SWEETWATER AUTHORITY

Water Rate Study

Final Report

September 2023

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1. Introduction

1.1 Purpose

The Sweetwater Authority (Authority) retained NBS to conduct a comprehensive utility rate study for its water enterprise funds. The Authority 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 all applicable legal requirements (e.g., California Constitution Article XIII D, Section 6, which is commonly referred to as Proposition 218 [Prop 218]). The Authority's broader objectives in this study include ensuring adequate funding for operating and capital costs, maintaining adequate reserves, 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 Authority in its continuing effort to maintain transparent communications with the residents and community it serves.

In developing new rates for the Authority's enterprise funds, NBS worked cooperatively with Authority staff and the Sweetwater Authority Board (Board) in selecting the appropriate rate alternatives that address the Authority's goals and objectives. Based on input provided by Authority 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, to the extent such standards and principles are consistent with California's unique legal framework for rate setting.

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 Authority 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 *Appendix.*

The Authority 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 three (3) 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. 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

Further details are discussed below and documented in the *Appendix.*

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

RATE DESIGN ANALYSIS

During the rate design phase of the study, NBS and Authority staff worked together to develop rate alternatives that will meet the Authority's objectives. It is important for the Authority 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).
- Rates should promote the efficient allocation of the resource.
- 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 Authority 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

[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.

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).

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 Authority's rate administration.

Tiered Water Rates – The 2015 San Juan Capistrano court decision held that water agencies may only charge tiered rates if they can show that the tiered rates are proportionate to the agency's higher costs to serve those customers within each tier, meaning that caution must be used to ensure that customers are appropriately allocated costs that meet legal requirements.

KEY FINANCIAL ASSUMPTIONS

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

Funding of Capital Projects – The capital improvement costs will be funded with a combination of cash in reserves and the additional revenue generated from the proposed rate increases. The capital projects listed in the financial plan are from the Authority's capital improvement program. The analysis assumes:

- Capital costs attributable to existing customers are funded using rate revenue.
- Capital costs attributable to growth are funded by revenue from the impact fee reserves.

Reserve Targets – The Authority maintains reserves for operations, capital, and other specific needs. The details of the 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.[5]
- General cost inflation is set at 3.93% annually.[6]
- Labor cost inflation is set at 3.50% annually.[7]
- Energy cost inflation is set at 12.43% annually.[8]
- Electricity cost inflation is set at 5.64% annually.[9]
- Fuel & Utilities cost inflation is set at 5.24% annually.[10]

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[5] *Customer growth based on based on data from the Authority's 2021 Capacity Fee Study. The growth rate was estimated on recent actual experience and the anticipation that the majority of growth will be in multi-family housing development.*

[6] *General cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers in the San Diego-Carlsbad, CA area.*

[7] *Labor cost inflation is based on the 5-year average annual change in the Quarterly Census of Employment and Wages for San Diego-Carlsbad, CA.*

[8] *Energy cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers in the San Diego-Carlsbad, CA area.*

[9] *Electricity cost inflation is based on the 5-year average change in the Consumer Price Index for San Diego-Carlsbad, CA area.*

[10] *Fuel & Utilities cost inflation is based on the 5-year average annual change in the Consumer Price Index - Average Price Data for Fuels and related products and power. This factor is used for utility costs other than electricity.*

- Construction cost inflation is set at 3.50% annually.[11]
- Water purchases inflation factor is set at 5.0% annually.[12]

These inflation factors are based on long-term trends; therefore, the Authority 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 for the rate adoption period.

[11] *Construction cost Inflation is the 10-year average change in the Construction Cost Index for 2012-2022. Source: Engineering News Record website.*

[12] *Water purchases growth is estimated at 5% annually based on historical data provided by Authority. Source file: Current and 5 prior years of Source of Supply.*

2. Water Rate Study

2.1 Key Water Rate Study Issues

The Authority'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 three 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, including the residential tiered water rates.
- Maintaining adequate reserve levels to ensure continuity in operations.
- 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.

Proposition 218 does not mandate a specific rate structure. Many different rate structures can be compliant with Proposition 218, so long as they meet the substantive requirements of article XIII D, section 6 of the California Constitution. Accordingly, NBS developed various water rate alternatives as requested by Authority staff over the course of this study. All rate structure alternatives relied on industry standards and cost-of-service principles, and are compliant with Proposition 218. 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 other relevant data provided by the Authority.

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 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 received from Authority staff and the Board, the proposed rate structure will "phase in" an increased percentage of rate revenue collected from fixed charges over the course of the three-year adopted rate period. The proposed rates will collect 13% of rate revenue from fixed charges in FY 2023/24, 16% of rate revenue from fixed charges in FY 2024/25 and 19% of rate revenue from fixed charges in FY 2025/26.

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 Authority's water utility, regarding these objectives, is as follows:

Meeting Net Revenue Requirements: For FY 2023/24 through FY 2025/26, 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 $57.2 million annually. If no rate adjustments are implemented, the Authority is projected to run an annual deficit of approximately $3.5 million in FY 2023/24, increasing to more than $5.3 million by FY 2025/26, and will be unable to meet its debt service coverage requirements. Additional detail on the Financial Plan and Summary of Revenue Requirements is found in Table 1 of the *Appendix*.

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. Additional detail on the Reserve Fund is found in Tables 2 and 3 of the *Appendix*.

- The Authority's existing reserves are healthy, and the challenge is to meet future revenue requirements and still maintain adequate reserves. NBS together with Authority staff have chosen to set the following reserve targets:
    - Operating Reserve equal to two months of operating and maintenance expenses, or approximately $8.8 million in FY 2023/24. 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.
    - Capital & Infrastructure Reserve equal to 103% of the total Board Designated Reserves. The Board Designated Reserves for Vista del Lago, Vehicle Replacement, Sweetwater River Basin land, Sweetwater Dam PMF Project, and the National Authority Wells Water Quality Improvement Project total approximately $7.8 million in FY 2022/23.
    - Revenue Stabilization Reserve equal to 1 month of rate revenue, or approximately $4.4 million in FY 2023/24. The rate stabilization reserve is used to offset future water rate increases due to water purchases from the San Diego County Water Authority (SDCWA). The maximum Rate Stabilization Reserve balance (Maximum Balance) is established with each annual budget and is equal to the volume of M&I wholesale water purchases required for a 24 month period when no surface reservoir water is available multiplied by the most current SDCWA Melded Untreated M&I Supply Rate and Transportation Rate, rounded to the nearest one-hundred thousand.

Funding Capital Improvement Projects: The Authority must fund necessary capital improvements to maintain current service levels. Authority staff has identified roughly $45.5 million in expected capital expenditures over the three years (FY 2023/24 through FY 2025/26) which is an average of approximately $15 million in capital expenditures annually. This rate study assumes the Authority will not be issuing any new revenue bonds in FY 2023/24 through FY 2025/26. The recommended rate increases enable the Authority to fund these capital expenditures without exhausting the existing reserves levels below the minimum target ending balances.

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 approximately 0.32% annually. This factor was used in the analysis for rate revenues while inflation factors, including the Consumer Price Index,[13] were used in projecting expenses.

Maintaining Adequate Bond Coverage: The water utility currently has an annual debt payment of approximately $1.3 million for the 2017 Water Revenue Bonds. This analysis assumes that the Authority will not be issuing any new debt to fund capital projects during the proposed rate period. 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 revenue bonds typically include a minimum debt service coverage ratio of 1.25. The benefit of maintaining a higher coverage ratio is that it strengthens the Authority'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 three years.

[13] Consumer Price Index for all urban consumers in the San Diego-Carlsbad, CA area. Source: Website: *https://www.bls.gov/cpi/.*

Figure 2. Summary of Water Revenue Requirements

Summary of Sources and Uses of Funds and Net Revenue Requirements	Budget	3-Year Projected Rate Period		
	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Sources of Water Funds				
Rate Revenue Under Prevailing Rates	$ 52,841,200	$ 53,009,986	$ 53,178,771	$ 53,503,162
Non-Rate Revenues	2,820,000	2,237,000	2,244,123	2,257,812
Total Sources of Funds	**$ 55,661,200**	**$ 55,246,986**	**$ 55,422,894**	**$ 55,760,974**
Uses of Water Funds				
Administration	$ 16,268,600	$ 17,121,200	$ 17,732,053	$ 18,364,765
Information Systems	1,895,000	2,128,000	2,207,441	2,289,858
Administrative Services	1,556,100	2,521,600	2,616,938	2,715,891
Customer Service	2,557,800	2,853,800	2,957,826	3,065,655
Water Quality	11,107,500	11,735,700	12,536,513	13,412,220
Engineering	16,790,800	11,497,200	12,014,169	12,554,871
Distribution	5,157,600	4,900,300	5,083,781	5,274,235
Debt Service	1,343,131	1,342,631	1,345,881	1,347,631
Rate-Funded Capital Expenses	1,511,179	4,601,261	2,071,623	2,083,862
Total Use of Funds	**$ 58,187,710**	**$ 58,701,692**	**$ 58,566,225**	**$ 61,108,988**
Annual Surplus/(Deficit)	**$ (2,526,510)**	**$ (3,454,707)**	**$ (3,143,331)**	**$ (5,348,015)**
Additional Revenue from Rate Increases[1]	-	265,050	1,869,234	5,346,156
Surplus (Deficiency) after Rate Increase	**$ (2,526,510)**	**$ (3,189,657)**	**$ (1,274,097)**	**$ (1,858)**
Projected Annual Rate Revenue Increase	***0.00%***	***0.50%***	***6.00%***	***6.50%***
Cumulative Rate Revenue Increases	*0.00%*	*0.50%*	*6.53%*	*13.45%*
Net Revenue Requirement[2]	**$ 55,367,710**	**$ 56,464,692**	**$ 56,322,102**	**$ 58,851,176**

1. Assumes new rates are implemented January 1, 2024.
2. Total use of funds less non-rate revenues.

Figure 3 summarizes the projected reserve fund balances and reserve targets for the Authority's unrestricted funds. A detailed version of the proposed 3-year financial plan is included in the *Appendix.* The tables in the *Appendix* include the revenue requirement (Table 1), reserve funds (Tables 2-3), revenue sources (Tables 4-5), operating expenses (Tables 6-15), capital improvement costs (Tables 16-23), debt obligations (Tables 24-25) and the proposed rate adjustments needed to meet the Authority's funding requirements (Table 1).

Figure 3. Summary of Primary Water Reserve Funds

Beginning Reserve Fund Balances and Recommended Reserve Targets	Budget	3-Year Projected Rate Period		
	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Operating Reserve				
Ending Balance	$ 9,222,000	$ 6,032,343	$ 4,758,246	$ 4,756,387
Recommended Minimum Target	*9,222,000*	*8,793,000*	*9,191,000*	*9,613,000*
Board Designated Reserves				
Ending Balance	$ 8,651,353	$ 9,115,404	$ 9,800,522	$ 10,923,157
Recommended Minimum Target	*8,057,105*	*8,298,818*	*8,547,783*	*8,804,216*
Revenue Stabilization Reserve				
Ending Balance	$ 13,216,231	$ 13,386,588	$ 13,559,142	$ 13,733,919
Recommended Minimum Target	*4,400,000*	*4,440,000*	*4,590,000*	*4,900,000*
Total Ending Balance	**$ 31,089,584**	**$ 28,534,335**	**$ 28,117,910**	**$ 29,413,463**
Total Recommended Minimum Target	***$ 21,679,105***	***$ 21,531,818***	***$ 22,328,783***	***$ 23,317,216***

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 Authority'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 Authority'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* (Tables 27-40) show how the Authority'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.[14]

NBS functionalized the Authority's costs into categories that represent fixed and variable costs. This analysis resulted in a cost distribution that is approximately 51% fixed and 49% variable (i.e., volumetric). However, the Authority's current rates collect revenue from customers in proportions of approximately 13% fixed and

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

87% variable. Authority staff and the Board have provided direction to design a rate structure to increase the cost distribution for fixed charges to be more representative of the cost-of-service analysis. As such, the proposed rate structure will "phase in" an increased percentage of rate revenue collected from fixed charges over the course of the three-year adopted rate period. The proposed rates will collect 13% of rate revenue from fixed charges in FY 2023/24, 16% of rate revenue from fixed charges in FY 2024/25 and 19% of rate revenue from fixed charges in FY 2025/26.

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 for FY 2023/24. Additional detailed information regarding functionalization and classification of costs is found in Tables 53-87 in the *Appendix*.

Figure 4. Allocation Percentages of Revenue Requirements

Classification Components	YEAR 1 (13% Fixed / 87% Variable) Net Rev. Reqts. *(FY 2023/24)*		YEAR 2 (16% Fixed / 84% Variable) Net Rev. Reqts. *(FY 2024/25)*[2]		YEAR 3 (19% Fixed / 81% Variable) Net Rev. Reqts. *(FY 2025/26)*[2]	
Commodity-Related Costs	$ 42,692,081	*80.1%*	$ 43,559,460	*77.1%*	$ 44,586,559	*74.1%*
SDCWA Wholesale Purchased Water	***3,657,200***	***6.9%***	***3,876,632***	***6.9%***	***4,128,613***	***6.9%***
Subtotal - Commodity-Related Costs	46,349,281	87.0%	47,436,092	84.0%	48,715,172	81.0%
Capacity-Related Costs	3,504,602	*6.6%*	5,111,950	*9.1%*	6,932,109	*11.5%*
SDCWA Infrastructure Access Charge	***2,206,700***	***4.1%***	***2,339,102***	***4.1%***	***2,491,144***	***4.1%***
Customer-Related Costs	1,207,800	*2.3%*	1,575,714	*2.8%*	1,992,786	*3.3%*
Fire Protection-Related Costs	6,653	*0.0%*	8,680	*0.0%*	10,977	*0.0%*
Net Revenue Requirement	**$ 53,275,036**	*100.0%*	**$ 56,471,538**	*100.0%*	**$ 60,142,188**	*100.0%*
Net Revenue Requirement w/o SDCWA Charges	**$ 47,411,136**	--	**$ 50,255,804**	--	**$ 53,522,431**	--

1. Net revenue requirements less recycled water revenue requirements.
2. Net Rev. Reqts. in Years 2-3 assume costs increase uniformly by the annual rate increases in the Financial Plan.

Figure 5. Allocated Net Revenue Requirements

FY 2023/24						
Customer Classes	Classification Components					Cost of Service Net Rev. Req'ts
	VARIABLE	*FIXED*				
	Total Commodity Costs	Capacity-Related Costs	SDCWA Infrastructure Access Charge	Customer-Related Costs	Fire Protection-Related Costs	
Residential	$ 17,740,351	$ 1,295,480	$ 815,709	$ 938,105	$ -	$ 20,789,645
Multi-Family	14,806,283	1,150,607	724,488	125,273	-	16,806,652
Commercial	8,173,543	596,597	375,652	101,579	-	9,247,371
Public Agencies	1,892,996	179,035	112,731	10,287	-	2,195,049
Irrigation	3,626,852	273,768	172,380	25,917	-	4,098,917
Other-Construction	66,097	4,400	2,770	2,489	-	75,756
Industrial	39,892	4,443	2,798	1,095	-	48,228
Fire Protection	3,266	273	172	3,053	6,653	13,418
Total Net Revenue Requirement	**$ 46,349,281**	**$ 3,504,602**	**$ 2,206,700**	**$ 1,207,800**	**$ 6,653**	**$ 53,275,036**

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. Customer classes are most often identified as single-family, multi-family, commercial, landscape, etc., and the Authority follows this common methodology. The rates proposed in this report follow a similar structure where the fixed charges

within each customer class vary by meter size while all customers are charged a volumetric rate based on the amount of consumption.

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.

In terms of variable cost allocation, commodity-related (volumetric) 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 3-year rate period. A conservation factor of 5% is utilized to account for permanent adjustments to water usage by the Authority's ratepayers over the course of the rate implementation period and is estimated based on the Authority's historical trends of decreasing annual average water consumption per resident.

Figure 6. Water Consumption by Customer Class

Development of the Volumetric/Variable Allocation Factor[1]				
Customer Class	**FY 2021/22 Consumption (hcf)**	**% Adjustment for Conservation[2]**	**Est. FY 2020/21 Volume Adjusted for Conservation**	**FY 2021/22 % of Total Volume**
Residential	2,851,451	5.0%	2,708,878	**38.3%**
Multi-Family	2,379,851	5.0%	2,260,858	**31.9%**
Commercial	1,313,754	5.0%	1,248,066	**17.6%**
Public Agencies	304,266	5.0%	289,053	**4.1%**
Irrigation	582,953	5.0%	553,805	**7.83%**
Other-Construction	10,624	5.0%	10,093	**0.1%**
Industrial	6,412	5.0%	6,091	**0.1%**
Fire Protection	525	5.0%	499	**0.01%**
Total	**7,449,836**		**7,077,344**	**100%**

1. Consumption data is based on SWA billing data.
2. A conservation factor of 5% is used.

Two components comprise the cost allocation to the fixed charges: (1) the capacity component, and (2) the customer component. In terms of peak capacity, the Authority must size its infrastructure to accommodate the highest levels of demand. This means that various public facilities and assets (such as reservoirs, storage tanks, pumping systems) are built larger or with greater capacity than would otherwise be needed by average or lower-than-average water use. Public agencies regularly look at peaking factors as a means of allocating the share of such facilities in proportion to the demand that various users place on the water system. A "peaking factor" is the relationship between the average use by meter size to its peak use. Peak water use is typically expressed as a ratio, or "peaking factor," by dividing the peak water use by the average bimonthly water use. **Figure 7** shows the peaking factor ratios for each customer class, which illustrates the peak bimonthly demand by each customer class compared to the average bimonthly use.

Figure 7. Peaking Factors by Customer Class

Development of the PEAK CAPACITY (MAX MONTH) Allocation Factors				
Customer Class	Average Bimonthly Use (hcf)	Avg. Bi-Mo. Peak Use (hcf)[1]	Peak Bimonthly Factor	Max Month Capacity Factor
Residential	225,740	298,431	**1.32**	**37.0%**
Multi-Family	188,405	265,058	**1.41**	**32.8%**
Commercial	104,006	137,434	**1.32**	**17.0%**
Public Agencies	24,088	41,243	**1.71**	**5.1%**
Irrigation	46,150	63,066	**1.37**	**7.81%**
Other-Construction	841	1,014	**1.21**	**0.1%**
Temporary Hydrant Meters	508	1,024	**2.02**	**0.1%**
Fire Protection	42	63	**1.52**	**0.01%**
Total	**589,779**	**807,332**	**1.37**	**100%**

1. Based on peak monthly data (highest 2-month average due to bi-monthly meter reading).

Both operating costs and capital infrastructure costs incurred to accommodate peak system capacity events are generally allocated to each meter size according to its contribution to peak capacity events (Tables 58-73 in the *Appendix*). The peaking factors by customer class summarized in Figure 7 above are then used to allocate the capacity-related (fixed) costs to each customer class as summarized in Tables 55, 62 and 68 of the *Appendix.* Additional detail regarding the calculation of the fixed charge component by meter size is found in Section 2.5 of the report below.

Figure 8 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. Capacity costs and customer costs comprise the component of the fixed meter charges.

Figure 8. Number of Meters by Customer Class

Development of the Customer Allocation Factor		
Customer Class	No. of Meters	Percent of Total
Residential	28,269	**77.7%**
Multi-Family	3,775	**10.4%**
Commercial	3,061	**8.4%**
Public Agencies	310	**0.9%**
Irrigation	781	**2.1%**
Other-Construction	75	**0.2%**
Temporary Hydrant Meters	33	**0.1%**
Fire Protection	92	**0.3%**
Total	**36,396**	**100.0%**

1. Meter count data is based on the City's billing data for June 2022.

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 a variety of alternative fixed versus variable rate designs with Authority staff and the Board over the course of this study. Ultimately, Authority staff and the Board have provided direction to design a rate structure to increase the cost distribution for fixed charges to be more representative of the cost-of-service analysis. As such, the proposed rate structure will "phase in" an increased percentage of rate revenue collected from fixed charges over the course of the three-year adopted rate period. The proposed rates will collect 13% of rate revenue from fixed charges in FY 2023/24, 16% of rate revenue from fixed charges in FY 2024/25 and 19% of rate revenue from fixed charges in FY 2025/26. The preferred rate structure proposes a tiered volumetric rate for residential customers based on the Authority's four sources of supply, and a uniform volumetric rate for all other customer classes. The following sections describe 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-peaking ratio is allocated a proportionately higher share of the capacity-related costs compared to customer classes with lower peaking ratios. 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.[15] The potential capacity demands (peaking) is proportional to the maximum hydraulic flow through each meter size based on the hydraulic capacity ratios established by AWWA.[16] The AWWA capacity ratios used for this report are shown in **Figure 9**.

Figure 9. Hydraulic Capacity Factors

Meter Size	Standard Meters	
	Meter Capacity (gpm)[1]	Equivalency to 1-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

1. Per *AWWA M-1, Table B-1.*

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

[16] *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.

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 10** summarizes the number of meters by customer class and meter size.

Figure 10. Number of Meters by Class and Size

Number of Meters by Class & Size										
Customer Class[1]	< 1" meter	1" meter	1.5" meter	2" meter	3" meter	4" meter	6" meter	8" meter	10" meter	Grand Total
Potable Water										
Residential	26,322	1,921	18	8						28,269
Multi-Family	1,998	919	364	487		1	5	1		3,775
Commercial	1,709	593	373	379	1	1		2	3	3,061
Public Agencies	93	36	43	133	3	2				310
Irrigation	160	205	157	257	2					781
Other-Construction	1			1	73					75
Industrial	17	6	3	6					1	33
Fire Protection	74	14	2	2						92
Total	**30,374**	**3,694**	**960**	**1,273**	**79**	**4**	**5**	**3**	**4**	**36,392**

1. Source file: *Customer Billing Information.xls*

Figure 11 shows the calculation of the fixed bimonthly service Sweetwater Authority charges for all customer classes based on meter size using the costs allocated to each customer class from **Figure 5**. 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 11. Calculation of Fixed Service Charges

										FY 2023/24
Number of Meters by Class and Size[1]	FY 2023/24									Total
	< 1"	1"	1 1/2"	2"	3"	4"	6"	8"	10"	
Total Meters (less Irrigation and Fire)	30,140	3,475	801	1,014	77	4	5	3	4	35,523
Total Meters (less Irrigation and Fire)	**30,140**	**3,475**	**801**	**1,014**	**77**	**4**	**5**	**3**	**4**	**35,523**
Hydraulic Capacity Factor[2]	*1.00*	*1.67*	*3.33*	*5.33*	*10.67*	*16.67*	*33.33*	*53.33*	*140.00*	
Total Equivalent Meters	**30,140**	**5,792**	**2,670**	**5,408**	**821**	**67**	**167**	**160**	**560**	**45,784**
Monthly Fixed Service Charges										
Customer Costs ($/Acct/month)[3]	$2.77	$2.77	$2.77	$2.77	$2.77	$2.77	$2.77	$2.77	$2.77	
Capacity Costs ($/Acct/month)[4]	$5.87	$9.78	$19.56	$31.30	$62.60	$97.81	$195.61	$312.98	$821.58	
Total Monthly Meter Charge	**$8.63**	**$12.55**	**$22.33**	**$34.06**	**$65.36**	**$100.57**	**$198.38**	**$315.75**	**$824.34**	
Annual Fixed Costs Allocated to Monthly Meter Charges										
Customer Costs	$ 1,178,829									
Capacity Costs	3,224,181									
Total Fixed Meter Costs	$ 4,403,010									
Annual Revenue from Monthly Meter Charges										
Customer Charges	$ 1,000,195	$ 115,318	$ 26,581	$ 33,650	$ 2,555	$ 133	$ 166	$ 100	$ 133	**$ 1,178,829**
Capacity Charges	$ 2,122,491	$ 407,855	$ 188,024	$ 380,837	$ 57,839	$ 4,695	$ 11,737	$ 11,267	$ 39,436	**$ 3,224,181**
Total Revenue from Monthly Meter Charges	**$ 3,122,685**	**$ 523,173**	**$ 214,605**	**$ 414,487**	**$ 60,394**	**$ 4,827**	**$ 11,903**	**$ 11,367**	**$ 39,569**	**$ 4,403,010**

1. Meter by Class and Size are based on June 2022 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.

Fixed Service Charges (Irrigation Meters)

The same methodology described above was also used to calculate fixed charges for irrigation meters. 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-peaking ratio is allocated a proportionately higher share of the capacity-related costs compared to customer classes with lower peaking ratios. As such, the fixed charges for the irrigation meters reflect the higher share of capacity-

related costs compared to other customer classes. The customer component includes those costs related to reading and maintaining meters, customer billing and collection, and other customer service-related costs. Further detail on the cost-of-service analysis for the fixed service charges for irrigation meters is found in Table 58 of the *Appendix.* As shown in the table, bimonthly fixed charges for irrigation meters are based on the calculated customer and capacity costs allocated to irrigation divided by the total number of customers for each irrigation meter size.

Fixed Service Charges (Fire Service Meters)

Fire service customers differ from other water service customers because their service is more of a standby nature, where a readiness-to-serve charge is more appropriate. Except in the event of a fire, these users do not intend to use water on a regular basis. The service provided to fire service customers is readiness to deliver relatively large quantities of water for short periods of time at any of the large number of points in the water distribution system; however, the total annual quantity of water delivered is relatively small. While the Authority still needs to provide sufficient capacity for fire meters and recover other operating and maintenance costs, the overall cost to serve these users is less than that of a standard service; therefore, the fixed charges are less. Further detail on the cost-of-service analysis for the fixed service charges for fire service meters is found in Table 60 the *Appendix.* As shown in the table, bimonthly fixed charges for fire meters are based on the calculated customer and capacity costs allocated to fire protection divided by the total number of customers for each fire meter size.

Volumetric Rates

Currently, the Authority uses a tiered rate structure for all non-single family residential customers; however, the proposed rates are based on a uniform, or single tier, volumetric rate for all non-single family residential customers. This is because, based on review of Authority-specific customer usage information and demand patterns (consumption by customer class is summarized Table 42 of the *Appendix*), single family residential customers consist of a single dwelling unit and show common consumption patterns in terms of total volume consumed, while other customer classes do not exhibit homogenous characteristics in terms of consumption patterns either within the specific customer class itself or across the various non-single family customer classes. For example, the multi-family residential customer class contains 114 times more meters and annually consumes over 370 times more water annually than the industrial customer class. As such, NBS recommends a uniform volumetric rate for non-single family residential customers to account for the lack of shared volumetric consumption pattern characteristics amongst the various customer classes.

