>	<b>\$2,040,802</b>	<b>\$1,341,916</b>	<b>\$1,264,278</b>	<b>\$1,190,221</b>
Target Reserves [6]	\$1,450,000	\$1,414,000	\$1,477,000	\$1,609,000	\$1,646,000
<b>Lopez Fund - 641</b>					
<b>Revenues</b>					
Transfer In from Water Fund	\$3,740,113	\$3,852,316	\$3,926,482	\$4,002,873	\$4,081,556
Interest Income [4]	8,500	8,600	8,600	8,700	8,700
<b>Total Lopez Revenues</b>	<b>\$3,748,613</b>	<b>\$3,860,916</b>	<b>\$3,935,082</b>	<b>\$4,011,573</b>	<b>\$4,090,256</b>
<b>Expenditures</b>					
Lopez Water Expense	\$2,239,161	\$2,472,198	\$2,546,364	\$2,622,755	\$2,701,438
Lopez Dam Bonds - 2011A Debt Service	420,749	434,981	434,981	434,981	434,981
SRF Loan Debt Service	845,137	845,137	845,137	845,137	845,137
Lopez Capital Outlay	235,066	100,000	100,000	100,000	100,000
<b>Total Lopez Expenditures</b>	<b>\$3,740,113</b>	<b>\$3,852,316</b>	<b>\$3,926,482</b>	<b>\$4,002,873</b>	<b>\$4,081,556</b>
<b>Net Lopez Funds Available</b>	<b>\$8,500</b>	<b>\$8,600</b>	<b>\$8,600</b>	<b>\$8,700</b>	<b>\$8,700</b>
<b>Lopez Available Reserves</b>					
Lopez Beginning available reserves	\$1,703,434	\$1,711,934	\$1,720,534	\$1,729,134	\$1,737,834
<b>Lopez Ending available reserves</b>	<b>\$1,711,934</b>	<b>\$1,720,534</b>	<b>\$1,729,134</b>	<b>\$1,737,834</b>	<b>\$1,746,534</b>
Lopez Target Reserves [7]	\$1,265,900	\$1,280,100	\$1,280,100	\$1,280,100	\$1,280,100
<b>Combined Reserves</b>					
Total Reserves (Fund 640 and 641)	\$3,749,376	\$3,761,336	\$3,071,050	\$3,002,112	\$2,936,755
Target Total Reserves (Fund 640 and 641)	\$2,715,900	\$2,694,100	\$2,757,100	\$2,889,100	\$2,926,100
<b>Debt Service Coverage</b>					
Total Revenues (Fund 640 and 641)	\$7,889,364	\$8,298,887	\$7,953,293	\$9,070,490	\$9,362,216
Total Expenses (Fund 640 and 641)	(\$7,540,358)	(\$7,508,456)	(\$7,835,079)	(\$8,439,555)	(\$8,666,681)
25% Coverage Factor Lopez 2011A Bonds [8]	(\$105,187)	(\$108,745)	(\$108,745)	(\$108,745)	(\$108,745)
<b>Net Revenues</b>	<b>\$243,819</b>	<b>\$681,686</b>	<b>\$9,469</b>	<b>\$522,190</b>	<b>\$586,790</b>
Lopez Coverage [9]	103%	109%	100%	106%	107%
Central Coast Blue Debt Service	\$0	\$0	\$0	\$106,173	\$424,692
Debt Service Coverage [10]	n/a	n/a	n/a	123%	138%

[1] Projected using the existing rates.

[2] Additional revenue from proposed rate adjustments.

[3] Includes collection fees, meter installations, late fees, ARPA Funds, and Water Availability Transfers In.

[4] Interest earnings on the average fund balance calculated at 0.5%.

[5] The available beginning FY 21-22 cash balance provided by City. Includes operating and capital funds.

[6] Target reserve estimated at 90 days of operation and maintenance expense and capital reserves target.

[7] Equal to Lopez annual debt service.

[8] For Lopez 2011A Bonds, pledge of gross revenues requires Coverage Factor of 25 percent of Lopez 2011A Bonds debt service.

[9] Minimum coverage is 100 percent.

[10] Minimum coverage is 125 percent.

The financial goals to maintain the health of enterprise included the following.

- Generate positive levels of income in each year of the Study period
- Maintain the operating, capital, and Lopez Fund reserves at or greater than target levels
- Maintain debt service coverage ratios at or greater than the minimum required
- Maintain the annual capital funding requirement

### Proposed Revenue Adjustments

Table 11 provides the annual revenue increases recommended to meet the financial planning criteria for the five-year Study Period. The financial plan indicates that 6.4 percent revenue increases are recommended on April 19, 2022 and on each January 1 through FY 2025-26, with increases of 4.0 percent thereafter for the next five years after the Study Period. The increases are necessary to meet the planning criteria discussed above.

A graphical depiction of the revenue and revenue requirements from Table 11 are presented in Figure 1. Revenue using the current rates is shown as the black line while revenue with revenue adjustments is shown as the red line. The green line represents the cash reserve balance at the end of year (which includes operating, capital and Lopez reserves) while the purple line indicates the Target Reserve level for these reserves.

Figure 1 shows that the revenue increases in Table 11 are necessary to meet annual O&M expense including CCB O&M expense, Lopez purchased water expense, CIP funding, CCB debt service, and the Target reserve maintenance level. The figure shows that the reserve balance (green line) declines in the middle years of the ten-year financial plan but meets the Target reserve level by the last year.

Figure 1  
Water Financial Plan  
Comparison of Revenue with Annual Obligations

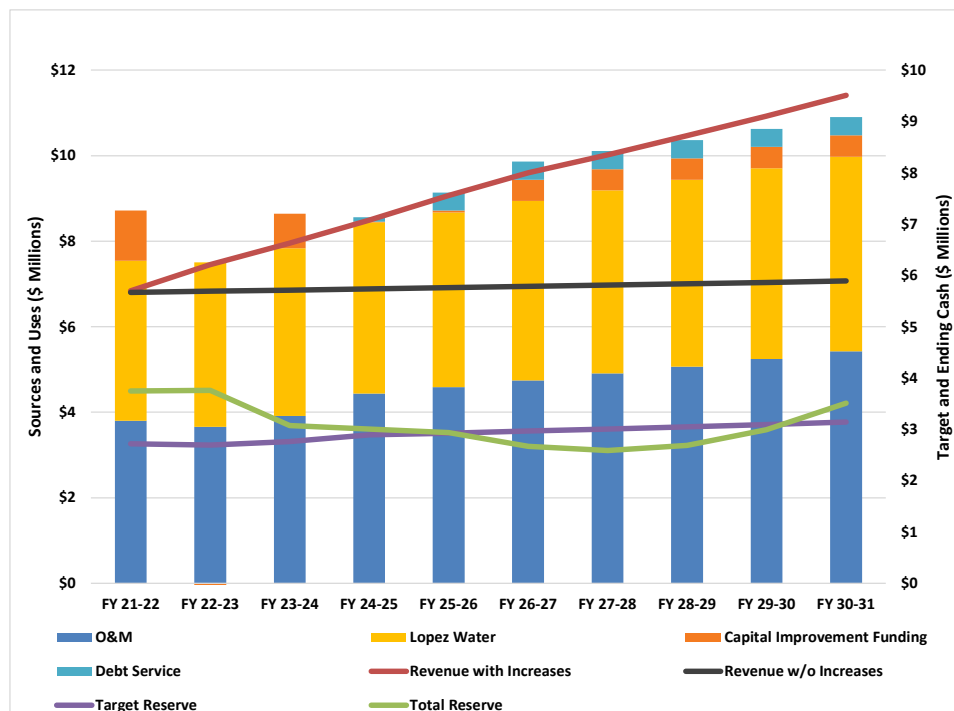
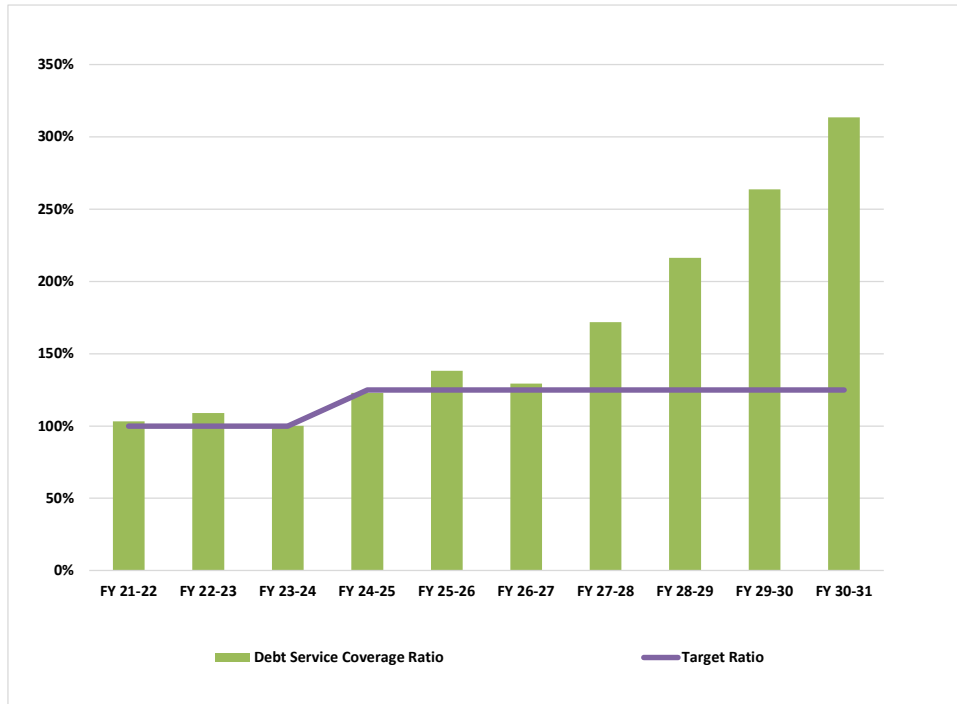


Figure 2 shows the debt service coverage ratio for the Lopez Dam Bonds 2011A debt service and the future CCB debt service. The figure shows that the coverage requirement is currently being met and will continue to be met in the later years with the CCB debt service if the revenue increases proposed in the water financial plan in Table 11 are implemented.

Figure 2  
Water Debt Service Coverage Ratio



## Water Cost of Service

This section of the report discusses the allocation of the water system's operating and capital costs for use in designing water rates. The agency responsible for imposing property-related fees in California is required to establish rates that create a nexus between the cost of providing service and the rates to be imposed.

### Industry Methodology

This Study uses methodologies from the American Water Works Association (AWWA) to allocate costs in an appropriate manner. AWWA is an industry trade organization that provides guidance on operations and management of water utilities. AWWA provides general principles to assist agencies in the design of water rates such that they are consistent with local requirements as well as recognizing state laws. The AWWA guidelines have been used to conduct this Study and have been used in the design of the City's water rates while also following Proposition 218 and the recent San Juan Capistrano court decision.

