ITEM NO.
6.2

RETAIL WATER RATE COST ANALYSIS AND RATE DESIGN STUDY

Report

Abstract

Documentation of the analysis of costs and cost allocations and the development of a unified retail water rate plan for the Santa Clarita Valley Water Agency service area.

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EXECUTIVE SUMMARY

This document is the cost-of-service analysis and rate plan design for the Santa Clarita Valley Water Agency ("Agency") retail rates. The Agency was formed on January 1, 2018, by the merger of Castaic Lake Water Agency and Newhall County Water District pursuant to the Santa Clarita Valley Water Agency Act, Stats. 2017 ch. 833 ("SB 634"). SB 634 also provided for the dissolution of Valencia Water Company and inclusion in the Agency shortly after the inception date. Following the merger, the three existing retail water purveyors became divisions of the Agency and have continued to charge their existing water rates.

This study provides a detailed description of the steps taken to derive the proposed rates. The main objectives of this study were to unify retail water rates in the Santa Clarita Valley where the three previously separate retail water purveyors had different rates; build into retail water rates the new and substantial cost of PFAS extraction from the water supply; provide reasonable levels of funding for pay-as-you-go ("Pay-go") capital projects and planned financing costs of future debt funded capital projects during the rate plan period; while creating equitable and affordable rates for all customers in the service area that proportionately allocate costs of providing water to each parcel based on the parcel's cost of service. The proposed rate plan covers the period FY2021-22 through FY2025-26. In the first year of the rate plan all customers will move to a single set of rates for the variable charge and fixed service charge. A fixed legacy debt charge ("Legacy Debt") will be included on the bills of the Santa Clarita Water Division (SCWD) and Valencia Water Division (VWD) to comply with terms of Senate Bill 634 and ensures that debt service for infrastructure necessary to provide water to the retail purveyors prior to merger will only be paid by customers in the respective service areas. The Newhall Water Division (NWD) did not have any debt so there is no legacy debt charge for these customers. The first year of the rate plan (FY 21/22) has no increase on overall revenue for the Agency. In years 2 through 5 of the rate plan period rates are proposed to be raised to collect an additional 6.5% of revenue each year. Customer impact will vary depending on water use, as 71% of Agency revenue will come from the variable charge. The more water a customer uses, the higher their bill will be.

The proposed uniform retail variable water charges are shown in Table 1. The proposed uniform retail fixed service charges are shown in Table 2. The Legacy Debt fixed charges are shown in Table 3. The projected financial performance of the proposed rate plan is shown in Table 4. This technical report steps through a series of tables and calculations that document assumptions, projections, dates, and calculations that ultimately lead to the proposed allocation of costs of service and development of the proposed rates.

Table 1: Proposed Uniform Variable Charges

Variable Charge: Potable & Recycled Water

Rate per CCF	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
Potable Water Variable Charge	$2.09	$2.22	$2.37	$2.52	$2.68
Recycled Water Variable Charge	$1.67	$1.78	$1.90	$2.02	$2.14

The potable and recycled water variable charges are designed to recover the cost of purchasing or pumping and treating water for its intended use. The charges shown are for each unit sold. Each unit of water is equal to 100 cubic feet ("ccf"), or 748 gallons.

The fixed service charges are set to recover many of the fixed costs of the Agency. The fixed service charge is based on meter connection size. The base meter size is ¾" as this is the most common size in the Agency service area. The use of standard hydraulic capacity ratios for each meter connection size, published by the American Water Works Association ("AWWA") were used to ensure fairness and equitability in the fixed charges for each meter size. The Agency relies on the hydraulic capacity ratios published by the AWWA as these are derived from standard engineering calculations of the amount of water that can flow through a pipe of a certain size. The Agency uses these factors in its planning and designing of the supply system.

Table 2: Proposed Uniform Fixed Service Charges

Meter Size	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
5/8-in	$13.64	$14.52	$15.47	$16.47	$17.54
3/4-in	$18.38	$19.58	$20.85	$22.21	$23.65
1-in	$27.87	$29.69	$31.62	$33.67	$35.86
1 1/2-in	$51.60	$54.96	$58.53	$62.33	$66.39
2-in	$80.08	$85.28	$90.83	$96.73	$103.02
2 1/2-in	$94.32	$100.45	$106.97	$113.93	$121.33
3-in	$146.52	$156.04	$166.18	$176.99	$188.49
4-in	$241.43	$257.13	$273.84	$291.64	$310.60
6-in	$478.72	$509.84	$542.98	$578.27	$615.86
8-in	$763.47	$813.09	$865.94	$922.23	$982.17
10-in	$1,095.67	$1,166.89	$1,242.74	$1,323.51	$1,409.54
12-in	$2,044.82	$2,177.74	$2,319.29	$2,470.04	$2,630.59

The legacy debt charges were developed to ensure that infrastructure costs incurred for the benefit of each of the pre-merger service areas is actually paid by those service areas as described in SB 634. Each of the former retail water purveyors' service areas must be charged for the cost of debt service on debt that was owed by the purveyors at the time of the merger. As part of the effort to keep retail rates as low as possible, prior to this rate design effort, the Agency refinanced all eligible debt. The former NWD customers will not have a Legacy Debt charge as NWD has no debt. Table 3 lists the legacy debt charges for SCWD and VWD for the five-year rate plan period. The calculations of the legacy debt charges for SCWD and VWD are contained later in this report.

Table 3: Proposed Legacy Debt Charges

Meter Size	SCWD	VWD
5/8-in	$6.80	$4.34
3/4-in	$10.20	$6.50
1-in	$17.01	$10.84
1 1/2-in	$34.02	$21.68
2-in	$54.42	$34.69
2 1/2-in	$64.63	$41.20
3-in	$102.05	$65.05
4-in	$170.08	$108.41
6-in	$340.15	$216.83
8-in	$544.24	$346.92
10-in	$782.35	$498.70
12-in	$1,462.65	$932.36

The expected financial performance of the rate plan is shown in Table 4. It is anticipated that Pay-go capital will average approximately $19,300,000 per year of the plan. Later in this report the existing pay-go plan is compared to this level of projected funding and although there are alternative funding mechanisms, it is likely that some of the existing plan will be deferred. The amount of Pay-go funds available for the Capital Improvement Plan is the difference between revenues and expenses.

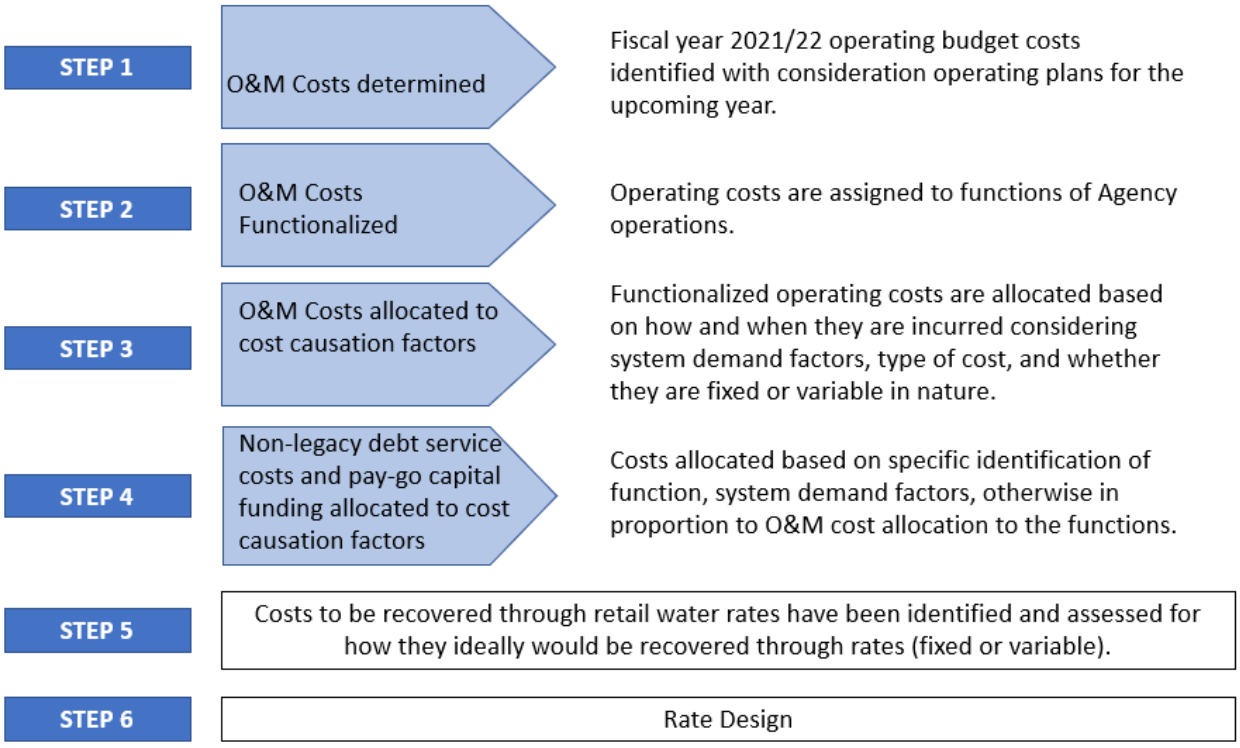
An important metric for the Agency is its Debt Service Coverage Ratio. Existing bond covenant requirements mandate a 1.2 ratio, and this plan projects that the Agency will meet or exceed this ratio.

Table 4: Proposed Revenue Growth and Corresponding Financial Results

	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
Proposed Revenue Growth	**0%**	**6.50%**	**6.50%**	**6.50%**	**6.50%**
Rate Revenues from Variable Charge, Service Charge and Legacy Debt Charge	$84,759,918	$90,245,712	$96,118,830	$103,060,210	$110,541,232
Private Fire Meter Revenues	$620,283	$669,527	$722,743	$780,220	$842,333
Other Operating Revenues	$3,999,700	$4,049,697	$4,100,394	$4,151,802	$4,203,932
Non-Operating Revenues	$28,559,231	$24,912,679	$21,318,227	$22,198,199	$22,979,598
Revenues	**$117,939,132**	**$119,877,616**	**$122,260,194**	**$130,190,431**	**$138,567,095**
O&M Expenses	($77,422,023)	($81,695,597)	($84,919,394)	($88,956,379)	($94,950,263)
Debt Service (non-Legacy Debt)	($8,829,414)	($8,385,580)	($11,896,595)	($13,189,431)	($15,446,774)
Legacy Debt	($8,693,412)	($8,814,719)	($9,579,497)	($9,710,643)	($9,840,625)
Capital PAY-GO Funding	**$22,994,283**	**$20,981,719**	**$15,864,708**	**$18,333,977**	**$18,329,433**
DSCR	**1.66**	**1.60**	**1.36**	**1.40**	**1.38**

The work of cost analysis for rate design is complex and for those reading this report a diagram of the workflow should be helpful. Figure 1 is a summary level guide to the work that was performed starting with identifying the operating costs for the fiscal year beginning on 07/01/2021.

Figure 1: The Flow of Data Analysis in this Report



INTRODUCTION

Guiding Rate Setting Principles

The American Water Works Association's ("AWWA") M1 Manual is a water industry standard for rate making guidelines. California courts have upheld reliance on the AWWA M1 Manual, provided that the rates also comply with the requirements of Proposition 218.

The AWWA M1 Manual states that rates designed should:

- Generate a stable rate revenue stream which, when combined with other sources of funds, is sufficient to meet the financial requirements and goals of the Agency
- Be fair and equitable – that is, they should generate revenue from customer classes which is reasonably in proportion to the cost to provide service to that customer class
- Be responsive to Agency and stakeholder objectives
- Be easy to understand by customers
- Be easy to administer by the Agency
- Encourage efficient use and conservation of water

This cost-of-service analysis/rate plan proposal was completed by Agency staff and is part of the ongoing post-merger integration of the Agency. It is an integral part of the Agency's realizing its goals as reflected in its Mission Statement, Strategic Plan, Financial Plan/Budget, and implementation of SB 634. The results of the study are addressed in detail below.

COST OF SERVICE STUDY

Cost of Service Study Approach

The "base-extra capacity" cost-of-service method published in the AWWA M1 manual was used to perform the Cost of Service ("COS") analysis for the Santa Clarita Valley Water Agency ("Agency"). Under this method operational costs are first allocated to system functions, which are categorized into typical industry standard activities. Next the costs of each function are distributed to appropriate cost causative components. The results of the COS analysis form a reasonable, equitable, basis for designing rates and allocating costs based on each parcel's proportional cost of service. The following flow chart displays a typical COS analysis.

Figure 2: Cost of Service Analysis Flow Chart

Cost Analysis

The costs included in the analysis below have been forecasted for future years based on expectations of change in sales volumes, growth in customer accounts and reasonable assumptions about inflation. Rather than relying only on historic observations of past cost increases alone, staff identified several published indices for specific types of costs. For the purposes of cost forecasting, using published indices in addition to historic information was selected as there is no guarantee that past price observations are indicative of future price changes. The published indices are derived by a level of research and analysis that exceeds what the Agency can accomplish. Table 5 has a list of the sources, factors, and annual amounts of cost escalation for the rate plan period. These are some of the key assumptions of the cost analysis.