Figure 12 shows the calculation of the uniform commodity rate per unit of water for all non-single family residential customers, including the basic commodity rate (without SDCWA pass-through costs) and the commodity rate including SDCWA wholesale water purchase charges (including SDCWA pass-through costs).

Figure 12. Uniform Commodity Rates for FY 2023/24

									(13% Fixed / 87% Variable)
Customer Classes	**Number of Meters[1]**	**Water Consumption (hcf/yr)[2]**	**Source of Supply Costs**	**Other Volumetric Costs**	**Target SWA Vol. Rev. Req't[3]**	**Uniform SWA Commodity Rates[3] ($/hcf)**	***SDCWA Wholesale Water Purchase***	***Uniform SDCWA Commodity Rates ($/hcf)***	**% of Total Commodity Rate Revenue**
Residential	28,269	2,708,878	$ 4,172,945	$ 12,167,600	$ 16,340,545	*4 Tiers*	$ 1,399,806	$0.517	*38.3%*
Multi-Family	3,775	2,260,858	3,482,784	10,155,207	13,637,990	$6.032	1,168,293	$0.517	*31.9%*
Commercial	3,061	1,248,066	1,922,608	5,605,999	7,528,608	$6.032	644,935	$0.517	*17.6%*
Public Agencies	310	289,053	445,277	1,298,352	1,743,629	$6.032	149,367	$0.517	*4.1%*
Irrigation	781	553,805	853,120	2,487,554	3,340,674	$6.032	286,178	$0.517	*7.8%*
Other-Construction	75	10,093	15,548	45,334	60,882	$6.032	5,215	$0.517	*0.1%*
Industrial	33	6,091	9,384	27,361	36,745	$6.032	3,148	$0.517	*0.1%*
Fire Protection	92	499	768	2,240	3,009	$6.032	258	$0.517	*0.0%*
Total Potable Water	**36,396**	**7,077,344**	**$ 10,902,433**	**$ 31,789,647**	**$ 42,692,081**	**--**	**$ 3,657,200**	**--**	***100%***

1. Consumption data is based on the SWA billing data.
2. Water consumption is actual consumption for FY 2021/22 and includes an adjustment of 5% for conservation. See Table 30.
3. Excluding SDCWA Wholesale Water Purchase costs.

Residential Tiered Rates

Currently, the Authority uses a 4-tier rate structure for all single-family residential customers. The proposed residential tiered rate structure collects the target volumetric rate revenue required from the cost-of-service analysis (summarized in **Figure 12** above) by allocating costs to a tiered rate structure that reflects the Authority's cost of providing water service to single-family residential customers consuming water at each tier based directly on the source of supply commodity costs specific to each source.

As shown in **Figure 13** below, the proposed residential tiered rates were calculated directly based on the source of supply commodity costs for the four Authority water supplies, as provided in the Authority's adopted budget for Fiscal Year 2023/24. As summarized in the Figure below, the Authority's four sources of supply are National City (NC) Wells, Reservoir Water, Groundwater Desalination (Desal), and San Diego County Water Authority (SDCWA) purchased water. Tier breakpoints were directly calculated based on the percentage of single-family residential customers at the respective volumetric consumption levels, as summarized in **Figure 14**. Additional detail demonstrating the calculation of the direct cost basis for the residential tiered rates based on the four sources of supply is found in Tables 45-52 the *Appendix*.

Figure 13. Water Supplies and Costs

Source of Supply	**Total Supplies**		**Cost ($/AF)[2]**	**Supply Costs[3] (FY 2023/24)**	
	In AF/Year	**% of Total**		**($)**	**% of Total**
Tier 1					
NC Wells	**1,900**	**11.2%**	**$338**	**$ 642,300**	**5.9%**
Tier 2					
Reservoir Water	**5,847**	**34.4%**	**$506**	**2,955,733**	**27.1%**
Tier 3					
Desal	**6,500**	**38.3%**	**$561**	**3,647,200**	**33.5%**
Tier 4					
SDCWA	**2,733**	**16.1%**	**$1,338**	**3,657,200**	**33.5%**
Totals	**16,980**	**100.0%**		**$ 10,902,433**	**100%**

Figure 14. Summary of Residential Tier Breakpoints

Tiers	Supply (Only) Costs ($/HCF)	Breakpoints	% Resid. HCF's
	UNBLENDED 4-Tier Rates		
Tier 1	**$0.78**	**T1 ≤ 4 hcf**	11.2%
Tier 2	**$1.16**	**4 < T2 ≤ 13**	34.4%
Tier 3	**$1.29**	**13 < T3 ≤ 24**	38.3%
Tier 4	**$3.07**	**24 < T4**	16.1%

Figure 15 shows the calculation of the residential tiered rates for FY 2023/24 based on percentage of consumption and source of supply commodity costs. As summarized in the Figure below, the residential tiered rates are directly calculated based on the source of supply commodity costs for residential consumption at each of the four tier levels. As shown in the figure below, the residential tier design structure collects the total residential share of volumetric costs for the single-family residential customer class that was calculated per the cost-of-service analysis.

Figure 15. Residential Tiered Rates for FY 2023/24

							(13% Fixed / 87% Variable)
Source of Supply	Source of Supply Costs		Other Volumetric Costs		Total Resid. Share of Vol. Costs by Tier	Residential Consumption by Tier	Residential Tiered Rates ($/hcf)
	% of Supply Costs	Source of Supply Costs	% of Consumption	Other Volumetric Costs			
Residential Tier 1	5.9%	$ 245,843	11.2%	$ 1,361,510	$ 1,607,353	303,114	**$5.30**
Residential Tier 2	27.1%	$ 1,131,317	34.4%	$ 4,189,868	$ 5,321,185	932,792	**$5.70**
Residential Tier 3	33.5%	$ 1,395,979	38.3%	$ 4,657,797	$ 6,053,776	1,036,968	**$5.84**
Residential Tier 4	33.5%	$ 1,399,806	16.1%	$ 1,958,425	$ 3,358,231	436,005	**$7.70**
Total	**66.5%**	**$ 4,172,945**	**100.0%**	**$12,167,600**	**$16,340,545**	**2,708,878**	--

1. Total Contracted Supply Purchase Costs are from the *Source of Supply* tab, Table 33.
2. Residential consumption for FY 2021/22 is from the *Allocation Factors* tab, Table 30.
3. Contracted Supply Costs are from the *Source of Supply* tab, Table 34.

2.6 Proposed Water Rates

The Authority's previous rate study was completed five years ago in 2018. Since then, the underlying cost factors (e.g., consumption by class, number of meters, peaking factors) 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 3-year rate adoption period. In contrast, in the subsequent two 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.

The Authority currently implements one fixed pass-through charge: 1) SDCWA Infrastructure Access Charge. The Authority also currently implements five volumetric pass-through charges: 1) SDCWA Customer Service Charge, 2) SDCWA Emergency Storage Charge, 3) SDCWA Supply Reliability Charge, 4) MWD Readiness to Serve Charge, and 5) MWD Capacity Charge. The Authority will continue to update these charges each January 1st. Pass-through charges will be based on the wholesale costs set by SDCWA and MWD, respectively.

Figure 16 provides a comparison of the current and proposed water rates for FY 2023/24 through 2025/26 for each customer class and meter size. Projected rates for each fiscal year[17] reflect adjustments based on the cost-of-service analysis, "phase-in" approach for the fixed/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 Tables 53-87 in the *Appendix*.

Figure 16. Current and Proposed Water Rates

Water Rate Schedule	Current Rates	Proposed Rates (with 3-Year Phase-In)		
		FY 2023/24	FY 2024/25	FY 2025/26
Projected Increase in Rate Revenue per Financial Plan:		*0.50%*	*6.00%*	*6.50%*
Bi-Monthly Fixed Service Charges (in $/2-mo)		*13% F/87% V*	*16% F/84% V*	*19% F/81% V*
Sweetwater Authority Rates for Bi-Monthly Fixed Charge				
< 1 inch	$ 21.70	$ 17.27	$ 24.36	$ 32.35
1 inch	32.30	25.09	35.77	47.83
1-1/2 inches	51.18	44.65	64.31	86.54
2 inches	72.40	68.13	98.56	132.98
3 inches	137.90	130.72	189.89	256.84
4 inches	232.76	201.14	292.63	396.18
6 inches	468.52	396.76	578.02	783.24
8 inches	772.48	631.50	920.49	1,247.71
10 inches	1,175.02	1,648.69	2,404.53	3,260.41
Sweetwater Authority Bi-Monthly Fixed Charges for Irrigation Meters				
< 1 inch	N.A.	$ 18.88	$ 27.54	$ 37.34
1 inch	N.A.	31.46	45.89	62.23
1-1/2 inches	N.A.	62.93	91.79	124.47
2 inches	N.A.	100.68	146.86	199.15
3 inches	N.A.	201.36	293.72	398.30
4 inches	N.A.	314.63	458.93	622.34
6 inches	N.A.	629.26	917.87	1,244.69
8 inches	N.A.	1,006.82	1,468.59	1,991.50
10 inches	N.A.	2,642.91	3,855.05	5,227.68
Sweetwater Authority Bi-Monthly Fixed Charges for Fire Meters				
< 1 inch	*N.A.*	$ 9.67	$ 12.62	$ 15.96
1 inch	*N.A.*	16.12	21.03	26.59
1-1/2 inches	*N.A.*	32.23	42.05	53.18
2 inches	*N.A.*	51.58	67.29	85.10
3 inches	*N.A.*	112.82	147.19	186.15
4 inches	*N.A.*	225.64	294.38	372.29
6 inches	*N.A.*	515.75	672.86	850.96
8 inches	*N.A.*	902.57	1,177.51	1,489.18
10 inches (and larger)	*N.A.*	2,127.49	2,775.55	3,510.20

[17] All rate adjustments are scheduled to be effective on January 1, 2024.

Water Rate Schedule	Current Rates	Proposed Rates (with 3-Year Phase-In)		
		FY 2023/24	FY 2024/25	FY 2025/26
Projected Increase in Rate Revenue per Financial Plan:		*0.50%*	*6.00%*	*6.50%*
Variable Charges for All Water Consumed (in $/hcf)				
Variable Rate for Bi-Monthly Sweetwater Authority Charge				
Residential Use				
Tier 1 - 0 - 10 HCF	$ 4.31	*N.A.*	*N.A.*	*N.A.*
Tier 2 - 11 - 16 HCF	5.14	*N.A.*	*N.A.*	*N.A.*
Tier 3 - 17 - 27 HCF	5.29	*N.A.*	*N.A.*	*N.A.*
Tier 4 - ≥ 28 HCF	6.37	*N.A.*	*N.A.*	*N.A.*
Tier 1 (0-4 HCF)	*N.A.*	$ 5.30	$ 5.38	$ 5.48
Tier 2 (4-13 HCF)	*N.A.*	5.70	5.81	5.93
Tier 3 (13-24 HCF)	*N.A.*	5.84	5.95	6.08
Tier 4 (24 HCF +)	*N.A.*	7.70	7.93	8.18
Multi-Family	5.92	6.03	6.15	6.30
Commercial	5.66	6.03	6.15	6.30
Public Agencies	6.99	6.03	6.15	6.30
Irrigation	*N.A.*	6.03	6.15	6.30
Other-Construction	8.54	6.03	6.15	6.30
Industrial	*N.A.*	6.03	6.15	6.30
Fire Protection	*N.A.*	6.03	6.15	6.30
Variable Rate for Bi-Monthly SDCWA Wholesale Water Purchase Charge				
Residential Use				
Tier 1 - 0 - 10 HCF	0.54	*N.A.*	*N.A.*	*N.A.*
Tier 2 - 11 - 16 HCF	0.65	*N.A.*	*N.A.*	*N.A.*
Tier 3 - 17 - 27 HCF	0.66	*N.A.*	*N.A.*	*N.A.*
Tier 4 - ≥ 28 HCF	0.80	*N.A.*	*N.A.*	*N.A.*
Tier 1 (0-4 HCF)	*N.A.*	$ 0.52	$ 0.55	$ 0.58
Tier 2 (4-13 HCF)	*N.A.*	0.52	0.55	0.58
Tier 3 (13-24 HCF)	*N.A.*	0.52	0.55	0.58
Tier 4 (24 HCF +)	*N.A.*	0.52	0.55	0.58
Multi-Family	0.74	0.52	0.55	0.58
Commercial	0.71	0.52	0.55	0.58
Public Agencies	0.87	0.52	0.55	0.58
Irrigation	*N.A.*	0.52	0.55	0.58
Other-Construction	1.07	0.52	0.55	0.58
Industrial	*N.A.*	0.52	0.55	0.58
Fire Protection	*N.A.*	0.52	0.55	0.58

2.7 Comparison of Current and Proposed Water Bills

Figure 17 and **Figure 18** compare a range of bimonthly water bills under the current and proposed water rates for residential and commercial customers. These bimonthly bills are based on typical meter sizes and highlight the average consumption levels for each customer. The attached *Appendix* ("Charts and Tables") provides additional detailed information on the comparison of current and proposed bimonthly bills for various customer classes.

These bill comparisons assume that financial plan projections remain accurate. However, some costs that are outside of the Authority's control could change, such as the cost of water purchased from SDCWA. There is a "pass-through" provision that allows the Authority to make adjustments to water rates if these types of costs exceed those in the Authority's projections.

Figure 17. Bimonthly Water Bill Comparison for Residential Customers

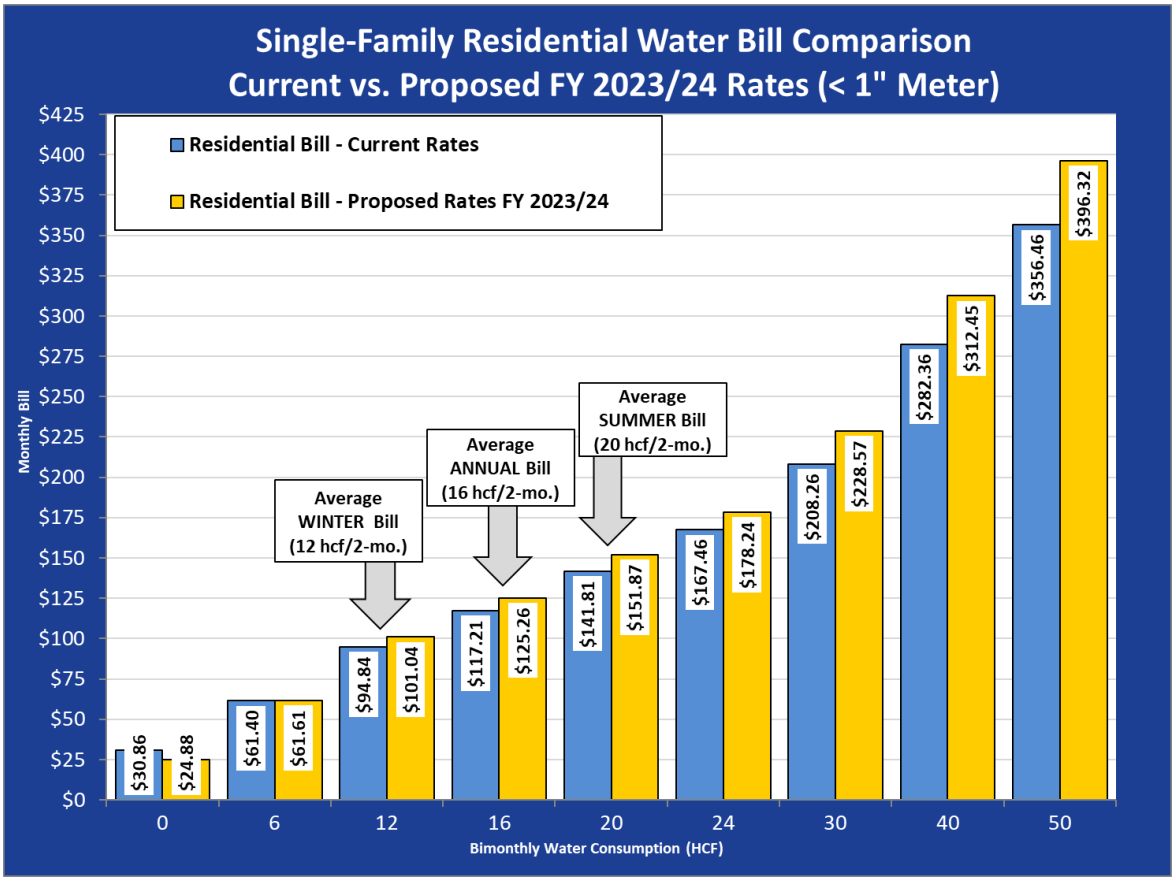


Figure 18. Bimonthly Water Bill Comparison for Commercial Customers

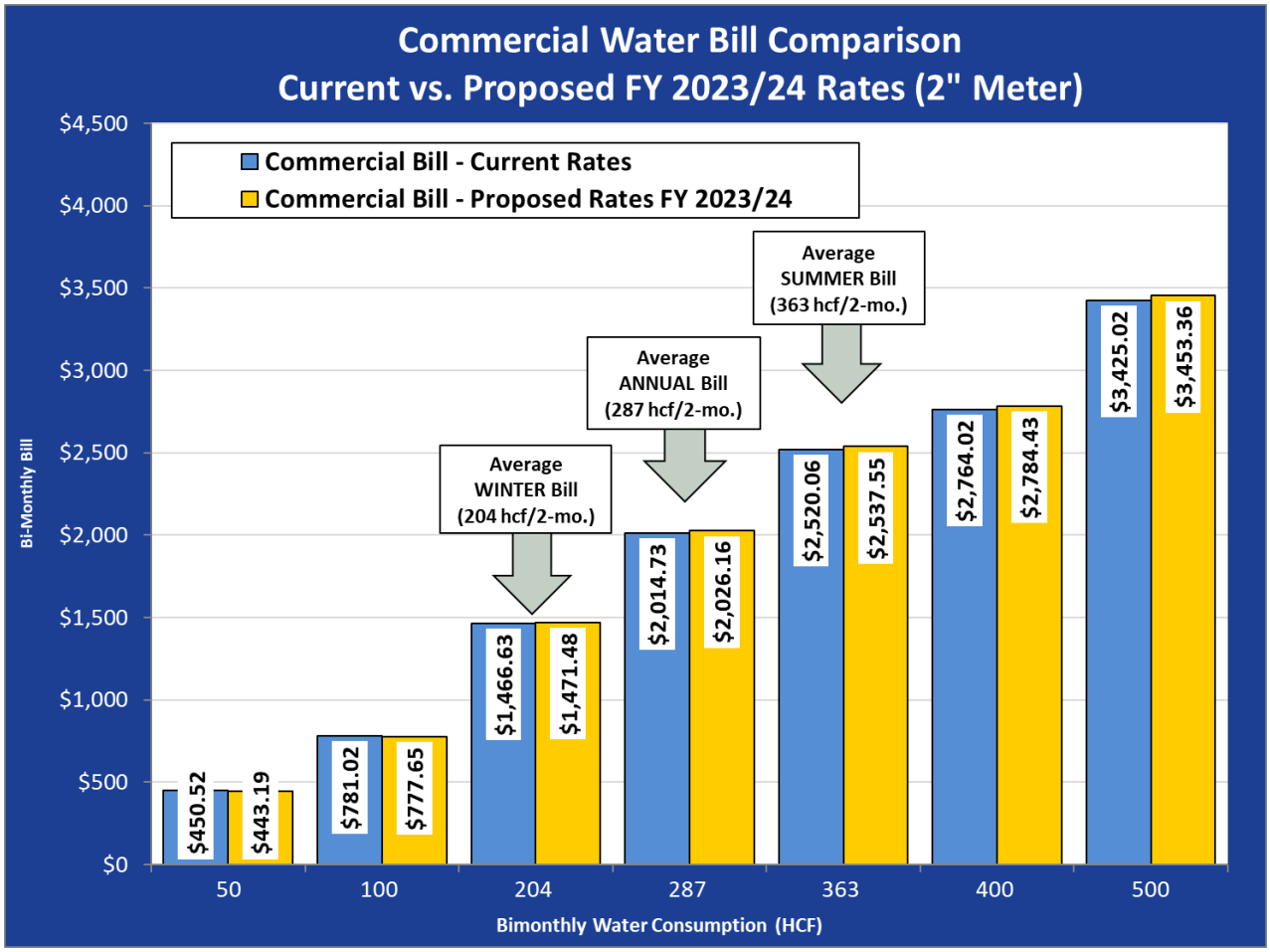


Figure 19 and **Figure 20** compare the single-family water bills for the three-year rate adoption period assuming average consumption levels of bimonthly water use of 16 HCF and 24 HCF, respectively.

Figure 19. Residential Water Bills – 3-Years

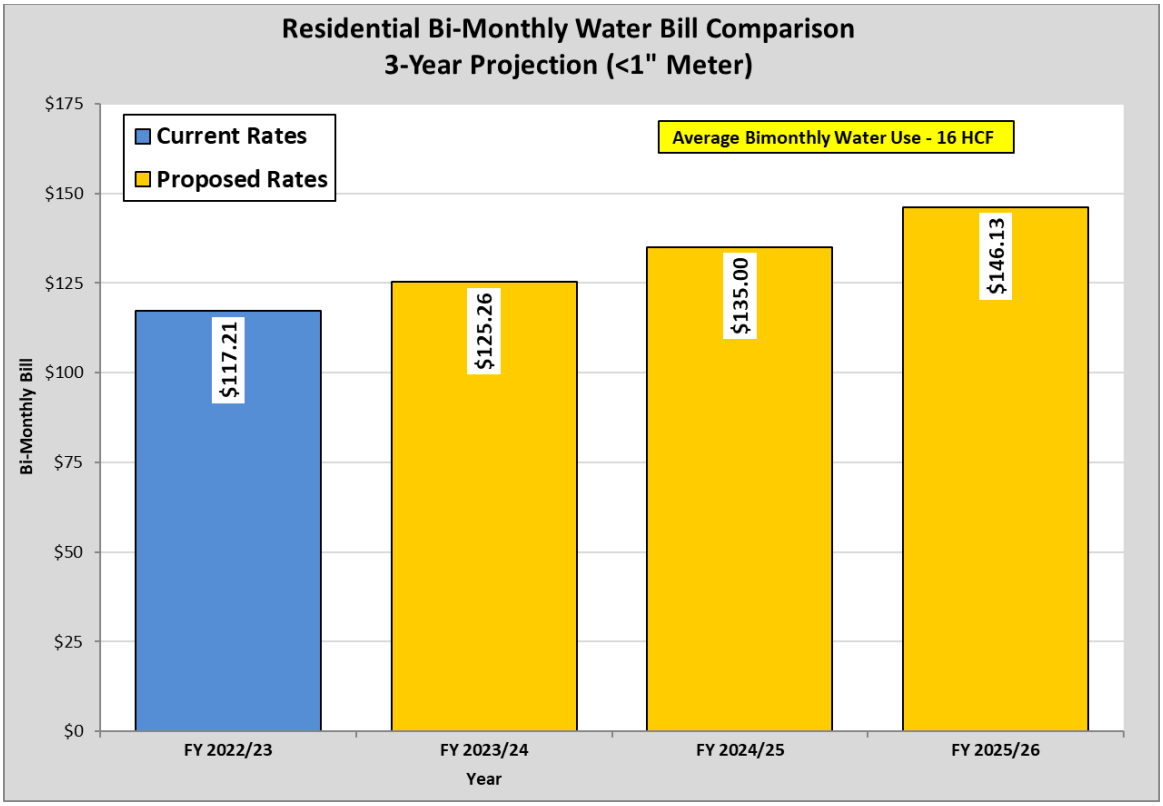
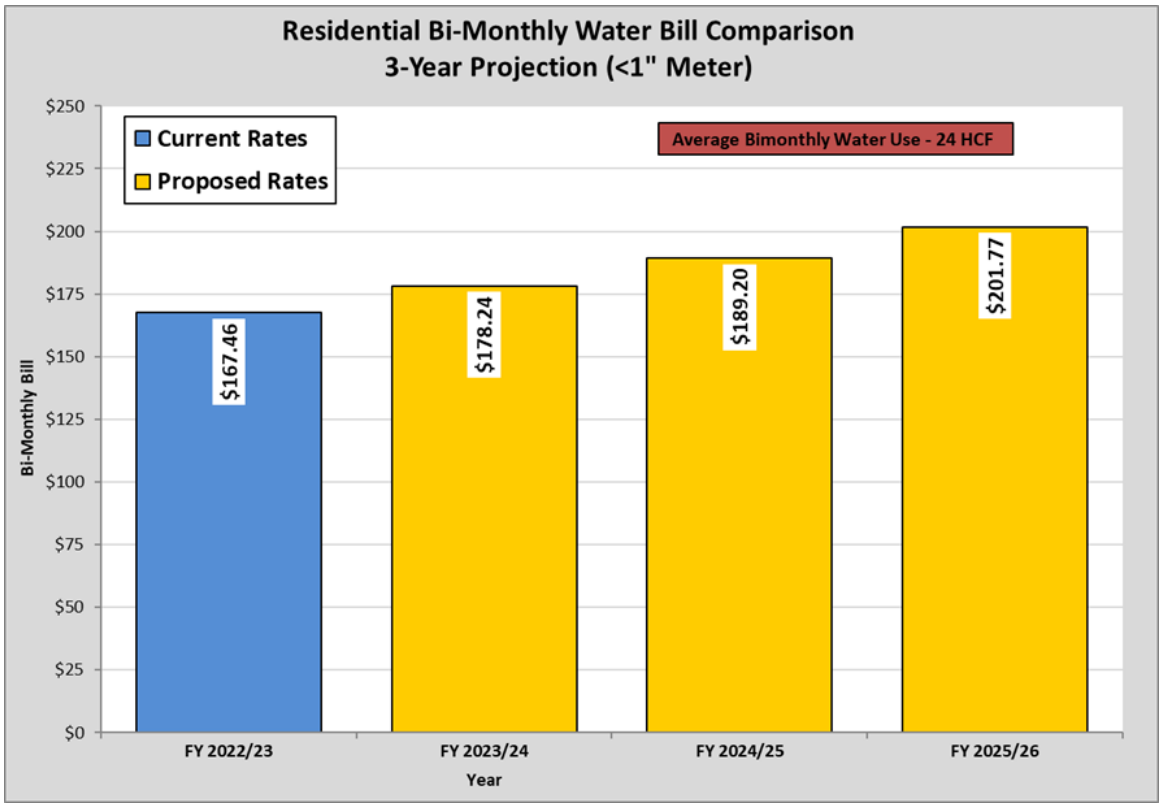


Figure 20. Residential Water Bills – 3-Years



3. Recommendations and Next Steps

3.1 Consultant Recommendations

NBS recommends the Authority take the following actions:

- **Approve and Accept this Study:** NBS recommends the Board formally approve, receive and file 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 Authority should proceed with implementing the 3-year schedule of proposed rates and rate increases previously shown in Figure 16. This will help ensure the continued financial health of Authority's water utility.

