SAN BERNARDINO COUNTY

County Service Area 70 CG (Cedar Glen)
Water Rate Study Report

Final Report

March 2026

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1. Introduction

1.1 Purpose

San Bernardino County (County) retained NBS to conduct a comprehensive utility rate study for its water enterprise fund for County Service Area 70 CG Cedar Glen (CSA 70 CG). The County had several objectives and goals in mind for this study including meeting revenue requirements, reviewing the rising costs of providing services, funding capital improvements and changes in costs, and complying with certain legal requirements (e.g., California Constitution Article XIII D, Section 6, which is commonly referred to as Proposition 218 [Prop 218]). The County's broader objectives in this study include ensuring adequate funding for operating and capital costs, ensuring revenue stability in utility rates. The rates resulting from this study were developed in a manner that is consistent with industry standard cost-of-service principles. In addition to documenting the rate study methodology, this report is provided with the intent to assist the County in its continuing effort to maintain transparent communications with the residents and community it serves.

In developing new rates for CSA 70 CG's enterprise fund, NBS worked cooperatively with County staff and the Board of Supervisors (Board) in selecting the appropriate rate alternatives that address the County's goals and objectives. Based on input provided by CSA 70 CG staff, NBS proposes the rates summarized in this report. The Board has the final decision regarding the adoption of the proposed rates and whether to proceed with the Prop 218 approval process.

1.2 Overview of the Study

Comprehensive rate studies, such as this one, typically include three components: (1) preparation of a financial plan that identifies the net revenue requirements for the utility; (2) analysis of the cost to serve each customer class, and (3) the rate structure design. These steps are shown in **Figure 1** and are intended to follow industry standards and reflect the fundamental principles of cost-of-service rate making embodied in the American Water Works Association's (AWWA) *Principles of Water Rates, Fees, and Charges*,[1] also referred to as Manual M1.

Rate studies also address requirements under Prop 218 that rates not exceed the cost of providing the service and be proportionate to the cost of providing service for all customers. In terms of the chronology of the study, the three steps shown in **Figure 1** represent the order in which they were performed in this study.

[1] *Principles of Water Rates, Fees, and Charges*, Manual of Water Supply Practices, Manual M1, American Water Works Association (AWWA), 7th Edition, 2017.

Figure 1. Primary Components of a Rate Study

NBS projected revenues and expenditures, developed net revenue requirements, performed cost-of-service rate analyses, and developed new water rates for the County using this approach. The following sections in this report present an overview of the methodologies, assumptions, and data used along with the financial plans and rates developed. Detailed tables and figures documenting the development of the proposed rates are provided in the Appendices.

The County provided NBS with the data necessary to conduct the study, including historical, current, and projected revenues and expenditures, number of customer accounts, and water consumption data along with other operational and capital cost information.

FINANCIAL PLAN

As a part of the rate study, NBS projected revenues and expenditures on a cash-flow basis for the next five (5) years. The amount of rate revenue required, that will allow reserves to be maintained at the recommended levels, is known as the net revenue requirement. As current rate revenue falls short of the net revenue requirement, rate adjustments – or more accurately, adjustments in the total revenue collected from rates – are recommended. This report presents an overview of the methodologies, assumptions, and data used along with the financial plan and proposed rates developed in this study.[2]

COST-OF-SERVICE ANALYSIS

The basic purpose of the cost-of-service analysis (COSA) is to fairly and equitably allocate costs to customer classes and/or meter sizes. The cost-of-service analysis consists of two major components: (1) the classification of expenses, and (2) the allocation of costs to customer classes. For example, a key task is the "classification" of the water revenue requirements into the following categories:

- Commodity related costs
- Capacity related costs
- Customer service related costs

[2] The complete financial plans are available in the *Appendices*.

RATE DESIGN ANALYSIS

During the rate design phase of the study, NBS and County staff worked together to develop rate alternatives that will meet the County's objectives. It is important for the County to send proper price signals to its customers about the actual cost of providing service. This objective is typically addressed through both the magnitude of the rate adjustments and the rate structure design. In other words, both the amount of revenue collected and the way in which the revenue is collected from customers are important.

Several criteria are typically considered in setting rates and developing sound rate structures. The fundamentals of this process have been well documented in several rate-setting manuals, such as AWWA's Manual M1. The foundation for evaluating rate structures is generally credited to James C. Bonbright in *Principles of Public Utility Rates*,[3] which outlines pricing policies, theories, and economic concepts along with various rate designs. The following is a simplified list of the attributes of a sound rate structure:

- Rates should be easy to understand from the customer's perspective.
- Rates should be easy to administer from the utility's perspective.
- Rates should be equitable and non-discriminating (i.e., cost-based).
- There should be continuity in the rate making philosophy over time.
- Rates should address other utility policies (e.g., conservation and economic development).
- Rates should provide month-to-month and year-to-year revenue stability.

RATE STRUCTURE TERMINOLOGY

This section covers basic rate design criteria that NBS and County staff considered as a part of their review of the rate structure alternatives. One of the most fundamental points in considering rate structures is the relationship between fixed and variable costs. Fixed costs, such as debt service and personnel costs, typically do not vary with the amount of water consumed. In contrast, variable costs, such as the cost of purchased water, chemicals, and electricity, tend to change with the quantity of water sold. Most rate structures contain a fixed, or minimum, charge in combination with a volumetric charge.

Fixed Charges – Fixed charges can be called base charges, minimum monthly charges, customer charges, fixed meter charges, etc. Fixed charges for water utilities typically increase by meter size. For example, a customer with a 2-inch meter has a fixed meter charge that is more than five times greater than the typical residential customer based on the safe operating capacity of the meter.[4] Since a large portion of utility costs are typically related to meeting capacity requirements, individual capacity demands are important in establishing equitable rates for customers.

Variable (Consumption-Based) Charges – In contrast to fixed charges, variable costs, such as purchased water, groundwater replenishment costs, and the cost of electricity used in pumping water and chemicals for treatment, tend to change with the quantity of water produced. For a water utility, variable charges are calculated based on a metered consumption per unit price (e.g., per 100 cubic feet, or HCF).

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[3] James C. Bonbright, Albert L. Danielsen, and David R. Kamerschen, *Principles of Public Utility Rates*, Arlington, VA: Public Utilities Report, Inc., Second Edition, 1988, pp. 383-384.

[4] *Principles of Water Rates, Fees, and Charges*, Manual of Water Supply Practices, Manual M1, AWWA, 7th Edition, 2017, pp. 151-152.

Uniform (Single-Tier) Water Rates – There are significant variations in the basic philosophy of variable charge rate structure alternatives. Under a uniform (single tier) rate structure, the cost per unit does not change with consumption and, therefore, provides a simple and straightforward approach from the customer's perspective and in terms of the County's rate administration.

KEY FINANCIAL ASSUMPTIONS

The following is a summary of the key financial assumptions used in the analyses. The following capital and operational fund targets reflect input from County staff to meet specific utility objectives.

Funding of Capital Projects – The capital improvement costs are anticipated to be funded using a combination of grant funding, debt financing, and rate revenue. NBS notes that the planned rate revenue increases may not support the debt financing as modeled. Projects may need to be delayed or omitted if sufficient revenues are not available to pay debt service and provide for required bond coverage ratios.

Reserve Targets – For the water utility, the County maintains reserves for operations, capital, and other specific needs. The details of each utility's reserve targets are covered in their respective sections of this report.

Inflation and Growth Projections – Assumptions were made in the analysis regarding cost inflation to project future revenues and expenses for the study period. The following inflation factors were used in the analysis:

- Customer growth is estimated at 0.32% per year.
- General cost inflation is set at 3.20% annually.
- Labor cost inflation is set at 0.00% annually.
- Electricity cost inflation is set at 8.35% annually.

These inflation factors are based on long-term trends; therefore, the County should re-examine these factors in another year to assess the impacts on utility costs and whether projected rate increases will be sufficient for the remainder of the rate adoption period.

2. Water Rate Study

2.1 Key Water Rate Study Issues

The County's water rate analysis was undertaken with a few specific objectives, including:

- Generating sufficient revenue to meet anticipated operating and maintenance costs and fund necessary capital improvement projects for the next five years.
- Continuing with a rate design that promotes revenue stability.
- Verifying the cost-of-service linkage between the current rate structure and the proposed water rates.
- Complying with the legal requirements of Prop 218 to ensure the cost of providing service is properly allocated amongst user classifications. This was the basis for eliminating tiered water rates.

NBS developed various water rate alternatives as requested by County staff over the course of this study. All rate structure alternatives relied on industry standards and cost-of-service principles. The rate alternative that will ultimately be implemented is the decision of the Board. The fixed and volume-based charges were calculated based on the net revenue requirements, number of customer accounts, water consumption and estimated water discharge, and other relevant data provided by the County.

The following are the basic components included in this analysis:

Developing Cost Allocations – The water revenue requirements were "functionalized" into three categories: (1) commodity (or volume-based) costs; (2) fixed capacity costs; and (3) customer service costs. These functionalized costs were then used to develop unit costs based on various factors, such as water consumption, peaking factors, and number of accounts by meter size.

