



# CITY OF REDWOOD CITY

## Water Rate Cost-of-Service Study

**Final Report July 8, 2025**  
**Revised October 30, 2025**





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October 30, 2025

Terence Kyaw  
Public Works Director  
City of Redwood City  
1400 Broadway  
Redwood City, CA 94063

**Subject: Water Rate Cost-of-Service Study – Final Report**

Dear Terence Kyaw:

HF&H is pleased to submit this cost-of-service report to the City of Redwood City (City). The previous rate study was completed in 2023. The current study makes the following recommendations.

- **Revenue increases.** Rate increases are recommended due to increases in the cost of purchased water from the San Francisco Public Utilities Commission (SFPUC) and the need to fund capital improvements, including ongoing repairs and replacements of aging infrastructure. The cost of SFPUC water is 44% of the annual revenue requirement – the largest single expense. Wholesale water rates are projected to increase 12% from FY 2024-25 to FY 2027-28. In addition, rate increases are needed to allow the City’s Water Enterprise Fund to continue compliance with debt service requirements, to avoid operational cost increases, and to maintain prudent reserve balances. Over the next three years, the recommended revenue increases are 7%, 6%, and 5%.
  - **Single Family Water Use Rate Structure Modifications.** The City will be transitioning from a tiered rate structure to a uniform rate structure for Single Family Residential customers. This change in Water Use Charge rates for single family customers means that all customers will now be charged a uniform consumption rate, regardless of the amount of water used.
  - **Drought Rate Revenue Stabilization Rates (Drought Rates).** Drought Rates can be adopted as part of the Proposition 218 process. The Drought Rates apply an incremental increase to each unit of water used by the customer. The increase is subject to the level of shortage declared such that a higher level shortage generates a higher Drought Rate so that the City can maintain revenue neutrality during drought conditions when customers are required to reduce water use.
  - **Pass-through Adjustment.** We recommend that the City incorporate annual pass-through adjustments of the SFPUC water purchase cost into its water use charge rates. Water use charge rates can be adjusted to track any difference between the SFPUC rates that were included in the analysis and the actual rates adopted each year by SFPUC.
-

The rates proposed in this report reflect the current and projected cost of providing service for the next five years. We greatly appreciate your assistance in developing the cost-of-service analysis.

Please note typographical errors were identified after this report was initially published. The report was revised on October 17, 2025 to correct a typographical error on page 48 of Section 6. Customer Bill Impacts. A footnote has been added to this page to call out the edit, as well.

On October 30, 2025 the report was revised to correct typographical errors as follows. Footnotes were added to each instance in the text to callout the correction:

An error was corrected in Figure 1-1 on page 3 of Section 1. Executive Summary. This figure is repeated as Figure 3-5 on page 18 of Section 3. Revenue Requirements.

An error was corrected on page 16 of Section 3. Revenue Requirements to correct the total sum of cash-funded capital projects.

An error was corrected on page 48 of Section 6. Customer Bill Impacts to correct the figure referenced in the Single Family Residential bill discussion.

Errors were corrected on pages 48 and 49 of Section 6. Customer Bill Impacts to correct the text and figures referenced in the Multi Family bill discussion.

An error was corrected on page 51 of Section 6. Customer Bill Impacts to correct the figure referenced in the Commercial bill discussion.

The edits made to the report did not change the analysis nor alter the rates previously published.

Sincerely,

Rick Simonson  
Senior Vice President



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## GLOSSARY

**AWWA** – American Water Works Association.

**BAWSCA** – Bay Area Water Supply and Conservation Agency.

**City** – City of Redwood City and/or the City’s Water Enterprise

**CCF** – Hundred cubic feet (see HCF below).

**CIP** - Capital Improvement Program.

**Commercial** – Refers to commercial, industrial, and municipal accounts served by the City. Includes all commercial, industrial, municipal, fire, other, and recycled water customers under the proposed Water Use Charge rates.

**Commercial/Multi Family** – Refers to all non-single family residential customers for the purposes of performing the cost-of-service analysis.

**Drought Rates** – Factors applied to Water Use Charge Rates to stabilize revenue to meet the City’s water revenue requirement during periods of conservation when there are significant reductions in water usage, and hence in water revenues.

**DU** – Dwelling Unit, in reference to the number of physical residences served by a Single Family Residential or Multi Family Residential meter.

**EFU** – Equivalent Fireline Unit, A unit of measure used to assign relative capacity demand values to private fire protection services based on the size of the service line connection.

**EMU** – Equivalent Meter Unit.

**Fire Service Charges** – Monthly fixed charges paid per private fire service customers, regardless of whether water is used. The charge is proportionate to the capacity of the fire service line in relation to the overall fire flow demand of the City system.

**FY** - Fiscal Year.

**Flat rates** - Fixed charges per account that do not vary based on metered water use. Flat rates are found in unmetered water systems and in wastewater rates. Flat rates are not uniform rates (see below).

**HCF** - Hundred cubic feet of metered water; 748 gallons; a cube of water 4.6 feet on edge. One HCF per month is about 25 gallons per day.

## Water Rate Cost-of-Service Study

Contents, Figures, Glossary, Acknowledgements, and Limitations



**Irrigation** – Refers to the current Landscape Irrigation customer class. Includes all potable and recycled water commercial irrigation customers under the proposed rate structure.

**Meter charges** - One-time charges for the purchase of a meter. Meter charges are not Service Charges (see below).

**Multi Family Residential** – Refers to the current Multi Family Residential customer class. Includes all multi-family customer accounts, residential fire service accounts, residential irrigation, and future residential recycled water customers under the proposed Water Use Charge rates.

**O&M** - Operating and Maintenance, in reference to the costs of running facilities.

**PAYGo** - Pay-As-You-Go, in reference to funding capital improvements from cash rather than from borrowed sources such as bonds or loans.

**Recommended Period** – Refers to FY 2025-26 through FY 2027-28 for which the City plans to establish new water rates.

**RWS** – Regional Water System

**Service Charges** – Fixed charges paid per account regardless of the amount of water used. The charge is proportionate to the capacity of the customer’s service, which is the capacity of the pipe connecting from the main to the meter, or the meter, whichever is smaller. This is not applicable to private fire services, which are charged according to the size of the connecting pipe, only. Service Charges are not meter charges (see above). The City’s Service Charges are called “Fixed Service Charges.”

**SFPUC** - San Francisco Public Utilities Commission.

**Study Period** – ten-year planning period analyzed in this study, which includes fiscal year 2025-26 to fiscal year 2034-35

**SVCW** – Silicon Valley Clean Water, a Joint Powers Authority serving the communities of Belmont, Redwood City, San Carlos, and the West Bay Sanitary District.

**Uniform rates** - Constant charges per unit of water use that do not change depending on the amount used. Uniform rates are not flat rates (see above).

**Water Use Charges** – The product of rates per unit of metered water use multiplied by a customer’s metered water use during the billing period.

**WSCP** – Water Shortage Contingency Plan.



# ACKNOWLEDGEMENTS

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## **LIMITATIONS**

This document was prepared solely for the City of Redwood City in accordance with the contract between the City and HF&H and is not intended for use by any other party for any other purpose.

In preparing this study, we relied on information from the City, which we consider accurate and reliable. Our analysis is based on the best available information at the time of the study.

Rounding differences caused by stored values in electronic models may exist.

This document represents our understanding of relevant laws, regulations, and court decisions but should not be relied upon as legal advice. Questions concerning the interpretation of legal authorities referenced in this document should be referred to a qualified attorney.



## Section 1. Executive Summary

### BACKGROUND

The City operates and maintains a potable and recycled water distribution system to serve its water users. It is a complex system with varying topography and separate but interconnected pressure zones. As of this study, the City serves 24,327 connections within its service area. The City's water service area covers approximately 17 square miles. The City purchases all its potable water from the San Francisco Public Utilities Commission (SFPUC) Regional Water System (RWS) and is a member of Bay Area Water Supply and Conservation Agency (BAWSCA). The City has also been supplying recycled water to its customers since 2000. As a member of Silicon Valley Clean Water (SVCW), the City receives disinfected tertiary-treated, recycled water for reuse. The infrastructure network includes 280 miles of water mains, 15 active storage reservoirs, 12 booster pump stations, and various assets, such as water meters, fire hydrants, and valves<sup>1</sup>. The SFPUC delivers treated wholesale water to the City from its RWS. This water is delivered through thirteen master meter locations from the SFPUC's transmission pipelines. From these connections, the City reduces pressure and pumps to deliver water to its customers.

The water rates in this study were developed using rate-making principles set forth by the American Water Works Association (AWWA) in *Principles of Water Rates, Fees and Charges* (M1 Manual). This Manual's cost-of-service principles endeavor to distribute costs to customer classes (also referred to as classes) and to individual customers in proportion to customers' impacts on the water system. Pursuant to the M1 Manual, rate studies generally contain three elements: (1) a revenue requirements analysis, which determines how much revenue is needed from rates to recover a utility's projected costs; (2) a cost-of-service analysis, which allocates the revenue requirements to the rate components;<sup>2</sup> and (3) a rate design analysis, which determines any modifications that are required to align the rate structure with the cost of service.

Rate studies include a revenue requirement analysis. A cost-of-service analysis is typically only conducted periodically. It is recommended that a cost-of-service analysis be conducted at least every five years to account for any material differences in the costs of providing service and in the water usage among customer classes, which will affect their respective shares of the cost-of-service. The City last conducted a cost-of-service study in 2023.

The City requested HF&H to conduct a cost-of-service study to analyze a period of ten years (Study Period). While three years of analysis (FY 2025-26, FY 2026-27, and FY 2027-28) are shown in this report, the projections from the Study Period are included in **Appendix A** to provide a longer term analysis. The City is electing to set water rates for three years

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<sup>1</sup> 2020 Urban Water Management Plan City of Redwood City published June 2021.

<sup>2</sup> This study's cost-of-service analysis utilizes a uniform rate structure methodology, following cost allocation principles supported in the AWWA M1 Manual. The approach allocates revenue requirements based on overall water demand, capacity needs, and customer service functions, with adjustments made to address the unique characteristics of the City's water system. Further details on these adjustments are provided in Chapter 4.



(Recommended Period) and plans to conduct the next rate study to set rates for FY 2028-29 and future years.

Since the previous cost-of-service analysis, changes in demand patterns among customer classes have occurred, which affects the factors that are used to allocate costs. The costs to which the allocation factors are applied also changed. Hence, there will be differences between the previous and current cost-of-service analyses. Primarily, the rate structure for single family customers is proposed to change from tiered water rates to a uniform volumetric rate. Adjustments are made to reflect the differences and rates are set accordingly.

The cost-of-service analysis proportionately allocates the revenue that is required from rates to the components of the rate structure and to the customer classes. Costs are classified corresponding to the function they serve. Each function's costs are further allocated to each component of the rates in proportion to the level of service required by customers. The levels of service are related to demand, infrastructure capacity, and customer service. Ultimately, a cost-of-service analysis ensures that the rates yield charges that are proportional to the cost of providing service to each customer.

The following discussion summarizes HF&H's findings and recommendations.

## REVENUE REQUIREMENTS

The revenue requirements were updated to reflect projected customer demands and the costs associated with meeting those demands. The three-year projections are shown in **Figure 1-1<sup>3</sup>** with FY 2024-25 provided for reference.

Over the Study Period, the City's revenue requirement is driven by increases to water purchase costs and capital improvement expenditures. The City's water supply source, SFPUC, intends to raise rates from \$5.67 per hundred cubic feet (HCF)<sup>4</sup> to \$5.80 per HCF for FY 2025-26. Wholesale water rates of \$5.67 per HCF in FY 2024-25 will increase 4.6% to \$5.93 per HCF in FY 2027-28. The City's capital improvement plan includes an average annual expense of \$13.6 million from FY 2025-26 through FY 2029-30, demonstrating the City's priority to continue to invest in its water system. Most of the planned project expenditures are for improvements to the water distribution system (i.e., pipelines), as well as storage and pumping infrastructure.

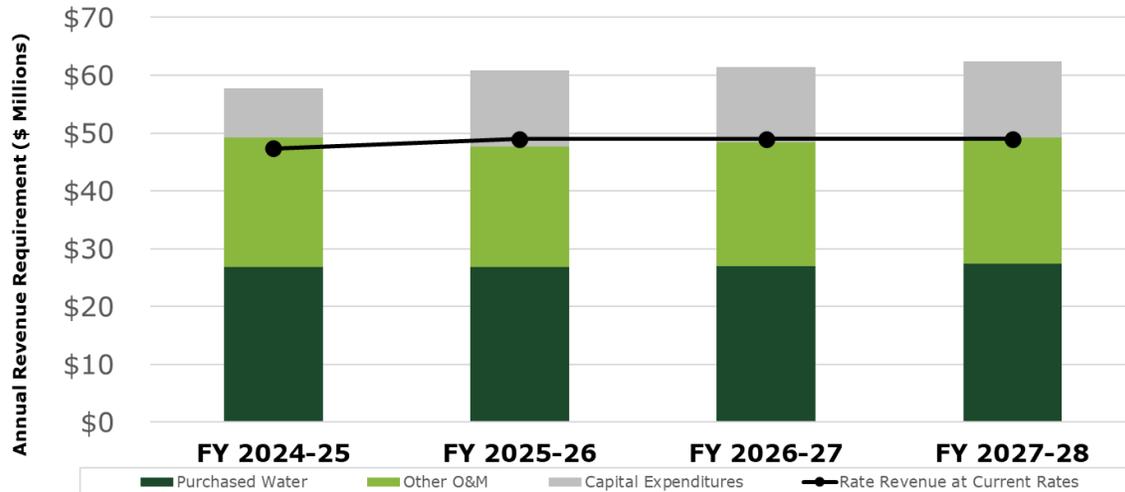
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<sup>3</sup> The final report was revised to correct a typographical error in Figure 1-1. The expense category total in FY 2027-28 for Purchased Water was updated to \$27,359,282, and the expense category total in FY 2027-28 for Other O&M was updated to \$21,927,263. In turn, these changes decreased the Total Revenue Requirement in FY 2027-28 to \$62,447,811. These changes did not change the analysis, or rates published in the original report from July 8, 2025 because the rates were calculated from the correct revenue requirement values shown in Appendix A, Table 2A.

<sup>4</sup> HCF (Hundred Cubic Feet) = 748.052 gallons



**Figure 1-1. Total Revenue Requirement Projections**



Water Enterprise Expenses	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Purchased Water	\$26,759,500	\$26,759,500	\$27,036,322	\$27,359,282
Other O&M	\$22,397,052	\$20,941,441	\$21,279,472	\$21,927,263
Capital Expenditures	\$8,638,538	\$13,161,266	\$13,161,266	\$13,161,266
<b>Total Revenue Requirement</b>	<b>\$57,795,090</b>	<b>\$60,862,207</b>	<b>\$61,477,061</b>	<b>\$62,447,811</b>
<i>Annual Increase</i>		5.3%	1.0%	1.6%

Source: **Figure 3-5.**

The rate and revenue increases from FY 2025-26 through FY 2027-28 are shown in **Figure 1-2**. The proposed rate increases would become effective on January 1, 2026 for the first year and on January 1 of each calendar year thereafter.

The fiscal year increase in revenue and rate adjustment columns typically do not match because the City implements rate increases mid-fiscal year. As a result, any changes to the rates apply to only six months of the fiscal year rather than the entire period. In effect, the rates within a single calendar year are made up of rates set in adjoining fiscal years. Proposed rates to be implemented have been realigned with the cost-of-service and calculated to increase revenues, which will result in varied adjustments per customer for Fiscal Year 2025-2026. It is assumed that rate increases for calendar years 2027 and 2028 will occur on January 1 of each year, with uniform percentage adjustments applied across all rates.

**Figure 1-2. Projected Revenue Increases**

Fiscal Year	Rate Adjustments	Date of Rate Adjustments	Revenue After Rate Adjustments	Fiscal Year Inc. in Revenue
Revenue at Current Rates			\$48,968,971	
FY 2025-26	7.0%	1/1/2026	\$50,682,884	3.5%
FY 2026-27	6.0%	1/1/2027	\$53,968,702	6.5%
FY 2027-28	5.0%	1/1/2028	\$56,929,122	5.5%

Source: **Figure 3-7.**

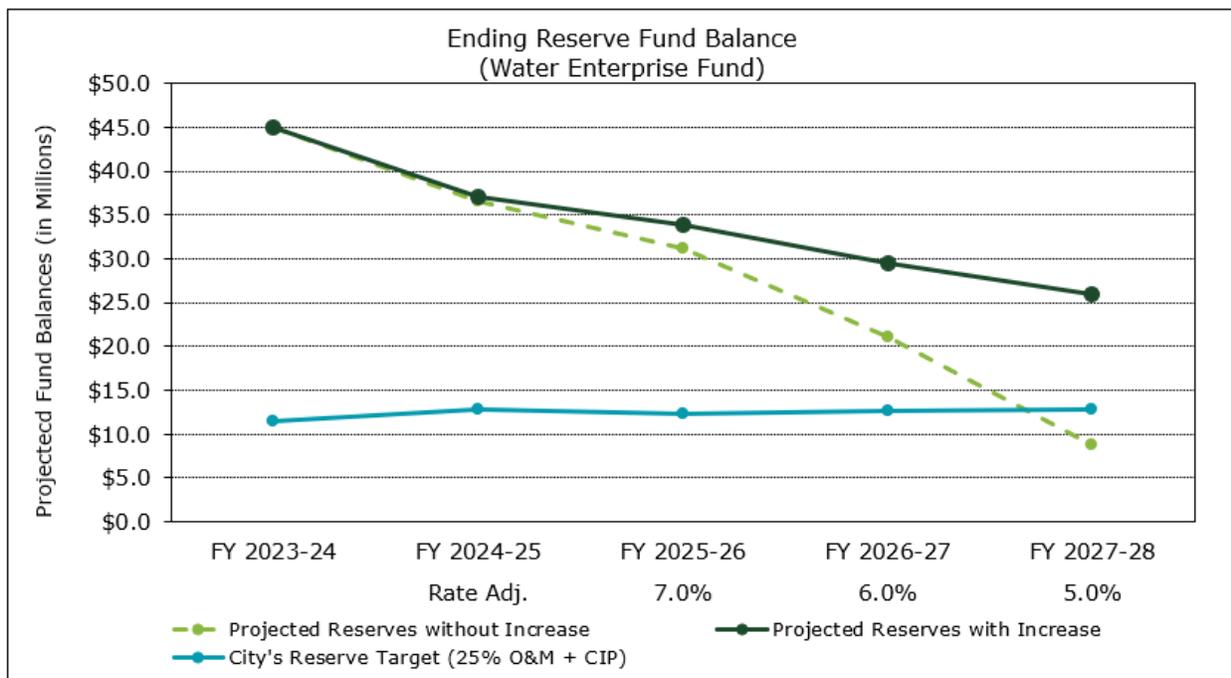
Note Rate Revenue excludes Private Fire Service Charge revenues.

As shown in **Figure 1-3**, the projected increases in the revenue requirements are balanced with the City’s existing level of reserves. The City’s reserve policy requires that the target



reserve balance is made up of an operating reserve component and a capital reserve component. The operating reserve component is 25% of annual operations and maintenance (O&M) expenses. The capital reserve component is currently \$2 million to provide working capital for pay-as-you-go construction projects. The City is proposing to revise the existing policy to escalate the portion of the capital reserve component according to the year-over-year change in the Construction Cost Index for the San Francisco Bay Area, as provided by Engineering News Record.<sup>5</sup> The capital reserve component has been escalated in our analysis and is reflected in **Figure 1-3**. The sum of these components equals the City's Reserve Target (blue line). The projected fund balance shows the use of reserves through the Recommended Period. The use of reserves compensates for the need to charge larger rate increases to customers. If current rate revenues remain unchanged, the City would require a heavier dependency on Water Enterprise Fund reserves, and reserves would be reduced significantly (dashed green line), falling below a recommended minimum threshold. However, with the proposed rate increases, the projected fund balance (green solid line) remains above the City's Reserve Target by the end of the Recommended Period. The reserve balance remains above the reserve target at the end of the rate period to ensure adequate funding is available for the significant costs associated with future capital improvements beyond FY 2027-28 as shown in Appendix A, Table 5. Maintaining a strong reserve position during this time allows the City to plan for continued infrastructure investment without requiring sudden, steep rate increases in future years. With these proposed rate increases, debt service coverage remains strong and improves during the five-year period. **Figure 1-4** projects debt coverage with the recommended revenue increases, ensuring the City continues to meet the minimum coverage ratio of 1.20.

**Figure 1-3. Projected Year-End Fund Balance**



Source: **Figure 3-9.**

<sup>5</sup> The Water Enterprise Fund has a formal policy of maintaining two million in reserves. The proposed reserve policy will be recommended for adoption via resolution to City Council.



Note: City’s Reserve Target is a proposed policy, recommended by City staff.

**Figure 1-4. Debt Service Coverage**

	<b>FY 2025-26</b>	<b>FY 2026-27</b>	<b>FY 2027-28</b>
Rate Revenue w/ Increases	\$51,236,452	\$54,538,877	\$57,530,573
Non-Operating Income*	\$1,648,725	\$1,699,695	\$1,752,254
Interest Income	\$352,856	\$315,027	\$275,464
Total Funds Available	\$53,238,033	\$56,553,599	\$59,558,291
O&M Expenses	(\$41,266,135)	(\$41,804,432)	(\$42,695,938)
Net Revenue	\$11,971,898	\$14,749,167	\$16,862,352
Debt Service	\$3,782,913	\$3,779,913	\$3,777,213
<b>Debt Coverage Ratio</b>	<b>3.16</b>	<b>3.90</b>	<b>4.46</b>

Source: **Figure 3-8.**

\* Non-operating income includes backflow admin & testing fees, sewer & general fund transfers.

## RATE STRUCTURE

### Current Rate Structure

The City’s current rate structure is comprised of two components: Service Charges and Water Use Charges.

### Current Service Charges

The Service Charges<sup>6</sup> are fixed rates that are charged on a dwelling unit basis for Single Family Residential customers, and are graduated in proportion to the capacity of the service provided for Multi-Family and Non-Residential (commercial, municipal, industrial, other, recycled water, and irrigation) customers. Single Family Residential customers are billed on a bi-monthly<sup>7</sup> basis by dwelling unit (DU). All Single Family Residential customers are assumed to have a 5/8” meter based on the current rate structure which bills a fixed bi-monthly charge based on the smallest level of capacity (5/8”). While some single-family residential properties may have larger water meters for reasons such as fire flow requirements or property-specific conditions, their typical water usage patterns remain similar to other single-family customers. Multi-Family Residential customers are charged on a bi-monthly basis, according to meter size. Non-residential, Commercial and irrigation customers are billed on a monthly basis. **Figure 1-5** summarizes the current Service Charges.

<sup>6</sup> The service is the connection between the public water system and the property served. The service includes the pipes, valves, and meter set (i.e., box, lid, yoke, meter, valve); in some cases, there are multiple meters. The service is installed at the property owner’s expense. After the meter is purchased and installed, customers pay Service Charge rates. The terminology in this report refers to the capacity of the service and the capacity of the meter interchangeably.

<sup>7</sup> Bi-monthly periods assume a billing period of 60 days.



**Figure 1-5. Current Service Charges**

Service Charges	
Customer Class	Current Rates
<b>Single Family Residential</b>	<u>Bi-monthly per DU</u>
	\$82.09
<b>Multi Family Residential</b>	<u>Bi-monthly per Meter</u>
5/8" Meters	\$82.09
3/4" Meters	\$112.67
1" Meters	\$173.83
1.5" Meters	\$326.76
2" Meters	\$510.26
3" Meters	\$1,351.35
4" Meters	\$2,314.75
6" Meters	\$4,914.42
8" Meters	\$8,584.57
10" Meters	\$12,866.41
<b>Commercial<sup>1</sup></b>	<u>Monthly per Meter</u>
5/8" Meters	\$41.05
3/4" Meters	\$56.34
1" Meters	\$86.92
1.5" Meters	\$163.38
2" Meters	\$255.13
3" Meters	\$675.67
4" Meters	\$1,157.38
6" Meters	\$2,457.21
8" Meters	\$4,292.28
10" Meters	\$6,433.20

Source: **Figure 4-1.**

<sup>1</sup>Commercial includes commercial, industrial, other, municipal, commercial fire, landscape irrigation, and recycled water accounts.

Customers with a separate private fire service are charged a fixed monthly charge that is graduated in proportion to the capacity of the service line. The current schedule of charges is shown in **Figure 1-6.**



**Figure 1-6. Current Fire Service Charges**

Fire Service	
Line Size	Current Rates
<b>Bi-monthly Charge per Connection</b>	
1"	\$36.98
2"	\$73.96
3"	\$110.94
4"	\$147.92
6"	\$221.88
8"	\$295.84
10"	\$369.80
12"	\$443.76
<b>Monthly Charge per Connection</b>	
1"	\$18.49
2"	\$36.98
3"	\$55.47
4"	\$73.96
6"	\$110.94
8"	\$147.92
10"	\$184.90
12"	\$221.88

Source: **Figure 4-2.**

### Current Water Use Charge Rates

The Water Use Charge is the product of rates per unit of metered water use multiplied times the metered water used during the specified billing period. Water is metered in “units” of HCF, whereby one unit (or HCF) equals 748 gallons. Water Use Charge rates are charged to four separate customer classes, Residential, Commercial, Landscape Irrigation, and Recycled Water customers.

For Single Family Residential customers, the current Water Use Charge rates consist of four tiers that charge higher rates as the level of consumption increases. For Multi Family, Commercial, Irrigation, and Recycled Water customers, the Water Use Charge rate is a uniform rate<sup>8</sup> per HCF of metered water use. All customers pay the same per HCF of water use. **Figure 1-7** reflects all current rates.

<sup>8</sup> This report distinguishes between *uniform* rates and *flat* rates. Uniform rates are constant charges per unit of water use that do not change depending on the amount used. Flat rates are fixed amounts that do not vary based on metered water use. Flat rates are most commonly used in unmetered water systems and for residential wastewater rates.



**Figure 1-7. Current Water Use Charge Rates**

Water Use Charges	
Current Tiers	Current Rates
<b>Single Family Residential</b>	
Tier 1 (0-10 hcf)	\$6.90
Tier 2 (11-14 hcf)	\$7.89
Tier 3 (15-20 hcf)	\$10.30
Tier 4 (21+ hcf)	\$15.59
<b>Multi Family Residential</b>	
All Water Use	\$8.47
<b>Commercial<sup>1</sup></b>	
All Water Use	\$8.47

Source: **Figure 4-3.**

<sup>1</sup>Commercial includes commercial, industrial, other, municipal, commercial fire, landscape irrigation, and recycled water accounts.

All components of the rate structure were reviewed, including the composition of the customer classes, the structures of the Service Charges and Water Use Charges, and the need for Drought Rates.

**Proposed Service Charge Rates**

Currently, about 38% of the rate revenue is generated by the current Fixed Service Charges. For a Single Family Residential bill of average bi-monthly water use (14 HCF), the Service Charge represents nearly 45% of the total bill.

Adjustments in FY 2025-26 are recommended to re-align the Service Charge rates with the cost-of-service. Revenues from the proposed Service Charges (the Service Charges in **Figure 1-8** and the Fire Service Charges in **Figure 1-9**) would generate 37% of the overall rate revenue. This level of revenue from Service Charges will continue to provide adequate revenue stability when combined with the relatively fixed revenue from non-seasonal (base) water demand.

**Summary of Proposed Service Charge Rates**

**Figure 1-8** summarizes the current and proposed rates to re-align with the cost of service. The proposed rates would become effective January 1, 2026, January 1, 2027, and January 1, 2028.

With the recommended increases and realignment to the cost-of-service, revenues from the Service Charges would increase 6.2% in FY 2025-26. Thereafter, all Service Charge rates would increase uniformly according to the recommended annual revenue increases of 6%, effective January 1, 2027 and 5% effective January 1, 2028.



**Figure 1-8. Current and Proposed Service Charge Rates**

<b>Customer Class</b>	<b>Current</b>	<b>FY 2025-26</b> eff. 1/1/2026	<b>FY 2026-27</b> eff. 1/1/2027	<b>FY 2027-28</b> eff. 1/1/2028
<b>Single Family Residential - Bi-monthly Charge per DU</b>				
	\$82.09	\$92.38	\$97.92	\$102.82
<b>Multi Family Residential - Bi-monthly Charge per Meter</b>				
5/8" Meters	\$82.09	\$92.38	\$97.92	\$102.82
3/4" Meters	\$112.67	\$119.58	\$126.75	\$133.09
1" Meters	\$173.83	\$173.98	\$184.42	\$193.64
1.5" Meters	\$326.76	\$310.00	\$328.60	\$345.03
2" Meters	\$510.26	\$473.24	\$501.63	\$526.71
3" Meters	\$1,351.35	\$1,221.36	\$1,294.64	\$1,359.37
4" Meters	\$2,314.75	\$2,078.28	\$2,202.98	\$2,313.13
6" Meters	\$4,914.42	\$4,390.64	\$4,654.08	\$4,886.78
8" Meters	\$8,584.57	\$7,655.16	\$8,114.47	\$8,520.19
10" Meters	\$12,866.41	\$11,463.74	\$12,151.56	\$12,759.14
<b>Commercial<sup>1</sup> - Monthly Charge per Meter</b>				
5/8" Meters	\$41.05	\$46.19	\$48.96	\$51.41
3/4" Meters	\$56.34	\$59.79	\$63.38	\$66.55
1" Meters	\$86.92	\$86.99	\$92.21	\$96.82
1.5" Meters	\$163.38	\$155.00	\$164.30	\$172.52
2" Meters	\$255.13	\$236.62	\$250.82	\$263.36
3" Meters	\$675.67	\$610.68	\$647.32	\$679.69
4" Meters	\$1,157.38	\$1,039.14	\$1,101.49	\$1,156.56
6" Meters	\$2,457.21	\$2,195.32	\$2,327.04	\$2,443.39
8" Meters	\$4,292.28	\$3,827.58	\$4,057.23	\$4,260.09
10" Meters	\$6,433.20	\$5,731.87	\$6,075.78	\$6,379.57

Source: **Figure 5-5.**

<sup>1</sup>Commercial includes commercial, industrial, other, municipal, commercial fire, landscape irrigation, and recycled water accounts.

**Figure 1-9** summarizes the current and proposed monthly Fire Service Charges. Rates were realigned to the cost-of-service in FY 2025-26. The rates for FY 2026-27 are based on a 6% increase applied uniformly, and the rates for FY 2027-28 are based on a 5% increase applied uniformly.



**Figure 1-9. Current and Proposed Fire Service Charge Rates**

Fire Service Line Size	Current Rates	FY 2025-26 eff. 1/1/2026	FY 2026-27 eff. 1/1/2027	FY 2027-28 eff 1/1/2028
<b>Bi-monthly Charge per Connection</b>				
1"	\$36.98	\$39.94	\$42.34	\$44.46
2"	\$73.96	\$50.20	\$53.22	\$55.88
3"	\$110.94	\$73.52	\$77.94	\$81.84
4"	\$147.92	\$113.76	\$120.58	\$126.60
6"	\$221.88	\$258.10	\$273.58	\$287.26
8"	\$295.84	\$507.10	\$537.52	\$564.40
10"	\$369.80	\$881.62	\$934.52	\$981.24
12"	\$443.76	\$1,400.70	\$1,484.74	\$1,558.98
<b>Monthly Charge per Connection</b>				
1"	\$18.49	\$19.97	\$21.17	\$22.23
2"	\$36.98	\$25.10	\$26.61	\$27.94
3"	\$55.47	\$36.76	\$38.97	\$40.92
4"	\$73.96	\$56.88	\$60.29	\$63.30
6"	\$110.94	\$129.05	\$136.79	\$143.63
8"	\$147.92	\$253.55	\$268.76	\$282.20
10"	\$184.90	\$440.81	\$467.26	\$490.62
12"	\$221.88	\$700.35	\$742.37	\$779.49

Source: **Figure 5-7.**

### **Proposed Water Use Charge Rates**

The City is transitioning from a tiered rate structure to a uniform rate structure for Single Family Residential water customers. This change aligns the residential rate structure with that of all other customer classes, which already pay a uniform rate for water consumption. The move simplifies the billing process, and ensures consistency in how water charges are applied. This adjustment also aligns with cost-of-service principles and recent case law articulating Proposition 218’s requirements for calculating rates and supports transparent rate setting practices consistent with California regulatory standards.