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 provides 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 Authority's budgets, capital improvement costs, customer accounts and consumption, and information from Authority 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	Budget	3-Year Projected Rate Period		
	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Sources of Water Funds				
Rate Revenue:				
Water Sales	$ 52,841,200	$ 53,009,986	$ 53,178,771	$ 53,503,162
Revenue from Rate Increases	-	265,050	1,869,234	5,346,156
Subtotal: Rate Revenue After Rate Increases	$ 52,841,200	$ 53,275,036	$ 55,048,005	$ 58,849,318
Non-Rate Revenue:				
Private Fire Protection Fees	870,000	921,000	923,932	929,568
Reconnection Fees	305,000	336,000	337,070	339,126
Repair Revenue	55,000	30,000	30,096	30,279
Tank/Tower Lease	545,000	-	-	-
Miscellaneous Fees	15,000	19,000	19,060	19,177
Sweetwater Reservoir Fishing Program	25,000	25,000	25,080	25,233
Reynolds Desal Operating Maint. Fees	-	-	-	-
Non-operating/Interest	615,000	625,000	626,990	630,815
Non-operating/Other	390,000	281,000	281,895	283,614
Subtotal: Non-Rate Revenue	2,820,000	2,237,000	2,244,123	2,257,812
Total Sources of Funds	**$ 55,661,200**	**$ 55,512,036**	**$ 57,292,128**	**$ 61,107,130**
Uses of Water Funds				
Operating Expenses:				
Administration	$ 16,268,600	$ 17,121,200	$ 17,732,053	$ 18,364,765
Information Systems	1,895,000	2,128,000	2,207,441	2,289,858
Administrative Services	1,556,100	2,521,600	2,616,938	2,715,891
Customer Service	2,557,800	2,853,800	2,957,826	3,065,655
Water Quality	11,107,500	11,735,700	12,536,513	13,412,220
Engineering	16,790,800	11,497,200	12,014,169	12,554,871
Distribution	5,157,600	4,900,300	5,083,781	5,274,235
Subtotal: Water Supply & Distribution: Expenses:	$ 55,333,400	$ 52,757,800	$ 55,148,721	$ 57,677,495
Non-Operating Expenses:				
Existing Debt Service	$ 1,343,131	$ 1,342,631	$ 1,345,881	$ 1,347,631
New Debt Service	-	-	-	-
Rate-Funded Capital Expenses	1,511,179	4,601,261	2,071,623	2,083,862
Subtotal: Other Expenditures	$ 2,854,310	$ 5,943,892	$ 3,417,504	$ 3,431,493
Total Uses of Water Funds	**$ 58,187,710**	**$ 58,701,692**	**$ 58,566,225**	**$ 61,108,988**
Annual Surplus/(Deficit)	**$ (2,526,510)**	**$ (3,189,657)**	**$ (1,274,097)**	**$ (1,858)**
Net Revenue Req't. *(Total Uses less Non-Rate Revenue)*	**$ 55,367,710**	**$ 56,464,692**	**$ 56,322,102**	**$ 58,851,176**
Total Rate Revenue After Rate Increases	**$ 52,841,200**	**$ 53,275,036**	**$ 55,048,005**	**$ 58,849,318**
Projected Annual Rate Revenue Increase	***0.00%***	***0.50%***	***6.00%***	***6.50%***
Cumulative Increase from Annual Revenue Increases	*0.00%*	*0.50%*	*6.53%*	*13.45%*
Bond Coverage Ratio (1.25 Required)		*-1.38*	*0.05*	*1.00*

3	*<-- Select Financial Plan Scenario Here*				
Financial Plan Alternatives		**FY 2022/23**	**FY 2023/24**	**FY 2024/25**	**FY 2025/26**
1	Alternative 1 - 1% Annual Rate Increases	*0.00%*	*1.00%*	*1.00%*	*1.00%*
2	Alternative 2 - 3% Inflationary Rate Increases	*0.00%*	*3.00%*	*3.00%*	*3.00%*
3	Alternative 3 - Custom Rate Increases	*0.00%*	*0.50%*	*6.00%*	*6.50%*
4	Alternative 4 - No Rate Increases	*0.00%*	*0.00%*	*0.00%*	*0.00%*

TABLE 2 : RESERVE FUND SUMMARY

SUMMARY OF CASH ACTIVITY	Budget	3-Year Projected Rate Period		
	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Unrestricted Reserve:				
Total Beginning Cash[1]	**$ 33,347,074**			
Operating Reserve				
Beginning Reserve Balance	$ 12,476,600	$ 9,222,000	$ 6,032,343	$ 4,758,246
Plus: Net Cash Flow (After Rate Increases)	(2,526,510)	(3,189,657)	(1,274,097)	(1,858)
Plus: Transfer in from Capital and Infrastructure Reserve	-	-	-	-
Less: Transfer out to Capital and Infrastructure Reserve	(728,090)	-	-	-
Ending Operating Reserve Balance	***$ 9,222,000***	***$ 6,032,343***	***$ 4,758,246***	***$ 4,756,387***
Target Ending Balance (2 Months of O&M) [2]	*$ 9,222,000*	*$ 8,793,000*	*$ 9,191,000*	*$ 9,613,000*
Board Designated Reserves (Capital)				
Beginning Reserve Balance	$ 7,822,432	$ 8,651,353	$ 9,115,404	$ 9,800,522
Designated Reserves				
Vista del Lago	$ 182,200			
Vehicle Replacement	243,000			
Sweetwater River Basin Land	352,689			
Sweetwater Dam PMF Project	5,342,931			
National City Wells Water Quality Improvement Project	1,701,612			
Plus: Interest Earnings	100,831	111,516	117,498	126,329
Plus: Transfer of Operating Reserve Surplus	728,090	-	-	-
Less: Use of Reserves for Capital Projects	-	352,535	567,621	996,306
Ending Capital and Infrastructure Reserve Balance	***$ 8,651,353***	***$ 9,115,404***	***$ 9,800,522***	***$ 10,923,157***
Target Ending Balance (103% of Fund Balance) [3]	*$ 8,057,105*	*$ 8,298,818*	*$ 8,547,783*	*$ 8,804,216*
Revenue Stabilization Reserve				
Beginning Reserve Balance	$ 13,048,042	$ 13,216,231	$ 13,386,588	$ 13,559,142
Plus: Interest Earnings	168,189	170,357	172,553	174,777
Plus: Transfer of Operating Reserve Surplus	-	-	-	-
Ending Revenue Stabilization Reserve Balance	***$ 13,216,231***	***$ 13,386,588***	***$ 13,559,142***	***$ 13,733,919***
Target Ending Balance (1 month of rate revenue) [4]	*$ 4,400,000*	*$ 4,440,000*	*$ 4,590,000*	*$ 4,900,000*
Ending Balance - Excl. Restricted Reserves	**$ 31,089,584**	**$ 28,534,335**	**$ 28,117,910**	**$ 29,413,463**
Min. Target Ending Balance -Excl. Restricted Reserves	**$ 21,679,105**	**$ 21,531,818**	**$ 22,328,783**	**$ 23,317,216**
Ending Surplus/(Deficit) Compared to Reserve Targets	***$ 9,410,479***	***$ 7,002,517***	***$ 5,789,127***	***$ 6,096,247***

1. Beginning cash balances provided by Authority staff. Source file: *Expense - Capital Budget FY24* .
2. The target ending balance is set equal to 2 months of O&M expenses. Source file: 9a Policy 517 - Financial Policies - FY 2022-23 Budget rvsd Bd appvd 220608.
3. The target ending balance is set equal to 103% of total Board designated reserves.
4. One month of rate revenue (NBS estimate).

TABLE 3 : RESERVE FUND SUMMARY, cont.

SUMMARY OF CASH ACTIVITY	Budget	3-Year Projected Rate Period		
	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Restricted Reserve: [1]				
Capacity Fee Reserve (provided for informational purposes only)				
Beginning Reserve Balance	$ 6,000,000	$ 7,566,161	$ 5,062,428	$ 5,062,428
Plus: Interest Earnings	77,340	97,528	65,255	65,255
Plus: Capacity Fee Revenue	3,000,000	2,000,000	2,006,368	2,018,607
Less: Use of Reserves for Capital Projects [2]	(1,511,179)	(4,601,261)	(2,071,623)	(2,083,862)
Ending Connection Fee Fund Balance	***$ 7,566,161***	***$ 5,062,428***	***$ 5,062,428***	***$ 5,062,428***
Target Ending Balance ($3 Million) [3]	*$ 3,000,000*	*$ 3,000,000*	*$ 3,000,000*	*$ 3,000,000*
Annual Interest Earnings Rate [4]	*1.29%*	*1.29%*	*1.29%*	*1.29%*

1. Beginning cash balances provided by Authority staff. Source file: *Expense - Capital Budget FY24* .
2. Use of reserves based on information provided by the Authority for FY 2023/24. Source file: *Expense - Capital Budget FY24* .
3. Capacity Fee Reserve is set equal to $3 million based on reserve budget for FY 2023/24.
4. Historical interest earning rates are per the average annual yields for funds invested in LAIF (2018-2022).
   The source is the California State Treasurer's website: *https://www.treasurer.ca.gov/pmia-laif/historical/annual.asp.*

CHART 1

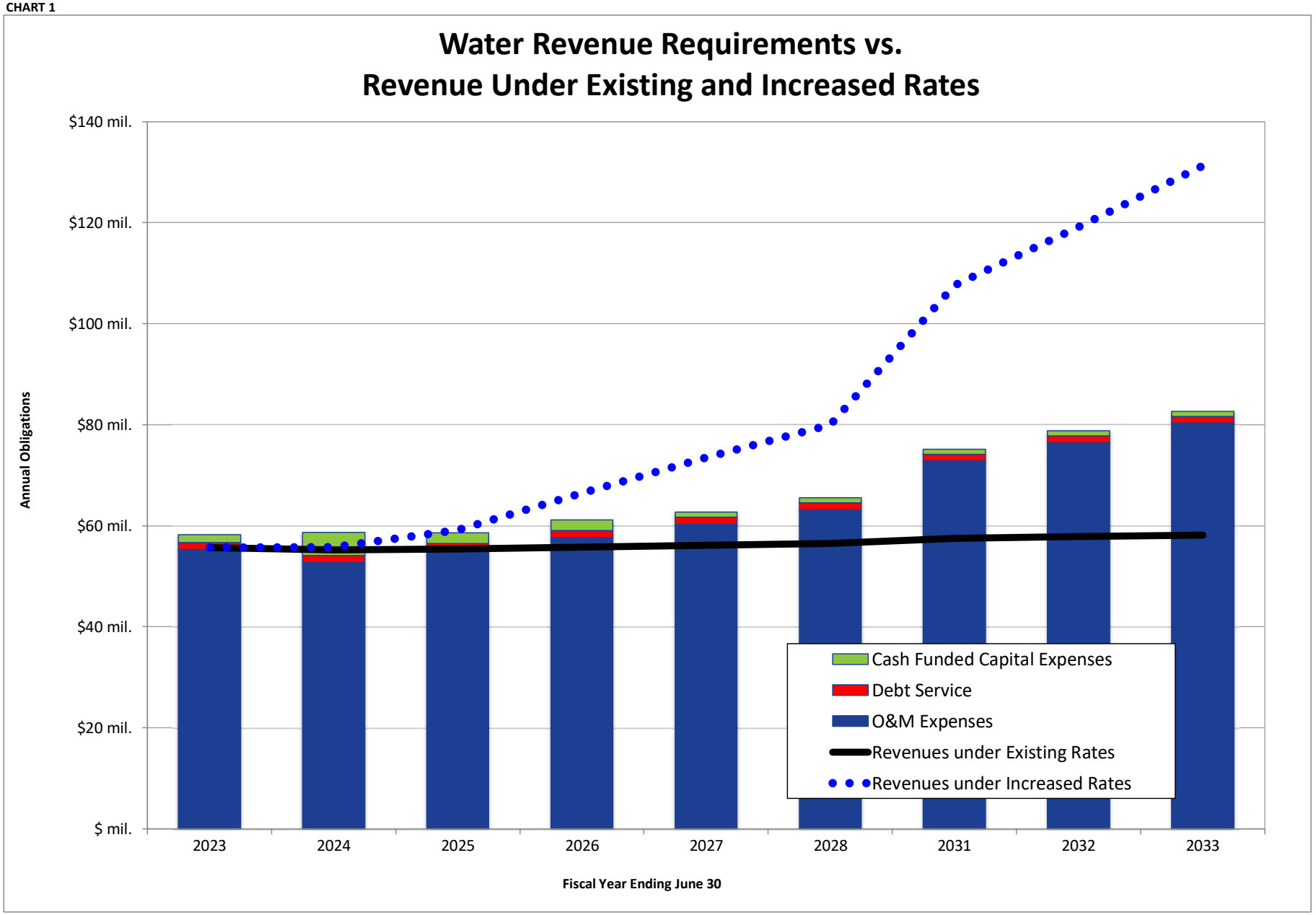

Water Revenue Requirements vs.
Revenue Under Existing and Increased Rates
$140 mil.
$120 mil.
$100 mil.
$80 mil.
$60 mil.
$40 mil.
$20 mil.
$ mil.
Annual Obligations
2023
2024
2025
2026
2027
2028
2031
2032
2033
Fiscal Year Ending June 30
Cash Funded Capital Expenses
Debt Service
O&M Expenses
Revenues under Existing Rates
Revenues under Increased Rates

CHART 2

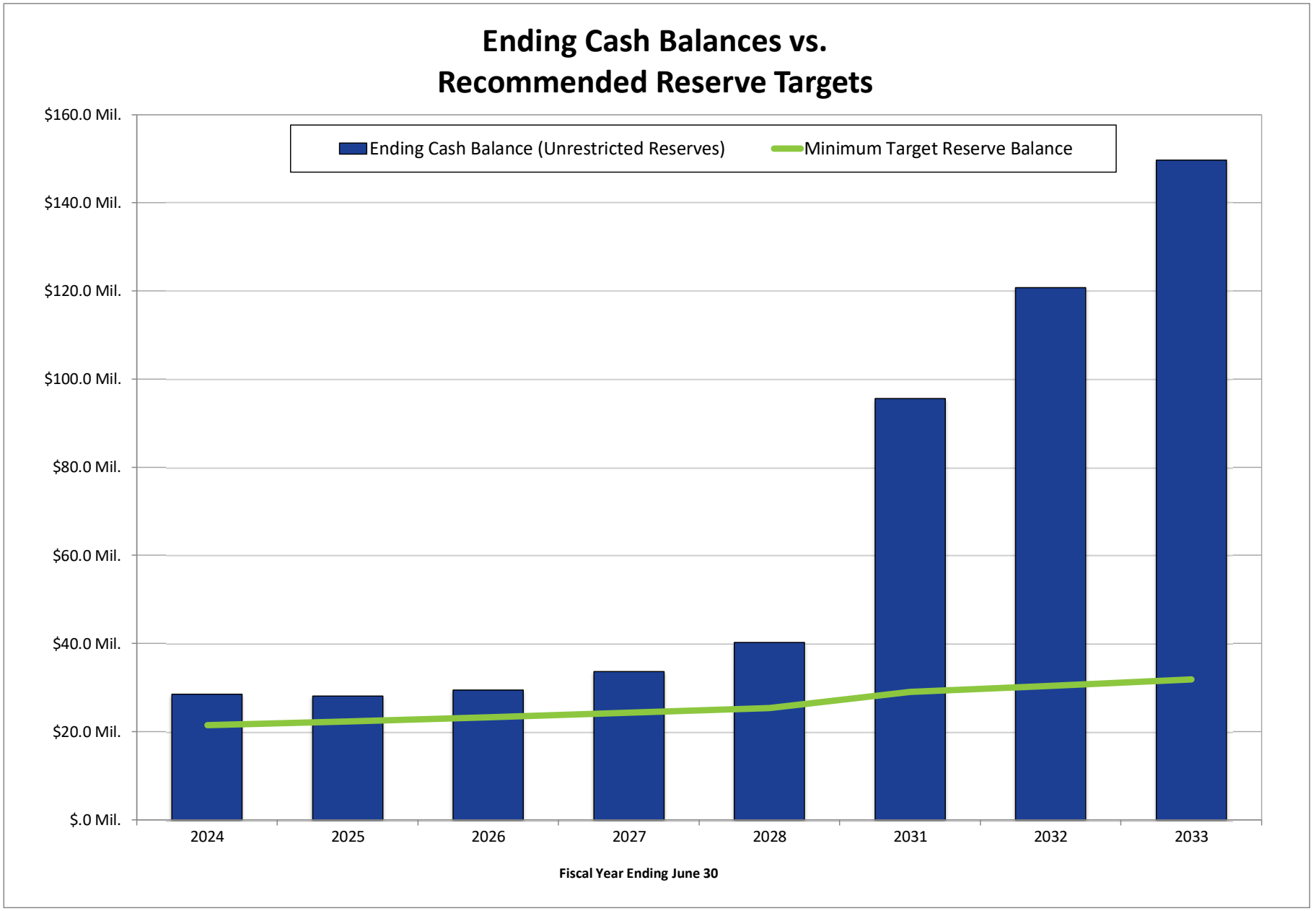

Ending Cash Balances vs.
Recommended Reserve Targets
$160.0 Mil.
$140.0 Mil.
$120.0 Mil.
$100.0 Mil.
$80.0 Mil.
$60.0 Mil.
$40.0 Mil.
$20.0 Mil.
$.0 Mil.
Ending Cash Balance (Unrestricted Reserves)
Minimum Target Reserve Balance
2024
2025
2026
2027
2028
2031
2032
2033
Fiscal Year Ending June 30

TABLE 4 : REVENUE FORECAST[1]

DESCRIPTION	Basis	Budget	3-Year Projected Rate Period		
		FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Water Sales/Rate Revenue					
Residential	1	$ 20,226,500	$ 20,291,108	$ 20,355,715	$ 20,479,885
Commercial	1	10,852,700	10,887,366	10,922,031	10,988,656
Industrial	1	58,900	59,088	59,276	59,638
Other	1	123,700	124,095	124,490	125,250
Multi-Family	1	17,613,900	17,670,162	17,726,425	17,834,556
Public Agencies	1	3,965,500	3,978,167	3,990,833	4,015,177
Other Revenue					
Private Fire Protection Fees	1	870,000	921,000	923,932	929,568
Reconnection Fees	1	305,000	336,000	337,070	339,126
Capacity Fees	1	3,000,000	2,000,000	2,006,368	2,018,607
Repair Revenue	1	55,000	30,000	30,096	30,279
Tank/Tower Lease	1	545,000	-	-	-
Miscellaneous Fees	1	15,000	19,000	19,060	19,177
Sweetwater Reservoir Fishing Program	1	25,000	25,000	25,080	25,233
Reynolds Desal Operating Maint. Fees	1	-	-	-	-
Non-operating/Interest	1	615,000	625,000	626,990	630,815
Non-operating/Other	1	390,000	281,000	281,895	283,614
TOTAL: REVENUE		**$ 58,661,200**	**$ 57,246,986**	**$ 57,429,262**	**$ 57,779,580**

TABLE 5 : REVENUE SUMMARY

DESCRIPTION	Basis	Budget	3-Year Projected Rate Period		
		FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Water Sales/Rate Revenue					
Residential		$ 20,226,500	$ 20,291,108	$ 20,355,715	$ 20,479,885
Commercial		10,852,700	10,887,366	10,922,031	10,988,656
Industrial		58,900	59,088	59,276	59,638
Other		123,700	124,095	124,490	125,250
Multi-Family		17,613,900	17,670,162	17,726,425	17,834,556
Public Agencies		3,965,500	3,978,167	3,990,833	4,015,177
Other Revenue					
Private Fire Protection Fees		870,000	921,000	923,932	929,568
Reconnection Fees		305,000	336,000	337,070	339,126
Capacity Fees		3,000,000	2,000,000	2,006,368	2,018,607
Repair Revenue		55,000	30,000	30,096	30,279
Tank/Tower Lease		545,000	-	-	-
Miscellaneous Fees		15,000	19,000	19,060	19,177
Sweetwater Reservoir Fishing Program		25,000	25,000	25,080	25,233
Reynolds Desal Operating Maint. Fees		-	-	-	-
Non-operating/Interest		615,000	625,000	626,990	630,815
Non-operating/Other		390,000	281,000	281,895	283,614
TOTAL: REVENUE		**$ 58,661,200**	**$ 57,246,986**	**$ 57,429,262**	**$ 57,779,580**

TABLE 6 : OPERATING EXPENSE FORECAST[1]

DESCRIPTION	Basis	Budget	3-Year Projected Rate Period		
		FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Administration					
General (10-10-100)					
Salaries	3	$ 1,327,400	$ 1,362,500	$ 1,410,188	$ 1,459,544
Office Supplies	2	13,900	14,600	15,174	15,770
Travel and Meetings	2	13,000	14,200	14,758	15,338
Subscriptions and Publications	2	2,100	2,000	2,079	2,160
Dues and Memberships	2	62,800	71,900	74,726	77,662
Postage	2	13,800	12,000	12,472	12,962
Delivery Services	2	14,000	13,700	14,238	14,798
General Legal	2	360,000	360,000	374,148	388,852
Janitorial	2	20,000	-	-	-
Communications	2	101,700	108,800	113,076	117,520
Utilities	5	62,700	65,100	68,771	72,649
Consulting Services	2	402,000	584,500	607,471	631,344
Inter-agency Support - SBID	2	30,000	30,000	31,179	32,404
Rents and Leases	2	58,000	67,500	70,153	72,910
Equipment Maintenance	2	22,000	19,000	19,747	20,523
Expense Contingency	2	200,000	200,000	207,860	216,029
Governing Board (10-10-110)					
Per Diems	3	100,800	100,800	104,328	107,979
Travel and Meetings	3	29,600	43,500	45,023	46,598
Health, Vision, Dental and Life Ins.	3	69,000	108,000	111,780	115,692
Public Affairs (10-10-120)					
Salaries	3	356,600	398,100	412,034	426,455
Programs	2	177,100	240,900	250,367	260,207
Travel and Meetings	2	5,500	6,500	6,755	7,021
Dues and Memberships	2	1,200	1,600	1,663	1,728
Publications	2	142,500	149,500	155,375	161,482
Water Efficiency (10-30-350)					
Salaries	3	161,200	90,800	93,978	97,267
Programs	2	300	-	-	-
Material - Supplies	2	500	-	-	-
Travel and Meetings	2	10,400	9,400	9,769	10,153
Dues and Memberships	2	2,600	2,500	2,598	2,700
Postage	2	16,000	-	-	-
Printing	2	8,000	7,000	7,275	7,561
Public Info. And Conservation Garden	2	62,300	58,300	60,591	62,972
Conservation Incentives	2	36,100	43,000	44,690	46,446
Consulting Services	2	2,500	-	-	-
Small Tools and Equipment	2	400	200	208	216
Accounting and Purchasing (10-10-125)					
Uncollectible Accounts	2	-	-	-	-
Salaries	3	710,900	723,100	748,409	774,603
Office Supplies	2	3,600	3,600	3,741	3,889
Travel and Meetings	2	2,600	2,600	2,702	2,808
Auditing	2	45,300	42,000	43,651	45,366
Taxes	2	8,600	12,800	13,303	13,826
Bank and Financial Fees	2	355,300	298,200	309,919	322,099

TABLE 7 : OPERATING EXPENSE FORECAST[1]

DESCRIPTION	Basis	Budget	3-Year Projected Rate Period		
		FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Administration, cont.					
Employee Related (10-10-130)					
Workers' Compensation Insurance	3	$ 540,000	$ 675,000	$ 698,625	$ 723,077
CalPERS Employer	3	5,842,700	5,894,000	6,100,290	6,313,800
Payroll Taxes	3	1,096,800	1,143,800	1,183,833	1,225,267
PARS 401A	3	708,800	695,400	719,739	744,930
Health, Vision, Dental and Life Ins.	3	3,472,800	3,595,500	3,721,343	3,851,589
Retiree Health and Other Benefits	3	352,700	402,100	416,174	430,740
Taxable Fringe Benefits	3	84,500	126,200	130,617	135,189
Expense Credits	3	(842,000)	(679,000)	(702,765)	(727,362)
Subtotal - Administration		**$ 16,268,600**	**$ 17,121,200**	**$ 17,732,053**	**$ 18,364,765**

TABLE 8 : OPERATING EXPENSE FORECAST, cont.[1]

DESCRIPTION	Basis	Budget	3-Year Projected Rate Period		
		FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Information Systems					
Information Systems (10-60-600)					
Salaries	3	$ 929,900	$ 974,200	$ 1,008,297	$ 1,043,587
Office Supplies	2	2,100	2,100	2,183	2,268
Travel and Meetings	2	13,900	15,700	16,317	16,958
Subscriptions and Publications	2	1,500	1,800	1,871	1,944
Dues and Memberships	2	1,700	1,700	1,767	1,836
Printing	2	500	500	520	540
Communications	2	16,800	18,900	19,643	20,415
Consulting Services	2	26,000	131,500	136,668	142,039
IS Equipment Company-wide	2	902,600	981,600	1,020,177	1,060,270
Subtotal - Information Systems		**$ 1,895,000**	**$ 2,128,000**	**$ 2,207,441**	**$ 2,289,858**