Determining Revenue Requirements by Customer Class – The total revenue that needs to be collected from each customer class, in this case by meter size, was determined using the functional costs and allocation factors. For example, customer costs are allocated based on the number of meters, while volume-related costs are allocated based on the water consumption of each customer class. Once the costs are allocated and the net revenue requirement for each customer class is determined, collecting the revenue requirements from each customer class is addressed within the rate design.

Evaluating Rate Design (Fixed vs. Variable Charges) – The revenue requirements for each customer class are collected through a combination of fixed monthly service charges and volumetric rates. Based on direction from County staff, the rates proposed in this report will collect 57% of the rate revenue from the fixed charge and 43% from the variable charges, which is consistent with the current rate design.

2.2 Financial Plan

It is important for municipal utilities to not only collect sufficient revenues every year, but to also maintain reasonable reserves to handle emergencies, fund working capital, maintain a good credit rating, and generally follow sound financial management practices. Rate adjustments are governed by the need to meet operating and capital costs as well as maintain reasonable reserve levels. The current state of the County's water utility, regarding these objectives, is as follows:

Meeting Net Revenue Requirements: For FY 2026/27 through FY 2030/31, the projected net revenue requirement (that is, total annual expenses plus debt service and rate-funded capital costs, less non-rate revenues) for the water system averages $171 thousand to $1.73 million annually. If no rate adjustments are implemented, the County is projected to run an annual deficit of approximately $170 thousand in FY 2026/27, increasing to more than $1.73 million by FY 2030/31, and will be unable to meet forecasted debt service coverage requirements in FY 2027/28 and following years when the anticipated debt service payments begin.

Maintaining Reserve Funds: Reserve funds provide a basis for a utility to cope with fiscal emergencies, such as revenue shortfalls, asset failure, and natural disasters, among other events. Reserve policies provide guidelines for sound financial management, with an overall long-range perspective to maintain financial solvency and mitigate financial risks associated with revenue instability, volatile capital costs, and unexpected emergencies.

- The County's existing reserves are significantly below targets currently. If the County pursues debt to fund the projected capital improvement costs, reserve funds will continue to grow the negative balance through the end of the rate period. NBS together with County staff have chosen to set the following reserve targets:
    - **Operating Reserve** equal to 90 days of operating and maintenance expenses, or approximately $111 thousand in FY 2026/27. An operating reserve is intended to promote financial viability in the event of any short-term fluctuation in revenues and/or expenditures, such as those caused by weather patterns, the natural inflow and outflow of cash during billing cycles, natural variability in demand-based revenue streams (e.g., volumetric charges), and – particularly in periods of economic distress – changes or trends in the age of receivables. NBS considers a 90-day operating reserve to be a standard reserve fund target (i.e., most municipal water utilities use a 3-6 month target for the operating reserve).
    - **Capital Rehabilitation & Replacement Reserve** equal to 90 days of operating and maintenance expenses, or approximately $111 thousand in FY 2026/27. This reserve is intended to be a cash resource set aside to address long-term capital system replacement and rehabilitation needs. NBS considers this capital reserve target to be at the lower end of what most utilities aim for. Many utilities aim for 3% to 6% of net assets.

Funding Capital Improvement Projects: The County must fund necessary capital improvements to maintain current service levels. County staff has identified roughly $36.7 million in expected capital expenditures over the next five years (FY 2026/27 through FY 2030/31) which is an average of $7.4 million in capital expenditures annually. This rate study assumes the County will be obtaining approximately $13.6 million in revenue bonds in FY 2026/27 and 2029/30, however the timing and amount of the loans may need to be adjusted as the current model indicates that the required debt coverage may not be sufficient to support the debt as modeled.

Inflation and Growth Projections: Cost inflation and growth assumptions are necessary to project future revenues and expenses for the study period. Customer growth is expected to be flat. This factor was used in the analysis for rate revenues while inflation factors, including the Consumer Price Index, were used in projecting expenses.

Maintaining Adequate Bond Coverage: The water utility currently has some outstanding debt, and this analysis assumes that the County will incurring approximately $13.6 million in new bonds to fund capital projects. However, whether new debt will be needed will depend on the actual delivery of capital projects (i.e., the timing and costs). The rate covenants of the new bonds are likely to include a minimum debt service coverage ratio of 1.25 which is not supported by the anticipated rate revenue as modeled. The benefit of maintaining a higher coverage ratio is that it strengthens the County's credit rating which can help lower interest rates for debt-funded capital projects and, in turn, reduce annual debt service payments.

Figure 2 summarizes the sources and uses of funds, net revenue requirements, and the annual percent adjustments in total rate revenue recommended for the next five years.

Figure 2. Summary of Water Revenue Requirements

Summary of Sources and Uses of Funds and Net Revenue Requirements	Budget	5-Year Projected Rate Period				
	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31
Sources of Water Funds						
Rate Revenue:	$ 279,751	$ 285,346	$ 291,053	$ 296,874	$ 302,812	$ 308,868
Non-Rate Revenue:	-	-	-	-	-	-
Total Sources of Funds:	**$ 279,751**	**$ 285,346**	**$ 291,053**	**$ 296,874**	**$ 302,812**	**$ 308,868**
Uses of Water Funds						
Operating Expenses	$ 442,449	$ 455,900	$ 469,874	$ 484,396	$ 499,492	$ 515,191
Debt Service	-	-	468,169	468,169	468,169	1,026,952
Rate-Funded Capital Expenses	248,032	-	-	185,516	500,000	500,000
Total Use of Funds:	**$ 690,481**	**$ 455,900**	**$ 938,043**	**$ 1,138,081**	**$ 1,467,662**	**$ 2,042,143**
Surplus (Deficiency) before Rate Increase	**$ (410,730)**	**$ (170,553)**	**$ (646,990)**	**$ (841,207)**	**$ (1,164,850)**	**$ (1,733,275)**
Additional Revenue from Rate Increases[1]	-	85,604	125,153	170,109	221,143	279,010
Surplus (Deficiency) after Rate Increase	**$ (410,730)**	**$ (84,949)**	**$ (521,837)**	**$ (671,098)**	**$ (943,706)**	**$ (1,454,265)**
Projected Annual Rate Increase	***0.00%***	***30.00%***	***10.00%***	***10.00%***	***10.00%***	***10.00%***
Net Revenue Requirement[2]	**$ 410,730**	**$ 170,553**	**$ 646,990**	**$ 841,207**	**$ 1,164,850**	**$ 1,733,275**

1. Assumes new rates are implemented July 1, 2026.
2. This is the annual amount needed from water rates. [Net Revenue Requirement = Total Use of Funds - (Non-Rate Revenues + Interest Earnings)].

Figure 3 summarizes the projected reserve fund balances and reserve targets for the County's unrestricted funds. A detailed version of the proposed 5-year financial plan is included in the Appendix. The tables in the Appendix include the revenue requirement, reserve funds, revenue sources, capital improvement costs, and the proposed rate adjustments needed to meet the County's funding requirements.

Figure 3. Summary of Primary Water Reserve Funds

Beginning Reserve Fund Balances and Recommended Reserve Targets	Budget	5-Year Projected Rate Period				
	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31
Operating Reserve						
Ending Balance	($515,963)	$ (515,963)	$ (600,913)	$ (1,122,749)	$ (1,793,847)	$ (2,737,554)
Recommended Minimum Target	*111,000*	*111,000*	*114,000*	*117,000*	*121,000*	*125,000*
Capital Reserve						
Ending Balance	$ 419,075	$ 419,075	$ 423,266	$ 427,499	$ 431,774	$ 436,091
Recommended Minimum Target	*111,000*	*111,000*	*114,000*	*117,000*	*121,000*	*125,000*
Total Ending Balance	**$ (96,888)**	**$ (96,888)**	**$ (177,647)**	**$ (695,251)**	**$ (1,362,074)**	**$ (2,301,462)**
Total Recommended Minimum Target	*$ 222,000*	*$ 222,000*	*$ 228,000*	*$ 234,000*	*$ 242,000*	*$ 250,000*

2.3 Cost-of-Service Analysis

Once the net revenue requirements are determined, the cost-of-service analysis (COSA) proportionately distributes the revenue requirements to each of the customer classes. The COSA consists of two major components: (1) the classification of expenses, and (2) the allocation of costs to each customer class. Costs

are classified according to the function they serve. All costs in the County's budget are allocated to each component of the rate structure in proportion to the level of service required by customers.

The level of service is related to the volume and strength of the water treated, infrastructure capacity, and customer service. These costs are based on allocation factors, such as water consumption, number of meters, and customer class. Ultimately, a COSA is intended to result in rates that are proportional to the cost of providing service to each customer class.

FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

Most costs are not typically allocated just to fixed or variable categories but rather allocated to multiple functions of water service. The functionalization and classification process provides the basis for allocating costs to various customer classes based on the cost causation (classification) components described below:

- **Commodity-related costs** are costs associated with the change in the volume of water produced and delivered. These commonly include the costs of water quality testing, energy related to pumping for transmission and distribution, and source of supply.
- **Capacity-related costs** are costs associated with sizing facilities to meet the maximum, or peak, demand. This includes both operating costs and capital infrastructure costs incurred to accommodate peak system capacity events.
- **Customer-related costs** are costs associated with having a customer connected to the water system, such as meter reading, postage, billing, and other administrative duties.