62.3% of the current water rate revenue is generated by the Water Use Charges. Adjustments in FY 2025-26 are recommended to re-align the Water Use Charge rates with the cost-of-service. These adjustments result in a slight increase to 62.6% of the overall rate revenue being generated from the Water Use Charges. Annualized water use of the City’s historically lowest consumption month accounts for nearly 46% of overall rate revenue. Thus, the rates will continue to provide adequate revenue stability, as the revenue from the lowest volume of annual water use provides additional revenue stability to the revenues received via the fixed Service Charges.

### **Summary of Water Use Charge Rates**

**Figure 1-10** summarizes the current and proposed Water Use Charge rates. The proposed rate analysis was derived using FY 2022-23 and FY 2023-24 water demand patterns. More detail is discussed in the Demand Projections section of **Section 3** of this report. Additionally, **Figure 1-10** illustrates the shift in Single Family Residential water rates from a tiered structure—where unit costs increased with usage—to a uniform structure with a consistent



per-unit charge. The change aligns these customers with all other customer classes and simplifies the rate structure.

With the recommended increases and realignment to the cost-of-service, revenues from the Water Use Charges would increase 7.6% with twelve months of rate increase applied. Thereafter, all Water Use Charge rates would increase uniformly according to the recommended revenue increases of 6% and 5%, effective January 1, 2027 and January 1, 2028, respectively.

**Figure 1-10. Current and Proposed Water Use Charge Rates**

Water Use Charges					
Usage	Current Rates	Usage	FY 2025-26 eff. 1/1/2026	FY 2026-27 eff. 1/1/2027	FY 2027-28 eff. 1/1/2028
<b>Single Family Residential</b>					
Tier 1 (0-10 hcf)	\$6.90	All Water Use	\$9.18	\$9.73	\$10.22
Tier 2 (11-14 hcf)	\$7.89				
Tier 3 (15-20 hcf)	\$10.30				
Tier 4 (21+ hcf)	\$15.59				
<b>Multi Family Residential</b>					
All Water Use	\$8.47	All Water Use	\$9.18	\$9.73	\$10.22
<b>Commercial<sup>1</sup></b>					
All Water Use	\$8.47	All Water Use	\$9.18	\$9.73	\$10.22

Source: **Figure 5-10.**

<sup>1</sup>Commercial includes commercial, industrial, other, municipal, commercial fire, landscape irrigation, and recycled water accounts.

### **Proposed Drought Rates**

We recommend implementing Drought Rates that could be applied to the Water Use Charge rates during declared water shortages to compensate for changes in water use. For each shortage stage, there is a corresponding Drought Rate. Each shortage stage in the City's *Water Shortage Contingency Plan* contains conservation requirements. The Drought Rates are designed only to offset the amount of revenue shortfall caused by conservation in effect during the specific water shortage stage, state mandated reductions in the level of potable water usage, or other natural disaster or event that results in a water shortage and an unforeseen drop in water demand. As such, the Drought Rates are revenue neutral and not a means to increase rate revenue beyond the amount that would have been generated under non-water shortage conditions.

**Figure 1-11** summarizes the Drought Rates that correspond to the water shortage stages in the City's *Water Shortage Contingency Plan*. If the City experiences a water shortage beyond the level of water use projected, the Drought Rate corresponding to the specified shortage stage is added to the normal-year Water Use Charge rates.

For example, if customers are required to cut back 20% (a Stage 2 water shortage) in FY 2025-26, a Drought Rate of \$0.85 would be applied to each HCF of water used in addition to the then-current Water Use Charge rates. If the water shortage stage increased to 40% in FY 2025-26, a Drought Rate of \$2.25 would be added to the then-current Water Use Charge rates. If the water shortage stage then decreased to 30%, the Drought Rates would be reduced from \$2.25 to \$1.45 per HCF.

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The Drought Rates calculated are equal to the rates that would have been produced through the cost-of-service analysis, if projected water usage was reduced to levels required in shortage conditions. For each stage, the drought rates are calculated by lost revenue from water sales net of any savings from reductions in demand-related costs (e.g. water purchases).

The procedure<sup>9</sup> for calculating Drought Rates corresponding to each cutback stage is provided in **Section 5** of this study. The Drought Rates only apply to Water Use Charge rates and not to Service Charge rates, which are independent of water demand. Revenue from Service Charge rates is not influenced by water demand and is therefore unaffected by conservation or fluctuations in customer demand.

**Figure 1-11. Drought Rates (\$/HCF)**

Stage	Demand Reduction	Surcharge		
		FY 2025-26	FY 2026-27	FY 2027-28
0	0%	\$0.00	\$0.00	\$0.00
1	10%	\$0.38	\$0.40	\$0.42
2	20%	\$0.85	\$0.90	\$0.95
3	30%	\$1.45	\$1.54	\$1.62
4	40%	\$2.25	\$2.39	\$2.51
5	50%	\$3.38	\$3.58	\$3.76
6	60%	\$5.07	\$5.37	\$5.64

Source: **Figure 5-12.**

<sup>9</sup> Accompanying **Figure 5-11** of this study.



## Section 2. Introduction

### STUDY PURPOSE

The purpose of this study is to conduct a cost-of-service analysis that will determine rates that proportionally recover the cost of providing the City's water service. Toward that end, the cost-of-service analysis determines how much revenue should be generated by each component of the rate structure so that rate payers within each customer class are charged for their proportionate share of the cost of providing service on a parcel basis. The cost-of-service analysis is tailored specifically to the City's customer classes and the rate structures that are appropriate for each class.

### STUDY PROCESS

In 2024, the City requested HF&H Consultants (HF&H) to perform a cost-of-service study to set water rates for FY 2025-26 through FY 2027-28. A ten-year analysis is provided to support for long-term planning.

The primary goal of this study is to ensure that rates continue to reflect the current cost of providing water service. A comprehensive rate study comprises three steps: 1) revenue requirement projections; 2) cost-of-service analysis; and 3) rate design. Revenue requirement projections identify how much revenue is needed from rates. The cost-of-service analysis determines how much of the revenue should come from the fixed and variable charges. This step also confirms the proportionate amount to be paid by each customer. The final step, rate design, establishes the structure of the fixed service charges and the variable volumetric charges for each customer.

The cost-of-service analysis was conducted following industry practices promulgated by the American Water Works Association.<sup>10</sup> At the outset of the analysis, the types of customer classes were reviewed, as were the types of rate structures that are appropriate to the City's customer class.

### REPORT ORGANIZATION

The report is divided into the following sections: Revenue Requirements, Cost-of-Service Analysis, Rate Design, and Customer Bill Impacts.

A Glossary of technical terms and acronyms is provided following the Table of Contents.

Additional detail pertaining to the 10-year rate study can be found in Appendix A.

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<sup>10</sup> *Principles of Water Rates, Fees, and Charges*. American Water Works Association Manual M1. 2017.



## Section 3. Revenue Requirements

The revenue requirements analysis starts by determining the FY 2024-25 revenue requirements based on the budgeted O&M and capital expenditures. Revenue requirements for each fiscal year are then projected over the Study Period. Revenue increases needed to cover the projected revenue requirements are then determined.

Since the City provides water through one integrated system of potable and recycled water, the rates reflect the realities of the system. As a result, all water, whether potable or recycled, will be considered as part of the same system portfolio.

### DEMAND PROJECTIONS

The revenue requirements projected during the Study Period are based on the City’s unique circumstances. Projected customer demand is particularly significant because it affects certain variable expenses such as the cost of purchased water as well as the revenue from water sales. Customer demand depends on the types of customers, the nature of their demands, the trends in their water use, growth, and climate, among others.

The City consists of single-family residences, multi-family residences, commercial (including schools), industrial, municipal, and irrigation water customers. The service area is largely developed, but the City’s General Housing Element identifies plans for more housing to meet future population growth. For purposes of this rate study, no growth in water demand nor in growth of accounts was assumed. Connection fee revenue from growth is assumed, but the City did not estimate increased operational costs or supply costs explicitly due to growth because the volume is expected to be insignificant on the annual time scale.

Water demand projections used in this study are shown in **Figure 3-1**. Projections are based on the two-year average of billing data from FY 2022-23 to FY 2023-24.

**Figure 3-1. Five-Year Modeled Demand Projections**

Customer Class	FY 2025-26	FY 2026-27	FY 2027-28
Multi Family Residential	824,419	824,419	824,419
Commercial	631,112	631,112	631,112
Commercial Irrigation	311,165	311,165	311,165
Residential Irrigation	174,878	174,878	174,878
Single Family Residential	1,660,000	1,660,000	1,660,000
Commercial Recycled	10,301	10,301	10,301
<b>Annual Water Use (HCF)</b>	<b>3,611,875</b>	<b>3,611,875</b>	<b>3,611,875</b>

### REVENUE REQUIREMENT ASSUMPTIONS AND PROJECTIONS

Expense projections combined with contributions to reserves become the revenue requirements. The City’s operating and capital budgets were relied on for FY 2024-25 expenses in the first-year revenue requirement. The assumptions shown in **Figure 3-2** were used to project revenue requirements through FY 2027-28.



**Figure 3-2. Projection Assumptions**

<b>Customer Class</b>	<b>FY 2024-25</b>	<b>FY 2025-26</b>	<b>FY 2026-27</b>	<b>FY 2027-28</b>
General Inflation	Per Budget	3.00%	3.00%	3.00%
Salaries and Wages	Per Budget	4.00%	4.00%	4.00%
Benefits	Per Budget	4.00%	4.00%	4.00%
Construction Cost Inflation	Per Budget	3.26%	3.26%	3.26%
Utilities	Per Budget	7.00%	7.00%	7.00%
Interest on Fund Balance	1.00%	1.00%	1.00%	1.00%
SFPUC Cost of Purchased Water	\$5.67	\$5.80	\$5.86	\$5.93
SFPUC Cost of Purchased Water %	Per Budget	Per Budget	1.03%	1.19%

**SFPUC Purchased Water Costs**

The City is entirely reliant on the SFPUC for its water supply. As a member of BAWSCA, the City’s water supply expenses are driven by two usage-based rates: 1) SFPUC’s annual rate and 2) BAWSCA’s bond surcharge rate <sup>11</sup>. The SFPUC provided notice to increase the previous rate of \$5.67 per HCF to \$5.80 per HCF beginning July 1, 2025. Further, the SFPUC’s notice forecasted rates would increase to \$5.86 per HCF on July 1, 2026, and \$5.93 per HCF on July 1, 2027.

Beginning in FY 2013-14, the BAWSCA bond surcharge rate was implemented to ensure each agency pays its proportionate share of debt issuance costs, based on water purchased. The surcharge has increased over time as additional bonds have been issued to fund capital projects.

Since 1984, the SFPUC’s wholesale rates have been established in accordance with rate-making agreements, which include provisions to annually reconcile projected versus actual expenses and demands. Any differences are carried forward into the following year’s rates. This mechanism helps protect both the SFPUC and the 26 BAWSCA wholesale customers. However, it can also result in annual adjustments that either raise or lower rates, contributing to short-term volatility and amplifying year-to-year rate fluctuations.

The rising SFPUC rates and current BAWSCA bond surcharge rate were built into the revenue requirement projections. The cost of SFPUC water is 44% of the annual revenue requirement — the largest single expense — and is charged to the City at a uniform rate, for all water delivered. The impact of these significant increases in wholesale rates on the revenue requirements over the study period cannot be overstated.

**Other Operations and Maintenance Expenses**

This cost category includes direct salaries and benefits, materials and services, contract services, debt service, and overhead. These expenses are projected to remain between \$21 million and \$22 million during the Recommended Period, according to City estimates.

<sup>11</sup> The SFPUC also charges a fixed service charge, currently 2% of total purchased water costs, which is not impacted by the amount of water the City purchases.



### Debt Service

The City has three outstanding bond obligations. The annual debt service is approximately \$3.8 million. The outstanding bonds are identified in **Figure 3-3**. The 2015 and 2017 refunding bonds refinanced existing debt originally issued between 2005 and 2007. The 2024 Refunding Bond specifically refinanced the previous 2013 Refunding Bond. In each instance, the original debt service funded capital projects related to the recycled water program. Although these projects were constructed and are in service, the debt service on these bonds will continue beyond the Recommended Period.

As shown in **Appendix A**, Table 6, the City has projected issuance of a bond in FY 2030–31 to fund potable and recycled water projects as it continues to implement necessary system improvements and upgrades. This assumption may change as the time to conduct these projects draws closer.

**Figure 3-3. Current Annual Debt Service**

<b>Current Debt</b>	<b>FY 2025-26</b>	<b>FY 2026-27</b>	<b>FY 2027-28</b>
Series 2015 Refunding Bonds	\$1,421,244	\$1,420,244	\$1,418,294
Series 2017 Refunding Bonds	\$494,419	\$497,669	\$494,919
Series 2024 Refunding Bonds	\$1,867,250	\$1,862,000	\$1,864,000
<b>Annual Debt Service</b>	<b>\$3,782,913</b>	<b>\$3,779,913</b>	<b>\$3,777,213</b>

### Capital Expenditures

Even though the City has constructed facilities to provide water service, these facilities will depreciate and eventually need to be replaced. It is unrealistic to think that the system has already been built and paid for and that there will be no future capital costs. The City has in place a Water Master Plan and a recently completed, Recycled Water Master Plan to address long-term capital projects via its Capital Improvement Program (CIP). Based on this Plan, the revenue requirement projections show an increased level of funding in FY 2026-27 that is needed to support the capital improvement program, which contains approximately \$65.8<sup>12</sup> million in cash-funded capital projects<sup>13</sup> over the next five years, or an annual average of \$13.1 million (net of capacity fee revenue), as shown in **Figure 3-4**.

For a comprehensive list of all capital projects currently forecasted through FY 2034-25, refer to Appendix A, Table 5.

<sup>12</sup> The final report was revised to correct a typographical error in the Capital Expenditures description of Section 3. The capital improvement program contains \$65.8 million in cash-funded capital projects, which corresponds to Figure 3-4. These changes did not change the analysis, or rates published in the original report from July 8, 2025.

<sup>13</sup> This figure assumes an annual inflation factor of 3.26% beginning FY 2025-26, based on the ten-year compound annual growth rate of the Engineering New Record Construction Cost Index for San Francisco.

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**Figure 3-4. Projected Capital Improvement Program**

<b>Water Enterprise CIP</b>	<b>FY 2025-26</b>	<b>FY 2026-27</b>	<b>FY 2027-28</b>	<b>FY 2028-29</b>	<b>FY 2029-30</b>
Distrib. System Replacement Program	\$1,000,000	\$1,500,000	\$2,000,000	\$2,000,000	\$2,000,000
Cathodic Protection Program	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Water System Seismic Improvement Program	\$1,000,000	\$250,000	\$250,000	\$250,000	\$250,000
Main City Potable Water Tank and Pump Station	\$2,250,000	\$3,000,000	\$3,000,000	\$3,500,000	\$4,000,000
Pump Station and Tank Rehab./ Repl. (SCADA) System Rehabilitation	\$1,500,000	\$2,000,000	\$1,000,000	\$1,000,000	\$1,000,000
	\$500,000	\$0	\$0	\$0	\$0
Water Tank Cathodic Protection Syst. Repl.	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Recycled Water Distrib. System Phase 2 Ext.	\$0	\$1,000,000	\$2,000,000	\$3,100,000	\$3,100,000
Main City Recycled Water Tank and Pump Station	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000
Future Water Storage Tank Land Purchase	\$0	\$2,067,308	\$2,067,308	\$2,067,308	\$0
Water Enterprise CIP Subtotal	\$8,850,000	\$12,417,308	\$12,917,308	\$14,517,308	\$12,950,000
Construction Cost Index	3.26%	6.62%	10.10%	13.68%	17.39%
<b>Total Inflated CIP</b>	<b>\$9,138,353</b>	<b>\$13,239,658</b>	<b>\$14,221,519</b>	<b>\$16,503,830</b>	<b>\$15,201,732</b>
Less Total Capacity Fees	(\$499,752)	(\$499,752)	(\$499,752)	(\$499,752)	(\$499,752)
<b>Net PAYGo CIP</b>	<b>\$8,638,601</b>	<b>\$12,739,906</b>	<b>\$13,721,767</b>	<b>\$16,004,078</b>	<b>\$14,701,980</b>

Note: Capacity Fees based on historical growth from billing account data. Capital projects provided by the City based on recommendations to City Council in April 2025.

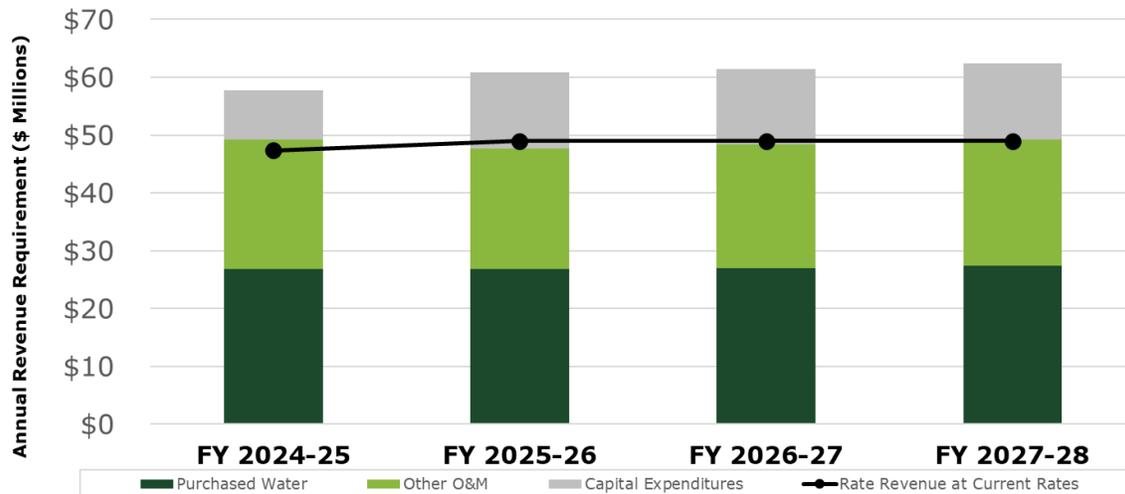
Note: Land purchase is not a part of the approved CIP. Also, Projected costs for Recycled Water Distribution System Phase 2 Extension were not included in the approved CIP.

The major expenses described above that comprise the revenue requirements are shown in **Figure 3-5<sup>14</sup>**. Wholesale water purchases account for the largest individual cost among these three cost categories. In the City’s case 44% of its total revenue requirement is for the cost of water, which will vary in direct proportion to demand. Current rate revenues of \$49.0 million are insufficient to meet projected expenses. The City faces a future growing deficit.

<sup>14</sup> The final report was revised to correct a typographical error in Figure 1-1. The expense category total in FY 2027-28 for Purchased Water was updated to \$27,359,282, and the expense category total in FY 2027-28 for Other O&M was updated to \$21,927,263. In turn, these changes decreased the Total Revenue Requirement in FY 2027-28 to \$62,447,811. These changes did not change the analysis, or rates published in the original report from July 8, 2025 because the rates were calculated from the correct revenue requirement values shown in Appendix A, Table 2A.



**Figure 3-5. Total Revenue Requirement Projections**



<b>Water Enterprise Expenses</b>	<b>FY 2024-25</b>	<b>FY 2025-26</b>	<b>FY 2026-27</b>	<b>FY 2027-28</b>
Purchased Water	\$26,759,500	\$26,759,500	\$27,036,322	\$27,359,282
Other O&M	\$22,397,052	\$20,941,441	\$21,279,472	\$21,927,263
Capital Expenditures	\$8,638,538	\$13,161,266	\$13,161,266	\$13,161,266
<b>Total Revenue Requirement</b>	<b>\$57,795,090</b>	<b>\$60,862,207</b>	<b>\$61,477,061</b>	<b>\$62,447,811</b>
<i>Annual Increase</i>		5.3%	1.0%	1.6%

Source: Data from City's FY 2024-25 Budget.

## RESERVES

Rates need to generate sufficient revenue to cover unfunded annual operating and capital expenses. However, rates are not set to exactly match cash expenditures because the timing of cash expenditures can fluctuate. If rates were set to exactly match expenditures, rates would also fluctuate. To avoid increasing and decreasing rates from year to year, reserves are used to cover the difference so that rate increases are smooth and gradual.

The City's current level of reserves has enabled it to maintain a strong credit rating, which reduces its financing costs. The City uses its reserves to stabilize rates against annual fluctuations in capital expenditures, variances between projected and actual water demands, and unanticipated expenditures and other expenditure variances. In some years, there is surplus revenue that is available to replenish reserves. In other years, reserves are drawn down to cover the cost of service.

Rates are set to generate a constant level of revenue to maintain reserves at adequate levels. At the same time that revenue from rates is added to reserves, reserves are drawn down to fund capital projects whose costs vary from year to year. In effect, reserves are used to buffer rates from varying levels of capital expenditures and unforeseen variances in operating expenditures.

Reserves are essential for rate stabilization and unforeseen expenses. They are drawn from when the Water Enterprise Fund faces higher-than-average costs and replenished during lower-cost years. Separate reserves support both operating and capital needs, each with its



own minimum and optimal target levels. Rates must be structured to maintain these target balances.

### ***Current Policy***

The City's reserve policy requires that the target reserve balance is made up of an operating reserve component and a capital reserve component. The operating reserve component is equal to 25% of annual operations and maintenance (O&M) expenses. The capital reserve component includes \$2 million to provide funding for pay-as-you-go construction projects. The operating component of the reserves provides working capital for month-to-month O&M expenses. With sufficient working capital, the City can operate without cash flow constraints. This current reserve policy tracks with HF&H's recommendation of a minimum operating reserve that is equal to at least 1.5 times the billing frequency (or three months in the City's case). The City's reserves should never drop below this minimum balance.

The capital improvement component of the reserves provides cash funding for the City's capital improvement program. The fund balance needs to be sufficient to pay contractors and purchase materials without delays caused by cash flow limitations. Given the City's plans to fund an average of \$13.1 million in capital projects per year with rate revenues, this component is necessary.

### ***City Proposed Policy***

The City is proposing to revise the existing policy to escalate the portion of the capital reserve component according to the year-over-year change in the Construction Cost Index for the San Francisco Bay Area, as provided by Engineering News Record.<sup>15</sup> This escalation of the reserve target ensures the City's monetary goal keeps pace with increases to construction costs each year.

## **REVENUE INCREASES**

Rates are set to generate enough revenue to cover projected annual expenses and maintain adequate reserves. While it is preferable to keep annual rate increases steady over the multi-year rate plan, the total revenue collected remains within the overall cost of service. In other words, although the rates are smoothed to avoid large year-to-year changes, they are still based on the total revenue needed over the rate period and do not exceed it. As shown in **Figure 3-5** and **Figure 3-6**, the annual increases in revenue requirements are uneven from year to year, while the rate increases are designed to be more consistent. This difference causes the fund balance to fluctuate from year to year, ensuring that revenues and expenses remain balanced over the three year period.

Revenue increases were derived to cover the City's Enterprise costs and to maintain adequate reserves. **Figure 3-6** summarizes the projected revenue from current rates, annual revenue requirements, annual variances, and the rate increases proposed to help address the City's costs. As shown in **Figure 3-6**, available reserves have been used to minimize the annual revenue increases from ratepayers.

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<sup>15</sup> The Water Enterprise Fund has a formal policy of maintaining two million in reserves. The proposed reserve policy will be recommended for adoption via resolution to Council.



**Figure 3-6. Rate Increase Calculations**

	Projected		
	FY 2025-26	FY 2026-27	FY 2027-28
Revenue from Current Rates	\$49,463,496	\$49,463,496	\$49,463,496
Revenue Requirement	(\$60,862,207)	(\$61,477,061)	(\$62,447,811)
Non-Operating Revenue	\$1,648,725	\$1,699,695	\$1,752,254
Use of Reserves	\$6,263,116	\$0	\$0
Net Revenue Requirement	(\$52,950,366)	(\$59,777,367)	(\$60,695,557)
Revenue Surplus/(Shortfall)	(\$3,486,871)	(\$10,313,871)	(\$11,232,062)
<b>Proposed Rate Increase</b>	<b>7%</b>	<b>6%</b>	<b>5%</b>
Revenue at Proposed Rates	\$51,236,452	\$54,538,877	\$57,530,573
Revenue Surplus/(Shortfall)	(\$1,713,914)	(\$5,238,489)	(\$3,164,985)

Note: Non-operating revenue includes backflow administrative and testing fees, and transfers from the Sewer Fund and General Fund.

Rate increases account for rate revenue and future revenue requirements. The revenue requirement (shown in greater detail in **Figure 3-5**) increases due to increasing water supply costs and capital expenditures. **Figure 3-7** summarizes the resulting annual increases in rates and revenues from the proposed service and water use charges. The fiscal year increase in revenue and rate adjustment columns typically do not match, as the City implements rate increases mid-fiscal year. Thus, any changes to the rates apply to six months instead of the whole fiscal year period. In effect, the rates of one calendar year are made up of rates set in adjoining fiscal years.

**Figure 3-7. Projected Revenue Increases**

Fiscal Year	Rate Adjustments	Date of Rate Adjustments	Revenue After Rate Adjustments	Fiscal Year Inc. in Revenue
Revenue at Current Rates			\$48,968,971	
FY 2025-26	7.0%	1/1/2026	\$50,682,884	3.5%
FY 2026-27	6.0%	1/1/2027	\$53,968,702	6.5%
FY 2027-28	5.0%	1/1/2028	\$56,929,122	5.5%

The rates are derived in **Section 5**. With these rate increases, the Water Enterprise is able to pay for its annual O&M and capital expenses, maintain adequate debt service coverage, and maintain adequate reserves, as further discussed below.

## DEBT COVERAGE

**Figure 3-8** shows the debt service coverage provided by the revenue increases in **Figure 3-7**. The City is required to maintain a minimum coverage ratio of 1.20. A higher ratio provides a greater margin of safety to bondholders and enhances the credit rating on bonds. Moreover, a higher credit rating benefits rate payers by reducing the cost of borrowing. While the resulting debt coverage ratio is greater than the 1.20 minimum, and lower increases would still be sufficient to maintain a ratio above 1.20, lower increases would be insufficient to cover the O&M and capital expenses to operate the City's water system.



**Figure 3-8. Debt Service Coverage**

	<b>FY 2025-26</b>	<b>FY 2026-27</b>	<b>FY 2027-28</b>
Rate Revenue w/ Increases	\$51,236,452	\$54,538,877	\$57,530,573
Non-Operating Income*	\$1,648,725	\$1,699,695	\$1,752,254
Interest Income	\$352,856	\$315,027	\$275,464
Total Funds Available	\$53,238,033	\$56,553,599	\$59,558,291
O&M Expenses	(\$41,266,135)	(\$41,804,432)	(\$42,695,938)
Net Revenue	\$11,971,898	\$14,749,167	\$16,862,352
Debt Service	\$3,782,913	\$3,779,913	\$3,777,213
<b>Debt Coverage Ratio</b>	<b>3.16</b>	<b>3.90</b>	<b>4.46</b>

Note: Non-operating revenue includes backflow administrative and testing fees, and transfers from the Sewer Fund and General Fund.

## RESERVE FUND BALANCE

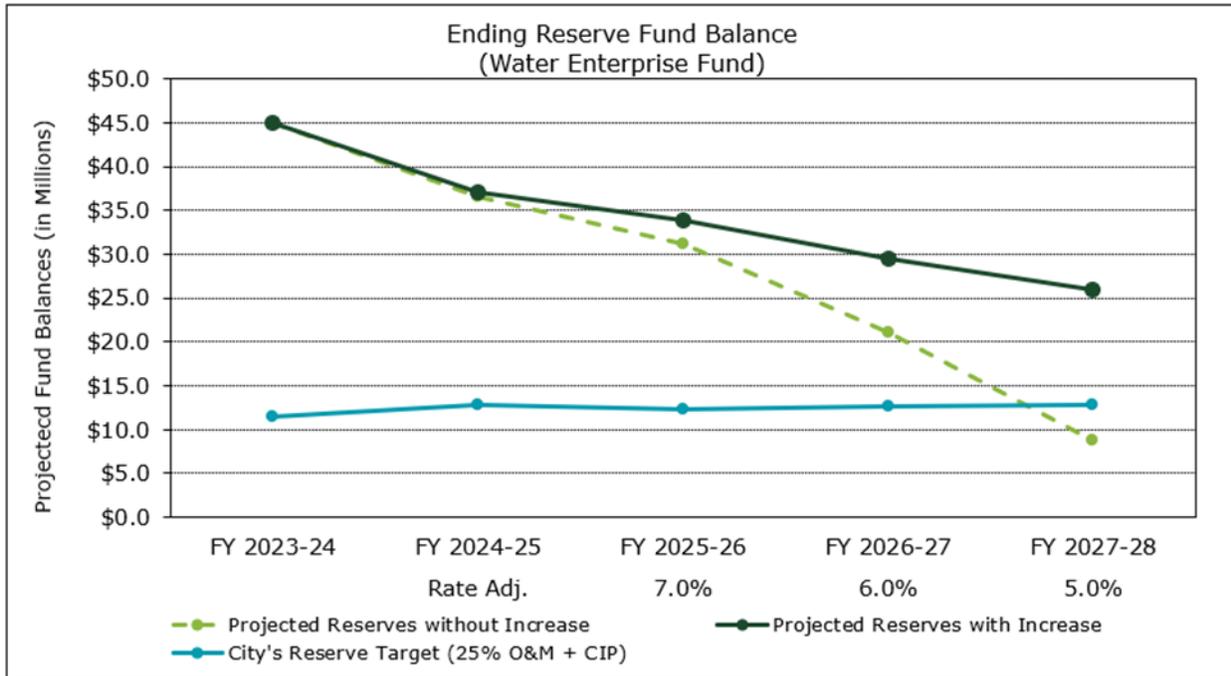
**Figure 3-9** shows the annual fluctuations (solid green line) in the fund balance that are caused by the differences between the revenue requirement and revenue from rates with the rate increases; the dashed green line is the projected fund balance without rate increases. The revenue and rate increases in **Figure 3-7** were derived to balance increasing rates while maintaining a level of reserves that continues to meet the City’s reserve target (blue line) by FY 2029-30. Over the Study Period, the Water Enterprise projects to utilize \$11.0 million from current reserves, while continuing to meet its debt coverage requirements and the City’s reserve target. Maintaining a fund balance above or equal to the City’s reserve target helps to protect the City’s credit rating, which lowers the cost of financing, thereby benefiting rate payers.

As shown by the dashed green line in **Figure 3-9**, without revenue increases, the FY 2023-24 starting fund balance of \$44.9 million is projected to drop below the City’s reserve target by FY 2027-28. With rate increases, the reserve balance (solid green line) decreases more gradually over the Study Period, as the City uses reserves to fund the projected revenue requirement. The recommended rate increases are balanced with the use of reserves. Reserves help offset the increased costs projected, reducing the potential for larger increases to be borne by ratepayers.