TABLE 9 : OPERATING EXPENSE FORECAST, cont.[1]

DESCRIPTION	Basis	Budget	3-Year Projected Rate Period		
		FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Administrative Services					
Human Resources (10-30-310)					
Salaries	3	$ 394,300	$ 362,600	$ 375,291	$ 388,426
Office Supplies	2	800	1,200	1,247	1,296
Travel and Meetings	2	9,000	8,900	9,250	9,613
Subscriptions and Publications	2	-	-	-	-
Dues and Memberships	2	600	600	624	648
Regulatory and Contractual	2	19,300	40,700	42,300	43,962
Wellness	2	13,000	10,500	10,913	11,342
Office Equipment Maintenance	2	1,000	1,000	1,039	1,080
Safety (10-30-320)					
Safety Incentive Program	2	13,300	13,500	14,031	14,582
Salaries	3	134,000	137,700	142,520	147,508
Office Supplies	2	600	600	624	648
Travel and Meetings	2	8,600	8,600	8,938	9,289
Dues and Memberships	2	700	800	831	864
Printing	2	300	300	312	324
General and Property Liability Insurance	2	418,500	536,600	557,688	579,606
Programs - Sanitary	2	5,000	5,000	5,197	5,401
Consulting Services	2	3,300	17,600	18,292	19,011
Small Tools and Equipment	2	5,500	7,500	7,795	8,101
Safety Shoes Program	2	32,400	30,000	31,179	32,404
Ergonomic Program	2	15,000	16,000	16,629	17,282
Respiratory Program	2	15,000	14,000	14,550	15,122
Training (10-30-330)					
Incentive Program	3	1,700	2,500	2,588	2,678
Salaries	3	190,000	283,000	292,905	303,157
Office Supplies	2	1,000	1,000	1,039	1,080
Authority-wide Training	2	112,500	100,000	103,930	108,014
Dues and Memberships	2	500	500	520	540
Printing	2	100	200	208	216
Security (10-30-340)					
Salaries	3	34,500	88,800	91,908	95,125
Landscaping	2	-	125,300	130,224	135,342
Office Supplies	2	500	1,600	1,663	1,728
Dues and Memberships	2	2,200	2,300	2,390	2,484
Printing	2	2,000	2,800	2,910	3,024
Janitorial	2	-	93,300	96,967	100,777
Consulting Services	2	13,500	5,000	5,197	5,401
Small Tools and Equipment	2	200	5,000	5,197	5,401
Equipment Maintenance	2	35,000	74,000	76,908	79,931
Outside Services	2	7,700	277,400	288,302	299,632
Buildings and Grounds Maintenance	2	-	124,200	129,081	134,154
Security Services	2	62,000	120,500	125,236	130,157
Emergency Response Exercises	2	2,500	500	520	540
Subtotal - Administrative Services		**$ 1,556,100**	**$ 2,521,600**	**$ 2,616,938**	**$ 2,715,891**

TABLE 10 : OPERATING EXPENSE FORECAST, cont.[1]

DESCRIPTION	Basis	Budget	3-Year Projected Rate Period		
		FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Customer Service					
Customer Service (10-20-200)					
Materials and Services Maintenance	2	$ 196,700	$ 239,600	$ 249,016	$ 258,803
Meter Replacement Program	2	300,000	190,000	197,467	205,227
Materials and Services Office	2	177,300	278,300	289,237	300,604
Uncollectible Accounts	2	150,000	250,000	259,825	270,036
Salaries	3	1,725,800	1,890,400	1,956,564	2,025,044
Travel and Meetings	2	8,000	5,500	5,716	5,941
Subtotal - Customer Service		**$ 2,557,800**	**$ 2,853,800**	**$ 2,957,826**	**$ 3,065,655**

TABLE 11 : OPERATING EXPENSE FORECAST, cont.[1]

DESCRIPTION	Basis	Budget	3-Year Projected Rate Period		
		FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Water Quality					
General Plant (10-80-800)					
Materials and Supplies SCADA	2	$ 328,000	$ 365,600	$ 379,968	$ 394,901
Materials and Supplies Laboratory	2	234,200	321,200	333,823	346,942
Equipment Rental	2	1,100	1,100	1,143	1,188
Salaries	3	471,900	394,400	408,204	422,491
Office Supplies	2	7,200	7,200	7,483	7,777
Travel and Meetings	2	5,900	5,900	6,132	6,373
Subscriptions and Publications	2	1,800	900	935	972
Dues and Memberships	2	10,900	10,700	11,121	11,558
Janitorial	2	20,000	-	-	-
Utilities	5	6,600	7,400	7,817	8,258
Consulting Services	2	154,800	119,100	123,781	128,645
Regulatory Permit Fees	2	130,100	132,200	137,395	142,795
Small Tools and Equipment	2	1,500	1,500	1,559	1,620
URDS I / Vista del Lago (10-80-830)					
Materials and Supplies Operating	2	45,000	8,000	8,314	8,641
Pump Power	4	8,600	10,000	11,243	12,641
Salaries	3	10,700	6,000	6,210	6,427
URDS II (10-80-840)					
Materials and Supplies Operating	2	3,200	3,200	3,326	3,456
Pump Power	4	1,300	1,500	1,686	1,896
Salaries	3	16,100	17,900	18,527	19,175
Desalination Plant (10-80-850)					
Materials and Suppl. Wells Pump Maint.	2	44,000	44,000	45,729	47,526
Pump Power	4	1,059,300	616,100	692,681	778,782
Wells Power	4	1,379,400	1,080,400	1,214,694	1,365,680
Materials and Supplies Operating	2	168,900	169,500	176,161	183,084
Materials and Supplies Maintenance	2	208,000	211,400	219,708	228,343
Water Treatment Chemicals	2	346,400	338,000	351,283	365,089
Materials and Supplies Laboratory	2	30,900	56,000	58,201	60,488
Plant Power	4	982,100	617,900	694,705	781,057
Materials and Supplies Monitor/Mit.	2	119,100	135,300	140,617	146,144
Equipment Rental	2	3,500	3,500	3,638	3,781
Salaries	3	285,300	282,200	292,077	302,300
Janitorial	2	30,700	-	-	-
Consulting Services	2	46,000	46,000	47,808	49,687
Regulatory Permit Fees	2	29,100	20,900	21,721	22,575
Hazardous Waste Removal	2	24,000	26,000	27,022	28,084
Materials and Services Building and Gr.	2	100,100	-	-	-

TABLE 12 : OPERATING EXPENSE FORECAST, cont.[1]

DESCRIPTION	Basis	Budget	3-Year Projected Rate Period		
		FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Water Quality, cont.					
Perdue Plant (10-80-860)					
Pump Power	4	$ 22,900	$ 258,000	$ 290,069	$ 326,125
Materials and Supplies Operating	2	84,900	118,300	122,949	127,781
Materials and Supplies Maintenance	2	328,600	326,000	338,812	352,127
Water Treatment Chemicals	2	583,600	1,423,000	1,478,924	1,537,046
Plant Power	4	51,700	608,000	683,574	768,543
Equipment Rental	2	3,000	3,000	3,118	3,240
Salaries	3	1,611,000	1,591,000	1,646,685	1,704,319
Hazardous Waste Removal	2	10,000	10,000	10,393	10,801
Materials and Services Building and Gr.	2	5,700	-	-	-
Building and Grounds Maintenance	2	57,500	-	-	-
National City Wells (10-80-870)					
Pump Power	4	170,600	285,500	320,988	360,886
Wells Power	4	73,000	146,800	165,047	185,563
Materials and Supplies Operating	2	3,500	3,300	3,430	3,564
Materials and Supplies Maintenance	2	43,300	45,000	46,769	48,607
Water Treatment Chemicals	2	83,200	92,000	95,616	99,373
Salaries	3	63,500	61,200	63,342	65,559
Hazardous Waste Removal	2	8,500	8,500	8,834	9,181
System Operations (10-80-890)					
Materials and Supplies SCADA	2	7,800	10,800	11,224	11,666
Materials and Supplies Pump Maint.	2	110,700	110,200	114,531	119,032
Pump Power	4	383,700	530,100	595,991	670,073
Tank Landscaping	2	117,500	-	-	-
Materials and Supplies Tank Maint.	2	60,000	60,000	62,358	64,809
Salaries	3	538,700	528,400	546,894	566,035
Small Tools and Equipment	2	3,500	3,500	3,638	3,781
Watershed (10-80-895)					
Materials and Services Operating	2	29,000	35,700	37,103	38,561
Salaries	3	191,400	191,400	198,099	205,032
Temporary Help	3	95,000	100,000	103,500	107,123
Consulting Services	2	50,000	125,000	129,913	135,018
Subtotal - Water Quality		**$ 11,107,500**	**$ 11,735,700**	**$ 12,536,513**	**$ 13,412,220**

TABLE 13 : OPERATING EXPENSE FORECAST, cont.[1]

DESCRIPTION	Basis	Budget	3-Year Projected Rate Period		
		FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Engineering					
General Engineering (10-40-400)					
Hydrological Monitoring	2	$ 163,500	$ 967,200	$ 1,005,211	$ 1,044,716
Materials and Supplies Dam Surveillance	2	300	2,900	3,014	3,132
Pipeline Maintenance	2	65,000	65,000	67,555	70,209
Salaries	3	1,802,800	1,698,000	1,757,430	1,818,940
Office Supplies	2	12,300	14,800	15,382	15,986
Travel and Meetings	2	19,700	22,400	23,280	24,195
Subscriptions and Publications	2	600	600	624	648
Dues and Memberships	2	1,900	2,100	2,183	2,268
Utilities	5	6,000	6,400	6,761	7,142
Consulting Services	2	259,100	410,600	426,737	443,507
Block Map Reproduction	2	5,500	5,500	5,716	5,941
Small Tools and Equipment	2	9,200	9,100	9,458	9,829
Equipment Maintenance	2	9,500	2,000	2,079	2,160
Building and Grounds Maintenance	2	163,600	30,000	31,179	32,404
Sweetwater Reservoir (10-80-810)					
Materials and Supplies Operating	2	33,700	40,400	41,988	43,638
Salaries	3	32,100	75,700	78,350	81,092
Loveland Reservoir (10-80-820)					
Materials and Supplies Operating	2	25,400	51,900	53,940	56,059
Salaries	3	73,000	31,500	32,603	33,744
Reservoir and Dams (10-80-820)					
Materials and Supplies Operating	2	110,200	241,400	250,887	260,747
Salaries	3	565,500	640,000	662,400	685,584
Utilities	2	7,000	7,000	7,275	7,561
Regulatory Permit Fees	2	97,200	113,400	117,857	122,488
Water Resources (10-10-410)					
SDCWA Wholesale Purchased Water	8	9,510,500	3,657,200	3,840,060	4,032,063
MWD Readiness-to-Serve	8	12,000	(39,400)	(41,370)	(43,439)
SDCWA Infrastructure Access Charge	8	2,313,400	2,206,700	2,317,035	2,432,887
SDCWA Customer Service Charge	8	181,300	202,400	212,520	223,146
SDCWA Emergency Storage Charge	8	457,700	460,100	483,105	507,260
MWD Capacity Reservation Charge	8	210,100	125,800	132,090	138,695
SDCWA Supply Reliability Charge	8	642,700	446,500	468,825	492,266
Subtotal - Engineering		**$ 16,790,800**	**$ 11,497,200**	**$ 12,014,169**	**$ 12,554,871**

TABLE 14 : OPERATING EXPENSE FORECAST, cont.[1]

DESCRIPTION	Basis	Budget	3-Year Projected Rate Period		
		FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Distribution					
Distribution (10-50-500)					
Materials and Supplies Maintenance	2	$ 969,000	$ 999,000	$ 1,038,261	$ 1,079,064
Materials and Supplies Water Service	2	65,200	68,000	70,672	73,450
Materials and Supplies Miscellaneous	2	134,800	132,800	138,019	143,443
Equipment Rental	2	2,500	2,500	2,598	2,700
Salaries	3	3,208,100	3,123,600	3,232,926	3,346,078
Office Supplies	2	4,500	5,500	5,716	5,941
Travel and Meetings	2	8,200	8,200	8,522	8,857
Temporary Help	3	25,000	20,000	20,700	21,425
Janitorial	2	20,000	-	-	-
Utilities	5	51,700	61,700	65,179	68,855
Small Tools and Equipment	2	55,000	49,500	51,445	53,467
Materials and Supplies Vehicle Maint.	2	207,800	138,800	144,255	149,924
Gasoline and Oil	6	285,700	256,500	269,942	284,089
Hazardous Waste Removal	2	11,000	16,600	17,252	17,930
Outside Services Office Equipment	2	1,900	3,100	3,222	3,348
Maintenance Communication Equip.	2	18,500	14,500	15,070	15,662
Materials and Services Building and Gr.	2	88,700	-	-	-
Subtotal - Distribution		**$ 5,157,600**	**$ 4,900,300**	**$ 5,083,781**	**$ 5,274,235**
TOTAL: WATER OPERATIONS EXPENSES		**$ 55,333,400**	**$ 52,757,800**	**$ 55,148,721**	**$ 57,677,495**

TABLE 15 : FORECASTING ASSUMPTIONS

INFLATION FACTORS[2]	Basis	2023	2024	2025	2026
Customer Growth[3]	1	--	0.32%	0.32%	0.61%
General Cost Inflation[4]	2	--	3.93%	3.93%	3.93%
Labor Cost Inflation[5]	3	--	1.70%	3.50%	3.50%
Energy[6]	4	--	12.43%	12.43%	12.43%
Electricity[7]	5	--	3.66%	5.64%	5.64%
Fuel & Utilities[8]	6	--	4.68%	5.24%	5.24%
Construction Cost Inflation[9]	7	--	3.50%	3.50%	3.50%
Water Purchases[10]	8	--	13.00%	5.00%	5.00%
No Escalation	9	--	0.00%	0.00%	0.00%

1. Revenues and expenses for FY 2022/23 and FY 2023/24 provided by the Authority. Revenues and expenses for all other years are escalated based on the forecasting assumptions in Table 15. Source files: *Expense - Capital Budget FY24 & Fiveyear Financial FY24.*
2. Expenses are inflated each year by the following annual inflation factor categories.
3. Customer growth is based on service area population growth through FY 2039/40. *Source files: 2015 Urban Water Management Plan.pdf, Page 22, & Customer Growth Rate_nbs.xlsx*
4. General cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers in the San Diego-Carlsbad, CA area.
5. Labor cost inflation is based on the 5-year average annual change in the Quarterly Census of Employment and Wages for San Diego-Carlsbad, CA.
6. Energy cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers in the San Diego-Carlsbad, CA area.
7. Electricity cost inflation is based on the 5-year average change in the Consumer Price Index for San Diego-Carlsbad, CA area.
8. Fuel & Utilities cost inflation is based on the 5-year average annual change in the Consumer Price Index - Average Price Data for Fuels and related products and power. This factor is used for utility costs other than electricity.
9. Construction cost Inflation is the 10-year average change in the Construction Cost Index for 2012-2022. Source: *Engineering News Record website (http://enr.construction.com).*
10. Water purchases growth is estimated at 5% annually based on historical data. Source file: *14 Current and 5 prior years of Source of Supply.*

SWEETWATER AUTHORITY
WATER RATE STUDY
Capital Improvement Plan Expenditures

TABLE 16 : CAPITAL FUNDING SUMMARY

CAPITAL FUNDING FORECAST	Budget	3-Year Projected Rate Period		
Funding Sources:	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Grant Funds	$ -	$ -	$ -	$ -
Use of Capacity Fee Reserves[1]	1,511,179	4,601,261	2,071,623	2,083,862
SRF Loan Funding	-	-	-	-
Use of New Revenue Bond Proceeds	-	-	-	-
Use of Capital Rehabilitation and Replacement Reserve	-	352,535	567,621	996,306
Rate Revenue	29,555,822	8,827,863	17,450,886	10,971,392
Total Sources of Capital Funds	**$ 31,067,001**	**$ 13,781,659**	**$ 20,090,130**	**$ 14,051,560**
Uses of Capital Funds:				
Total Project Costs	$ 31,067,001	$ 13,781,659	$ 20,090,130	$ 14,051,560
Capital Funding Surplus (Deficiency)	$ -	$ -	$ -	$ -

SRF Loan Funding	$ -	$ -	$ -	$ -
New Revenue Bond Proceeds	$ -	$ -	$ -	$ -

CAPITAL IMPROVEMENT PROGRAM FUNDING OPTIONS

Policy Choice		FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
1	Full Funding of CIP, at actual cost & timing	$ 31,067,001	$ 13,781,659	$ 20,090,130	$ 14,051,560
2	75% Funding of CIP, at actual cost & timing	$ 23,300,251	$ 10,336,244	$ 15,067,597	$ 10,538,670
3	50% Funding of CIP, at actual cost & timing	$ 15,533,501	$ 6,890,829	$ 10,045,065	$ 7,025,780

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

Capital Improvement Program Funding Choice	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Effective Annual Funding Amount	$ 31,067,001	$ 13,781,659	$ 20,090,130	$ 14,051,560

CAPITAL IMPROVEMENT PROGRAM

TABLE 17 : CAPITAL IMPROVEMENT PROGRAM COSTS (*in Current-Year Dollars*)[1]

Project No.	Description	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Administration					
General	Capital Contingency*	$ -	$ 250,000	$ 250,000	$ 250,000
General	City of San Diego Reynolds Desal Contribution Reimbursement (Reserve offset)	-		3,000,000	3,000,000
Public Affairs	Aesthetic Enhancements to Various Well Facilities	-	-	-	-
Admin Services	Sweetwater Authority Facilities Master Plan*		350,000	350,000	350,000
	Aesthetic Enhancements to Various Well Facilities	125,000			
Customer Service	Automatic Metering Infrastructure - Feasibility Study		125,000		
	Automatic Metering Infrastructure - Implementation		1,000,000	1,000,000	1,000,000
	Customer Water Bill Payment Kiosk		65,000		
	Water Meter Test Bench Replacement	148,000			
Information Systems	Customer Service Information System Replacement		200,000		
	Geographical Information Systems Assessment, Plan, and Expansion			150,000	
	IS Master Plan	150,000			
	Board Room Technology Upgrade	130,000			
	Authority-wide Electronic Document/Content Management System (ECMS) and Board Agenda Software	50,000		100,000	150,000
	Information Systems Office and Server Room Improvements	140,000			
Water Quality					
General	Laboratory Instrument Replacement		275,000		
	Lead and Copper Rule Revisions Service Line Inventory		645,000	215,000	
	URDS Evolution			297,700	
	Quantum PLC Replacement (SCADA)				387,900
	Laboratory Information Management System (LIMS)	90,000			
Habitat	Sweetwater Wetlands Habitat Recovery Project (HRP)	2,067,800			
	Grant and Prior Year PAYGO Funding for HRP	(1,945,700)			
Perdue Plant	Sodium Hypochlorite Chlorination System		258,000	1,575,000	
	Liquid Ammonium Sulfate Conversion			500,000	
	Raw Water Pump Variable Frequency Drive		138,000		
	Hazardous Tree Removal (Fire Protection)		150,000	330,000	240,000
	Sweetwater Reservoir Aeration/Destratification System	1,787,000	745,000		
Desal Facility	Reverse Osmosis Filter Replacements		175,000	192,000	176,000
Natl City Wells	Iron and Manganese Removal System	2,963,000	2,647,800		
System Operations	Booster Pump, Motor and Well Replacement Program*		80,000	80,000	80,000
	Demolish and Abandon Alluvial Wells			100,000	
	SDF Well pump control valve modification		52,600		

TABLE 18 : **CAPITAL IMPROVEMENT PROGRAM COSTS** (*in Current-Year Dollars*)[1]

Project No.	Description	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Engineering					
General	URDS Facility Maintenance and Repairs	517,300			
	Programmatic Permitting of Property Operating and Maintenance Plan	612,600	200,000	80,000	86,300
	Water Resources Master Plan	250,000			
	City of San Diego Otay 2nd Pipeline Interconnection Replacement	275,000			
	Loveland Reservoir Residence Improvements - Roofing Replacement and Photovoltaic System Installation	110,000			
	Loveland Reservoir Boat Ramp Improvements and Anchors for Boat Dock and Log Boom	332,000			
	Naples Street Large Meter Improvements	85,000			
	Consulting Team for Sweetwater Reservoir Enhancement Project	500,000	160,000		
	New Steel Fire Tank at Loveland Reservoir	105,000			
	New San Diego Formation Well in National City	500,000	100,000	2,200,000	
	Recycled Water Analysis		150,000		
	Loveland Trails Repairs		50,000		
	San Diego Formation Groundwater Sustainability Plan Phase II			200,000	
	Abandonment of Pipes with Slurry Fill			200,000	
	Sweetwater Reservoir Fishing Program Booster Pump Station			60,000	
	Shredder attachment for CAT			45,000	
	Bulk Material Bins at Perdue Plant			75,000	
	Aluminum Work Boat Sweetwater Reservoir			30,000	
	Water Distribution System Master Plan				350,000
	Urban Water Management Plan				70,000
Design	Engineering Design Program*		160,000	160,000	160,000
Pipelines	Salot St, Tolas Ct to East 8th St, NC	155,500	-	-	-
	East 16th St, Euvlid Ave to Pump Station No. 39, NC	1,447,600	-	-	-
	La Vista Cemetery, Euclid Ave to East 32nd St, NC	767,700	-	-	-
	East 32nd, between Olive St to Orange St, NC	979,400	-	-	-
	Olive St, East 32nd St to Sweetwater Rd, NC	255,600	-	-	-
	Lomacitas Lane - Valley Road to Sweetwater Road, Bonita	-	-	-	-
	Lomacitas Lane - Valley Road to 273' West, Bonita	-	-	-	-
	H Street, Claire Avenue to 750 LF East, Chula Vista	-	662,100	-	-
	Projected Pipeline Replacements			7,394,800	5,603,200
	Additional reduction to pipeline replacements upon Budget Adoption on June 28, 2023			(2,000,000)	(2,000,000)
Paving	Pavement Maintenance*		85,000	50,000	50,000
Street Imp.	Street Improvements*	163,190	250,000	250,000	250,000
Tanks	Claire Vista "B" Rehabilitation		776,600		
	Halecrest Rehabilitation		832,900		
	Desal Contact Tank Rehabilitation		202,100		
	O.D. Arnold "B" Rehabilitation			1,040,000	
	NC Wells Rehabilitation			110,000	
	Tank Coating and Structural Rehabilitation of Reservoirs*			500,000	500,000
	Central-Wheeler Tank Construction and System Improvements	3,081,000	200,000		
	Cathodic Protection at up to Four Steel Storage Tanks	670,000			
	Bonita Valley Reservoir Control Building Roof Repair	150,000			
	Cherry Hills Tanks Lining Replacement and Bonita Valley Reservoir Drain Valve Replacement	400,000	100,900		
Treatment	Clearwell Effluent Meter Replacement	1,026,000	-	-	-
Dams	Stairway and Valve Replacement at Loveland Dam	3,185,000	-	-	-
	Sweetwater Dam and South Dike Improvements	8,275,000	-	Potential Debt Finance	

TABLE 19 : CAPITAL IMPROVEMENT PROGRAM COSTS (*in Current-Year Dollars*)[1]

Project No.	Description	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Distribution					
General	Gasoline Underground Storage Tank Replacement	350,000	300,000		
	Expand EV Chargers for larger fleet vehicles			205,000	
Valve	Valve Replacement Program*		450,000	400,000	400,000
Vehicles	Annual Vehicle Replacement Fund**	-	928,000	967,000	949,600
Estimated Future Projects					
Future Projects[2]		-	-	-	-
Total: CIP Program Costs *(Current-Year Dollars)*		**$ 29,897,990**	**$ 12,764,000**	**$ 20,106,500**	**$ 12,053,000**

* On going projects only include the annual cost for cumulative budget totals.