The County's budgeted costs were reviewed and allocated to these cost causation components which are used as the basis for establishing new water rates and translated into fixed and variable charges. Tables in the Appendix show how the County's expenses were classified and allocated to these cost causation components. In the analysis, these cost causation components are also considered to be either fixed or variable.

FIXED AND VARIABLE COSTS

Ideally, utilities should recover all of their fixed costs from fixed charges and all of their variable costs from volumetric charges. When this is the case, fluctuations in water sales revenues would be directly offset by reductions or increases in variable expenses, which provides greater revenue stability for the utility. However, other factors are often considered when designing water rates, such as community values, water conservation goals, ease of understanding, and ease of administration.[5]

NBS functionalized the County's costs into categories that represent fixed and variable costs. This analysis resulted in a cost distribution that is approximately 58.4% fixed and 41.6% variable (i.e., volumetric), which is consistent with the County's current rate revenue collection from customers in proportions of approximately 59% fixed and 41% variable. County staff agrees with NBS that the current rate design is the preferred rate alternative; it provides continuity for the County's rate design while also encouraging water conservation. Therefore, the proposed new rates are based on these 58.4% fixed and 41.6% variable allocations.

[5] *Principles of Water Rates, Fees, and Charges,* Manual of Water Supply Practices, Manual M1, AWWA, 7th Edition, 2017, pp. 6 and 96.

Figure 4 summarizes how costs are allocated to each cost component and used to establish new water rates. **Figure 5** shows the resulting cost allocation to each cost classification component.

Figure 4. Allocation Percentages of Revenue Requirements

Classification Components	Cost-of-Service Net Revenue Requirements *(FY 2026/27)*	
Commodity-Related Costs	$ 154,200	*41.6%*
Capacity-Related Costs	195,198	*52.6%*
Customer-Related Costs	21,552	*5.8%*
Net Revenue Requirement	**$ 370,950**	*100.0%*

Figure 5. Allocated Net Revenue Requirements

Customer Classes	Classification Components			Cost of Service Net Rev. Req'ts	% of COS Net Revenue Req'ts
	VARIABLE	*FIXED*			
	Commodity-Related Costs	Capacity-Related Costs	Customer-Related Costs		
All Customers	$ 154,200	$ 195,198	$ 21,552	$ 370,950	*100.0%*
Total Net Revenue Requirement	**$ 154,200**	**$ 195,198**	**$ 21,552**	**$ 370,950**	**100%**

2.4 Characteristics of Water Customers by Customer Class

Customer classes are typically determined by grouping customers with similar demand characteristics into categories that reflect the cost differentials to serve each type of customer. In this case customers are identified by meter size, as the land uses are fairly homogenous. The rates proposed in this report follow a similar structure where the fixed charges for the single customer class vary by meter size while all customers are charged a uniform volumetric rate.

The amount of consumption, the peaking factors, and the number of meters by size are used to allocate costs to customer classes and determine the appropriate rate structures for each. These components of the COSA are presented in the following figures.

Commodity-related costs are costs associated with the total annual consumption of water by customer class. **Figure 6** below summarizes the most recent consumption data by customer class and represents the expected percent of consumption over the 5-year rate period.

Figure 6. Water Consumption by Customer Class

Development of the Volumetric/Variable Allocation Factor[1]			
Customer Class	CY 2024 Consumption (HCF)	% of Total Volume (Potable)	% of Total Volume (Non-potable)
All Customers	11,622	**100.0%**	**0.0%**
Total	**11,622**	**100.0%**	**0.0%**

1. Consumption data is based on County billing data for CY 2024.

Figure 7 shows the number of meters for each customer class. The percentage of total customers by customer class is then used to develop the customer allocation factors to allocate customer costs. Customer

costs are those costs associated with having customers connected to the water system and include costs related to meter reading, postage, and billing.

Figure 7. Number of Meters by Customer Class

Development of the Customer Allocation Factor[1]		
Customer Class	**No. of Meters**	**% of Total Meters**
All Customers	334	**100.0%**
Total	**334**	**100.0%**

1. Consumption data is based on County billing data for CY 2024.

2.5 Rate Design Analysis

Evaluating the water rate structure includes reviewing rate-design objectives and policies, including continuity of rate design, revenue stability, equity among customers, and water conservation. NBS discussed the 58.4%/41.6% rate design with County staff over the course of this study as it is closest to the actual cost of service based on NBS' analysis and consistent with the current rate design. Also, because of the difficulty meeting Prop 218 legal requirements of demonstrating the cost basis for tiered rates given the County's water supply costs, the preferred rate structure proposes a uniform tier for all customers rather than the existing three tiers. The following section describes how the proposed water rates were determined.

DEVELOPMENT OF PROPOSED RATES

Fixed Service Charges

The fixed meter charge recognizes that the water utility incurs fixed costs regardless of whether customers use water. Two components comprise the fixed meter charge: (1) the capacity component, and (2) the customer component. The capacity component recovers costs associated with sizing the water system to ensure there is sufficient capacity in the system to meet peak demand. A user class with higher capacity is allocated a proportionately higher share of the capacity-related costs compared to customer classes with lower capacity. The customer component includes those costs related to reading and maintaining meters, customer billing and collection, and other customer service-related costs.

Fixed charges also vary based on meter sizes because larger meters have higher capacity requirements and reflect their potential to use more of the system's capacity.[6] The potential capacity demands is proportional to the maximum hydraulic flow through each meter size based on the hydraulic capacity ratios established by AWWA.[7] The AWWA capacity ratios used for this report are shown in **Figure 8**.

[6] System capacity is the system's ability to supply water to all delivery points at the time when demanded.

[7] *Principles of Water Rates, Fees and Charges*, Manual of Water Supply Practices, Manual M1, AWWA, 7th Edition, 2017, p. 386. *Water Meters – Selection, Installation, Testing and Maintenance*, Manual M6, AWWA, 5th Edition, 2012, pp. 63-65.

Figure 8. Hydraulic Capacity Factors

Meter Size	Standard Meters	
	Meter Capacity (GPM)[1]	Equivalency to 3/4 inch
	Displacement Meters	
3/4 inch	30	1.00
1 inch	50	1.67
1 1/2 inch	100	3.33
2 inch	160	5.33
	Compound Class I Meters	
3 inch	320	10.67
4 inch	500	16.67
6 inch	1,000	33.33
8 inch	1,600	53.33
	Turbine Class II Meters	
10 inch	4,200	140.00
12 inch	5,300	176.67

1. Per AWWA, M1 Manual, Table B-1.

The actual number of meters by size is multiplied by the corresponding capacity ratios to calculate "equivalent" meters. The number of equivalent meters is used as a proxy for the potential demand that each customer can place on the water system. **Figure 9** summarizes the number of meters, the hydraulic capacity factors, and the number of equivalent meters (i.e., the number of meters multiplied by the hydraulic capacity factor) by customer class and meter size.

Figure 9. Equivalent Meters

Number of Meters by Class and Size[1]	FY 2026/27								Total
	5/8 - 3/4" meter	1" meter	1.5" meter	2" meter	3" meter	4" meter	6" meter	8" meter	
All Customers	239	94	0	1	0	0	0	0	334
Total Meters/Accounts	**239**	**94**	**0**	**1**	**0**	**0**	**0**	**0**	**334**
Hydraulic Capacity Factor[2]	*1.00*	*1.67*	*3.33*	*5.33*	*10.67*	*16.67*	*33.33*	*53.33*	
Total Equivalent Meters	**239**	**157**	**0**	**5**	**0**	**0**	**0**	**0**	**401**

Using the costs allocated to each customer class from Figure 5, **Figure 10** shows the calculation of the fixed monthly service charges for all customer classes based on meter size. As previously mentioned, the customer service charge is calculated by dividing the customer service-related costs by the total number of meters, whereas the fixed capacity charge is calculated by dividing the capacity-related costs by the total number of equivalent meters for each meter size.

Figure 10. Calculation of Fixed Service Charges for FY 2026/27

Number of Meters by Class and Size[1]	FY 2026/27								Total
	5/8 - 3/4" meter	1" meter	1.5" meter	2" meter	3" meter	4" meter	6" meter	8" meter	
All Customers	239	94	0	1	0	0	0	0	334
Total Meters/Accounts	**239**	**94**	**0**	**1**	**0**	**0**	**0**	**0**	**334**
Hydraulic Capacity Factor[2]	*1.00*	*1.67*	*3.33*	*5.33*	*10.67*	*16.67*	*33.33*	*53.33*	
Total Equivalent Meters	**239**	**157**	**0**	**5**	**0**	**0**	**0**	**0**	**401**
Monthly Fixed Service Charges									
Customer Costs ($/Acct/month)[3]	$ 5.38	$ 5.38	$ 5.38	$ 5.38	$ 5.38	$ 5.38	$ 5.38	$ 5.38	
Capacity Costs ($/Acct/month)[4]	$ 40.56	$ 67.61	$ 135.22	$ 216.35	$ 432.69	$ 676.08	$ 1,352.16	$ 2,163.46	
Total Monthly Meter Charge	**$ 45.94**	**$ 72.99**	**$ 140.59**	**$ 221.72**	**$ 438.07**	**$ 681.46**	**$ 1,357.54**	**$ 2,168.83**	

1. Meter by Class and Size are based on December 2024 customer billing data.
2. Source: *Principles of Water Rates, Fees, and Charges*, Manual M1, AWWA, Table B-1.
3. Customer costs are allocated to each customer by dividing the total customer costs by the total number of customers.
4. Capacity costs are allocated by meter size and the hydraulic capacity of the meter.