The annual costs of providing water service from the financial plan are allocated to cost components following guidelines provided in the AWWA Manual M1. The methodology provides the basis to design rates to generate

sufficient revenue to meet estimated annual revenue requirements from the financial plan. Costs are then recovered through fixed charges and variable charges to water system users.

## Costs of Service to be Allocated

The annual water cost of service consists of the O&M expenses and capital costs of the water system. O&M expenses include costs related to Lopez water supply, water distribution, operation and maintenance of the facilities, and general and administrative costs. Capital costs include capital improvement program funding and debt service discussed in the financial plan.

Costs are first allocated to water system cost component based on the operating characteristics and design of the water system facilities. Cost allocations consider the average quantity of water consumed as well as the peak rate at which water is consumed. The water system is designed to serve average and peak demands, and costs that are related to serving average and peak demands are allocated in a manner such that they may be recovered appropriately.

The cost allocation components for water service for this Study are Water Supply (groundwater and Lopez water), Delivery, Peaking, Meters and Services, Customer, and Direct Fire Protection. The parameters have been further expanded to recognize those costs that are common to all customers, and those that exclude Wheeling customers. Wheeling customers do not pay for water supply costs. FY 2021-22 was used as the Test Year for assigning the operating and capital costs of the water system to each of these parameters. The total cost to be recovered from the users of the water system by cost component for FY 2021-22 is presented in Table 12. Appendix A-2 provides a detailed allocation.

Table 12  
Allocation of Water Revenue Requirements to Cost Component

FY 21-22 Revenue Requirement	Common to All				Direct Fire Protection	Common to All Except Wheeling			
	Delivery	Peaking	Meters/Serv	Customer		Water Supply	Delivery	Peaking	Lopez Debt
\$7,145,288	\$805,219	\$1,989,574	\$51,699	\$37,308	\$75,805	\$2,342,661	\$181,952	\$160,117	\$1,500,952

## Water Rate Design

The cost of service analyses described in the previous section provides the basis for water rate design. The intent of the rate design is to achieve fairness and ensure that each customer class pays its fair share of costs. Rates should be simple to administer, easy to understand, and comply with regulatory requirements. This section describes how water rates and charges are designed and includes the proposed schedule of water rates for implementation.

## Proposed Water Rate Structure

The recommended water rate structure includes maintaining the fixed charge structure, however modifying the variable rate structure to (1) revise the tier break points for SFR and MFR customers and (2) provide an individual uniform volume charge for non-residential customers.

## Proposed Water Fixed Charges

The proposed fixed charges recover the Customer, Meters and Services, and Lopez debt service costs of service identified from Table 12 and recovers costs allocated to public fire protection. Customer costs are recovered based on the number of bills issued. Meters and Services, Lopez debt service, and public fire protection costs are recovered based on meter and service ratios provided by AWWA.

Tables 13 below presents the design of the proposed monthly fixed charges for customers for FY 2021-22 for a 5/8-inch meter. The current fixed charges generate about 40 percent of revenue from water rates. The proposed fixed charges generate approximately 37 percent of the revenue from water rates.

**Table 13**  
**Design of Water Fixed Charges**

Customer Service Cost		FY 21-22
Customer Cost		\$37,308
Number of Monthly Bills		81,096
Customer Cost per Unit		\$0.46

Meters and Services Cost		FY 21-22
Meters and Services Cost		\$51,699
Lopez Debt Service		\$1,500,952
Public Fire Protection		\$957,404
Meters and Services Cost		\$2,510,055
Number of Monthly Eq. Meters & Services		91,700
Meters and Services Cost per Unit		\$27.37
Monthly Base Fixed Charge - 5/8" Meter		\$27.83

Fixed charges for meter sizes greater than 5/8-inch are increased as shown below in Table 14 for FY 2021-22. The Meter and Services, Lopez Debt Service, and Public Fire Protection charges increase with meter and service cost ratios while the Customer charge does not increase with meter size.

**Table 14**  
**Design of Water Fixed Charges by Meter Size**

FY 21-22

Meter Size	Meter & Service Ratio	Meter & Services Charge	Lopez Debt Service	Public Fire Protection	Customer Charge	Total Monthly Charge
inches						
5/8"	1.00	\$0.56	\$16.37	\$10.44	\$0.46	\$27.83
3/4"	1.10	\$0.62	\$18.01	\$11.48	\$0.46	\$30.57
1"	1.40	\$0.78	\$22.92	\$14.62	\$0.46	\$38.78
1.5"	1.80	\$1.01	\$29.47	\$18.79	\$0.46	\$49.73
2"	2.90	\$1.62	\$47.47	\$30.28	\$0.46	\$79.83
3"	11.00	\$6.16	\$180.07	\$114.84	\$0.46	\$301.53
4"	14.00	\$7.84	\$229.18	\$146.16	\$0.46	\$383.64
6"	21.00	\$11.76	\$343.77	\$219.24	\$0.46	\$575.23
8"	29.00	\$16.24	\$474.73	\$302.76	\$0.46	\$794.19

### Proposed Private Fire Protection Fixed Charges

Annual costs allocated to the Fire Protection cost component are separated into Public and Private Fire Protection costs. Public Fire Protection costs are included into the monthly service charges as shown in Table 13. Private Fire Protection costs are recovered from those customers that receive the direct fire protection benefit. The monthly cost by equivalent hydrant (fireline) size is provided in Table 15 and the monthly private fireline charges are designed as shown in Table 16.

Table 15  
Design of 6-Inch Private Fire Protection Charge

Fire Protection	FY 21-22
Private Fire Protection Cost	\$86,134
Private Fire Protection Eq. 6" Firelines	1,066
Private Fire Protection 6" Monthly Charge	\$80.82

Table 16  
Design of Private Fireline Charges  
FY 21-22

Fireline Size	Fireline Ratio	Monthly Fireline Charge
2"	0.06	\$4.49
3"	0.16	\$13.06
4"	0.34	\$27.82
6"	1.00	\$80.82
8"	2.13	\$172.23
10"	3.83	\$309.73

### Proposed Service Fee per Additional Unit Charge

The City charges for additional dwelling units that are connected to SFR and MFR customers. The charge is 2 HCF of water consumption bi-monthly at the Tier 1 rate. A review of residential customers showed that those that had an additional unit consumed 2 HCF more in use. The additional unit charge is shown on Table 20.

### Proposed Water Variable Charges

Variable charges are designed to recover the costs that were allocated to the Water Supply, Delivery, and Peaking components shown in Table 12. Consumption and peaking characteristics of water system customers were analyzed to allocate costs to customer classification as well as between each tier. The water supply, delivery, and peaking costs are discussed below.

#### Water Supply Costs

The City's water supply costs include groundwater and Lopez water costs. Total water supply costs are shared uniformly by all customers and are not allocated to rate tiers to differentiate the water supply costs on use because 96 percent of the water produced by the City is from Lopez water and the impact to rates is small.

#### Delivery Costs

Delivery costs are operating, and capital costs of the water system related to delivering water to all customers at an average rate of use. Delivery costs tend to vary with the total quantity of water consumed under average demand conditions. These costs are also shared uniformly by all customers of the system.

#### Peaking Costs

Peaking costs are costs associated with meeting peak rates of demand requirements of the water system and include operating and capital costs beyond that required for average rates of use. Water system facilities are



designed to meet peak demand requirements and are apportioned to customer classes based on their system use characteristics. Peaking costs may be assigned to tiers in a tiered-rate structure based on the customers within the tier that are causing the peak demand.

### Proposed Single-family and Multifamily Residential Variable Water Rates

For this Study it is proposed that the current three-tier rate structure be maintained for SFR and MFR customers, however the tier break points are proposed to be modified. Tier 1 is defined as consumption to provide basic indoor water use and is based on 2.31 persons per household (pph) from the California Department of Finance estimates using 55 gallons per capita per day (gpcd) resulting in a Tier 1 breakpoint of 10 HCF (2.31 pph x 55 gpcd x 365 days per year ÷ 748 gal per HCF ÷ 6 billing periods per year). Tier 2 is defined as consumption related to outdoor water use up to the average of the SFR summer peak demand which was determined from billing information to be 22 HCF. Tier 3 is defined as water use above Tier 2.

Table 17 provides a summary of the variable rate components applicable to the SFR and MFR classification consisting of Water Supply, Delivery, and Peaking costs. Water Supply and Delivery costs are allocated to tiers based on water consumption in each tier. Peaking costs are allocated to the defined tiers based on the peaking factors that occur from customers within the tiers based on the tier break points discussed above. Tier 1 is considered to have a peaking factor of 1.0, Tier 2 and Tier 3 have peaking factors that reflect the average use per customer within these tiers as a ratio to Tier 1.

Table 17  
Design of Single-Family and Multifamily Tiered Water Rate Structure  
FY 21-22

Water Supply Water Component of Variable Charge					
Tier	Tier Range	Consumption	% Share	Water Supply Costs	Unit Rate \$/HCF
Tier 1	0 - 10	407,204	51.2%	\$956,771	\$2.35
Tier 2	11 - 22	227,263	28.6%	\$533,980	\$2.35
Tier 3	Over 22	160,253	20.2%	\$376,532	\$2.35
		794,720	100.0%	\$1,867,283	
Delivery Component of Variable Charge					
Tier	Tier Range	Consumption	% Share	Delivery Costs	Unit Rate \$/HCF
Tier 1	0 - 10	407,204	51.2%	\$399,584	\$0.98
Tier 2	11 - 22	227,263	28.6%	\$223,011	\$0.98
Tier 3	Over 22	160,253	20.2%	\$157,254	\$0.98
		794,720	100.0%	\$779,849	
Peaking Component of Variable Charge					
Tier	Tier Range	Peaking Factor	Weighted Consumption	Peaking Costs	Unit Rate \$/HCF
Tier 1	0 - 10	1.00	407,204	\$297,111	\$0.73
Tier 2	11 - 22	2.06	468,163	\$341,588	\$1.50
Tier 3	Over 22	2.20	352,556	\$257,238	\$1.61
			1,227,923	\$895,937	

The sum of the three component's unit rates equals the water rates in the tiers for the SFR and MFR classifications. Table 18 provides the resulting water rate by tier from summing the Water Supply, Delivery, and Peaking unit rates. SFR and MFR customers pay for the same Water Supply and Delivery costs per HCF, however they pay for their individual peaking requirements and associated costs depending on which tier their consumption falls into.

**Table 18**  
**Single-family and Multifamily Residential Tiered Water Rates**  
 FY 21-22

Tier	Range	Water Supply	Delivery	Peaking	Total Rate
	HCF	\$/HCF	\$/HCF	\$/HCF	\$/HCF
Tier 1	0 - 10	\$2.35	\$0.98	\$0.73	\$4.06
Tier 2	11 - 22	\$2.35	\$0.98	\$1.50	\$4.83
Tier 3	Over 22	\$2.35	\$0.98	\$1.61	\$4.94

### Proposed Non-Residential Variable Water Rates

For Non-Residential customers, it is proposed that these classes have an individual uniform volume rate structure that recognizes a blending of the three components of Water Supply, Delivery, and Peaking costs. However, each classification will recognize the individual peaking characteristics of its class in their variable rate. A uniform variable rate structure is recommended for Non-residential classes as they are intended to have separate irrigation meters. Table 19 below provides the Non-residential variable rates.