By the end of FY 2027-28, with recommended increases, the Water Enterprise Fund reserve balance projects to be \$25.9 million. The projected Water Enterprise Fund reserve balance exceeds the reserve target by the end of FY 2027-28. However, the City plans to continue to draw from reserves to address future capital project funding to reduce future increases to rate payers. Appendix A, Table 1A extends the projection of the reserve balance through FY 2034-35. By FY 2029-30, the Water Enterprise Fund reserve balance will decrease to approximately \$17 million and be much closer to the City’s reserve target at that point of \$14 million.



**Figure 3-9. Projected Year-End Fund Balance**



Note: City's Reserve Target includes a proposed policy, recommended by City staff.



## Section 4. Cost-of-Service Analysis

### GENERAL APPROACH

The revenue requirement analysis determines the total amount of revenue that must be recovered from rates. The next step in the process is the cost-of-service analysis, which ensures that costs are proportionally allocated to customers based on how they use the system.

Previous rate studies employed a tiered rate structure or the AWWA “base/extra capacity” method that allocates costs based on average day, maximum day, and maximum hour demands. Instead, the methodology has been refined to support a uniform volumetric rate, aligning cost allocations with the actual services provided. This change was made, in part, to respond to recent California Court of Appeal decisions regarding the requirements for property-related fees, which must be justified based on demonstrated costs of service pursuant to Proposition 218.

Costs are now allocated across four primary service components:

- **Demand-related costs**, representing general water use across the customer base.
- **Customer service costs**, associated with billing, meter reading, and account management.
- **Capacity-related costs**, which reflect the infrastructure required to meet system-wide needs.
- **Fire protection costs**, allocated separately to public and private fire service requirements.

This approach allows for a simplified rate structure, with costs distributed evenly across all units of water consumption, rather than segmented by usage tiers. By aligning cost allocations with the services delivered and the infrastructure required to support them, the uniform rate structure ensures that rates are equitable and compliant with cost-of-service principles.

### CUSTOMER CLASSES

The cost-of-service analysis distributes the revenue requirements among customer classes in proportion to their service requirements. There is no industry standard that specifies which customer classes should be used. The law allows utilities to exercise discretion in determining the appropriate customer classes provided the rates yield charges that are proportional to the cost of providing service for each category.

The City currently has multiple customer classes: Single Family Residential and Non-Residential. Non-Residential includes multi family residential dwellings, and commercial, municipal, institutional, industrial, and irrigation customers. All these customers pay the same per unit of water use and are grouped into one class. These classes were last reviewed as part of the previous cost-of-service study in 2022.

The contrast in customer classes stems from the typical pattern of usage by each class. Residential use varies according to indoor and outdoor needs throughout the year, producing



periods of peak demands for which the system must be designed to meet. Non-Residential customers' use produces fewer peak periods due to less homogenous use. In other words, some Non-Residential customers have significant water use during peak usage periods of the system while others do not. As a result, water usage is more stable over time as demand does not spike in the same manner as it does for Single Family Residential customers. Irrigation customers use depends on the demands of what is being irrigated. As such, irrigation customers can place both seasonal demands and peaking demands on the system.

## **CURRENT RATE STRUCTURE**

There is no industry standard that specifies what rate structure must be used. The law allows utilities to exercise discretion in determining their rate structure as long as the rates yield charges that are proportional to the cost of providing the service.

In the City's case, its current water rate structure consists of a fixed Service Charge component and a variable Water Use Charge component. The use of a pair of Service and Water Use Charges is the most common standard in the industry.

The current rates for the Service and Water Use Charge rates are dependent on each customer class. The Service Charge is billed based on the number of dwelling units or the size of the meter. Billing based on meter size reflects a charge that is graduated in proportion to the capacity of the service (i.e., meter-size), which is an industry standard for metered water systems. As the name implies, this charge is related to the customer's service, which provides a fixed, upper limit on the amount of capacity that is available in the water system.

The Service Charges are fixed rates that are charged on a dwelling unit basis for single family customers and on a fixed rate graduated in proportion to the capacity of the service provided for multi-family and Non-Residential (commercial, municipal, industrial, other, recycled water, and irrigation) customers. Single Family Residential and Multi Family customers are billed on a bi-monthly<sup>16</sup> basis. Non-Residential customers are billed on a monthly basis.

**Figures 4-1** and **Figure 4-2** summarize the current Service Charges and Fire Service Charges. Note, Customers with a separate fire service are billed a separate Fire Service Charge per connection. The charge is graduated in proportion to the capacity of the service (i.e., meter-size), which is an industry standard for metered water systems.

Fixed service charges for Commercial and Multi Family Residential accounts are the same per meter size. However, two rates are shown to reflect the difference in billing frequency. Multi Family Residential accounts are billed on a bi-monthly frequency while Commercial accounts are billed on a monthly frequency. Rates are the same, but one is billed on a bi-monthly basis and one is billed on a monthly basis.

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<sup>16</sup> Bi-monthly periods assume a billing period of approximately 60 days.



**Figure 4-1. Current Service Charges**

<b>Service Charges</b>	
<b>Customer Class</b>	<b>Current Rates</b>
<b>Single Family Residential</b>	<u><i>Bi-monthly per DU</i></u> \$82.09
<b>Multi Family Residential</b>	<u><i>Bi-monthly per Meter</i></u>
5/8" Meters	\$82.09
3/4" Meters	\$112.67
1" Meters	\$173.83
1.5" Meters	\$326.76
2" Meters	\$510.26
3" Meters	\$1,351.35
4" Meters	\$2,314.75
6" Meters	\$4,914.42
8" Meters	\$8,584.57
10" Meters	\$12,866.41
<b>Commercial<sup>1</sup></b>	<u><i>Monthly per Meter</i></u>
5/8" Meters	\$41.05
3/4" Meters	\$56.34
1" Meters	\$86.92
1.5" Meters	\$163.38
2" Meters	\$255.13
3" Meters	\$675.67
4" Meters	\$1,157.38
6" Meters	\$2,457.21
8" Meters	\$4,292.28
10" Meters	\$6,433.20

<sup>1</sup>Commercial includes commercial, industrial, other, municipal, commercial fire, landscape irrigation, and recycled water accounts.



**Figure 4-2. Current Fire Service Charges**

Fire Service	
Line Size	Current Rates
<b>Bi-monthly Charge per Connection</b>	
1"	\$36.98
2"	\$73.96
3"	\$110.94
4"	\$147.92
6"	\$221.88
8"	\$295.84
10"	\$369.80
12"	\$443.76
<b>Monthly Charge per Connection</b>	
1"	\$18.49
2"	\$36.98
3"	\$55.47
4"	\$73.96
6"	\$110.94
8"	\$147.92
10"	\$184.90
12"	\$221.88

The Water Use Charges are the product of rates per unit of metered water use multiplied times the metered water use during the specified billing period. Water is measured in “units” of HCF of metered water use, whereby one unit or HCF equals 748 gallons. Water Use Charge rates are charged to three separate customer classes, Single Family Residential, Multi Family Residential, and Commercial.

Currently for Single Family Residential customers, the Water Use Charge rates consist of four tiers that charge higher rates as the level of consumption increases. For both Multi Family Residential and Commercial customers, the Water Use Charge rate is a uniform rate<sup>17</sup> per HCF of metered water use. **Figure 4-3** reflects all current Water Use Charge rates.

<sup>17</sup> This report distinguishes between *uniform* rates and *flat* rates. Uniform rates are constant charges per unit of water use that do not change depending on the amount used. Flat rates are fixed amounts that do not vary based on metered water use. Flat rates are most commonly used in unmetered water systems and for residential wastewater rates.



**Figure 4-3. Current Water Use Charge Rates**

Water Use Charges	
Current Tiers	Current Rates
<b>Single Family Residential</b>	
Tier 1 (0-10 hcf)	\$6.90
Tier 2 (11-14 hcf)	\$7.89
Tier 3 (15-20 hcf)	\$10.30
Tier 4 (21+ hcf)	\$15.59
<b>Multi Family Residential</b>	
All Water Use	\$8.47
<b>Commercial<sup>1</sup></b>	
All Water Use	\$8.47

<sup>1</sup>Commercial includes commercial, industrial, other, municipal, commercial fire, landscape irrigation, and recycled water accounts.

## CONSUMPTION CHARGE MODIFICATIONS

Volume charges can be structured in a variety of ways, including uniform, increasing block, decreasing block, and seasonal rate designs. Currently, a tiered rate structure is used for Single Family Residential. Single Family Residential customers remain the most homogeneous class in terms of usage purpose (primarily indoor and outdoor needs), but actual peaking behavior and discretionary use have declined due to conservation, drought-responsive landscaping, and evolving customer behavior.

For other customer classes—Multi Family Residential, Commercial, Irrigation, and Recycled Water—the diversity in customer size, water use intensity, and seasonal demand makes it difficult to design meaningful and equitable tiered rate structures. These customers often exhibit highly variable and use-specific patterns that are not well aligned with standardized tiers.

Further, while usage volumes are tracked, there is limited data available regarding the timing of water use within each customer class. Without detailed information on when water is used, it is challenging to fully assess demand patterns or design rates that reflect the true cost impacts of peaking or time-based demand.

Given these factors, the City is transitioning to a uniform rate structure for all customer classes. Uniform rates provide a simpler billing method and better align with the City’s current cost-of-service allocations, which are based on demand, service levels, system capacity, and fire protection needs—not tiered peaking assumptions. In addition, all customers exhibit peak levels of usage, so charging a uniform rate is more equitable. This approach ensures equity and compliance with cost-of-service principles while improving administrative efficiency.

The design and calculation of these uniform volumetric charges for each customer class are detailed in **Section 5** of this report.

Our recommended modifications are as follows:

- Changing from tiered rates for Single Family Residential customers and uniform rates for all other customer classes, to a uniform volumetric rate structure for all customers. This change simplifies the rate structure, aligns more closely with actual water usage patterns



and cost-of-service principles, corresponds to available data, and enhances administrative efficiency. Under this recommendation, all customer classes will pay the same rate per unit of water consumed, regardless of usage volume.

- Although the City has different pressure zones, we do not recommend that the City charge rates by zone. The City’s water facilities are an integrated distribution network, not a series of isolated zones served by separately dedicated reservoirs, pumps, and distribution pipelines. Water facilities are designed as integrated networks that balance pressures and keep water from stagnating. Water that is pumped to the highest zones not only benefits customers in the highest zones but can also benefit customers in lower zones to which the water also flows.

The cost-of-service analysis determines how much of the revenue requirement should be recovered from the fixed Service Charges and the variable Water Use Charges for each customer class.

## **COST-OF-SERVICE ALLOCATIONS**

As the name implies, cost-of-service analysis is a process of determining how much services cost. To provide water service, infrastructure must be constructed, operated, and maintained, which must be paid for from cash or debt. The type and size of infrastructure depends on how much service customers require. Water systems are designed to provide sufficient capacity to meet customer demands for service wherever, whenever, and for as long as demanded.

Although each customer places unique demands on the system, water system infrastructure must be designed to reliably meet the highest levels of expected usage across all customers. The size and capacity of system components—such as pipelines, storage tanks, and pumps—are influenced by the need to serve the full range of demands under varying conditions. Greater usage levels and service requirements result in the need for larger, more costly infrastructure, as well as increased operating and maintenance (O&M) expenses. The purpose of a cost-of-service analysis is to allocate the costs of providing this system capacity to all customers.

It is important to understand that once the infrastructure is designed and built, the capacity it provides is continuously available, regardless of whether customers are using their full potential demand at a given time. All customers, regardless of their individual usage patterns, benefit from having access to reliable service at any time. As such, the cost of constructing, operating, and maintaining the system is allocated across all customers’ impact on system design and utilization.

### ***Analytical Procedure***

The cost-of-service analysis in this study involved a series of four steps that allow for reasonable cost allocations. Costs must first be classified according to the associated function. Functions provide the level of service required by customers. The cost of functions can be allocated in proportion to the service provided.

1. **Service function cost classification** – Revenue requirements are summarized by Water Enterprise Program and service function cost categories, which is needed for allocating costs that will be used for calculating rates (See **Figure 4-6**).
2. **Cost function allocations** – Costs from Step 1 are allocated to the demand, customer service, and capacity service components (See **Figure 4-7** and **Appendix A, Table 8B**).



Specific programs reflect a composite allocation of account costs to all three service components. Allocations applied to each cost component are summarized in **Figure 4-8**.

3. **Fire protection allocations** – Costs from Step 2 specific to fire protection services are distributed to public and fire protection service component (See **Figure 4-8**).

This sequence of steps is further explained below. The steps constitute the cost-of-service analysis, which converts the revenue requirement for FY 2025-26 in **Figure 4-6** into the eventual cost of service for setting Service Charge rates and Water Use Charge rates in **Figure 4-9**.

### Service Function Cost Classification

After determining a utility's revenue requirements, the cost-of-service analysis begins by aligning the budget items with the associated function. For example, some cost items are related to functions that support the ability to meet water demand while other costs are incurred to provide customer service. In other words, "function" refers to the type of operational activity or capital cost needed to provide service. Organizing the budget by functions correlates budget items with the rate that will fund the cost. The service functions for each cost category determine how the capital and O&M costs are allocated.

### City Water Enterprise Fund Programs

There are six operating expense programs paid for by the Water Enterprise Fund. Each program contains line item account costs that were assigned one of the three service functions. This exercise is included as Table 8B in Appendix A. Here is an overview of each of the six programs and the functions each program provides:

- **61410 – Revenue Services.** This program category includes the administrative expenses incurred for processing meter reads and other billing activities. These costs are independent of volume of water used or available space in the system and are apportioned on the basis of the number of meters served.
- **65142 – Water Customer Services.** Costs within this category support operational related activities, including meter reading, addressing customer inquiries, and protecting the City's water distribution system through the cross-connection control program.
- **65144, 65147 – Water Supply and Distribution.** This program includes costs to operate, maintain, and repair the City's water distribution system to comply with County, State, and Federal regulations. Program costs within this category include public and private fire protection service costs, as well as servicing the existing debt service incurred by the Water Enterprise Fund. Given the various infrastructure associated with providing water to customers, various accounts within this program have been classified functionally as demand, capacity, or customer service.

Water is pumped throughout the system to service demand. Supply reservoirs are located at high points in the system so that water can flow to customers by gravity as demanded. Water fills the reservoirs from pump stations at a fairly steady rate compared to the outflow to customers, which occurs at the peak hour of the peak day.

Costs to maintain, operate, and manage the City's recycled water system are captured in this program. These costs include those incurred to purchase recycled water from Silicon Valley Clean Water for the City's use.



- **65145 – Water Purchases.** The City does not have its own surface water or groundwater resources; the City is not supplied by lakes, river diversions, or wells. Instead, the City purchases treated water from the SFPUC. The cost of its water supply is included in the cost paid to the SFPUC, which is the City’s single largest O&M expense. This cost category is allocated to customers based on demand, as costs vary with the total quantity of water used. Expenses include annual fees the City pays as a BAWSCA member in addition to the wholesale water purchase expenses.
- **65146 – Water Resource Management.** The City must continue to meet evolving state-issued water efficiency standards and regulations. To meet efficiency standards, customers are expected to use water judiciously. Costs in this category also include the City’s water conservation program. Hence, a majority of program costs are recovered through demand function.

### Customer Service Functions

There are four customer service functions. Each of these functions includes costs that are not related to rates of flow.

**Administrative Support Services.** This category of expenses includes costs the Enterprise pays for services provided on its behalf. Specifically, it covers the utility’s proportional share of expenses related to city-wide financial services such as auditing and advising on investments. These are administrative and support costs that benefit the utility’s operations and are allocated based on the number of meters served, independent of the volume of water delivered or rates of flow.

**Capital Expenses** – Investments in the Enterprise infrastructure are necessary to ensure existing levels of service are maintained. In addition, capital projects allow for expansion of the system’s capacity to support growth. Costs are allocated based on the capacity corresponding to each meter served.

**Non-Operating Revenue** – Revenue from miscellaneous fees benefit rate payers by reducing the net amount of expenses that rates need to cover. These costs are independent of rates of flow and are applied to the fixed component of the service charge to reduce the cost of service to each meter.

**Reserves** – Similar to non-operating revenue, rate payers benefit from the Enterprise’s use of reserves. In FY 2025-26, the planned use of \$7.5 million in reserves will help offset the need for larger rate increases to meet growing expenses. As a result, the City can charge rate payers less than the total revenue requirement and phase in rates over time to reduce impacts to rate payers. These costs are independent of flow, but are apportioned using a composite allocation of all other functions analyzed. This is shown in more detail in **Figure 4-9**. Reductions to rates are intended to benefit customers by reducing the Service Charges and the Water Use Charges assessed.

### Fire Protection

The distribution system also includes hydrants for fire suppression and supply to private fire services. To segregate the water supply and distribution costs from Program 65144 attributable to public and private fire protection services an allocation was developed in **Figure 4-4** according to the value of pressure and storage assets in the water system. These specific asset types were designed to meet both fire flow and maximum day demand



requirements to varying degrees. The existing capacity of the City’s pressure system assets is split almost equally between meeting fire flow and maximum day demand requirements. In contrast, storage capacity is driven largely by maximum day demand requirements. An allocation of these water system assets, which serve supply and distribution, determined that 43.7% of Program 65144 costs should be apportioned to fire protection services. Thus, \$3,192,284 of the total \$7,297,786 included in Program 65144 are attributable to public and private fire protection services, as shown in **Figure 4-8**.

**Figure 4-4. Allocation of Water Supply and Distribution Costs**

Asset Type	Values of Assets	Value Allocation	Fire Flow Demand <sup>1</sup>	Max Day Demand <sup>2</sup>
Pressure <sup>1</sup>	\$9,701,974	77%	52%	48%
Storage <sup>2</sup>	\$2,827,336	23%	16%	84%
	\$12,529,310	100%		
<b>Allocation of Water Distribution</b>			<b>43.7%</b>	<b>56.3%</b>

<sup>1</sup>Allocation of fire flow and maximum day demand calculated based on Table 6-4 in 2011 City of Redwood City Water System Master Plan.

<sup>2</sup>Allocation of fire flow and maximum day demand calculated based on Table 6-3 in 2011 City of Redwood City Water System Master Plan.

The City’s fire flow demands include public fire hydrants, as well as private fire services. Public fire hydrants provide a benefit to all customers that is recovered through a fixed service component of all service charges calculated. Whereas, private fire services only serve the need of the specific customer account. Thus, Fire protection costs from Program 65144 were further divided among public and private protection according to the demand reserved in the system. The diameter of each fire service line was converted to a demand factor, a procedure identified in the AWWA M1 manual, 7<sup>th</sup> edition. As stated in this reference, “the demand factor is shown to bring the various connection sizes into equivalence. Using the principles of the Hazen-Willians equation for flow through pressure conduits, the relative flow potential for various size pipes is dependent on the diameter raised to the 2.63 power.” All public fire hydrants were assumed to have a 6-inch connection. Demand factors for each size service were then multiplied by the number of connections of each size to derive the total number of equivalent connections. Based on **Figure 4-5**, 19.3% of the fire-protection costs should be allocated to private fire service. This allocation is also included in **Figure 4-7** as O&M Water Supply & Distribution (Fire Protection).



**Figure 4-5. Allocation of Public and Private Fire Protection Costs**

Service Line	Count	Demand Factor	Equivalent Connections	Allocation
<u>Hydrants</u>				
6"	2,385	111.31	265,477	80.7%
<u>Existing Private Service Lines</u>				
1"	0	1.00	0	
2"	170	6.19	1,052	
3"	30	17.98	539	
4"	146	38.32	5,595	
6"	183	111.31	20,370	
8"	126	237.21	29,888	
10"	8	426.58	3,413	
12"	4	689.04	2,756	
	663		63,613	19.3%
<b>Total</b>	<b>3,048</b>		<b>329,090</b>	<b>100.0%</b>

Source: City data for public fire hydrants and customers with private fire service lines.

**Figure 4-6** shows the classification of the budgeted operating and capital expenses and non-operating revenues by function, including the identified portion of the fire protection costs included in Program 65144 Water Supply and Distribution.



**Figure 4-6. Revenue Requirements Summary by Function (FY 2025-26)**

	<b>FY 2025-26 Revenue Requirement</b>
<b>O&amp;M Expenses</b>	
61410-Revenue Services	\$2,509,087
65142-Water Customer Services	\$2,723,818
65144, 65147-Water Supply and Distribution	\$5,598,279
65144-Water Supply & Distrib (Fire Protection)	\$4,353,012
65145-SFWD Water Purchases	\$26,695,000
65146-Water Resource Management	\$1,916,272
65144-Water Supply & Distrib. Rec. Water Debt	<u>\$3,782,913</u>
<b>Total Allocable O&amp;M</b>	<b>\$47,578,381</b>
O&M Composite	
<b>Capital Expenses (PAYGo)</b>	\$13,161,266
<hr/>	
<b>Subtotal - O&amp;M and Capital</b>	<b>\$60,739,647</b>
<b>Unallocated O&amp;M</b>	
61710-Administrative Support Services	<u>\$122,560</u>
<b>Administrative Costs</b>	\$122,560
<b>Subtotal O&amp;M, Capital, Non-Operating</b>	\$60,862,207
Expense Composite	
<b>Non-Operating Revenue</b>	
46205-Backflow Devices Admin Fee	(\$124,800)
46210-Backflow Devices Testing Fee	(\$26,000)
49725-Miscellaneous Revenue	(\$10,300)
49901-Transfer from General Fund	(\$718,059)
49910-Transfer from Sewer Fund	<u>(\$769,566)</u>
<b>Total Non-Operating</b>	<b>(\$1,648,725)</b>
<b>Transfers to/(from) Reserves</b>	(\$6,263,116)
<hr/>	
<b>Total Revenue Requirement</b>	<b>\$52,950,366</b>

Note: Rounding differences caused by stored values in electronic models may exist.

Once the costs are organized by service function, it is possible to allocate them based on the allocation percentages that correspond to each service function. The allocation percentages are derived from the units of service associated with each service function.

All allocation factors employed in the cost-of-service allocation exercise are shown in **Figure 4-7**. A letter has been assigned to each allocation factor row for reference to the allocation factor assigned in **Figure 4-8**.

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**Figure 4-7. System Wide Cost Allocation Factors**

System-Wide Cost Allocation Factors	Customer Services			Private		Total
	Demand Services	Service	Capacity	Public Fire Services	Fire Services	
<b>a</b> Demand	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
<b>b</b> Capacity	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
<b>c</b> Services	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
<u>Composite Allocations</u>						
<b>d</b> O&M Revenue Services	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
<b>e</b> O&M Admin Support Services	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
<b>f</b> O&M Water Customer Services	53.3%	46.5%	0.2%	0.0%	0.0%	100.0%
<b>g</b> O&M Water Supply and Distribution	64.5%	0.0%	35.5%	0.0%	0.0%	100.0%
<b>h</b> O&M Water Supply and Distrib. (Fire Protection)	0.0%	0.0%	0.0%	80.7%	19.3%	100.0%
<b>i</b> SFPUC Water Purchases	98.6%	0.0%	1.4%	0.0%	0.0%	100.0%
<b>j</b> O&M Water Resource Management	93.8%	0.2%	6.0%	0.0%	0.0%	100.0%
<b>k</b> O&M Composite	77.7%	7.9%	5.2%	7.4%	1.8%	100.0%
<b>l</b> CIP Composite	0.0%	4.6%	95.4%	0.0%	0.0%	100.0%
<b>m</b> Exp Composite	60.7%	7.4%	24.7%	5.8%	1.4%	100.0%

Source: Appendix A: Table 8, Table 8B, and Table 8C.

The revenue requirements in **Figure 4-5** are allocated to the demand and customer service functions in **Figure 4-8**, using the calculated factors from **Figure 4-7**. The resulting allocations indicate that slightly less than 63% of the revenue requirement is attributable to the demand service component and roughly 37% to the customer service, capacity and fire protection components. As previously mentioned, the Water Use Charge rates are designed to recover the costs allocated to the demand service component and the Service Charge rates are designed to recover the customer service, capacity, and fire protection costs.

**Figure 4-8. Service Function Allocations**

	FY 2025-26 Revenue Requirement	Allocation Factor	Water Use Charge		Service Charge		
			Demand	Customer	Capacity	Public Fire Protection Services	Private Fire Protection Services
<b>O&amp;M Expenses</b>							
61410-Revenue Services	\$2,509,087	<b>d</b>	\$0	\$2,509,087	\$0	\$0	\$0
65142-Water Customer Services	\$2,723,818	<b>f</b>	\$1,451,622	\$1,267,315	\$4,881	\$0	\$0
65144, 65147-Water Supply and Distribution	\$5,598,279	<b>g</b>	\$3,612,778	\$0	\$1,985,501	\$0	\$0
65144-Water Supply & Distrib (Fire Protection)	\$4,353,012	<b>h</b>	\$0	\$0	\$0	\$3,511,574	\$841,439
65145-SFPUC Water Purchases	\$26,695,000	<b>i</b>	\$26,325,000	\$0	\$370,000	\$0	\$0
65146-Water Resource Management	\$1,916,272	<b>j</b>	\$1,797,098	\$4,639	\$114,534	\$0	\$0
65144-Water Supply & Distrib. Rec. Water Debt	\$3,782,913	<b>a</b>	\$3,782,913	\$0	\$0	\$0	\$0
<b>Total Allocable O&amp;M</b>	<b>\$47,578,381</b>		<b>\$36,969,410</b>	<b>\$3,781,042</b>	<b>\$2,474,917</b>	<b>\$3,511,574</b>	<b>\$841,439</b>
O&M Composite			77.7%	7.9%	5.2%	7.4%	1.8%
<b>Capital Expenses (PAYGo)</b>	<b>\$13,161,266</b>	<b>l</b>	\$0	\$600,181	\$12,561,086	\$0	\$0
<b>Subtotal - O&amp;M and Capital</b>	<b>\$60,739,647</b>		<b>\$36,969,410</b>	<b>\$4,381,222</b>	<b>\$15,036,002</b>	<b>\$3,511,574</b>	<b>\$841,439</b>
<b>Unallocated O&amp;M</b>							
61710-Administrative Support Services	\$122,560	<b>e</b>	\$0	\$122,560	\$0	\$0	\$0
<b>Administrative Costs</b>	<b>\$122,560</b>		\$0	\$122,560	\$0	\$0	\$0
<b>Subtotal O&amp;M, Capital, Non-Operating</b>	<b>\$60,862,207</b>		<b>\$36,969,410</b>	<b>\$4,503,782</b>	<b>\$15,036,002</b>	<b>\$3,511,574</b>	<b>\$841,439</b>
Expense Composite			60.7%	7.4%	24.7%	5.8%	1.4%
<b>Non-Operating Revenue</b>							
46205-Backflow Devices Admin Fee	(\$124,800)	<b>c</b>	\$0	(\$124,800)	\$0	\$0	\$0
46210-Backflow Devices Testing Fee	(\$26,000)	<b>c</b>	\$0	(\$26,000)	\$0	\$0	\$0
49725-Miscellaneous Revenue	(\$10,300)	<b>c</b>	\$0	(\$10,300)	\$0	\$0	\$0
49901-Transfer from General Fund	(\$718,059)	<b>c</b>	\$0	(\$718,059)	\$0	\$0	\$0
49910-Transfer from Sewer Fund	(\$769,566)	<b>c</b>	\$0	(\$769,566)	\$0	\$0	\$0
<b>Total Non-Operating</b>	<b>(\$1,648,725)</b>		\$0	<b>(\$1,648,725)</b>	\$0	\$0	\$0
<b>Transfers to/(from) Reserves</b>	<b>(\$6,263,116)</b>	<b>m</b>	<b>(\$3,804,392)</b>	<b>(\$463,468)</b>	<b>(\$1,547,302)</b>	<b>(\$361,364)</b>	<b>(\$86,590)</b>
<b>Total Revenue Requirement</b>	<b>\$52,950,366</b>		<b>\$33,165,018</b>	<b>\$2,391,589</b>	<b>\$13,488,700</b>	<b>\$3,150,210</b>	<b>\$754,849</b>
			<b>\$33,165,018</b>	<b>\$2,391,589</b>	<b>\$13,488,700</b>	<b>\$3,150,210</b>	<b>\$754,849</b>
			<b>62.6%</b>		<b>35.9%</b>		<b>1.4%</b>

<sup>1</sup>Government Code 53750.5 authorizes the inclusion of public fire protection costs in water rates.

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**Figure 4-9** summarizes the small shift in the Service Charge revenues from the Water Use Charge revenues to align with the cost-of-service. The exercise performed in **Figure 4-9** indicates that the proportion of Service Charge revenues will decrease slightly from roughly 37.7% to 37.4% of total rate revenues, while Water Use Charge revenues will increase slightly from 62.3% to 62.6%. The right-hand columns summarizing the difference between the cost-of-service and current revenues include both the impacts of the realignment of rates through the cost allocation process and the overall revenue increases proposed.

**Figure 4-9. Cost-of-Service Revenue Summary**

Components of Rate Structure	Revenue at Current Rates		Cost of Service FY 2025-26		Difference COS Minus Current	
<b>Single Family</b>						
Water Use Charge Revenue	\$14,300,730	60.0%	\$15,242,481	58.7%	\$941,752	6.6%
Fixed Service Charge Revenue	\$9,546,588	40.0%	\$10,741,466	41.3%	\$1,194,878	12.5%
<b>Subtotal - Single Family</b>	<b>\$23,847,318</b>	<b>100.0%</b>	<b>\$25,983,947</b>	<b>100.0%</b>	<b>\$2,136,630</b>	<b>9.0%</b>
<b>Commercial/Multi Family</b>						
Water Use Charge Revenue	\$16,532,381	65.8%	\$17,922,536	68.8%	\$1,390,156	8.4%
Fixed Service Charge Revenue	\$8,589,272	34.2%	\$8,137,088	31.2%	(\$452,184)	-5.3%
<b>Subtotal - Commercial</b>	<b>\$25,121,653</b>	<b>100.0%</b>	<b>\$26,059,624</b>	<b>100.0%</b>	<b>\$937,971</b>	<b>3.7%</b>
<b>Private Fire Service</b>						
Fixed Service Charge Revenue	\$494,525		\$906,795		\$412,270	83.4%
<b>Total</b>						
Water Use Charge Revenue	\$30,833,111	62.3%	\$33,165,018	62.6%	\$2,331,907	7.6%
Fixed Service Charge Revenue	\$18,630,385	37.7%	\$19,785,349	37.4%	\$1,154,964	6.2%
<b>Total</b>	<b>\$49,463,496</b>	<b>100.0%</b>	<b>\$52,950,366</b>	<b>100.0%</b>	<b>\$3,486,871</b>	<b>7.0%</b>

Note: Commercial/Multi Family includes all Commercial, Multi-Family, and Irrigation customers.



## Section 5. Rate Design

The City has historically charged water customers the combination of a fixed Service Charge and a variable Water Use Charge based on metered water use. As previously discussed, this is a common set of charges that is prevalent throughout the water industry. This chapter explains the derivation of the Water Use and Service Charge rates that reflect the projected cost of service.

### SERVICE CHARGE DESIGN

Service Charge rates are fixed rates that are billed each billing period to recover the cost of the service functions. The cost-of-service analysis determines how much of the revenue requirement is attributable to the customer service function. The function has four components – customer services, customer capacity, public fire protection, and private fire protection. Costs attributable to customer services are allocated to customers in proportion to their number of meters. Costs attributable to customer capacity are allocated to customers in proportion to the capacity of their services. Public fire protection costs are allocated to customers in proportion to the number of meters and private fire services. Private fire protection costs are allocated to customers in proportion to the capacity of their services. The sum of the customer service, capacity and public fire protection equals the Service Charge rate per connection. The sum of the customer service, public fire protection, and private fire protection components determines the Fire Service Charge rate per connection.