Volumetric Rates

Currently, the County uses a 3-tier rate structure for all customers; however, the proposed rates are based on a uniform, or single tier, volumetric rate. Given the single source of water supply, a uniform volumetric rate is more feasible from a Prop 218 perspective.

Figure 11 shows the calculation of the uniform tier rate per unit of water for all customers.

Figure 11. Uniform Tier Rates for FY 2026/27

Customer Classes	Water Consumption (HCF/yr)	Total Target Rev. Req't from Vol. Charges	% of Total Rate Revenue	Uniform Commodity Rates ($/HCF)	*Proposed Rate Structure*
All Customers	11,622	$ 154,200	*41.6%*	$13.27	*Uniform*
Total Water	**11,622**	**$ 154,200**	***41.6%***		

2.6 Proposed Water Rates

Since the County's last rate study, the underlying cost factors (e.g., number of meters and water consumption) have changed. The cost-of-service analysis by nature "re-balances" how costs are allocated between customer classes and, as a result, there are uneven adjustments in the first year of the 5-year rate adoption period. In contrast, in the subsequent four years of the rate planning period, proposed charges are simply adjusted by the proposed adjustment in total rate revenue needed to meet projected revenue requirements.

Figure 12 provides a comparison of the current and proposed water rates for FY 2026/27 through 2030/31 for each customer class and meter size. Projected rates for each fiscal year[8] reflect adjustments based on the cost-of-service analysis, the 58.4% fixed/41.6% variable rate design structure, and the recommended percent increases in rate revenue planned for each year. More detailed tables on the development of the proposed water rates are documented in the Appendix.

[8] All rate adjustments are scheduled to be effective on July 1, 2026.

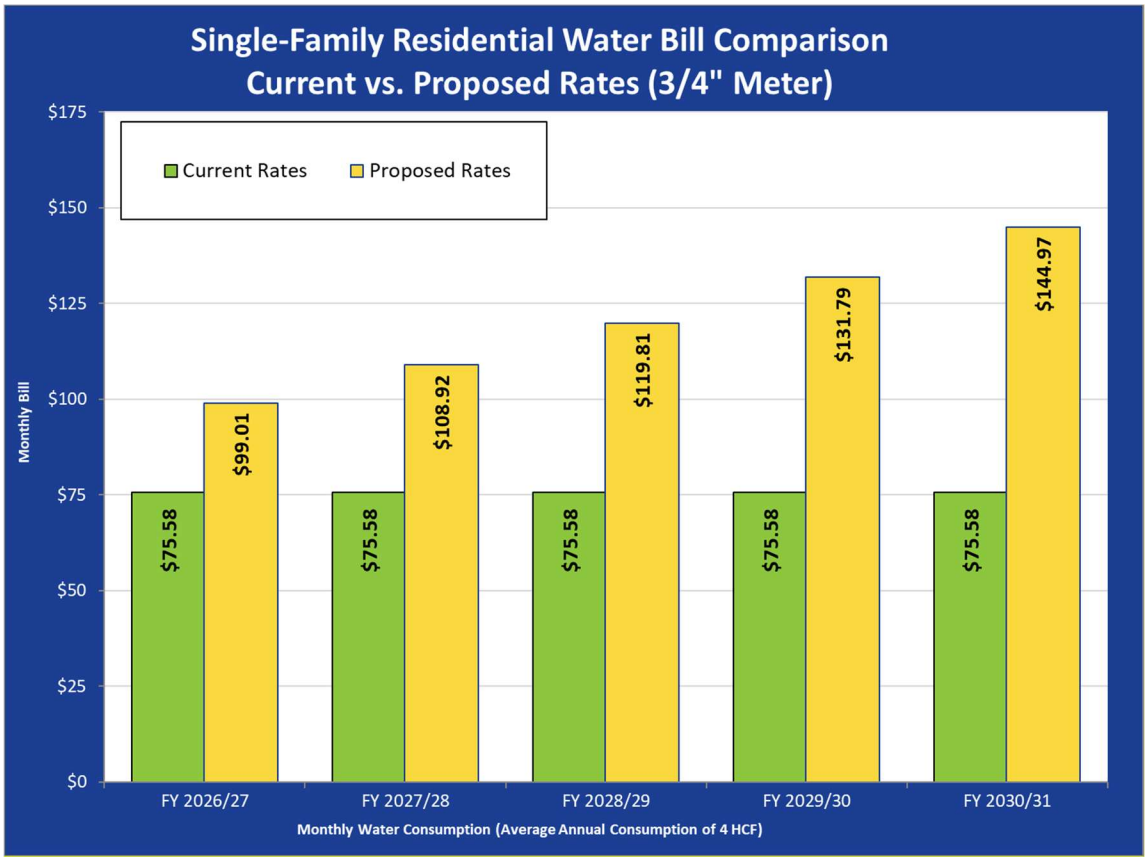
Figure 12. Current and Proposed Water Rates

Water Rate Schedule	Current Rates	Proposed Rates				
		FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31
Monthly Fixed Service Charges (in $/mo)						
Domestic Service Charge						
Flat Rate	$188.85	N/A	N/A	N/A	N/A	N/A
5/8" & 3/4"	$35.26	$45.94	$50.54	$55.59	$61.15	$67.26
1"	$57.84	$72.99	$80.28	$88.31	$97.14	$106.86
1.5"	$113.75	$140.59	$154.65	$170.12	$187.13	$205.84
2"	$181.11	$221.72	$243.90	$268.28	$295.11	$324.62
3"	$360.96	$438.07	$481.88	$530.06	$583.07	$641.38
4"	$563.05	$681.46	$749.60	$824.56	$907.02	$997.72
6"	$1,124.19	$1,357.54	$1,493.29	$1,642.62	$1,806.88	$1,987.57
8"	$1,797.81	$2,168.83	$2,385.72	$2,624.29	$2,886.72	$3,175.39
Water Usage Charges (in $/HCF)						
0-6	$10.08	$13.27	$14.59	$16.05	$17.66	$19.43
7-12	$10.32	N/A	N/A	N/A	N/A	N/A
13+	$11.18	N/A	N/A	N/A	N/A	N/A

2.7 Comparison of Current and Proposed Water Bills

Figure 13 compares a monthly water bills under the current and proposed water rates for a residential customer. These monthly bills for each year of the rate period are based on typical meter sizes and highlight the average consumption levels for the customer.

Figure 13. Monthly Water Bill Comparison for Residential Customers



3. Recommendations and Next Steps

3.1 Consultant Recommendations

NBS recommends the County take the following actions:

- **Approve and Accept this Study:** NBS recommends the Board formally approve and adopt this Study and its recommendations and proceed with the next steps outlined below to implement the proposed rates. This will provide documentation of the rate study analyses and the basis for analyzing potential changes to future rates.
- **Implement Recommended Levels of Rate Increases and Proposed Rates:** Based on successfully meeting the Prop 218 procedural requirements, the County should proceed with implementing the 5-year schedule of proposed rates and rate increases previously shown in Figure 12. This will help ensure the continued financial health of County's utilities.

3.2 Next steps

Annually Review Rates and Revenue – Any time an agency adopts new utility rates or rate structures, those new rates should be closely monitored over the next several years to ensure the revenue generated is sufficient to meet the annual revenue requirements. Changing economic and water consumption patterns underscore the need for this review, as well as potential and unseen changing revenue requirements — particularly those related to environmental regulations that can significantly affect capital improvements and repair and replacement costs.

Note: The attached Appendix provide more detailed information on the analysis of the financial plan, revenue requirements, cost-of-service, and the rate design analyses that have been summarized in this report.

3.3 NBS' Principal Assumptions and Considerations

In preparing this report and the opinions and recommendations included herein, NBS has relied on several principal assumptions and considerations regarding financial matters, conditions, and events that may occur in the future. This information and these assumptions, including the County's budgets, capital improvement costs, customer accounts and consumption, and information from County staff were provided by sources we believe to be reliable, although NBS has not independently verified this data.

While we believe NBS' use of such information and assumptions is reasonable for the purpose of this report and its recommendations, some assumptions will invariably not materialize as stated herein and may vary significantly due to unanticipated events and circumstances. Therefore, the actual results can be expected to vary from those projected to the extent that actual future conditions differ from those assumed by us or provided to us by others.