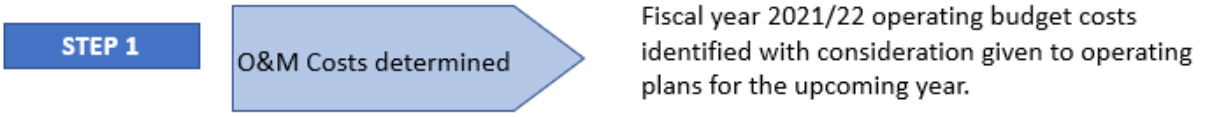
Table 5: Cost Inflation Factors

Expense Inflation Source	Expense Escalation Factors	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
CA Department of Finance/BLS	Overall Inflation Rate	2.5%	2.5%	2.5%	2.4%	2.4%
CA Department of Finance/BLS	Utility/Chemical Inflation Rate	4.4%	4.4%	4.4%	4.4%	4.4%
SCV CAFR	Treatment Inflation Rate	3.3%	3.3%	3.3%	3.3%	3.3%
SCV Water	Pumping and Wells Inflation Rate	3.0%	3.0%	3.0%	3.0%	3.0%
SCV Water	Employee Expenses Inflation Rate	3.0%	3.0%	3.0%	3.0%	3.0%
Construction Equip. & Machinery PPI	Equipment Inflation Rate	1.0%	1.0%	1.0%	1.0%	1.0%
SCV Water	Fuels and Automobile Inflation Rate	3.0%	3.0%	3.0%	3.0%	3.0%
Los Angeles ENR Index	Construction Inflation Rate	2.9%	2.9%	2.9%	2.9%	2.9%

In addition to anticipated cost increases, the largest increase to operating costs during the rate period is PFAS. Table 6 shows that PFAS O&M costs will grow substantially during the rate period as more treatment facilities become operational. PFAS O&M is a new cost to the Agency and in FY2021-22 it will represent over 2.7% of all O&M; this cost will continue to grow during the rate plan period to an expected nearly 9% of all O&M costs in FY2025-26. The PFAS maintenance cost forecast was developed by the consulting firm Kennedy Jenks and is based on the timing of planned PFAS treatment facilities going live as contained in the Technical Memorandum, "The Santa Clarita Valley Water Agency, Groundwater Treatment Implementation Plan (April 2021)". As a result of this growth in costs, the funding for Pay-go capital will be lower than it would be otherwise.

Table 6: The Impact of PFAS on Operating Costs

Description	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
Total O&M Expenses	$77,422,023	$81,695,597	$84,919,394	$88,956,379	$94,950,263
PFAS	$2,039,596	$2,863,956	$4,104,420	$4,688,760	$8,477,865
O&M excluding PFAS	$75,382,427	$78,831,641	$80,814,973	$84,267,620	$86,472,399
PFAS % of O&M Expenses	**2.63%**	**3.51%**	**4.83%**	**5.27%**	**8.93%**



The following analysis begins with a high-level summary of costs and non-rate revenues that serve to reduce the amount of revenue that must be generated from retail rates, Table 7 shows that Operating and Maintenance Expenses ("O&M") for FY21/22 is $77,422,023. These costs will then be broken down by function (Table 8) and assessed for cost causation (Table 11). In addition to the O&M costs, Table 7 shows the debt service and Pay-go capital funding that is necessary. However, these two cost elements are outside the scope of cost causative analysis and are built into the rates separately. These "Other obligations" in Table 7 total $31,349,791 (refer to Tables 15-19 for debt service details and Table 55 for Pay-go capital) bringing the total revenue requirements to $108,771,814 for FY2021/22.

Table 7: Expense and Revenue Summary FY 2021/22

Cost Allocation Summary	Cost of Service
O&M Expenses	$77,422,023
Other Obligations (Debt Service + Pay-Go)	$31,349,791
Total Revenue Requirements	**$108,771,814**
Other Operating Revenues	($3,999,700)
Non-operating Revenues	($28,559,231)
Total Revenue Requirements From Private Fire Meter	($620,283)
Public Fire Hydrant (paid by 1% Prop Tax)	($160,462)
Revenue Requirements from Retail Rates	**$75,432,138**

The "total revenue requirements" are $108,771,814 but this total amount does not need to be collected from retail rates. Table 7 shows that by utilizing $3,999,700 of "Other operating revenues" (refer to Table 52) such as service expansion fees and $28,559,231 of "non-operating revenues" (refer to Table 53) such as 1% property tax, investment revenues, communication, rentals to offset some of the operating costs, the Agency can effectively keep rates lower than they otherwise would be. Table 7 also shows that $620,283 in revenues generated from private fire meters (Table 50) and the use of $160,462 of 1% ad valorem property tax revenues to pay for public fire hydrants prevents the costs associated with those revenues from being included in retail rates. The result from these offsets in costs is the actual amount of retail rate revenue requirements for FY2021/22 of $75,432,138.

Functionalization

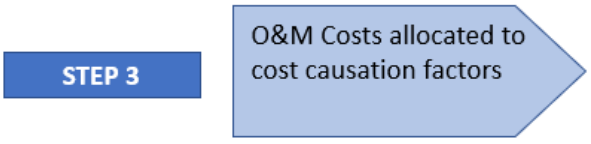
Functionalization is the process of allocating costs to specific provisions of service. The functions of the Agency for tracking costs are:

1. Source of Supply – costs associated with sources of water supply
2. Pumping & Wells – costs associated with general water pumping and energy use
3. Water Quality & Treatment – costs associated with the treatment of water
4. Transmission, Distribution & Maintenance – costs associated with transmitting and distributing water to customers
5. Customer Service – costs associated with billing and customer services
6. Administrative & General – costs associated with administrative and general functions
7. Engineering
8. Water Resources

These functions are the Agency's cost centers. Table 8 provides the O&M expense forecasts for each of the eight Departments for FY2021/22. The amounts at this level are summary level but will be broken down into additional detail later in this report. The source of these figures is the draft budget for the year beginning July 1, 2021. These figures are based on prior year expenditures, expected cost increases, and updated operating, maintenance, and capital project expenditure plans that have been communicated to staff from senior managers throughout the Agency. The sum of the O&M expenses in Table 8 can also be seen in Table 7. "Other Obligations" (debt service and Pay-go) are not functionalized in Table 8 and will be allocated to the Fixed Service and variable charges in proportion to the results of the cost causation analysis that will be discussed in the next section.

Table 8: Functionalization of Operating & Maintenance Costs FY 2021/22

Department	O&M Expenses
Source of Supply	$7,501,112
Pumping & Wells	$15,785,709
Water Quality & Treatment	$6,964,324
Transmission, Distribution & Maintenance	$12,345,787
Engineering	$3,320,355
Customer Accounts	$2,793,157
Administrative & General	$20,941,865
Water Resources	$7,769,713
Total O&M Expenses	**$77,422,023**



Functionalized operating costs are allocated based on how and when they are incurred considering system demand factors, type of cost, and whether they are fixed or variable in nature.

Allocation of Functionalized costs to Cost Causation factors

For the water system to always provide adequate service to its customers, it must be capable of meeting not only annual water volume requirements, but also the peak demand – the maximum rate at which water is consumed during the year. Following cost allocation into the functional categories listed above (Table 8), each functional cost was then distributed amongst cost causative components based on the designed capacity of each facility. Seven cost causation factors commonly used in water cost of service analysis were used:

1. Water Supply – water purchase costs, chemicals, pumping costs
2. Base – delivering water to customers under average demand conditions
3. Maximum Day Demand (MDD) – the costs of delivering water to customers on the day with the highest demand
4. Peaking Hourly Demand (PHD) – the costs of delivering water to customers in the hour with the highest demand on the highest day
5. Meters - the costs of servicing meters
6. Customer Service – billing and other customer service-related costs
7. Fire Protection – the costs of providing water service for public and private fire meters

The term "facility" is used in the analysis to group assets of similar purpose. The list of facilities used in the analysis are: Source of Supply; Pumping and Wells; Water Quality and Treatment; Transmission, Distribution, and Mains; Engineering; Customer Accounts; Administration and General; and Water Resources. Each water service facility designed solely to meet average daily demand ("Base", "Base Demand") should have 100% of its cost assigned to the base cost component. Facilities designed to meet the extra demand requirements should be assigned to Maximum Day Demand ("MDD") and Peaking Hourly Demand ("PHD") in proportion to the portion of that facility designed to serve MDD and PHD.

Daily production data was not produced by the previously separate three retail purveyors. When daily production data is not available, the methodology approved by the AWWA for calculating the MDD is to divide the maximum month usage by the number of days in that month. PHD is calculated by multiplying MDD by a peaking factor of 1.5 (the lowest factor recommended by the California State Water Resources Control Board's Division of Drinking Water). This methodology allows for using the best data available to SCV Water to form reasonable assumptions and projections for rates.

The California State Water Resources Control Board's Division of Drinking Water regulates public water systems; oversees water recycling projects; permits water treatment devices; and supports and promotes water system security.
Table 9 lists the month-billed production data and the results of the calculations. The actual calculations are provided below Table 9.

Table 9: Month-Billed Production Data, Base Demand, MDD, and PHD

Billed Month	Total Billed Usage in ccf
July	2,586,941
August	3,030,653
September	3,076,110
October	2,693,247
November	2,477,943
December	1,778,815
January	1,016,897
February	1,355,301
March	1,632,982
April	1,138,554
May	1,767,607
June	2,389,381
Average Month	2,078,703
Max Month	3,076,110
Avg-Day Demand	68,341
Max-Day Demand (MDD)	99,229
Peaking Hourly Demand (PHD)	148,844

The source of the "Billed Month" data is the Agency's Customer Billing Systems.

Table 10: Monthly Demand

Billed Month	Total Billed Usage in ccf
July	2,586,941
August	3,030,653
September	3,076,110
October	2,693,247
November	2,477,943
December	1,778,815
January	1,016,897
February	1,355,301
March	1,632,982
April	1,138,554
May	1,767,607
June	2,389,381
Total	**24,944,431**

Total Annual Water Usage (in ccf) = 24,944,431

Average Month = Sum of the monthly demands in the fiscal year divided by 12 = 2,078,703 ccf.

Base Demand = Average Day Demand: The average day demand is calculated by dividing the total annual water usage by 365 days.

Base Demand = 24,944,431 ÷ 365 = 68,341

Maximum Day Demand = Maximum Month Demand ÷ 31: The maximum day demand is calculated by dividing the total water usage during the maximum month by the number of days in that month.

Maximum total water usage of the month of August (billed in September) is 3,076,110 ccf ÷ 31 days of August = 99,229 (ccf)

Peak Hourly Demand = Maximum Day Demand X 1.5: The peak hourly demand is calculated by multiplying the maximum day demand by a peaking factor of 1.5.

Peak Hourly Demand = 99,229 X 1.5 = 148,844

The formulas used for allocating costs between Base and Maximum Day are:

$$\text{Base Demand} = \frac{\text{Average Day Demand (ccf/Day)}}{\text{Maximum Day Demand (ccf/Day)}}$$

Base Demand Fraction = 68,341 ÷ 99,229 = 68.9%

$$\text{Maximum Day Demand} = \frac{\text{Maximum Day Demand - Average Demand (ccf/ Day)}}{\text{Maximum Day Demand (ccf/Day)}}$$

Maximum Day Demand Fraction = (99,229 – 66,8341) ÷ 99,229 = 31.1%

The formulas used for allocations of costs between Base, Maximum Day and Peak Hourly Demand are:

$$\text{Base Demand (\%)} = \frac{\text{Average Day Demand (ccf/Day)}}{\text{Peak Hour Demand (ccf/Day)}}$$

Base Demand Percentage = (66,374 ÷ 148,844) = 45.9%

$$\text{Maximum Day Demand (\%)} = \frac{\text{Maximum Day Demand - Average Demand (ccf/ Day)}}{\text{Peak Hour Demand (ccf/Day)}}$$

Maximum Day Demand Percentage = (99,229 – 66,8341) ÷ 148,844= 20.8%

$$\text{Peak Hourly Demand (\%)} = \frac{\text{Peak Hour Demand - Maximum Day Demand (ccf/Day)}}{\text{Peak Hour Demand (ccf/Day)}}$$

Peak Hourly Demand = (148,844 - 99,229) ÷ 148,844= 33.3%

Using the functionalized operation and maintenance cost data in Table 8 and allocating those costs using the calculations from Table 9, functionalized costs were allocated to the Agency's facilities based on cost causation. The result of this work is summarized in Table 11. Table 11 includes the facilities (cost causation factors) that are either fixed or variable. For each of the facilities, the main cost components of the function are identified. For example, in the function "Pumping & Wells", purchased power is a major expense ($8,848,299) and is shown as a standalone item of the function. Purchased power is identified as a variable cost of the facility "Source of Supply". The remaining costs of a facility are listed in Table 11 as "other" and also allocated between fixed cost and variable cost. Detailed cost components of the eight functional categories in Table 11 are included in Tables 11A through 11Q.