**Table 19**  
**Design of Non-Residential Variable Water Rates**  
 FY 21-22

Description	Total Costs	Volume	Uniform Rate
		HCF	\$/HCF
Commercial	\$488,281	111,001	\$4.40
Irrigation	453,458	91,207	\$4.97
Hydrant	903	114	\$7.92
Wheeling	\$26,081	11,000	\$2.37

### Proposed Water Rates

Table 20 presents the proposed fixed charges and variable charges for the water system for the next five years. Table 20 includes the current fixed and variable rates as well as future water rates for implementation beginning on April 19, 2022 and each January 1 through FY 2025-26. The table also includes the current variable charges by rate tier and the new rate structure for April 19, 2022. Water system fixed and variable charges beyond April 19, 2022 are increased by the percentages shown in the financial plan in Table 11.

Table 20  
Proposed Water Fixed and Variable Charges with Central Coast Blue

	Current Rate	April 19, FY 21-22	January 1, FY 22-23	January 1, FY 23-24	January 1, FY 24-25	January 1, FY 25-26
Meter Size	Fixed Charge (\$ per month)					
5/8"	\$29.51	\$27.83	\$29.61	\$31.51	\$33.53	\$35.68
3/4"	\$31.67	\$30.57	\$32.53	\$34.61	\$36.83	\$39.19
1"	\$38.12	\$38.78	\$41.26	\$43.90	\$46.71	\$49.70
1.5"	\$46.73	\$49.73	\$52.91	\$56.30	\$59.90	\$63.73
2"	\$70.41	\$79.83	\$84.94	\$90.38	\$96.16	\$102.31
3"	\$244.74	\$301.53	\$320.83	\$341.36	\$363.21	\$386.46
4"	\$309.31	\$383.64	\$408.19	\$434.31	\$462.11	\$491.69
6"	\$459.96	\$575.23	\$612.04	\$651.21	\$692.89	\$737.23
8"	\$632.14	\$794.19	\$845.02	\$899.10	\$956.64	\$1,017.86
Service Fee per Add'l Unit	\$7.99	\$8.12	\$8.64	\$9.20	\$9.78	\$10.40
Fireline Size	Variable Charge (\$ per HCF)					
2"	\$3.74	\$4.49	\$4.78	\$5.09	\$5.42	\$5.77
3"	\$10.88	\$13.06	\$13.90	\$14.79	\$15.74	\$16.75
4"	\$23.18	\$27.82	\$29.60	\$31.49	\$33.51	\$35.65
6"	\$67.33	\$80.82	\$85.99	\$91.49	\$97.35	\$103.58
8"	\$143.48	\$172.23	\$183.25	\$194.98	\$207.46	\$220.74
10"	\$258.03	\$309.73	\$329.55	\$350.64	\$373.08	\$396.96
<b>Single-Family</b>						
Tier 1 - 0 to 18 units	\$3.78					
Tier 2 - 19 to 36 units	\$4.16					
Tier 3 - Over 36	\$5.55					
Tier 1 - 0 to 10 units		\$4.06	\$4.32	\$4.60	\$4.89	\$5.20
Tier 2 - 11 to 22 units		\$4.83	\$5.14	\$5.47	\$5.82	\$6.19
Tier 3 - Over 22		\$4.94	\$5.26	\$5.60	\$5.96	\$6.34
<b>Multifamily</b>						
Tier 1 - 0 to 18 units	\$3.78					
Tier 2 - 19 to 27 units	\$4.16					
Tier 3 - Over 27	\$5.55					
Tier 1 - 0 to 10 units		\$4.06	\$4.32	\$4.60	\$4.89	\$5.20
Tier 2 - 11 to 22 units		\$4.83	\$5.14	\$5.47	\$5.82	\$6.19
Tier 3 - Over 22		\$4.94	\$5.26	\$5.60	\$5.96	\$6.34
<b>Commercial</b>	\$3.95	\$4.40	\$4.68	\$4.98	\$5.30	\$5.64
<b>Irrigation</b>	\$4.21	\$4.97	\$5.29	\$5.63	\$5.99	\$6.37
<b>Hydrant</b>	\$6.13	\$7.92	\$8.43	\$8.97	\$9.54	\$10.15
<b>Wheeling</b>	\$2.04	\$2.37	\$2.52	\$2.68	\$2.85	\$3.03

## Water Bill Impact Analysis

An impact analysis was performed to evaluate the change in SFR customer bills that would occur from the implementation of the proposed water rates for the April 19, 2022 rate structure implementation. As shown in

Table 21, a SFR customer with a 5/8-inch meter using the average consumption of 19 HCF bi-monthly will experience a bill that will increase from \$131.22 to \$139.73 an increase of \$8.51 or 6.5 percent.

Table 21

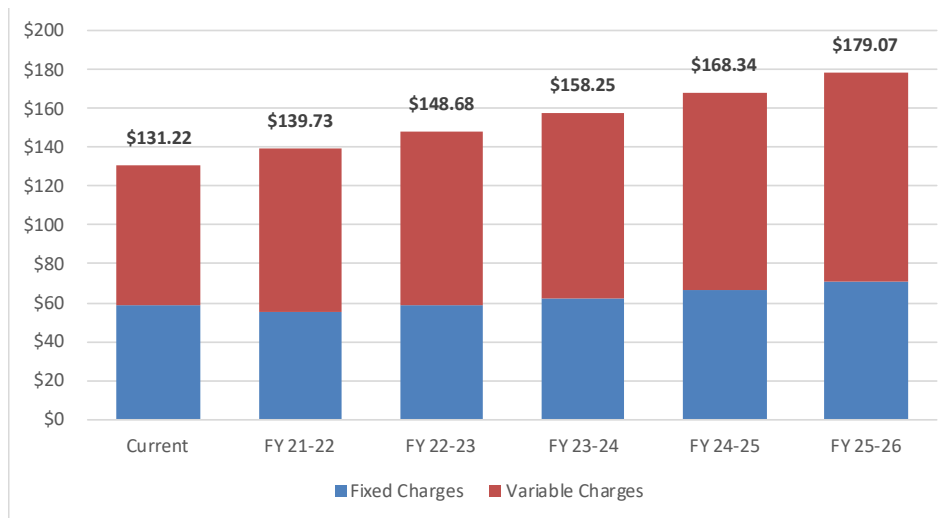
Comparison of Current Single-family Residential Bi-monthly Water Bill with 5/8-inch Meter Size with Proposed Bill Using April 2022 Water Rates With Central Coast Blue

Description	Use (HCF)	Current Bill			Proposed April 19, 2022 Bill				
		Service Charge	Volume Charge	Current Bill	Service Charge	Volume Charge	Proposed Bill	Dollar Difference	Percent Change
	0	\$59.02	\$0.00	\$59.02	\$55.66	\$0.00	\$55.66	(\$3.36)	-5.7%
Very Low	5	\$59.02	\$18.90	\$77.92	\$55.66	\$20.30	\$75.96	(\$1.96)	-2.5%
Low	10	\$59.02	\$37.80	\$96.82	\$55.66	\$40.60	\$96.26	(\$0.56)	-0.6%
Median	15	\$59.02	\$56.70	\$115.72	\$55.66	\$64.75	\$120.41	\$4.69	4.1%
Average	19	\$59.02	\$72.20	\$131.22	\$55.66	\$84.07	\$139.73	\$8.51	6.5%
High	30	\$59.02	\$117.96	\$176.98	\$55.66	\$138.08	\$193.74	\$16.76	9.5%
Very High	50	\$59.02	\$220.62	\$279.64	\$55.66	\$236.88	\$292.54	\$12.90	4.6%

Table 22 provides future SFR bills calculated using the proposed rates in Table 20 at the average consumption of 19 HCF bi-monthly.

Table 22

Single-family Residential Bi-monthly Water Bill Impacts at 19 HCF Bi-monthly With Central Coast Blue



SFR Charges	Current	Proposed				
		FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
Fixed Charges	\$59.02	\$55.66	\$59.22	\$63.02	\$67.06	\$71.36
Variable Charges	\$72.20	\$84.07	\$89.46	\$95.23	\$101.28	\$107.71
Total Charges	\$131.22	\$139.73	\$148.68	\$158.25	\$168.34	\$179.07
Dollar Change		\$8.51	\$8.95	\$9.57	\$10.09	\$10.73
Percent Change		6.5%	6.4%	6.4%	6.4%	6.4%

# Water Rate Survey

A water rate survey was conducted for neighboring communities to the City of Arroyo Grande. Chart 1 compares the Arroyo Grande SFR estimated bi-monthly water bill with those of neighboring communities at the same consumption of 19 HCF bi-monthly. The rate survey includes rate schedules in effect August 2021. Water bills for Arroyo Grande are shown using the current rates and the proposed April 19, 2022 rates. The chart indicates that with the April 2022 water rate structure change, an Arroyo Grande SFR customer using the average bi-monthly consumption of 19 HCF will experience a bill that is among the lowest of the communities listed.

Chart 1

Single-family Residential Bi-Monthly Water Bills of Local Communities Using 19 HCF with Central Coast Blue



Note: Above table uses water rates in effect August 2021. Arroyo Grande April 2022 bill is based on the rate structure and rates in Table 20. Pismo Beach includes Special Water Tax.

## Water Rates without Central Coast Blue

This section is provided to illustrate the impact of CCB costs on customer water bills. Water revenue increases could be 4.0 percent annually without CCB as contrasted with 6.4 percent with CCB as shown in Table 23. Table 24 provides the water rates without the CCB project.

Table 23

Annual Revenue Increases With and Without Central Coast Blue

Description	April 19 FY 21-22 [1]	January 1 FY 22-23	January 1 FY 23-24	January 1 FY 24-25	January 1 FY 25-26
<b>Water System (with CCB [2])</b>	6.4%	6.4%	6.4%	6.4%	6.4%
<b>Water System (without CCB [2])</b>	4.0%	4.0%	4.0%	4.0%	4.0%

[1] Increases this year may not match Tables ES-5 and ES-9 due to rate structure change and cost of service adjustments.

[2] Central Coast Blue project.