Appendix. Water Rate Study Tables and Figures

TABLE 1 : FINANCIAL PLAN AND SUMMARY OF REVENUE REQUIREMENTS

RATE REVENUE REQUIREMENTS SUMMARY	Projected	5-Year Projected Rate Period				
	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31
Sources of Water Funds [1]						
Rate Revenue:	$ 279,751	$ 285,346	$ 291,053	$ 296,874	$ 302,812	$ 308,868
Non-Rate 0	-	-	-	-	-	-
Total Sources of Funds:	**$ 279,751**	**$ 285,346**	**$ 291,053**	**$ 296,874**	**$ 302,812**	**$ 308,868**
Uses of Water Funds [1]						
Operating Expenses:						
200-Services & Supplies-General	$ 308,469	$ 319,392	$ 330,758	$ 342,589	$ 354,907	$ 367,739
540-Intra Entity Reimbursement Out	133,980	136,507	139,116	141,807	144,585	147,452
Subtotal: Operating Expenses	$ 442,449	$ 455,900	$ 469,874	$ 484,396	$ 499,492	$ 515,191
Other Expenditures:						
Existing Debt Service	$ -	$ -	$ -	$ -	$ -	$ -
New Debt Service	-	-	468,169	468,169	468,169	1,026,952
Rate-Funded Capital Expenses	248,032	-	-	185,516	500,000	500,000
Subtotal: Other Expenditures	$ 248,032	$ -	$ 468,169	$ 653,685	$ 968,169	$ 1,526,952
Total Uses of Water Funds:	**$ 690,481**	**$ 455,900**	**$ 938,043**	**$ 1,138,081**	**$ 1,467,662**	**$ 2,042,143**
plus: Revenue from Rate Increases[3]	-	85,604	125,153	170,109	221,143	279,010
Annual Surplus/(Deficit)	**$ (410,730)**	**$ (84,949)**	**$ (521,837)**	**$ (671,098)**	**$ (943,706)**	**$ (1,454,265)**
Net Revenue Req't. *(Total Uses less Non-Rate Revenue)*	**$ 410,730**	**$ 170,553**	**$ 646,990**	**$ 841,207**	**$ 1,164,850**	**$ 1,733,275**
Total Rate Revenue After Rate Increases (Water)	**$ -**	**$ 85,604**	**$ 125,153**	**$ 170,109**	**$ 221,143**	**$ 279,010**
Projected Annual Rate Revenue Increase	***0.00%***	***30.00%***	***10.00%***	***10.00%***	***10.00%***	***10.00%***
Cumulative Increase from Annual Revenue Increases	*0.00%*	*30.00%*	*43.00%*	*57.30%*	*73.03%*	*90.33%*
Debt Coverage After Rate Increase	*N/A*	*N/A*	*(0.11)*	*(0.04)*	*0.05*	*0.07*

1. Revenue and expenses for FY 2021/22 through FY 2023/24 provided by the District. Revenues and expenses for all other years are escalated based on the forecasting assumptions in Table 8.

2. Interest earnings for FY 2021/22 through FY 2023/24 are from the District's Budget. For all other years, interest is calculated based on historical LAIF returns.

3. Revenue from rate increases assumes an implementation date of July 1, 2026 for new rates. For each year thereafter, the assumption is that new rates will be implemented on July 1st of each year.

3	*<-- Select Financial Plan Scenario Here*						
Financial Plan Alternatives		FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31
1	Alternative 1 - Custom Rate Increases	*0.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*
2	Alternative 2 - Custom Rate Increases	*0.00%*	*8.00%*	*8.00%*	*8.00%*	*8.00%*	*8.00%*
3	Alternative 3 - Custom Rate Increases	*0.00%*	*30.00%*	*10.00%*	*10.00%*	*10.00%*	*10.00%*
4	Alternative 4 - No Rate Increases	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

TABLE 2 : RESERVE FUND SUMMARY

SUMMARY OF CASH ACTIVITY	Projected	5-Year Projected Rate Period				
	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31
Unrestricted Reserve:						
Total Beginning Cash[1]						
Operating Reserve						
Beginning Reserve Balance	$ (105,234)	$ (515,963)	$ (600,913)	$ (1,122,749)	$ (1,793,847)	$ (2,737,554)
Plus: Net Cash Flow (After Rate Increases)	(410,730)	(84,949)	(521,837)	(671,098)	(943,706)	(1,454,265)
Plus: Transfer in of Debt Reserve Surplus	-	-	-	-	-	-
Plus: Interest Earnings	-	-	-	-	-	-
Plus: Loan Proceeds	-	-	-	-	-	-
Less: Transfer out to Capital and Infrastructure Reserve	-	-	-	-	-	-
Ending Operating Reserve Balance	***($515,963)***	***($600,913)***	***($1,122,749)***	***($1,793,847)***	***($2,737,554)***	***($4,191,818)***
Target Ending Balance (90 days of O&M)[2]	*$ 111,000*	*$ 114,000*	*$ 117,000*	*$ 121,000*	*$ 125,000*	*$ 129,000*
Capital Reserve						
Beginning Reserve Balance	$ 414,926	$ 419,075	$ 423,266	$ 427,499	$ 431,774	$ 436,091
Plus: Grant Proceeds	-	-	-	-	-	-
Plus: Transfer of Operating Reserve Surplus	-	-	-	-	-	-
Plus: Interest Earnings	4,149	4,191	4,233	4,275	4,318	4,361
Less: Use of Reserves for Capital Projects	-	-	-	-	-	-
Ending Capital Reserve Balance	***$ 419,075***	***$ 423,266***	***$ 427,499***	***$ 431,774***	***$ 436,091***	***$ 440,452***
Target Ending Balance (90 days of O&M)[2]	*$ 111,000*	*$ 114,000*	*$ 117,000*	*$ 121,000*	*$ 125,000*	*$ 129,000*
Ending Balance - Excl. Restricted Reserves	**$ (96,888)**	**$ (177,647)**	**$ (695,251)**	**$ (1,362,074)**	**$ (2,301,462)**	**$ (3,751,366)**
Min. Target Ending Balance -Excl. Restricted Reserves	**$ 222,000**	**$ 228,000**	**$ 234,000**	**$ 242,000**	**$ 250,000**	**$ 258,000**
Ending Surplus/(Deficit) Compared to Reserve Targets	***$ (318,888)***	***$ (405,647)***	***$ (929,251)***	***$ (1,604,074)***	***$ (2,551,462)***	***$ (4,009,366)***
Annual Interest Earnings Rate[4]	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*

1. Beginning cash balances provided by District Staff.
2. The target ending balance is set equal to 90 days of O&M expenses.
3. Historical interest earning rates are per the average annual yields for funds invested in LAIF (2018-2024). The source is the California State Treasurer's website: *https://www.treasurer.ca.gov/pmia-laif/historical/annual.asp* .

TABLE 4 : REVENUE FORECAST [1]

DESCRIPTION	Basis	Projected	5-Year Projected Rate Period				
		FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31
Operating Revenue							
RATE REVENUE	1	$ 279,751	$ 285,346	$ 291,053	$ 296,874	$ 302,812	$ 308,868
XXX-Charges for Current Services-Fee Ord		**$ 279,751**	**$ 285,346**	**$ 291,053**	**$ 296,874**	**$ 302,812**	**$ 308,868**
40909975 OP TRANSFERS IN	6	$ -	$ -	$ -	$ -	$ -	$ -
090-Other Financing Sources		**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
TOTAL: REVENUE		**$ 279,751**	**$ 285,346**	**$ 291,053**	**$ 296,874**	**$ 302,812**	**$ 308,868**

TABLE 5 : REVENUE SUMMARY

DESCRIPTION	Basis	Projected	5-Year Projected Rate Period				
		FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31
XXX-Charges for Current Services-Fee Ord		$ 279,751	$ 285,346	$ 291,053	$ 296,874	$ 302,812	$ 308,868
090-Other Financing Sources		-	-	-	-	-	-
TOTAL: REVENUE		**$ 279,751**	**$ 285,346**	**$ 291,053**	**$ 296,874**	**$ 302,812**	**$ 308,868**

TABLE 6 : OPERATING EXPENSE FORECAST[1]