Table 11: Functionalized Costs Allocated to Facilities

FY 2021-2022

O&M Cost Allocation	Total by Function	Source of Supply	Base	MDD	PHD	Meters	Customer Service	Public Fire Protection Service
Source of Supply	**$7,501,112**	**$7,501,112**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Fixed	$0	$0	$0	$0	$0	$0	$0	$0
Variable	$7,501,112	$7,501,112	$0	$0	$0	$0	$0	$0
Pumping & Wells	**$15,785,709**	**$8,848,299**	**$3,185,273**	**$1,439,667**	**$2,312,470**	**$0**	**$0**	**$0**
P-Purchased Power	$8,848,299	$8,848,299	$0	$0	$0	$0	$0	$0
Fixed	$0	$0	$0	$0	$0	$0	$0	$0
Variable	$8,848,299	$8,848,299	$0	$0	$0	$0	$0	$0
P-Other	$6,937,410	$0	$3,185,273	$1,439,667	$2,312,470	$0	$0	$0
Fixed	$6,937,410	$0	$3,185,273	$1,439,667	$2,312,470	$0	$0	$0
Variable	$0	$0	$0	$0	$0	$0	$0	$0
Water Quality & Treatment	**$6,964,324**	**$1,374,520**	**$2,566,527**	**$1,160,009**	**$1,863,268**	**$0**	**$0**	**$0**
WT-Chemicals	$1,374,520	$1,374,520	$0	$0	$0	$0	$0	$0
Fixed	$0	$0	$0	$0	$0	$0	$0	$0
Variable	$1,374,520	$1,374,520	$0	$0	$0	$0	$0	$0
WT-Other	$5,589,804	$0	$2,566,527	$1,160,009	$1,863,268	$0	$0	$0
Fixed	$5,589,804	$0	$2,566,527	$1,160,009	$1,863,268	$0	$0	$0
Variable	$0	$0	$0	$0	$0	$0	$0	$0
Transmission, Distribution & Maintenance	**$12,345,787**	**$0**	**$8,208,370**	**$3,709,986**	**$367,731**	**$0**	**$0**	**$59,699**
T&D-Storage	$154,395	$0	$106,334	$48,061	$0	$0	$0	$0
Fixed	$154,395	$0	$106,334	$48,061	$0	$0	$0	$0
Variable	$0	$0	$0	$0	$0	$0	$0	$0
T&D-Transmission Mains	$0	$0	$0	$0	$0	$0	$0	$0
Fixed	$0	$0	$0	$0	$0	$0	$0	$0
Variable	$0	$0	$0	$0	$0	$0	$0	$0
T&D-Distribution Mains	$1,103,193	$0	$506,525	$228,937	$367,731	$0	$0	$0
Fixed	$1,103,193	$0	$506,525	$228,937	$367,731	$0	$0	$0
Variable	$0	$0	$0	$0	$0	$0	$0	$0
T&D-Hydrants	$59,699	$0	$0	$0	$0	$0	$0	$59,699
Fixed	$59,699	$0	$0	$0	$0	$0	$0	$59,699
Variable	$0	$0	$0	$0	$0	$0	$0	$0
T&D-Other	$11,028,499	$0	$7,595,511	$3,432,988	$0	$0	$0	$0
Fixed	$10,813,802	$0	$7,447,645	$3,366,157	$0	$0	$0	$0
Variable	$214,697	$0	$147,865	$66,832	$0	$0	$0	$0
Engineering	**$3,320,355**	$0	$1,524,523	$689,048	$1,106,785	$0	$0	$0
Fixed	$3,320,355	$0	$1,524,523	$689,048	$1,106,785	$0	$0	$0
Variable	$0	$0	$0	$0	$0	$0	$0	$0
Customer Accounts	**$2,793,157**	**$0**	**$0**	**$0**	**$0**	**$367,769**	**$2,425,388**	**$0**
C-Meters and Services	$367,769	$0	$0	$0	$0	$367,769	$0	$0
Fixed	$367,769	$0	$0	$0	$0	$367,769	$0	$0
Variable	$0	$0	$0	$0	$0	$0	$0	$0
C-Billing	$2,425,388	$0	$0	$0	$0	$0	$2,425,388	$0
Fixed	$2,425,388	$0	$0	$0	$0	$0	$2,425,388	$0
Variable	$0	$0	$0	$0	$0	$0	$0	$0
Administrative and General	**$20,941,865**	**$7,448,115**	**$6,808,862**	**$3,077,442**	**$2,216,008**	**$179,374**	**$1,182,946**	**$29,117**
A&G-Salaries	$5,717,907	$2,033,612	$1,859,072	$840,256	$605,053	$48,976	$322,988	$7,950
Fixed	$5,717,907	$2,033,612	$1,859,072	$840,256	$605,053	$48,976	$322,988	$7,950
Variable	$0	$0	$0	$0	$0	$0	$0	$0
A&G-Employee Benefits	$3,391,755	$1,206,300	$1,102,767	$498,424	$358,906	$29,051	$191,591	$4,716
Fixed	$3,391,755	$1,206,300	$1,102,767	$498,424	$358,906	$29,051	$191,591	$4,716
Variable	$0	$0	$0	$0	$0	$0	$0	$0
A&G-Insurance	$1,430,712	$508,842	$465,170	$210,246	$151,394	$12,255	$80,817	$1,989
Fixed	$1,430,712	$508,842	$465,170	$210,246	$151,394	$12,255	$80,817	$1,989
Variable	$0	$0	$0	$0	$0	$0	$0	$0
A&G-Other	$10,401,491	$3,699,360	$3,381,853	$1,528,517	$1,100,656	$89,092	$587,551	$14,462
Fixed	$10,401,491	$3,699,360	$3,381,853	$1,528,517	$1,100,656	$89,092	$587,551	$14,462
Variable	$0	$0	$0	$0	$0	$0	$0	$0
Water Resources	**$7,769,713**	**$7,769,713**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Fixed	$4,311,877	$4,311,877	$0	$0	$0	$0	$0	$0
Variable	$3,457,837	$3,457,837	$0	$0	$0	$0	$0	$0
O&M Total	**$77,422,023**	**$32,941,760**	**$22,293,556**	**$10,076,152**	**$7,866,263**	**$547,143**	**$3,608,334**	**$88,817**

Source of Supply costs contain the costs associated with the Buena Vista-Rosedale Rio Bravo Supply of water as well as the supply contracts that are used to "firm" up the supply of water needed to provide to the Agency customers (Table 11A). Both are variable in nature as the amount spent is dependent upon the quantity of water purchased or secured for supply.

Table 11 A: Source of Supply

Source of Supply	Fixed Cost	Variable Cost
BVRRB Supply	$0	$4,417,409
Firming Programs	$0	$3,083,703
	$0	**$7,501,112**

The Pumping & Wells function has been broken down in to two categories Pumping & Wells and Other costs. Table 11B shows that the Agency is expecting to spend over $8.8 million in purchased power for FY2021-22. This cost was broken down by use such as general (general facility lighting, pumping, sewer, treatment plant, and wells.

Table 11 B: Pumping & Wells Purchased Power

Pumping & Wells - Purchased Power	Fixed Cost	Variable Cost
Power Purchased	$0	$69,729
Power Purchased - Pumping	$0	$8,160,827
Power Purchased - Sewer	$0	$10,330
Power Purchased - Treatment Plant	$0	$433,867
Power Purchased - Wells	$0	$173,547
	$0	**$8,848,299**

The Other costs associated with Pumping & Wells include Labor, labor benefits, maintenance and repair for pumping equipment and wells, operating controls, professional services, and the largest item, PFAS treatment costs of the N Wells. These costs are listed in Table 11C.

Table 11 C: Pumping & Wells Other Costs

Pumping & Wells - Other	Fixed Cost	Variable Cost
Pumping and Wells - Benefits	$784,432	$0
Pumping and Wells - Labor	$1,447,002	$0
Maintenance & Repair - Pumping Equipment	$580,615	$0
Maintenance & Repair - Wells	$905,499	$0
Operation Controls	$205,902	$0
Operation Miscellaneous	$56,370	$0
Professional Services - Outside Services & Consulting	$917,995	$0
PFAS Treatment Costs - N Wells	$2,039,596	$0
	$6,937,410	**$0**

Table 11D lists Chemicals and an expense of $1,374,520 for the fiscal year beginning July 1, 2021. Chemicals are a key component of water treatment and includes a variety of items including caustic soda, ammonia, chlorine, and polyelectrolytes. The amount expended on these types of costs is dependent on matters including the volume of water our customers use and water quality testing results.

Table 11 D: Water Quality & Treatment - Chemicals

Water Quality & Treatment - Chemicals	Fixed Cost	Variable Cost
Chemicals	$0	$1,374,520
	$0	**$1,374,520**

The other costs associated with Water Quality & Treatment are for personnel, consulting, regulatory fees, and various costs of running a water quality and treatment laboratory. These costs are listed in Table 11E.

Table 11 E: Water Quality & Treatment - Other

Water Quality & Treatment - Other	Fixed Cost	Variable Cost
Water Quality and Treatment - Benefits	$1,532,438	$0
Water Quality and Treatment - Labor	$2,810,856	$0
Backflow Prevention	$1,025	$0
Laboratory Expense	$761,105	$0
Maintenance & Repair - Treatment Equipment	$51,650	$0
Miscellaneous Expense (testing samples, gases)	$159,082	$0
Professional Services - Outside Services & Consulting	$81,992	$0
Regulatory Fees	$191,656	$0
	$5,589,804	**$0**

Transmission, Distribution & Mains is the function of moving and storing water at the Agency. Table 11F shows that $154,395 has been identified as the expected expenditure on Tanks for ongoing maintenance work in the fiscal year beginning July 1, 2021.

Table 11 F: Transmission, Distribution & Mains - T&D Storage

Transmission, Distribution & Maintenance - Storage	Fixed Cost	Variable Cost
Maintenance & Repairs - Tanks	$154,395	$0
	$154,395	**$0**

Maintenance and repairs in the Transmission, Distribution & Mains function is estimated at $1,103,193, as listed in Table 11G, based on planned maintenance including costs associated with asphalt and concrete patch work to repair leaks and welding.

Table 11 G: Transmission, Distribution & Mains- Maintenance & Repairs

Transmission, Distribution & Maintenance - Distribution Maintenance	Fixed Cost	Variable Cost
Maintenance & Repairs - Mains	$1,103,193	$0
	$1,103,193	**$0**

Table 11H lists the recurring level of expenditure for maintenance and repairs on hydrants. This work is comprised of testing the valves.

Table 11 H: Transmission, Distribution & Mains - Hydrants

Transmission, Distribution & Maintenance - Hydrant	Fixed Cost	Variable Cost
Maintenance & Repairs - Hydrants	$59,699	$0
	$59,699	**$0**

Other expenses of the Transmission, Distribution & Mains function (Table 11I), include personnel costs, outside services including consulting, sewer maintenance, costs of maintaining the workshops and yards, waste disposal, small parts and materials, and small tools and tool rentals. The only item that has been designated as a variable cost, tools, and supplies, represents planned tool rentals and small tool replacements and additions.

Table 11 I: Transmission, Distribution & Mains - Other

Transmission, Distribution & Maintenance - Other	Fixed Cost	Variable Cost
Transmission, Distribution & Maintenance - Benefits	$3,144,516	$0
Transmission, Distribution & Maintenance - Labor	$5,556,059	$0
Maintenance & Repairs - Services	$596,994	$0
Maintenance & Repairs - Sewer	$30,879	$0
Maintenance & Repairs - Shop and Yard	$61,758	$0
Miscellaneous - Other (Waste Disposal, rentals)	$46,121	$0
Parts & Materials	$302,930	$0
Professional Services - Outside Services & Consulting	$1,074,546	$0
Tools and Supplies	$0	$214,697
	$10,813,802	**$214,697**

Table 11J lists the costs of the Engineering function of the Agency. Due to the large volume of capital projects, both under construction and in the planning and design stages, the Agency utilizes professional consulting services and temporary personnel to keep the projects on track. Total Engineering expenses planned for the fiscal year beginning July 1, 2021 are $3,320,355.

Table 11 J: Engineering

Engineering	Fixed Cost	Variable Cost
Engineering - Benefits	$761,623	$0
Engineering - Labor	$1,523,776	$0
Professional Services - Outside Services & Consulting	$908,266	$0
Temporary Personnel	$126,690	$0
	$3,320,355	**$0**

Table 11K lists the customer accounts-meters and services costs which are comprised of non-warranty meter and register replacements. The amount is listed as fixed as it is a close approximation of the recurring annual expenditure of this nature.

Table 11 K: Customer Accounts - Meters & Services

Customer Accounts - Meter and Services	Fixed Cost	Variable Cost
Maintenance & Repairs - Meters	$367,769	$0
	$367,769	**$0**

Table 11L lists the customer accounts-billing costs. The amounts include expected labor and benefits costs, billing and collecting costs including system maintenance, integration, and postage, and an amount for uncollectable accounts.

Table 11 L: Customer Accounts - Billing

Customer Accounts - Billing	Fixed Cost	Variable Cost
Customer Accounts - Benefits	$552,378	$0
Customer Accounts - Labor	$1,086,674	$0
Billing & Collecting	$723,920	$0
Uncollectable Accounts	$62,416	$0
	$2,425,388	**$0**

Table 11M contains the personnel costs for the Administrative & General function of the Agency. This function includes the General Manager and support staff ("Management" line item of the Table), and the labor for the Finance, Administration, and Information Technology divisions.

Table 11 M: Administrative & General - Salaries

Administrative & General- Salaries	Fixed Cost	Variable Cost
General & Administrative - Labor	$4,995,980	$0
Payroll Taxes (UEI)	$8,199	$0
Management - Labor	$713,728	$0
	$5,717,907	**$0**

Table 11N lists the Administrative & General function's employee benefits costs. These include the payment of all Agency retiree benefits as well as active employee benefits for the General Manager and staff, and the Finance, Administration, and Information Technology division. The total fixed expenditure for the year beginning July 1, 2021 is forecast at $3,391,755.

Table 11 N: Administrative & General - Employee Benefits

Administrative & General- Employee Benefits	Fixed Cost	Variable Cost
General & Administrative - Benefits	$2,516,632	$0
Retiree Benefits	$538,840	$0
Management - Benefits	$336,283	$0
	$3,391,755	**$0**

Table 11O lists the premiums for both liability and earthquake/flood insurance for the Agency. This forecast for the year beginning July 1, 2021 is based on historical costs.