TABLE 20 : CAPITAL IMPROVEMENT PROGRAM COSTS (*in Future-Year Dollars*)

Project No.	Description	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Administration					
General	Capital Contingency*	$ -	$ 269,932	$ 280,487	$ 291,454
General	City of San Diego Reynolds Desal Contribution Reimbursement (Reserve offset)	$ -	$ -	$ 3,365,839	$ 3,497,443
Public Affairs	Aesthetic Enhancements to Various Well Facilities	$ -	$ -	$ -	$ -
Admin Services	Sweetwater Authority Facilities Master Plan*	$ -	$ 377,905	$ 392,681	$ 408,035
	Aesthetic Enhancements to Various Well Facilities	$ 129,888	$ -	$ -	$ -
Customer Service	Automatic Metering Infrastructure - Feasibility Study	$ -	$ 134,966	$ -	$ -
	Automatic Metering Infrastructure - Implementation	$ -	$ 1,079,729	$ 1,121,946	$ 1,165,814
	Customer Water Bill Payment Kiosk	$ -	$ 70,182	$ -	$ -
	Water Meter Test Bench Replacement	$ 153,787	$ -	$ -	$ -
Information Systems	Customer Service Information System Replacement	$ -	$ 215,946	$ -	$ -
	Geographical Information Systems Assessment, Plan, and Expansion	$ -	$ -	$ 168,292	$ -
	IS Master Plan	$ 155,865	$ -	$ -	$ -
	Board Room Technology Upgrade	$ 135,083	$ -	$ -	$ -
	Authority-wide Electronic Document/Content Management System (ECMS) and Board Agenda Software	$ 51,955	$ -	$ 112,195	$ 174,872
	Information Systems Office and Server Room Improvements	$ 145,474	$ -	$ -	$ -
Water Quality		$ -	$ -	$ -	$ -
General	Laboratory Instrument Replacement	$ -	$ 296,925	$ -	$ -
	Lead and Copper Rule Revisions Service Line Inventory	$ -	$ 696,425	$ 241,218	$ -
	URDS Evolution	$ -	$ -	$ 334,003	$ -
	Quantum PLC Replacement (SCADA)	$ -	$ -	$ -	$ 452,219
	Laboratory Information Management System (LIMS)	$ 93,519	$ -	$ -	$ -
Habitat	Sweetwater Wetlands Habitat Recovery Project (HRP)	$ 2,148,651	$ -	$ -	$ -
	Grant and Prior Year PAYGO Funding for HRP	$ (2,021,777)	$ -	$ -	$ -
Perdue Plant	Sodium Hypochlorite Chlorination System	$ -	$ 278,570	$ 1,767,065	$ -
	Liquid Ammonium Sulfate Conversion	$ -	$ -	$ 560,973	$ -
	Raw Water Pump Variable Frequency Drive	$ -	$ 149,003	$ -	$ -
	Hazardous Tree Removal (Fire Protection)	$ -	$ 161,959	$ 370,242	$ 279,795
	Sweetwater Reservoir Aeration/Destratification System	$ 1,856,872	$ 804,398	$ -	$ -
Desal Facility	Reverse Osmosis Filter Replacements	$ -	$ 188,953	$ 215,414	$ 205,183
Natl City Wells	Iron and Manganese Removal System	$ 3,078,853	$ 2,858,906	$ -	$ -
System Operations	Booster Pump, Motor and Well Replacement Program*	$ -	$ 86,378	$ 89,756	$ 93,265
	Demolish and Abandon Alluvial Wells	$ -	$ -	$ 112,195	$ -
	SDF Well pump control valve modification	$ -	$ 56,794	$ -	$ -

TABLE 21 : **CAPITAL IMPROVEMENT PROGRAM COSTS** (*in Future-Year Dollars*)

Project No.	Description	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Engineering					
General	URDS Facility Maintenance and Repairs	537,526	-	-	-
	Programmatic Permitting of Property Operating and Maintenance Plan	636,553	215,946	89,756	100,610
	Water Resources Master Plan	259,775	-	-	-
	City of San Diego Otay 2nd Pipeline Interconnection Replacement	285,753	-	-	-
	Loveland Reservoir Residence Improvements - Roofing Replacement and Photovoltaic System Installation	114,301	-	-	-
	Loveland Reservoir Boat Ramp Improvements and Anchors for Boat Dock and Log Boom	344,981	Potential Debt Finance		
	Naples Street Large Meter Improvements	88,324	-	-	-
	Consulting Team for Sweetwater Reservoir Enhancement Project	519,550	172,757	-	-
	New Steel Fire Tank at Loveland Reservoir	109,106	-	-	-
	New San Diego Formation Well in National City	519,550	107,973	Potential Debt Finance	
	Recycled Water Analysis	-	161,959	-	-
	Loveland Trails Repairs	-	53,986	-	-
	San Diego Formation Groundwater Sustainability Plan Phase II	-	-	224,389	-
	Abandonment of Pipes with Slurry Fill	-	-	224,389	-
	Sweetwater Reservoir Fishing Program Booster Pump Station	-	-	67,317	-
	Shredder attachment for CAT	-	-	50,488	-
	Bulk Material Bins at Perdue Plant	-	-	84,146	-
	Aluminum Work Boat Sweetwater Reservoir	-	-	33,658	-
	Water Distribution System Master Plan	-	-	-	408,035
	Urban Water Management Plan	-	-	-	81,607
Design	Engineering Design Program*	-	172,757	179,511	186,530
Pipelines	Salot St, Tolas Ct to East 8th St, NC	161,580	-	-	-
	East 16th St, Euvlid Ave to Pump Station No. 39, NC	1,504,201	-	-	-
	La Vista Cemetery, Euclid Ave to East 32nd St, NC	797,717	-	-	-
	East 32nd, between Olive St to Orange St, NC	1,017,695	-	-	-
	Olive St, East 32nd St to Sweetwater Rd, NC	265,594	-	-	-
	Lomacitas Lane - Valley Road to Sweetwater Road, Bonita	-	-	-	-
	Lomacitas Lane - Valley Road to 273' West, Bonita	-	-	-	-
	H Street, Claire Avenue to 750 LF East, Chula Vista	-	714,888	-	-
	Projected Pipeline Replacements	-	-	8,296,568	6,532,291
	Additional reduction to pipeline replacements upon Budget Adoption on June 28, 2023	-	-	(2,243,892)	(2,331,629)
Paving	Pavement Maintenance*	-	91,777	56,097	58,291
Street Imp.	Street Improvements*	169,571	269,932	280,487	291,454
Tanks	Claire Vista "B" Rehabilitation	-	838,517	-	-
	Halecrest Rehabilitation	-	899,306	-	-
	Desal Contact Tank Rehabilitation	-	218,213	-	-
	O.D. Arnold "B" Rehabilitation	-	-	1,166,824	-
	NC Wells Rehabilitation	-	-	123,414	-
	Tank Coating and Structural Rehabilitation of Reservoirs*	-	-	560,973	582,907
	Central-Wheeler Tank Construction and System Improvements	3,201,467	215,946	-	-
	Cathodic Protection at up to Four Steel Storage Tanks	696,197	-	-	-
	Bonita Valley Reservoir Control Building Roof Repair	155,865	-	-	-
	Cherry Hills Tanks Lining Replacement and Bonita Valley Reservoir Drain Valve Replacement	415,640	108,945	-	-
Treatment	Clearwell Effluent Meter Replacement	1,066,117	-	-	-
Dams	Stairway and Valve Replacement at Loveland Dam	3,309,534	-	-	-
	Sweetwater Dam and South Dike Improvements	8,598,553	-	Potential Debt Finance	

SWEETWATER AUTHORITY
WATER RATE STUDY
Capital Improvement Plan Expenditures

TABLE 22 : CAPITAL IMPROVEMENT PROGRAM COSTS (*in Future-Year Dollars*)

Project No.	Description	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Distribution					
General	Gasoline Underground Storage Tank Replacement	363,685	323,919	-	-
	Expand EV Chargers for larger fleet vehicles	-	-	229,999	-
Valve	Valve Replacement Program*	-	485,878	448,778	466,326
Vehicles	Annual Vehicle Replacement Fund**	-	1,001,988	1,084,922	1,107,057
Estimated Future Projects					
Future Projects[2]		-	-	-	-
Total: CIP Program Costs *(Future-Year Dollars)*		**$ 31,067,001**	**$ 13,781,659**	**$ 20,090,130**	**$ 14,051,560**

TABLE 23 : FORECASTING ASSUMPTIONS

Economic Variables	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Annual Construction Cost Inflation, Per Engineering News Record[3]	*3.91%*	*3.91%*	*3.91%*	*3.91%*
Cumulative Construction Cost Multiplier from FY 2022/23	*1.04*	*1.08*	*1.12*	*1.17*

1. Capital project costs were provided by Authority Staff in source file: *13a Fiveyear Capital FY 2022-23* & *Fiveyear Capital FY 2023-24* .
2. Future project costs beyond FY 2027/28 are calculated based on the Authority's 5-year average.
3. For reference purposes, the annual Construction Cost Inflation percentage is the 5-year average change in the Construction Cost Index from 2017 to 2022 (3.91%).
   Source: Engineering News Record website (http://enr.construction.com).

TABLE 24 : EXISTING DEBT OBLIGATIONS

EXISTING DEBT OBLIGATIONS	Budget	3-Year Projected Rate Period		
Annual Repayment Schedules:	**FY 2022/23**	**FY 2023/24**	**FY 2024/25**	**FY 2025/26**
2017 Water Revenue Bonds - Debt Amount $21,830,000 [1]				
Principal Payment	$ 510,000	$ 535,000	$ 565,000	$ 595,000
Interest Payment	833,131	807,631	780,881	752,631
Subtotal: Annual Debt Service	**$ 1,343,131**	**$ 1,342,631**	**$ 1,345,881**	**$ 1,347,631**
Coverage Requirement ($-Amnt above annual payment) [2]	$ 1,678,914	$ 1,678,289	$ 1,682,352	$ 1,684,539
Reserve Requirement (total fund balance) [3]	$ -	$ -	$ -	$ -
Grand Total: Existing Annual Debt Service	**$ 1,343,131**	**$ 1,342,631**	**$ 1,345,881**	**$ 1,347,631**
Grand Total: Existing Annual Coverage Requirement	**$ 1,678,914**	**$ 1,678,289**	**$ 1,682,352**	**$ 1,684,539**
Grand Total: Existing Debt Reserve Target	**$ -**	**$ -**	**$ -**	**$ -**

1. Water Revenue Bonds Series 2017A issued in the name of Cede & Co, as nominee of The Depository Trust Company, New York, New York.
   Source: 6 Repayment Schedule 2017 Bond payments & 7a CASweetwaterAuth01a-FINAL 2017 Bond OS.pdf.
2. The debt service coverage ratio requirement is 1.25 (See page 8).
3. The 2017 Revenue Bonds do not require that the Authority maintain a reserve fund (See page 8).

TABLE 25 : EXISTING ANNUAL DEBT OBLIGATIONS TO BE SATISFIED BY WATER RATES

Annual Obligations	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Existing Annual Debt Service	*$ 1,343,131*	*$ 1,342,631*	*$ 1,345,881*	*$ 1,347,631*
Existing Annual Coverage Requirement	*$ 1,678,914*	*$ 1,678,289*	*$ 1,682,352*	*$ 1,684,539*
Existing Debt Reserve Target	*$ -*	*$ -*	*$ -*	*$ -*

TABLE 26 : WATER RATE SCHEDULE (Current Rates Jan. 1, 2023)

Commodity Charges		
Single-Family Residential Rates	**Variable Rate for Bi-Monthly Sweetwater Authority Charge**	**Variable Rate for Bi-Monthly SDCWA Wholesale Water Purchase Charge**
Tiers by Units of Water Served	***$/HCF*** [2]	***$/HCF*** [2]
0 through 10 HCF	$4.31	$0.54
11 through 16 HCF	$5.14	$0.65
17 through 27 HCF	$5.29	$0.66
28 and above HCF	$6.37	$0.80
Other Commodity Charges	**Uniform Rate for Bi-Monthly Sweetwater Authority Charge**	**Uniform Rate for Bi-Monthly SDCWA Wholesale Water Purchase Charge**
Customer Class	***$/HCF*** [2]	***$/HCF*** [2]
Multi-family Residential	$5.92	$0.74
Commercial	$5.66	$0.71
Public Agencies	$6.99	$0.87
Construction	$8.54	$1.07

Meter Charge & SDCWA Infrastructure Access Charge		
Meter Size	**Sweetwater Authority Rates for Bi-Monthly Fixed Charge**	**SDCWA Rates for Bi-Monthly Infrastructure Access Charge**
5/8 inches	$21.70	$9.16
1 inch	$32.30	$14.66
1-1/2 inches	$51.18	$27.48
2 inches	$72.40	$47.62
3 inches	$137.90	$87.94
4 inches	$232.76	$150.22
6 inches	$468.52	$274.80
8 inches	$772.48	$476.32
10 inches	$1,175.02	$714.48

SDCWA & MWD Volumetric Pass-through Charges					
Uniform Rate for Bi-Monthly Pass Through Charge	**SDCWA Customer Service Charge**	**SDCWA Emergency Storage Charge**	**SDCWA Supply Reliability Charge**	**MWD Readiness to Serve Charge**	**MWD Capacity Charge**
All Customer Classes	***$/HCF*** [2]	***$/HCF*** [2]	***$/HCF*** [2]	***$/HCF*** [2]	***$/HCF*** [2]
	$0.03	$0.08	0.08	$0.01	$0.04

1. Rates available on the City website. Source:*https://www.sweetwater.org* .
2. HCF = hundred cubic feet (748 gallons)

TABLE 27 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS

Classification of Expenses											
Budget Categories	Total Revenue Requirement	Commodity	Capacity	Customer	Fire Protection	SDCWA/MWD Pass-Through	Basis of Classification				
	FY 2023/24	(COM)	(CAP)	(CA)	(FP)	(PT)	(COM)	(CAP)	(CA)	(FP)	(PT)
Administration											
General (10-10-100)											
Salaries	$ 1,362,500	$ 681,250	$ 613,125	$ 68,125	$ -	$ -	50.0%	45.0%	5.0%	0.0%	0.0%
Office Supplies	14,600	7,300	6,570	730	-	-	50.0%	45.0%	5.0%	0.0%	0.0%
Travel And Meetings	14,200	7,100	6,390	710	-	-	50.0%	45.0%	5.0%	0.0%	0.0%
Subscriptions And Publications	2,000	1,000	900	100	-	-	50.0%	45.0%	5.0%	0.0%	0.0%
Dues And Memberships	71,900	35,950	32,355	3,595	-	-	50.0%	45.0%	5.0%	0.0%	0.0%
Postage	12,000	6,000	5,400	600	-	-	50.0%	45.0%	5.0%	0.0%	0.0%
Delivery Services	13,700	6,850	6,165	685	-	-	50.0%	45.0%	5.0%	0.0%	0.0%
General Legal	360,000	180,000	162,000	18,000	-	-	50.0%	45.0%	5.0%	0.0%	0.0%
Janitorial	-	-	-	-	-	-	50.0%	45.0%	5.0%	0.0%	0.0%
Communications	108,800	54,400	48,960	5,440	-	-	50.0%	45.0%	5.0%	0.0%	0.0%
Utilities	65,100	32,550	29,295	3,255	-	-	50.0%	45.0%	5.0%	0.0%	0.0%
Consulting Services	584,500	292,250	263,025	29,225	-	-	50.0%	45.0%	5.0%	0.0%	0.0%
Inter-Agency Support - Sbid	30,000	15,000	13,500	1,500	-	-	50.0%	45.0%	5.0%	0.0%	0.0%
Rents And Leases	67,500	33,750	30,375	3,375	-	-	50.0%	45.0%	5.0%	0.0%	0.0%
Equipment Maintenance	19,000	9,500	8,550	950	-	-	50.0%	45.0%	5.0%	0.0%	0.0%
Expense Contingency	200,000	100,000	90,000	10,000	-	-	50.0%	45.0%	5.0%	0.0%	0.0%
Governing Board (10-10-110)											
Per Diems	$ 100,800	$ -	$ 50,400	$ 49,928	$ 472	$ -	0.0%	50.0%	49.5%	0.5%	0.0%
Travel And Meetings	43,500	-	21,750	21,546	204	-	0.0%	50.0%	49.5%	0.5%	0.0%
Health, Vision, Dental And Life Ins.	108,000	-	54,000	53,494	506	-	0.0%	50.0%	49.5%	0.5%	0.0%
Public Affairs (10-10-120)											
Salaries	$ 398,100	$ -	$ -	$ 396,237	$ 1,863	$ -	0.0%	0.0%	99.5%	0.5%	0.0%
Programs	240,900	-	-	239,772	1,128	-	0.0%	0.0%	99.5%	0.5%	0.0%
Travel And Meetings	6,500	-	-	6,470	30	-	0.0%	0.0%	99.5%	0.5%	0.0%
Dues And Memberships	1,600	-	-	1,593	7	-	0.0%	0.0%	99.5%	0.5%	0.0%
Publications	149,500	-	-	148,800	700	-	0.0%	0.0%	99.5%	0.5%	0.0%
Water Efficiency (10-30-350)											
Salaries	$ 90,800	$ 81,295	$ -	$ 9,080	$ 425	$ -	89.5%	0.0%	10.0%	0.5%	0.0%
Programs	-	-	-	-	-	-	89.5%	0.0%	10.0%	0.5%	0.0%
Material - Supplies	-	-	-	-	-	-	89.5%	0.0%	10.0%	0.5%	0.0%
Travel And Meetings	9,400	8,416	-	940	44	-	89.5%	0.0%	10.0%	0.5%	0.0%
Dues And Memberships	2,500	2,238	-	250	12	-	89.5%	0.0%	10.0%	0.5%	0.0%
Postage	-	-	-	-	-	-	89.5%	0.0%	10.0%	0.5%	0.0%
Printing	7,000	6,267	-	700	33	-	89.5%	0.0%	10.0%	0.5%	0.0%
Public Info. And Conservation Garder	58,300	52,197	-	5,830	273	-	89.5%	0.0%	10.0%	0.5%	0.0%
Conservation Incentives	43,000	38,499	-	4,300	201	-	89.5%	0.0%	10.0%	0.5%	0.0%
Consulting Services	-	-	-	-	-	-	89.5%	0.0%	10.0%	0.5%	0.0%
Small Tools And Equipment	200	179	-	20	1	-	89.5%	0.0%	10.0%	0.5%	0.0%
Accounting And Purchasing (10-10-125)											
Uncollectible Accounts	$ -	$ -	$ -	$ -	$ -	$ -	0.0%	50.0%	50.0%	0.0%	0.0%
Salaries	723,100	-	361,550	361,550	-	-	0.0%	50.0%	50.0%	0.0%	0.0%
Office Supplies	3,600	-	1,800	1,800	-	-	0.0%	50.0%	50.0%	0.0%	0.0%

TABLE 28 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses											
Budget Categories	Total Revenue Requirement	Commodity	Capacity	Customer	Fire Protection	SDCWA/MWD Pass-Through	Basis of Classification				
	FY 2023/24	(COM)	(CAP)	(CA)	(FP)	(PT)	(COM)	(CAP)	(CA)	(FP)	(PT)
Administration, cont.											
General (10-10-100), Cont.											
Travel And Meetings	2,600	-	1,300	1,300	-	-	0.0%	50.0%	50.0%	0.0%	0.0%
Auditing	42,000	-	21,000	21,000	-	-	0.0%	50.0%	50.0%	0.0%	0.0%
Taxes	12,800	-	6,400	6,400	-	-	0.0%	50.0%	50.0%	0.0%	0.0%
Bank And Financial Fees	$ 298,200	$ -	$ 149,100	$ 149,100	$ -	$ -	0.0%	50.0%	50.0%	0.0%	0.0%
Administration, Cont.	-	-	-	-	-	-	0.0%	50.0%	50.0%	0.0%	0.0%
Employee Related (10-10-130)											
Workers' Compensation Insurance	$ 675,000	$ 337,500	$ 337,500	$ -	$ -	$ -	50.0%	50.0%	0.0%	0.0%	0.0%
Calpers Employer	5,894,000	2,947,000	2,947,000	-	-	-	50.0%	50.0%	0.0%	0.0%	0.0%
Payroll Taxes	1,143,800	571,900	571,900	-	-	-	50.0%	50.0%	0.0%	0.0%	0.0%
Pars 401A	695,400	347,700	347,700	-	-	-	50.0%	50.0%	0.0%	0.0%	0.0%
Health, Vision, Dental And Life Ins.	3,595,500	1,797,750	1,797,750	-	-	-	50.0%	50.0%	0.0%	0.0%	0.0%
Retiree Health And Other Benefits	402,100	201,050	201,050	-	-	-	50.0%	50.0%	0.0%	0.0%	0.0%
Taxable Fringe Benefits	126,200	63,100	63,100	-	-	-	50.0%	50.0%	0.0%	0.0%	0.0%
Expense Credits	(679,000)	(339,500)	(339,500)	-	-	-	50.0%	50.0%	0.0%	0.0%	0.0%
Subtotal - Administration	**$17,121,200**	**$ 7,578,491**	**$ 7,910,410**	**$ 1,626,400**	**$ 5,898**	**$ -**	**44.3%**	**46.2%**	**9.5%**	**0.0%**	**0.0%**
Information Systems											
Information Systems (10-60-600)											
Salaries	$ 974,200	$ -	$ 823,510	$ 146,130	$ 4,560	$ -	0.0%	84.5%	15.0%	0.5%	0.0%
Office Supplies	2,100	-	1,775	315	10	-	0.0%	84.5%	15.0%	0.5%	0.0%
Travel And Meetings	15,700	-	13,272	2,355	73	-	0.0%	84.5%	15.0%	0.5%	0.0%
Subscriptions And Publications	1,800	-	1,522	270	8	-	0.0%	84.5%	15.0%	0.5%	0.0%
Dues And Memberships	1,700	-	1,437	255	8	-	0.0%	84.5%	15.0%	0.5%	0.0%
Printing	500	-	423	75	2	-	0.0%	84.5%	15.0%	0.5%	0.0%
Communications	18,900	-	15,977	2,835	88	-	0.0%	84.5%	15.0%	0.5%	0.0%
Consulting Services	131,500	-	111,159	19,725	616	-	0.0%	84.5%	15.0%	0.5%	0.0%
Is Equipment Company-Wide	981,600	-	829,765	147,240	4,595	-	0.0%	84.5%	15.0%	0.5%	0.0%
Subtotal - Information Systems	**$ 2,128,000**	**$ -**	**$ 1,798,839**	**$ 319,200**	**$ 9,961**	**$ -**	**0.0%**	**84.5%**	**15.0%**	**0.5%**	**0.0%**
Administrative Services											
Human Resources (10-30-310)											
Salaries	$ 362,600	$ 268,324	$ 76,146	$ 18,130	$ -	$ -	74.0%	21.0%	5.0%	0.0%	0.0%
Office Supplies	1,200	888	252	60	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Travel And Meetings	8,900	6,586	1,869	445	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Subscriptions And Publications	-	-	-	-	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Dues And Memberships	600	444	126	30	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Regulatory And Contractual	40,700	30,118	8,547	2,035	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Wellness	10,500	7,770	2,205	525	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Office Equipment Maintenance	1,000	740	210	50	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Safety (10-30-320)											
Safety Incentive Program	$ 13,500	$ 9,990	$ 2,835	$ 675	$ -	$ -	74.0%	21.0%	5.0%	0.0%	0.0%
Salaries	137,700	101,898	28,917	6,885	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Office Supplies	600	444	126	30	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Travel And Meetings	8,600	6,364	1,806	430	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Dues And Memberships	800	592	168	40	-	-	74.0%	21.0%	5.0%	0.0%	0.0%

TABLE 29 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses											
Budget Categories	Total Revenue Requirement	Commodity	Capacity	Customer	Fire Protection	SDCWA/MWD Pass-Through	Basis of Classification				
	FY 2023/24	(COM)	(CAP)	(CA)	(FP)	(PT)	(COM)	(CAP)	(CA)	(FP)	(PT)
Administrative Services, cont.											
Human Resources (10-30-310), Cont.											
Printing	300	222	63	15	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
General And Property Liability Insurance	536,600	397,084	112,686	26,830	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Programs - Sanitary	5,000	3,700	1,050	250	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Consulting Services	17,600	13,024	3,696	880	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Small Tools And Equipment	7,500	5,550	1,575	375	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Safety Shoes Program	$ 30,000	$ 22,200	$ 6,300	$ 1,500	$ -	$ -	74.0%	21.0%	5.0%	0.0%	0.0%
Ergonomic Program	16,000	11,840	3,360	800	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Respiratory Program	14,000	10,360	2,940	700	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Training (10-30-330)	-	-	-	-	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Incentive Program	2,500	1,850	525	125	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Salaries	283,000	209,420	59,430	14,150	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Office Supplies	1,000	740	210	50	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Authority-Wide Training	100,000	74,000	21,000	5,000	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Dues And Memberships	500	370	105	25	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Printing	200	148	42	10	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Security (10-30-340)											
Salaries	$ 88,800	$ 65,712	$ 18,648	$ 4,440	$ -	$ -	74.0%	21.0%	5.0%	0.0%	0.0%
Landscaping	125,300	92,722	26,313	6,265	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Office Supplies	1,600	1,184	336	80	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Dues And Memberships	2,300	1,702	483	115	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Printing	2,800	2,072	588	140	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Janitorial	93,300	69,042	19,593	4,665	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Consulting Services	5,000	3,700	1,050	250	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Small Tools And Equipment	5,000	3,700	1,050	250	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Equipment Maintenance	74,000	54,760	15,540	3,700	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Outside Services	277,400	205,276	58,254	13,870	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Buildings And Grounds Maintenance	124,200	91,908	26,082	6,210	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Security Services	120,500	89,170	25,305	6,025	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Emergency Response Exercises	500	370	105	25	-	-	74.0%	21.0%	5.0%	0.0%	0.0%
Subtotal - Administrative Services	**$ 2,521,600**	**$ 1,865,984**	**$ 529,536**	**$ 126,080**	**$ -**	**$ -**	**74.0%**	**21.0%**	**5.0%**	**0.0%**	**0.0%**
Customer Service											
Materials and Services Maintenance	$ 239,600	$ -	$ -	$ 238,478	$ 1,122	$ -	0.0%	0.0%	99.5%	0.5%	0.0%
Meter Replacement Program	190,000	-	-	189,111	889	-	0.0%	0.0%	99.5%	0.5%	0.0%
Materials and Services Office	278,300	-	-	276,997	1,303	-	0.0%	0.0%	99.5%	0.5%	0.0%
Uncollectible Accounts	250,000	-	-	248,830	1,170	-	0.0%	0.0%	99.5%	0.5%	0.0%
Salaries	1,890,400	-	-	1,881,551	8,849	-	0.0%	0.0%	99.5%	0.5%	0.0%
Travel and Meetings	5,500	-	-	5,474	26	-	0.0%	0.0%	99.5%	0.5%	0.0%
Subtotal - Customer Service	**$ 2,853,800**	**$ -**	**$ -**	**$ 2,840,442**	**$ 13,358**	**$ -**	**0.0%**	**0.0%**	**99.5%**	**0.5%**	**0.0%**