DESCRIPTION	Basis	Projected	5-Year Projected Rate Period				
		FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31
Operating Expenses							
52002030 SAFETY EQUIP	2	$ 103	$ 107	$ 110	$ 113	$ 117	$ 121
52002050 PURCHASE OF MATERIALS	2	310	320	330	340	351	362
52002070 FOOD	2	206	213	220	227	234	242
52002085 LEGAL NOTICES	2	103	107	110	113	117	121
52002090 MISCELLANEOUS EXPENSE	2	5,263	5,432	5,605	5,785	5,970	6,161
52002120 SMALL TOOLS & INSTRUMENTS	2	1,032	1,065	1,099	1,134	1,171	1,208
52002135 SPECIAL DEPT EXPENSE	2	1,548	1,598	1,649	1,701	1,756	1,812
52002176 STREET MAINTENANCE	2	72,240	74,552	76,937	79,399	81,940	84,562
52002180 UTILITIES	2	206	213	220	227	234	242
52002182 UTILITIES-ELECTRICITY	5	21,670	23,480	25,440	27,565	29,867	32,361
52002183 UTILITIES-GAS	2	464	479	495	510	527	544
52002186 UTILITIES-WATER	2	140,311	144,801	149,434	154,216	159,151	164,244
52002190 PRIOR YR EXP/SVCS & SUPPLIES	2	413	426	440	454	468	483
52002310 PRESORT & PACKAGING (ISF ONLY)	2	3,612	3,728	3,847	3,970	4,097	4,228
52002323 COURIER & PRINTING (ISF ONLY)	2	619	639	659	681	702	725
52002415 COUNTY SERVICES (INCL COWCAP	2	1,609	1,660	1,714	1,768	1,825	1,883
52002425 CREDIT CARD MERCHANT FEES	2	52	53	55	57	59	60
52002445 OTHER PROFESSIONAL & SPEC SVCS	2	15,480	15,975	16,487	17,014	17,559	18,120
52002448 COUNTY COUNSEL SERVICES	3	2,000	2,000	2,000	2,000	2,000	2,000
52002458 PERMIT COSTS	2	1,032	1,065	1,099	1,134	1,171	1,208
52002660 PENALTIES	2	41	43	44	45	47	48
52002678 MISCELLANEOUS LAB TESTING	2	18,998	19,606	20,233	20,881	21,549	22,239
52002855 GENERAL MAINTENANCE-EQUIPMENT	2	1,032	1,065	1,099	1,134	1,171	1,208
52002870 GEN MAINT-STRUCT,IMP & GROUNDS	2	-	-	-	-	-	-
52002905 RENTS & LEASES-STRUCT,IMP&GRDS	2	18,576	19,170	19,784	20,417	21,070	21,745
52002930 MAINTENANCE CHARGES (ISF ONLY)	2	1,548	1,598	1,649	1,701	1,756	1,812
200-Services & Supplies-General		**$ 308,469**	**$ 319,392**	**$ 330,758**	**$ 342,589**	**$ 354,907**	**$ 367,739**
55405010 SALARIES & BENE TRANFERS OUT	3	55,000	55,000	55,000	55,000	55,000	55,000
55405012 SERVS & SUPPLY TRANFERS OUT	2	36,120	37,276	38,469	39,700	40,970	42,281
55405018 INTERNAL COST ALLOCA OUT	2	42,860	44,232	45,647	47,108	48,615	50,171
540-Intra Entity Reimbursement Out		**$ 133,980**	**$ 136,507**	**$ 139,116**	**$ 141,807**	**$ 144,585**	**$ 147,452**
SUBTOTAL: WATER SYSTEM EXPENSES		**$ 442,449**	**$ 455,900**	**$ 469,874**	**$ 484,396**	**$ 499,492**	**$ 515,191**
GRAND TOTAL: WATER EXPENSES		**$ 442,449**	**$ 455,900**	**$ 469,874**	**$ 484,396**	**$ 499,492**	**$ 515,191**

TABLE 7 : FORECASTING ASSUMPTIONS

INFLATION FACTORS[3]	Basis	2026	2027	2028	2029	2030	2031
Customer Growth[2]	1	0.32%	2.00%	2.00%	2.00%	2.00%	2.00%
General Cost Inflation[3]	2	3.20%	3.20%	3.20%	3.20%	3.20%	3.20%
Labor Cost Inflation[4]	3	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Chemicals[5]	4	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%
Electricity[6]	5	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%
No Escalation	6	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

1. Revenue and expenses for FY 2024/25 provided by the County. Revenues and expenses for all other years are escalated based on the forecasting assumptions in Table 7.
2. Customer growth is based on the population projections provided by the County.
3. General cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers in the San Bernardino-Riverside-Ontario, CA area.
4. Labor cost inflation is provided by County.
5. Chemical cost inflation is based on the 5-year average annual change in the Producer Price Index for Chemical Manufacturing.
6. Electricity cost inflation is based on the 5-year average change in the Consumer Price Index for Electricity for the San Bernardino-Riverside-Ontario, CA area.

TABLE 8 : CAPITAL FUNDING SUMMARY

CAPITAL FUNDING FORECAST	Projected	5-Year Projected Rate Period				
Funding Sources:	**FY 2025/26**	**FY 2026/27**	**FY 2027/28**	**FY 2028/29**	**FY 2029/30**	**FY 2030/31**
Grants	$ -	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000
Use of Capacity Fee Reserves	-	-	-	-	-	-
SRF Loan Funding	-	-	-	-	-	-
Use of New Revenue Bond Proceeds	-	2,060,178	2,039,478	2,100,344	2,040,865	2,304,795
Use of Capital Rehabilitation and Replacement Reserve	-	-	-	-	-	-
Rate Revenue	248,032	-	-	185,516	500,000	500,000
Total Sources of Capital Funds	**$ 248,032**	**$ 7,060,178**	**$ 7,039,478**	**$ 7,285,860**	**$ 7,540,865**	**$ 7,804,795**
Uses of Capital Funds:						
Total Project Costs	$ 248,032	$ 7,060,178	$ 7,039,478	$ 7,285,860	$ 7,540,865	$ 7,804,795
Capital Funding Surplus (Deficiency)	***$ -***	***$ 0***	***$ 0***	***$ -***	***$ 0***	***$ (0)***
SRF Loan Funding	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***
New Revenue Bond Proceeds		***$ 6,200,000***		***$ -***	***$ 7,400,000***	***$ -***

TABLE 9 : CAPITAL IMPROVEMENT PROGRAM FUNDING OPTIONS

Policy Choice		FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31
1	Alternative 1 - Full Funding of CIP	$ 248,032	$ 7,060,178	$ 7,039,478	$ 7,285,860	$ 7,540,865	$ 7,804,795
2	Alternative 2 - 75% Funding of CIP	$ 186,024	$ 5,295,133	$ 5,279,608	$ 5,464,395	$ 5,655,649	$ 5,853,596
3	Alternative 3 - 50% Funding of CIP	$ 124,016	$ 3,530,089	$ 3,519,739	$ 3,642,930	$ 3,770,432	$ 3,902,398

Insert policy choice in box to right, based on options listed above:	**1**

Capital Improvement Program Funding Choice	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31
Effective Annual Funding Amount	$ 248,032	$ 7,060,178	$ 7,039,478	$ 7,285,860	$ 7,540,865	$ 7,804,795

CAPITAL IMPROVEMENT PROGRAM

TABLE 10 : CAPITAL IMPROVEMENT PROGRAM COSTS (*in Current-Year Dollars*)[1]

Project #	Project Description[2]	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31
Water Treatment Plant							
	Lead Pipe Investigation	$ 248,032	$ -	$ -	$ -	$ -	$ -
	Master Plan	-	250,000	-	-	-	-
	Cedar Glen Earmark	-	6,571,428	6,571,428	6,571,428	6,571,428	6,571,428
Total: CIP Program Costs *(Current-Year Dollars)*		**$ 248,032**	**$ 6,821,428**	**$ 6,571,428**	**$ 6,571,428**	**$ 6,571,428**	**$ 6,571,428**

TABLE 11 : CAPITAL IMPROVEMENT PROGRAM COSTS (*in Future-Year Dollars*)[3]

Project Description	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31
Water Treatment Plant						
Lead Pipe Investigation	$ 248,032	$ -	$ -	$ -	$ -	$ -
Master Plan	-	258,750	-	-	-	-
Cedar Glen Earmark	-	6,801,428	7,039,478	7,285,860	7,540,865	7,804,795
Total: CIP Program Costs *(Current-Year Dollars)*	**$ 248,032**	**$ 7,060,178**	**$ 7,039,478**	**$ 7,285,860**	**$ 7,540,865**	**$ 7,804,795**

TABLE 12 : FORECASTING ASSUMPTIONS

Economic Variables	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31
Annual Construction Cost Inflation, Per Engineering News Record[4]	*0.00%*	*3.50%*	*3.50%*	*3.50%*	*3.50%*	*3.50%*
Cumulative Construction Cost Multiplier from FY 2024/25	*1.00*	*1.04*	*1.07*	*1.11*	*1.15*	*1.19*

1. Capital project costs were provided by City Staff and assumes Year 1 begins in FY 2023/24.
3. The capital project costs have been inflated by District Staff in Current CIP Budget using the Construction Cost Index (See Table 13). Website: *http://enr.construction.com* .
4. For reference purposes, the annual Construction Cost Inflation percentage is the 10-year average annual change in the Construction Cost Index for 2013-2023 (3.5%).

TABLE 13 : EXISTING DEBT OBLIGATIONS

EXISTING DEBT OBLIGATIONS	Actual	Budget	5-Year Projected Rate Period				
Annual Repayment Schedules:	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32
N/A							
Principal Payment	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Interest Payment	-	-	-	-	-	-	-
Subtotal: Annual Debt Service	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Coverage Requirement ($-Amnt above annual payment)	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Reserve Requirement (total fund balance)	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Grand Total: Existing Annual Debt Service	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Grand Total: Existing Annual Coverage Requirement	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Grand Total: Existing Debt Reserve Target	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

1
2
3
4

TABLE 14 : EXISTING ANNUAL DEBT OBLIGATIONS TO BE SATISFIED BY WATER RATES

Annual Obligations	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32
Existing Annual Debt Service	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Existing Annual Coverage Requirement	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Existing Debt Reserve Target	$ -	$ -	$ -	$ -	$ -	$ -	$ -

TABLE 15 : FUTURE DEBT FINANCING ASSUMPTIONS

Long-Term Debt Terms	Revenue Bonds
Issuance Cost	2.00%
Annual Interest Cost (%)	5.50%
Term	30
Debt Reserve Funded	Yes
Coverage Requirement (% above annual pmt)	125%