Table 11 O: Administrative & General - Insurance

Administrative & General- Insurance	Fixed Cost	Variable Cost
Earthquake/Flood Insurance	$61,494	$0
Liability/Property Insurance	$1,369,218	$0
	$1,430,712	**$0**

Table 11P are the remaining expenses of the Administrative & General function for the Agency. This category has many of the operating expenses such as utilities and refuse disposal, office supplies, rent, financial auditing services, licenses and fees, environmental compliance tracking technology, Microsoft 365 licenses. These common costs are recurring, so they are considered fixed costs.

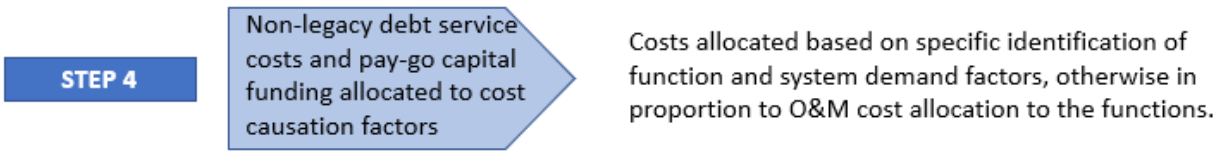
Table 11 P: Administrative & General - Other

Administrative & General- Other	Fixed Cost	Variable Cost
Parts & Material	$121,172	$0
Professional Services - Outside Services & Consulting	$620,098	$0
Security/Alarm Services	$143,486	$0
Capital Equipment to CIP	($90,879)	$0
Dues and Memberships	$231,474	$0
Employee Expense	$127,926	$0
Employee Travel	$127,585	$0
Internal Relations	$58,127	$0
Maintenance & Repair - Office Equipment	$60,206	$0
Miscellaneous Expenses (bank fees, special projects)	$240,973	$0
Office Supplies	$188,955	$0
Overhead Allocation	($622,738)	$0
Professional Development - Education/Training	$373,490	$0
Professional License/Fees	$102,490	$0
Professional Services - Accounting	$84,032	$0
Professional Services - Outside Services & Consulting	$619,354	$0
Publications	$19,492	$0
Recruitment	$30,747	$0
Rent/HOA Dues	$57,599	$0
Safety Training and Equipment	$175,623	$0
Supplies and Services	$311,311	$0
Temporary Personnel	$257,500	$0
Uniforms	$121,963	$0
Utilities	$405,974	$0
Vehicle Expense (Repairs)	$1,535,813	$0
Vehicle Operating (Includes Fuel)	$206,000	$0
Director - Benefits	$350,135	$0
Director - Compensation	$231,379	$0
Director - Expenses	$139,050	$0
Professional Services - Legal	$1,147,273	$0
Professional Services - Legislative Advocate Services	$333,093	$0
Professional Services - Outside Services & Consulting	$179,358	$0
Computer Support	$2,513,431	$0
	$10,401,491	**$0**

Table 11Q lists the expenses of the Water Resources function. Of the $4,311,877 of fixed costs, $2,529,107 represents personnel costs (Labor $1,822,953 + Benefits $706,154), professional services will account for $640,563, and funding the Groundwater Sustainability Agency is expected to cost $250,000. The line item "DD Variable DWR Charges" are classified as fixed charges to the Agency as they are paid each year at this level (they are variable to the DWR). Variable costs of the Water Resources function are planned at $3,457,837. Of these variable costs, Water Efficiency and Conservation programs will cost $2,462,203 and Public Outreach & Activities are planned at $808,555 to provide customers awareness and information regarding many key planning activities that are currently ongoing including the water rate plan, Urban Water Management Plan, and Water Shortage Contingency Plan.

Table 11 Q: Water Resources

Water Resources	Fixed Cost	Variable Cost
DD Landowner Expenditure	$204,980	$0
DD Variable DWR Charges	$102,490	$0
Groundwater Sustainability Agency	$250,000	$0
Agency Publications	$0	$27,753
Community Relations	$0	$159,325
Professional Services - Outside Services & Consulting	$640,563	$0
Public Outreach & Activities	$0	$808,555
Water Efficiency and Conservation	$0	$2,462,203
Water Resources - Benefits	$706,154	$0
Water Resources - Labor	$1,822,953	$0
Water Shortage Contengy Plan	$20,000	$0
Water Acquisition costs- Ventura	$20,498	$0
Water Acquisition costs- Semi Tropic	$84,240	$0
Water Acquisition costs- BV/RRB	$60,000	$0
Salt and Nutrient Management Plant	$100,000	$0
Annexation Support	$50,000	$0
Grant Administration	$200,000	$0
Integrated Regional Water Management Plan	$50,000	$0
	$4,311,877	**$3,457,837**



After the O&M expenses are allocated by cost causation factors and the nature of the costs had been identified (fixed or variable), all other costs (non-legacy debt service and Pay-go capital requirements) to be collected from retail rate revenues were added to this analysis and the results are shown Table 12. Table 11 has only the O&M expenses; Table 12 has the O&M expenses

plus the Other Obligations identified in Table 3 (debt service and Pay-go capital). Table 12 shows that 80% of costs are fixed and the remaining 20% are variable.

Table 12: Summary of Total Revenue Requirements

Cost Allocation Summary	Fixed	Variable	Total
Source of Supply	$11,759,992	$21,181,768	$32,941,760
Base	$35,168,670	$147,865	$35,316,536
Max Daily Demand (MDD)	$13,880,658	$66,832	$13,947,490
Peak Hourly Demand (PHD)	$13,996,206	$0	$13,996,206
Meters	$4,724,906	$0	$4,724,906
Customer Service	$7,722,306	$0	$7,722,306
Fire Protection Service	$122,612	$0	$122,612
Total Revenue Requirements	**$87,375,349**	**$21,396,465**	**$108,771,814**
	80%	20%	100%

Table 13 breaks the summary level data in Table 12 by function and facility. The total revenue requirements of $108,771,814 is reduced by other operating revenues, non-operating revenues, private fire meter revenues and public fire protection costs are removed to arrive at the amount to be collected from retail rates, $75,432,138.

Table 13: Amounts to Collected from Retail Rates

	Source of Supply	Base	MDD	PHD	Meters	Customer Service	Public Fire Hydrants	Total
Source of Supply	$ 7,501,112	$ -	$ -	$ -	$ -	$ -	$ -	$ 7,501,112
Pumping & Wells	8,848,299	3,185,273	1,439,667	2,312,470	-	-	-	$ 15,785,709
Water Quality & Treatment	1,374,520	2,566,527	1,160,009	1,863,268	-	-	-	$ 6,964,324
Transmission, Distribution & Mains	-	8,208,370	3,709,986	367,731	-	-	59,699	$ 12,345,787
Enginering	-	1,524,523	689,048	1,106,785	-	-	-	$ 3,320,355
Customer Accounts	-	-	-	-	367,769	2,425,388	-	$ 2,793,157
Administrative & General	7,448,115	6,808,862	3,077,442	2,216,008	179,374	1,182,946	29,117	$ 20,941,865
Water Resources	7,769,713	-	-	-	-	-	-	$ 7,769,713
Total O&M costs	**$32,941,760**	**$ 22,293,556**	**$10,076,152**	**$ 7,866,263**	**$ 547,143**	**$ 3,608,334**	**$ 88,817**	**$ 77,422,023**
Other Obligations (Non-Legacy Debt Service and Pay-go Capital)	-	13,022,980	3,871,338	6,129,944	4,177,763	4,113,972	33,795	31,349,791
Total Revenue Requirements	**32,941,760**	**35,316,536**	**13,947,490**	**13,996,207**	**4,724,906**	**7,722,306**	**122,612**	**108,771,814**
Less: Offsets								
Other Operating Revenues	(1,701,805)	(1,151,708)	(520,544)	(406,379)	(28,266)	(186,410)	(4,588)	(3,999,700)
Non-Operating Revenues	-	(11,863,757)	(3,526,736)	(5,584,295)	(3,805,885)	(3,747,772)	(30,787)	(28,559,231)
Private Fire Meter Revenues	-	-	(117,517)	(423,629)	(11,217)	(67,921)	-	(620,283)
Public Fire Hyndrants (Paid by 1% Prop Tax)	-	-	(15,902)	(57,323)	-	-	(87,237)	(160,462)
Total Offsets	(1,701,805)	(13,015,464)	(4,180,699)	(6,471,626)	(3,845,368)	(4,002,103)	(122,612)	(33,339,676)
To be collected from retail rates	**$31,239,955**	**$ 22,301,071**	**$ 9,766,791**	**$ 7,524,581**	**$ 879,538**	**$ 3,720,203**	**$ -**	**$ 75,432,138**

The other obligations shown in Table 13 total $31,349,794. This amount is broken down into the two components, non-legacy debt service and Pay-go capital funding in Table 14. The $8,829,414 shown as debt service in Table 14 is a portion of the $35,179,187 debt service to be paid in the fiscal year beginning 7/1/2021. Table 15 shows this amount and the revenue sources that will be used for payment of this obligation. For a list of each debt issue and its annual debt service, refer to Table 19. For additional information on the rate plan's Pay-go capital funding, refer to Tables 55-56.

Table 14: Breakdown of Total Other Obligations

Debt Service	CIP Pay-Go	Total Other Obligations
$8,829,414	$22,520,377	**$31,349,791**

The Agency uses Regional Facility Capacity Fees ("FCF") and 1% property tax revenues to assist in paying debt service. FCF are fees paid by developers based on meter connection additions to the service area to recover the cost of infrastructure required to serve the new development. A list of the specific debt obligations and amounts to be paid using FCF and 1% property tax is shown in Table 17. FCF revenues are dependent on construction starts and are paid by developers when building permits are issued. The timing of FCF revenues is not known with certainty. Delays due to weather, pandemic, economic slowdown among other events can impact FCF revenues. The amount of debt service that is planned to be paid using FCF is fixed. To offset the potential mismatch in FCF revenues and debt service obligations, 1% property taxes are used to pay the obligations. The amount of 1% property tax will vary annually. Legacy debt service is the annual repayment of debt obligations of the premerger retail purveyors. For additional information on Legacy debt refer to Table 18 and Tables 35-41.

Table 15: How Annual Debt Service will be Funded

	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
Total Debt Service	$35,179,187	$35,431,665	$41,040,113	$42,487,175	$45,016,571
Legacy Debt Service	$8,693,412	$8,814,719	$9,579,497	$9,710,643	$9,840,625
Non Legacy Debt Service	$26,485,775	$26,616,946	$31,460,616	$32,776,532	$35,175,946
Forecasted FCF Revenues	$6,300,000	$6,457,500	$6,618,938	$6,784,411	$6,954,021
1% Property Tax Revenues	$11,356,361	$11,773,866	$12,945,083	$12,802,690	$12,775,151
Allocated to Retail Rates	**$8,829,414**	**$8,385,580**	**$11,896,595**	**$13,189,431**	**$15,446,774**

The amount of non-legacy debt service included in retail rates for the fiscal year beginning 07/01/2021 is $8,829,414. The annual amounts for the rate plan period are shown at the bottom of Table 15. Table 16 shows the individual debt obligations and their annual cost for the rate plan period.

During the rate plan period, the Agency expects to issue additional debt to pay for major infrastructure projects. Table 16 shows the specific debt issues and corresponding annual debt service. The additional debt to be issued during the rate period is shown in Table 16 beginning with the PFAS bank note that is projected to be entered into towards the middle of the fiscal year beginning 07/01/2021.

Table 16: Debt Service Allocated to Rates

	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
1999A CAB Series	$2,355,347	$2,355,348	$2,355,348	$2,355,348	$2,355,348
Tax-Exempt Refunding Series 2010 A	$177,520	$465,340	$408,606	$415,786	$136,530
Taxable Refunding Series 2015 A	$4,304,206	$3,425,440	$3,591,631	$3,574,905	$4,410,167
Taxable Refunding Series 2016 A	$414,465	$414,465	$414,465	$414,465	$414,465
Tax-Exempt Series 2020 A	$1,528,838	$1,528,838	$1,528,838	$1,528,838	$1,528,838
PFAS Bank Note	$49,038	$196,150	$196,150	$0	$0
SRF Loan	$0	$0	$0	$1,498,532	$1,498,532
Bond 2023	$0	$0	$3,401,558	$3,401,558	$3,401,558
Bond 2025	$0	$0	$0	$0	$1,701,337
Debt Service (Non-Legacy Debt)	**$8,829,414**	**$8,385,580**	**$11,896,595**	**$13,189,431**	**$15,446,774**

Table 17 breaks down by debt issue, the annual debt service (Table 15) that will be paid from FCF & 1% property tax revenues.

Table 17: Listing of Non-Legacy Debt Service Paid with FCF and 1% Prop Tax Revenues

Debt Issue	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
1999A CAB Series	$8,089,653	$8,089,654	$8,089,653	$8,089,653	$8,089,653
Tax-Exempt Refunding Series 2010 A	$1,265,730	$3,317,910	$2,913,394	$2,964,589	$973,470
Taxable Refunding Series 2015 A	$7,235,221	$5,758,045	$6,037,405	$6,009,292	$7,413,337
Taxable Refunding Series 2016 A	$583,645	$583,645	$583,645	$583,645	$583,645
Tax-Exempt Series 2020 A	$482,112	$482,112	$482,112	$482,112	$482,112
PFAS Bank Note	$0	$0	$0	$0	$0
SRF Loan	$0	$0	$0	$0	$0
Bond 2023	$0	$0	$1,457,811	$1,457,810	$1,457,810
Bond 2025	$0	$0	$0	$0	$729,145
Total Debt Service	**$17,656,361**	**$18,231,366**	**$19,564,020**	**$19,587,101**	**$19,729,172**

The annual amounts of legacy debt service shown in Table 15 is broken down into specific debt issues in Table 18.