**Figure 5-1** and **Figure 5-2** lists the units of service corresponding to each of the cost components. The 23,660<sup>18</sup> services and 667 private fire services are used for apportioning the customer service and public fire protection cost components.

**Figure 5-1. Service Charge Units of Service**

Meter Size	Services	Meter Ratings (gpm) <sup>1</sup>	Capacity Multiplier	EMUs
	<b>a</b>	<b>b</b>	<b>c = b ÷ 20</b>	<b>a * c</b>
5/8" Meters	21,163	20	1.00	21,163
3/4" Meters	187	30	1.50	281
1" Meters	744	50	2.50	1,860
1.5" Meters	456	100	5.00	2,280
2" Meters	799	160	8.00	6,392
3" Meters	225	435	21.75	4,894
4" Meters	72	750	37.50	2,700
6" Meters	7	1600	80.00	560
8" Meters	4	2800	140.00	560
10" Meters	3	4200	210.00	630
	<b>23,660</b>		<b>Total EMUs</b>	<b>41,319</b>

<sup>1</sup>Capacity multiplier assumes 5/8" meter = 1 EMU = 20 gallons per minute.

<sup>18</sup> This total includes only potable and recycled water meters. All fire service meters have been excluded.



**Figure 5-2. Fire Service Charge Units of Service**

Fireline Services (In Inches)	Private Fire Services	Demand Factor	EFUs
	<b>a</b>	<b>b</b>	<b>a * b</b>
2"	170	6	1,052
3"	30	18	539
4"	146	38	5,595
6"	183	111	20,370
8"	126	237	29,888
10"	8	427	3,413
12"	4	689	2,756
	667	<b>Total EFUs</b>	63,613

Capacity costs associated with the distribution system are apportioned among the connections in proportion to the capacity associated with each connection. In **Figure 5-1**, Connections are converted to Equivalent Meter Units (EMUs) to apportion the customer capacity cost component for potable and recycled water meters. An EMU represents the number of 5/8-inch meters to which a larger meter is equivalent. For example, a 1-inch meter provides 2.50 times as much capacity as a 5/8-inch meter. The capacity multipliers are based on the meter data provided by the City of the manufacturer’s nominal capacity. For larger sized meters, the City uses multiple types, such as displacement, turbine, or compound. All Single Family Residential customers were assumed to have a 5/8” meter based on the current rate structure which bills a fixed bi-monthly charge based on the smallest level of capacity (5/8”). The meter ratings used reflect the nominal capacity of the most commonly used meter type available for each size. There are 41,319 total EMUs. In effect, the 23,660 services of assorted sizes have the equivalent capacity as 41,319 5/8-inch meters.

**Figure 5-2** details the derivation of the units of service associated with fire services. For fire services, what dictates the demand on the system is the diameter of the fire service line, since during a fire event, each fire service needs to deliver very high flow rates instantly. The fire service size determines the maximum instantaneous demand it can place on the system (i.e., how much water the infrastructure must be ready to deliver at a moment’s notice for fire suppression). An Equivalent Fireline Unit (EFU) is calculated and proportionally allocates the standby capacity costs associated with providing adequate fire protection capacity. The EFU calculation relies upon a demand factor. The demand factor, or relative potential of the size of the service, is derived based on the service size raised to the power of 2.63<sup>19</sup>. The demand factors used reflect the equivalent capacity of the various sizes of private fire service lines. There are 63,613 total EFUs. In effect, the 667 service lines of assorted sizes have the equivalent demand of 63,613 1-inch service lines.

**Figure 5-3** derives the unit costs for the customer accounts and customer capacity cost components. Each service is allocated \$18.98 per month for the customer service and public fire protection cost components. This amount represents the costs the City incurs to maintain each service regardless of the capacity of the service (e.g., customer billing, administration overhead). Each potable or recycled water (i.e. non-fire protection) service is also allocated \$27.20 per month per EMU. This amount represents a portion of the cost of providing distribution system capacity for each account, and increases based on the capacity of the

<sup>19</sup> *Principles of Water Rates, Fees, and Charges*. American Water Works Association Manual M1. 7<sup>th</sup> Edition, pg. 163

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meter. Lastly, each fire service is allocated \$0.99 per month per EFU and represents the City's per-unit cost to operate, maintain, and keep the water system infrastructure in a state of readiness to meet potential demands from private fire service connections, proportional to the fire service line size.

**Figure 5-3. Service Charge Unit Costs**

FY 2025-26 Customer Service Expenses	Customer Service + Public Fire			Customer Capacity Component	Total
	Service Component	Private Fire Service component			
O&M Expenses	\$7,292,615	\$841,439		\$2,474,917	\$9,767,532
Capital expenses(PAYGo)	\$600,181	\$0		\$12,561,086	\$13,161,266
Admin Support Svcs	\$122,560	\$0		\$0	\$122,560
Non-Operating Revenue	(\$1,648,725)	\$0		\$0	(\$1,648,725)
Transfer (from) Reserves	(\$824,832)	(\$86,590)		(\$1,547,302)	(\$2,372,134)
<b>Total FY 2025-26</b>	<b>\$5,541,799</b>	<b>\$754,849</b>		<b>\$13,488,700</b>	<b>\$19,030,499</b>
<b>Units of Service</b>	<b>24,327</b>	<b>63,613</b>		<b>41,319</b>	
	Service	EFUs		EMUs	
Annual Unit Cost	\$227.80	\$11.87		\$326.45	
<b>Monthly Unit Cost</b>	<b>\$18.98</b>	<b>\$0.99</b>		<b>\$27.20</b>	
	per Service/DU	per EFU		per EMU	

Source: Expenses from **Figure 4-8**; Units of Service from **Figures 5-1** and **Figure 5-2**.

**Figure 5-4** combines the customer service and capacity components into a single Service Charge for each size service.

**Figure 5-4. Proposed Monthly Service Charge Rates – FY 2025-26**

Service Size	Service Component	Capacity Component			COS
	(\$/mo.)	\$/EMU	Capacity Multiplier	Capacity Total	Service Charges (\$/mo.)
	<b>a</b>	<b>b</b>	<b>c</b>	<b>d = b * c</b>	<b>e = a + d</b>
5/8" Meters	\$18.98	\$27.20	1.00	\$27.20	\$46.19
3/4" Meters	\$18.98	\$27.20	1.50	\$40.81	\$59.79
1" Meters	\$18.98	\$27.20	2.50	\$68.01	\$86.99
1.5" Meters	\$18.98	\$27.20	5.00	\$136.02	\$155.00
2" Meters	\$18.98	\$27.20	8.00	\$217.63	\$236.62
3" Meters	\$18.98	\$27.20	21.75	\$591.69	\$610.68
4" Meters	\$18.98	\$27.20	37.50	\$1,020.16	\$1,039.14
6" Meters	\$18.98	\$27.20	80.00	\$2,176.34	\$2,195.32
8" Meters	\$18.98	\$27.20	140.00	\$3,808.59	\$3,827.58
10" Meters	\$18.98	\$27.20	210.00	\$5,712.89	\$5,731.87

Source: **Figure 5-3**.

Note: Rounding differences caused by stored values in electronic models may exist.

With the proposed rates, all meter sizes greater than or equal to 1.5" would see a decrease in FY 2025-26. **Figure 5-5** shows the proposed three-year schedule of Service Charges. The proposed Fire Service Charges are derived in **Figure 5-6** by combining the service components and capacity components for each size of private fire service connection. **Figure 5-7** shows the proposed three-year schedule of Fire Service Charge rates that are proposed.



**Figure 5-5. Current and Proposed Service Charge Rates**

<b>Customer Class</b>	<b>Current</b>	<b>FY 2025-26</b> eff. 1/1/2026	<b>FY 2026-27</b> eff. 1/1/2027	<b>FY 2027-28</b> eff. 1/1/2028
<b>Single Family Residential - Bi-monthly Charge per DU</b>				
	\$82.09	\$92.38	\$97.92	\$102.82
<b>Multi Family Residential - Bi-monthly Charge per Meter</b>				
5/8" Meters	\$82.09	\$92.38	\$97.92	\$102.82
3/4" Meters	\$112.67	\$119.58	\$126.75	\$133.09
1" Meters	\$173.83	\$173.98	\$184.42	\$193.64
1.5" Meters	\$326.76	\$310.00	\$328.60	\$345.03
2" Meters	\$510.26	\$473.24	\$501.63	\$526.71
3" Meters	\$1,351.35	\$1,221.36	\$1,294.64	\$1,359.37
4" Meters	\$2,314.75	\$2,078.28	\$2,202.98	\$2,313.13
6" Meters	\$4,914.42	\$4,390.64	\$4,654.08	\$4,886.78
8" Meters	\$8,584.57	\$7,655.16	\$8,114.47	\$8,520.19
10" Meters	\$12,866.41	\$11,463.74	\$12,151.56	\$12,759.14
<b>Commercial (including Irrigation) - Monthly Charge per Meter</b>				
5/8" Meters	\$41.05	\$46.19	\$48.96	\$51.41
3/4" Meters	\$56.34	\$59.79	\$63.38	\$66.55
1" Meters	\$86.92	\$86.99	\$92.21	\$96.82
1.5" Meters	\$163.38	\$155.00	\$164.30	\$172.52
2" Meters	\$255.13	\$236.62	\$250.82	\$263.36
3" Meters	\$675.67	\$610.68	\$647.32	\$679.69
4" Meters	\$1,157.38	\$1,039.14	\$1,101.49	\$1,156.56
6" Meters	\$2,457.21	\$2,195.32	\$2,327.04	\$2,443.39
8" Meters	\$4,292.28	\$3,827.58	\$4,057.23	\$4,260.09
10" Meters	\$6,433.20	\$5,731.87	\$6,075.78	\$6,379.57

Source: Rates for FY 2025-26 shown in **Figure 5-4** with revenue increases from **Figure 3-6** applied uniformly to FY 2026-27 and FY 2027-28.



**Figure 5-6. Proposed Monthly Fire Service Charge Rates**

Private Fire Service Lines Service Line Size (in)	Service Component (\$/mo.)	Private Fire Service Capacity \$/EFU	Capacity Multiplier	Capacity Total	Monthly Proposed Rate
	a	b	c	d = b * c	e = a + d
1"	\$18.98	\$0.99	1.00	\$0.99	<b>\$19.97</b>
2"	\$18.98	\$0.99	6.19	\$6.12	<b>\$25.10</b>
3"	\$18.98	\$0.99	17.98	\$17.78	<b>\$36.76</b>
4"	\$18.98	\$0.99	38.32	\$37.89	<b>\$56.88</b>
6"	\$18.98	\$0.99	111.31	\$110.07	<b>\$129.05</b>
8"	\$18.98	\$0.99	237.21	\$234.56	<b>\$253.55</b>
10"	\$18.98	\$0.99	426.58	\$421.82	<b>\$440.81</b>
12"	\$18.98	\$0.99	689.04	\$681.36	<b>\$700.35</b>

Source: **Figure 5-3.**

Note: Rounding differences caused by stored values in electronic models may exist.

**Figure 5-7. Current and Proposed Fire Service Charge Rates**

Fire Service Line Size	Current Rates	FY 2025-26 eff. 1/1/2026	FY 2026-27 eff. 1/1/2027	FY 2027-28 eff 1/1/2028
<b>Bi-monthly Charge per Connection</b>				
1"	\$36.98	\$39.94	\$42.34	\$44.46
2"	\$73.96	\$50.20	\$53.22	\$55.88
3"	\$110.94	\$73.52	\$77.94	\$81.84
4"	\$147.92	\$113.76	\$120.58	\$126.60
6"	\$221.88	\$258.10	\$273.58	\$287.26
8"	\$295.84	\$507.10	\$537.52	\$564.40
10"	\$369.80	\$881.62	\$934.52	\$981.24
12"	\$443.76	\$1,400.70	\$1,484.74	\$1,558.98
<b>Monthly Charge per Connection</b>				
1"	\$18.49	\$19.97	\$21.17	\$22.23
2"	\$36.98	\$25.10	\$26.61	\$27.94
3"	\$55.47	\$36.76	\$38.97	\$40.92
4"	\$73.96	\$56.88	\$60.29	\$63.30
6"	\$110.94	\$129.05	\$136.79	\$143.63
8"	\$147.92	\$253.55	\$268.76	\$282.20
10"	\$184.90	\$440.81	\$467.26	\$490.62
12"	\$221.88	\$700.35	\$742.37	\$779.49

Source: Rates for FY 2025-26 shown in **Figure 5-6** with revenue increases from **Figure 3-6** applied uniformly to FY 2026-27 and FY 2027-28.

## WATER USE CHARGE DESIGN

As previously discussed, it is recommended that the City transition from tiered Water Use Charges for Single Family customers and uniform rates for all other classes to a uniform rate structure for all customer classes.



### **Single Family Residential Water Use Charges**

The City’s Single Family Residential customers are currently charged a four-tier increasing block rate structure.<sup>20</sup> This structure consists of successive blocks of water usage, with the unit price increasing in each block. It is progressive in nature, meaning that water use is billed sequentially by tier—starting with Tier 1 and progressing to higher tiers as usage increases. For example, all metered water is first billed at the Tier 1 rate, with only the portion of water exceeding Tier 1 thresholds billed at Tier 2, and so on for Tiers 3 and 4.

Historically, increasing block rates have been implemented to promote conservation and to better reflect the incremental costs associated with higher usage. This type of structure has also helped address seasonal peaking and discretionary outdoor use, particularly in the Single Family Residential class. However, evolving customer behavior, improved efficiency, and updated cost-of-service practices have prompted a reevaluation of this approach.

As part of this study, a change is recommended from the current tiered rate structure to a uniform volumetric rate for all customer classes, including Single Family Residential. The shift to uniform rates is supported by the City’s current cost-of-service methodology, which no longer relies on demand peaking metrics to allocate costs. Instead, costs are now distributed based on system demand, capacity requirements, service levels, and public and private fire protection needs. Further, the City has a single water source and is charged a uniform water price regardless of the volume that is purchased. This allocation more accurately reflects how customers utilize the system and supports a uniform rate that is equitable and aligned with proportional cost-of-service principles.

### **Commercial/Multi Family Water Use Charges**

We recommend that the City continue to maintain uniform rates for its non-Single Family Residential customer classes. This structure remains appropriate given the diversity of water use patterns within these classes and aligns with the cost-of-service methodology that allocates costs based on overall demand, capacity, and service characteristics rather than usage tiers.

### **Water Use Charges Summary**

Referring to **Figure 4-7** we can see the allocation factors associated with demand and **Figure 4-8** illustrates the allocations across demand, services, and fire protection. **Figure 5-8** details the annual demand in HCF. The consumption charge is calculated by dividing the total demand-related costs by total water use to determine the rate needed to recover those costs, this is shown in **Figure 5-9**.

**Figure 5-8. Annual Demand**

<b>Units of Service - Annual Demand (hcf)</b>	
<b>Single Family</b>	1,660,000
<b>Non-Residential</b>	1,951,875
	<b>3,611,875</b>

Source: FY 2022-23 and FY 2023-24 City water consumption data.

<sup>20</sup> For simplicity, we use the term “tiered rates” synonymously with “increasing block rates.” “Inclining block rates” is commonly used for “increasing block rates.” However, because an incline can slope both up or down, it is ambiguous in this context and therefore is not used in this study.



**Figure 5-9. Proposed Water Use Charge**

Consumption Charge Cost of Service	Demand
Operations & Maintenance	\$36,969,410
Capital Expenses (PayGo)	\$0
Non-Operating Revenue	\$0
Transfers to/(from) Reserves	(\$3,804,392)
<b>Total Consumption Charge COS</b>	\$33,165,018
<b>Net Consumption Charge</b>	<b>\$33,165,018</b>
<b>Annual water use (hcf)</b>	3,611,875
<b>Consumption Charge (\$ per hcf)</b>	<b>\$9.18</b>

Source: Cost of service from **Figure 4-8**; Water use from **Figure 5-8**.

The three-year schedule of proposed Water Use Charges for Single Family Residential, Multi Family Residential, Commercial, and Irrigation customers is shown in **Figure 5-10**.

**Figure 5-10. Current and Proposed Water Use Charge Rates**

Usage	Current Rates	Usage	FY 2025-26 eff. 1/1/2026	FY 2026-27 eff. 1/1/2027	FY 2027-28 eff. 1/1/2028
<b>Single Family Residential</b>					
Tier 1 (0-10 hcf)	\$6.90	All Water Use	\$9.18	\$9.73	\$10.22
Tier 2 (11-14 hcf)	\$7.89				
Tier 3 (15-20 hcf)	\$10.30				
Tier 4 (21+ hcf)	\$15.59				
<b>Multi Family Residential</b>					
All Water Use	\$8.47	All Water Use	\$9.18	\$9.73	\$10.22
<b>Commercial<sup>1</sup></b>					
All Water Use	\$8.47	All Water Use	\$9.18	\$9.73	\$10.22

<sup>1</sup>Commercial includes commercial, industrial, other, municipal, commercial fire, landscape irrigation, and recycled water accounts.

Note: Rounding differences caused by stored values in electronic models may exist.

Further impacts to customers due to these recommended adjustments will be discussed in Section 6.

### **Drought Rates**

During prolonged shortages, customers are required to conserve or even ration their water use. The magnitude of the water savings can significantly reduce water sales revenue from quantity charges.

The City requested HF&H to update the Drought Rates that would be applied to the rates for the Water Use Charges and implemented during declared water shortage stages in accordance with the City’s Water Shortage Contingency Plan (WSCP), state mandated reductions in the



level of water usage, or other natural disaster or event that results in a water shortage and an unforeseen drop in water demand that requires reductions in water use.

With the transition from a tiered to a uniform rate structure, the City no longer needs to apply separate Drought Rates across different tiers and customer classes. Instead, it is recommended that the City implement a simplified drought rate structure in which all customers are subject to the same drought surcharge based on the City’s current drought stage. This practice mirrors the recommendation that all City customers would pay an equal uniform Water Use Charge, regardless of customer class. Under this approach, Drought Rates will be tied directly to defined stages of water use reduction, ensuring consistency, equity, and ease of administration during times of a declared shortage.

**Analysis**

To develop drought rates, an analysis was conducted to evaluate the financial impact of reduced water consumption under various drought stages. The analysis began by applying the designated percentage reduction for each drought stage or shortage stage, as defined by the City’s WSCP, to the City’s total projected water consumption. This provided an estimate of reduced water usage under each stage. **Figure 5-11** shows the steps used to calculate the drought rates that are discussed in the additional paragraphs below.

**Figure 5-11. Drought Rates Calculation**

Stage	Demand Reduction <b>b</b>	Commodity Consumption <b>c</b>	Commodity Rate <b>d</b>	Commodity Charge Revenue <b>e = c<sub>n</sub> x d</b>	Cost Savings <b>f = (e<sub>0</sub> - e<sub>n</sub>) x a</b>	Lost Revenue <b>g = (e<sub>0</sub> - e<sub>n</sub>) + f<sub>n</sub></b>	Drought Rates <b>h = g ÷ c</b>
0	0%	3,611,875	\$9.18	33,165,018	\$0	\$0	\$0.00
1	10%	3,250,688	\$9.18	29,848,516	(\$2,094,888)	\$1,221,614	\$0.38
2	20%	2,889,500	\$9.18	26,532,014	(\$4,189,775)	\$2,443,228	\$0.85
3	30%	2,528,313	\$9.18	23,215,512	(\$6,284,663)	\$3,664,842	\$1.45
4	40%	2,167,125	\$9.18	19,899,011	(\$8,379,551)	\$4,886,456	\$2.25
5	50%	1,805,938	\$9.18	16,582,509	(\$10,474,439)	\$6,108,070	\$3.38
6	60%	1,444,750	\$9.18	13,266,007	(\$12,569,326)	\$7,329,684	\$5.07

**a** = Cost of water (\$5.80 per hcf)

Next, cost savings (column f of **Figure 5-11**) were calculated by multiplying the reduction in water volume by the FY 2025-26 wholesale water purchase price charged by the San Francisco Public Utilities Commission (SFPUC), per item a in **Figure 5-11**. This step reflects the avoided cost of purchasing less water during drought conditions.

Finally, the lost revenue (column g of **Figure 5-11**) was determined by calculating the difference in projected Water Use Charge revenue before and after the stage reduction, then adjusting that figure by subtracting the cost savings. The result represents the net revenue shortfall associated with each drought stage. Drought rate surcharges are then designed to recover this shortfall, ensuring that the utility remains financially stable while encouraging conservation during periods of supply shortage.

The Drought Rates calculated are equal to the rates that would have been produced through the cost-of-service analysis, for a reduced volume of water. For each stage, the drought rates are calculated by lost revenue from water sales net of any savings from reductions in demand-related costs (e.g. water purchases). This analysis demonstrates that increases or decreases to water usage do not proportionately reduce costs, as a large portion of the Enterprise’s costs are fixed. The expenses that do vary according to usage have been accounted for in the calculation of the drought rates.



### Implementation

The recommended Drought Rates in **Figure 5-12** are implemented only during periods of declared water shortage emergencies. Once a mandatory shortage is declared, the City Council has discretion to enact Drought Rates corresponding to the level of shortage reduction implemented using the rates provided in **Table 5-12**. The adjustments can go in either direction from stage to stage depending on whether the level of reduction is increasing or decreasing during the shortage. At least 30 days prior to making the adjustment, notice must be provided to rate payers, which can be included in the customer’s bills. No protest process is required. These adjustments would be temporary, and rates would return to the regular schedule at the conclusion of the water shortage emergency.

**Figure 5-12. Drought Rates**

Stage	Demand Reduction	Surcharge		
		FY 2025-26	FY 2026-27	FY 2027-28
0	0%	\$0.00	\$0.00	\$0.00
1	10%	\$0.38	\$0.40	\$0.42
2	20%	\$0.85	\$0.90	\$0.95
3	30%	\$1.45	\$1.54	\$1.62
4	40%	\$2.25	\$2.39	\$2.51
5	50%	\$3.38	\$3.58	\$3.76
6	60%	\$5.07	\$5.37	\$5.64

The Drought Rates could be applied when the City requires its customers to reduce water use. At such times, the Drought Rates would be added to the Water Use Charge rates proposed in the current rate study. The City can choose to enact Drought Rates when the water emergency demand levels will fall short of the respective year of modeled demand.

The Drought Rates only apply to Water Use Charge rates and not to Service Charge rates, which are independent of water demand. The Drought Rates are added to the non-water shortage, normal-year Water Use Charge rates proposed in this report. The Drought Rates would be adopted as part of the rate notification in the Proposition 218 implementation process. Once adopted, the City could apply the Drought Rates as needed during conservation stages.

As a further example, **Figure 5-13** has Water Use Charge rates after applying the Drought Rates to the rates proposed for FY 2025-26 through FY 2027-28. The table shows the proposed rates followed by the rates that correspond to each stage of conservation.

Note that if reductions in water use are higher or lower than the specified stages set in the WSCP due to state mandated reductions in the level of potable water usage, or other natural disaster or event that results in a water shortage and an unforeseen drop in water demand, the Drought Rates will be adjusted in accordance with the methodology above.



**Figure 5-13. Water Rates with Drought Rates Included**

Stage	Demand Reduction	Rates with Drought Surcharge		
		FY 2025-26	FY 2026-27	FY 2027-28
0	0%	\$9.18	\$9.73	\$10.22
1	10%	\$9.56	\$10.13	\$10.64
2	20%	\$10.03	\$10.63	\$11.17
3	30%	\$10.63	\$11.27	\$11.84
4	40%	\$11.43	\$12.12	\$12.73
5	50%	\$12.56	\$13.31	\$13.98
6	60%	\$14.25	\$15.10	\$15.86

***Pass-Through Adjustment***

The cost of SFPUC water is the single largest component of the City’s revenue requirements. Because the City has no control over the SFPUC’s wholesale water rate, this cost is simply passed through to the City’s customers. The SFPUC provides projections of its future wholesale water rates, which are built into the rate projections in this study. The SFPUC updates its projections each year as part of the rate-making process legally prescribed in the wholesale Water Supply Agreement. California Government Code Section 53756 authorizes water suppliers to adjust their rates in response to changes in pass-through costs. We recommend that the City incorporate annual pass-through adjustments in its volumetric rates.

Each year the City should determine how much, if any, pass-through adjustment is required as soon as the SFPUC submits its updated wholesale rates, which is typically in April or May each year. The wholesale rate used for the projections in this study should be compared with the updated rate and the difference either added or subtracted from the City’s Water Use Charge rates for Residential and Non-Residential customers. The wholesale rates per HCF used in this study<sup>21</sup> are as follows:

- FY 2024-25 – \$5.67
- FY 2025-26 – \$5.80
- FY 2026-27 – \$5.86
- FY 2027-28 – \$5.93

For example, if the updated SFPUC rate for FY 2026-27 is \$5.96, instead of the projected figure from the rate study of \$5.86, the \$0.10 difference shall be added to the Water Use Charge rates charged to all water customers. If the updated SFPUC rate is less than the foregoing rates, the difference should be subtracted from the City’s volumetric rates. In other words, the adjustment should be made in either direction.

The pass-through adjustment acts similarly to the Drought Rates, and can be incorporated into the Proposition 218 notice. The pass-through adjustment allows the City to adjust Water Use Charge rates to track any difference between the SFPUC rates that were included in the analysis and the actual rates adopted each year by SFPUC. The pass-through adjustment can

<sup>21</sup> Rates included in letter from SFPUC to Tom Smegal RE: Fiscal Year 2025-26 Wholesale Water Rates Notice, dated May 8, 2025.

**Water Rate Cost-of-Service Study**  
Section 5. Rate Design



also be made by providing 30-day notice in the customer bills without triggering the need for a Proposition 218 protest process.



## Section 6. Customer Bill Impacts

In the previous chapter, the Volume and Service Charge structures were compared for the current and proposed rates. A further understanding of the differences between the two structures can be gained by comparing bills based on both rate structures.

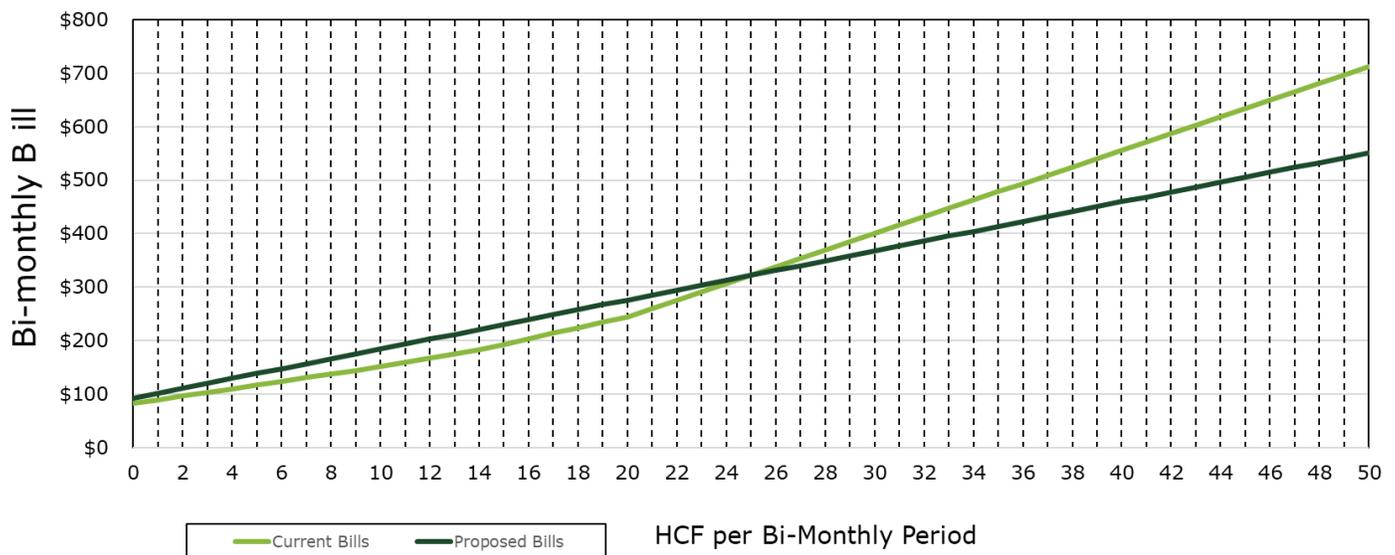
### BILL COMPARISON

#### **Single Family Residential Bills Under Proposed Rates (eff. 1/1/2026)**

Customers pay the sum of the Service Charge corresponding to the capacity of their service plus a Water Use Charge for water use during the billing period.

**Figure 6-1** provides perspective on the impact of the proposed (dark green line) and current rates (light green line). This graph plots bills across a range of water use. Customers can expect an increase for a given level of water use when the proposed rate structure line is above the current rate structure line. In this case, when usage meets or exceeds 25 HCF customers will see a decrease to their bill. Meanwhile, customers using less than 25 HCF will see up to a maximum of a 21.9% increase. Under the current structure, tiered rates generate larger bills for customers that use more water. Under uniform rates, customers previously using Tier 1 and Tier 2 levels of water, paid \$6.90 per HCF and \$7.89 per HCF, respectively. With the change to a uniform Water Use Charge of \$9.18 per HCF, these customers will see increases of \$2.28 per HCF for the first 7 units of water and \$1.29 per HCF for 8-14 units of water.

**Figure 6-1. Single Family Residential Bill Comparison**



Source: City billing data for FY 2022-23 and FY 2023-24.

Since 64% of residential bills report water use equal to or less than 14 HCF, then the majority of bi-monthly bills will increase by no more than \$38.25. Further, approximately 14% of bills

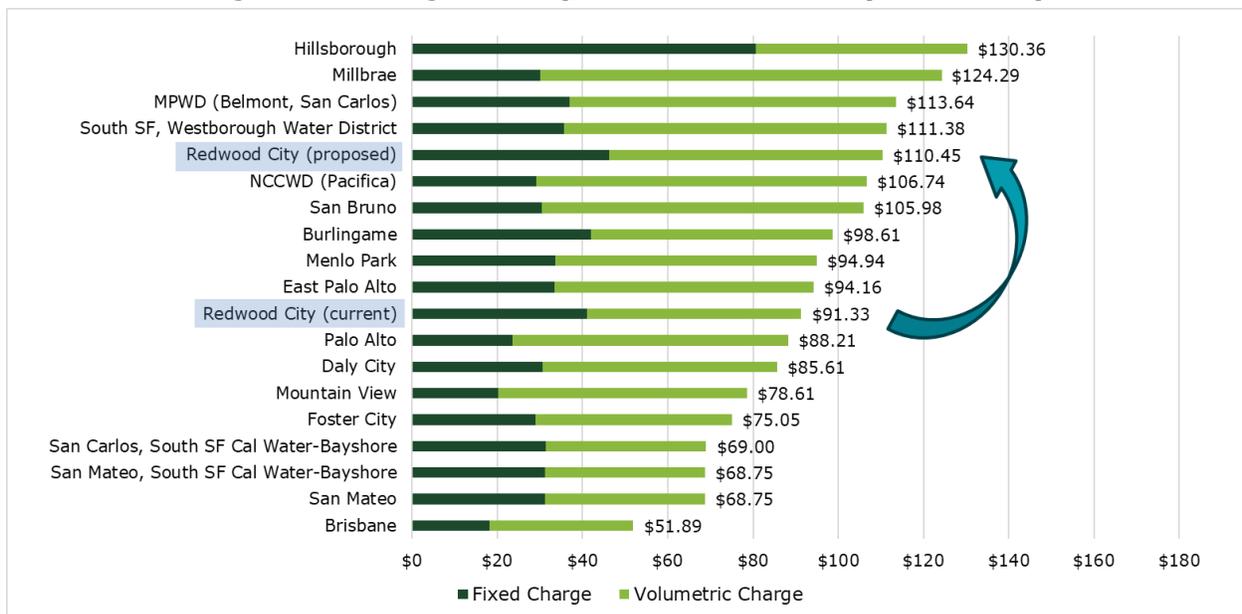


are 25<sup>22</sup> HCF or more and with the current rate structure will see a decrease compared to previous bills under the new rate structure.