Table 24  
Proposed Water Fixed and Variable Charges without Central Coast Blue

	Current Rate	April 19, FY 21-22	January 1, FY 22-23	January 1, FY 23-24	January 1, FY 24-25	January 1, FY 25-26
Meter Size		Fixed Charge (\$ per month)				
5/8"	\$29.51	\$28.41	\$29.55	\$30.73	\$31.96	\$33.24
3/4"	\$31.67	\$31.15	\$32.40	\$33.70	\$35.05	\$36.45
1"	\$38.12	\$39.35	\$40.92	\$42.56	\$44.26	\$46.03
1.5"	\$46.73	\$50.30	\$52.31	\$54.40	\$56.58	\$58.84
2"	\$70.41	\$80.39	\$83.61	\$86.95	\$90.43	\$94.05
3"	\$244.74	\$302.01	\$314.09	\$326.65	\$339.72	\$353.31
4"	\$309.31	\$384.09	\$399.45	\$415.43	\$432.05	\$449.33
6"	\$459.96	\$575.61	\$598.63	\$622.58	\$647.48	\$673.38
8"	\$632.14	\$794.49	\$826.27	\$859.32	\$893.69	\$929.44
Service Fee per Add'l Unit	\$7.99	\$7.92	\$8.24	\$8.56	\$8.90	\$9.26
Fireline Size		Variable Charge (\$ per HCF)				
2"	\$3.74	\$3.66	\$3.81	\$3.96	\$4.12	\$4.28
3"	\$10.88	\$10.63	\$11.06	\$11.50	\$11.96	\$12.44
4"	\$23.18	\$22.66	\$23.57	\$24.51	\$25.49	\$26.51
6"	\$67.33	\$65.81	\$68.44	\$71.18	\$74.03	\$76.99
8"	\$143.48	\$140.24	\$145.85	\$151.68	\$157.75	\$164.06
10"	\$258.03	\$252.20	\$262.29	\$272.78	\$283.69	\$295.04
Single-Family						
Tier 1 - 0 to 18 units	\$3.78					
Tier 2 - 19 to 36 units	\$4.16					
Tier 3 - Over 36	\$5.55					
Tier 1 - 0 to 10 units		\$3.96	\$4.12	\$4.28	\$4.45	\$4.63
Tier 2 - 11 to 22 units		\$4.56	\$4.74	\$4.93	\$5.13	\$5.34
Tier 3 - Over 22		\$4.64	\$4.83	\$5.02	\$5.22	\$5.43
Multifamily						
Tier 1 - 0 to 18 units	\$3.78					
Tier 2 - 19 to 27 units	\$4.16					
Tier 3 - Over 27	\$5.55					
Tier 1 - 0 to 10 units		\$3.96	\$4.12	\$4.28	\$4.45	\$4.63
Tier 2 - 11 to 22 units		\$4.56	\$4.74	\$4.93	\$5.13	\$5.34
Tier 3 - Over 22		\$4.64	\$4.83	\$5.02	\$5.22	\$5.43
Commercial	\$3.95	\$4.22	\$4.39	\$4.57	\$4.75	\$4.94
Irrigation	\$4.21	\$4.75	\$4.94	\$5.14	\$5.35	\$5.56
Hydrant	\$6.13	\$7.70	\$8.01	\$8.33	\$8.66	\$9.01
Wheeling	\$2.04	\$2.07	\$2.15	\$2.24	\$2.33	\$2.42

## Water Bill Impacts without Central Coast Blue

Table 25 provides the bi-monthly bills without CCB at various usage levels for a SFR customer with a 5/8-inch meter compared with the bills using current water rates. Table 25 shows that a SFR customer with a 5/8-inch

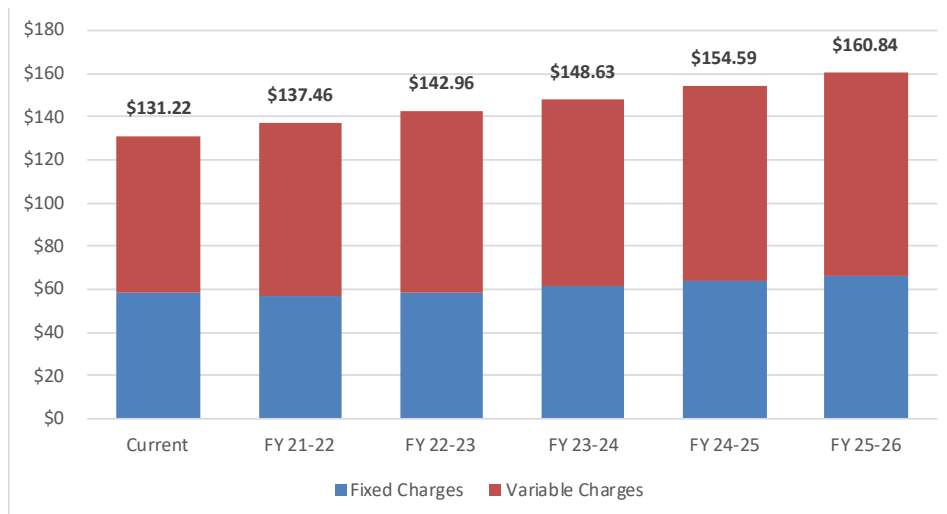
meter using the average consumption of 19 HCF bi-monthly will experience a bill that will increase from \$131.22 to \$137.46, an increase of \$6.24 or 4.8 percent for the first increase.

**Table 25**  
Comparison of Current Single-family Residential Bi-monthly Water Bill with 5/8-inch Meter Size with Proposed Bill Using April 2022 Water Rates without Central Coast Blue

Description	Use (HCF)	Current Bill			Proposed April 19, 2022 Bill				
		Service Charge	Volume Charge	Current Bill	Service Charge	Volume Charge	Proposed Bill	Dollar Difference	Percent Change
	0	\$59.02	\$0.00	\$59.02	\$56.82	\$0.00	\$56.82	(\$2.20)	-3.7%
Very Low	5	\$59.02	\$18.90	\$77.92	\$56.82	\$19.80	\$76.62	(\$1.30)	-1.7%
Low	10	\$59.02	\$37.80	\$96.82	\$56.82	\$39.60	\$96.42	(\$0.40)	-0.4%
Median	15	\$59.02	\$56.70	\$115.72	\$56.82	\$62.40	\$119.22	\$3.50	3.0%
Average	19	\$59.02	\$72.20	\$131.22	\$56.82	\$80.64	\$137.46	\$6.24	4.8%
High	30	\$59.02	\$117.96	\$176.98	\$56.82	\$131.44	\$188.26	\$11.28	6.4%
Very High	50	\$59.02	\$220.62	\$279.64	\$56.82	\$224.24	\$281.06	\$1.42	0.5%

Table 26 shows how the bills would escalate over time with the revenue increases without the CCB project.

**Table 26**  
Single-family Residential Bi-monthly Water Bill Impacts at 19 HCF Bi-monthly without Central Coast Blue



SFR Charges	Current	Proposed				
		FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
Fixed Charges	\$59.02	\$56.82	\$59.10	\$61.46	\$63.92	\$66.48
Variable Charges	\$72.20	\$80.64	\$83.86	\$87.17	\$90.67	\$94.36
Total Charges	\$131.22	\$137.46	\$142.96	\$148.63	\$154.59	\$160.84
Dollar Change		\$6.24	\$5.50	\$5.67	\$5.96	\$6.25
Percent Change		4.8%	4.0%	4.0%	4.0%	4.0%

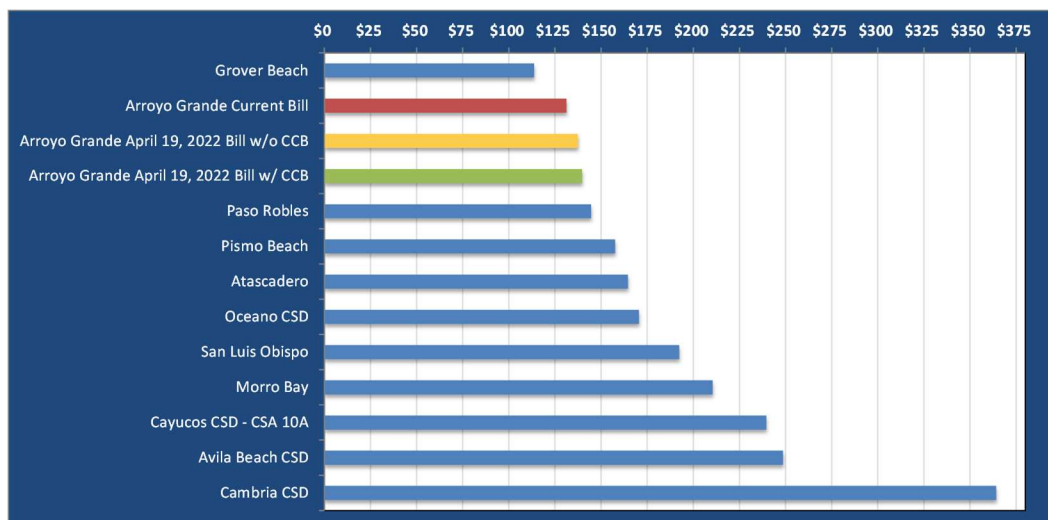
Table 27 provides a comparison of the SFR bi-monthly bills with and without the CCB project while also providing the dollar difference in the bills. The average SFR customer with a 5/8-inch meter using 19 HCF will pay \$2.27 more bi-monthly with the CCB project beginning April 19, 2022 and \$18.23 more bi-monthly beginning January 1, 2026.

**Table 27**  
Impacts to Single-family Residential Bi-monthly Water Bills  
With and without Central Coast Blue at 19 HCF

Description	April 19 FY 21-22	January 1 FY 22-23	January 1 FY 23-24	January 1 FY 24-25	January 1 FY 25-26
Average Bill w/o CCB	\$137.46	\$142.96	\$148.63	\$154.59	\$160.84
Average Bill with CCB	\$139.73	\$148.68	\$158.25	\$168.34	\$179.07
Difference	\$2.27	\$5.72	\$9.62	\$13.75	\$18.23

Chart 2 provides a comparison of SFR bi-monthly bills with and without CCB to bills of other communities at the same consumption. The chart shows that Arroyo Grande SFR bills remain among the lowest of the bills listed.

**Chart 2**  
Single-family Residential Bi-Monthly Water Bills of Local Communities Using 19 HCF with Central Coast Blue



Note: Above table uses water rates in effect August 2021. Arroyo Grande April 2022 bill is based on the rate structure and rates in Table 24. Pismo Beach includes Special Water Tax.



# Wastewater Financial Planning

Financial planning for the wastewater enterprise includes identifying and projecting revenues and revenue requirements of the wastewater system for a five-year planning period. Estimates of revenue from various sources are compared with the projected revenue requirements. This comparison allows the review of the adequacy of existing revenue to meet annual obligations and provide the basis for revenue adjustments. New wastewater rates and charges are created to recover the City's annual operating and capital costs associated with the wastewater system.

This section discusses the assumptions, current wastewater rates, user classifications, revenues and revenue requirements, planned CIP projects and financing sources, and proposed revenue adjustments.

## Current Wastewater Rates

The current wastewater rates consist of fixed and variable charges to residential and non-residential customers. The rates have not been increased since 2009. All customers are charged the same fixed monthly charge. Residential and Non-residential customers are charged different variable rates. The current rates are presented in Table 28.

Table 28  
Current Wastewater Rates

Classification	Fixed Charges	Variable Charges <sup>[1]</sup>
	\$/month	\$/HCF
Single-family Residential [2]	\$2.40	\$0.67
Multifamily Residential [2]	2.40	0.94
Non-Residential	\$2.40	\$1.32

<sup>[1]</sup> Charged based on water consumption.

<sup>[2]</sup> Charged to each dwelling unit including additional units.