Table 18: Legacy Debt Service

	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
SCWD - Taxable Refunding Series 2017	$5,498,842	$5,620,149	$5,743,865	$5,878,507	$6,008,323
VWD - 2018 Interfund Loan	$976,975	$976,975	$1,618,038	$1,614,541	$1,614,706
VWD - Acquisition Interfund Loan	$2,217,595	$2,217,595	$2,217,595	$2,217,595	$2,217,595
Total Legacy Debt	**$8,693,412**	**$8,814,719**	**$9,579,497**	**$9,710,643**	**$9,840,625**

Total annual debt service shown in Table 15 is broken down by debt issue in Table 19.

Table 19: Listing of Annual Debt Service by Obligation

	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
1999A CAB Series	$10,445,000	$10,445,000	$10,445,000	$10,445,000	$10,445,000
Tax-Exempt Refunding Series 2010 A	$1,443,250	$3,783,250	$3,322,000	$3,380,375	$1,110,000
Taxable Refunding Series 2015 A	$11,539,427	$9,183,485	$9,629,036	$9,584,197	$11,823,504
Taxable Refunding Series 2016 A	$998,111	$998,111	$998,111	$998,111	$998,111
SCWD Taxable Refunding Series 2017	$5,498,842	$5,620,149	$5,743,865	$5,878,507	$6,008,323
VWD 2018 Interfund Loan	$976,975	$976,975	$1,618,038	$1,614,541	$1,614,706
VWD Acquisition Interfund Loan	$2,217,595	$2,217,595	$2,217,595	$2,217,595	$2,217,595
Tax-Exempt Series 2020 A	$2,010,950	$2,010,950	$2,010,950	$2,010,950	$2,010,950
PFAS Bank Note	$49,038	$196,150	$196,150	$0	$0
SRF Loan	$0	$0	$0	$1,498,532	$1,498,532
Bond 2023	$0	$0	$4,859,368	$4,859,368	$4,859,368
Bond 2025	$0	$0	$0	$0	$2,430,482
Total Debt Service	**$35,179,187**	**$35,431,665**	**$41,040,113**	**$42,487,175**	**$45,016,571**

At this point, the cost analysis is complete, and the process flow has reached step 5.

STEP 5 Costs to be recovered through retail water rates have been identified and assessed for how they ideally would be recovered through rates (fixed or variable).

Recall from Table 12 that the Agency's cost of service is comprised of 80% fixed costs and 20% variable costs. In this section the focus is on recovering these costs through retail rates. Table 20 shows that the rate plan recommendation will result in approximately 29% of its retail rate revenues coming from the fixed service charge, and the remainder, approximately 71% from variable revenue. While it would be ideal for the Agency to be able to recover all of its fixed costs with fixed revenue, this is not practical as the impact on customers would be too large and it would discourage conservation. Refer to the Rate Design section of this report for additional information on customer bill impact.

The Agency's retail rate structure is currently very straightforward. Prior to the merger, each of the retail water divisions restructured their rates to eliminate water tier structures. In addition, none of the existing rate structures contain fixed service charges based on customer type. By having a fixed service charge based solely on meter connection size (and not considering customer classification), the Agency has taken a stance that the demands placed on the system based on meter connection size is fairly recovered using the AWWA equivalent meter factors. The only exception to this is the customer care costs that are allocated to all customers equally.

By using the AWWA equivalent meter factors to allocate costs, proportionality of cost distribution is achieved. The main limiting factor for setting the amount of revenue to generate through fixed charges in this rate plan is customer impact and is covered in the Rate Design section of this report. Table 14 shows how the seven cost causation factors were ultimately allocated between fixed and variable charge.

Table 20: Documentation of Amounts to be Collected from Rates as Fixed and Variable Revenues

Cost Allocation Summary	Fixed	Variable	Total
Source of Supply	$0	$31,239,955	**$31,239,955**
Base	$8,764,321	$13,536,750	**$22,301,071**
Max Daily Demand (MDD)	$4,883,395	$4,883,395	**$9,766,791**
Peak Hourly Demand (PHD)	$3,762,290	$3,762,290	**$7,524,581**
Meters	$879,538	$0	**$879,538**
Customer Service	$3,720,203	$0	**$3,720,203**
Public Fire Protection Service	$0	$0	**$0**
Revenue Requirements from Rates	**$22,009,747**	**$53,422,391**	**$75,432,138**
	29.2%	**70.8%**	**100%**

Table 21 lists the cost causation component amounts allocated to be collected from the fixed service charge and how the costs were allocated.

Table 21: Fixed Cost Causative Components Allocated to the Fixed Service Charge

Fixed Cost Causative Components	Allocated Fixed Cost	Allocation Method
Base	$8,764,321	EMUs
Max Daily Demand (MDD)	$4,883,395	EMUs
Peak Hourly Demand (PHD)	$3,762,290	EMUs
Meters	$879,538	EMUs
Customer Service	$3,720,203	# of bills
Total Fixed Service Charge Revenue Requirement	**$22,009,747**	

Table 22: Variable Charge Revenue Requirements

Variable Cost Causative Components	Allocated Variable Cost
Source of Supply	$31,239,955
Delivery	$13,536,750
Max Daily Demand (MDD)	$4,883,395
Peak Hourly Demand (PHD)	$3,762,290
Total Variable Charge Revenue Requirement	**$53,422,391**

Table 23: Fire Protection by Cost Causative Components

Cost Allocation	% allocation (Equivalent Meters)	MDD	PHD	Meters	Customer Service	Direct Cost	Total Cost
Private Fire	*88.1%*	$117,517	$423,629	$11,217	$67,921		**$620,283**
Public Fire	*11.9%*	$15,902	$57,323			$87,237	**$160,462**
							$780,745

The next and final step in the workflow is rate design.

STEP 6	Rate Design

RATE DESIGN

To calculate retail water rates, it is necessary to develop a forecast of the number of units of water that will be sold, and a forecast of the number of meters of each size. Water sales are in units of 100 cubic feet (CCF), which is equivalent to 748 gallons. In many of the Agency planning documents the water supply and demand is stated in terms of acre feet (AF). An acre foot of water contains 435.6 CCF. Table 24 contains the CCF forecast that was based on a variety of factors including population growth expectations as forecasted by the Santa Clarita Economic Development Corporation(Data (scvedc.org)), expected growth in the number of meters served by the Agency, while taking into consideration the known regulatory mandates for reduced consumption. The result is the forecast of slow growth in sales units. Note that the regulatory mandate for conservation must be met in 2025 which accounts for the growth in sales by approximately 1% in FY2024-25 compared with FY2023-24.

Table 24: Water Sales Forecast FY 2022 -2026

	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
Sales Forecast CCF	25,617,472	25,674,264	25,732,051	26,050,670	26,373,688
Sales Forecast Acre Feet	58,810	58,940	59,073	59,804	60,546
Growth (ccf)	75,539	56,792	57,787	318,619	323,018
Growth %	***0.30%***	***0.22%***	***0.23%***	***1.24%***	***1.24%***

The forecast of meter growth was developed with consideration of known development projects that will be served by the Agency, historic growth rates in meter counts, and in consideration of the Agency's economic development forecast. Table 25 provides a forecast for the number of meters by meter connection size by year for the rate plan. Once the forecast was complete it was necessary to convert the meter count to "equivalent meters" to fairly allocate fixed costs equitably. The concept of equivalent meters is to convert the hydraulic capacity of the individual meter sizes into equivalent units. The Agency used the standard AWWA equivalent meter ratios with a ¾" meter as the base meter size. The result of this work can be seen in Tables 25 and 26. Note how the EMU Factor of the base meter size is 1 and the larger meters have been converted to Equivalent Meter Units.

Table 25: Forecast of Meter Growth by Meter Connection Size FY2021/22 Through FY2025/2026

Meter Size	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
5/8-in	6,091	6,220	6,352	6,486	6,623
3/4-in	55,005	55,715	56,438	57,173	57,921
1-in	7,914	8,054	8,197	8,343	8,492
1 1/2-in	1,387	1,407	1,428	1,449	1,471
2-in	3,894	3,938	3,983	4,029	4,076
2 1/2-in	25	25	25	25	25
3-in	185	187	189	191	193
4-in	180	182	184	186	188
6-in	57	57	57	57	57
8-in	31	31	31	31	31
10-in	11	11	11	11	11
12-in	-	-	-	-	-
Total Meters	**74,780**	**75,827**	**76,895**	**77,981**	**79,088**
Growth Rate	***1.36%***	***1.37%***	***1.38%***	***1.38%***	***1.39%***

Each meter size has a certain amount of hydraulic capacity, which determines how much water can be provided at any one time to a customer. The AWWA publishes the table of EMU conversion factors that is used by engineers to determine the optimal pipe size a business needs and by rate developers to ensure each individual meter in the service area is contributing equitably to the recovery of costs.

Table 26: Forecast of Equivalent Meter Units FY 2021/22 Through FY 2025/26

Meter Size	EMU Factor	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
5/8-in	**0.67**	4,061	4,147	4,235	4,324	4,415
3/4-in	**1.00**	55,005	55,715	56,438	57,173	57,921
1-in	**1.67**	13,190	13,423	13,662	13,905	14,153
1 1/2-in	**3.33**	4,623	4,690	4,760	4,830	4,903
2-in	**5.33**	20,768	21,003	21,243	21,488	21,739
2 1/2-in	**6.33**	158	158	158	158	158
3-in	**10.00**	1,850	1,870	1,890	1,910	1,930
4-in	**16.67**	3,000	3,033	3,067	3,100	3,133
6-in	**33.33**	1,900	1,900	1,900	1,900	1,900
8-in	**53.33**	1,653	1,653	1,653	1,653	1,653
10-in	**76.67**	843	843	843	843	843
12-in	**143.33**	-	-	-	-	-
Total EMUs		**107,052**	**108,436**	**109,849**	**111,285**	**112,750**

In the cost analysis section of this report, Table 12 showed that fixed costs account for 80% of the Agency's O&M, debt service, and Pay-go capital costs and 20% of these costs were variable costs. Table 27 shows how the retail rates have been designed to collect these costs. The Agency has discretion to allocate fixed and variable costs as it sees fit, provided that the allocation of such costs allows for rates that proportionally allocate the cost of providing service. Table 27 allocates rate revenue to cover O&M, debt service, and capital costs in a manner that recovers 29% of the overall revenue requirement from the fixed charge, and 71% of the revenue requirement from the variable charge. Allocating costs this way allows for the Agency to proportionally recover its costs of service from customers based on the demand they place on the system, while ensuring rates are affordable for customers that do not use very much water, and thus, do not place a significant demand on the water system. *These revenues do not include Legacy Debt which is a fixed charge. Legacy Debt is covered later in this section.*

Source of (Water) Supply – water purchase costs, chemicals, pumping costs. 100% of these costs are to be recovered from the variable charge. Use of water is variable so it is common to include all these costs in a variable charge.

Base demand – costs of delivering water to customers under average demand conditions. 99.4% of these costs were identified in Table 6 as fixed. Due to the need to consider customer impact and affordability, only 39.3% of these costs are recovered through the fixed charge.

Maximum Day Demand (MDD) – the costs of delivering water to customers on the day with the highest demand. 99.5% of these costs were identified as fixed but only 50% will be recovered through the fixed charge.

Peaking Hourly Demand (PHD) - the costs of delivering water to customers in the hour with the highest demand on the highest day. 100% of these costs were identified as fixed but only 50% will be recovered through the fixed charge.

Meters – the cost of servicing meters. 100% of these costs were identified as fixed and 100% will be recovered through the fixed charge.

Customer Service – the cost of billing and other customer service-related costs. 100% of these costs were identified as fixed and 100% will be recovered through the fixed charge.

Public Fire hydrants – the costs of providing public fire hydrants services were identified as 100% fixed. Public fire hydrants services are not recovered through retail water rates. Instead, these costs are recovered from other revenues the Agency earns. Table 24 lists the amount of public fire hydrants costs that will be recovered from the other revenues.

Table 27 is a summary of the amounts of revenues expected to be derived from the fixed service charge and variable charge. Table 20 showed these amounts broken down by how the costs were incurred (cost causation).

Table 27: How Revenue will be Earned

Total Revenue Requirements From Rates	Cost of Service	%
Revenue Requirements From Variable Charge	$53,422,391	70.8%
Revenue Requirements From Fixed Service Charge	$22,009,747	29.2%
Total Revenue Requirements From Rates	**$75,432,138**	

During rate design, a target for the percentage of costs to be collected from the variable charge was set that results in providing an incentive for conservation while also taking consideration of customer impact and revenue stability to the Agency. Once the target was determined, individual cost items were then allocated to variable from fixed to meet these targets.

Variable Charge

The variable charge, beginning in the fiscal year starting on 07/01/2021, will be the same for all retail customers in the service area. Table 28 provides the individual components and dollar amounts that were first listed in Table 20 in the variable cost section of the Table. The amount of revenue to be collected by the variable charge total $53,422,391 and will be recovered from the sale of 25,617,472 units of water. To accomplish this the unified rate must equal $2.09 per CCF.