**Neighboring Agency Comparison**

The bill for common water use by a Single Family household in Redwood City was compared to a water bill subject to neighboring agency rates in **Figure 6-2**. For a monthly comparison, the average bi-monthly water use of 14 HCF<sup>23</sup> was halved to 7 HCF to calculate the Volumetric Charge. The bi-monthly Service Charge was halved to calculate the Fixed Charge. With the recommend increases, the customer bill for common water use increases slightly among neighboring agencies.

**Figure 6-2. Single Family Residential Monthly Bill Survey**



**Multi Family Bills Under Proposed Rates (eff. 1/1/2026)**

Multi Family bills will increase proportionately to the level of water use. At lower levels of water use, bills benefit due to the reduced Service Charge. Overall, there is a widening gap between the two lines in each chart shown in **Figure 6-3** to **Figure 6-5**. As usage increases, the bill at proposed rates grows at a more rapid rate than the bill under current rates. The

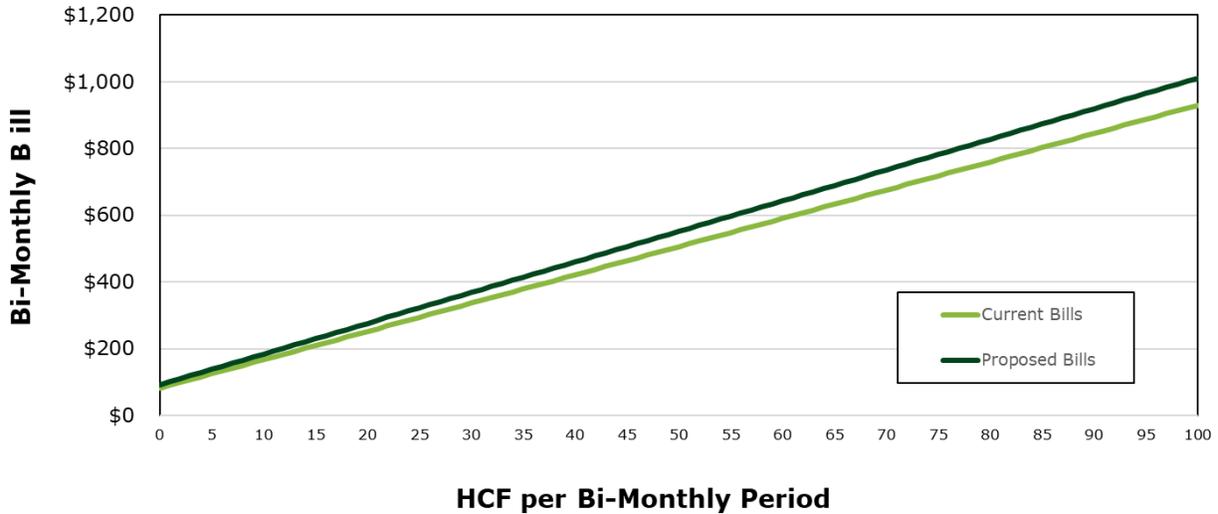
<sup>22</sup> The final report was revised to correct a typographical error in this sentence. Approximately 14% of Single Family Residential bills report 25 HCF or more in monthly usage. This change did not change the analysis, or rates published in the original report from July 8, 2025.

<sup>23</sup> The final report was revised to correct a typographical error in this sentence. The average bi-monthly water use for Single Family households in Redwood City is 14 HCF, which is an average of 7 HCF per monthly use. This change did not change the analysis, figures, calculations, or rates published in the original report from July 8, 2025.

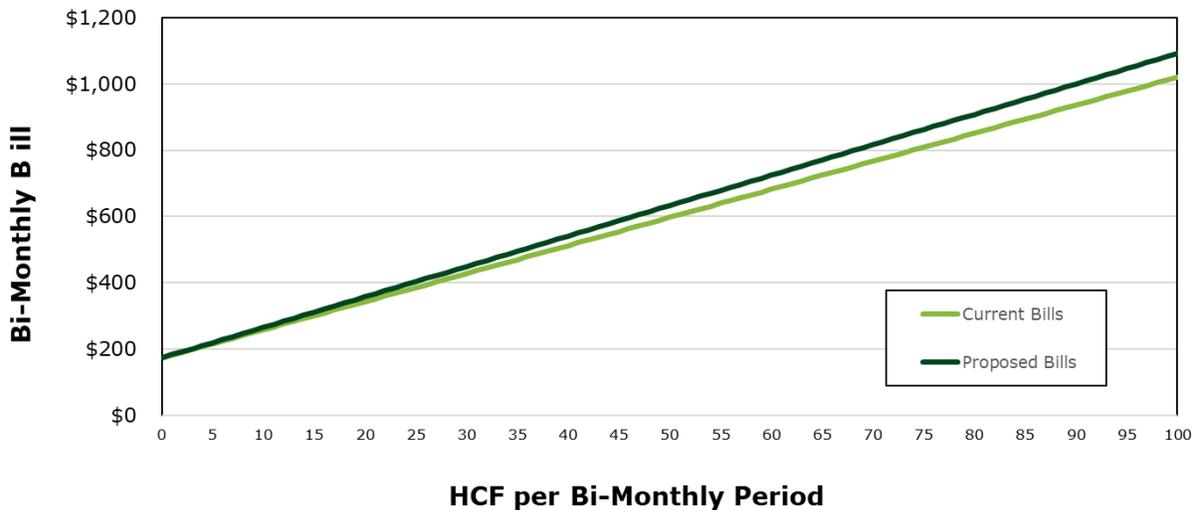


three comparisons shown are for three of the most common meter sizes and represent 85<sup>24</sup>% of Multi Family customers. Regardless of the meter size and level of water use, customers can expect monthly bills will increase.

**Figure 6-3. Multi Family Bill Comparison – 5/8” Meter**



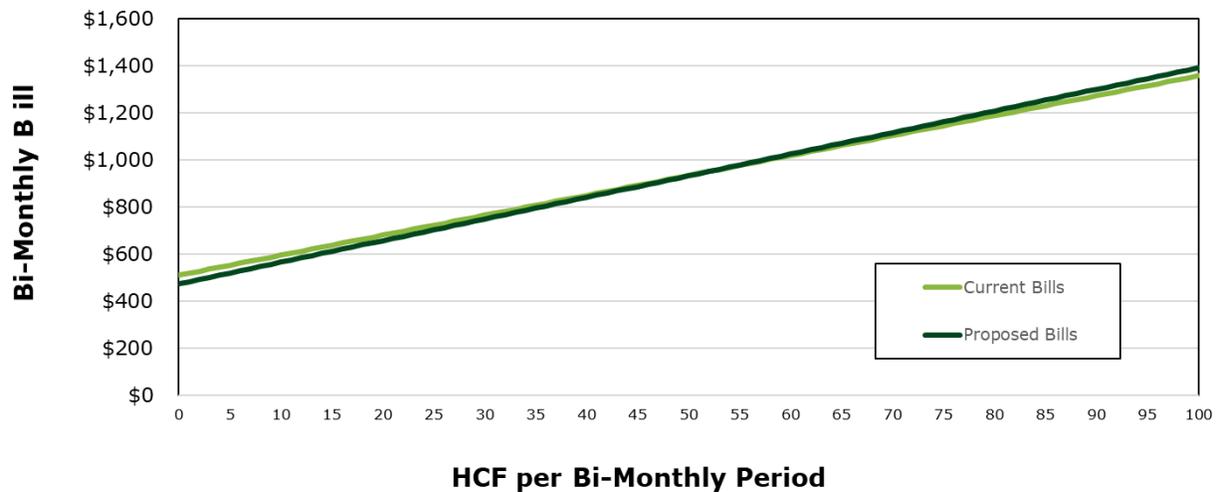
**Figure 6-4. Multi Family Bill Comparison – 1” Meter**



<sup>24</sup> The final report was revised to correct typographical errors in this paragraph. The three comparisons in Figure 6-3 to Figure 6-5 for the three most common meter sizes of Multi Family customers represent 85% of Multi Family customer accounts. These changes did not change the analysis, or rates published in the original report from July 8, 2025.



**Figure 6-5. Multi Family Bill Comparison – 2” Meter**



The scale of each graph makes it difficult to discern the variance between bills at current rates and proposed rates. **Figure 6-6** provides specific bill impacts by incremental water use and meter size.

**Figure 6-6. Sample Multi Family Bill Impacts by Meter Size and Water Use**

Water Use (HCF)	5/8" meter			1" meter			2" meter		
	Current Bill	Proposed Rates	Bi-Monthly Increase	Current Bill	Proposed Rates	Bi-Monthly Increase	Current Bill	Proposed Rates	Bi-Monthly Increase
0	\$82.09	\$92.38	<b>\$10.29</b>	\$173.83	\$173.98	<b>\$0.15</b>	\$510.26	\$473.24	<b>(\$37.02)</b>
10	\$166.79	\$184.18	<b>\$17.39</b>	\$258.53	\$265.78	<b>\$7.25</b>	\$594.96	\$565.04	<b>(\$29.92)</b>
20	\$251.49	\$275.98	<b>\$24.49</b>	\$343.23	\$357.58	<b>\$14.35</b>	\$679.66	\$656.84	<b>(\$22.82)</b>
30	\$336.19	\$367.78	<b>\$31.59</b>	\$427.93	\$449.38	<b>\$21.45</b>	\$764.36	\$748.64	<b>(\$15.72)</b>
40	\$420.89	\$459.58	<b>\$38.69</b>	\$512.63	\$541.18	<b>\$28.55</b>	\$849.06	\$840.44	<b>(\$8.62)</b>
50	\$505.59	\$551.38	<b>\$45.79</b>	\$597.33	\$632.98	<b>\$35.65</b>	\$933.76	\$932.24	<b>(\$1.52)</b>
60	\$590.29	\$643.18	<b>\$52.89</b>	\$682.03	\$724.78	<b>\$42.75</b>	\$1,018.46	\$1,024.04	<b>\$5.58</b>
70	\$674.99	\$734.98	<b>\$59.99</b>	\$766.73	\$816.58	<b>\$49.85</b>	\$1,103.16	\$1,115.84	<b>\$12.68</b>
80	\$759.69	\$826.78	<b>\$67.09</b>	\$851.43	\$908.38	<b>\$56.95</b>	\$1,187.86	\$1,207.64	<b>\$19.78</b>
90	\$844.39	\$918.58	<b>\$74.19</b>	\$936.13	\$1,000.18	<b>\$64.05</b>	\$1,272.56	\$1,299.44	<b>\$26.88</b>
100	\$929.09	\$1,010.38	<b>\$81.29</b>	\$1,020.83	\$1,091.98	<b>\$71.15</b>	\$1,357.26	\$1,391.24	<b>\$33.98</b>

Note: Proposed rates shown would be effective 1/1/2026

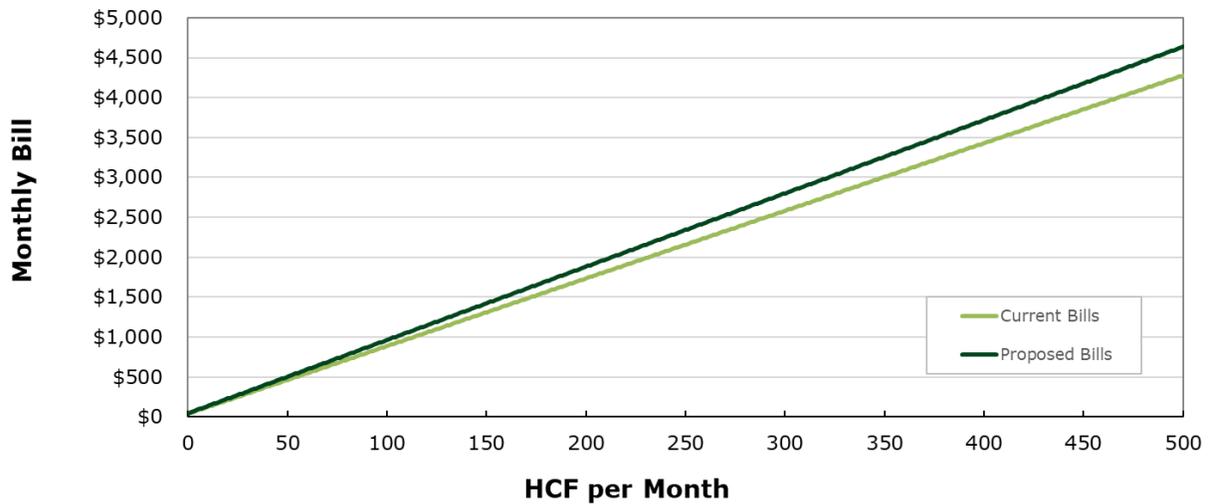
**Commercial Bills Under Proposed Rates (eff. 1/1/2026)**

Commercial bills will increase proportionately to the level of water use. At lower levels of water use, bills benefit due to the reduced Service Charge. Overall, there is a widening gap between the two lines in each chart shown in **Figure 6-7** to **Figure 6-9**. As usage increases, the bill at proposed rates grows at a more rapid rate than the bill under current rates. The

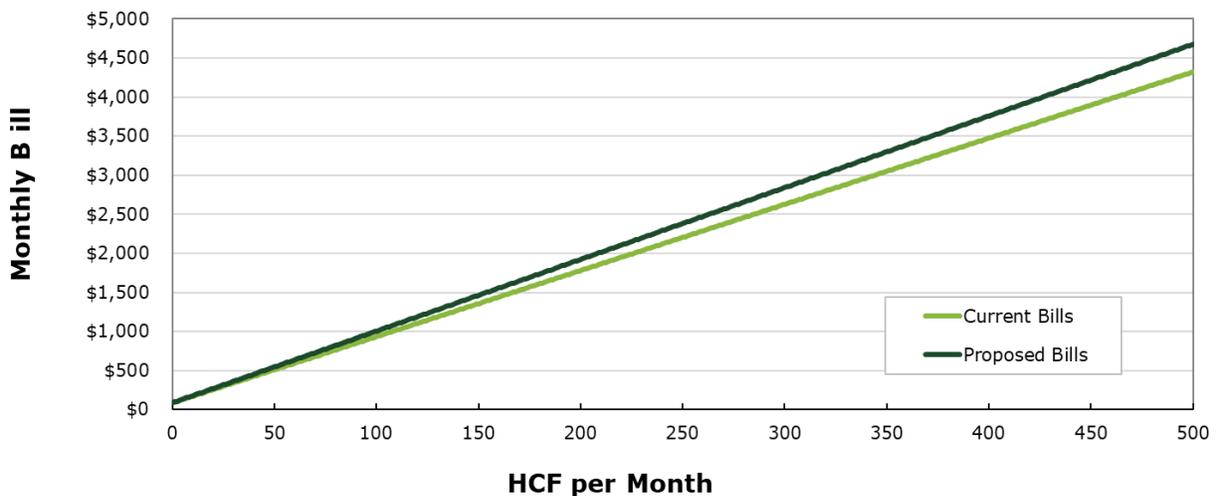


three comparisons shown are for three of the most common meter sizes and represent 76%<sup>25</sup> of commercial customers. Regardless of the meter size and level of water use, customers can expect monthly bills will increase.

**Figure 6-7. Commercial Bill Comparison – 5/8” Meter**



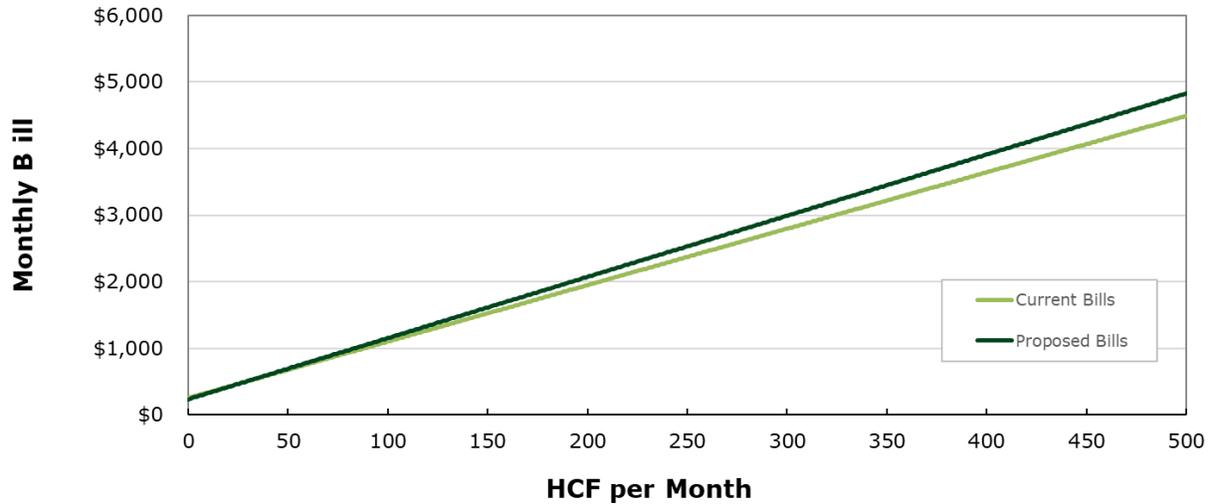
**Figure 6-8. Commercial Bill Comparison – 1” Meter**



<sup>25</sup> The final report was revised to correct a typographical error in this paragraph. The three comparisons in Figure 6-6 to Figure 6-8 for the three most common meter sizes of Commercial customers represent 76% of Commercial customer accounts. This change did not change the analysis, or rates published in the original report from July 8, 2025.



**Figure 6-9. Commercial Bill Comparison – 2” Meter**



The scale of each graph makes it difficult to discern the variance between bills at current rates and proposed rates. **Figure 6-10** provides specific bill impacts by incremental water use and meter size.

**Figure 6-10. Sample Commercial Bill Impacts by Meter Size and Water Use**

Water Use (HCF)	5/8" meter			1" meter			2" meter		
	Current Bill	Proposed Rates	Monthly Increase	Current Bill	Proposed Rates	Monthly Increase	Current Bill	Proposed Rates	Monthly Increase
0	\$41.05	\$46.19	\$5.14	\$86.92	\$86.99	\$0.07	\$255.13	\$236.62	(\$18.51)
10	\$125.75	\$137.99	\$12.24	\$171.62	\$178.79	\$7.17	\$339.83	\$328.42	(\$11.41)
20	\$210.45	\$229.79	\$19.34	\$256.32	\$270.59	\$14.27	\$424.53	\$420.22	(\$4.31)
30	\$295.15	\$321.59	\$26.44	\$341.02	\$362.39	\$21.37	\$509.23	\$512.02	\$2.79
40	\$379.85	\$413.39	\$33.54	\$425.72	\$454.19	\$28.47	\$593.93	\$603.82	\$9.89
50	\$464.55	\$505.19	\$40.64	\$510.42	\$545.99	\$35.57	\$678.63	\$695.62	\$16.99
100	\$888.05	\$964.19	\$76.14	\$933.92	\$1,004.99	\$71.07	\$1,102.13	\$1,154.62	\$52.49
200	\$1,735.05	\$1,882.19	\$147.14	\$1,780.92	\$1,922.99	\$142.07	\$1,949.13	\$2,072.62	\$123.49
300	\$2,582.05	\$2,800.19	\$218.14	\$2,627.92	\$2,840.99	\$213.07	\$2,796.13	\$2,990.62	\$194.49
400	\$3,429.05	\$3,718.19	\$289.14	\$3,474.92	\$3,758.99	\$284.07	\$3,643.13	\$3,908.62	\$265.49
500	\$4,276.05	\$4,636.19	\$360.14	\$4,321.92	\$4,676.99	\$355.07	\$4,490.13	\$4,826.62	\$336.49

Note: Proposed rates shown would be effective 1/1/2026

## AB 755 WATER USE ANALYSIS

In accordance with AB 755, we analyzed the top 10% of water use to determine: 1) the costs of water service for the highest users and 2) the average annual volume of water delivered to the high water users. **Figure 6-11** summarizes this subset of customers.



**Figure 6-11. Water Use Analysis – Top 10% of Water Users**

<b>Customer Class</b>	<b># of Accounts</b>	<b>Annual Use (HCF)</b>	<b>Avg Annual Use</b>	<b>Total Costs</b>
Commercial	15	228,356	15,224	\$2,413,824
Multi Family	11	143,909	13,083	\$1,547,063
Single Family	0	0	0	\$0
<b>Total</b>	<b>26</b>	<b>372,265</b>	<b>14,318</b>	<b>\$3,960,887</b>

Note: Does not include fire meters or fire flow

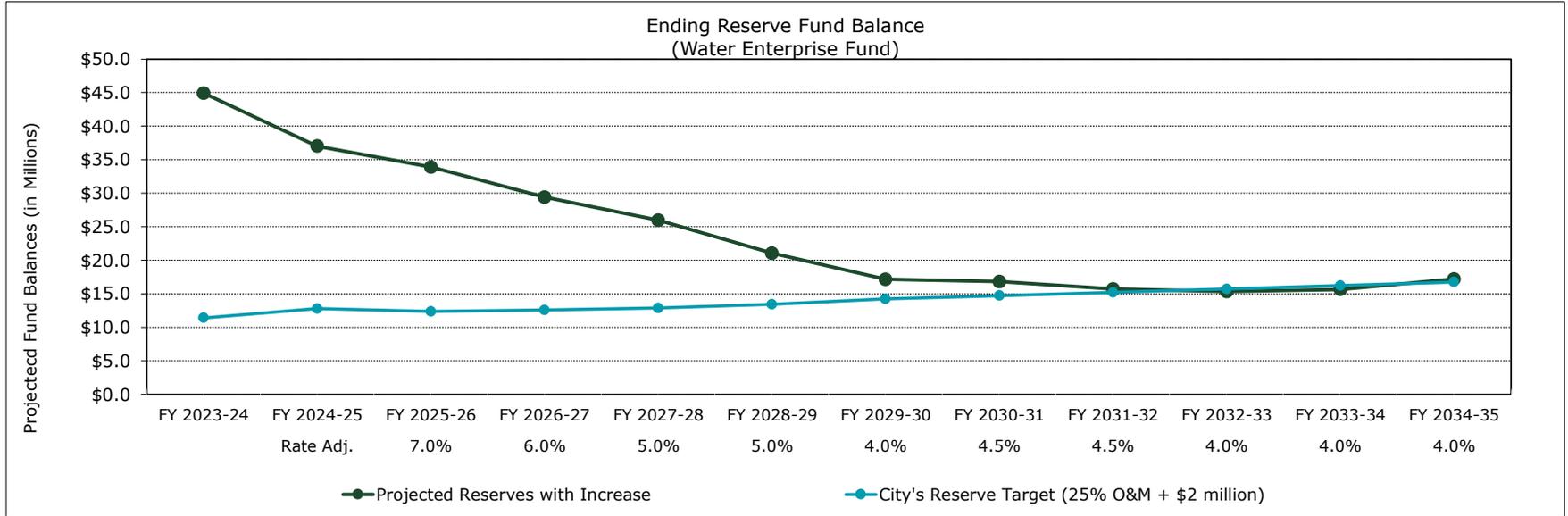


# Appendix A

## WATER RATE STUDY MODEL

City of Redwood City  
 Water Rate Study  
 1A. Summary

Fiscal Year:	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33	FY 2033-34	FY 2034-35	Notes
Revenue Increases	8.0%	7.0%	7.0%	6.0%	5.0%	5.0%	4.0%	4.5%	4.5%	4.0%	4.0%	4.0%	To Tables 3, 4
Cumulative Increase	8.0%	15.6%	23.6%	31.1%	37.6%	44.5%	50.3%	57.0%	64.1%	70.7%	77.5%	84.6%	From Table 3
Debt Coverage	3.05	1.97	3.16	3.90	4.46	4.70	4.65	3.45	3.71	3.94	4.17	6.27	
CIP Spend Factor	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	



City of Redwood City  
 Water Rate Study  
 1A. Summary

Debt Issuance	Loan 1	Loan 2	Loan 3
Project Costs	\$25,000,000	\$0	\$0
Issurance Costs	1.50%	1.50%	1.50%
Loan Amount	\$25,375,000	\$0	\$0
Interest Rate	5%	5%	5%
Term	30	30	30
First Payment	FY 2030-31	FY 2030-31	FY 2030-32
<b>Annual Payment</b>	<b>\$1,650,680</b>	<b>\$0</b>	<b>\$0</b>

City of Redwood City  
Water Rate Study  
1B. General

Assumptions	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33	FY 2033-34	FY 2034-35	Notes
a General Inflation	Per Budget	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	To Table 2; City reviewed projection
b Salaries and Wages	Per Budget	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	To Table 2; City reviewed projection
c Benefits	Per Budget	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	To Table 2; City reviewed projection
d Construction Cost Inflation	Per Budget	3.26%	3.26%	3.26%	3.26%	3.26%	3.26%	3.26%	3.26%	3.26%	3.26%	To Table 2; 10-year average increase SF-Bay Area CCI
e Utilities	Per Budget	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	To Table 2; Based historical PG&E electric rate increases; City reviewed projection
f % Increase in Revenue due to Growth	Per Budget	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	To Tables 2, 3; City reviewed projection
g Interest on Fund Balance	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	To Table 5; City reviewed projection
h CIP Completion Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	City reviewed projection
i SFPUC Cost of Purchased Water	\$5.67	\$5.80	\$5.86	\$5.93	\$6.23	\$6.73	\$6.93	\$7.14	\$7.35	\$7.57	\$7.80	SFPUC issued notice of rates for FY 2025-26
j SFPUC Cost of Purchased Water %	Per Budget	2.3%	1.0%	1.2%	5.1%	8.0%	3.0%	3.0%	3.0%	3.0%	3.0%	Rate increases for FY 2026-27 and after are projected
k Growth in Demand	Per Budget	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	No assumed demand growth

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Potable and Recycled Water Expenses	Tbl. 1B	Budgeted					
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
<b>O&amp;M</b>							
50100 Regular	b	\$5,545,941	\$5,767,779	\$5,998,490	\$6,238,429	\$6,487,967	\$6,747,485
50500 Annual Leave Buyout	b	\$126,208	\$131,256	\$136,507	\$141,967	\$147,646	\$153,551
50700 PROFESSIONAL DEVELOPMENT	a	\$863	\$889	\$916	\$943	\$971	\$1,000
50900 OTHER SALARY CREDITS	b	\$30,600	\$31,824	\$33,097	\$34,421	\$35,798	\$37,230
51500 Overtime	b	\$469,195	\$487,963	\$507,481	\$527,781	\$548,892	\$570,847
51900 SALARY ADJUSTMENTS	b	\$31,609	\$32,873	\$34,188	\$35,556	\$36,978	\$38,457
52000 SAFETY BOOTS (put below salaries and wages)	a	\$2,500	\$2,575	\$2,652	\$2,732	\$2,814	\$2,898
52020 Cell Phone Allowance	a	\$1,035	\$1,066	\$1,098	\$1,131	\$1,165	\$1,200
52110 Auto Allowance	a	\$4,830	\$4,975	\$5,124	\$5,278	\$5,436	\$5,599
52200 RETIREMENT (PERS)	c	\$1,840,757	\$1,914,387	\$1,990,963	\$2,070,601	\$2,153,425	\$2,239,562
52300 Medical Insurance	c	\$794,966	\$826,765	\$859,835	\$894,229	\$929,998	\$967,198
52320 Dental Insurance	c	\$64,843	\$67,437	\$70,134	\$72,940	\$75,857	\$78,891
52330 Vision Care Insurance	c	\$550	\$572	\$595	\$619	\$643	\$669
52340 Long-term Disability	c	\$5,053	\$5,255	\$5,465	\$5,684	\$5,911	\$6,148
52400 RETIREE HEALTH BENEFITS RESERVE EXPENSE (FORMERL)	c	\$257,540	\$267,842	\$278,555	\$289,697	\$301,285	\$313,337
52600 LEAVE BUYOUT ALLOWANCE	c	\$47,524	\$49,425	\$51,402	\$53,458	\$55,596	\$57,820
52700 UNEMPLOYMENT INSURANCE	c	\$5,707	\$5,935	\$6,173	\$6,420	\$6,676	\$6,943
52800 MEDICARE	c	\$79,681	\$82,868	\$86,183	\$89,630	\$93,215	\$96,944
53000 Gas and Electric	e	\$544,000	\$582,080	\$622,826	\$666,423	\$713,073	\$762,988
53100 Water	a	\$38,561	\$39,718	\$40,909	\$42,137	\$43,401	\$44,703
53200 Wholesale Water Purchases	j	\$26,759,500	\$26,759,500	\$27,036,322	\$27,359,282	\$28,743,394	\$31,050,247
53300 Telephone/Pagers (in addition to obj 74)	a	\$5,000	\$5,150	\$5,305	\$5,464	\$5,628	\$5,796
53310 Communication Supplies and Services (formerly obj 35-PR,	a	\$45,076	\$46,428	\$47,821	\$49,256	\$50,733	\$52,255
53400 Office Supplies	a	\$547,372	\$563,793	\$580,707	\$598,128	\$616,072	\$634,554
53410 Facilities Rental/Lease	a	\$30,000	\$35,000	\$36,050	\$37,132	\$38,245	\$39,393
53450 Printing and Binding	a	\$8,000	\$8,240	\$8,487	\$8,742	\$9,004	\$9,274
53470 Professional/Reference Books/Supplies	a	\$1,959	\$2,018	\$2,078	\$2,141	\$2,205	\$2,271
53500 Uniform Services/Repair/Replacement/Clothing Purchases	a	\$19,500	\$20,085	\$20,688	\$21,308	\$21,947	\$22,606
53600 Software Maintenance and Support	a	\$118,100	\$121,643	\$125,292	\$129,051	\$132,923	\$136,910
53700 Regulatory/compliance fees	a	\$117,000	\$137,000	\$141,110	\$145,343	\$149,704	\$154,195
54000 Operating Supplies and Expenses	a	\$474,220	\$488,447	\$503,100	\$518,193	\$533,739	\$549,751
54100 Small Repair and Maintenance	a	\$1,046,473	\$1,077,867	\$1,110,203	\$1,143,509	\$1,177,815	\$1,213,149
54200 Small Tools and Minor Equipment	a	\$14,580	\$15,017	\$15,468	\$15,932	\$16,410	\$16,902
55000 Consultant Services	a	\$675,199	\$794,199	\$524,296	\$540,025	\$556,225	\$572,912
55030 Outside Legal Services (formerly object 61)	a	\$23,060	\$23,752	\$24,464	\$25,198	\$25,954	\$26,733
55070 Banking Services	a	\$0	\$0	\$0	\$0	\$0	\$0
55100 Insurance	a	\$260,000	\$267,800	\$275,834	\$284,109	\$292,632	\$301,411
55500 Meetings - Internal or External	a	\$25,328	\$26,088	\$26,870	\$27,677	\$28,507	\$29,362
55520 Certifications	a	\$5,500	\$5,665	\$5,835	\$6,010	\$6,190	\$6,376
55530 Educational Allowance (Non taxable)	a	\$1,607	\$1,655	\$1,705	\$1,756	\$1,809	\$1,863
55600 Memberships, Dues and Subscriptions - Professional Organi	a	\$385,144	\$395,144	\$406,998	\$419,208	\$431,785	\$444,738
55700 Conferences - Registration	a	\$15,076	\$15,528	\$15,994	\$16,474	\$16,968	\$17,477
55710 Air fare	a	\$8,029	\$8,270	\$8,518	\$8,774	\$9,037	\$9,308
55720 Car Rental	a	\$4,000	\$4,120	\$4,244	\$4,371	\$4,502	\$4,637
55730 Hotel	a	\$8,125	\$8,369	\$8,620	\$8,878	\$9,145	\$9,419
55735 Meals	a	\$3,500	\$3,605	\$3,713	\$3,825	\$3,939	\$4,057
55740 Taxi	a	\$2,125	\$2,189	\$2,254	\$2,322	\$2,392	\$2,463
55750 Parking	a	\$1,625	\$1,674	\$1,724	\$1,776	\$1,829	\$1,884
55760 Mileage	a	\$306	\$315	\$325	\$334	\$344	\$355
56710 YEAR END CLOSING ENTRIES	a	\$94,441	\$97,274	\$100,192	\$103,198	\$106,294	\$109,483
58100 RIGHT-OF-WAY RENT		\$2,583,167	\$0	\$0	\$0	\$0	\$0
58300 PC REFRESH	a	\$8,035	\$8,276	\$8,524	\$8,780	\$9,043	\$9,315
59400 IMPROVEMENTS OTHER THAN BUILDINGS	a	\$5,000	\$5,150	\$5,305	\$5,464	\$5,628	\$5,796
59500 EQUIPMENT (purchases > \$5000)	a	\$13,000	\$13,390	\$13,792	\$14,205	\$14,632	\$15,071
<b>Total O&amp;M</b>		<b>\$43,201,010</b>	<b>\$41,266,135</b>	<b>\$41,804,432</b>	<b>\$42,695,938</b>	<b>\$44,671,421</b>	<b>\$47,593,438</b>