## Wastewater User Classifications

### Number of Customers

The City currently classifies wastewater customers as SFR, MFR, and one of seven classifications for non-residential customers. Residential customers, including SFR and MFR, account for about 94 percent of the total accounts served by the wastewater system. Table 29 provides the historical and projected average number of customers by classification.

Table 29

## Historical and Projected Average Number of Wastewater Customers by Classification

Customer Class	Historical	Projected				
	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
<b>Number of Accounts</b>						
Single-family Residential [1]	6,007	6,037	6,067	6,097	6,127	6,158
Multifamily Residential	117	118	118	119	119	120
Business	392	394	394	394	394	394
Church	14	14	14	14	14	14
School	13	13	13	13	13	13
Hospital	3	3	3	3	3	3
Motel	9	9	9	9	9	9
Convalescent Home	3	3	3	3	3	3
<b>Total Accounts</b>	<b>6,558</b>	<b>6,591</b>	<b>6,621</b>	<b>6,652</b>	<b>6,682</b>	<b>6,714</b>
<b>Number of Units</b>						
Multifamily Residential [2]	1,697	1,705	1,714	1,723	1,731	1,740
Convalescent Home [2]	153	153	153	153	153	153

[1] Accounts/units are forecast to increase based on the assumed growth rate of 0.5% annually.

[2] Multifamily reflects number of dwelling units. Convalescent reflects number of beds.

## Water Sales Volumes of Wastewater Customers

Table 30 provides the historical and projected water sales volumes of wastewater customers by classification. Water sales volumes were projected by recognizing the growth in the number of accounts and the FY 2020-21 use per customer. Residential (SFR and MFR) customers account for more than 87 percent of the water sales volumes of wastewater customers.

The water sales volumes of wastewater customers are used to calculate projected wastewater revenue and estimate wastewater discharge volumes. The wastewater discharge volumes are used for cost allocation purposes to assign cost responsibility based on wastewater flow of each class.

Table 30

## Historical and Projected Water Consumption of Wastewater Customers (HCF)

Description	Historical	Projected <sup>[1]</sup>				
	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
Single-family Residential	686,416	689,844	693,272	696,700	700,128	703,671
Multifamily Residential	104,384	104,876	105,430	105,983	106,475	107,029
Business	67,804	68,150	68,150	68,150	68,150	68,150
Church	6,168	6,168	6,168	6,168	6,168	6,168
School	11,082	11,082	11,082	11,082	11,082	11,082
Hospital	5,578	5,578	5,578	5,578	5,578	5,578
Motel	13,913	13,913	13,913	13,913	13,913	13,913
Convalescent Home	5,947	5,947	5,947	5,947	5,947	5,947
<b>Total Projected Consumption</b>	<b>901,292</b>	<b>905,558</b>	<b>909,540</b>	<b>913,521</b>	<b>917,441</b>	<b>921,538</b>

[1] Forecast based on application of FY 20-21 use per customer to the number of customers.

## Wastewater Financial Plan

The financial plan provides the means of analyzing the revenue and revenue requirements of the wastewater system and its impact on reserves as well as the ability to fund on-going O&M expense and capital infrastructure requirements. This section of the report discusses the projection of revenue, O&M expenses, CIP needs of the wastewater system and its financing, and revenue adjustments needed to maintain a sustainable wastewater enterprise.

### Wastewater Revenues

The Sewer Fund receives revenue from several sources. Operating revenue is received from rates and charges for wastewater service. Table 31 presents the projected fixed and variable rate revenue from current wastewater rates of the wastewater system. The revenue is projected by applying the current wastewater rates from Table 28 to the projected number of accounts and consumption volume.

Table 31  
Projected Rate-based Wastewater Revenue Using Existing Rates

Description	Projected				
	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
<b>Wastewater Service Revenues</b>					
Fixed Charge Revenue [1]	\$239,616	\$240,710	\$241,833	\$242,956	\$244,080
Variable Consumption Revenue [2]	707,085	709,903	712,719	715,478	718,373
Total Revenues From Current Rates	\$946,701	\$950,613	\$954,552	\$958,434	\$962,453

[1] Current fixed charge multiplied by the number of customers.

[2] Current non-residential variable rates multiplied by projected non-residential water volumes.

### Miscellaneous Wastewater Revenue

Miscellaneous revenues are received from late payment fees and ARPA funds. Table 32 below provides the sources of miscellaneous revenue.

Table 32  
Projected Miscellaneous Wastewater Revenue

Description	Budget	Projected			
	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
Utility Billing Late Payment Penalty	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000
ARPA Funds	217,200	50,000	-	282,200	-
Total Miscellaneous Revenues	\$224,200	\$57,000	\$7,000	\$289,200	\$7,000

### Wastewater Revenue Requirements

Revenue requirements of the wastewater system include O&M expense and CIP funding. Each of these items are discussed below.

## Wastewater Operation and Maintenance Expense

O&M are an on-going obligation of the wastewater system and such costs are normally met from wastewater service revenue. O&M includes the cost to operate and maintain the wastewater collection system, lift stations, and treatment and disposal facilities. Costs also include technical services and other general and administrative expenses.

O&M has been projected recognizing the major expense categories of personnel services, electric power expense, capital outlay, and all other expenses. Personnel costs consist of salaries and benefits expense of those personnel directly involved with providing wastewater service. Salaries expense is projected to increase by 3.5 percent annually while benefits expense is projected to increase by 8 percent annually. Electric power expense is projected to increase annually at 3 percent while chemicals expense increases by 3 percent. Personnel Transfers increase annually by 4 percent. All other O&M expense is projected to increase by 2 percent annually. Capital outlay is projected to increase by 3 percent annually. Table 33 provides a summary of the wastewater O&M expenses for the Study Period.

Table 33  
Historical and Projected Wastewater Operation and Maintenance Expense

Description	Budget		Projected		
	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
<b>Salaries and Benefits</b>					
Salaries	\$132,200	\$134,900	\$150,276	\$153,279	\$156,344
Benefits	112,800	104,900	142,928	153,952	165,849
Subtotal Salaries and Benefits	\$245,000	\$239,800	\$293,203	\$307,231	\$322,193
<b>Wastewater Operations</b>					
Office Supplies	\$1,100	\$1,100	\$1,122	\$1,144	\$1,167
Contractual Services	63,445	64,740	66,035	67,356	68,703
Power	30,000	31,000	30,900	30,900	30,900
Bank Charges	11,000	11,000	11,220	11,444	11,673
Maintenance - Vehicles	8,200	8,400	8,568	8,739	8,914
Maintenance - Office Equipment	600	600	612	624	636
Maintenance - Machinery and Equip	10,300	10,600	10,812	11,028	11,249
Gas & Oil	7,200	7,400	7,548	7,699	7,853
Maintenance Lines & Pumps	31,000	32,000	32,640	33,293	33,959
Debt Principal	8,000	-	-	-	-
Debt Interest	500	-	-	-	-
Lease Purchase Payments	-	-	-	100,000	100,000
Personnel Transfers	331,700	321,600	334,172	347,242	360,829
Cost Allocation Transfers	126,100	126,100	128,622	131,194	133,818
Transfers Out - CIP Fund	25,940	90,000	91,800	93,636	95,509
Transfers Out - USDA City Hall Loan	5,000	5,000	5,100	5,202	5,306
All Other	5,200	5,200	5,304	5,409	5,517
Subtotal Operations	\$665,285	\$714,740	\$734,455	\$854,910	\$876,033
<b>Capital Outlay</b>					
Machinery & Equipment	3,500	2,500	2,575	2,652	2,732
Subtotal Capital Outlay	\$3,500	\$2,500	\$2,575	\$2,652	\$2,732
<b>Total Wastewater O&amp;M Expense</b>	<b>\$913,785</b>	<b>\$957,040</b>	<b>\$1,030,233</b>	<b>\$1,164,793</b>	<b>\$1,200,958</b>

## Wastewater Annual CIP Funding

The Sewer Fund pays for CIP needs of the wastewater system as identified in the City's CIP plan. The annual amount required is provided from the Sewer Fund to aid in funding these improvements. The amount spent annually is discussed below in the Wastewater CIP section.

## Wastewater Capital Improvement Program

The City has developed a CIP that lists wastewater capital expenditures for FY 2021-22 through FY 2025-26, presented in Table 34. The majority of the CIP includes trenchless rehabilitation projects. The City projects that it would expend approximately \$1.3 million over this period. The CIP is paid for through funds from the Sewer Fund.

Table 34  
Wastewater Capital Improvement Program

Description	Fiscal Year				
	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
<b>Current Capital Improvement Program (CIP) Projects [1]</b>					
Fuel Management System/Dispenser Replacement	\$10,940	\$0	\$0	\$0	\$0
Corporation Yard Renovations	15,000	15,000	15,000	15,000	15,000
Financial Management Software	-	75,000	20,000	-	-
Rate Study Update	-	-	-	-	30,000
Maintenance Hole Rehabilitation	60,000	-	-	-	-
The Pike Sewer Line Replacement	24,977	-	-	-	-
Trenchless Rehab - Alpine/Halcyon/Wood/Vernon	217,200	-	-	-	-
Trenchless Rehab - Woodland/Ash	-	120,412	-	-	-
Trenchless Rehab - Woodland Backyards	-	50,000	-	-	-
Trenchless Rehab - Alder/Cameron	-	-	254,315	-	-
Wastewater Master Plan Update	-	-	100,000	-	-
Trenchless Rehab - Pilgrim/Orchard/Cherry/California	-	-	-	282,000	-
<b>Total Wastewater CIP</b>	<b>\$328,117</b>	<b>\$260,412</b>	<b>\$389,315</b>	<b>\$297,000</b>	<b>\$45,000</b>

[1] CIP Source: FY 21-22 City CIP document. Represents only Sewer Fund portion of project.

## Wastewater Financial Plan

A financial plan has been prepared for the wastewater utility that includes the revenues and revenue requirements that were identified for the wastewater system. The plan is presented in Table 35 and incorporates specific financial planning goals to provide guidance to maintain the health of the wastewater utility on an on-going basis. The goals included the following items.

- Generate positive levels of income in each year of the Study period
- Maintain the operating and capital reserves at or greater than target levels
- Maintain debt service coverage ratios at or greater than the minimum required
- Meet the annual capital funding requirement

## Proposed Revenue Adjustments

Table 35 provides the annual revenue increases recommended to meet the financial planning goals for the five-year Study Period. The financial plan indicates that 8.3 percent revenue increases are recommended beginning on April 19, 2022 and on each January 1 through FY 2025-26, with 2.0 percent revenue increases thereafter for the next five years. The increases are necessary to meet the financial planning goals discussed above.