Table 28: Calculation of the Variable Charge Effective 07/01/2021

Variable Cost Causative Components	Allocated Variable Cost
Source of Supply	$31,239,955
Delivery	$13,536,750
Max Daily Demand (MDD)	$4,883,395
Peak Hourly Demand (PHD)	$3,762,290
Total Variable Charge Revenue Requirement	**$53,422,391**
Sales Volume in ccf	25,617,472
Variable Rate	**$2.09**

The formula used to calculate the variable rate is shown below.

$$\text{Variable Rate} = \frac{\text{Source of Supply + Delivery + MDD + PHD}}{\text{Sales Volume}}$$

Fixed Service Charge

Using the AWWA hydraulic capacity factors we previously showed (Table 26) how each meter size and the number of corresponding meters was converted to a number of equivalent meter units ("EMU"). Table 29 shows how the hydraulic capacity factor for each meter size was used to allocate the costs to be collected as a fixed service charge. To illustrate how this works, the base meter size is ¾" and has an EMU factor of 1.0. The 1" meter connections have an EMU factor of 1.67 as a 1" meter has the capacity of 1.67 times that a ¾" meter has. By multiplying any of the costs allocated to the ¾" meter by 1.67, the 1" meter connection size cost allocation can be calculated. Some calculations will have a small difference from the listed cost allocation due to rounding costs to the nearest penny. It is reasonable to rely on the AWWA standards as the AWWA, since 1881, has developed and maintained water and wastewater consensus standards and manuals according to procedures outlined in the AWWA Governing Documents. AWWA Standards are documents that serve as a basis for the manufacture and contract specifications for the purchase and use of water works products and services. There are over 165 AWWA standards to date, all ANSI (American National Standards Institute) approved.

$$\text{Fixed Charge Rate} = \text{Base Rate} + \text{MDD Rate} + \text{PHD Rate} + \text{Meter Rate} + \text{Customer Service Rate}$$

Each element of the fixed service charge is derived with a formula. For example, the base rate component is calculated by dividing the Base costs shown in Table 20 ($8,764,321) and dividing it by the total equivalent meter units that were calculated in Table 26 (107,052 units) and then dividing that result by 12 to reach the monthly base rate element of the fixed service charge. Note that the Customer Service rate element is derived by using the total meter count instead of the total equivalent meter count. This was done because the costs included in this rate element do not vary by meter size (bill preparation, customer service). Table 20 contains the results of these calculations; they are located in the ¾" meter size row and then adjusted where appropriate by EMU (hydraulic capacity) factor. Below are the formulas used to determine the rate elements.

$$\text{Base Rate} = \frac{\text{Base Allocated Cost}}{\text{Total EMUs}} \div \text{Bills per Year}$$

$$\text{MDD Rate} = \frac{\text{MDD Allocated Cost}}{\text{Total EMUs}} \div \text{Bills per Year}$$

$$\text{PHD Rate} = \frac{\text{PHD Allocated Cost}}{\text{Total EMUs}} \div \text{Bills per Year}$$

$$\text{Meter Rate} = \frac{\text{Meters Allocated Cost}}{\text{Total EMUs}} \div \text{Bills per Year}$$

$$\text{Customer Service Rate} = \frac{\text{Customer Service Allocated Cost}}{\text{Total Meter Counts X Bills per Year}}$$

Table 29: Calculation of the Fixed Service Charge

Meter Size	EMU's Factor	Base	MDD	PHD	Meters	Customer Service	Fixed Service Charge
5/8-in	0.67	$4.55	$2.53	$1.95	$0.46	$4.15	**$13.64**
3/4-in	1.00	$6.82	$3.80	$2.93	$0.68	$4.15	**$18.38**
1-in	1.67	$11.37	$6.34	$4.88	$1.14	$4.15	**$27.87**
1 1/2-in	3.33	$22.74	$12.67	$9.76	$2.28	$4.15	**$51.60**
2-in	5.33	$36.39	$20.27	$15.62	$3.65	$4.15	**$80.08**
2 1/2-in	6.33	$43.21	$24.08	$18.55	$4.34	$4.15	**$94.32**
3-in	10.00	$68.22	$38.01	$29.29	$6.85	$4.15	**$146.52**
4-in	16.67	$113.71	$63.36	$48.81	$11.41	$4.15	**$241.43**
6-in	33.33	$227.42	$126.71	$97.62	$22.82	$4.15	**$478.72**
8-in	53.33	$363.87	$202.74	$156.20	$36.52	$4.15	**$763.47**
10-in	76.67	$523.06	$291.44	$224.53	$52.49	$4.15	**$1,095.67**
12-in	143.33	$977.89	$544.87	$419.78	$98.14	$4.15	**$2,044.82**

These calculations were verified in Table 30. By multiplying the fixed charge derived in Table 29 by the number of actual meters for each meter size, the total collected during the year equals the costs identified for recovery by this charge. Refer back to Table 27 for the Fixed Service Charge revenue requirement of $22,009,747.

Table 30: Verification of the Fixed Charge Amounts for FY 2021/22

Meter Size	Fixed Service Charge	Total # Accounts	Fixed Service Charge Revenues
5/8-in	**$13.64**	6,091	$999,460
3/4-in	**$18.38**	55,005	$12,170,280
1-in	**$27.87**	7,914	$2,655,915
1 1/2-in	**$51.60**	1,387	$861,945
2-in	**$80.08**	3,894	$3,755,621
2 1/2-in	**$94.32**	25	$28,399
3-in	**$146.52**	185	$326,495
4-in	**$241.43**	180	$523,482
6-in	**$478.72**	57	$328,703
8-in	**$763.47**	31	$285,104
10-in	**$1,095.67**	11	$145,187
12-in	**$2,044.82**	-	$0
		74,780	**$22,080,591**

Private Fire meter services are recovered through a fixed charge to specific customers based on the meter connection size of the service. Table 31 shows the total amount of costs that needs to be recovered by this charge (originally shown in Table13), the number of private fire meter services by meter connection size, the charge for each meter connection size and the revenues by meter connection size.

Table 31: Private Fire Meter Charge Revenues by Meter Size FY 2021/22

Meter Size	Total # Accounts	EMU Factor	Equivalent Meters	MDD	PHD	Customer Service	Meters	Private Fire Meter Rates	Anticipated Private Fire Meter Revenues
3/4-in	-	1.00	-	$0.19	$0.69	$4.15	$0.68	$5.71	$0
1-in	3	1.67	5	$0.32	$1.15	$4.15	$0.68	$6.29	$230
1 1/2-in	-	3.33	-	$0.64	$2.29	$4.15	$0.68	$7.76	$0
2-in	141	5.33	751	$1.02	$3.67	$4.15	$0.68	$9.51	$16,086
2 1/2-in	-	6.33	-	$1.21	$4.35	$4.15	$0.68	$10.39	$0
3-in	-	10.00	-	$1.91	$6.88	$4.15	$0.68	$13.61	$0
4-in	289	16.67	4,815	$3.18	$11.46	$4.15	$0.68	$19.47	$67,486
6-in	389	33.33	12,974	$6.36	$22.92	$4.15	$0.68	$34.10	$159,295
8-in	462	53.33	24,651	$10.17	$36.67	$4.15	$0.68	$51.67	$286,586
10-in	63	76.67	4,818	$14.62	$52.71	$4.15	$0.68	$72.16	$54,419
12-in	13	143.33	1,879	$27.34	$98.54	$4.15	$0.68	$130.71	$20,562
14-in	1	213.33	216	$40.69	$146.67	$4.15	$0.68	$192.19	$2,338
16-in	4	305.33	1,238	$58.23	$209.92	$4.15	$0.68	$272.98	$13,282
18-in	-	488.33	-	$93.13	$335.74	$4.15	$0.68	$433.70	$0
20-in	-	616.67	-	$117.61	$423.97	$4.15	$0.68	$546.41	$0
	1,365		**51,348**						**$620,283**

Table 32: Private Fire Meter Count Forecast

Meter Size	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
5/8-in	-	-	-	-	-
3/4-in	-	-	-	-	-
1-in	3	3	3	3	3
1 1/2-in	-	-	-	-	-
2-in	141	143	145	147	149
2 1/2-in	-	-	-	-	-
3-in	-	-	-	-	-
4-in	289	293	297	301	305
6-in	389	395	400	406	411
8-in	462	469	475	482	488
10-in	63	64	65	65	66
12-in	13	13	13	13	14
14-in	1	1	1	1	1
16-in	4	4	4	4	4
18-in	-	-	-	-	-
20-in	-	-	-	-	-
Total	**1,365**	**1,384**	**1,403**	**1,422**	**1,442**

Legacy Debt

A fixed legacy debt charge will be included in the unified retail rates of the Agency. This fixed charge is designed to recover the debt service costs of legacy debt owed by the formerly separate three retail purveyors of the Agency to ensure that debt service for infrastructure necessary to provide to the retail purveyors prior to the merger will only be paid for by customers in those service areas. The former Newhall Water Department (NWD) did not have any debt so there is no legacy debt charge for these customers. The former Santa Clarita Water Department (SCWD) and Valencia Water Department (VWD) will have this charge and the calculation of these charges follows. Table 33 shows the total legacy debt service for each of the five years included in the rate plan.

Table 33: Listing of Legacy Debt Service for SCWD and VWD

	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
SCWD - Taxable Refunding Series 2017	$5,498,842	$5,620,149	$5,743,865	$5,878,507	$6,008,323
VWD - 2018 Interfund Loan	$976,975	$976,975	$1,618,038	$1,614,541	$1,614,706
VWD - Acquisition Interfund Loan	$2,217,595	$2,217,595	$2,217,595	$2,217,595	$2,217,595
Total Legacy Debt	**$8,693,412**	**$8,814,719**	**$9,579,497**	**$9,710,643**	**$9,840,625**

Table 34: SCWD Annual Legacy Debt Service and Related Fixed Charge per EMU

SCWD Legacy Debt	FY2021-22	FY2022-23	FY2023-24	FY2024-25	FY2025-26
SCWD - Taxable Refunding Series 2017	$5,498,842	$5,620,149	$5,743,865	$5,878,507	$6,008,323
SCWD Legacy Debt Charge per EMU	**$10.20**	**$10.20**	**$10.20**	**$10.20**	**$10.20**

Table 35: SCWD Equivalent Meter Calculation

Meter Size	Account #	EMU Factor	EMUs
SCWD 5/8-in	5,580	**0.67**	3,720
SCWD 3/4-in	20,482	**1.00**	20,482
SCWD 1-in	5,637	**1.67**	9,395
SCWD 1 1/2-in	800	**3.33**	2,667
SCWD 2-in	1,306	**5.33**	6,965
SCWD 2 1/2-in	-	**6.33**	-
SCWD 3-in	53	**10.00**	530
SCWD 4-in	109	**16.67**	1,817
SCWD 6-in	27	**33.33**	900
SCWD 8-in	9	**53.33**	480
SCWD 10-in	-	**76.67**	-
SCWD 12-in	-	**143.33**	-
SCWD Total	**34,003**		**46,956**

Calculation of Legacy Debt Charge:

$$\text{Legacy Charge per EMU} = \frac{\text{Average 5 Yrs Legacy Debt}}{\text{EMU's}} \div \text{Bill Per Year}$$

SCWD Average of 5 Years Legacy Debt = $5,749,937

Total SCWD EMUs = 46,956

SCWD Legacy Debt Charge = ($5,749,937 / 46,956) ÷ 12 = $10.20 per EMU

Table 36: Santa Clarita Water Division Legacy Debt Charge

Santa Clarita Division Legacy Debt

	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
5/8-in	$6.80	$6.80	$6.80	$6.80	$6.80
3/4-in	$10.20	$10.20	$10.20	$10.20	$10.20
1-in	$17.01	$17.01	$17.01	$17.01	$17.01
1 1/2-in	$34.02	$34.02	$34.02	$34.02	$34.02
2-in	$54.42	$54.42	$54.42	$54.42	$54.42
2 1/2-in	$64.63	$64.63	$64.63	$64.63	$64.63
3-in	$102.05	$102.05	$102.05	$102.05	$102.05
4-in	$170.08	$170.08	$170.08	$170.08	$170.08
6-in	$340.15	$340.15	$340.15	$340.15	$340.15
8-in	$544.24	$544.24	$544.24	$544.24	$544.24
10-in	$782.35	$782.35	$782.35	$782.35	$782.35
12-in	$1,462.65	$1,462.65	$1,462.65	$1,462.65	$1,462.65

Table 37: VWD Annual Legacy Debt and Related Fixed Charge per EMU

VWD Legacy Debt	FY2021-22	FY2022-23	FY2023-24	FY2024-25	FY2025-26
VWD - 2018 Interfund Loan	$976,975	$976,975	$1,618,038	$1,614,541	$1,614,706
VWD - Acquisition Interfund Loan	$2,217,595	$2,217,595	$2,217,595	$2,217,595	$2,217,595
Total Legacy Debt	**$3,194,570**	**$3,194,570**	**$3,835,633**	**$3,832,136**	**$3,832,301**
VWD Legacy Debt Charge per EMU	**$6.50**	**$6.50**	**$6.50**	**$6.50**	**$6.50**

Table 38: VWD Equivalent Meters Calculation

Meter Size	Account #	EMU Factor	EMUs
VWD 5/8-in	511	**0.67**	341
VWD 3/4-in	26,224	**1.00**	26,224
VWD 1-in	1,407	**1.67**	2,345
VWD 1 1/2-in	439	**3.33**	1,463
VWD 2-in	2,138	**5.33**	11,403
VWD 2 1/2-in	-	**6.33**	-
VWD 3-in	131	**10.00**	1,310
VWD 4-in	53	**16.67**	883
VWD 6-in	20	**33.33**	667
VWD 8-in	11	**53.33**	587
VWD 10-in	8	**76.67**	613
VWD 12-in	-	**143.33**	-
VWD Total	**30,942**		**45,836**

Calculation of Legacy Debt Charge:

$$\text{Legacy Charge per EMU} = \frac{\text{Average 5 Yrs Legacy Debt}}{\text{EMU's}} \div \text{Bill Per Year}$$

VWD Average of 5 Years Legacy Debt = $3,577,842

Total VWD EMUs = 45,836

VWD Legacy Debt Charge = ($ 3,577,842 / 45,836) ÷ 12 = $6.50 per EMU

Table 39: Valencia Water Division Legacy Debt Charge

Valencia Water Division Legacy Debt

	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
5/8-in	$4.34	$4.34	$4.34	$4.34	$4.34
3/4-in	$6.50	$6.50	$6.50	$6.50	$6.50
1-in	$10.84	$10.84	$10.84	$10.84	$10.84
1 1/2-in	$21.68	$21.68	$21.68	$21.68	$21.68
2-in	$34.69	$34.69	$34.69	$34.69	$34.69
2 1/2-in	$41.20	$41.20	$41.20	$41.20	$41.20
3-in	$65.05	$65.05	$65.05	$65.05	$65.05
4-in	$108.41	$108.41	$108.41	$108.41	$108.41
6-in	$216.83	$216.83	$216.83	$216.83	$216.83
8-in	$346.92	$346.92	$346.92	$346.92	$346.92
10-in	$498.70	$498.70	$498.70	$498.70	$498.70
12-in	$932.36	$932.36	$932.36	$932.36	$932.36

RECYCLED WATER VARIABLE CHARGE

The recycled water variable charge will be charged to customers that receive recycled water. Currently recycled water is not offered to single family residential customers as the system is still being built out. The cost analysis for recycled water is relatively simple compared to the potable water since there is only one source of water supply at this time, the Sanitation District, and few pipelines to operate and maintain. In addition to these supply and operation and maintenance costs, Pay-go revenue is being collected to apply towards the continuing buildout of the system. Table 40 shows the expected sales volume, and related costs built into the variable charge for recycled water.