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		Budgeted						
Potable and Recycled Water Expenses		Tbl. 1B	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
<b>Internal Service Charges</b>								
57000 Communication Services	a		\$69,752	\$71,845	\$74,000	\$76,220	\$78,506	\$80,862
57200 Equipment Rentals	a		\$854,336	\$879,966	\$906,365	\$933,556	\$961,563	\$990,410
57300 Building Maintenance Services	a		\$82,396	\$84,868	\$87,414	\$90,036	\$92,737	\$95,520
57400 Telephone	a		\$56,722	\$58,424	\$60,176	\$61,982	\$63,841	\$65,756
57500 Custodial Services	a		\$76,435	\$78,728	\$81,090	\$83,523	\$86,028	\$88,609
57600 Risk Management Services	a		\$150,822	\$155,347	\$160,007	\$164,807	\$169,751	\$174,844
57700 Data Management Services	a		\$349,960	\$360,459	\$371,273	\$382,411	\$393,883	\$405,700
57800 Workers Comp Insurance	a		\$266,823	\$274,828	\$283,073	\$291,565	\$300,312	\$309,321
58000 General Governmental Allocation	a		\$667,408	\$687,430	\$708,053	\$729,295	\$751,174	\$773,709
<b>Total Internal Service Charges</b>			<b>\$2,574,654</b>	<b>\$2,651,894</b>	<b>\$2,731,450</b>	<b>\$2,813,394</b>	<b>\$2,897,796</b>	<b>\$2,984,730</b>
<b>Debt Service</b>								
Series 2013 Refunding Bonds			\$1,464,825	\$1,867,250	\$1,862,000	\$1,864,000	\$1,867,750	\$1,863,000
Series 2015 Refunding Bonds			\$1,420,644	\$1,421,244	\$1,420,244	\$1,418,294	\$1,420,444	\$1,421,544
Series 2017 Refunding Bonds			\$495,419	\$494,419	\$497,669	\$494,919	\$491,419	\$492,169
Future Debt			\$0	\$0	\$0	\$0	\$0	\$0
Interfund Loan			\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Debt Service</b>			<b>\$3,380,888</b>	<b>\$3,782,913</b>	<b>\$3,779,913</b>	<b>\$3,777,213</b>	<b>\$3,779,613</b>	<b>\$3,776,713</b>
<b>Non-Operating (Revenues)/Expenses</b>								
46205-BACKFLOW DEVICES ADMIN FEE	b		(\$120,000)	(\$124,800)	(\$129,792)	(\$134,984)	(\$140,383)	(\$145,998)
46210-BACKFLOW DEVICES TESTING FEE	b		(\$25,000)	(\$26,000)	(\$27,040)	(\$28,122)	(\$29,246)	(\$30,416)
49725-MISCELLANEOUS REVENUE	a		(\$10,000)	(\$10,300)	(\$10,609)	(\$10,927)	(\$11,255)	(\$11,593)
49901-TRANSFER FROM GENERAL FUND	a		(\$697,145)	(\$718,059)	(\$739,601)	(\$761,789)	(\$784,643)	(\$808,182)
49910-TRANSFER FROM SEWER FUND	a		(\$747,151)	(\$769,566)	(\$792,652)	(\$816,432)	(\$840,925)	(\$866,153)
Uncollected Charges Net of Recovery								
<b>Subtotal Non-Operating Revenue</b>			<b>(\$1,599,296)</b>	<b>(\$1,648,725)</b>	<b>(\$1,699,695)</b>	<b>(\$1,752,254)</b>	<b>(\$1,806,452)</b>	<b>(\$1,862,342)</b>
<b>Other Transfers</b>								
Revenue Requirements			\$0	(\$6,263,116)	\$0	\$0	\$0	\$0
Capital Projects			\$8,638,538	\$13,161,266	\$13,161,266	\$13,161,266	\$13,161,266	\$13,161,266
<b>Total Transfers</b>			<b>\$8,638,538</b>	<b>\$6,898,150</b>	<b>\$13,161,266</b>	<b>\$13,161,266</b>	<b>\$13,161,266</b>	<b>\$13,161,266</b>
<b>Net Revenue Requirement</b>			<b>\$56,195,794</b>	<b>\$52,950,366</b>	<b>\$59,777,367</b>	<b>\$60,695,557</b>	<b>\$62,703,644</b>	<b>\$65,653,804</b>
Annual Change			47.6%	-5.8%	12.9%	1.5%	3.3%	4.7%
Cumulative Change				-5.8%	6.4%	8.0%	11.6%	16.8%

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Potable and Recycled Water Expenses	Tbl. 1B	FY 2030-31	FY 2031-32	FY 2032-33	FY 2033-34	FY 2034-35	Notes
<b>O&amp;M</b>							
50100 Regular	b	\$7,017,385	\$7,298,080	\$7,590,003	\$7,893,603	\$8,209,347	
50500 Annual Leave Buyout	b	\$159,693	\$166,081	\$172,724	\$179,633	\$186,819	
50700 PROFESSIONAL DEVELOPMENT	a	\$1,030	\$1,061	\$1,093	\$1,126	\$1,160	
50900 OTHER SALARY CREDITS	b	\$38,719	\$40,268	\$41,878	\$43,553	\$45,295	
51500 Overtime	b	\$593,681	\$617,429	\$642,126	\$667,811	\$694,523	
51900 SALARY ADJUSTMENTS	b	\$39,995	\$41,595	\$43,259	\$44,989	\$46,789	
52000 SAFETY BOOTS (put below salaries and wages)	a	\$2,985	\$3,075	\$3,167	\$3,262	\$3,360	
52020 Cell Phone Allowance	a	\$1,236	\$1,273	\$1,311	\$1,350	\$1,391	
52110 Auto Allowance	a	\$5,767	\$5,940	\$6,118	\$6,302	\$6,491	
52200 RETIREMENT (PERS)	c	\$2,329,145	\$2,422,311	\$2,519,203	\$2,619,971	\$2,724,770	
52300 Medical Insurance	c	\$1,005,886	\$1,046,121	\$1,087,966	\$1,131,484	\$1,176,744	
52320 Dental Insurance	c	\$82,047	\$85,329	\$88,742	\$92,292	\$95,983	
52330 Vision Care Insurance	c	\$696	\$724	\$753	\$783	\$814	
52340 Long-term Disability	c	\$6,394	\$6,649	\$6,915	\$7,192	\$7,480	
52400 RETIREE HEALTH BENEFITS RESERVE EXPENSE (FORMERL)	c	\$325,870	\$338,905	\$352,461	\$366,560	\$381,222	
52600 LEAVE BUYOUT ALLOWANCE	c	\$60,133	\$62,538	\$65,040	\$67,641	\$70,347	
52700 UNEMPLOYMENT INSURANCE	c	\$7,221	\$7,510	\$7,810	\$8,123	\$8,448	
52800 MEDICARE	c	\$100,822	\$104,855	\$109,049	\$113,411	\$117,947	
53000 Gas and Electric	e	\$816,397	\$873,545	\$934,693	\$1,000,122	\$1,070,130	
53100 Water	a	\$46,044	\$47,425	\$48,848	\$50,313	\$51,823	
53200 Wholesale Water Purchases	j	\$31,981,755	\$32,941,207	\$33,929,444	\$34,947,327	\$35,995,747	
53300 Telephone/Pagers (in addition to obj 74)	a	\$5,970	\$6,149	\$6,334	\$6,524	\$6,720	
53310 Communication Supplies and Services (formerly obj 35-PR,	a	\$53,823	\$55,438	\$57,101	\$58,814	\$60,578	
53400 Office Supplies	a	\$653,591	\$673,199	\$693,394	\$714,196	\$735,622	
53410 Facilities Rental/Lease	a	\$40,575	\$41,792	\$43,046	\$44,337	\$45,667	
53450 Printing and Binding	a	\$9,552	\$9,839	\$10,134	\$10,438	\$10,751	
53470 Professional/Reference Books/Supplies	a	\$2,339	\$2,409	\$2,482	\$2,556	\$2,633	
53500 Uniform Services/Repair/Replacement/Clothing Purchases	a	\$23,284	\$23,983	\$24,702	\$25,443	\$26,206	
53600 Software Maintenance and Support	a	\$141,018	\$145,248	\$149,606	\$154,094	\$158,717	
53700 Regulatory/compliance fees	a	\$158,821	\$163,585	\$168,493	\$173,548	\$178,754	
54000 Operating Supplies and Expenses	a	\$566,243	\$583,231	\$600,728	\$618,750	\$637,312	
54100 Small Repair and Maintenance	a	\$1,249,543	\$1,287,030	\$1,325,641	\$1,365,410	\$1,406,372	
54200 Small Tools and Minor Equipment	a	\$17,409	\$17,932	\$18,470	\$19,024	\$19,594	
55000 Consultant Services	a	\$590,099	\$607,802	\$626,037	\$644,818	\$664,162	
55030 Outside Legal Services (formerly object 61)	a	\$27,535	\$28,361	\$29,212	\$30,088	\$30,991	
55070 Banking Services	a	\$0	\$0	\$0	\$0	\$0	
55100 Insurance	a	\$310,454	\$319,767	\$329,360	\$339,241	\$349,418	
55500 Meetings - Internal or External	a	\$30,243	\$31,150	\$32,085	\$33,047	\$34,039	
55520 Certifications	a	\$6,567	\$6,764	\$6,967	\$7,176	\$7,392	
55530 Educational Allowance (Non taxable)	a	\$1,919	\$1,976	\$2,036	\$2,097	\$2,160	
55600 Memberships, Dues and Subscriptions - Professional Organi	a	\$458,080	\$471,823	\$485,977	\$500,557	\$515,573	
55700 Conferences - Registration	a	\$18,002	\$18,542	\$19,098	\$19,671	\$20,261	
55710 Air fare	a	\$9,587	\$9,875	\$10,171	\$10,476	\$10,790	
55720 Car Rental	a	\$4,776	\$4,919	\$5,067	\$5,219	\$5,376	
55730 Hotel	a	\$9,702	\$9,993	\$10,293	\$10,601	\$10,919	
55735 Meals	a	\$4,179	\$4,305	\$4,434	\$4,567	\$4,704	
55740 Taxi	a	\$2,537	\$2,613	\$2,692	\$2,773	\$2,856	
55750 Parking	a	\$1,940	\$1,999	\$2,059	\$2,120	\$2,184	
55760 Mileage	a	\$365	\$376	\$388	\$399	\$411	
56710 YEAR END CLOSING ENTRIES	a	\$112,767	\$116,151	\$119,635	\$123,224	\$126,921	
58100 RIGHT-OF-WAY RENT		\$0	\$0	\$0	\$0	\$0	
58300 PC REFRESH	a	\$9,594	\$9,882	\$10,178	\$10,484	\$10,798	
59400 IMPROVEMENTS OTHER THAN BUILDINGS	a	\$5,970	\$6,149	\$6,334	\$6,524	\$6,720	
59500 EQUIPMENT (purchases > \$5000)	a	\$15,523	\$15,988	\$16,468	\$16,962	\$17,471	
<b>Total O&amp;M</b>		<b>\$49,164,911</b>	<b>\$50,790,191</b>	<b>\$52,471,223</b>	<b>\$54,210,026</b>	<b>\$56,008,702</b>	

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Potable and Recycled Water Expenses	Tbl. 1B	FY 2030-31	FY 2031-32	FY 2032-33	FY 2033-34	FY 2034-35	Notes
<b>Internal Service Charges</b>							
57000 Communication Services	a	\$83,288	\$85,786	\$88,360	\$91,011	\$93,741	
57200 Equipment Rentals	a	\$1,020,122	\$1,050,726	\$1,082,247	\$1,114,715	\$1,148,156	
57300 Building Maintenance Services	a	\$98,385	\$101,337	\$104,377	\$107,508	\$110,733	
57400 Telephone	a	\$67,729	\$69,761	\$71,854	\$74,009	\$76,230	
57500 Custodial Services	a	\$91,267	\$94,005	\$96,826	\$99,730	\$102,722	
57600 Risk Management Services	a	\$180,089	\$185,492	\$191,057	\$196,789	\$202,692	
57700 Data Management Services	a	\$417,871	\$430,407	\$443,319	\$456,618	\$470,317	
57800 Workers Comp Insurance	a	\$318,601	\$328,159	\$338,003	\$348,143	\$358,588	
58000 General Governmental Allocation	a	\$796,920	\$820,828	\$845,452	\$870,816	\$896,941	
<b>Total Internal Service Charges</b>		<b>\$3,074,272</b>	<b>\$3,166,500</b>	<b>\$3,261,495</b>	<b>\$3,359,339</b>	<b>\$3,460,120</b>	
<b>Debt Service</b>							
Series 2013 Refunding Bonds		\$1,860,000	\$1,863,500	\$1,863,000	\$1,858,500	\$0	From Table 6
Series 2015 Refunding Bonds		\$1,420,138	\$1,421,138	\$1,420,838	\$1,421,038	\$1,419,663	
Series 2017 Refunding Bonds		\$495,019	\$491,894	\$492,919	\$492,900	\$496,800	
Future Debt		\$0	\$1,650,680	\$1,650,680	\$1,650,680	\$1,650,680	
Interfund Loan		\$0	\$0	\$0	\$0	\$0	Per City no loan after FY 2022-23
<b>Total Debt Service</b>		<b>\$3,775,156</b>	<b>\$5,427,211</b>	<b>\$5,427,436</b>	<b>\$5,423,118</b>	<b>\$3,567,143</b>	
<b>Non-Operating (Revenues)/Expenses</b>							
46205-BACKFLOW DEVICES ADMIN FEE	b	(\$151,838)	(\$157,912)	(\$164,228)	(\$170,797)	(\$177,629)	Updated for FY 2023-24
46210-BACKFLOW DEVICES TESTING FEE	b	(\$31,633)	(\$32,898)	(\$34,214)	(\$35,583)	(\$37,006)	Updated for FY 2023-24
49725-MISCELLANEOUS REVENUE	a	(\$11,941)	(\$12,299)	(\$12,668)	(\$13,048)	(\$13,439)	Updated for FY 2023-24
49901-TRANSFER FROM GENERAL FUND	a	(\$832,428)	(\$857,400)	(\$883,122)	(\$909,616)	(\$936,905)	for SW billing
49910-TRANSFER FROM SEWER FUND	a	(\$892,137)	(\$918,901)	(\$946,469)	(\$974,863)	(\$1,004,108)	for Sewer billing
Uncollected Charges Net of Recovery							increases based on revenue incre
<b>Subtotal Non-Operating Revenue</b>		<b>(\$1,919,977)</b>	<b>(\$1,979,411)</b>	<b>(\$2,040,701)</b>	<b>(\$2,103,907)</b>	<b>(\$2,169,088)</b>	
<b>Other Transfers</b>							
Revenue Requirements		\$0	\$0	\$0	\$0	\$0	
Capital Projects		\$12,863,226	\$12,863,226	\$12,863,226	\$12,863,226	\$12,863,226	From Table 4
<b>Total Transfers</b>		<b>\$12,863,226</b>	<b>\$12,863,226</b>	<b>\$12,863,226</b>	<b>\$12,863,226</b>	<b>\$12,863,226</b>	
<b>Net Revenue Requirement</b>		<b>\$66,957,588</b>	<b>\$70,267,718</b>	<b>\$71,982,679</b>	<b>\$73,751,803</b>	<b>\$73,730,103</b>	To Table 3
Annual Change		2.0%	4.9%	2.4%	2.5%	0.0%	
Cumulative Change		19.2%	25.0%	28.1%	31.2%	31.2%	

City of Redwood City  
Water Rate Study  
3A. Rev Increases

	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33	FY 2033-34	FY 2034-35	Notes	
<b>Rate Revenue @ Current Rates</b>													
Revenue from Current Rates	\$47,371,046	\$48,968,971	\$48,968,971	\$48,968,971	\$48,968,971	\$48,968,971	\$48,968,971	\$48,968,971	\$48,968,971	\$48,968,971	\$48,968,971		
Revenue Requirement	\$56,195,794	\$52,950,366	\$59,777,367	\$60,695,557	\$62,703,644	\$65,653,804	\$66,957,588	\$70,267,718	\$71,982,679	\$73,751,803	\$73,730,103	From Table 2	
<b>To/(From) operations before Rate Incr.</b>	<b>(\$8,824,748)</b>	<b>(\$3,981,396)</b>	<b>(\$10,808,396)</b>	<b>(\$11,726,587)</b>	<b>(\$13,734,673)</b>	<b>(\$16,684,833)</b>	<b>(\$17,988,618)</b>	<b>(\$21,298,747)</b>	<b>(\$23,013,708)</b>	<b>(\$24,782,833)</b>	<b>(\$24,761,133)</b>	To Table 4	
	<i>previously adopted</i>												
<b>Increase in Rate Revenue (Fixed, Water Use Charges)</b>	7.0%	7.0%	6.0%	5.0%	5.0%	4.0%	4.5%	4.5%	4.0%	4.0%	4.0%	From Table 1A	
<b>Revenue from Rate Increases</b>													
FY 2025-26 (eff. Jan. 1, 2026)	6	\$1,713,914	\$3,427,828	\$3,427,828	\$3,427,828	\$3,427,828	\$3,427,828	\$3,427,828	\$3,427,828	\$3,427,828	\$3,427,828		
FY 2026-27 (eff. Jan. 1, 2027)	6		\$1,571,904	\$3,143,808	\$3,143,808	\$3,143,808	\$3,143,808	\$3,143,808	\$3,143,808	\$3,143,808	\$3,143,808		
FY 2027-28 (eff. Jan. 1, 2028)	6			\$1,388,515	\$2,777,030	\$2,777,030	\$2,777,030	\$2,777,030	\$2,777,030	\$2,777,030	\$2,777,030		
FY 2028-29 (eff. Jan. 1, 2029)	6				\$1,457,941	\$2,915,882	\$2,915,882	\$2,915,882	\$2,915,882	\$2,915,882	\$2,915,882		
FY 2029-30 (eff. Jan. 1, 2030)	6					\$1,224,670	\$2,449,341	\$2,449,341	\$2,449,341	\$2,449,341	\$2,449,341		
FY 2030-31 (eff. Jan. 1, 2031)	6						\$1,432,864	\$2,865,729	\$2,865,729	\$2,865,729	\$2,865,729		
FY 2031-32 (eff. Jan. 1, 2032)	6							\$1,497,343	\$2,994,686	\$2,994,686	\$2,994,686		
FY 2032-33 (eff. Jan. 1, 2033)	6								\$1,390,865	\$2,781,731	\$2,781,731		
FY 2033-34 (eff. Jan. 1, 2034)	6									\$1,446,500	\$2,893,000		
FY 2033-34 (eff. Jan. 1, 2034)	6										\$1,504,360		
<b>Total Revenue from Rate Increases</b>		\$0	\$1,713,914	\$4,999,732	\$7,960,151	\$10,806,607	\$13,489,218	\$16,146,753	\$19,076,961	\$21,965,169	\$24,802,535	\$26,249,035	
<b>Total Current Revenue</b>		\$47,371,046	\$48,968,971	\$48,968,971	\$48,968,971	\$48,968,971	\$48,968,971	\$48,968,971	\$48,968,971	\$48,968,971	\$48,968,971	From Above	
<b>Total Fixed, Water Use Charges Revenue</b>		\$47,371,046	\$50,682,884	\$53,968,702	\$56,929,122	\$59,775,578	\$62,458,189	\$65,115,724	\$68,045,931	\$70,934,140	\$73,771,505	\$75,218,006	
<b>Private Fire Service Line Revenue</b>													
Revenue from Current Rates		previously adop.	\$494,525	\$494,525	\$494,525	\$494,525	\$494,525	\$494,525	\$494,525	\$494,525	\$494,525		
<b>Increase in Rate Revenue</b>		7.0%	11.9%	6.0%	5.0%	5.0%	4.0%	4.5%	4.5%	4.0%	4.0%		
<b>Revenue from Rate Increases</b>													
FY 2025-26 (eff. Jan. 1, 2026)	6		\$59,043	\$59,043	\$59,043	\$59,043	\$59,043	\$59,043	\$59,043	\$59,043	\$59,043		
FY 2026-27 (eff. Jan. 1, 2027)	6			\$16,607	\$33,214	\$33,214	\$33,214	\$33,214	\$33,214	\$33,214	\$33,214		
FY 2027-28 (eff. Jan. 1, 2028)	6				\$14,670	\$29,339	\$29,339	\$29,339	\$29,339	\$29,339	\$29,339		
FY 2028-29 (eff. Jan. 1, 2029)	6					\$15,403	\$30,806	\$30,806	\$30,806	\$30,806	\$30,806		
FY 2029-30 (eff. Jan. 1, 2030)	6						\$12,939	\$25,877	\$25,877	\$25,877	\$25,877		
FY 2030-31 (eff. Jan. 1, 2031)	6							\$15,138	\$30,276	\$30,276	\$30,276		
FY 2031-32 (eff. Jan. 1, 2032)	6								\$15,819	\$31,639	\$31,639		
FY 2032-33 (eff. Jan. 1, 2033)	6									\$14,694	\$29,389		
FY 2033-34 (eff. Jan. 1, 2034)	6										\$15,282		
FY 2033-34 (eff. Jan. 1, 2034)	6											\$15,893	
<b>Total Revenue from Rate Increases</b>		\$0	\$59,043	\$75,650	\$106,926	\$136,999	\$165,341	\$193,417	\$224,375	\$254,888	\$284,865	\$316,040	
<b>Total Current Revenue</b>		\$494,525	\$494,525	\$494,525	\$494,525	\$494,525	\$494,525	\$494,525	\$494,525	\$494,525	\$494,525		
<b>Total Private Fire Service Line Revenues</b>		\$494,525	\$553,568	\$570,175	\$601,451	\$631,524	\$659,866	\$687,942	\$718,900	\$749,413	\$779,390	\$810,565	
<b>Total Fixed, Water Use Charges Revenue</b>		\$47,371,046	\$50,682,884	\$53,968,702	\$56,929,122	\$59,775,578	\$62,458,189	\$65,115,724	\$68,045,931	\$70,934,140	\$73,771,505	\$75,218,006	
<b>Revenue Requirement</b>		<b>(\$56,195,794)</b>	<b>(\$52,950,366)</b>	<b>(\$59,777,367)</b>	<b>(\$60,695,557)</b>	<b>(\$62,703,644)</b>	<b>(\$65,653,804)</b>	<b>(\$66,957,588)</b>	<b>(\$70,267,718)</b>	<b>(\$71,982,679)</b>	<b>(\$73,751,803)</b>	<b>(\$73,730,103)</b>	From Above
<b>To/(From) operations after Rate Incr.</b>		<b>(\$8,330,223)</b>	<b>(\$1,713,914)</b>	<b>(\$5,238,489)</b>	<b>(\$3,164,985)</b>	<b>(\$2,296,542)</b>	<b>(\$2,535,749)</b>	<b>(\$1,153,922)</b>	<b>(\$1,502,887)</b>	<b>(\$299,126)</b>	<b>\$799,092</b>	<b>\$2,298,468</b>	To Table 4

**City of Redwood City  
Water Rate Study  
3B. Revenue at Current Rates**

solely for the revenue at current rates vs COS

	before past rates adopted		7/1/2024 with approved rates	1/1/2025 with approved rates	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33	FY 2032-34	Notes
	FY 2023-24	FY 2024-25	FY 2024-25 six months	FY 2024-25 six months										
<b>Fixed Service Charge</b>														From Tab 10, based on FY 22-23 meter data
Single Family	\$8,921,002	\$8,921,002	\$4,460,501	\$4,773,294	\$9,546,588	\$9,546,588	\$9,546,588	\$9,546,588	\$9,546,588	\$9,546,588	\$9,546,588	\$9,546,588	\$9,546,588	
Multi Family	\$5,870,508	\$5,870,508	\$1,159,310	\$1,240,497	\$2,480,994	\$2,480,994	\$2,480,994	\$2,480,994	\$2,480,994	\$2,480,994	\$2,480,994	\$2,480,994	\$2,480,994	
Commercial	\$4,004,204	\$4,004,204	\$2,002,102	\$2,142,281	\$4,284,561	\$4,284,561	\$4,284,561	\$4,284,561	\$4,284,561	\$4,284,561	\$4,284,561	\$4,284,561	\$4,284,561	
Recycled	\$156,363	\$156,363	\$78,182	\$83,654	\$167,309	\$167,309	\$167,309	\$167,309	\$167,309	\$167,309	\$167,309	\$167,309	\$167,309	
Irrigation	\$1,064,896	\$1,064,896	\$774,017	\$828,204	\$1,656,409	\$1,656,409	\$1,656,409	\$1,656,409	\$1,656,409	\$1,656,409	\$1,656,409	\$1,656,409	\$1,656,409	
<b>Total Fixed Service Charges</b>	<b>\$20,016,972</b>	<b>\$20,016,972</b>	<b>\$8,474,112</b>	<b>\$9,067,930</b>	<b>\$18,135,860</b>									
<b>Consumption Charges</b>														
Single Family														
Tier 1 Usage	933,353	933,353	466,677	466,677	933,353	933,353	933,353	933,353	933,353	933,353	933,353	933,353	933,353	FY 22-23, FY 23-24 - HFH Water Use Analysis
Tier 2 Usage	310,372	310,372	155,186	155,186	310,372	310,372	310,372	310,372	310,372	310,372	310,372	310,372	310,372	FY 22-23, FY 23-24 - HFH Water Use Analysis
Tier 3 Usage	203,775	203,775	101,887	101,887	203,775	203,775	203,775	203,775	203,775	203,775	203,775	203,775	203,775	FY 22-23, FY 23-24 - HFH Water Use Analysis
Tier 4 Usage	212,500	212,500	106,250	106,250	212,500	212,500	212,500	212,500	212,500	212,500	212,500	212,500	212,500	FY 22-23, FY 23-24 - HFH Water Use Analysis
Tier 1 Rate	\$6.45	\$6.45	\$6.45	\$6.90	\$6.90	\$6.90	\$6.90	\$6.90	\$6.90	\$6.90	\$6.90	\$6.90	\$6.90	
Tier 2 Rate	\$7.37	\$7.37	\$7.37	\$7.89	\$7.89	\$7.89	\$7.89	\$7.89	\$7.89	\$7.89	\$7.89	\$7.89	\$7.89	
Tier 3 Rate	\$9.63	\$9.63	\$9.63	\$10.30	\$10.30	\$10.30	\$10.30	\$10.30	\$10.30	\$10.30	\$10.30	\$10.30	\$10.30	
Tier 4 Rate	\$14.57	\$14.57	\$14.57	\$15.59	\$15.59	\$15.59	\$15.59	\$15.59	\$15.59	\$15.59	\$15.59	\$15.59	\$15.59	
Tier 1 Revenue	\$6,020,129	\$6,020,129	\$3,010,065	\$3,220,069	\$6,440,138	\$6,440,138	\$6,440,138	\$6,440,138	\$6,440,138	\$6,440,138	\$6,440,138	\$6,440,138	\$6,440,138	
Tier 2 Revenue	\$2,287,444	\$2,287,444	\$1,143,722	\$1,224,419	\$2,448,838	\$2,448,838	\$2,448,838	\$2,448,838	\$2,448,838	\$2,448,838	\$2,448,838	\$2,448,838	\$2,448,838	
Tier 3 Revenue	\$1,962,349	\$1,962,349	\$981,175	\$1,049,439	\$2,098,878	\$2,098,878	\$2,098,878	\$2,098,878	\$2,098,878	\$2,098,878	\$2,098,878	\$2,098,878	\$2,098,878	
Tier 4 Revenue	\$3,096,125	\$3,096,125	\$1,548,063	\$1,656,438	\$3,312,875	\$3,312,875	\$3,312,875	\$3,312,875	\$3,312,875	\$3,312,875	\$3,312,875	\$3,312,875	\$3,312,875	
<b>Total Single Family Consumption Rev</b>	<b>\$13,366,048</b>	<b>\$13,366,048</b>	<b>\$6,683,024</b>	<b>\$7,150,365</b>	<b>\$14,300,730</b>									
Multi Family														
Usage	824,419	824,419	412,210	412,210	824,419	824,419	824,419	824,419	824,419	824,419	824,419	824,419	824,419	FY 22-23, FY 23-24 - HFH Water Use Analysis
All Water Use	\$7.92	\$7.92	\$7.92	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	
<b>Total Multi Family Consumption Rev</b>	<b>\$6,529,402</b>	<b>\$6,529,402</b>	<b>\$3,264,701</b>	<b>\$3,491,416</b>	<b>\$6,982,832</b>									
Recycled														
Usage	10,301	10,301	5,151	5,151	10,301	10,301	10,301	10,301	10,301	10,301	10,301	10,301	10,301	FY 22-23, FY 23-24 - HFH Water Use Analysis
Rate	\$7.92	\$7.92	\$7.92	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	
<b>Total Revenue</b>	<b>\$81,584</b>	<b>\$81,584</b>	<b>\$40,792</b>	<b>\$43,625</b>	<b>\$87,249</b>									
Commercial														
Usage	631,112	631,112	315,556	315,556	631,112	631,112	631,112	631,112	631,112	631,112	631,112	631,112	631,112	FY 22-23, FY 23-24 - HFH Water Use Analysis
Rate	\$7.92	\$7.92	\$7.92	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	
<b>Total Revenue</b>	<b>\$4,998,404</b>	<b>\$4,998,404</b>	<b>\$2,499,202</b>	<b>\$2,672,757</b>	<b>\$5,345,515</b>									
Irrigation														
All Usage	486,043	486,043	243,022	243,022	486,043	486,043	486,043	486,043	486,043	486,043	486,043	486,043	486,043	FY 22-23, FY 23-24 - HFH Water Use Analysis
Rate	\$7.92	\$7.92	\$7.92	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	
<b>Total Revenue</b>	<b>\$3,849,461</b>	<b>\$3,849,461</b>	<b>\$1,924,730</b>	<b>\$2,058,392</b>	<b>\$4,116,784</b>									
<b>Total Consumption Charge Revenue</b>	<b>\$28,824,898</b>	<b>\$28,824,898</b>	<b>\$14,412,449</b>	<b>\$15,416,555</b>	<b>\$30,833,111</b>									
<b>Total Revenue</b>	<b>\$48,841,870</b>	<b>\$48,841,870</b>	<b>\$22,886,561</b>	<b>\$24,484,485</b>	<b>\$48,968,971</b>									