TABLE 16 : FUTURE DEBT OBLIGATIONS

Annual Repayment Schedules	2025	2026	2027	2028	2029	2030	2031
SRF Loan Funding							
Principal Payment	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Interest Payment	-	-	-	-	-	-	-
Subtotal: Annual Debt Service	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Revenue Bonds							
Principal Payment	$ -	$ -	$ -	$ -	$ 93,935	$ 99,102	$ 104,552
Interest Payment	-	-	-	-	374,234	369,068	363,617
Subtotal: Annual Debt Service	**$ -**	**$ -**	**$ -**	**$ -**	**$ 468,169**	**$ 468,169**	**$ 468,169**
Grand Total: Future Annual Debt Service	**$ -**	**$ -**	**$ -**	**$ -**	**$ 468,169**	**$ 468,169**	**$ 468,169**
Grand Total: New Annual Coverage Requirement	**$ -**	**$ -**	**$ -**	**$ -**	**$ 585,212**	**$ 585,212**	**$ 585,212**
Grand Total: Future Debt Reserve Target	**$ -**	**$ -**	**$ -**	**$ -**	**$ 468,169**	**$ 468,169**	**$ 468,169**

TABLE 17 : TOTAL DEBT SERVICE

Annual Obligations	2025	2026	2027	2028	2029	2030	2031
Annual Debt Service	*$ -*	*$ -*	*$ -*	*$ -*	*$ 468,169*	*$ 468,169*	*$ 468,169*
Annual Coverage Requirement	*$ -*	*$ -*	*$ -*	*$ -*	*$ 585,212*	*$ 585,212*	*$ 585,212*
Total Debt Reserve Target	*$ -*	*$ -*	*$ -*	*$ -*	*$ 468,169*	*$ 468,169*	*$ 468,169*
Check	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*

TABLE 18 : CURRENT WATER RATE SCHEDULE

Water Rate Schedule	July 1, 2025
Monthly Fixed Service Charges (in $/mo)	
Domestic Service Charge	
Flat Rate	$188.85
5/8" & 3/4"	$35.26
1"	$57.84
1.5"	$113.75
2"	$181.11
3"	$360.96
4"	$563.05
6"	$1,124.19
8"	$1,797.81
Water Usage Charges (in $/HCF)*	
0-6	$10.08
7-12	$10.32
13+	$11.18

*Monthly fee per hcf

TABLE 19 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS

Classification of Expenses							
Budget Categories	Total Revenue Requirements	Commodity	Capacity	Customer	Basis of Classification		
	FY 2026/27	(COM)	(CAP)	(CA)	(COM)	(CAP)	(CA)
Operating Expenses							
52002030 Safety Equip	$ 107	$ 29	$ 72	$ 5	27.5%	67.5%	5.0%
52002050 Purchase Of Materials	$ 320	$ 88	$ 216	$ 16	27.5%	67.5%	5.0%
52002070 Food	$ 213	$ 59	$ 144	$ 11	27.5%	67.5%	5.0%
52002085 Legal Notices	$ 107	$ -	$ -	$ 107	0.0%	0.0%	100.0%
52002090 Miscellaneous Expense	$ 5,432	$ 1,494	$ 3,666	$ 272	27.5%	67.5%	5.0%
52002120 Small Tools & Instruments	$ 1,065	$ 293	$ 719	$ 53	27.5%	67.5%	5.0%
52002135 Special Dept Expense	$ 1,598	$ 439	$ 1,078	$ 80	27.5%	67.5%	5.0%
52002176 Street Maintenance	$ 74,552	$ 20,502	$ 50,322	$ 3,728	27.5%	67.5%	5.0%
52002180 Utilities	$ 213	$ 128	$ 75	$ 11	60.0%	35.0%	5.0%
52002182 Utilities-Electricity	$ 23,480	$ 14,088	$ 8,218	$ 1,174	60.0%	35.0%	5.0%
52002183 Utilities-Gas	$ 479	$ 288	$ 168	$ 24	60.0%	35.0%	5.0%
52002186 Utilities-Water	$ 144,801	$ 86,880	$ 50,680	$ 7,240	60.0%	35.0%	5.0%
52002190 Prior Yr Exp/Svcs & Supplies	$ 426	$ 117	$ 288	$ 21	27.5%	67.5%	5.0%
52002310 Presort & Packaging (Isf Only)	$ 3,728	$ -	$ -	$ 3,728	0.0%	0.0%	100.0%
52002323 Courier & Printing (Isf Only)	$ 639	$ 176	$ 431	$ 32	27.5%	67.5%	5.0%
52002415 County Services (Incl Cowcap)	$ 1,660	$ 457	$ 1,121	$ 83	27.5%	67.5%	5.0%
52002425 Credit Card Merchant Fees	$ 53	$ -	$ -	$ 53	0.0%	0.0%	100.0%
52002445 Other Professional & Spec Svcs	$ 15,975	$ 4,393	$ 10,783	$ 799	27.5%	67.5%	5.0%
52002448 County Counsel Services	$ 2,000	$ 550	$ 1,350	$ 100	27.5%	67.5%	5.0%
52002458 Permit Costs	$ 1,065	$ 293	$ 719	$ 53	27.5%	67.5%	5.0%
52002660 Penalties	$ 43	$ 12	$ 29	$ 2	27.5%	67.5%	5.0%
52002678 Miscellaneous Lab Testing	$ 19,606	$ 15,685	$ 2,941	$ 980	80.0%	15.0%	5.0%
52002855 General Maintenance-Equipment	$ 1,065	$ 293	$ 719	$ 53	27.5%	67.5%	5.0%
52002905 Rents & Leases-Struct,Imp&Grds	$ 19,170	$ 5,272	$ 12,940	$ 959	27.5%	67.5%	5.0%
52002930 Maintenance Charges (Isf Only)	$ 1,598	$ 439	$ 1,078	$ 80	27.5%	67.5%	5.0%
55405010 Salaries & Bene Tranfers Out	$ 55,000	$ 15,125	$ 37,125	$ 2,750	27.5%	67.5%	5.0%
55405012 Servs & Supply Tranfers Out	$ 37,276	$ 10,251	$ 25,161	$ 1,864	27.5%	67.5%	5.0%
55405018 Internal Cost Alloca Out	$ 44,232	$ 12,164	$ 29,856	$ 2,212	27.5%	67.5%	5.0%
Subtotal: Water System Expenses	**$ 455,900**	**$ 189,513**	**$ 239,899**	**$ 26,488**	**41.6%**	**52.6%**	**5.8%**

TABLE 20 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses, cont.							
Budget Categories	Total Revenue Requirements	Commodity	Capacity	Customer	Basis of Classification		
	FY 2026/27	(COM)	(CAP)	(CA)	(COM)	(CAP)	(CA)
Debt Service Payments							
Outstanding Debt	$ -	$ -	$ -	$ -	0.0%	100.0%	0.0%
New Debt Issue - SRF Loan	-	-	-	-	0.0%	100.0%	0.0%
New Debt Issue - Revenue Bond	-	-	-	-	0.0%	100.0%	0.0%
Total Debt Service Payments	**$ -**	**$ -**	**$ -**	**$ -**	**0.0%**	**0.0%**	**0.0%**
Capital Expenditures							
Rate-Funded Capital Expenses	$ -	$ -	$ -	$ -	0.0%	100.0%	0.0%
TOTAL REVENUE REQUIREMENTS	**$ 455,900**	**$ 189,513**	**$ 239,899**	**$ 26,488**	**41.6%**	**52.6%**	**5.8%**
Less: Non-Rate Revenues							
090-Other Financing Sources	$ -	$ -	$ -	$ -	60.0%	35.0%	5.0%
NET REVENUE REQUIREMENTS	**$ 455,900**	**$ 189,513**	**$ 239,899**	**$ 26,488**			
Allocation of Revenue Requirements	**100.0%**	**41.6%**	**52.6%**	**5.8%**			

TABLE 21 : ADJUSTMENT TO CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS

Adjustments to Classification of Expenses				
Adjustment for Current Rate Level:	**Total**	**(COM)**	**(CAP)**	**(CA)**
FY 2026/27 Target Rate Rev. After Rate Increases	$ 370,950			
Projected Revenue at Current Rates	$ 285,346			
FY 2026/27 Projected Rate Increase	30%			
Adjusted Net Revenue Req'ts	**$ 370,950**	**$ 154,200**	**$ 195,198**	**$ 21,552**
Percent of Revenue	*100.0%*	*41.6%*	*52.6%*	*5.8%*

TABLE 22 : NET REVENUE REQUIREMENTS PER COSA RESULTS

Net Revenue Requirements - Per COSA Results	Total Rate Revenue Requirements FY 2025/26	Commodity Related Costs	Fixed Costs	
			Capacity Related Costs	Customer Related Costs
Rate-Design Adjustments to Fixed/Variable %	**100.0%**	**41.6%**	**52.6%**	**5.8%**
Rate-Design Adjustments to Fixed/Variable ($)	**$370,950**	**$154,200**	**$195,198**	**$21,552**

TABLE 23 : DEVELOPMENT OF THE COMMODITY ALLOCATION FACTOR

Development of the Volumetric/Variable Allocation Factor[1]			
Customer Class	**CY 2024 Consumption (HCF)**	**% of Total Volume (Potable)**	**% of Total Volume (Non-potable)**
All Customers	11,622	**100.0%**	**0.0%**
Total	**11,622**	**100.0%**	**0.0%**

1. Consumption data is based on County billing data for CY 2024.

TABLE 24 : DEVELOPMENT OF THE CUSTOMER ALLOCATION FACTORS: METERS

Development of the Customer Allocation Factor[1]		
Customer Class	**No. of Meters**	**% of Total Meters**
All Customers	334	**100.0%**
Total	**334**	**100.0%**