Table 40: Recycled Water Sales Forecast, Cost of Service, and Variable Charge

	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
Sales Forecast AF	586	631	676	721	767
Sales Forecast CCF	255,278	275,007	294,736	314,465	334,194
Variable Charge Revenue Requirement					
O&M	$103,000	$106,090	$109,273	$112,551	$115,927
Purchased Water	$100,790	$108,580	$116,369	$124,159	$131,948
Pay-Go- RW Distribution	$223,030	$273,742	$333,176	$397,250	$468,635
Total Cost of Service	**$426,820**	**$488,412**	**$558,818**	**$633,960**	**$716,511**
Recycled Water COS Rate	**$1.67**	**$1.78**	**$1.90**	**$2.02**	**$2.14**

The recycled water pricing is based on maintaining the price at 85% of the Agency's potable water rate to maintain the market for recycle. By maintaining a cost-based rate and the price differential, the Agency will at times charge less than its cost of service. The cost component in the recycled water rate that most variable is the Pay-go for recycled water distribution. Should Pay-go spending exceed projected revenues, cash reserves or non-rate revenues may be used to cover the underfunding.

FINANCIAL PERFORMANCE

Up to this point in the report, the focus has been on cost analysis and setting rates to recover those costs. In this section, the financial forecast is presented and discussed so it becomes evident that the proposed rates align with the financial requirements of the Agency as currently planned.

Table 41: Proposed Revenue Growth and Corresponding Financial Results

	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
Proposed Revenue Growth	**0%**	**6.50%**	**6.50%**	**6.50%**	**6.50%**
Rate Revenues from Variable Charge, Service Charge and Legacy Debt Charge	$84,759,918	$90,245,712	$96,118,830	$103,060,210	$110,541,232
Private Fire Meter Revenues	$620,283	$669,527	$722,743	$780,220	$842,333
Other Operating Revenues	$3,999,700	$4,049,697	$4,100,394	$4,151,802	$4,203,932
Non-Operating Revenues	$28,559,231	$24,912,679	$21,318,227	$22,198,199	$22,979,598
Revenues	**$117,939,132**	**$119,877,616**	**$122,260,194**	**$130,190,431**	**$138,567,095**
O&M Expenses	($77,422,023)	($81,695,597)	($84,919,394)	($88,956,379)	($94,950,263)
Debt Service (non-Legacy Debt)	($8,829,414)	($8,385,580)	($11,896,595)	($13,189,431)	($15,446,774)
Legacy Debt	($8,693,412)	($8,814,719)	($9,579,497)	($9,710,643)	($9,840,625)
Capital PAY-GO Funding	**$22,994,283**	**$20,981,719**	**$15,864,708**	**$18,333,977**	**$18,329,433**
DSCR	1.66	1.60	1.36	1.40	1.38

The revenues in this table include the forecasted amounts to be collected from retail rates and other sources of revenues. Retail revenues includes legacy debt revenues; these were calculated outside of the cost allocation work as they were specific to each retail division. In addition, some of the revenues shown are not generated from retail rates. A reconciliation between the expected financial performance of the Agency and the earlier work of allocating costs to cost causation factors (Table 12) is shown below.

Table 42: Expected Financial Performance and Cost Allocation Analysis Reconciliation

	FY2021-22	
Total Revenues	$ 117,939,132	
Less:		
Legacy Debt Revenues	$ (9,327,779)	Colleced from Legacy Debt Charge
Add:		
Public Fire Hydrant	$ 160,462	Paid by 1% Prop Tax
	$ 108,771,814	Table 7 Revenue Requirements

Table 43 shows how the proposed revenue growth would happen. In the Table, “Water Sales” refers to water rate revenues from the variable charges (potable and non-potable), fixed service charge revenue, and private fire meters revenue. For the fiscal year beginning July 1, 2021 no

revenue growth is proposed. In years two through five of the rate plan, water sales revenues would be increased by 6.5% annually. By not proposing a revenue increase in the first year, the following years required greater changes to keep pace with Agency requirements. Table 43 shows in the row labeled "Water Sales" the retail rate revenues (excluding legacy debt revenues) if there were not revenue increases. The annual slight change in sales revenues is due to volumetric sales growth and growth in meter counts. The following rows labeled "Year…", show that year's revenue growth and how that revenue grows in the following years due to volumetric sales increases and growth in meter count. For example, in year 2 of the rate plan period a 6.5% revenue increase in retail sales would amount to $4,970,405. The following year that revenue increase stays in the rates but due to volumetric sales growth and meter count growth it generates $5,004,577. Table 45 is reconciled back to the row in Table 43 labeled "Rate Revenues from variable charge, fixed service charge, and legacy debt charge".

Table 43: Proposed Revenue Growth during the Rate Plan Period

	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
Proposed Revenue Increase	**0%**	**6.5%**	**6.5%**	**6.5%**	**6.5%**
Water Sales	$76,052,422	$76,467,776	$76,877,106	$77,842,297	$78,822,591
Year 1 - 0 %	$0	$0	$0	$0	$0
Year 2 - 6.5 %		$4,970,405	$5,004,577	$5,067,408	$5,131,221
Year 3 - 6.5 %			$5,330,368	$5,397,288	$5,465,255
Year 4 - 6.5 %				$5,748,642	$5,821,034
Year 5 - 6.5 %					$6,199,974
Water Sales	$76,052,422	$81,438,181	$87,212,051	$94,055,635	$101,440,075
Legacy Debt	$9,327,779	$9,477,058	$9,629,522	$9,784,795	$9,943,490
Private Fire Meter Revenues	($620,283)	($669,527)	($722,743)	($780,220)	($842,333)
Rate Revenues from Variable Charge, Fixed Service Charge and Legacy Debt Charge	**$84,759,918**	**$90,245,712**	**$96,118,831**	**$103,060,210**	**$110,541,232**

Table 44: Breakdown of Retail Rate Revenues

Rate Revenues	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
Revenues from Variable Charge	$53,422,391	$57,020,978	$60,864,025	$65,622,803	$70,754,871
Revenue from Fixed Service Charge	$22,009,747	$23,747,675	$25,625,283	$27,652,612	$29,842,871
Legacy Debt Charge Revenues	$9,327,779	$9,477,058	$9,629,522	$9,784,795	$9,943,490
Subtotal	**$84,759,918**	**$90,245,712**	**$96,118,830**	**$103,060,210**	**$110,541,232**
Private Fire Meter Rate Revenues	$ 620,283	$ 669,527	$ 722,743	$ 780,220	$ 842,333
Total Rate Revenues	**$85,380,201**	**$90,915,239**	**$96,841,573**	**$103,840,430**	**$111,383,565**

Table 45: Variable Charge Revenues

Variable Rate Revenues	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
Usage in ccf	25,617,472	25,674,264	25,732,051	26,050,670	26,373,688
Variable Rate	$2.09	$2.22	$2.37	$2.52	$2.68
Total Variable Revenues	**$53,422,391**	**$57,020,978**	**$60,864,025**	**$65,622,803**	**$70,754,871**

Table 46: Fixed Service Charge Revenues

Fixed Service Rate Revenues	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
5/8-in	$996,773	$1,084,046	$1,179,009	$1,282,134	$1,394,315
3/4-in	$12,133,879	$13,089,385	$14,121,093	$15,234,819	$16,437,357
1-in	$2,647,186	$2,869,127	$3,109,873	$3,371,006	$3,654,239
1 1/2-in	$858,885	$927,903	$1,002,966	$1,083,867	$1,171,844
2-in	$3,741,878	$4,030,129	$4,341,134	$4,676,702	$5,038,790
2 1/2-in	$28,295	$30,134	$32,092	$34,178	$36,400
3-in	$325,271	$350,159	$376,907	$405,654	$436,545
4-in	$521,497	$561,565	$604,639	$650,940	$700,705
6-in	$327,446	$348,729	$371,397	$395,538	$421,248
8-in	$284,010	$302,470	$322,131	$343,069	$365,369
10-in	$144,628	$154,029	$164,041	$174,704	$186,060
12-in	$0.00	$0.00	$0.00	$0.00	$0.00
Total Fixed Service Charge	**$22,009,747**	**$23,747,675**	**$25,625,283**	**$27,652,612**	**$29,842,871**

Table 47 compares the forecasted legacy debt revenues with the legacy debt costs by fiscal year. This table shows a possible over collection in each year. This is due to the uncertainty of the number of active meters (for each size) during a year. The uncertainty exists due to customers leaving the service area, services being cut off for non-payment, and new accounts being added to the system. Separate general ledger accounts have been established to track the legacy debt revenues for comparison with related debt service. Any positive balance in these accounts at the end of the rate plan period will be applied in the calculation of the legacy debt charge in the next rate case. When reviewing this Table, it is important to take into consideration that the legacy debt charges are based on forecasted meter growth. During a year, actual meter counts vary as some existing accounts will close and new accounts will open.

Table 47: Legacy Debt Forecasted Revenue

	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025	Five Year Total
Legacy Debt	$8,693,412	$8,814,719	$9,579,497	$9,710,643	$9,840,625	$46,638,896
Legacy Debt Collected from Rates	$9,327,779	$9,477,058	$9,629,522	$9,784,795	$9,943,490	$48,162,645
Over/Under Collection	***$634,367***	***$662,339***	***$50,025***	***$74,153***	***$102,866***	***$1,523,749***

Table 48 shows the allocation of costs to each meter connection size based on the use of the equivalent meter factors in the column labeled “EMU Factor”. The table is also showing the meter count by meter connection size and the revenues expected to be received. As an example of how the EMU Factor impacts the charge by meter connection size, for a 2” meter connection size the EMU factor is 5.33. Multiplying that factor by the MDD cost assigned to the base meter connection size, ¾”, the result is 5.33 * 0.19 = $1.0127, rounded up to $1.02. This is the MDD cost allocation proportionately allocated to the 2” meters. Note that the Customer Service, and Meters charges are the same for all meter connection sizes. This is due to the fact that these costs do not vary based on meter connection size, so they were allocated evenly to all meters. This was noted previously in Table 21.

Table 48: Calculation of Private Fire Meter Rates

Meter Size	Total # Accounts	EMU Factor	Equivalent Meters	MDD	PHD	Customer Service	Meters	Private Fire Meter Rates	Anticipated Private Fire Meter Revenues
3/4-in	-	1.00	-	$0.19	$0.69	$4.15	$0.68	$5.71	$0
1-in	3	1.67	5	$0.32	$1.15	$4.15	$0.68	$6.29	$230
1 1/2-in	-	3.33	-	$0.64	$2.29	$4.15	$0.68	$7.76	$0
2-in	141	5.33	751	$1.02	$3.67	$4.15	$0.68	$9.51	$16,086
2 1/2-in	-	6.33	-	$1.21	$4.35	$4.15	$0.68	$10.39	$0
3-in	-	10.00	-	$1.91	$6.88	$4.15	$0.68	$13.61	$0
4-in	289	16.67	4,815	$3.18	$11.46	$4.15	$0.68	$19.47	$67,486
6-in	389	33.33	12,974	$6.36	$22.92	$4.15	$0.68	$34.10	$159,295
8-in	462	53.33	24,651	$10.17	$36.67	$4.15	$0.68	$51.67	$286,586
10-in	63	76.67	4,818	$14.62	$52.71	$4.15	$0.68	$72.16	$54,419
12-in	13	143.33	1,879	$27.34	$98.54	$4.15	$0.68	$130.71	$20,562
14-in	1	213.33	216	$40.69	$146.67	$4.15	$0.68	$192.19	$2,338
16-in	4	305.33	1,238	$58.23	$209.92	$4.15	$0.68	$272.98	$13,282
18-in	-	488.33	-	$93.13	$335.74	$4.15	$0.68	$433.70	$0
20-in	-	616.67	-	$117.61	$423.97	$4.15	$0.68	$546.41	$0
	1,365		**51,348**						**$620,283**

Table 49 summarizes the annual revenues collected by each fiscal year of the rate plan. The revenues are based on the forecasted number of meters (Table 34) multiplied by the proposed Private Fire Meter Charges (Table 59).