City of Redwood City  
Water Rate Study  
4. Reserves

	Rate Adj.	7.0%	6.0%	5.0%	5.0%	4.0%	4.5%	4.5%	4.0%	4.0%	4.0%	From Table 1A	
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33	FY 2033-34	FY 2034-35	Notes
<b>Operating Reserves</b>													
Beginning Balance		\$42,935,256	\$34,992,735	\$27,325,747	\$22,334,323	\$19,376,857	\$17,262,600	\$14,886,798	\$13,875,974	\$12,504,333	\$12,328,755	\$13,255,130	
Surplus/Deficit		(\$8,330,223)	(\$1,713,914)	(\$5,238,489)	(\$3,164,985)	(\$2,296,542)	(\$2,535,749)	(\$1,153,922)	(\$1,502,887)	(\$299,126)	\$799,092	\$2,298,468	From Table 3
Revenue Requirement			(\$6,263,116)										To Table 2
To Capital Reserves													
Fund Subtotal	\$0	\$34,605,033	\$27,015,705	\$22,087,258	\$19,169,338	\$17,080,315	\$14,726,851	\$13,732,876	\$12,373,087	\$12,205,207	\$13,127,847	\$15,553,598	
Estimated Interest Earnings	\$0	\$387,701	\$310,042	\$247,065	\$207,518	\$182,286	\$159,947	\$143,098	\$131,245	\$123,548	\$127,283	\$144,044	
<b>Ending Balance</b>	<b>\$42,935,256</b>	<b>\$34,992,735</b>	<b>\$27,325,747</b>	<b>\$22,334,323</b>	<b>\$19,376,857</b>	<b>\$17,262,600</b>	<b>\$14,886,798</b>	<b>\$13,875,974</b>	<b>\$12,504,333</b>	<b>\$12,328,755</b>	<b>\$13,255,130</b>	<b>\$15,697,641</b>	YTD estimate from finance fund reserve balance
Target Balance	\$9,419,144	\$10,800,253	\$10,316,534	\$10,451,108	\$10,673,985	\$11,167,855	\$11,898,359	\$12,291,228	\$12,697,548	\$13,117,806	\$13,552,507	\$14,002,176	25% of annual operating expenses
<b>Capital Reserves</b>													
Beginning Balance		\$2,000,000	\$2,020,000	\$6,585,479	\$7,074,801	\$6,582,245	\$3,791,043	\$2,280,536	\$2,942,169	\$3,193,659	\$3,017,327	\$2,394,873	
Net Cash Funded CIP		(\$8,638,538)	(\$8,638,601)	(\$12,739,906)	(\$13,721,767)	(\$16,004,078)	(\$14,701,980)	(\$12,227,577)	(\$12,642,262)	(\$13,070,459)	(\$13,512,607)	(\$13,780,313)	From Table 5
From Revenue Requirements		\$8,638,538	\$13,161,266	\$13,161,266	\$13,161,266	\$13,161,266	\$13,161,266	\$12,863,226	\$12,863,226	\$12,863,226	\$12,863,226	\$12,863,226	To Table 2
From Operating Reserves	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	From Above
Fund Subtotal	\$0	\$2,000,000	\$6,542,665	\$7,006,839	\$6,514,300	\$3,739,434	\$2,250,329	\$2,916,185	\$3,163,133	\$2,986,427	\$2,367,946	\$1,477,785	
Estimated Interest Earnings	\$0	\$20,000	\$42,813	\$67,962	\$67,946	\$51,608	\$30,207	\$25,984	\$30,527	\$30,900	\$26,926	\$19,363	
<b>Ending Balance</b>	<b>\$2,000,000</b>	<b>\$2,020,000</b>	<b>\$6,585,479</b>	<b>\$7,074,801</b>	<b>\$6,582,245</b>	<b>\$3,791,043</b>	<b>\$2,280,536</b>	<b>\$2,942,169</b>	<b>\$3,193,659</b>	<b>\$3,017,327</b>	<b>\$2,394,873</b>	<b>\$1,497,149</b>	
Target Balance	\$2,000,000	\$2,000,000	\$2,065,165	\$2,132,452	\$2,201,932	\$2,273,676	\$2,347,758	\$2,424,253	\$2,503,241	\$2,584,802	\$2,669,021	\$2,755,984	\$2 million escalated using CCI (proposed)

City of Redwood City  
Water Rate Study  
5. CIP

Note: debt assumed for future funding

	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33	FY 2033-34	FY 2034-35	Total	Notes
<b>Water Enterprise CIP</b>												
Distribution System Replacement Program	\$1,000,000	\$1,500,000	\$2,000,000	\$2,000,000	\$2,000,000	\$0	\$0	\$0	\$0	\$0	\$11,000,000	FY 2023-24 through FY 2027-28 per adopted CIP
Cathodic Protection Program	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$0	\$0	\$0	\$0	\$0	\$874,264	
Water System Seismic Improvement Program	\$1,000,000	\$250,000	\$250,000	\$250,000	\$250,000	\$0	\$0	\$0	\$0	\$0	\$4,000,000	
Main City Potable Water Tank and Pump Station	\$2,250,000	\$3,000,000	\$3,000,000	\$3,500,000	\$4,000,000	\$0	\$0	\$0	\$0	\$0	\$17,750,000	
Pump Station and Tank Rehabilitation/ Replacement	\$1,500,000	\$2,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$8,000,000	
Supervisory Control and Data Acquisition (SCADA) System	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$525,000	
Water Tank Cathodic Protection System Replacement	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$0	\$0	\$0	\$0	\$0	\$600,000	
Recycled Water Distribution System Phase 2 Extension	\$0	\$1,000,000	\$2,000,000	\$3,100,000	\$3,100,000	\$0	\$0	\$0	\$0	\$0	\$11,988,352	
Main City Recycled Water Tank and Pump Station	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000	\$25,000,000	
Future Water Storage Tank Land Purchase		\$2,067,308	\$2,067,308	\$2,067,308							\$6,201,923	Project spread over three years per City
Potable Water Projects	\$0	\$0	\$0	\$0	\$0	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$25,000,000	per 2010 Master Plan and City staff
Potable Water Projects (Debt Funded)	\$0	\$0	\$0	\$0	\$0	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$25,000,000	
Recycled Water Projects	\$0	\$0	\$0	\$0	\$0	\$3,100,000	\$3,100,000	\$3,100,000	\$3,100,000	\$3,100,000	\$15,500,000	per City staff
Recycled Water Projects (Debt Funded)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>Water Enterprise CIP</b>	<b>\$8,850,000</b>	<b>\$12,417,308</b>	<b>\$12,917,308</b>	<b>\$14,517,308</b>	<b>\$12,950,000</b>	<b>\$15,500,000</b>	<b>\$15,500,000</b>	<b>\$15,500,000</b>	<b>\$15,500,000</b>	<b>\$15,500,000</b>	<b>\$151,439,539</b>	
Construction Cost Index	3.26%	6.62%	10.10%	13.68%	17.39%	21.21%	25.16%	29.24%	33.45%	37.80%		From Table 1B
CIP Spend Factor	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%		
Total Inflated CIP	\$9,138,353	\$13,239,658	\$14,221,519	\$16,503,830	\$15,201,732	\$18,787,962	\$19,400,116	\$20,032,216	\$20,684,911	\$21,358,872	\$159,497,913	To Table 4
Less Total Capacity Fees	(\$499,752)	(\$499,752)	(\$499,752)	(\$499,752)	(\$499,752)	(\$499,752)	(\$499,752)	(\$499,752)	(\$499,752)	(\$688,600)	(\$5,883,444)	updated for FY 2023-24 to FY 2027-28
Less Debt Funded CIP	\$0	\$0	\$0	\$0	\$0	(\$6,060,633)	(\$6,258,102)	(\$6,462,005)	(\$6,672,552)	(\$6,889,959)	(\$25,453,292)	
<b>Net PAYGo CIP</b>	<b>\$8,638,601</b>	<b>\$12,739,906</b>	<b>\$13,721,767</b>	<b>\$16,004,078</b>	<b>\$14,701,980</b>	<b>\$12,227,577</b>	<b>\$12,642,262</b>	<b>\$13,070,459</b>	<b>\$13,512,607</b>	<b>\$13,780,313</b>	<b>\$128,161,177</b>	
				Average Annual PAYGo				Average FYE 2031-35				
						<b>\$13,161,266</b>				<b>\$13,046,644</b>		

CIP Allocation

	Demand	Customer	Capacity	Total
Capacity	\$0	\$0	\$1,700,000	\$1,700,000
Services	\$0	\$100,000	\$0	\$100,000
Services	\$0	\$400,000	\$0	\$400,000
Capacity	\$0	\$0	\$3,150,000	\$3,150,000
Capacity	\$0	\$0	\$1,300,000	\$1,300,000
Capacity	\$0	\$0	\$100,000	\$100,000
Services	\$0	\$100,000	\$0	\$100,000
Capacity	\$0	\$0	\$1,840,000	\$1,840,000
Capacity	\$0	\$0	\$2,400,000	\$2,400,000
Capacity	\$0	\$0	\$2,067,308	\$2,067,308
Capacity	\$0	\$0	\$0	\$0
Capacity	\$0	\$0	\$0	\$0
Capacity	\$0	\$0	\$0	\$0
Capacity	\$0	\$0	\$0	\$0
Capacity	\$0	\$0	\$0	\$0
Capacity	\$0	\$0	\$0	\$0
CIP Composite	\$0	\$600,000	\$12,557,308	\$13,157,308
	0%	5%	95%	

City of Redwood City  
Water Rate Study  
6. Debt Service

	Projected											Notes
	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33	FY 2033-34	FY 2034-35	
<b>Series 2015 Refunding Bonds</b>												
Principal	\$985,000	\$1,025,000	\$1,065,000	\$1,095,000	\$1,130,000	\$1,165,000	\$1,200,000	\$1,240,000	\$1,280,000	\$1,325,000	\$1,370,000	
Interest	\$435,644	\$396,244	\$355,244	\$323,294	\$290,444	\$256,544	\$220,138	\$181,138	\$140,838	\$96,038	\$49,663	
<b>Total</b>	<b>\$1,420,644</b>	<b>\$1,421,244</b>	<b>\$1,420,244</b>	<b>\$1,418,294</b>	<b>\$1,420,444</b>	<b>\$1,421,544</b>	<b>\$1,420,138</b>	<b>\$1,421,138</b>	<b>\$1,420,838</b>	<b>\$1,421,038</b>	<b>\$1,419,663</b>	
<b>Series 2017 Refunding Bonds</b>												
Principal	\$320,000	\$335,000	\$355,000	\$370,000	\$385,000	\$405,000	\$420,000	\$430,000	\$445,000	\$460,000	\$480,000	
Interest	\$175,419	\$159,419	\$142,669	\$124,919	\$106,419	\$87,169	\$75,019	\$61,894	\$47,919	\$32,900	\$16,800	
<b>Total</b>	<b>\$495,419</b>	<b>\$494,419</b>	<b>\$497,669</b>	<b>\$494,919</b>	<b>\$491,419</b>	<b>\$492,169</b>	<b>\$495,019</b>	<b>\$491,894</b>	<b>\$492,919</b>	<b>\$492,900</b>	<b>\$496,800</b>	
<b>Series 2024 Refunding Bonds</b>												
Principal	\$1,200,000	\$1,205,000	\$1,260,000	\$1,325,000	\$1,395,000	\$1,460,000	\$1,530,000	\$1,610,000	\$1,690,000	\$1,770,000		Refinanced in FY 2024-25
Interest	\$264,825	\$662,250	\$602,000	\$539,000	\$472,750	\$403,000	\$330,000	\$253,500	\$173,000	\$88,500	\$0	
<b>Total</b>	<b>\$1,464,825</b>	<b>\$1,867,250</b>	<b>\$1,862,000</b>	<b>\$1,864,000</b>	<b>\$1,867,750</b>	<b>\$1,863,000</b>	<b>\$1,860,000</b>	<b>\$1,863,500</b>	<b>\$1,863,000</b>	<b>\$1,858,500</b>	<b>\$0</b>	
<b>Future Debt Service - Loan 1</b>												
<b>Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,650,680</b>	<b>\$1,650,680</b>	<b>\$1,650,680</b>	<b>\$1,650,680</b>	<b>\$1,650,680</b>	Future Assumption
<b>Future Debt Service - Loan 2</b>												
<b>Total</b>	<b>\$0</b>											
<b>Future Debt Service - Loan 3</b>												
<b>Total</b>	<b>\$0</b>											
<b>Interfund Loan</b>												
Principal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>Total</b>	<b>\$0</b>											
<b>Debt Coverage Calculation</b>												
<b>Funds Available for Debt Service</b>												
Rate Revenue	\$47,865,571	\$51,236,452	\$54,538,877	\$57,530,573	\$60,407,102	\$63,118,054	\$65,803,666	\$68,764,831	\$71,683,553	\$74,550,895	\$76,028,571	From Table 3
Non-Operating Income	\$1,599,296	\$1,648,725	\$1,699,695	\$1,752,254	\$1,806,452	\$1,862,342	\$1,919,977	\$1,979,411	\$2,040,701	\$2,103,907	\$2,169,088	From Table 2
Interest Income	\$407,701	\$352,856	\$315,027	\$275,464	\$233,894	\$190,154	\$169,082	\$161,772	\$154,448	\$154,209	\$163,407	From Table 4
<b>Total Funds Available</b>	<b>\$49,872,568</b>	<b>\$53,238,033</b>	<b>\$56,553,599</b>	<b>\$59,558,291</b>	<b>\$62,447,448</b>	<b>\$65,170,551</b>	<b>\$67,892,725</b>	<b>\$70,906,013</b>	<b>\$73,878,702</b>	<b>\$76,809,011</b>	<b>\$78,361,066</b>	To below
O&M	\$43,201,010	\$41,266,135	\$41,804,432	\$42,695,938	\$44,671,421	\$47,593,438	\$49,164,911	\$50,790,191	\$52,471,223	\$54,210,026	\$56,008,702	From Table 2
Net Revenue	\$6,671,558	\$11,971,898	\$14,749,167	\$16,862,352	\$17,776,027	\$17,577,113	\$18,727,814	\$20,115,822	\$21,407,480	\$22,598,985	\$22,352,363	Funds Available less Expenses
Debt Service	\$3,380,888	\$3,782,913	\$3,779,913	\$3,777,213	\$3,779,613	\$3,776,713	\$5,425,836	\$5,427,211	\$5,427,436	\$5,423,118	\$3,567,143	From above
<b>Debt Coverage Ratio</b>	<b>1.97</b>	<b>3.16</b>	<b>3.90</b>	<b>4.46</b>	<b>4.70</b>	<b>4.65</b>	<b>3.45</b>	<b>3.71</b>	<b>3.94</b>	<b>4.17</b>	<b>6.27</b>	To Table 1B

**City of Redwood City  
Water Rate Study**

**7. Consumption Summary**

Two-Year Average (FY 2022-23 and FY 2023-24) Water Consumption by Month

Customer Class	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Consumption
Multi Family	72,954	70,762	74,448	71,258	70,577	67,618	65,389	65,344	65,040	62,501	70,124	68,406	824,419
Commercial	59,704	62,513	64,436	56,406	50,025	45,337	43,273	44,376	44,617	48,637	54,341	57,449	631,112
Commercial Irrigator	52,495	52,178	46,135	33,946	19,577	7,559	3,326	5,065	4,463	9,945	31,911	44,568	311,165
Residential Irrigation	29,452	30,014	26,933	19,966	9,906	3,414	1,637	1,168	1,465	4,998	17,498	28,429	174,878
Single Family	164,200	191,090	174,015	182,779	149,618	136,416	106,806	99,673	90,962	95,561	113,098	155,785	1,660,000
Residential Recycled	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial Recycled	821	882	1,469	1,218	719	625	491	509	670	930	1,031	938	10,301
<b>Total</b>	<b>379,626</b>	<b>407,438</b>	<b>387,435</b>	<b>365,573</b>	<b>300,421</b>	<b>260,967</b>	<b>220,920</b>	<b>216,133</b>	<b>207,215</b>	<b>222,571</b>	<b>288,003</b>	<b>355,574</b>	<b>3,611,875</b>

max

min

Customer Class	Demand (HCF)	
Single Family	1,660,000	46.0%
Commercial/MF	1,951,875	54.0%
	3,611,875	100.0%

City of Redwood City  
Water Rate Study  
8. Allocations

System-Wide Cost Allocation Factors	Demand Services		Customer Services			Total
	Demand	Service	Capacity	Public Fire Services	Private Fire Services	
Demand	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Capacity	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Services	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
<b>Composite Allocations</b>						
O&M Revenue Services	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
O&M Admin Support Services	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
O&M Water Customer Services	53.3%	46.5%	0.2%	0.0%	0.0%	100.0%
O&M Water Supply and Distribution	64.5%	0.0%	35.5%	0.0%	0.0%	100.0%
O&M Water Supply and Distribution (Fire Protection)	0.0%	0.0%	0.0%	80.7%	19.3%	100.0%
SFPUC Water Purchases	98.6%	0.0%	1.4%	0.0%	0.0%	100.0%
O&M Water Resource Management	93.8%	0.2%	6.0%	0.0%	0.0%	100.0%
O&M Composite	77.7%	7.9%	5.2%	7.4%	1.8%	100.0%
Exp Composite	60.7%	7.4%	24.7%	5.8%	1.4%	100.0%
CIP Composite	0.0%	4.6%	95.4%	0.0%	0.0%	100.0% from Table 5
Recycled Water	69.4%	0.4%	30.2%	0.0%	0.0%	100.0%

	FY 2025-26 Revenue Requirement	Allocation Factor	Consumption Charge	Service Charge		Public Fire Protection Services	Private Fire Protection Services
			Demand	Customer	Capacity		
<b>O&amp;M Expenses</b>							
61410-Revenue Services	\$2,509,087	O&M Revenue Service	\$0	\$2,509,087	\$0	\$0	\$0
65142-Water Customer Services	\$2,723,818	Water Customer Ser	\$1,451,622	\$1,267,315	\$4,881	\$0	\$0
65144, 65147-Water Supply and Distribution	\$5,598,279	Water Supply and Dist	\$3,612,778	\$0	\$1,985,501	\$0	\$0
65144, 65147-Water Supply and Distribution (Fire Protection)	\$4,353,012	ply and Distribution	\$0	\$0	\$0	\$3,511,574	\$841,439
65145-SFPUC Water Purchases	\$26,695,000	SFPUC Water Purchas	\$26,325,000	\$0	\$370,000	\$0	\$0
65146-Water Resource Management	\$1,916,272	Water Resource Mana	\$1,797,098	\$4,639	\$114,534	\$0	\$0
65144-Water Supply and Distribution Recycled Water Debt	\$3,782,913	Demand	\$3,782,913	\$0	\$0	\$0	\$0
Total Allocable O&M	\$47,578,381		\$36,969,410	\$3,781,042	\$2,474,917	\$3,511,574	\$841,439
O&M Composite			77.7%	7.9%	5.2%	7.4%	1.8%
<b>Capital Expenses (PAYGo)</b>							
	\$13,161,266	CIP Composite	\$0	\$600,181	\$12,561,086	\$0	\$0
<b>Subtotal - O&amp;M and Capital</b>	<b>\$60,739,647</b>		<b>\$36,969,410</b>	<b>\$4,381,222</b>	<b>\$15,036,002</b>	<b>\$3,511,574</b>	<b>\$841,439</b>
		% of Consumption	100.0%				
		% of total	60.9%	7.2%	24.8%	5.8%	1.4%
<b>Unallocated O&amp;M</b>							
61710-Administrative Support Services	\$122,560	Admin Support Ser	\$0	\$122,560	\$0	\$0	\$0
<b>Administrative Costs</b>	<b>\$122,560</b>		<b>\$0</b>	<b>\$122,560</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Subtotal O&amp;M, Capital, Non-Operating</b>	<b>\$60,862,207</b>		<b>\$36,969,410</b>	<b>\$4,503,782</b>	<b>\$15,036,002</b>	<b>\$3,511,574</b>	<b>\$841,439</b>
<i>Expense Composite</i>			60.7%	7.4%	24.7%	5.8%	1.4%
<b>Non-Operating Revenue</b>							
46205-Backflow Devices Admin Fee	(\$124,800)	Services	\$0	(\$124,800)	\$0	\$0	\$0
46210-Backflow Devices Testing Fee	(\$26,000)	Services	\$0	(\$26,000)	\$0	\$0	\$0
49725-Miscellaneous Revenue	(\$10,300)	Services	\$0	(\$10,300)	\$0	\$0	\$0
49901-Transfer from General Fund	(\$718,059)	Services	\$0	(\$718,059)	\$0	\$0	\$0
49910-Transfer from Sewer Fund	(\$769,566)	Services	\$0	(\$769,566)	\$0	\$0	\$0
<b>Total Non-Operating</b>	<b>(\$1,648,725)</b>		<b>\$0</b>	<b>(\$1,648,725)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Transfers to/(from) Reserves</b>	<b>(\$6,263,116)</b>	Exp Composite	<b>(\$3,804,392)</b>	<b>(\$463,468)</b>	<b>(\$1,547,302)</b>	<b>(\$361,364)</b>	<b>(\$86,590)</b>
<b>Total Revenue Requirement</b>	<b>\$52,950,366</b>		<b>\$33,165,018</b>	<b>\$2,391,589</b>	<b>\$13,488,700</b>	<b>\$3,150,210</b>	<b>\$754,849</b>
			<b>62.6%</b>	<b>\$2,391,589</b>	<b>\$13,488,700</b>	<b>\$3,150,210</b>	<b>\$754,849</b>
				<b>35.9%</b>		<b>1.4%</b>	
			Consumption Charge COS	Service Charge COS		Private Fireline Capacity COS	

City of Redwood City  
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8B. O&M Allocations

Potable and Recycled Water Expenses	Tbl. 1B	FY 2025-26	Revenue Services		Administrative Support		Water Customer Services	
			Allocation	61410	Allocation	61710	Allocation	65142
<b>O&amp;M</b>								
50100 Regular	b	\$5,767,779	Services	\$1,031,529	Services	\$0	Demand	\$693,993
50500 Annual Leave Buyout	b	\$131,256	Services	\$23,504	Services	\$0	Demand	\$15,766
50700 PROFESSIONAL DEVELOPMENT	a	\$889	Services	\$271	Services	\$0	Demand	\$77
50900 OTHER SALARY CREDITS	b	\$31,824	Services	\$6,275	Services	\$0	Demand	\$2,586
51500 Overtime	b	\$487,963	Services	\$0	Services	\$0	Demand	\$73,844
51900 SALARY ADJUSTMENTS	b	\$32,873	Services	\$6,251	Services	\$0	Demand	\$1,867
52000 SAFETY BOOTS (put below salaries and wages)	a	\$2,575	Services	\$0	Services	\$0	Demand	\$0
52020 Cell Phone Allowance	a	\$1,066	Services	\$324	Services	\$0	Demand	\$93
52110 Auto Allowance	a	\$4,975	Services	\$1,514	Services	\$0	Demand	\$433
52200 RETIREMENT (PERS)	c	\$1,914,387	Services	\$347,889	Services	\$0	Demand	\$229,721
52300 Medical Insurance	c	\$826,765	Services	\$156,620	Services	\$0	Demand	\$110,849
52320 Dental Insurance	c	\$67,437	Services	\$13,391	Services	\$0	Demand	\$8,342
52330 Vision Care Insurance	c	\$572	Services	\$113	Services	\$0	Demand	\$71
52340 Long-term Disability	c	\$5,255	Services	\$1,043	Services	\$0	Demand	\$648
52400 RETIREE HEALTH BENEFITS RESERVE EXPENSE (FORMERL'	c	\$267,842	Services	\$51,357	Services	\$0	Demand	\$34,545
52600 LEAVE BUYOUT ALLOWANCE	c	\$49,425	Services	\$10,192	Services	\$0	Demand	\$6,058
52700 UNEMPLOYMENT INSURANCE	c	\$5,935	Services	\$1,063	Services	\$0	Demand	\$712
52800 MEDICARE	c	\$82,868	Services	\$14,845	Services	\$0	Demand	\$9,924
53000 Gas and Electric	e	\$582,080	Services	\$12,840	Services	\$0	Services	\$10,700
53100 Water	a	\$39,718	Services	\$602	Services	\$0	Services	\$12,075
53200 Wholesale Water Purchases	j	\$26,759,500	Services	\$0	Services	\$0	Services	\$0
53300 Telephone/Pagers (in addition to obj 74)	a	\$5,150	Services	\$0	Services	\$0	Services	\$0
53310 Communication Supplies and Services (formerly obj 35-PR,	a	\$46,428	Services	\$324	Services	\$0	Services	\$10,089
53400 Office Supplies	a	\$563,793	Services	\$464,743	Services	\$0	Services	\$1,545
53410 Facilities Rental/Lease	a	\$35,000	Services	\$0	Services	\$0	Services	\$0
53450 Printing and Binding	a	\$8,240	Services	\$0	Services	\$0	Services	\$2,575
53470 Professional/Reference Books/Supplies	a	\$2,018	Services	\$0	Services	\$0	Services	\$1,030
53500 Uniform Services/Repair/Replacement/Clothing Purchases	a	\$20,085	Services	\$0	Services	\$0	Services	\$3,090
53600 Software Maintenance and Support	a	\$121,643	Services	\$0	Services	\$0	Services	\$47,483
53700 Regulatory/compliance fees	a	\$137,000	Services	\$0	Services	\$0	Services	\$120,000
54000 Operating Supplies and Expenses	a	\$488,447	Services	\$0	Services	\$0	Services	\$12,072
54100 Small Repair and Maintenance	a	\$1,077,867	Services	\$7,272	Services	\$0	Services	\$684,950
54200 Small Tools and Minor Equipment	a	\$15,017	Services	\$0	Services	\$0	Services	\$2,060
55000 Consultant Services	a	\$794,199	Services	\$0	Services	\$25,286	Services	\$94,000
55030 Outside Legal Services (formerly object 61)	a	\$23,752	Services	\$3,152	Services	\$0	Services	\$20,600
55070 Banking Services	a	\$0	Services	\$0	Services	\$0	Services	\$0
55100 Insurance	a	\$267,800	Services	\$0	Services	\$0	Services	\$0
55500 Meetings - Internal or External	a	\$26,088	Services	\$5,488	Services	\$0	Services	\$2,060
55520 Certifications	a	\$5,665	Services	\$0	Services	\$0	Services	\$1,030
55530 Educational Allowance (Non taxable)	a	\$1,655	Services	\$0	Services	\$0	Services	\$515
55600 Memberships, Dues and Subscriptions - Professional Organ	a	\$395,144	Services	\$344	Services	\$0	Capacity	\$4,000
55700 Conferences - Registration	a	\$15,528	Services	\$1,236	Services	\$0	Services	\$4,120
55710 Air fare	a	\$8,270	Services	\$0	Services	\$0	Services	\$1,446
55720 Car Rental	a	\$4,120	Services	\$0	Services	\$0	Services	\$0
55730 Hotel	a	\$8,369	Services	\$0	Services	\$0	Services	\$1,545
55735 Meals	a	\$3,605	Services	\$0	Services	\$0	Services	\$515
55740 Taxi	a	\$2,189	Services	\$0	Services	\$0	Services	\$515
55750 Parking	a	\$1,674	Services	\$0	Services	\$0	Services	\$0
55760 Mileage	a	\$315	Services	\$315	Services	\$0	Services	\$0
56710 YEAR END CLOSING ENTRIES	a	\$97,274	Services	\$0	Services	\$97,274	Services	\$0
58300 PC REFRESH	a	\$8,276	Services	\$2,590	Services	\$0	Services	\$1,602
59400 IMPROVEMENTS OTHER THAN BUILDINGS	a	\$5,150	Services	\$0	Services	\$0	Services	\$0
59500 EQUIPMENT (purchases > \$5000)	a	\$13,390	Services	\$0	Services	\$0	Services	\$2,884
<b>Total O&amp;M</b>		<b>\$41,266,135</b>		<b>\$2,165,090</b>		<b>\$122,560</b>		<b>\$2,232,029</b>
<b>Allocation to Internal Service Charges</b>			Demand	\$0	Demand	\$0	Demand	\$1,189,530
			Services	\$2,165,090	Services	\$122,560	Services	\$1,038,500
			Capacity	\$0	Capacity	\$0	Capacity	\$4,000
				<b>\$2,165,090</b>		<b>\$122,560</b>		<b>\$2,232,029</b>