TABLE 30 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses											
Budget Categories	Total Revenue Requirement	Commodity	Capacity	Customer	Fire Protection	SDCWA/MWD Pass-Through	Basis of Classification				
	FY 2023/24	(COM)	(CAP)	(CA)	(FP)	(PT)	(COM)	(CAP)	(CA)	(FP)	(PT)
Water Quality											
General Plant (10-80-800)											
Materials And Supplies Scada	$ 365,600	$ 237,640	$ 109,680	$ 18,280	$ -	$ -	65.0%	30.0%	5.0%	0.0%	0.0%
Materials And Supplies Laboratory	321,200	208,780	96,360	16,060	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Equipment Rental	1,100	715	330	55	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Salaries	394,400	256,360	118,320	19,720	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Office Supplies	7,200	4,680	2,160	360	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Travel And Meetings	5,900	3,835	1,770	295	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Subscriptions And Publications	900	585	270	45	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Dues And Memberships	10,700	6,955	3,210	535	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Janitorial	-	-	-	-	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Utilities	7,400	4,810	2,220	370	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Consulting Services	119,100	77,415	35,730	5,955	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Regulatory Permit Fees	132,200	85,930	39,660	6,610	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Small Tools And Equipment	1,500	975	450	75	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Urds I / Vista Del Lago (10-80-830)	-	-	-	-	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Materials And Supplies Operating	8,000	5,200	2,400	400	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Pump Power	10,000	6,500	3,000	500	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Salaries	6,000	3,900	1,800	300	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Urds Ii (10-80-840)											
Materials And Supplies Operating	$ 3,200	$ 2,080	$ 960	$ 160	$ -	$ -	65.0%	30.0%	5.0%	0.0%	0.0%
Pump Power	1,500	975	450	75	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Salaries	17,900	11,635	5,370	895	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Desalination Plant (10-80-850)											
Materials And Suppl. Wells Pump Maint.	$ 44,000	$ 28,600	$ 13,200	$ 2,200	$ -	$ -	65.0%	30.0%	5.0%	0.0%	0.0%
Pump Power	616,100	400,465	184,830	30,805	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Wells Power	1,080,400	702,260	324,120	54,020	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Materials And Supplies Operating	169,500	110,175	50,850	8,475	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Materials And Supplies Maintenance	211,400	137,410	63,420	10,570	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Water Treatment Chemicals	338,000	219,700	101,400	16,900	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Materials And Supplies Laboratory	56,000	36,400	16,800	2,800	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Plant Power	617,900	401,635	185,370	30,895	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Materials And Supplies Monitor/Mit.	135,300	87,945	40,590	6,765	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Equipment Rental	3,500	2,275	1,050	175	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Salaries	282,200	183,430	84,660	14,110	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Janitorial	-	-	-	-	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Consulting Services	46,000	29,900	13,800	2,300	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Regulatory Permit Fees	20,900	13,585	6,270	1,045	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Hazardous Waste Removal	26,000	16,900	7,800	1,300	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Materials And Services Building And Gr.	-	-	-	-	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Water Quality, Cont.	-	-	-	-	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Perdue Plant (10-80-860)											
Pump Power	$ 258,000	$ 258,000	$ -	$ -	$ -	$ -	100.0%	0.0%	0.0%	0.0%	0.0%
Materials And Supplies Operating	118,300	70,980	47,320	-	-	-	60.0%	40.0%	0.0%	0.0%	0.0%
Materials And Supplies Maintenance	326,000	195,600	130,400	-	-	-	60.0%	40.0%	0.0%	0.0%	0.0%

TABLE 31 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses											
Budget Categories	Total Revenue Requirement	Commodity	Capacity	Customer	Fire Protection	SDCWA/MWD Pass-Through	Basis of Classification				
	FY 2023/24	(COM)	(CAP)	(CA)	(FP)	(PT)	(COM)	(CAP)	(CA)	(FP)	(PT)
Water Quality, cont.											
General Plant (10-80-800), cont.											
Water Treatment Chemicals	1,423,000	853,800	569,200	-	-	-	60.0%	40.0%	0.0%	0.0%	0.0%
Plant Power	608,000	364,800	243,200	-	-	-	60.0%	40.0%	0.0%	0.0%	0.0%
Equipment Rental	$ 3,000	$ 1,800	$ 1,200	$ -	$ -	$ -	60.0%	40.0%	0.0%	0.0%	0.0%
Salaries	1,591,000	954,600	636,400	-	-	-	60.0%	40.0%	0.0%	0.0%	0.0%
Hazardous Waste Removal	10,000	6,000	4,000	-	-	-	60.0%	40.0%	0.0%	0.0%	0.0%
Materials And Services Building And Gr.	-	-	-	-	-	-	60.0%	40.0%	0.0%	0.0%	0.0%
Building And Grounds Maintenance	-	-	-	-	-	-	60.0%	40.0%	0.0%	0.0%	0.0%
National City Wells (10-80-870)											
Pump Power	$ 285,500	$ 285,500	$ -	$ -	$ -	$ -	100.0%	0.0%	0.0%	0.0%	0.0%
Wells Power	146,800	88,080	58,720	-	-	-	60.0%	40.0%	0.0%	0.0%	0.0%
Materials And Supplies Operating	3,300	1,980	1,320	-	-	-	60.0%	40.0%	0.0%	0.0%	0.0%
Materials And Supplies Maintenance	45,000	27,000	18,000	-	-	-	60.0%	40.0%	0.0%	0.0%	0.0%
Water Treatment Chemicals	92,000	55,200	36,800	-	-	-	60.0%	40.0%	0.0%	0.0%	0.0%
Salaries	61,200	36,720	24,480	-	-	-	60.0%	40.0%	0.0%	0.0%	0.0%
Hazardous Waste Removal	8,500	5,100	3,400	-	-	-	60.0%	40.0%	0.0%	0.0%	0.0%
System Operations (10-80-890)											
Materials And Supplies Scada	$ 10,800	$ 10,800	$ -	$ -	$ -	$ -	100.0%	0.0%	0.0%	0.0%	0.0%
Materials And Supplies Pump Maint.	110,200	110,200	-	-	-	-	100.0%	0.0%	0.0%	0.0%	0.0%
Pump Power	530,100	530,100	-	-	-	-	100.0%	0.0%	0.0%	0.0%	0.0%
Tank Landscaping	-	-	-	-	-	-	100.0%	0.0%	0.0%	0.0%	0.0%
Materials And Supplies Tank Maint.	60,000	60,000	-	-	-	-	100.0%	0.0%	0.0%	0.0%	0.0%
Salaries	528,400	528,400	-	-	-	-	100.0%	0.0%	0.0%	0.0%	0.0%
Small Tools And Equipment	3,500	3,500	-	-	-	-	100.0%	0.0%	0.0%	0.0%	0.0%
Watershed (10-80-895)											
Materials And Services Operating	$ 35,700	$ 23,205	$ 10,710	$ 1,785	$ -	$ -	65.0%	30.0%	5.0%	0.0%	0.0%
Salaries	191,400	124,410	57,420	9,570	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Temporary Help	100,000	65,000	30,000	5,000	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Consulting Services	125,000	81,250	37,500	6,250	-	-	65.0%	30.0%	5.0%	0.0%	0.0%
Subtotal - Water Quality	**$11,735,700**	**$ 8,031,675**	**$ 3,428,370**	**$ 275,655**	**$ -**	**$ -**	**68.4%**	**29.2%**	**2.3%**	**0.0%**	**0.0%**

TABLE 32 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses											
Budget Categories	Total Revenue Requirement	Commodity	Capacity	Customer	Fire Protection	SDCWA/MWD Pass-Through	Basis of Classification				
	FY 2023/24	(COM)	(CAP)	(CA)	(FP)	(PT)	(COM)	(CAP)	(CA)	(FP)	(PT)
Engineering											
General Engineering (10-40-400)											
Hydrological Monitoring	$ 967,200	$ 551,304	$ 415,896	$ -	$ -	$ -	57.0%	43.0%	0.0%	0.0%	0.0%
Materials And Supplies Dam Surveillance	2,900	1,653	1,247	-	-	-	57.0%	43.0%	0.0%	0.0%	0.0%
Pipeline Maintenance	65,000	37,050	27,950	-	-	-	57.0%	43.0%	0.0%	0.0%	0.0%
Salaries	1,698,000	967,860	730,140	-	-	-	57.0%	43.0%	0.0%	0.0%	0.0%
Office Supplies	14,800	8,436	6,364	-	-	-	57.0%	43.0%	0.0%	0.0%	0.0%
Travel And Meetings	22,400	12,768	9,632	-	-	-	57.0%	43.0%	0.0%	0.0%	0.0%
Subscriptions And Publications	600	342	258	-	-	-	57.0%	43.0%	0.0%	0.0%	0.0%
Dues And Memberships	2,100	1,197	903	-	-	-	57.0%	43.0%	0.0%	0.0%	0.0%

TABLE 33 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses											
Budget Categories	Total Revenue Requirement	Commodity	Capacity	Customer	Fire Protection	SDCWA/MWD Pass-Through	Basis of Classification				
	FY 2023/24	(COM)	(CAP)	(CA)	(FP)	(PT)	(COM)	(CAP)	(CA)	(FP)	(PT)
Engineering, cont.											
General Engineering (10-40-400), cont.											
Utilities	$ 6,400	$ 3,648	$ 2,752	$ -	$ -	$ -	57.0%	43.0%	0.0%	0.0%	0.0%
Consulting Services	410,600	234,042	176,558	-	-	-	57.0%	43.0%	0.0%	0.0%	0.0%
Block Map Reproduction	5,500	3,135	2,365	-	-	-	57.0%	43.0%	0.0%	0.0%	0.0%
Small Tools And Equipment	9,100	5,187	3,913	-	-	-	57.0%	43.0%	0.0%	0.0%	0.0%
Equipment Maintenance	2,000	1,140	860	-	-	-	57.0%	43.0%	0.0%	0.0%	0.0%
Building And Grounds Maintenance	30,000	17,100	12,900	-	-	-	57.0%	43.0%	0.0%	0.0%	0.0%
Sweetwater Reservoir (10-80-810)											
Materials And Supplies Operating	$ 40,400	$ 23,028	$ 17,372	$ -	$ -	$ -	57.0%	43.0%	0.0%	0.0%	0.0%
Salaries	75,700	43,149	32,551	-	-	-	57.0%	43.0%	0.0%	0.0%	0.0%
Loveland Reservoir (10-80-820)	-	-	-	-	-	-	57.0%	43.0%	0.0%	0.0%	0.0%
Materials And Supplies Operating	51,900	29,583	22,317	-	-	-	57.0%	43.0%	0.0%	0.0%	0.0%
Salaries	31,500	17,955	13,545	-	-	-	57.0%	43.0%	0.0%	0.0%	0.0%
Reservoir And Dams (10-80-820)											
Materials And Supplies Operating	$ 241,400	$ 137,598	$ 103,802	$ -	$ -	$ -	57.0%	43.0%	0.0%	0.0%	0.0%
Salaries	640,000	364,800	275,200	-	-	-	57.0%	43.0%	0.0%	0.0%	0.0%
Utilities	7,000	3,990	3,010	-	-	-	57.0%	43.0%	0.0%	0.0%	0.0%
Regulatory Permit Fees	113,400	64,638	48,762	-	-	-	57.0%	43.0%	0.0%	0.0%	0.0%
Water Resources (10-10-410)											
SDCWA Wholesale Purchased Water	$ 3,657,200	$ 3,657,200	$ -	$ -	$ -	$ -	100.0%	0.0%	0.0%	0.0%	0.0%
MWD Readiness-to-Serve	(39,400)	-	-	-	-	(39,400)	0.0%	0.0%	0.0%	0.0%	100.0%
SDCWA Infrastructure Access Charge	2,206,700	-	2,206,700	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
SDCWA Customer Service Charge	202,400	-	-	-	-	202,400	0.0%	0.0%	0.0%	0.0%	100.0%
SDCWA Emergency Storage Charge	460,100	-	-	-	-	460,100	0.0%	0.0%	0.0%	0.0%	100.0%
MWD Capacity Reservation Charge	125,800	-	-	-	-	125,800	0.0%	0.0%	0.0%	0.0%	100.0%
SDCWA Supply Reliability Charge	446,500	-	-	-	-	446,500	0.0%	0.0%	0.0%	0.0%	100.0%
Subtotal - Engineering	**$11,497,200**	**$ 6,186,803**	**$ 4,114,997**	**$ -**	**$ -**	**$ 1,195,400**	**53.8%**	**35.8%**	**0.0%**	**0.0%**	**10.4%**

TABLE 34 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses											
Budget Categories	Total Revenue Requirement	Commodity	Capacity	Customer	Fire Protection	SDCWA/MWD Pass-Through	Basis of Classification				
	FY 2023/24	(COM)	(CAP)	(CA)	(FP)	(PT)	(COM)	(CAP)	(CA)	(FP)	(PT)
Distribution											
Distribution (10-50-500)											
Materials And Supplies Maintenance	$ 999,000	$ 549,450	$ 449,550	$ -	$ -	$ -	55.0%	45.0%	0.0%	0.0%	0.0%
Materials And Supplies Water Service	68,000	37,400	30,600	-	-	-	55.0%	45.0%	0.0%	0.0%	0.0%
Materials And Supplies Miscellaneous	132,800	73,040	59,760	-	-	-	55.0%	45.0%	0.0%	0.0%	0.0%
Equipment Rental	2,500	1,375	1,125	-	-	-	55.0%	45.0%	0.0%	0.0%	0.0%
Salaries	3,123,600	1,717,980	1,405,620	-	-	-	55.0%	45.0%	0.0%	0.0%	0.0%
Office Supplies	5,500	3,025	2,475	-	-	-	55.0%	45.0%	0.0%	0.0%	0.0%
Travel And Meetings	8,200	4,510	3,690	-	-	-	55.0%	45.0%	0.0%	0.0%	0.0%
Temporary Help	20,000	11,000	9,000	-	-	-	55.0%	45.0%	0.0%	0.0%	0.0%
Janitorial	-	-	-	-	-	-	55.0%	45.0%	0.0%	0.0%	0.0%
Utilities	61,700	33,935	27,765	-	-	-	55.0%	45.0%	0.0%	0.0%	0.0%
Small Tools And Equipment	49,500	27,225	22,275	-	-	-	55.0%	45.0%	0.0%	0.0%	0.0%
Materials And Supplies Vehicle Maint.	138,800	76,340	62,460	-	-	-	55.0%	45.0%	0.0%	0.0%	0.0%
Gasoline And Oil	256,500	141,075	115,425	-	-	-	55.0%	45.0%	0.0%	0.0%	0.0%
Hazardous Waste Removal	16,600	9,130	7,470	-	-	-	55.0%	45.0%	0.0%	0.0%	0.0%
Outside Services Office Equipment	3,100	1,705	1,395	-	-	-	55.0%	45.0%	0.0%	0.0%	0.0%
Maintenance Communication Equip.	14,500	7,975	6,525	-	-	-	55.0%	45.0%	0.0%	0.0%	0.0%
Materials And Services Building And Gr.	-	-	-	-	-	-	55.0%	45.0%	0.0%	0.0%	0.0%
Subtotal - Distribution	**$ 4,900,300**	**$ 2,695,165**	**$ 2,205,135**	**$ -**	**$ -**	**$ -**	**55.0%**	**45.0%**	**0.0%**	**0.0%**	**0.0%**
TOTAL: WATER OPERATIONS EXPENSES	**$52,757,800**	**##########**	**##########**	**$ 5,187,777**	**$ 29,218**	**$ 1,195,400**	**50.0%**	**37.9%**	**9.8%**	**0.1%**	**2.3%**

TABLE 35 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses, continued											
Budget Categories	**Total Revenue Requirement**	**Commodity**	**Capacity**	**Customer**	**Fire Protection**	**SDCWA/MWD Pass-Through**	**Basis of Classification**				
	FY 2023/24	**(COM)**	**(CAP)**	**(CA)**	**(FP)**	**(PT)**	**(COM)**	**(CAP)**	**(CA)**	**(FP)**	**(PT)**
Debt Service Payments											
Existing Debt Service	$ 1,342,631	$ -	$ 1,342,631	$ -	$ -	$ -	0.0%	100.0%	0.0%	0.0%	0.0%
New Debt Service	-	-	-	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Total Debt Service Payments	**$ 1,342,631**	**$ -**	**$ 1,342,631**	**$ -**	**$ -**	**$ -**	**0.0%**	**100.0%**	**0.0%**	**0.0%**	**0.0%**
Capital Expenditures											
Rate Funded Capital Expenses	$ 4,601,261	$ 2,300,631	$ 2,300,631	$ -	$ -	$ -	50.0%	50.0%	0.0%	0.0%	0.0%
TOTAL REVENUE REQUIREMENTS	**$58,701,692**	**##########**	**##########**	**$ 5,187,777**	**$ 29,218**	**$ 1,195,400**	**48.8%**	**40.3%**	**8.8%**	**0.0%**	**2.0%**
Less: Non-Rate Revenues											
Private Fire Protection Fees	$ 921,000	$ -	$ 921,000	$ -	$ -	$ -	0.0%	100.0%	0.0%	0.0%	0.0%
Reconnection Fees	336,000	171,048	135,258	29,694	-	-	50.9%	40.3%	8.8%	0.0%	0.0%
Repair Revenue	30,000	15,272	12,077	2,651	-	-	50.9%	40.3%	8.8%	0.0%	0.0%
Tank/Tower Lease	-	-	-	-	-	-	50.9%	40.3%	8.8%	0.0%	0.0%
Miscellaneous Fees	19,000	9,672	7,649	1,679	-	-	50.9%	40.3%	8.8%	0.0%	0.0%
Sweetwater Reservoir Fishing Program	25,000	12,727	10,064	2,209	-	-	50.9%	40.3%	8.8%	0.0%	0.0%
Reynolds Desal Operating Maint. Fees	-	-	-	-	-	-	50.9%	40.3%	8.8%	0.0%	0.0%
Non-operating/Interest	625,000	318,170	251,596	55,235	-	-	50.9%	40.3%	8.8%	0.0%	0.0%
Non-operating/Other	281,000	143,049	113,117	24,833	-	-	50.9%	40.3%	8.8%	0.0%	0.0%
less Pass-Through Costs	***$ (1,195,400)***										
NET REVENUE REQUIREMENTS	**$59,743,292**	**##########**	**##########**	**$ 5,304,079**	**$ 29,218**	**$ 1,195,400**					
Allocation of Revenue Requirements	**100.0%**	**49.1%**	**42.0%**	**8.9%**	**0.0%**	***n.a.***					

TABLE 36 : ADJUSTMENT TO CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS

Adjustments to Classification of Expenses						
Adjustment for Current Rate Level:	**Total**	**(COM)**	**(CAP)**	**(CA)**	**(FP)**	**(PT)**
Test Year (FY 2023/24) Target Rate Rev. After Rate Increases	$53,275,036					
Projected Rate Revenue at Current Rates	53,009,986					
Test Year (FY 2023/24) Projected Rate Adjustment	1%					
Adjusted Net Revenue Req'ts	**$53,275,036**	##########	##########	**$ 4,729,819**	**$ 26,054**	**$ 1,195,400**
Percent of Revenue	*100.0%*	*49.1%*	*42.0%*	*8.9%*	*0.0%*	*n.a.*

TABLE 37 : NET REVENUE REQUIREMENTS PER COSA RESULTS

Net Revenue Requirements - Per COSA Results *51% Fixed / 49% Variable*	Total Rate Revenue Requirements FY 2023/24	Commodity Related Costs	Fixed Costs			SDCWA/MWD Pass-Through
			Capacity Related Costs	Customer Related Costs	Fire Protection Related Costs	
Rate-Design Adjustments to Fixed/Variable %	**100.0%**	**49.1%**	**42.0%**	**8.9%**	**0.0%**	*n.a.*
Rate-Design Adjustments to Fixed/Variable ($)	**$53,275,036**	**$26,153,344**	**$22,365,818**	**$4,729,819**	**$26,054**	**$ 1,195,400**

Rate Design	Total Rev. Reqts. FY'23/24	Commodity Related Costs	Fixed Costs			SDCWA/MWD Pass-Through
			Capacity Related Costs	Customer Related Costs	Fire Protection Related Costs	

TABLE 38 : REVISED NET REVENUE REQUIREMENTS PER COSA RESULTS - COSA

Rate-Design Adjustments to Fixed/Variable %	**100.0%**	**49.0%**	**42.1%**	**8.9%**	**0.0%**	*n.a.*
Rate-Design Adjustments to Fixed/Variable ($)[1]	**$53,275,036**	**$26,104,767**	**$22,405,876**	**$4,738,291**	**$26,101**	**$ 1,195,400**

1. Net Rev. Reqts. less Recycled Water Rev. Reqts.

3-Year Phase-In Option

TABLE 39 : REVISED NET REVENUE REQUIREMENTS - (13% FIXED/87% VOLUMETRIC) - ALTERNATIVE 1

Rate-Design Adjustments to Fixed/Variable %	**100.0%**	**87.0%**	**10.7%**	**2.3%**	**0.0%**	*n.a.*
Rate-Design Adjustments to Fixed/Variable ($)[1]	**$53,275,036**	**$46,349,281**	**$5,711,302**	**$1,207,800**	**$6,653**	**$ 1,195,400**

TABLE 40 : REVISED NET REVENUE REQUIREMENTS - (16% FIXED/84% VOLUMETRIC) - ALTERNATIVE 1

Rate-Design Adjustments to Fixed/Variable %	**100.0%**	**84.0%**	**13.2%**	**2.8%**	**0.0%**	*n.a.*
Rate-Design Adjustments to Fixed/Variable ($)[1]	**$53,275,036**	**$44,751,030**	**$7,029,295**	**$1,486,523**	**$8,189**	**$ 1,195,400**

TABLE 41 : REVISED NET REVENUE REQUIREMENTS - (19% FIXED/81% VOLUMETRIC) - ALTERNATIVE 1

Rate-Design Adjustments to Fixed/Variable %	**100.0%**	**81.0%**	**15.7%**	**3.3%**	**0.0%**	*n.a.*
Rate-Design Adjustments to Fixed/Variable ($)[1]	**$53,275,036**	**$43,152,779**	**$8,347,287**	**$1,765,246**	**$9,724**	**$ 1,195,400**

TABLE 42 : DEVELOPMENT OF THE COMMODITY ALLOCATION FACTOR

Development of the Volumetric/Variable Allocation Factor[1]				
Customer Class	FY 2021/22 Consumption (hcf)	% Adjustment for Conservation[2]	Est. FY 2020/21 Volume Adjusted for Conservation	FY 2021/22 % of Total Volume
Residential	2,851,451	5.0%	2,708,878	**38.3%**
Multi-Family	2,379,851	5.0%	2,260,858	**31.9%**
Commercial	1,313,754	5.0%	1,248,066	**17.6%**
Public Agencies	304,266	5.0%	289,053	**4.1%**
Irrigation	582,953	5.0%	553,805	**7.83%**
Other-Construction	10,624	5.0%	10,093	**0.1%**
Industrial	6,412	5.0%	6,091	**0.1%**
Fire Protection	525	5.0%	499	**0.01%**
Total	**7,449,836**		**7,077,344**	**100%**

1. Consumption data is based on SWA billing data.
2. A conservation factor of 5% is used.

Commodity Related Costs: *Costs associated with the total consumption (flow) of water over a specified period of time (e.g. annual).*

TABLE 43 : DEVELOPMENT OF THE CAPACITY ALLOCATION FACTORS

Development of the PEAK CAPACITY (MAX MONTH) Allocation Factors				
Customer Class	Average Bimonthly Use (hcf)	Avg. Bi-Mo. Peak Use (hcf)[1]	Peak Bimonthly Factor	Max Month Capacity Factor
Residential	225,740	298,431	**1.32**	**37.0%**
Multi-Family	188,405	265,058	**1.41**	**32.8%**
Commercial	104,006	137,434	**1.32**	**17.0%**
Public Agencies	24,088	41,243	**1.71**	**5.1%**
Irrigation	46,150	63,066	**1.37**	**7.81%**
Other-Construction	841	1,014	**1.21**	**0.1%**
Temporary Hydrant Meters	508	1,024	**2.02**	**0.1%**
Fire Protection	42	63	**1.52**	**0.01%**
Total	**589,779**	**807,332**	**1.37**	**100%**

1. Based on peak monthly data (highest 2-month average due to bi-monthly meter reading).

Capacity Related Costs: *Costs associated with the maximum demand required at one point in time or the maximum size of facilities required to meet this demand.*

TABLE 44 : DEVELOPMENT OF THE CUSTOMER ALLOCATION FACTORS

Development of the Customer Allocation Factor		
Customer Class	No. of Meters FY 2021/22022	Percent of Total
Residential	28,269	**77.7%**
Multi-Family	3,775	**10.4%**
Commercial	3,061	**8.4%**
Public Agencies	310	**0.9%**
Irrigation	781	**2.1%**
Other-Construction	75	**0.2%**
Temporary Hydrant Meters	33	**0.1%**
Fire Protection	92	**0.3%**
Total	**36,396**	**100.0%**

1. Meter count data is based on the City's billing data for June 2022.

Customer Related Costs *: Costs associated with having a customer on the water system. These costs vary with the addition or deletion of customers on the system. Examples: Meter-reading, Postage and billing.*

TABLE 45 : SUMMARY OF SOURCE OF SUPPLIES AND COSTS

Source of Supply	Cost ($/AF)[2]	Acre Feet/Year	HCF/Year	% of Total
NC Wells	$338	1,900	827,640	11.2%
Reservoir Water	$506	5,847	2,546,953	34.4%
Desal	$561	6,500	2,831,400	38.3%
SDCWA	$1,338	2,733	1,190,495	16.1%
Total	--	16,980	7,396,488	100%

TABLE 46 : SUMMARY OF TIERED RATE ALTERNATIVES (WITHOUT METER OVERLAY)

Tiers	Supply (Only) Costs ($/HCF)	Breakpoints	% Resid. HCF's
	UNBLENDED 4-Tier Rates		
Tier 1	**$0.78**	**T1 ≤ 4 hcf**	11.2%
Tier 2	**$1.16**	**4 < T2 ≤ 12.5**	34.4%
Tier 3	**$1.29**	**12.5 < T3 ≤ 24**	38.3%
Tier 4	**$3.07**	**24 < T4**	16.1%
	UNBLENDED 3-Tier Rates		
Tier 1	**$1.07**	**T1 ≤ 12.5 hcf**	45.6%
Tier 2	**$1.29**	**12.5 < T2 ≤ 24**	38.3%
Tier 3	**$3.07**	**24 < T3**	16.1%
	BLENDED Tiered Rates (3 Tiers)		
Tier 1	**$1.06**	**T1 ≤ 5 hcf**	13.3%
Tier 2	**$1.47**	**5 < T2 ≤ 15**	41.0%
Tier 3	**$1.58**	**15 < T3**	45.6%
	BLENDED Tiered Rates (2 Tiers)		
Tier 1	**$1.37**	**T1 ≤ 15 hcf**	54.4%
Tier 2	**$1.58**	**15 < T2**	45.6%

TABLE 47 : FY 2023/24 WATER SUPPLY COSTS BY CUSTOMER CLASS

Customer Class	FY 2021/22 Consumption[1] (hcf)	% of Consumption	Supply Costs[2] by Class FY'23/24	Supply Costs[2] by Class FY'24/25	Supply Costs[2] by Class FY'25/26	Supply Costs[2] by Class FY'26/27	Supply Costs[2] by Class FY'27/28
			Rate Increase:	6.00%	6.50%	4.00%	4.00%
Residential	2,708,878	38.3%	$ 4,172,945	$ 4,423,322	$ 4,688,721	$ 4,993,488	$ 5,193,227
Multi-Family	2,260,858	31.9%	3,482,784	3,691,751	3,913,256	4,167,617	4,334,322
Commercial	1,248,066	17.6%	1,922,608	2,037,965	2,160,243	2,300,658	2,392,685
Public Agencies	289,053	4.1%	445,277	471,994	500,313	532,833	554,147
Irrigation	553,805	7.8%	853,120	904,308	958,566	1,020,873	1,061,708
Other-Construction	10,093	0.1%	15,548	16,481	17,469	18,605	19,349
Industrial	6,091	0.1%	9,384	9,947	10,543	11,229	11,678
Fire Protection	499	0.01%	768	814	863	919	956
Total	**7,077,344**	**100.0%**	**$ 10,902,433**	**$ 11,556,579**	**$ 12,249,974**	**$ 13,046,223**	**$ 13,568,071**

1. Consumption data is based on SWA billing data and has been adjusted for 5% conservation.
2. Supply costs provided by SWA are allocated to customer classes based on their percentage of FY'21/22 consumption.