1. Consumption data is based on County billing data for CY 2024.

TABLE 25 : ALLOCATION OF WATER REVENUE REQUIREMENTS

Classification Components	Cost-of-Service Net Revenue Requirements *(FY 2026/27)*	
Commodity-Related Costs	$ 154,200	*41.6%*
Capacity-Related Costs	195,198	*52.6%*
Customer-Related Costs	21,552	*5.8%*
Net Revenue Requirement	**$ 370,950**	*100.0%*

TABLE 26 : ALLOCATION OF NET REVENUE REQUIREMENTS - FY 2024/25

Customer Classes	Classification Components			Cost of Service Net Rev. Req'ts	% of COS Net Revenue Req'ts
	VARIABLE	*FIXED*			
	Commodity-Related Costs	Capacity-Related Costs	Customer-Related Costs		
All Customers	$ 154,200	$ 195,198	$ 21,552	$ 370,950	*100.0%*
Total Net Revenue Requirement	**$ 154,200**	**$ 195,198**	**$ 21,552**	**$ 370,950**	**100%**
Total Net Revenue Requirement by Classification Component	*VARIABLE $154,200*	*FIXED $216,750*		*$370,950*	

TABLE 27 : RATE DESIGN - SUMMARY OF REVENUE REQUIREMENTS

Customer Class	COSA Net Revenue		NET REVENUE REQUIREMENT				
	FY 2026/27	% of COS Rev. Req't.	% Fixed Revenue	% Variable Revenue	Revenue from Volumetric Charges	Revenue from Hydraulic Capacity Charges	Revenue from Customer Costs
All Customers	$ 370,950	100.0%	58%	42%	$ 154,200	$ 195,198	$ 21,552
Total	**$ 370,950**	**100.0%**			**$ 154,200**	**$ 195,198**	**$ 21,552**

TABLE 28 : METER EQUIVALENCY FACTORS USED IN FIXED CHARGES CALCULATION

Meter Size	Standard Meters	
	Meter Capacity	Equivalency to 3/4 inch
	Displacement Meters	
3/4 inch	30	1.00
1 inch	50	1.67
1 1/2 inch	100	3.33
2 inch	160	5.33
	Compound Class I Meters	
3 inch	320	10.67
4 inch	500	16.67
6 inch	1,000	33.33
8 inch	1,600	53.33
	Turbine Class II Meters	
10 inch	4,200	140.00
12 inch	5,300	176.67

1. Per AWWA, M1 Manual, Table B-1.

TABLE 29 : CALCULATION OF MONTHLY FIXED DOMESTIC METER SERVICE CHARGES FOR FY 2026/27

									NET REVENUE REQUIREMENT
Number of Meters by Class and Size[1]	**FY 2026/27**								**Total**
	5/8 - 3/4" meter	**1" meter**	**1.5" meter**	**2" meter**	**3" meter**	**4" meter**	**6" meter**	**8" meter**	
All Customers	239	94	0	1	0	0	0	0	334
Total Meters/Accounts	**239**	**94**	**0**	**1**	**0**	**0**	**0**	**0**	**334**
Hydraulic Capacity Factor[2]	*1.00*	*1.67*	*3.33*	*5.33*	*10.67*	*16.67*	*33.33*	*53.33*	
Total Equivalent Meters	**239**	**157**	**0**	**5**	**0**	**0**	**0**	**0**	**401**
Monthly Fixed Service Charges									
Customer Costs ($/Acct/month)[3]	$ 5.38	$ 5.38	$ 5.38	$ 5.38	$ 5.38	$ 5.38	$ 5.38	$ 5.38	
Capacity Costs ($/Acct/month)[4]	$ 40.56	$ 67.61	$ 135.22	$ 216.35	$ 432.69	$ 676.08	$ 1,352.16	$ 2,163.46	
Total Monthly Meter Charge	**$ 45.94**	**$ 72.99**	**$ 140.59**	**$ 221.72**	**$ 438.07**	**$ 681.46**	**$ 1,357.54**	**$ 2,168.83**	
Annual Fixed Costs Allocated to Monthly Meter Charges									
Customer Costs	$ 21,552								
Capacity Costs	195,198								
Total Fixed Meter Costs	$ 216,750								
Annual Revenue from Monthly Meter Charges									
Customer Charges	$ 15,422	$ 6,066	$ -	$ 65	$ -	$ -	$ -	$ -	**$ 21,552**
Capacity Charges	$ 116,340	$ 76,262	$ -	$ 2,596	$ -	$ -	$ -	$ -	**$ 195,198**
Total Revenue from Monthly Meter Charges	**$ 131,762**	**$ 82,327**	**$ -**	**$ 2,661**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 216,750**

1. Meter by Class and Size are based on December 2024 customer billing data.
2. Source: *Principles of Water Rates, Fees, and Charges* , Manual M1, AWWA, Table B-1.
3. Customer costs are allocated to each customer by dividing the total customer costs by the total number of customers.
4. Capacity costs are allocated by meter size and the hydraulic capacity of the meter.

TABLE 30 : ESTIMATED DOMESTIC FIXED REVENUE BY CUSTOMER CLASS

							NET REVENUE REQUIREMENT
Customer Class and Meter Size	**Hydraulic Capacity Factor**	**Number of Meters**	**Total Equivalent Meters**	**Fixed Meter Charge**		**Total Fixed Meter Charge**	**Estimated Revenue from Fixed Charges**
				Customer Component	**Capacity Component**		
5/8 - 3/4" meter	1.00	239	239	$ 5.38	$ 40.56	$ 45.94	$ 131,762.04
1" meter	1.67	94	157	5.38	67.61	72.99	82,327.46
1.5" meter	3.33	0	0	5.38	135.22	140.59	-
2" meter	5.33	1	5	5.38	216.35	221.72	2,660.68
3" meter	10.67	0	0	5.38	432.69	438.07	-
4" meter	16.67	0	0	5.38	676.08	681.46	-
6" meter	33.33	0	0	5.38	1,352.16	1,357.54	-
8" meter	53.33	0	0	5.38	2,163.46	2,168.83	-
Total		**334**	**401**				**$ 216,750.18**

TABLE 31 : PROPOSED VOLUMETRIC CHARGES FOR FY 2026/27 BY CUSTOMER CLASS

NET REVENUE REQUIREMENT					
Customer Classes	**Water Consumption (HCF/yr)**	**Total Target Rev. Req't from Vol. Charges**	**% of Total Rate Revenue**	**Uniform Commodity Rates ($/HCF)**	***Proposed Rate Structure***
All Customers	11,622	$ 154,200	*41.6%*	$13.27	*Uniform*
Total Water	**11,622**	**$ 154,200**	***41.6%***		

TABLE 32 : SUMMARY OF VOLUMETRIC CHARGES FOR FY 2026/27 FOR PROPOSED RATE TABLE

NET REVENUE REQUIREMENT					
Customer Classes	**Water Consumption (HCF/yr)**	**Total Target Rev. Req't from Vol. Charges**	**% of Total Rate Revenue**	**Uniform Commodity Rates ($/HCF)**	***Proposed Rate Structure***
All Customers	11,622	$ 154,200	*41.6%*	$13.27	*Uniform*
Total Water	**11,622**	**$ 154,200**	***41.6%***		

TABLE 33 : ESTIMATED VOLUMETRIC REVENUE BY CUSTOMER CLASS

				NET REVENUE REQUIREMENT	
Customer Class	**Estimated Consumption**	**Estimated Variable Revenue**	**% of Variable Rate Revenue**	**Total Estimated**	**Cost of Service Net Revenue**
All Customers	11,622	$ 154,200	*100.0%*	$ 154,200	$ 370,950
Grand Total	**11,622**	**$ 154,200**	***100.0%***	**$ 154,200**	**$ 370,950**

TABLE 34 : CURRENT VS. PROPOSED MAXIMUM WATER RATES ***NET REVENUE REQUIREMENT***

Water Rate Schedule	Current Rates	Proposed Rates				
		FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31
Monthly Fixed Service Charges (in $/mo)						
Domestic Service Charge						
Flat Rate	$188.85	N/A	N/A	N/A	N/A	N/A
5/8" & 3/4"	$35.26	$45.94	$50.54	$55.59	$61.15	$67.26
1"	$57.84	$72.99	$80.28	$88.31	$97.14	$106.86
1.5"	$113.75	$140.59	$154.65	$170.12	$187.13	$205.84
2"	$181.11	$221.72	$243.90	$268.28	$295.11	$324.62
3"	$360.96	$438.07	$481.88	$530.06	$583.07	$641.38
4"	$563.05	$681.46	$749.60	$824.56	$907.02	$997.72
6"	$1,124.19	$1,357.54	$1,493.29	$1,642.62	$1,806.88	$1,987.57
8"	$1,797.81	$2,168.83	$2,385.72	$2,624.29	$2,886.72	$3,175.39
Water Usage Charges (in $/HCF)						
0-6	$10.08	$13.27	$14.59	$16.05	$17.66	$19.43
7-12	$10.32	N/A	N/A	N/A	N/A	N/A
13+	$11.18	N/A	N/A	N/A	N/A	N/A