City of Redwood City  
Water Rate Study  
8B. O&M Allocations

		Redwood City Program - Allocation of O&M Costs							
		Water Supply and Distribution		SFWD Water Purchases		Water Resources Management			
Potable and Recycled Water Expenses	Tbl. 1B	FY 2025-26	Allocation	65144, 65147	Allocation	65145	Allocation	65146	
<b>O&amp;M</b>									
50100 Regular	b	\$5,767,779	Demand	\$3,426,965	Demand	\$0	Demand	\$615,291	
50500 Annual Leave Buyout	b	\$131,256	Capacity	\$77,964	Demand	\$0	Demand	\$14,022	
50700 PROFESSIONAL DEVELOPMENT	a	\$889	Capacity	\$464	Demand	\$0	Demand	\$77	
50900 OTHER SALARY CREDITS	b	\$31,824	Capacity	\$18,829	Demand	\$0	Demand	\$4,133	
51500 Overtime	b	\$487,963	Capacity	\$402,438	Demand	\$0	Demand	\$11,680	
51900 SALARY ADJUSTMENTS	b	\$32,873	Capacity	\$22,888	Demand	\$0	Demand	\$1,867	
52000 SAFETY BOOTS (put below salaries and wages)	a	\$2,575	Capacity	\$2,575	Demand	\$0	Demand	\$0	
52020 Cell Phone Allowance	a	\$1,066	Capacity	\$556	Demand	\$0	Demand	\$93	
52110 Auto Allowance	a	\$4,975	Capacity	\$2,596	Demand	\$0	Demand	\$433	
52200 RETIREMENT (PERS)	c	\$1,914,387	Capacity	\$1,131,178	Demand	\$0	Demand	\$205,599	
52300 Medical Insurance	c	\$826,765	Capacity	\$506,316	Demand	\$0	Demand	\$52,980	
52320 Dental Insurance	c	\$67,437	Capacity	\$38,125	Demand	\$0	Demand	\$7,578	
52330 Vision Care Insurance	c	\$572	Capacity	\$322	Demand	\$0	Demand	\$66	
52340 Long-term Disability	c	\$5,255	Capacity	\$2,972	Demand	\$0	Demand	\$592	
52400 RETIREE HEALTH BENEFITS RESERVE EXPENSE (FORMERL'	c	\$267,842	Capacity	\$154,922	Demand	\$0	Demand	\$27,018	
52600 LEAVE BUYOUT ALLOWANCE	c	\$49,425	Capacity	\$28,217	Demand	\$0	Demand	\$4,958	
52700 UNEMPLOYMENT INSURANCE	c	\$5,935	Capacity	\$3,529	Demand	\$0	Demand	\$631	
52800 MEDICARE	c	\$82,868	Capacity	\$49,270	Demand	\$0	Demand	\$8,830	
53000 Gas and Electric	e	\$582,080	Demand	\$551,050	Demand	\$0	Demand	\$7,490	
53100 Water	a	\$39,718	Demand	\$24,308	Demand	\$0	Demand	\$2,734	
53200 Wholesale Water Purchases	j	\$26,759,500	Demand	\$434,500	Demand	\$26,325,000	Demand	\$0	
53300 Telephone/Pagers (in addition to obj 74)	a	\$5,150	Capacity	\$0	Capacity	\$0	Capacity	\$5,150	
53310 Communication Supplies and Services (formerly obj 35-PR,	a	\$46,428	Capacity	\$34,212	Capacity	\$0	Capacity	\$1,803	
53400 Office Supplies	a	\$563,793	Capacity	\$94,775	Capacity	\$0	Capacity	\$2,730	
53410 Facilities Rental/Lease	a	\$35,000	Capacity	\$35,000	Capacity	\$0	Capacity	\$0	
53450 Printing and Binding	a	\$8,240	Capacity	\$515	Capacity	\$0	Capacity	\$5,150	
53470 Professional/Reference Books/Supplies	a	\$2,018	Capacity	\$988	Capacity	\$0	Capacity	\$0	
53500 Uniform Services/Repair/Replacement/Clothing Purchases	a	\$20,085	Capacity	\$16,995	Capacity	\$0	Capacity	\$0	
53600 Software Maintenance and Support	a	\$121,643	Capacity	\$0	Capacity	\$0	Capacity	\$74,160	
53700 Regulatory/compliance fees	a	\$137,000	Demand	\$17,000	Demand	\$0	Demand	\$0	
54000 Operating Supplies and Expenses	a	\$488,447	Demand	\$334,750	Demand	\$0	Demand	\$141,625	
54100 Small Repair and Maintenance	a	\$1,077,867	Demand	\$293,975	Demand	\$0	Demand	\$91,670	
54200 Small Tools and Minor Equipment	a	\$15,017	Demand	\$11,927	Demand	\$0	Demand	\$1,030	
55000 Consultant Services	a	\$794,199	Demand	\$325,913	Demand	\$0	Demand	\$349,000	
55030 Outside Legal Services (formerly object 61)	a	\$23,752	Capacity	\$0	Capacity	\$0	Capacity	\$0	
55070 Banking Services	a	\$0	Capacity	\$0	Capacity	\$0	Capacity	\$0	
55100 Insurance	a	\$267,800	Capacity	\$267,800	Capacity	\$0	Capacity	\$0	
55500 Meetings - Internal or External	a	\$26,088	Capacity	\$17,510	Capacity	\$0	Capacity	\$1,030	
55520 Certifications	a	\$5,665	Capacity	\$2,575	Capacity	\$0	Capacity	\$2,060	
55530 Educational Allowance (Non taxable)	a	\$1,655	Capacity	\$515	Capacity	\$0	Capacity	\$625	
55600 Memberships, Dues and Subscriptions - Professional Organ	a	\$395,144	Capacity	\$16,800	Capacity	\$370,000	Services	\$4,000	
55700 Conferences - Registration	a	\$15,528	Capacity	\$7,082	Services	\$0	Capacity	\$3,090	
55710 Air fare	a	\$8,270	Capacity	\$5,794	Services	\$0	Capacity	\$1,030	
55720 Car Rental	a	\$4,120	Capacity	\$4,120	Services	\$0	Capacity	\$0	
55730 Hotel	a	\$8,369	Capacity	\$5,794	Services	\$0	Capacity	\$1,030	
55735 Meals	a	\$3,605	Capacity	\$3,090	Services	\$0	Capacity	\$0	
55740 Taxi	a	\$2,189	Capacity	\$1,674	Services	\$0	Capacity	\$0	
55750 Parking	a	\$1,674	Capacity	\$1,674	Services	\$0	Capacity	\$0	
55760 Mileage	a	\$315	Capacity	\$0	Services	\$0	Capacity	\$0	
56710 YEAR END CLOSING ENTRIES	a	\$97,274	Capacity	\$0	Services	\$0	Capacity	\$0	
58300 PC REFRESH	a	\$8,276	Capacity	\$3,194	Services	\$0	Capacity	\$890	
59400 IMPROVEMENTS OTHER THAN BUILDINGS	a	\$5,150	Capacity	\$5,150	Services	\$0	Capacity	\$0	
59500 EQUIPMENT (purchases > \$5000)	a	\$13,390	Capacity	\$10,506	Services	\$0	Capacity	\$0	
<b>Total O&amp;M</b>		<b>\$41,266,135</b>		<b>\$8,399,313</b>		<b>\$26,695,000</b>		<b>\$1,652,142</b>	
<b>Allocation to Internal Service Charges</b>			Demand	\$5,420,389	Demand	\$26,325,000	Demand	\$1,549,395	
			Services	\$0	Services	\$0	Services	\$4,000	
			Capacity	\$2,978,924	Capacity	\$370,000	Capacity	\$98,747	
				<b>\$8,399,313</b>		<b>\$26,695,000</b>		<b>\$1,652,142</b>	

City of Redwood City  
 Water Rate Study  
 8B. O&M Allocations

Potable and Recycled Water Expenses	Tbl. 1B	FY 2025-26	Revenue Services		Administrative Support		Water Customer Services	
			Allocation	61410	Allocation	61710	Allocation	65142
			Demand	0%	Demand	0%	Demand	53%
			Services	100%	Services	100%	Services	47%
			Capacity	0%	Capacity	0%	Capacity	0%
<b>Internal Service Charges</b>								
57000 Communication Services	a	\$71,845	O&M Composite	\$0	O&M Composite	\$0	O&M Composite	\$35,923
57200 Equipment Rentals	a	\$879,966	O&M Composite	\$0	O&M Composite	\$0	O&M Composite	\$113,724
57300 Building Maintenance Services	a	\$84,868	O&M Composite	\$15,735	O&M Composite	\$0	O&M Composite	\$9,027
57400 Telephone	a	\$58,424	O&M Composite	\$38,434	O&M Composite	\$0	O&M Composite	\$4,148
57500 Custodial Services	a	\$78,728	O&M Composite	\$20,851	O&M Composite	\$0	O&M Composite	\$8,807
57600 Risk Management Services	a	\$155,347	O&M Composite	\$18,583	O&M Composite	\$0	O&M Composite	\$31,066
57700 Data Management Services	a	\$360,459	O&M Composite	\$86,619	O&M Composite	\$0	O&M Composite	\$51,958
57800 Workers Comp Insurance	a	\$274,828	O&M Composite	\$45,839	O&M Composite	\$0	O&M Composite	\$63,527
58000 General Governmental Allocation	a	\$687,430	O&M Composite	\$117,935	O&M Composite	\$0	O&M Composite	\$173,609
<b>Total Internal Service Charges</b>		<b>\$2,651,894</b>		<b>\$343,997</b>		<b>\$0</b>		<b>\$491,789</b>
<b>Total by City Program:</b>				<b>\$2,509,087</b>		<b>\$122,560</b>		<b>\$2,723,818</b>
Composite Allocation by City Program								
			Demand	\$0	Demand	\$0	Demand	\$1,451,622
			Services	\$2,509,087	Services	\$122,560	Services	\$1,267,315
			Capacity	\$0	Capacity	\$0	Capacity	\$4,881
				\$2,509,087		\$122,560		\$2,723,818
To Allocations Worksheet								
<b>Composite Allocations by Program</b>								
<b>Program</b>	<b>Demand</b>	<b>Services</b>	<b>Capacity</b>					
61410	0.00%	100.00%	0.00%					
61710	0.00%	100.00%	0.00%					
65142	53.29%	46.53%	0.18%					
65144, 65147	64.53%	0.00%	35.47%					
65145	98.61%	0.00%	1.39%					
65146	93.78%	0.24%	5.98%					

City of Redwood City  
 Water Rate Study  
 8B. O&M Allocations

		Redwood City Program - Allocation of O&M Costs						
		Water Supply and Distribution		SFWD Water Purchases		Water Resources Management		
<u>Potable and Recycled Water Expenses</u>	Tbl. 1B	<u>FY 2025-26</u>	<u>Allocation</u>	<u>65144, 65147</u>	<u>Allocation</u>	<u>65145</u>	<u>Allocation</u>	<u>65146</u>
			Demand	65%	Demand	99%	Demand	94%
			Services	0%	Services	0%	Services	0%
			Capacity	35%	Capacity	1%	Capacity	6%
<b>Internal Service Charges</b>								
57000 Communication Services	a	\$71,845	O&M Composite	\$35,921	O&M Composite	\$0	O&M Composite	\$0
57200 Equipment Rentals	a	\$879,966	O&M Composite	\$756,455	O&M Composite	\$0	O&M Composite	\$9,787
57300 Building Maintenance Services	a	\$84,868	O&M Composite	\$18,256	O&M Composite	\$0	O&M Composite	\$41,850
57400 Telephone	a	\$58,424	O&M Composite	\$7,766	O&M Composite	\$0	O&M Composite	\$8,075
57500 Custodial Services	a	\$78,728	O&M Composite	\$25,724	O&M Composite	\$0	O&M Composite	\$23,346
57600 Risk Management Services	a	\$155,347	O&M Composite	\$90,902	O&M Composite	\$0	O&M Composite	\$14,796
57700 Data Management Services	a	\$360,459	O&M Composite	\$166,020	O&M Composite	\$0	O&M Composite	\$55,862
57800 Workers Comp Insurance	a	\$274,828	O&M Composite	\$130,177	O&M Composite	\$0	O&M Composite	\$35,285
58000 General Governmental Allocation	a	\$687,430	O&M Composite	\$320,758	O&M Composite	\$0	O&M Composite	\$75,128
<b>Total Internal Service Charges</b>		<b>\$2,651,894</b>		<b>\$1,551,978</b>		<b>\$0</b>		<b>\$264,129</b>
			<b>Total by City Program:</b>	<b>\$9,951,291</b>		<b>\$26,695,000</b>		<b>\$1,916,272</b>
<i>Composite Allocation by City Program</i>								
			Demand	\$6,421,938	Demand	\$26,325,000	Demand	\$1,797,098
			Services	\$0	Services	\$0	Services	\$4,639
			Capacity	\$3,529,353	Capacity	\$370,000	Capacity	\$114,534
				<u>\$9,951,291</u>		<u>\$26,695,000</u>		<u>\$1,916,272</u>

City of Redwood City  
 Water Rate Study  
 8C. Fire Service Allocations

**Allocation of Fire Flow Demand Costs Public Versus Private**

Service Line	Count	Demand Factor	Equivalent Connections	Allocation
<u>Hydrants</u>				
6"	2,385	111.31	265,477	80.7%
<u>Existing Private Service Lines</u>				
1"	0	1.00	0	
2"	170	6.19	1,052	
3"	30	17.98	539	
4"	146	38.32	5,595	
6"	183	111.31	20,370	
8"	126	237.21	29,888	
10"	8	426.58	3,413	
12"	4	689.04	2,756	
	663		63,613	19.3%
<b>Total</b>	<b>3,048</b>		<b>329,090</b>	<b>100.0%</b>

Asset Type	Values of Assets	Value Allocation	Fire Flow Demand <sup>1</sup>	Max Day Demand <sup>2</sup>
Pressure <sup>1</sup>	\$9,701,974	77%	52%	48%
Storage <sup>2</sup>	\$2,827,336	23%	16%	84%
	\$12,529,310	100%		

**Allocation of Water Distribution 43.7% 56.3%**

<sup>1</sup>Allocation of fire flow and maximum day demand calculated based on Tab in 2011 City of Redwood City Water System Master Plan

<sup>2</sup>Allocation of fire flow and maximum day demand calculated based on Tab in 2011 City of Redwood City Water System Master Plan

Demand Type	Public Fire Demand	Private Fire Demand	Max Day Demand <sup>2</sup>
Fire Flow Demand	80.7%	19.3%	
<b>Allocation of Water Distrib.</b>	<b>35.3%</b>	<b>8.5%</b>	<b>56.3%</b>

City of Redwood City  
 Water Rate Study  
 9. Water Use Charges

Consumption Charge Cost of Service	Demand
Operations & Maintenance	\$36,969,410
Capital Expenses (PayGo)	\$0
Non-Operating Revenue	\$0
Transfers to/(from) Reserves	(\$3,804,392)
<b>Total Consumption Charge COS</b>	<b>\$33,165,018</b>
<b>Net Consumption Charge</b>	<b>\$33,165,018</b>
<b>Annual water use (hcf)</b>	<b>3,611,875</b>
<b>Consumption Charge (\$ per hcf)</b>	<b>\$9.18</b>

value not rounded

Units of Service - Annual Demand (hcf)	
Single Family	1,660,000
Non-Residential	1,951,875
	<b>3,611,875</b>

46%

Components of Rate Structure	Revenue at Current Rates		Cost of Service FY 2025-26		Difference COS Minus Current	
<b>Single Family</b>						
Water Use Charge Revenue	\$14,300,730	60.0%	\$15,242,481	58.7%	\$941,752	6.6%
Fixed Service Charge Revenue	\$9,546,588	40.0%	\$10,741,466	41.3%	\$1,194,878	12.5%
<b>Subtotal - Single Family</b>	<b>\$23,847,318</b>	<b>100.0%</b>	<b>\$25,983,947</b>	<b>100.0%</b>	<b>\$2,136,630</b>	<b>9.0%</b>
<b>Commercial/Multi Family</b>						
Water Use Charge Revenue	\$16,532,381	65.8%	\$17,922,536	68.8%	\$1,390,156	8.4%
Fixed Service Charge Revenue	\$8,589,272	34.2%	\$8,137,088	31.2%	(\$452,184)	-5.3%
<b>Subtotal - Commercial</b>	<b>\$25,121,653</b>	<b>100.0%</b>	<b>\$26,059,624</b>	<b>100.0%</b>	<b>\$937,971</b>	<b>3.7%</b>
<b>Private Fire Service</b>						
Fixed Service Charge Revenue	\$494,525		\$906,795		\$412,270	83.4%
<b>Total</b>						
Water Use Charge Revenue	\$30,833,111	62.3%	\$33,165,018	62.6%	\$2,331,907	7.6%
Fixed Service Charge Revenue	\$18,630,385	37.7%	\$19,785,349	37.4%	\$1,154,964	6.2%
<b>Total</b>	<b>\$49,463,496</b>	<b>100.0%</b>	<b>\$52,950,366</b>	<b>100.0%</b>	<b>\$3,486,871</b>	<b>7.0%</b>

City of Redwood City  
 Water Rate Study  
 10. Fixed Service Charges

Services and EMU Summary

Applicable Service Size	Single Family Services	Multi Family Services	Res Irr Services	Res Recycled Services	Comm Recycled Services	Commercial Services	Comm Irr Services	Services	Meter Ratings (gpm)	Capacity Multiplier	EMUs	
5/8" Meters	19,380	871	30	0	0	852	30	a	b	c = b ÷ 20	a * c	
3/4" Meters	0	82	12	0	0	77	16	21,163	20	1.00	21,163	
1" Meters	0	337	37	0	2	273	95	187	30	1.50	281	
1.5" Meters	0	116	37	0	2	176	125	744	50	2.50	1,860	
2" Meters	0	245	111	0	2	299	142	456	100	5.00	2,280	
3" Meters	0	40	2	0	14	140	29	799	160	8.00	6,392	
4" Meters	0	21	3	0	3	41	4	225	435	21.75	4,894	
6" Meters	0	0	0	0	0	6	1	72	750	37.50	2,700	
8" Meters	0	1	0	0	0	3	0	4	1600	80.00	560	
10" Meters	0	0	0	0	0	3	0	3	2800	140.00	560	
<b>Total Accounts/DUs</b>	<b>19,380</b>	<b>1,713</b>	<b>232</b>	<b>0</b>	<b>23</b>	<b>1,870</b>	<b>442</b>	<b>23,660</b>			<b>41,319</b>	
										<b>Total EMUs</b>		
										<b>c = a * b</b>		
<b>Fireline Services (diam. Line in inch)</b>										<b>Private Fire Services Demand Factor</b>		<b>EFUs</b>
2"		170						170	6.19	1,052		
3"		30						30	17.98	539		
4"		146						146	38.32	5,595		
6"		183						183	111.31	20,370		
8"		126						126	237.21	29,888		
10"		8						8	426.58	3,413		
12"		4						4	689.04	2,756		
								<b>667</b>	<b>Total EFUs</b>	<b>63,613</b>		
<b>Customer + Public Fire Protection Units Costs</b>						<b>\$5,541,799</b>	<b>Private Fire Unit Costs</b>		<b>\$754,849</b>	<b>Units Costs</b>	<b>\$13,488,700</b>	
Total Services/DU + Private Fireline Services						<b>24,327</b>						
per Service/DU						<b>\$227.80</b>	per EFU		<b>\$11.87</b>	per EMU	<b>\$326.45</b>	
Monthly						<b>\$18.98</b>	Monthly		<b>\$0.99</b>	Monthly	<b>\$27.20</b>	

Based on AWWA gpm ratings

Commercial Connections (Potable Only) 1,870  
 Multi Family Connections (Potable Only) 1,713

Service Charge Component Calculation

FY 2024-25

Applicable Service Size	% of Meters	Service Component (\$/mo.)	Capacity Component			COS		Total		
			\$/EMU	Capacity Multiplier	Capacity Total	Service Charges (\$/mo.)	Current Charge	\$ Difference		
		a	b	c	d = b * c	e = a + d	g	h = e - f		
5/8" Meters	89.4%	\$18.98	\$27.20	1.00	\$27.20	\$46.19	\$41.05	\$5.14	13%	
3/4" Meters	0.8%	\$18.98	\$27.20	1.50	\$40.81	\$59.79	\$56.34	\$3.45	6%	
1" Meters	3.1%	\$18.98	\$27.20	2.50	\$68.01	\$86.99	\$86.92	\$0.07	0%	
1.5" Meters	1.9%	\$18.98	\$27.20	5.00	\$136.02	\$155.00	\$163.38	(\$8.38)	-5%	
2" Meters	3.4%	\$18.98	\$27.20	8.00	\$217.63	\$236.62	\$255.13	(\$18.51)	-7%	
3" Meters	1.0%	\$18.98	\$27.20	21.75	\$591.69	\$610.68	\$675.67	(\$64.99)	-10%	
4" Meters	0.3%	\$18.98	\$27.20	37.50	\$1,020.16	\$1,039.14	\$1,157.38	(\$118.24)	-10%	
6" Meters	0.0%	\$18.98	\$27.20	80.00	\$2,176.34	\$2,195.32	\$2,457.21	(\$261.89)	-11%	
8" Meters	0.0%	\$18.98	\$27.20	140.00	\$3,808.59	\$3,827.58	\$4,292.28	(\$464.70)	-11%	
10" Meters	0.0%	\$18.98	\$27.20	210.00	\$5,712.89	\$5,731.87	\$6,433.20	(\$701.33)	-11%	

City of Redwood City  
 Water Rate Study  
 10. Fixed Service Charges

**COS Revenue**

Applicable Service Size	SF Residential Services	Annual Revenue	MF Residential Services	Annual Revenue	Commercial Services	Annual Revenue	Recycled Services	Annual Revenue	Irrigation Services	Annual Revenue	Total
5/8" Meters	19,380	\$10,741,466	871	\$482,756	852	\$472,225	0	\$0	60	\$33,255	\$11,729,703
3/4" Meters	0	\$0	82	\$58,833	77	\$55,246	0	\$0	28	\$20,089	\$134,169
1" Meters	0	\$0	337	\$351,805	273	\$284,993	2	\$2,088	132	\$137,799	\$776,685
1.5" Meters	0	\$0	116	\$215,767	176	\$327,370	2	\$3,720	162	\$301,329	\$848,187
2" Meters	0	\$0	245	\$695,656	299	\$848,984	2	\$5,679	253	\$718,371	\$2,268,689
3" Meters	0	\$0	40	\$293,124	140	\$1,025,935	14	\$102,594	31	\$227,171	\$1,648,824
4" Meters	0	\$0	21	\$261,864	41	\$511,258	3	\$37,409	7	\$87,288	\$897,819
6" Meters	0	\$0	0	\$0	6	\$158,063	0	\$0	1	\$26,344	\$184,407
8" Meters	0	\$0	1	\$45,931	3	\$137,793	0	\$0	0	\$0	\$183,724
10" Meters	0	\$0	0	\$0	3	\$206,347	0	\$0	0	\$0	\$206,347
	19,380	\$10,741,466	1,713	\$2,405,736	1,870	\$4,028,215	23	\$151,489	674	\$1,551,647	\$18,878,554

Private Fire Service Line Size (in)	Service Annual Proposed Rate	Private Fire Service Capacity Multiplier	Capacity Annual Proposed Rate	Total Proposed Rate	Monthly Proposed Rate	Current Rates	% Change	Services	Annual Revenue	
	a	b	c	d = b * c	e = a + d	g	h = e - f			
1"	\$227.80	\$11.87	1.00	\$11.87	\$239.67	\$19.97	\$18.49	8.0%	0	\$0
2"	\$227.80	\$11.87	6.19	\$73.46	\$301.26	\$25.10	\$36.98	-32.1%	170	\$51,214
3"	\$227.80	\$11.87	17.98	\$213.37	\$441.18	\$36.76	\$55.47	-33.7%	30	\$13,235
4"	\$227.80	\$11.87	38.32	\$454.71	\$682.51	\$56.88	\$73.96	-23.1%	146	\$99,647
6"	\$227.80	\$11.87	111.31	\$1,320.84	\$1,548.65	\$129.05	\$110.94	16.3%	183	\$283,402
8"	\$227.80	\$11.87	237.21	\$2,814.75	\$3,042.56	\$253.55	\$147.92	71.4%	126	\$383,362
10"	\$227.80	\$11.87	426.58	\$5,061.90	\$5,289.70	\$440.81	\$184.90	138.4%	8	\$42,318
12"	\$227.80	\$11.87	689.04	\$8,176.36	\$8,404.16	\$700.35	\$221.88	215.6%	4	\$33,617
									\$906,795	\$906,795
									\$19,785,349	\$19,785,349

**FY 24-25 Current Revenue**

Applicable Service Size	SF Residential Services	Annual Revenue	MF Residential Services	Annual Revenue	Commercial Accounts	Annual Revenue	Recycled Services	Annual Revenue	Irrigation Services	Annual Revenue	Total
5/8" Meters	19,380	\$9,546,588	871	\$429,055	852	\$419,695	0	\$0	60	\$29,556	\$10,424,894
3/4" Meters	0	\$0	82	\$55,439	77	\$52,058	0	\$0	28	\$18,930	\$126,427
1" Meters	0	\$0	337	\$351,504	273	\$284,750	2	\$2,086	132	\$137,681	\$776,022
1.5" Meters	0	\$0	116	\$227,425	176	\$345,059	2	\$3,921	162	\$317,611	\$894,015
2" Meters	0	\$0	245	\$750,082	299	\$915,406	2	\$6,123	253	\$774,575	\$2,446,186
3" Meters	0	\$0	40	\$324,322	140	\$1,135,126	14	\$113,513	31	\$251,349	\$1,824,309
4" Meters	0	\$0	21	\$291,660	41	\$569,431	3	\$41,666	7	\$97,220	\$999,976
6" Meters	0	\$0	0	\$0	6	\$176,919	0	\$0	1	\$29,487	\$206,406
8" Meters	0	\$0	1	\$51,507	3	\$154,522	0	\$0	0	\$0	\$206,029
10" Meters	0	\$0	0	\$0	3	\$231,595	0	\$0	0	\$0	\$231,595
	19,380	\$9,546,588	1,713	\$2,480,994	1,870	\$4,284,561	23	\$167,309	674	\$1,656,409	\$18,135,860

**City of Redwood City  
Water Rate Study  
11. Pass Through Costs**

*Note: Actual SFPUC rate is modeled to demonstrate how water use charges adjust, but has not been recorded.*

<b>Effective Date</b>	<b>Actual SFPUC Rate</b>	<b>SFPUC Rate Adopted in 218 Notice</b>	<b>SFPUC Minus Adopted</b>	<b>Water Use Charges</b>
<b>7/1/2026</b>	\$6.17	\$5.86	\$0.31	\$9.73
		Adjustment for difference		\$0.31
		Adjusted District rate for SFPUC pass-through		\$10.04
<b>7/1/2027</b>	\$6.35	\$5.93	\$0.42	\$10.22
		Adjustment for difference		\$0.42
		Adjusted District rate for SFPUC pass-through		\$10.64
<b>7/1/2028</b>	\$6.65	\$6.23	\$0.42	\$10.73
		Adjustment for difference		\$0.42
		Adjusted District rate for SFPUC pass-through		\$11.15
<b>7/1/2029</b>	\$6.74	\$6.73	\$0.01	\$11.16
		Adjustment for difference		\$0.01
		Adjusted District rate for SFPUC pass-through		\$11.17

- Key
- Rates highlighted in blue were adopted in the 218 and were based on the SFPUC rates in column D.
  - Enter the Actual SFPUC rates when they are adopted by the SFPUC.
  - The difference between the original and adopted SFPUC rates adjust the City's rates, which are shown in green.

**City of Redwood City  
Water Rate Study  
12. Drought Rates**

Stage	Demand Reduction b	Consumption c	Commodity Rate d	Commodity Charge e = c <sub>n</sub> x d	Cost Savings a	Lost Revenue f <sub>n</sub>	Drought Rates h = g ÷ c
0	0%	3,611,875	\$9.18	33,165,018	\$0	\$0	\$0.00
1	10%	3,250,688	\$9.18	29,848,516	(\$2,094,888)	\$1,221,614	\$0.38
2	20%	2,889,500	\$9.18	26,532,014	(\$4,189,775)	\$2,443,228	\$0.85
3	30%	2,528,313	\$9.18	23,215,512	(\$6,284,663)	\$3,664,842	\$1.45
4	40%	2,167,125	\$9.18	19,899,011	(\$8,379,551)	\$4,886,456	\$2.25
5	50%	1,805,938	\$9.18	16,582,509	(\$10,474,439)	\$6,108,070	\$3.38
6	60%	1,444,750	\$9.18	13,266,007	(\$12,569,326)	\$7,329,684	\$5.07

a = Cost of water (\$5.80 per hcf)

Stage	Demand Reduction	Lost Revenue	Consumption	Drought Rates
0	0%	\$0	3,611,875	\$0.00
1	10%	\$1,221,614	3,250,688	\$0.38
2	20%	\$2,443,228	2,889,500	\$0.85
3	30%	\$3,664,842	2,528,313	\$1.45
4	40%	\$4,886,456	2,167,125	\$2.25
5	50%	\$6,108,070	1,805,938	\$3.38
6	60%	\$7,329,684	1,444,750	\$5.07

Stage	Demand Reduction	Surcharge FY 2025-26	Surcharge FY 2026-27	Surcharge FY 2027-28	Surcharge FY 2028-29	Surcharge FY 2029-30
0	0%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1	10%	\$0.38	\$0.40	\$0.42	\$0.44	\$0.46
2	20%	\$0.85	\$0.90	\$0.95	\$1.00	\$1.04
3	30%	\$1.45	\$1.54	\$1.62	\$1.70	\$1.77
4	40%	\$2.25	\$2.39	\$2.51	\$2.64	\$2.75
5	50%	\$3.38	\$3.58	\$3.76	\$3.95	\$4.11
6	60%	\$5.07	\$5.37	\$5.64	\$5.92	\$6.16

City of Redwood City  
Water Rate Study  
13. Proposed Rates

Note: Rates for FY 2028-29 and FY 2029-30 are based on revenue increases in Table 1A

Service Charges							
Customer Class	Current Measurement	Current	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
<b>Single Family Residential</b>	Bi-monthly per DU	\$82.09	\$92.38	\$97.92	\$102.82	\$107.96	\$112.28
<b>Multi Family Residential</b>							
5/8" Meters	Bi-Monthly per Meter	\$82.09	\$92.38	\$97.92	\$102.82	\$107.96	\$112.28
3/4" Meters	Bi-Monthly per Meter	\$112.67	\$119.58	\$126.75	\$133.09	\$139.74	\$145.33
1" Meters	Bi-Monthly per Meter	\$173.83	\$173.98	\$184.42	\$193.64	\$203.32	\$211.45
1.5" Meters	Bi-Monthly per Meter	\$326.76	\$310.00	\$328.60	\$345.03	\$362.28	\$376.77
2" Meters	Bi-Monthly per Meter	\$510.26	\$473.24	\$501.63	\$526.71	\$553.05	\$575.17
3" Meters	Bi-Monthly per Meter	\$1,351.35	\$1,221.36	\$1,294.64	\$1,359.37	\$1,427.34	\$1,484.43
4" Meters	Bi-Monthly per Meter	\$2,314.75	\$2,078.28	\$2,202.98	\$2,313.13	\$2,428.79	\$2,525.94
6" Meters	Bi-Monthly per Meter	\$4,914.42	\$4,390.64	\$4,654.08	\$4,886.78	\$5,131.12	\$5,336.36
8" Meters	Bi-Monthly per Meter	\$8,584.57	\$7,655.16	\$8,114.47	\$8,520.19	\$8,946.20	\$9,304.05
10" Meters	Bi-Monthly per Meter	\$12,866.41	\$11,463.74	\$12,151.56	\$12,759.14	\$13,397.10	\$13,932.98
<b>Commercial</b>							
5/8" Meters	Monthly per Meter	\$41.05	\$46.19	\$48.96	\$51.41	\$53.98	\$56.14
3/4" Meters	Monthly per Meter	\$56.34	\$59.79	\$63.38	\$66.55	\$69.88	\$72.68
1" Meters	Monthly per Meter	\$86.92	\$86.99	\$92.21	\$96.82	\$101.66	\$105.73
1.5" Meters	Monthly per Meter	\$163.38	\$155.00	\$164.30	\$172.52	\$181.15	\$188.40
2" Meters	Monthly per Meter	\$255.13	\$236.62	\$250.82	\$263.36	\$276.53	\$287.59
3" Meters	Monthly per Meter	\$675.67	\$610.68	\$647.32	\$679.69	\$713.67	\$742.22
4" Meters	Monthly per Meter	\$1,157.38	\$1,039.14	\$1,101.49	\$1,156.56	\$1,214.39	\$1,262.97
6" Meters	Monthly per Meter	\$2,457.21	\$2,195.32	\$2,327.04	\$2,443.39	\$2,565.56	\$2,668.18
8" Meters	Monthly per Meter	\$4,292.28	\$3,827.58	\$4,057.23	\$4,260.09	\$4,473.09	\$4,652.01
10" Meters	Monthly per Meter	\$6,433.20	\$5,731.87	\$6,075.78	\$6,379.57	\$6,698.55	\$6,966.49
Water Use Charges							
Single Family Residential							
Current Tiers	FY 2024-25	Proposed Tiers	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Tier 1 (0-10 hcf)	\$6.90	All Water Use	\$9.18	\$9.73	\$10.22	\$10.73	\$11.16
Tier 2 (11-14 hcf)	\$7.89						
Tier 3 (15-20 hcf)	\$10.30						
Tier 4 (21+ hcf)	\$15.59						
Multi Family Residential (including Residential Fire)							
Usage	FY 2024-25	Usage	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
All Water Use	\$8.47	All Water Use	\$9.18	\$9.73	\$10.22	\$10.73	\$11.16
Commercial - Includes Commercial, Industrial, Other, Municipal, Commercial Fire, Landscape Irrigation							
Usage	FY 2024-25	Usage	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
All Water Use	\$8.47	All Water Use	\$9.18	\$9.73	\$10.22	\$10.73	\$11.16
Fire Service Connection:							
	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	
1" Meters	\$18.49	\$19.97	\$21.17	\$22.23	\$23.34	\$24.27	
2" Meters	\$36.98	\$25.10	\$26.61	\$27.94	\$29.34	\$30.51	
3" Meters	\$55.47	\$36.76	\$38.97	\$40.92	\$42.97	\$44.69	
4" Meters	\$73.96	\$56.88	\$60.29	\$63.30	\$66.47	\$69.13	
6" Meters	\$110.94	\$129.05	\$136.79	\$143.63	\$150.81	\$156.84	
8" Meters	\$147.92	\$253.55	\$268.76	\$282.20	\$296.31	\$308.16	
10" Meters	\$184.90	\$440.81	\$467.26	\$490.62	\$515.15	\$535.76	
12" Meters	\$221.88	\$700.35	\$742.37	\$779.49	\$818.46	\$851.20	