TABLE 48 : FY 2023/24 WATER SUPPLIES AND COSTS - UNBLENDED SUPPLY OPTION (4 TIERS)

Source of Supply	Total Contracted Purchases[1]			Cost ($/AF)[2]	Supply Costs[3] (FY 2023/24)		Supply Unit Costs[2] ($/HCF)
	In AF	In HCF	% of Total		($)	% of Total	
Tier 1							
NC Wells	1,900	827,640	11.2%	$338	$ 642,300	5.9%	**$0.78**
Tier 2							
Reservoir Water	5,847	2,546,953	34.4%	$506	2,955,733	27.1%	**$1.16**
Tier 2							
Desal	6,500	2,831,400	38.3%	$561	3,647,200	33.5%	**$1.29**
Tier 3							
SDCWA	2,733	1,190,495	16.1%	$1,338	3,657,200	33.5%	**$3.07**
Totals	**16,980**	**7,396,488**	**100.0%**		**$ 10,902,433**	**100%**	

1. Source file: *2023-24 Water Production.xlsx* .
2. Cost provided by SWA.
3. Costs per acre foot time acre feet.

TABLE 49 : RESIDENTIAL TIER CONSUMPTION LEVELS

3-Year Phase-In Assumptions			
	YEAR 1	YEAR 2	YEAR 3
% Fixed	**13%**	**16%**	**19%**
% Variable	**87%**	**84%**	**81%**
Annual Growth Rate	**N.A.**	**0.00%**	**0.00%**
Rate Increase	**0.5%**	**6.0%**	**6.5%**
Rate Increase Adjustments:	***N.A.***	***1.060***	***1.129***

TABLE 50 : RESIDENTIAL TIER CONSUMPTION LEVELS

Residential Tiers[1]	Consumption	% of Consumption[2]	Avg. Bi-Monthly Consumption FY 2021/22 (hcf)[3]
Tier 1	303,114	11.2%	
Tier 2	932,792	34.4%	
Tier 3	1,036,968	38.3%	
Tier 4	436,005	16.1%	
Total	**2,708,878**	**100.0%**	16.0

1. The FY 2021/22 consumption data are actuals and includes a 5% conservation factor. See Allocation *Factors* Tab, Table 30.
2. See *SFR Distribitution Data Tab* for details on how the percentage of consumption was calculated.
3. Annual residential consumption divided by total residential meters divided by 12 months.

TABLE 51 : PROPOSED UNIFORM VOLUMETRIC CHARGES FOR FY 2023/24

									(13% Fixed / 87% Variable)
Customer Classes	**Number of Meters[1]**	**Water Consumption (hcf/yr)[2]**	**Source of Supply Costs**	**Other Volumetric Costs**	**Target SWA Vol. Rev. Req't[3]**	**Uniform SWA Commodity Rates[3] ($/hcf)**	***SDCWA Wholesale Water Purchase***	***Uniform SDCWA Commodity Rates ($/hcf)***	**% of Total Commodity Rate Revenue**
Residential	28,269	2,708,878	$ 4,172,945	$ 12,167,600	$ 16,340,545	*4 Tiers*	$ 1,399,806	$0.517	*38.3%*
Multi-Family	3,775	2,260,858	3,482,784	10,155,207	13,637,990	$6.032	1,168,293	$0.517	*31.9%*
Commercial	3,061	1,248,066	1,922,608	5,605,999	7,528,608	$6.032	644,935	$0.517	*17.6%*
Public Agencies	310	289,053	445,277	1,298,352	1,743,629	$6.032	149,367	$0.517	*4.1%*
Irrigation	781	553,805	853,120	2,487,554	3,340,674	$6.032	286,178	$0.517	*7.8%*
Other-Construction	75	10,093	15,548	45,334	60,882	$6.032	5,215	$0.517	*0.1%*
Industrial	33	6,091	9,384	27,361	36,745	$6.032	3,148	$0.517	*0.1%*
Fire Protection	92	499	768	2,240	3,009	$6.032	258	$0.517	*0.0%*
Total Potable Water	**36,396**	**7,077,344**	**$ 10,902,433**	**$ 31,789,647**	**$ 42,692,081**	**--**	**$ 3,657,200**	**--**	***100%***

1. Consumption data is based on the SWA billing data.
2. Water consumption is actual consumption for FY 2021/22 and includes an adjustment of 5% for conservation. See Table 30.
3. Excluding SDCWA Wholesale Water Purchase costs.

TABLE 52 : RESIDENTIAL TIERED RATES FOR FY 2023/24

							UNBLENDED 4-Tier Rates
Source of Supply	**Source of Supply Costs**		**Other Volumetric Costs**		**Total Resid. Share of Vol. Costs by Tier**	**Residential Consumption by Tier**	**Residential Tiered Rates ($/hcf)**
	% of Supply Costs	**Source of Supply Costs**	**% of Consumption**	**Other Volumetric Costs**			
Residential Tier 1	5.9%	$ 245,843	11.2%	$ 1,361,510	$ 1,607,353	303,114	**$ 5.99**
Residential Tier 2	27.1%	1,131,317	34.4%	4,189,868	5,321,185	932,792	6.39
Residential Tier 3	33.5%	1,395,979	38.3%	4,657,797	6,053,776	1,036,968	6.52
Residential Tier 4	33.5%	1,399,806	16.1%	1,958,425	3,358,231	436,005	8.39
Total	**100.0%**	**$ 4,172,945**	**100.0%**	**$12,167,600**	**$16,340,545**	**2,708,878**	**--**

TABLE 53 : ALLOCATION OF WATER REVENUE REQUIREMENTS

3-Year Phase-In Assumptions	YEAR 1	YEAR 2	YEAR 3
% Fixed	13%	16%	19%
% Variable	87%	84%	81%
Annual Growth Rate	N.A.	0.00%	0.00%
Rate Increase	0.5%	6.0%	6.5%

TABLE 54 : ALLOCATION OF WATER REVENUE REQUIREMENTS

Classification Components	YEAR 1 (13% Fixed / 87% Variable) Net Rev. Reqts. *(FY 2023/24)*		YEAR 2 (16% Fixed / 84% Variable) Net Rev. Reqts. *(FY 2024/25)* [2]		YEAR 3 (19% Fixed / 81% Variable) Net Rev. Reqts. *(FY 2025/26)* [2]	
Commodity-Related Costs	$ 42,692,081	*80.1%*	$ 43,559,460	*77.1%*	$ 44,586,559	*74.1%*
SDCWA Wholesale Purchased Water	***3,657,200***	***6.9%***	***3,876,632***	***6.9%***	***4,128,613***	***6.9%***
Subtotal - Commodity-Related Costs	46,349,281	87.0%	47,436,092	84.0%	48,715,172	81.0%
Capacity-Related Costs	3,504,602	*6.6%*	5,111,950	*9.1%*	6,932,109	*11.5%*
SDCWA Infrastructure Access Charge	***2,206,700***	***4.1%***	***2,339,102***	***4.1%***	***2,491,144***	***4.1%***
Customer-Related Costs	1,207,800	*2.3%*	1,575,714	*2.8%*	1,992,786	*3.3%*
Fire Protection-Related Costs	6,653	*0.0%*	8,680	*0.0%*	10,977	*0.0%*
Net Revenue Requirement	**$ 53,275,036**	*100.0%*	**$ 56,471,538**	*100.0%*	**$ 60,142,188**	*100.0%*
Net Revenue Requirement w/o SDCWA Char	**$ 47,411,136**	--	**$ 50,255,804**	--	**$ 53,522,431**	--

1. Net revenue requirements less recycled water revenue requirements.

2. Net Rev. Reqts. in Years 2-3 assume costs increase uniformly by the annual rate increases in the Financial Plan.

TABLE 55 : ALLOCATION OF UNADJUSTED NET REVENUE REQUIREMENTS - FY 2023/24

FY 2023/24

Customer Classes	Classification Components							Cost of Service Net Rev. Req'ts	% of COS Net Revenue Req'ts
	VARIABLE			*FIXED*					
	Commodity-Related Costs	SDCWA Wholesale Purchase Charge	Total Commodity Costs	Capacity-Related Costs	SDCWA Infrastructure Access Charge	Customer-Related Costs	Fire Protection-Related Costs		
Residential	$ 16,340,545	$ 1,399,806	$ 17,740,351	$ 1,295,480	$ 815,709	$ 938,105	$ -	$ 20,789,645	*39.0%*
Multi-Family	13,637,990	1,168,293	14,806,283	1,150,607	724,488	125,273	-	16,806,652	*31.5%*
Commercial	7,528,608	644,935	8,173,543	596,597	375,652	101,579	-	9,247,371	*17.4%*
Public Agencies	1,743,629	149,367	1,892,996	179,035	112,731	10,287	-	2,195,049	*4.1%*
Irrigation	3,340,674	286,178	3,626,852	273,768	172,380	25,917	-	4,098,917	*7.7%*
Other-Construction	60,882	5,215	66,097	4,400	2,770	2,489	-	75,756	*0.1%*
Industrial	36,745	3,148	39,892	4,443	2,798	1,095	-	48,228	*0.1%*
Fire Protection	3,009	258	3,266	273	172	3,053	6,653	13,418	*0.0%*
Total Net Revenue Requirement	**$ 42,692,081**	**$ 3,657,200**	**$ 46,349,281**	**$ 3,504,602**	**$ 2,206,700**	**$ 1,207,800**	**$ 6,653**	**$ 53,275,036**	**100%**
Total Net Revenue Requirement by Classification Component	*VARIABLE $46,349,281*			*FIXED $6,925,755*				*$53,275,036*	

TABLE 56 : COST-OF-SERVICE SUMMARY OF REVENUE REQUIREMENTS

Customer Class	YEAR 1 (13% Fixed / 87% Variable) Net Rev. Reqts. (FY 2023/24)	
	FY 2023/24 COS Rev. Req't	% of COS Rev. Req't.
Residential	$ 20,789,645	39.0%
Multi-Family	16,806,652	31.5%
Commercial	9,247,371	17.4%
Public Agencies	2,195,049	4.1%
Irrigation	4,098,917	7.7%
Other-Construction	75,756	0.1%
Industrial	48,228	0.1%
Fire Protection	13,418	0.0%
Total	**$ 53,275,036**	**100%**

TABLE 57 : METER EQUIVALENCY FACTORS USED IN FIXED CHARGES CALCULATION

Meter Size	Standard Meters		Fire Meters	
	Meter Capacity (gpm)[1]	Equivalency to 3/4 inch	Meter Capacity (gpm)[1]	Equivalency to 3/4 inch
	Displacement Meters		*Displacement Meters*	
5/8 inch	20	1.00	20	0.67
3/4 inch	30	1.00	30	1.00
1 inch	50	1.67	50	1.67
1 1/2 inch	100	3.33	100	3.33
2 inch	160	5.33	160	5.33
	Compound Class I Meters		*Fire Service Type II Meters*	
3 inch	320	10.67	350	11.67
4 inch	500	16.67	700	23.33
6 inch	1,000	33.33	1,600	53.33
8 inch	1,600	53.33	2,800	93.33
	Turbine Class II Meters		*Fire Service Type III Meters*	
10 inch	4,200	140.00	4,400	220.00
12 inch	5,300	176.67	*N/A*	--

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

TABLE 58 : CALCULATION OF MONTHLY FIXED CHARGES - SWA FIXED METER SERVICE CHARGE

											FY 2023/24
Number of Meters by Class and Size [1]	**FY 2023/24**										**Total**
	< 1"	**1"**	**1 1/2"**	**2"**	**3"**	**4"**	**6"**	**8"**	**10"**	
Total Meters (less Irrigation and Fire)	30,140	3,475	801	1,014	77	4	5	3	4		35,523
Total Meters (less Irrigation and Fire)	**30,140**	**3,475**	**801**	**1,014**	**77**	**4**	**5**	**3**	**4**		**35,523**
Hydraulic Capacity Factor [2]	*1.00*	*1.67*	*3.33*	*5.33*	*10.67*	*16.67*	*33.33*	*53.33*	*140.00*		
Total Equivalent Meters	**30,140**	**5,792**	**2,670**	**5,408**	**821**	**67**	**167**	**160**	**560**		**45,784**
Monthly Fixed Service Charges											
Customer Costs ($/Acct/month)[3]	$2.77	$2.77	$2.77	$2.77	$2.77	$2.77	$2.77	$2.77	$2.77		
Capacity Costs ($/Acct/month)[4]	$5.87	$9.78	$19.56	$31.30	$62.60	$97.81	$195.61	$312.98	$821.58		
Total Monthly Meter Charge	**$8.63**	**$12.55**	**$22.33**	**$34.06**	**$65.36**	**$100.57**	**$198.38**	**$315.75**	**$824.34**		
Annual Fixed Costs Allocated to Monthly Meter Charges											
Customer Costs	$ 1,178,829										
Capacity Costs	3,224,181										
Total Fixed Meter Costs	$ 4,403,010										
Annual Revenue from Monthly Meter Charges											
Customer Charges	$ 1,000,195	$ 115,318	$ 26,581	$ 33,650	$ 2,555	$ 133	$ 166	$ 100	$ 133		**$ 1,178,829**
Capacity Charges	$ 2,122,491	$ 407,855	$ 188,024	$ 380,837	$ 57,839	$ 4,695	$ 11,737	$ 11,267	$ 39,436		**$ 3,224,181**
Total Revenue from Monthly Meter Charges	**$ 3,122,685**	**$ 523,173**	**$ 214,605**	**$ 414,487**	**$ 60,394**	**$ 4,827**	**$ 11,903**	**$ 11,367**	**$ 39,569**		**$ 4,403,010**

1. Meter by Class and Size are based on June 2022 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 59 : CALCULATION OF MONTHLY FIXED CHARGES - SWA IRRIGATION METER CHARGE

											FY 2023/24
Number of Meters by Class and Size [1]	**FY 2023/24**										**Total**
	< 1"	**1"**	**1 1/2"**	**2"**	**3"**	**4"**	**6"**	**8"**	**10"**	
Total Irrigation Meters	160	205	157	257	2	0	0	0	0		781
Total Irrigation Meters	**160**	**205**	**157**	**257**	**2**	**0**	**0**	**0**	**0**		**781**
Hydraulic Capacity Factor [2]	*1.00*	*1.67*	*3.33*	*5.33*	*10.67*	*16.67*	*33.33*	*53.33*	*140.00*		
Total Equivalent Meters	**160**	**342**	**523**	**1,371**	**21**	**0**	**0**	**0**	**0**		**2,417**
Monthly Fixed Service Charges											
Customer Costs ($/Acct/month)[3]	$2.77	$2.77	$2.77	$2.77	$2.77	$2.77	$2.77	$2.77	$2.77		
Capacity Costs ($/Acct/month)[4]	$9.44	$15.73	$31.46	$50.34	$100.68	$157.32	$314.63	$503.41	$1,321.45		
Total Monthly Meter Charge	**$12.20**	**$18.50**	**$34.23**	**$53.11**	**$103.45**	**$160.08**	**$317.40**	**$506.18**	**$1,324.22**		
Annual Fixed Costs Allocated to Monthly Meter Charges											
Customer Costs	$ 25,917										
Capacity Costs	273,768										
Total Fixed Meter Costs	$ 299,685										
Annual Revenue from Monthly Meter Charges											
Customer Charges	$ 5,310	$ 6,803	$ 5,210	$ 8,529	$ 66	$ -	$ -	$ -	$ -		**$ 25,917**
Capacity Charges	$ 18,123	$ 38,700	$ 59,277	$ 155,252	$ 2,416	$ -	$ -	$ -	$ -		**$ 273,768**
Total Revenue from Monthly Meter Charges	**$ 23,432**	**$ 45,503**	**$ 64,487**	**$ 163,781**	**$ 2,483**	**$ -**	**$ -**	**$ -**	**$ -**		**$ 299,685**

1. Meter by Class and Size are based on June 2022 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 60 : CALCULATION OF MONTHLY FIXED CHARGES - SWA FIRE METER CHARGE

											FY 2023/24
Number of Meters by Class and Size [1]	**FY 2023/24**										**Total**
	< 1"	**1"**	**1 1/2"**	**2"**	**3"**	**4"**	**6"**	**8"**	**10"**	
Total Fire Meters	74	14	2	2	0	0	0	0	0		92
Total Fire Meters	**74**	**14**	**2**	**2**	**0**	**0**	**0**	**0**	**0**		**92**
Hydraulic Capacity Factor [2]	*1.00*	*1.67*	*3.33*	*5.33*	*11.67*	*23.33*	*53.33*	*93.33*	*220.00*		
Total Equivalent Meters	**74**	**23**	**7**	**11**	**0**	**0**	**0**	**0**	**0**		**115**
Monthly Fixed Service Charges											
Customer Costs ($/Acct/month)[3]	$2.77	$2.77	$2.77	$2.77	$2.77	$2.77	$2.77	$2.77	$2.77		
Capacity Costs ($/Acct/month)[4]	$4.84	$8.06	$16.12	$25.79	$56.41	$112.82	$257.88	$451.28	$1,063.74		
Total Monthly Meter Charge	**$7.60**	**$10.82**	**$18.88**	**$28.55**	**$59.18**	**$115.59**	**$260.64**	**$454.05**	**$1,066.51**		
Annual Fixed Costs Allocated to Monthly Meter Charges											
Customer Costs	$ 3,053										
Capacity Costs	6,653										
Total Fixed Meter Costs	$ 9,706										
Annual Revenue from Monthly Meter Charges											
Customer Charges	$ 2,456	$ 465	$ 66	$ 66	$ -	$ -	$ -	$ -	$ -		**$ 3,053**
Capacity Charges	$ 4,294	$ 1,354	$ 387	$ 619	$ -	$ -	$ -	$ -	$ -		**$ 6,653**
Total Revenue from Monthly Meter Charges	**$ 6,749**	**$ 1,818**	**$ 453**	**$ 685**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**		**$ 9,706**

1. Meter by Class and Size are based on June 2022 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 61 : CALCULATION OF MONTHLY FIXED CHARGES - SDCWA INFRASTRUCTURE ACCESS CHARGE

											FY 2023/24
Number of Meters by Class and Size [1]	**FY 2023/24**										**Total**
	< 1"	**1"**	**1 1/2"**	**2"**	**3"**	**4"**	**6"**	**8"**	**10"**	
Total Meters/Accounts	30,374	3,694	960	1,273	79	4	5	3	4		36,396
Total Meters/Accounts	**30,374**	**3,694**	**960**	**1,273**	**79**	**4**	**5**	**3**	**4**		**36,396**
Hydraulic Capacity Factor [2]	*1.00*	*1.67*	*3.33*	*5.33*	*10.67*	*16.67*	*33.33*	*53.33*	*140.00*		
Total Equivalent Meters	**30,374**	**6,157**	**3,200**	**6,789**	**843**	**67**	**167**	**160**	**560**		**48,316**
Monthly Fixed Service Charges											
Customer Costs ($/Acct/month)[3]	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		
Capacity Costs ($/Acct/month)[4]	$3.81	$6.34	$12.69	$20.30	$40.60	$63.43	$126.87	$202.99	$532.84		
Total Monthly Meter Charge	**$3.81**	**$6.34**	**$12.69**	**$20.30**	**$40.60**	**$63.43**	**$126.87**	**$202.99**	**$532.84**		
Annual Fixed Costs Allocated to Monthly Meter Charges											
Customer Costs	$ -										
SDCWA Infrastructure Access Charges	2,206,700										
Total Fixed Meter Costs	$ 2,206,700										
Annual Revenue from Monthly Meter Charges											
Customer Charges	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		**$ -**
Capacity Charges	$ 1,387,249	$ 281,189	$ 146,151	$ 310,084	$ 38,486	$ 3,045	$ 7,612	$ 7,308	$ 25,576		**$ 2,206,700**
Total Revenue from Monthly Meter Charges	**$ 1,387,249**	**$ 281,189**	**$ 146,151**	**$ 310,084**	**$ 38,486**	**$ 3,045**	**$ 7,612**	**$ 7,308**	**$ 25,576**		**$ 2,206,700**

1. Meter by Class and Size are based on June 2022 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 62 : ALLOCATION OF UNADJUSTED NET REVENUE REQUIREMENTS - FY 2024/25

Year 2

Customer Classes	Classification Components							Cost of Service Net Rev. Req'ts	% of COS Net Revenue Req'ts
	VARIABLE			*FIXED*					
	Commodity-Related Costs	SCDWA Wholesale	Total Commodity	Capacity-Related	SDCWA Infrastructure	Customer-Related Costs	Fire Protection-Related Costs		
Residential	$ 16,672,537	$ 1,483,795	$ 18,156,331	$ 1,889,638	$ 864,652	$ 1,223,867	$ -	$ 22,134,488	*39.2%*
Multi-Family	13,915,075	1,238,391	15,153,465	1,678,320	767,958	163,433	-	17,763,176	*31.5%*
Commercial	7,681,567	683,631	8,365,198	870,220	398,191	132,522	-	9,766,131	*17.3%*
Public Agencies	1,779,054	158,329	1,937,384	261,147	119,494	13,421	-	2,331,446	*4.1%*
Irrigation	3,408,547	303,348	3,711,895	399,328	182,723	33,812	-	4,327,759	*7.7%*
Other-Construction	62,119	5,528	67,647	6,417	2,936	3,247	-	80,248	*0.1%*
Industrial	37,491	3,337	40,828	6,481	2,965	1,429	-	51,703	*0.1%*
Fire Protection	3,070	273	3,343	399	183	3,983	8,680	16,587	*0.0%*
Total Net Revenue Requirement	**$ 43,559,460**	**$ 3,876,632**	**$ 47,436,092**	**$ 5,111,950**	**$ 2,339,102**	**$ 1,575,714**	**$ 8,680**	**$ 56,471,538**	**100%**
Total Net Revenue Requirement by Classification Component	*VARIABLE $47,436,092*			*FIXED $9,035,446*				*$56,471,538*	

TABLE 63 : COST-OF-SERVICE SUMMARY OF REVENUE REQUIREMENTS

Customer Class	YEAR 2	
	FY 2023/24 COS	% of COS Rev. Req't.
Residential	$ 22,134,488	39.2%
Multi-Family	17,763,176	31.5%
Commercial	9,766,131	17.3%
Public Agencies	2,331,446	4.1%
Irrigation	4,327,759	7.7%
Other-Construction	80,248	0.1%
Industrial	51,703	0.1%
Fire Protection	16,587	0.0%
Total	**$ 56,471,538**	**100%**

TABLE 64 : CALCULATION OF MONTHLY FIXED CHARGES - SWA FIXED METER SERVICE CHARGE

Year 2

Number of Meters by Class and Size [1]	FY 2023/24									Total
	< 1"	1"	1 1/2"	2"	3"	4"	6"	8"	10"	
Total Meters (less Irrigation and Fire)	30,140	3,475	801	1,014	77	4	5	3	4	35,523
Total Meters (less Irrigation and Fire)	**30,140**	**3,475**	**801**	**1,014**	**77**	**4**	**5**	**3**	**4**	**35,523**
Hydraulic Capacity Factor [2]	*1.00*	*1.67*	*3.33*	*5.33*	*10.67*	*16.67*	*33.33*	*53.33*	*140.00*	
Total Equivalent Meters	**30,140**	**5,792**	**2,670**	**5,408**	**821**	**67**	**167**	**160**	**560**	**45,784**
Monthly Fixed Service Charges										
Customer Costs ($/Acct/month)[3]	$3.62	$3.62	$3.62	$3.62	$3.62	$3.62	$3.62	$3.62	$3.62	
Capacity Costs ($/Acct/month)[4]	$8.56	$14.27	$28.54	$45.66	$91.33	$142.70	$285.39	$456.63	$1,198.65	
Total Monthly Meter Charge	**$12.18**	**$17.89**	**$32.16**	**$49.28**	**$94.94**	**$146.31**	**$289.01**	**$460.24**	**$1,202.27**	
Annual Fixed Costs Allocated to Monthly Meter Charges										
Customer Costs	$ 1,541,828									
Capacity Costs	4,703,942									
Total Fixed Meter Costs	$ 6,245,770									
Annual Revenue from Monthly Meter Charges										
Customer Charges	$ 1,308,186	$ 150,828	$ 34,766	$ 44,011	$ 3,342	$ 174	$ 217	$ 130	$ 174	**$ 1,541,828**
Capacity Charges	$ 3,096,623	$ 595,043	$ 274,319	$ 555,625	$ 84,385	$ 6,849	$ 17,124	$ 16,439	$ 57,535	**$ 4,703,942**
Total Revenue from Monthly Meter Charges	**$ 4,404,809**	**$ 745,871**	**$ 309,086**	**$ 599,636**	**$ 87,727**	**$ 7,023**	**$ 17,341**	**$ 16,569**	**$ 57,709**	**$ 6,245,770**

1. Meter by Class and Size are based on June 2022 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 65 : CALCULATION OF MONTHLY FIXED CHARGES - SWA IRRIGATION METER CHARGE