Table 49: Private Fire Meter Revenues

Private Fire Meter Revenues	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
3/4-in	$0	$0	$0	$0	$0
1-in	$230	$248	$268	$289	$312
1 1/2-in	$0	$0	$0	$0	$0
2-in	$16,086	$17,366	$18,749	$20,244	$21,859
2 1/2-in	$0	$0	$0	$0	$0
3-in	$0	$0	$0	$0	$0
4-in	$67,486	$72,856	$78,660	$84,930	$91,706
6-in	$159,295	$171,971	$185,671	$200,471	$216,466
8-in	$286,586	$309,391	$334,038	$360,664	$389,441
10-in	$54,419	$58,750	$63,430	$68,486	$73,950
12-in	$20,562	$22,084	$23,720	$25,480	$27,373
14-in	$2,338	$2,524	$2,725	$2,942	$3,177
16-in	$13,282	$14,339	$15,481	$16,715	$18,048
18-in	$0	$0	$0	$0	$0
20-in	$0	$0	$0	$0	$0
Total Private Fire Meter	**$620,283**	**$669,527**	**$722,743**	**$780,220**	**$842,333**

Other Operating Revenues

Table 50: Other Operating Revenues

Other Operating Revenues	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
Misc. Fees (Customer Related fees and charges such as late fees, disconnect charges, etc.)	$1,000,000	$1,020,000	$1,040,400	$1,061,208	$1,082,432
Service Connection/Expansion Fees	$2,999,700	$3,029,697	$3,059,994	$3,090,594	$3,121,500
Total Other Operating Revenues	**$3,999,700**	**$4,049,697**	**$4,100,394**	**$4,151,802**	**$4,203,932**

Non-Operating Revenues

Table 51: Non-Operating Revenues

	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
1% Property Tax Revenues	$ 16,417,976	$ 16,647,957	$ 17,597,295	$ 18,411,491	$ 19,125,930
Communication/ Rental Income	$ 509,682	$ 519,876	$ 530,273	$ 540,879	$ 551,696
Investment Revenues	$ 1,678,043	$ 1,703,213	$ 1,728,761	$ 1,754,693	$ 1,781,013
Settlement Agreement (CIP)	$ 3,940,000	$ -	$ -	$ -	$ -
Settlement Agreement (O&M)	$ 1,405,131	$ 1,433,233	$ 1,461,898	$ 1,491,136	$ 1,520,959
Grants and Reimbursements	$ 1,608,400	$ 1,608,400	$ -	$ -	$ -
Reimbursement from Annexing Parties	$ -	$ -	$ -	$ -	$ -
One-time Water Sales	$ -	$ -	$ -	$ -	$ -
Use of Capacity Fees (Retail)	$ 3,000,000	$ 3,000,000	$ -	$ -	$ -
Non-Operating Revenues	**$ 28,559,231**	**$ 24,912,679**	**$ 21,318,227**	**$ 22,198,199**	**$ 22,979,598**

1% Property Tax Revenues
The Agency receives a portion of the 1% LA County and Ventura County tax levies on properties within Agency boundaries. The Agency distribution changes each year based on increases or decreases in assessed property values.

Communication/Rental Income
The main source of revenue for the Communication/Rental Income is primarily cell tower lease agreements and rental of the old SCWD building.

Investment Revenues
The Agency places funds not needed for current expenditures in short-term investments in accordance with the Agency's investment policy.

Settlement Agreement (CIP)
Perchlorate Litigation Settlement Agreement (Settlement Agreement) was executed by CLWA, SCWD, NCWD, and VWD, and Whittaker-Bermite, which involves estimated potential payment of up to $100,000,000. Funds have been deposited in escrow which will be disbursed to the Agency and the foregoing retail purveyors to pay for the costs of restoration of wells and contamination removal.

Settlement Agreement (O&M)
The Settlement Agreement also provides funds to assist in the payment of operation and maintenance costs for the system for up to 30 years, which the agencies estimate to cost as much as $50,000,000. Approximately $1,000,000 is reimbursed to the Agency annually for operations and maintenance costs related to activities related to restoration of wells and contamination removal. Amounts reimbursed to the Agency for such operations and maintenance costs are treated as Revenues of the Water System.

Grants and Reimbursements
The Agency takes every opportunity to apply state grants (and is actively seeking federal grants) to fund some Capital Improvement Projects in part or in whole. We have received Proposition 84 grants in the amount of approximately $2.9 relating to the Agency's recycled water program

Reimbursement from Annexing Parties
The acquisition of 11,000 AFY supply was originally intended, among other reasons, to supplement the SWP supplies, which are committed to users in SCV Water's existing service area, by providing water for parties seeking to annex to the service area. In order to be eligible for annexation to SCV Water's service area, a potential annexing party would be required to enter into Deposit and Funding Agreement with SCV Water and pay for a proportionate share of the 11,000 AFY supply.

One-time Water Sales
In times of above average rainfall and snowpack, the Agency may be able to sell some of its banked State Water.

Use of Capacity Fees (Retail)
Capacity Fees (CF) are collected from customers requesting new water service. The charges are designed to recover costs of facilities necessary to serve new customers. These costs include distribution and treatment facilities or facilities that serve the system as a whole. The purpose of the CF is to assure that existing customers do not bear the cost of customer growth and that new customers pay for their appropriate share of the existing water system facilities. Funds collected

from the CF are held either in a separate fund or accounted for as a capital contribution from developers. It is expected that the CF funds are to be invested in the water system annually.

Operating Cost Forecast

The analysis of operating costs was covered earlier in this report for the base year, FY2021-22. In this section we provide the forecast of operating costs for the entire rate period. Key cost escalation factors are provided in Table 1 of this report. Each of those factors was applied to specific costs to derive the forecast. The average escalation rate by fiscal year can be seen at the bottom of Table 52. This represents the weighted average impact of the various cost escalation factors.

Table 52: Operating Cost Forecast

Department	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
Source of Supply	$ 7,501,112	$ 7,710,628	$ 8,626,229	$ 8,938,773	$ 9,262,754
Pumping and Wells	$ 15,785,709	$ 17,181,005	$ 18,860,421	$ 19,993,793	$ 24,353,573
Water Quality and Treatment	$ 6,964,324	$ 7,197,978	$ 7,439,835	$ 7,705,639	$ 7,981,842
Transmission, Distribution & Maintenance	$ 12,345,787	$ 12,849,208	$ 13,217,447	$ 13,597,604	$ 13,988,855
Engineering	$ 3,320,355	$ 3,415,334	$ 3,513,046	$ 3,612,713	$ 3,715,233
General and Administrative	$ 23,735,022	$ 24,970,117	$ 25,068,390	$ 26,360,939	$ 26,460,130
Water Resources and Public Outreach	$ 7,769,713	$ 8,371,328	$ 8,194,026	$ 8,746,919	$ 9,187,875
Total O&M Expenses	**$ 77,422,023**	**$ 81,695,597**	**$ 84,919,394**	**$ 88,956,379**	**$ 94,950,263**
Average Escalation Rate	**2.3%**	**5.5%**	**3.9%**	**4.8%**	**6.7%**

Cash Reserves

This rate plan has taken into consideration the Agency's cash reserve policy. The Agency holds cash reserves for variations in operating costs, water supply reliability, emergencies and disasters, capital work, and rate stabilization. The Agency will be able to maintain capital reserves at the levels stated in the Policy during the rate plan period. The capital reserve, which is used to fund Pay-go (rate funded) capital will be funded as shown in Table 53. There currently is a surplus in this reserve account that is expected to be utilized as planned rate funding has been set to optimize the use of the reserves to keep rates down. This is discussed in the next section.

Pay-Go Capital Funding and Current Planned Expenditure

As the two largest impacts to customers in this rate case are the unification of rates and providing funding for PFAS operations and maintenance costs, the Pay-go funding provided by rates will fall short of the current expenditure plan. Table 53 lists the annual amount of Pay-go that is expected to be generated by retail rates. The drop of just over $5,000,000 in funding in FY2023-24 is primarily the result of a new bond issue; it is expected that the annual debt service for the Bond Issue of 2023 will be about $4.8 million per year.

Table 53: Pay-Go Funding Forecast

	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
Capital PAY-GO Funding	$22,994,283	$20,981,719	$15,864,708	$18,333,977	$18,329,433

The current Pay-go capital plan is listed in Table 54. At the time of this report there is still work to be done with this plan as Pay-go revenues will be less. Given the sudden development of PFAS it is expected that the current Pay-go plan will be evaluated for prioritization, deferment, use of surplus reserves, or other sources of funding.

Table 54: Current Pay-Go Plan

Pay-Go Projects	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
Pipelines & Pipeline Replacements	$8,546,000	$9,085,000	$12,425,000	$8,225,000	$1,750,000
Capital Planning & Studies	6,635,034	6,979,689	6,982,931	8,566,443	9,091,118
Wells & Well Facility Improvements	6,093,000	1,057,000	370,000	370,000	370,000
Tanks & Tank Facility Improvements	3,555,000	3,480,000	3,080,000	8,470,000	7,880,000
Technology Improvements & Replacements	3,140,000	2,954,000	3,389,400	3,348,340	3,133,174
Wellhead Treatment Improvements	2,790,000	5,065,000	8,185,000	-	-
Admin & Tech	2,325,000	475,000	475,000	475,000	475,000
Booster Station/Turnout Improvements	2,239,000	1,311,000	1,519,000	1,560,000	760,000
R&R Budget	1,993,450	1,968,450	2,918,450	1,918,450	1,918,450
Meter Replacements	1,875,000	1,875,000	875,000	875,000	875,000
Minor Capital	1,860,000	600,000	600,000	500,000	500,000
General Facility Replacements	832,500	1,292,500	575,000	620,000	560,000
Technology-SCADA	550,000	550,000	550,000	550,000	550,000
Disinfection Projects	490,000	490,000	490,000	490,000	490,000
Appurtenance Improvements	475,000	475,000	475,000	475,000	475,000
Water Resources & Supply	469,797	-	-	-	-
Laboratory Improvements	-	-	-	-	-
Major Capital	-	-	150,000	311,000	573,000
PFAS	22,416,000	18,283,000	6,939,000	-	-
Current Planned Pay- Go	**$66,284,781**	**$55,940,639**	**$49,998,781**	**$36,754,233**	**$29,400,742**

SCV WATER PROPOSED CHARGES FOR FY2022 Through FY2026 RATE TABLES

Table 55: Variable Charge - Potable and Recycled Water

Variable Charge: Potable & Recycled Water

Rate per CCF	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
Potable Water Variable Charge	$2.09	$2.22	$2.37	$2.52	$2.68
Recycled Water Variable Charge	$1.67	$1.78	$1.90	$2.02	$2.14

Table 56: Fixed Service Charge

Fixed Service Charge

Meter Size	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
5/8-in	$13.64	$14.52	$15.47	$16.47	$17.54
3/4-in	$18.38	$19.58	$20.85	$22.21	$23.65
1-in	$27.87	$29.69	$31.62	$33.67	$35.86
1 1/2-in	$51.60	$54.96	$58.53	$62.33	$66.39
2-in	$80.08	$85.28	$90.83	$96.73	$103.02
2 1/2-in	$94.32	$100.45	$106.97	$113.93	$121.33
3-in	$146.52	$156.04	$166.18	$176.99	$188.49
4-in	$241.43	$257.13	$273.84	$291.64	$310.60
6-in	$478.72	$509.84	$542.98	$578.27	$615.86
8-in	$763.47	$813.09	$865.94	$922.23	$982.17
10-in	$1,095.67	$1,166.89	$1,242.74	$1,323.51	$1,409.54
12-in	$2,044.82	$2,177.74	$2,319.29	$2,470.04	$2,630.59

Table 57: Legacy Debt Charges

Legacy Debt Charges

Meter Size	SCWD	VWD
5/8-in	$6.80	$4.34
3/4-in	$10.20	$6.50
1-in	$17.01	$10.84
1 1/2-in	$34.02	$21.68
2-in	$54.42	$34.69
2 1/2-in	$64.63	$41.20
3-in	$102.05	$65.05
4-in	$170.08	$108.41
6-in	$340.15	$216.83
8-in	$544.24	$346.92
10-in	$782.35	$498.70
12-in	$1,462.65	$932.36

Table 58: Private Fire Meter Charge

Private Fire Meter					
Meter Size	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
3/4-in	$5.71	$6.08	$6.47	$6.90	$7.34
1-in	$6.29	$6.70	$7.14	$7.60	$8.10
1 1/2-in	$7.76	$8.26	$8.80	$9.37	$9.98
2-in	$9.51	$10.13	$10.79	$11.49	$12.24
2 1/2-in	$10.39	$11.07	$11.79	$12.55	$13.37
3-in	$13.61	$14.50	$15.44	$16.44	$17.51
4-in	$19.47	$20.73	$22.08	$23.52	$25.04
6-in	$34.10	$36.32	$38.68	$41.20	$43.87
8-in	$51.67	$55.03	$58.60	$62.41	$66.47
10-in	$72.16	$76.85	$81.85	$87.17	$92.83
12-in	$130.71	$139.21	$148.25	$157.89	$168.15
14-in	$192.19	$204.68	$217.98	$232.15	$247.24
16-in	$272.98	$290.73	$309.63	$329.75	$351.18
18-in	$433.70	$461.89	$491.91	$523.89	$557.94
20-in	$546.41	$581.92	$619.75	$660.03	$702.93