Table 35  
Wastewater Financial Plan

Description	Projected				
	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
Proposed Revenue Increase (April 19)	8.3%				
Proposed Revenue Increase (January 1)		8.3%	8.3%	8.3%	8.3%
<b>Sewer Fund - 612</b>					
<b>Revenue</b>					
Rate-based Revenues, Existing Rates [1]	\$946,701	\$950,613	\$954,552	\$958,434	\$962,453
Total Additional Wastewater Revenue [2]	6,548	114,505	203,750	301,109	407,352
Miscellaneous Income	224,200	57,000	7,000	289,200	7,000
Interest Income [3]	6,708	6,442	5,798	5,507	6,281
<b>Total Revenue</b>	<b>\$1,184,157</b>	<b>\$1,128,560</b>	<b>\$1,171,100</b>	<b>\$1,554,250</b>	<b>\$1,383,086</b>
<b>Expenditures</b>					
Operation and Maintenance Expense	\$913,785	\$957,040	\$1,030,233	\$1,164,793	\$1,200,958
Capital Improvement Funding	328,117	260,412	389,315	297,000	45,000
<b>Total Expenditures</b>	<b>\$1,241,902</b>	<b>\$1,217,452</b>	<b>\$1,419,548</b>	<b>\$1,461,793</b>	<b>\$1,245,958</b>
<b>Net Funds Available</b>	<b>(\$57,745)</b>	<b>(\$88,892)</b>	<b>(\$248,448)</b>	<b>\$92,457</b>	<b>\$137,128</b>
<b>Available Reserves</b>					
Beginning available reserves [4]	\$1,011,446	\$953,701	\$864,809	\$616,361	\$708,818
<b>Ending available reserves</b>	<b>\$953,701</b>	<b>\$864,809</b>	<b>\$616,361</b>	<b>\$708,818</b>	<b>\$845,946</b>
Target Reserves [5]	\$728,000	\$739,000	\$758,000	\$791,000	\$800,000

[1] Projected using the existing rates.

[2] Additional revenue from rate adjustments.

[3] Interest earnings on the average fund balance calculated at 0.5% plus Sewer Facility Fund interest income.

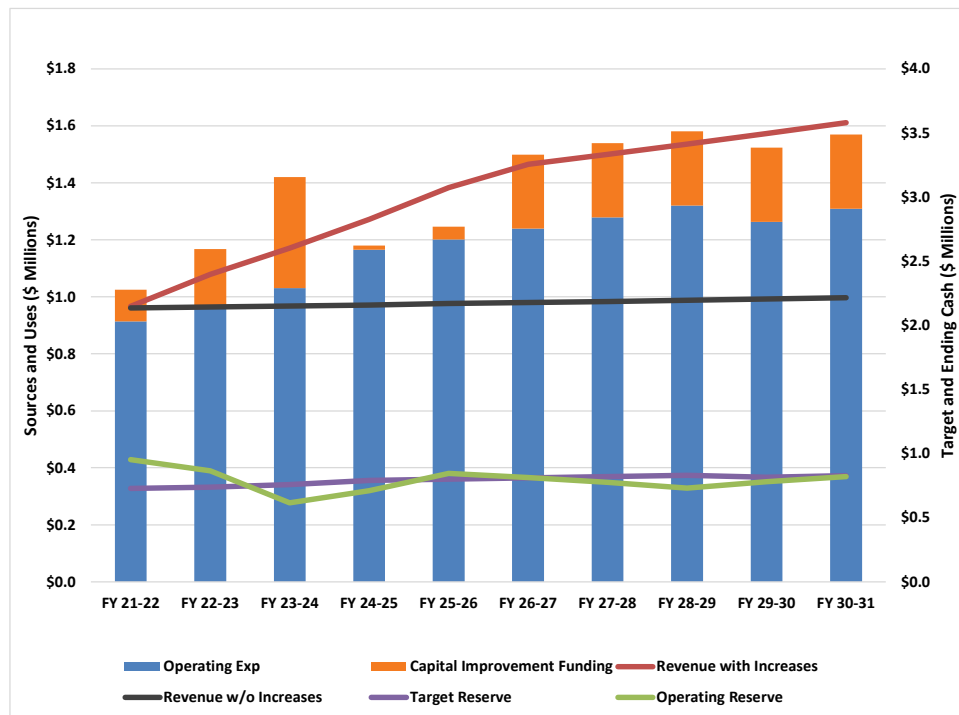
[4] The available FY 21-22 cash balance provided by the City. Includes operating and capital fund reserves

[5] Target reserve estimated at 90 days of operation and maintenance expense plus capital reserve.

A graphical depiction of the revenue and revenue requirements from Table 35 are presented in Figure 4. Revenue using the current rates is shown as the black line while revenue with increases is shown as the red line. The green line represents the cash reserve balance at the end of year while the purple line indicates the Target Reserve level.

The figure shows that the revenue received from the current rates need to be increased to meet annual obligations, fund the CIP program, and maintain reserves. The figure shows that the operating and capital fund reserve balance (green line) is below the Target Reserve (purple line) in the interim years of the Study Period, however, returns to meet or exceed the target reserve in later years.

Figure 3  
Wastewater Financial Plan  
Comparison of Revenue with Annual Obligations



## Wastewater Cost of Service

This section of the report discusses how the wastewater system's operating and capital costs are allocated for use in designing rates. Establishing rates in California requires that the agency responsible for imposing property-related fees create a nexus between the cost of providing service and the rates to be imposed.

### Industry Methodology

Methodology from the Water Environment Federation (WEF) is used in this Study to allocate wastewater costs in an appropriate manner. Similar to AWWA, WEF is an industry trade organization that provides guidance on operations, technical training, education, and management of wastewater utilities. General principles are provided to assist agencies with the design of wastewater rates and charges that are consistent with local requirements while also recognizing state laws and legal framework.

### Costs of Service to be Allocated

The annual revenue requirements for FY 2021-22 are defined as the Test Year and are the cost of providing service for wastewater rate setting. The annual costs this year will be used to evaluate the fairness and equity of the current wastewater rates and will form the basis for the proposed rates.

The cost of service consists of O&M expense and capital funding needs. To establish the cost of providing service to the users of the wastewater system, costs need to first be allocated to wastewater parameters.

## Cost Allocation to Wastewater Parameters

For the approach used for this Study, the cost allocation components for wastewater service are Flow and Customer. The SSLOCSD provides wastewater collection for the trunk sewer only, wastewater treatment, and disposal services to City customers which are billed separately for these services on the customer bill. Because the City does not provide these services, the City's costs are only related to Flow (wastewater collection) and Customer (billing). Operating and capital costs are assigned to each parameter based on the functional operation and design of the facilities.

The total cost to be recovered in FY 2021-22 from the users of the wastewater system is presented in Table 36. The annual revenue requirements are allocated to each wastewater parameter based on a detailed review of expenses and capital requirements and is used in calculating the unit costs of service. A detailed allocation is provided in Appendix B-1.

Table 36  
Allocation of Wastewater Revenue Requirement  
to Cost Component

Fiscal Year	Revenue Requirement	Flow	Customer
FY 21-22	\$1,025,277	\$763,405	\$261,872

## Unit Costs of Service

Each customer classification's responsibility for a portion of the cost of service is established through developing unit costs of service for each of the wastewater parameters described above. Costs of service are then distributed to each user classification by identifying how each group uses the wastewater system, or their units of service. By applying the unit costs to each customer class's units of service, the cost of service by customer class is established.

A wastewater mass balance was performed that reconciled estimated wastewater flow from City customers to the influent flow received by SSLOCSD. The units of service for each customer classification are provided in Appendix B-2. The units of service for wastewater flow by customer classification were identified from an analysis of the estimated influent flow received by SSLOCSD from the City for FY 2020-21.

Table 37 presents the unit costs of providing service for the wastewater system. Unit costs are determined by dividing the costs by parameter from Table 36 and by the units of service from Appendix B-2.



Table 37

## FY 21-22 Development of Wastewater Unit Costs

Description	FY 21-22		
	Total Costs	Flow	Customer
<b>Total Costs of Service</b>	\$1,025,277	\$763,405	\$261,872
Units of Service		543,508	99,936
<b>Unit Costs of Service</b>		\$1.40459	\$2.62040
Units of Measure		HCF	Bills

## User Class Costs

The unit costs from Table 37 are applied to each customer classifications' flow and customer units of service from Appendix B-2 to establish user class costs. The resulting cost of service responsibility of each class is provided in Table 38.

Table 38

## Distribution of Costs to Customer Classes FY 21-22

Description	Allocated Total Cost	Flow	Customer
Unit Costs of Service		\$1.40459	\$2.62040
Units of Measure		HCF	Bills
<b>Single-family Residential</b>			
Units of Service		355,128	72,444
Allocated Cost of Service	\$688,641	\$498,809	\$189,832
<b>Multifamily Residential</b>			
Units of Service		77,542	20,460
Allocated Cost of Service	\$162,528	\$108,915	\$53,613
<b>Non-Residential</b>			
Units of Service		110,838	7,032
Allocated Cost of Service	\$174,108	\$155,682	\$18,427
<b>Total Costs of Service</b>	<b>\$1,025,277</b>	<b>\$763,405</b>	<b>\$261,872</b>

## Wastewater Rates

The goal of the rate design is to achieve fairness while ensuring that each customer class pays its fair share of costs. Rates should be simple to administer, easy to understand, and comply with regulatory requirements. This section describes how wastewater rates and charges are designed and includes the proposed schedule of wastewater rates for implementation.

## Proposed Wastewater Rate Structure

It is proposed to use the current rate structure as the basis for the wastewater rates for the next five years. The rate structure consists of monthly fixed charges for all customers and individual class variable charges based on water consumption applicable to each customer classification.

### Proposed Wastewater Fixed Charges

Fixed charges are stated as the unit cost per bill from Table 37 since these costs do not increase with meter size. All customers are charged the same monthly charge.

### Proposed Wastewater Variable Charges

The wastewater flow costs that were allocated to customer class in Table 38 are divided by metered water consumption of each class to establish the variable rate. Table 39 provides the calculations to establish the variable rates by class.

Table 39  
Design of Variable Wastewater Rates  
FY 21-22

Classification	Flow Cost [1]	Water Sales Volume	Variable Rate \$/HCF
Single-family Residential	\$498,809	689,844	\$0.72
Multifamily Residential	108,915	104,876	\$1.04
Non-Residential	155,682	110,838	\$1.40
Total	\$763,405	905,558	

[1] From Table 38.

## Proposed Wastewater Rates

Table 40 presents the proposed fixed charges and variable charges for the wastewater system for the next five years. Table 40 includes the current fixed and variable rates as well as future wastewater rates for implementation beginning on April 19, 2022 and each January 1 through FY 2025-26. Wastewater system fixed and variable charges beyond April 19, 2022 are increased by the percentages shown in the financial plan in Table 35.

Table 40  
Proposed Wastewater Fixed and Variable Charges

Meter Size	Current	April 19, FY 21-22	January 1, FY 22-23	January 1, FY 23-24	January 1, FY 24-25	January 1, FY 25-26
Fixed Charge (\$ per month)						
All Customers [1]	\$2.40	\$2.62	\$2.84	\$3.08	\$3.34	\$3.62
Variable Charge (\$ per HCF) [2]						
Single-family Residential	\$0.67	\$0.72	\$0.78	\$0.84	\$0.91	\$0.99
Multifamily Residential	\$0.94	\$1.04	\$1.12	\$1.21	\$1.31	\$1.42
Non-Residential	\$1.32	\$1.40	\$1.52	\$1.65	\$1.79	\$1.94

[1] Fixed charge per month per account and to each additional unit.

[2] Charged on the basis of water consumption read through the meter.

## Wastewater Bill Impact Analysis

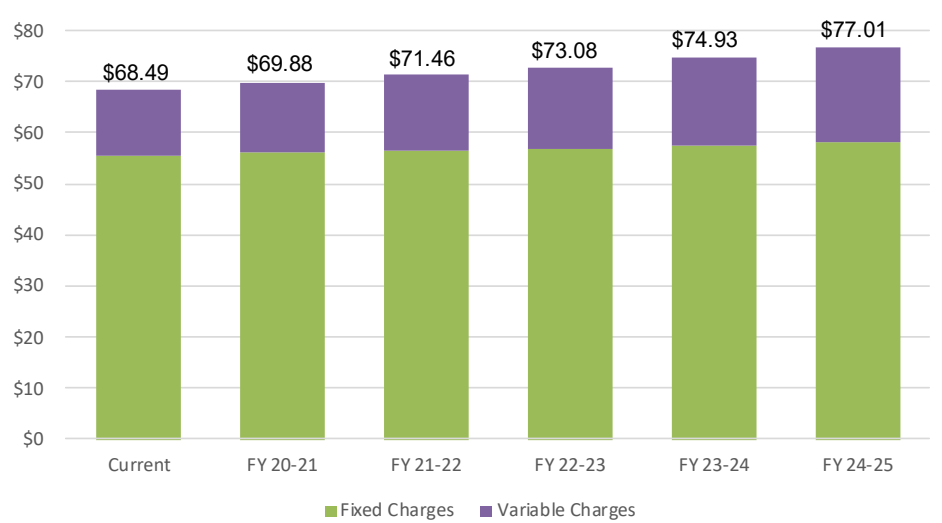
An impact analysis was performed to evaluate the change in SFR customer wastewater bills that would occur from the implementation of the proposed wastewater rates for the April 19, 2022 increase. As shown in Table 41, a SFR customer using the average consumption of 19 HCF bi-monthly will experience a bill that will increase from \$68.49 to \$69.88, an increase of \$1.39 or 2.0 percent. The current and proposed bills include the current South San Luis Obispo County Sanitation District (SSLOCS D) wastewater treatment charge of \$25.48 monthly.

Table 41  
Comparison of Current Single-family Residential Bi-monthly Wastewater Bill with Proposed Bill Using April 2022 Wastewater Rates

Description	Use (HCF)	Service Charge	San District Charge	Volume Charge	Current Bill	Service Charge	San District Charge	Volume Charge	Proposed Bill	Dollar Difference	Percent Change
	0	\$4.80	\$50.96	\$0.00	\$55.76	\$5.24	\$50.96	\$0.00	\$56.20	\$0.44	0.8%
Very Low	5	\$4.80	\$50.96	\$3.35	\$59.11	\$5.24	\$50.96	\$3.60	\$59.80	\$0.69	1.2%
Low	10	\$4.80	\$50.96	\$6.70	\$62.46	\$5.24	\$50.96	\$7.20	\$63.40	\$0.94	1.5%
Median	13	\$4.80	\$50.96	\$8.71	\$64.47	\$5.24	\$50.96	\$9.36	\$65.56	\$1.09	1.7%
Average	19	\$4.80	\$50.96	\$12.73	\$68.49	\$5.24	\$50.96	\$13.68	\$69.88	\$1.39	2.0%
High	30	\$4.80	\$50.96	\$20.10	\$75.86	\$5.24	\$50.96	\$21.60	\$77.80	\$1.94	2.6%
Very High	50	\$4.80	\$50.96	\$33.50	\$89.26	\$5.24	\$50.96	\$36.00	\$92.20	\$2.94	3.3%

Table 42 provides future SFR wastewater bills calculated using the proposed rates from Table 40 at the average consumption of 19 HCF bi-monthly.

**Table 42**  
**Single-family Residential Bi-monthly Wastewater Bill Impacts at 19 HCF**



SFR Charges	Current	Proposed				
		FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
Fixed Charges	\$4.80	\$5.24	\$5.68	\$6.16	\$6.68	\$7.24
Variable Charges	\$12.73	\$13.68	\$14.82	\$15.96	\$17.29	\$18.81
SSLOCSD Charge	\$50.96	\$50.96	\$50.96	\$50.96	\$50.96	\$50.96
Total Charges	\$68.49	\$69.88	\$71.46	\$73.08	\$74.93	\$77.01
Dollar Change		\$1.39	\$1.58	\$1.62	\$1.85	\$2.08
Percent Change		2.0%	2.3%	2.3%	2.5%	2.8%

Note: Assumes constant South San Luis Obispo County Sanitation District (SSLOCSD) charges.

## Wastewater Rate Survey

A wastewater rate survey was conducted for neighboring communities to the City of Arroyo Grande. Chart 3 compares the Arroyo Grande SFR bi-monthly wastewater bill using 19 HCF with those of neighboring communities. The rate survey includes rate schedules in effect August 2021. Wastewater bills for Arroyo Grande are shown using the current rates and the proposed rates for implementation April 19, 2022. The chart indicates that an Arroyo Grande SFR customer will experience a bill that is among the lowest of the communities listed.

Chart 3  
Single-family Residential Bi-Monthly Wastewater Bills of Local Communities at 19 HCF



Note: Above table uses wastewater rates in effect August 2021. Arroyo Grande April 2022 bill is based on the rate structure and rates in Table 40.

## Water and Wastewater Drought Rates

The City requested that water and wastewater rates be developed to address the City's implementation of a Stage 1 drought declaration. The City's Stage 1 drought declaration includes requesting residential and irrigation customers to reduce consumption from calendar year (CY) 2020 levels by an overall 10 percent as well as other targeted efforts to achieve reductions in water consumption.

To compensate for the revenue decline that occurs from the reduction in consumption, Stage 1 drought rates increase the normal water and wastewater rates to recover the lost revenue and to restore the revenue back to the same levels provided in the water and wastewater financial plans in the earlier sections of this report assuming there is a sustained drought at CY 2020 annual consumption levels. The Stage 1 drought rates increase the normal condition water and wastewater rate schedules each by an overall 13.6 percent respectively.

The drought rates were determined for a five-year period with the same implementation dates of the normal water and wastewater rates with April 19, 2022 for the first year with subsequent increases each January 1. The drought rates apply when the Arroyo Grande City Council declares a Stage 1 drought declaration.

Tables 43 provides Stage 1 drought water rates with Central Coast Blue and Table 44 provides wastewater rates under a Stage 1 drought declaration.

**Table 43**  
**Proposed Stage 1 Drought Water Fixed and Variable Charges**  
**with Central Coast Blue**

	Current Rate	April 19, FY 21-22	January 1, FY 22-23	January 1, FY 23-24	January 1, FY 24-25	January 1, FY 25-26
<b>Meter Size</b>	<b>Fixed Charge (\$ per month)</b>					
5/8"	\$29.51	\$31.61	\$33.64	\$35.80	\$38.09	\$40.53
3/4"	\$31.67	\$34.73	\$36.95	\$39.32	\$41.84	\$44.52
1"	\$38.12	\$44.05	\$46.87	\$49.87	\$53.06	\$56.46
1.5"	\$46.73	\$56.49	\$60.11	\$63.96	\$68.05	\$72.40
2"	\$70.41	\$90.69	\$96.49	\$102.67	\$109.24	\$116.22
3"	\$244.74	\$342.54	\$364.46	\$387.78	\$412.61	\$439.02
4"	\$309.31	\$435.82	\$463.70	\$493.38	\$524.96	\$558.56
6"	\$459.96	\$653.46	\$695.28	\$739.77	\$787.12	\$837.49
8"	\$632.14	\$902.20	\$959.94	\$1,021.38	\$1,086.74	\$1,156.29
Service Fee per Add'l Unit	\$7.99	\$9.22	\$9.82	\$10.46	\$11.12	\$11.82
<b>Fireline Size</b>	<b>Variable Charge (\$ per HCF)</b>					
2"	\$3.74	\$5.10	\$5.43	\$5.78	\$6.16	\$6.55
3"	\$10.88	\$14.84	\$15.78	\$16.79	\$17.87	\$19.02
4"	\$23.18	\$31.60	\$33.63	\$35.77	\$38.07	\$40.50
6"	\$67.33	\$91.81	\$97.68	\$103.93	\$110.59	\$117.67
8"	\$143.48	\$195.65	\$208.18	\$221.51	\$235.69	\$250.77
10"	\$258.03	\$351.85	\$374.38	\$398.34	\$423.83	\$450.96
<b>Single-Family</b>	<b>Variable Charge (\$ per HCF)</b>					
Tier 1 - 0 to 18 units	\$3.78					
Tier 2 - 19 to 36 units	\$4.16					
Tier 3 - 37 to 36 units	\$5.55					
Tier 1 - 0 to 10 units		\$4.61	\$4.91	\$5.23	\$5.56	\$5.91
Tier 2 - 11 to 22 units		\$5.49	\$5.84	\$6.21	\$6.61	\$7.03
Tier 3 - Over 22		\$5.61	\$5.98	\$6.36	\$6.77	\$7.20
<b>Multifamily</b>	<b>Variable Charge (\$ per HCF)</b>					
Tier 1 - 0 to 18 units	\$3.78					
Tier 2 - 19 to 27 units	\$4.16					
Tier 3 - Over 27	\$5.55					
Tier 1 - 0 to 10 units		\$4.61	\$4.91	\$5.23	\$5.56	\$5.91
Tier 2 - 11 to 22 units		\$5.49	\$5.84	\$6.21	\$6.61	\$7.03
Tier 3 - Over 22		\$5.61	\$5.98	\$6.36	\$6.77	\$7.20
<b>Commercial</b>	\$3.95	\$5.00	\$5.32	\$5.66	\$6.02	\$6.41
<b>Irrigation</b>	\$4.21	\$5.65	\$6.01	\$6.40	\$6.80	\$7.24
<b>Hydrant</b>	\$6.13	\$9.00	\$9.58	\$10.19	\$10.84	\$11.53
<b>Wheeling</b>	\$2.04	\$2.69	\$2.86	\$3.04	\$3.24	\$3.44

**Table 44**  
**Proposed Stage 1 Drought Wastewater Fixed and Variable Charges**

	Current Rate	April 19, FY 21-22	January 1, FY 22-23	January 1, FY 23-24	January 1, FY 24-25	January 1, FY 25-26
Fixed Charge (\$ per month)						
All Customers [1]	\$2.40	\$2.98	\$3.23	\$3.50	\$3.79	\$4.11
Variable Charge (\$ per HCF) [2]						
Single-family Residential	\$0.67	\$0.82	\$0.89	\$0.95	\$1.03	\$1.12
Multifamily Residential	\$0.94	\$1.18	\$1.27	\$1.37	\$1.49	\$1.61
Non-Residential	\$1.32	\$1.60	\$1.73	\$1.87	\$2.03	\$2.20

[1] Fixed charge per month per account and to each additional unit.

[2] Charged on the basis of water consumption read through the meter.

# Appendix A

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Water System Historical and Projected Operation and Maintenance Expense and Cost of Service Allocation with Central Coast Blue are provided in Appendix A.



Appendix A-1  
Historical and Projected Water Operation and Maintenance Expense

Line No.	Description	Budget	Projected			
		FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
Water Fund						
Administration						
1	Salaries	\$63,700	\$65,000	\$67,275	\$69,630	\$72,067
2	Benefits	163,100	133,500	144,180	155,714	168,172
3	Contractual Services	221,045	191,140	194,964	198,863	202,840
4	Personnel Transfers	909,621	875,626	910,651	947,077	984,960
5	Personnel Transfers - Utility Billing	94,879	98,674	102,621	106,726	110,995
6	Cost Allocation Transfers	1,156,900	1,156,900	1,180,038	1,203,639	1,227,712
7	Transfers Out - USDA City Hall Loan	8,800	8,800	8,800	8,800	8,800
8	All Other	130,900	133,000	135,660	138,372	141,140
9	Total Water Administration	\$2,748,945	\$2,662,640	\$2,744,189	\$2,828,821	\$2,916,686
Water Production						
10	Salaries	\$75,700	\$77,200	\$79,902	\$82,699	\$85,593
11	Benefits	42,500	43,300	46,764	50,505	54,546
12	Power (electricity)	56,700	57,400	58,862	60,862	62,940
13	Services and Supplies	30,900	31,800	32,436	33,084	33,746
14	Total Water Production	\$205,800	\$209,700	\$217,964	\$227,150	\$236,825
Water Distribution						
15	Salaries	\$293,400	\$296,000	\$306,360	\$317,083	\$328,180
16	Benefits	156,700	163,000	176,040	190,123	205,333
17	Supplies - Water Meters	41,200	42,400	43,248	44,113	44,995
18	Chemicals	25,800	26,500	27,402	28,333	29,301
19	Power	90,000	92,700	95,857	99,113	102,497
20	Maintenance - Vehicles	10,300	10,600	10,812	11,028	11,249
21	Maintenance - Mach & Equip	7,200	7,400	7,548	7,699	7,853
22	Maintenance - Bldgs	5,200	5,400	5,508	5,618	5,730
23	Gas and Oil	20,600	21,200	21,624	22,056	22,497
24	Maintenance - Reservoirs	10,300	10,600	10,812	11,028	11,249
25	Maintenance - Wells/lines/pumps	57,000	59,000	60,180	61,384	62,612
26	Maintenance - Meters	10,000	10,000	10,200	10,404	10,612
27	All Other	117,800	39,000	39,780	40,574	41,386
28	Subtotal	\$845,500	\$783,800	\$815,371	\$848,556	\$883,494
29	Subtotal O&M Expense	\$3,800,245	\$3,656,140	\$3,777,524	\$3,904,527	\$4,037,005
30	Central Coast Blue Water Supply	-	-	131,073	532,155	548,120
Lopez Fund						
Lopez Water Supply						
31	Lopez Contract O&M	\$2,239,161	\$2,472,198	\$2,546,364	\$2,622,755	\$2,701,438
32	Lopez Dam Bonds - 2011A Debt Service	420,749	434,981	434,981	434,981	434,981
33	SRF Loan Debt Service	845,137	845,137	845,137	845,137	845,137
34	Lopez Capital Outlay	235,066	100,000	100,000	100,000	100,000
35	Total Lopez Water Expense	\$3,740,113	\$3,852,316	\$3,926,482	\$4,002,873	\$4,081,556
36	Total Water System O&M Expense	\$7,540,358	\$7,508,456	\$7,835,079	\$8,439,555	\$8,666,681

Appendix A-2  
Allocation of Water Revenue Requirements to Cost Component

	FY 21-22		Common to All				Common to All Except Wheeling			
	Revenue									
	Requirement	Delivery	Peaking	Meters/Serv	Customer	Direct Fire Protection	Water Supply	Delivery	Peaking	Lopez Debt
<b>Administration</b>										
Salaries and Benefits	\$226,800	\$69,637	\$97,756	\$11,045	\$0	\$16,196	\$0	\$17,109	\$15,057	\$0
Contractual Services	213,614	65,587	92,074	10,403	-	15,254	-	16,115	14,181	-
Contractual Services - Billing	5,464	-	-	-	5,464	-	-	-	-	-
Contractual Services - Meter Reading	1,967	-	-	-	1,967	-	-	-	-	-
Water Treatment Services (sampling & testing)	21,000	-	-	-	-	-	21,000	-	-	-
Personnel Transfers	909,621	279,287	392,072	44,300	-	64,956	-	68,620	60,386	-
Personnel Transfers - Utility Billing	94,879	-	-	-	94,879	-	-	-	-	-
Cost Allocation Transfers	1,156,900	355,212	498,655	56,343	-	82,614	-	87,274	76,802	-
Transfers Out - USDA City Hall Loan	8,800	2,702	3,793	429	-	628	-	664	584	-
Other	109,900	25,759	36,163	4,086	26,000	5,992	-	6,330	5,570	-
Total General and Administration	\$2,748,945	\$798,184	\$1,120,513	\$126,606	\$128,310	\$185,640	\$21,000	\$196,112	\$172,580	\$0
<b>Water Production</b>										
Salaries and Benefits	\$118,200	\$0	\$0	\$0	\$0	\$0	\$0	\$62,872	\$55,328	\$0
Contractual Services	10,300	-	-	-	-	-	-	5,479	4,821	-
Power (electricity)	56,700	-	-	-	-	-	56,700	-	-	-
Maintenance - Machinery & Equipment	20,600	-	-	-	-	-	-	10,957	9,643	-
Total Water Production	\$205,800	\$0	\$0	\$0	\$0	\$0	\$56,700	\$79,308	\$69,792	\$0
<b>Water Distribution</b>										
Salaries and Benefits	\$450,100	\$113,581	\$314,619	\$0	\$0	\$21,900	\$0	\$0	\$0	\$0
Supplies - Water Meters	41,200	-	-	41,200	-	-	-	-	-	-
Chemicals	25,800	-	-	-	-	-	25,800	-	-	-
Contractual Services	20,600	5,465	15,135	-	-	-	-	-	-	-
Power	90,000	77,783	12,217	-	-	-	-	-	-	-
Maintenance - Vehicles	10,300	2,732	7,568	-	-	-	-	-	-	-
Maintenance - Office Equip	\$0	-	-	-	-	-	-	-	-	-
Maintenance - Mach & Equip	7,200	1,909	5,291	-	-	-	-	-	-	-
Maintenance - Bldgs	\$5,200	1,379	3,821	-	-	-	-	-	-	-
Maintenance - Reservoirs	10,300	1,030	9,270	-	-	-	-	-	-	-
Maintenance - Wells/lines/pumps	\$57,000	8,268	7,277	-	-	41,455	-	-	-	-
Maintenance - Meters	10,000	-	-	10,000	-	-	-	-	-	-
Lease Purchase Payments	\$13,500	3,581	9,919	-	-	-	-	-	-	-
Equipment	67,500	14,795	40,986	-	-	11,719	-	-	-	-
All Other	36,800	9,764	27,036	-	-	-	-	-	-	-
Total Water Distribution	\$845,500	\$240,288	\$453,139	\$51,200	\$0	\$75,073	\$25,800	\$0	\$0	\$0
<b>Lopez Water Expense</b>	<b>\$3,740,113</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,239,161</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,500,952</b>
Total Operation and Maintenance Expense	\$7,540,358	\$1,038,472	\$1,573,652	\$177,806	\$128,310	\$260,713	\$2,342,661	\$275,420	\$242,372	\$1,500,952
<b>Capital Costs</b>										
Capital Improvement Funding	\$2,226,797	\$503,270	\$1,532,013	\$0	\$0	\$0	\$0	\$101,869	\$89,645	\$0
Total Capital Costs	\$2,226,797	\$503,270	\$1,532,013	\$0	\$0	\$0	\$0	\$101,869	\$89,645	\$0
<b>Adjustments</b>										
Revenue Offsets	(\$1,138,052)	(\$319,697)	(\$484,452)	(\$54,738)	(\$39,500)	(\$80,262)	\$0	(\$84,788)	(\$74,615)	\$0
Adjustments for Annual Cash Balance	(1,877,791)	(527,500)	(799,349)	(90,318)	(65,176)	(132,431)	-	(139,902)	(123,115)	-
Adjustments to Annualize Rate Increase	393,976	110,675	167,710	18,949	13,674	27,785	-	29,353	25,830	-
Total Adjustments	(\$2,621,867)	(\$736,522)	(\$1,116,091)	(\$126,107)	(\$91,002)	(\$184,908)	\$0	(\$195,337)	(\$171,900)	\$0
<b>Total Cost of Service</b>	<b>\$7,145,288</b>	<b>\$805,219</b>	<b>\$1,989,574</b>	<b>\$51,699</b>	<b>\$37,308</b>	<b>\$75,805</b>	<b>\$2,342,661</b>	<b>\$181,952</b>	<b>\$160,117</b>	<b>\$1,500,952</b>

# Appendix B

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Wastewater System Allocation of Wastewater Revenue Requirements to Cost Component and Units of Service are provided in Appendix B.

## Appendix B-1

### Allocation of Wastewater Revenue Requirements to Cost Component

Description	FY 21-22			
	Total Cost	Flow	Customer	General
<b>Direct Operation and Maintenance Expense</b>				
Salaries and Benefits	\$245,000	\$217,511	\$27,489	\$0
Power	30,000	30,000	0	0
Maintenance Lines & Pumps	31,000	27,522	3,478	0
Personnel Transfers - Billing	13,746	0	13,746	0
Capital Outlay	3,500	3,175	325	0
All Other O&M	590,539	0	49,974	540,565
Total Operation and Maintenance Expense	\$913,785	\$278,208	\$95,012	\$540,565
<b>Reallocation of General Expense</b>	0	404,142	136,423	(540,565)
Total Operation and Maintenance Expense	\$913,785	\$682,350	\$231,435	\$0
<b>Capital Improvement Funding</b>	\$328,117	\$297,680	\$30,437	\$0
<b>Adjustments</b>				
Revenue Offsets	(\$230,925)	(\$230,925)	\$0	\$0
Adjustments for Annual Cash Balance	(51,180)	(51,180)	0	0
Adjustments to Annualize Rate Increase	65,480	65,480	0	0
Total Adjustments	(\$216,625)	(\$216,625)	\$0	\$0
Total Revenue Requirement	\$1,025,277	\$763,405	\$261,872	\$0

## Appendix B-2

### FY 21-22 Units of Service

Customer Class	FY 21-22 Annual Use	Overall Return Factor	Total Wastewater Volume	Bills
	HCF		HCF	Bills
Single-family Residential	689,844	51%	355,128	72,444
Multifamily Residential	104,876	74%	77,542	20,460
Non-Residential	110,838	100%	110,838	7,032
<b>Total System</b>	<b>905,558</b>		<b>543,508</b>	<b>99,936</b>