Year 2

Number of Meters by Class and Size [1]	FY 2023/24									Total
	< 1"	1"	1 1/2"	2"	3"	4"	6"	8"	10"	
Total Irrigation Meters	160	205	157	257	2	0	0	0	0	781
Total Irrigation Meters	**160**	**205**	**157**	**257**	**2**	**0**	**0**	**0**	**0**	**781**
Hydraulic Capacity Factor [2]	*1.00*	*1.67*	*3.33*	*5.33*	*10.67*	*16.67*	*33.33*	*53.33*	*140.00*	
Total Equivalent Meters	**160**	**342**	**523**	**1,371**	**21**	**0**	**0**	**0**	**0**	**2,417**
Monthly Fixed Service Charges										
Customer Costs ($/Acct/month)[3]	$3.61	$3.61	$3.61	$3.61	$3.61	$3.61	$3.61	$3.61	$3.61	
Capacity Costs ($/Acct/month)[4]	$13.77	$22.95	$45.89	$73.43	$146.86	$229.47	$458.93	$734.30	$1,927.53	
Total Monthly Meter Charge	**$17.38**	**$26.55**	**$49.50**	**$77.04**	**$150.47**	**$233.08**	**$462.54**	**$737.90**	**$1,931.13**	
Annual Fixed Costs Allocated to Monthly Meter Charges										
Customer Costs	$ 33,812									
Capacity Costs	399,328									
Total Fixed Meter Costs	$ 433,141									
Annual Revenue from Monthly Meter Charges										
Customer Charges	$ 6,927	$ 8,875	$ 6,797	$ 11,126	$ 87	$ -	$ -	$ -	$ -	**$ 33,812**
Capacity Charges	$ 26,435	$ 56,449	$ 86,463	$ 226,457	$ 3,525	$ -	$ -	$ -	$ -	**$ 399,328**
Total Revenue from Monthly Meter Charges	**$ 33,362**	**$ 65,324**	**$ 93,260**	**$ 237,583**	**$ 3,611**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 433,141**

1. Meter by Class and Size are based on June 2022 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 66 : CALCULATION OF MONTHLY FIXED CHARGES - SWA FIRE METER CHARGE

										Year 2
Number of Meters by Class and Size [1]	**FY 2023/24**									**Total**
	< 1"	**1"**	**1 1/2"**	**2"**	**3"**	**4"**	**6"**	**8"**	**10"**	
Total Fire Meters	74	14	2	2	0	0	0	0	0	92
Total Fire Meters	**74**	**14**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**92**
Hydraulic Capacity Factor [2]	*1.00*	*1.67*	*3.33*	*5.33*	*11.67*	*23.33*	*53.33*	*93.33*	*220.00*	
Total Equivalent Meters	**74**	**23**	**7**	**11**	**0**	**0**	**0**	**0**	**0**	**115**
Monthly Fixed Service Charges										
Customer Costs ($/Acct/month)[3]	$3.61	$3.61	$3.61	$3.61	$3.61	$3.61	$3.61	$3.61	$3.61	
Capacity Costs ($/Acct/month)[4]	$6.31	$10.51	$21.03	$33.64	$73.59	$147.19	$336.43	$588.75	$1,387.78	
Total Monthly Meter Charge	**$9.92**	**$14.12**	**$24.63**	**$37.25**	**$77.20**	**$150.80**	**$340.04**	**$592.36**	**$1,391.38**	
Annual Fixed Costs Allocated to Monthly Meter Charges										
Customer Costs	$ 3,983									
Capacity Costs	8,680									
Total Fixed Meter Costs	$ 12,663									
Annual Revenue from Monthly Meter Charges										
Customer Charges	$ 3,204	$ 606	$ 87	$ 87	$ -	$ -	$ -	$ -	$ -	**$ 3,983**
Capacity Charges	$ 5,602	$ 1,766	$ 505	$ 807	$ -	$ -	$ -	$ -	$ -	**$ 8,680**
Total Revenue from Monthly Meter Charges	**$ 8,805**	**$ 2,372**	**$ 591**	**$ 894**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 12,663**

1. Meter by Class and Size are based on June 2022 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 67 : CALCULATION OF MONTHLY FIXED CHARGES - SDCWA INFRASTRUCTURE ACCESS CHARGE

										Year 2
Number of Meters by Class and Size [1]	**FY 2023/24**									**Total**
	< 1"	**1"**	**1 1/2"**	**2"**	**3"**	**4"**	**6"**	**8"**	**10"**	
Total Meters	30,374	3,694	960	1,273	79	4	5	3	4	36,396
Total Meters	**30,374**	**3,694**	**960**	**1,273**	**79**	**4**	**5**	**3**	**4**	**36,396**
Hydraulic Capacity Factor [2]	*1.00*	*1.67*	*3.33*	*5.33*	*10.67*	*16.67*	*33.33*	*53.33*	*140.00*	
Total Equivalent Meters	**30,374**	**6,157**	**3,200**	**6,789**	**843**	**67**	**167**	**160**	**560**	**48,316**
Monthly Fixed Service Charges										
Customer Costs ($/Acct/month)[3]	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	
Capacity Costs ($/Acct/month)[4]	$4.03	$6.72	$13.45	$21.52	$43.03	$67.24	$134.48	$215.17	$564.81	
Total Monthly Meter Charge	**$4.03**	**$6.72**	**$13.45**	**$21.52**	**$43.03**	**$67.24**	**$134.48**	**$215.17**	**$564.81**	
Annual Fixed Costs Allocated to Monthly Meter Charges										
Customer Costs	$ -									
SDCWA Infrastructure Access Charges	2,339,102									
Total Fixed Meter Costs	$ 2,339,102									
Annual Revenue from Monthly Meter Charges										
Customer Charges	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ -**
Capacity Charges	$ 1,470,484	$ 298,060	$ 154,920	$ 328,689	$ 40,796	$ 3,228	$ 8,069	$ 7,746	$ 27,111	**$ 2,339,102**
Total Revenue from Monthly Meter Charges	**$ 1,470,484**	**$ 298,060**	**$ 154,920**	**$ 328,689**	**$ 40,796**	**$ 3,228**	**$ 8,069**	**$ 7,746**	**$ 27,111**	**$ 2,339,102**

1. Meter by Class and Size are based on June 2022 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 68 : ALLOCATION OF UNADJUSTED NET REVENUE REQUIREMENTS - FY 2025/26

Year 3									
Customer Classes	**Classification Components**							**Cost of Service Net Rev. Req'ts**	**% of COS Net Revenue Req'ts**
	VARIABLE			***FIXED***					
	Commodity-Related Costs	**SCDWA Wholesale**	**Total Commodity**	**Capacity-Related**	**SDCWA Infrastructure**	**Customer-Related Costs**	**Fire Protection-Related Costs**		
Residential	$ 17,065,663	$ 1,580,241	$ 18,645,904	$ 2,562,462	$ 920,854	$ 1,547,809	$ -	$ 23,677,029	*39.4%*
Multi-Family	14,243,182	1,318,886	15,562,067	2,275,902	817,875	206,692	-	18,862,537	*31.4%*
Commercial	7,862,693	728,067	8,590,760	1,180,070	424,073	167,599	-	10,362,502	*17.2%*
Public Agencies	1,821,003	168,621	1,989,624	354,131	127,262	16,973	-	2,487,989	*4.1%*
Irrigation	3,488,918	323,066	3,811,984	541,513	194,600	42,762	-	4,590,859	*7.6%*
Other-Construction	63,584	5,888	69,471	8,702	3,127	4,106	-	85,407	*0.1%*
Industrial	38,375	3,553	41,929	8,788	3,158	1,807	-	55,682	*0.1%*
Fire Protection	3,142	291	3,433	541	194	5,037	10,977	20,183	*0.0%*
Total Net Revenue Requirement	**$ 44,586,559**	**$ 4,128,613**	**$ 48,715,172**	**$ 6,932,109**	**$ 2,491,144**	**$ 1,992,786**	**$ 10,977**	**$ 60,142,188**	**100%**
Total Net Revenue Requirement by Classification Component	*VARIABLE $48,715,172*			*FIXED $11,427,016*				*$60,142,188*	

TABLE 69 : COST-OF-SERVICE SUMMARY OF REVENUE REQUIREMENTS

Customer Class	**YEAR 3**	
	FY 2023/24 COS Rev. Req't	**% of COS Rev. Req't.**
Residential	$ 23,677,029	39.4%
Multi-Family	18,862,537	31.4%
Commercial	10,362,502	17.2%
Public Agencies	2,487,989	4.1%
Irrigation	4,590,859	7.6%
Other-Construction	85,407	0.1%
Industrial	55,682	0.1%
Fire Protection	20,183	0.0%
Total	**$ 60,142,188**	**100%**

TABLE 70 : CALCULATION OF MONTHLY FIXED CHARGES - SWA FIXED METER SERVICE CHARGE

										Year 3
Number of Meters by Class and Size [1]	**FY 2023/24**									**Total**
	< 1"	**1"**	**1 1/2"**	**2"**	**3"**	**4"**	**6"**	**8"**	**10"**	
Total Meters (less Irrigation and Fire)	30,140	3,475	801	1,014	77	4	5	3	4	35,523
Total Meters (less Irrigation and Fire)	**30,140**	**3,475**	**801**	**1,014**	**77**	**4**	**5**	**3**	**4**	**35,523**
Hydraulic Capacity Factor [2]	*1.00*	*1.67*	*3.33*	*5.33*	*10.67*	*16.67*	*33.33*	*53.33*	*140.00*	
Total Equivalent Meters	**30,140**	**5,792**	**2,670**	**5,408**	**821**	**67**	**167**	**160**	**560**	**45,784**
Monthly Fixed Service Charges										
Customer Costs ($/Acct/month)[3]	$4.56	$4.56	$4.56	$4.56	$4.56	$4.56	$4.56	$4.56	$4.56	
Capacity Costs ($/Acct/month)[4]	$11.61	$19.35	$38.71	$61.93	$123.86	$193.53	$387.06	$619.29	$1,625.64	
Total Monthly Meter Charge	**$16.17**	**$23.92**	**$43.27**	**$66.49**	**$128.42**	**$198.09**	**$391.62**	**$623.85**	**$1,630.20**	
Annual Fixed Costs Allocated to Monthly Meter Charges										
Customer Costs	$ 1,944,986									
Capacity Costs	6,379,619									
Total Fixed Meter Costs	$ 8,324,605									
Annual Revenue from Monthly Meter Charges										
Customer Charges	$ 1,650,252	$ 190,266	$ 43,857	$ 55,519	$ 4,216	$ 219	$ 274	$ 164	$ 219	**$ 1,944,986**
Capacity Charges	$ 4,199,727	$ 807,015	$ 372,040	$ 753,554	$ 114,445	$ 9,289	$ 23,223	$ 22,295	$ 78,031	**$ 6,379,619**
Total Revenue from Monthly Meter Charges	**$ 5,849,979**	**$ 997,281**	**$ 415,897**	**$ 809,074**	**$ 118,661**	**$ 9,508**	**$ 23,497**	**$ 22,459**	**$ 78,250**	**$ 8,324,605**

1. Meter by Class and Size are based on June 2022 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 71 : CALCULATION OF MONTHLY FIXED CHARGES - SWA IRRIGATION METER CHARGE

										Year 3
Number of Meters by Class and Size [1]	**FY 2023/24**									**Total**
	< 1"	**1"**	**1 1/2"**	**2"**	**3"**	**4"**	**6"**	**8"**	**10"**	
Total Irrigation Meters	160	205	157	257	2	0	0	0	0	781
Total Irrigation Meters	**160**	**205**	**157**	**257**	**2**	**0**	**0**	**0**	**0**	**781**
Hydraulic Capacity Factor [2]	*1.00*	*1.67*	*3.33*	*5.33*	*10.67*	*16.67*	*33.33*	*53.33*	*140.00*	
Total Equivalent Meters	**160**	**342**	**523**	**1,371**	**21**	**0**	**0**	**0**	**0**	**2,417**
Monthly Fixed Service Charges										
Customer Costs ($/Acct/month)[3]	$4.56	$4.56	$4.56	$4.56	$4.56	$4.56	$4.56	$4.56	$4.56	
Capacity Costs ($/Acct/month)[4]	$18.67	$31.12	$62.23	$99.57	$199.15	$311.17	$622.34	$995.75	$2,613.84	
Total Monthly Meter Charge	**$23.23**	**$35.68**	**$66.80**	**$104.14**	**$203.71**	**$315.73**	**$626.91**	**$1,000.31**	**$2,618.40**	
Annual Fixed Costs Allocated to Monthly Meter Charges										
Customer Costs	$ 42,762									
Capacity Costs	541,513									
Total Fixed Meter Costs	$ 584,275									
Annual Revenue from Monthly Meter Charges										
Customer Charges	$ 8,760	$ 11,224	$ 8,596	$ 14,071	$ 110	$ -	$ -	$ -	$ -	**$ 42,762**
Capacity Charges	$ 35,847	$ 76,548	$ 117,249	$ 307,089	$ 4,780	$ -	$ -	$ -	$ -	**$ 541,513**
Total Revenue from Monthly Meter Charges	**$ 44,607**	**$ 87,772**	**$ 125,846**	**$ 321,160**	**$ 4,889**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 584,275**

1. Meter by Class and Size are based on June 2022 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 72 : CALCULATION OF MONTHLY FIXED CHARGES - SWA FIRE METER CHARGE

											Year 3
Number of Meters by Class and Size [1]	**FY 2023/24**										**Total**
	< 1"	**1"**	**1 1/2"**	**2"**	**3"**	**4"**	**6"**	**8"**	**10"**	
Total Fire Meters	74	14	2	2	0	0	0	0	0	92
Total Fire Meters	**74**	**14**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**92**
Hydraulic Capacity Factor [2]	*1.00*	*1.67*	*3.33*	*5.33*	*11.67*	*23.33*	*53.33*	*93.33*	*220.00*	
Total Equivalent Meters	**74**	**23**	**7**	**11**	**0**	**0**	**0**	**0**	**0**	**115**
Monthly Fixed Service Charges										
Customer Costs ($/Acct/month)[3]	$4.56	$4.56	$4.56	$4.56	$4.56	$4.56	$4.56	$4.56	$4.56	
Capacity Costs ($/Acct/month)[4]	$7.98	$13.30	$26.59	$42.55	$93.07	$186.15	$425.48	$744.59	$1,755.10	
Total Monthly Meter Charge	**$12.54**	**$17.86**	**$31.16**	**$47.11**	**$97.64**	**$190.71**	**$430.04**	**$749.15**	**$1,759.67**	
Annual Fixed Costs Allocated to Monthly Meter Charges										
Customer Costs	$ 5,037									
Capacity Costs	10,977									
Total Fixed Meter Costs	$ 16,015									
Annual Revenue from Monthly Meter Charges										
Customer Charges	$ 4,052	$ 767	$ 110	$ 110	$ -	$ -	$ -	$ -	$ -	**$ 5,037**
Capacity Charges	$ 7,084	$ 2,234	$ 638	$ 1,021	$ -	$ -	$ -	$ -	$ -	**$ 10,977**
Total Revenue from Monthly Meter Charges	**$ 11,136**	**$ 3,000**	**$ 748**	**$ 1,131**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 16,015**

1. Meter by Class and Size are based on June 2022 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 73 : CALCULATION OF MONTHLY FIXED CHARGES - SDCWA INFRASTRUCTURE ACCESS CHARGE

											Year 3
Number of Meters by Class and Size [1]	**FY 2023/24**										**Total**
	< 1"	**1"**	**1 1/2"**	**2"**	**3"**	**4"**	**6"**	**8"**	**10"**	
Total Meters	30,374	3,694	960	1,273	79	4	5	3	4	36,396
Total Meters	**30,374**	**3,694**	**960**	**1,273**	**79**	**4**	**5**	**3**	**4**	**36,396**
Hydraulic Capacity Factor [2]	*1.00*	*1.67*	*3.33*	*5.33*	*10.67*	*16.67*	*33.33*	*53.33*	*140.00*	
Total Equivalent Meters	**30,374**	**6,157**	**3,200**	**6,789**	**843**	**67**	**167**	**160**	**560**	**48,316**
Monthly Fixed Service Charges										
Customer Costs ($/Acct/month)[3]	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	
Capacity Costs ($/Acct/month)[4]	$4.30	$7.16	$14.32	$22.92	$45.83	$71.61	$143.22	$229.15	$601.53	
Total Monthly Meter Charge	**$4.30**	**$7.16**	**$14.32**	**$22.92**	**$45.83**	**$71.61**	**$143.22**	**$229.15**	**$601.53**	
Annual Fixed Costs Allocated to Monthly Meter Charges										
Customer Costs	$ -									
SDCWA Infrastructure Access Charges	2,491,144									
Total Fixed Meter Costs	$ 2,491,144									
Annual Revenue from Monthly Meter Charges										
Customer Charges	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ -**
Capacity Charges	$ 1,566,065	$ 317,434	$ 164,990	$ 350,054	$ 43,447	$ 3,437	$ 8,593	$ 8,250	$ 28,873	**$ 2,491,144**
Total Revenue from Monthly Meter Charges	**$ 1,566,065**	**$ 317,434**	**$ 164,990**	**$ 350,054**	**$ 43,447**	**$ 3,437**	**$ 8,593**	**$ 8,250**	**$ 28,873**	**$ 2,491,144**

1. Meter by Class and Size are based on June 2022 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 74 : RESIDENTIAL TIER CONSUMPTION LEVELS

3-Year Phase-In Assumptions			
	YEAR 1	YEAR 2	YEAR 3
% Fixed	**13%**	**16%**	**19%**
% Variable	**87%**	**84%**	**81%**
Annual Growth Rate	**N.A.**	**0.00%**	**0.00%**
Rate Increase	**0.5%**	**6.0%**	**6.5%**
Rate Increase Adjustments:	***N.A.***	***1.060***	***1.129***

TABLE 75 : RESIDENTIAL TIER CONSUMPTION LEVELS

Residential Tiers[1]	Consumption	% of Consumption[2]	Avg. Bi-Monthly Consumption FY 2021/22 (hcf)[3]
Tier 1	303,114	11.2%	
Tier 2	932,792	34.4%	
Tier 3	1,036,968	38.3%	
Tier 4	436,005	16.1%	
Total	**2,708,878**	**100.0%**	16.0

1. The FY 2021/22 consumption data are actuals and includes a 5% conservation factor.
   See Allocation *Factors* Tab, Table 30.
2. See *SFR Distribitution Data Tab* for details on how the percentage of consumption was calculated.
3. Annual residential consumption divided by total residential meters divided by 12 months.

TABLE 76 : PROPOSED UNIFORM VOLUMETRIC CHARGES FOR FY 2023/24

									(13% Fixed / 87% Variable)
Customer Classes	**Number of Meters[1]**	**Water Consumption (hcf/yr)[2]**	**Source of Supply Costs**	**Other Volumetric Costs**	**Target SWA Vol. Rev. Req't[3]**	**Uniform SWA Commodity Rates[3] ($/hcf)**	***SDCWA Wholesale Water Purchase***	***Uniform SDCWA Commodity Rates ($/hcf)***	**% of Total Commodity Rate Revenue**
Residential	28,269	2,708,878	$ 4,172,945	$ 12,167,600	$ 16,340,545	*4 Tiers*	$ 1,399,806	$0.517	*38.3%*
Multi-Family	3,775	2,260,858	3,482,784	10,155,207	13,637,990	$6.032	1,168,293	$0.517	*31.9%*
Commercial	3,061	1,248,066	1,922,608	5,605,999	7,528,608	$6.032	644,935	$0.517	*17.6%*
Public Agencies	310	289,053	445,277	1,298,352	1,743,629	$6.032	149,367	$0.517	*4.1%*
Irrigation	781	553,805	853,120	2,487,554	3,340,674	$6.032	286,178	$0.517	*7.8%*
Other-Construction	75	10,093	15,548	45,334	60,882	$6.032	5,215	$0.517	*0.1%*
Industrial	33	6,091	9,384	27,361	36,745	$6.032	3,148	$0.517	*0.1%*
Fire Protection	92	499	768	2,240	3,009	$6.032	258	$0.517	*0.0%*
Total Potable Water	**36,396**	**7,077,344**	**$ 10,902,433**	**$ 31,789,647**	**$ 42,692,081**	**--**	**$ 3,657,200**	**--**	***100%***

1. Consumption data is based on the SWA billing data.
2. Water consumption is actual consumption for FY 2021/22 and includes an adjustment of 5% for conservation. See Table 30.
3. Excluding SDCWA Wholesale Water Purchase costs.

TABLE 77 : RESIDENTIAL TIERED RATES FOR FY 2023/24

							(13% Fixed / 87% Variable)
	Source of Supply Costs		**Other Volumetric Costs**				
Source of Supply	**% of Supply Costs**	**Source of Supply Costs**	**% of Consumption**	**Other Volumetric Costs**	**Total Resid. Share of Vol. Costs by Tier**	**Residential Consumption by Tier**	**Residential Tiered Rates ($/hcf)**
Residential Tier 1	5.9%	$ 245,843	11.2%	$ 1,361,510	$ 1,607,353	303,114	**$5.30**
Residential Tier 2	27.1%	1,131,317	34.4%	4,189,868	5,321,185	932,792	**$5.70**
Residential Tier 3	33.5%	1,395,979	38.3%	4,657,797	6,053,776	1,036,968	**$5.84**
Residential Tier 4	33.5%	1,399,806	16.1%	1,958,425	3,358,231	436,005	**$7.70**
Total	**66.5%**	**$ 4,172,945**	**100.0%**	**$12,167,600**	**$16,340,545**	**2,708,878**	**--**

1. Total Contracted Supply Purchase Costs are from the *Source of Supply* tab, Table 33.
2. Residential consumption for FY 2021/22 is from the *Allocation Factors* tab, Table 30.
3. Contracted Supply Costs are from the *Source of Supply* tab, Table 34.

TABLE 78 : PROPOSED UNIFORM VOLUMETRIC CHARGES FOR FY 2024/25

(17% Fixed / 83% Variable)

Customer Classes	Number of Meters[1]	Water Consumption (hcf/yr)[2]	Source of Supply Costs	Other Volumetric Costs	Target SWA Vol. Rev. Req't[3]	Uniform SWA Commodity Rates[3] ($/hcf)	*SDCWA Wholesale Water Purchase*	*Uniform SDCWA Commodity Rates ($/hcf)*	% of Total Commodity Rate Revenue
Residential	28,269	2,708,878	$ 4,423,322	$ 12,249,215	$ 16,672,537	*4 Tiers*	$ 1,483,795	$0.548	*38.3%*
Multi-Family	3,775	2,260,858	3,691,751	10,223,324	13,915,075	$6.155	1,238,391	$0.548	*31.9%*
Commercial	3,061	1,248,066	2,037,965	5,643,602	7,681,567	$6.155	683,631	$0.548	*17.6%*
Public Agencies	310	289,053	471,994	1,307,061	1,779,054	$6.155	158,329	$0.548	*4.1%*
Irrigation	781	553,805	904,308	2,504,240	3,408,547	$6.155	303,348	$0.548	*7.8%*
Other-Construction	75	10,093	16,481	45,638	62,119	$6.155	5,528	$0.548	*0.1%*
Industrial	33	6,091	9,947	27,545	37,491	$6.155	3,337	$0.548	*0.1%*
Fire Protection	92	499	814	2,255	3,070	$6.155	273	$0.548	*0.0%*
Total Potable Water	**36,396**	**7,077,344**	**$ 11,556,579**	**$ 32,002,880**	**$ 43,559,460**	--	**$ 3,876,632**	--	***100%***

1. Consumption data is based on the SWA billing data.
2. Water consumption is actual consumption for FY 2021/22 and includes an adjustment of 5% for conservation. See Table 30.
3. Excluding SDCWA Wholesale Water Purchase costs.

TABLE 79 : RESIDENTIAL TIERED RATES FOR FY 2024/25

(17% Fixed / 83% Variable)

Source of Supply	Source of Supply Costs		Other Volumetric Costs		Total Resid. Share of Vol. Costs by Tier	Residential Consumption by Tier	Residential Tiered Rates ($/hcf)
	% of Supply Costs	Source of Supply Costs	% of Consumption	Other Volumetric Costs			
Residential Tier 1	5.9%	$ 260,593	11.2%	$ 1,370,642	$ 1,631,236	303,114	**$5.38**
Residential Tier 2	27.1%	1,199,196	34.4%	4,217,972	5,417,168	932,792	**$5.81**
Residential Tier 3	33.5%	1,479,737	38.3%	4,689,040	6,168,777	1,036,968	**$5.95**
Residential Tier 4	33.5%	1,483,795	16.1%	1,971,561	3,455,356	436,005	**$7.93**
Total	**100.0%**	**$ 4,423,322**	**100.0%**	**$12,249,215**	**$16,672,537**	**2,708,878**	--

1. Total Contracted Supply Purchase Costs are from the *Source of Supply* tab, Table 33.
2. Residential consumption for FY 2021/22 is from the *Allocation Factors* tab, Table 30.
3. Contracted Supply Costs are from the *Source of Supply* tab, Table 34.

TABLE 80 : PROPOSED UNIFORM VOLUMETRIC CHARGES FOR FY 2025/26

									(21% Fixed / 79% Variable)
Customer Classes	**Number of Meters[1]**	**Water Consumption (hcf/yr)[2]**	**Source of Supply Costs**	**Other Volumetric Costs**	**Target SWA Vol. Rev. Req't[3]**	**Uniform SWA Commodity Rates[3] ($/hcf)**	***SDCWA Wholesale Water Purchase***	***Uniform SDCWA Commodity Rates ($/hcf)***	**% of Total Commodity Rate Revenue**
Residential	28,269	2,708,878	$ 4,688,721	$ 12,376,942	$ 17,065,663	*4 Tiers*	$ 1,580,241	$0.583	*38.3%*
Multi-Family	3,775	2,260,858	3,913,256	10,329,926	14,243,182	$6.300	1,318,886	$0.583	*31.9%*
Commercial	3,061	1,248,066	2,160,243	5,702,450	7,862,693	$6.300	728,067	$0.583	*17.6%*
Public Agencies	310	289,053	500,313	1,320,690	1,821,003	$6.300	168,621	$0.583	*4.1%*
Irrigation	781	553,805	958,566	2,530,352	3,488,918	$6.300	323,066	$0.583	*7.8%*
Other-Construction	75	10,093	17,469	46,114	63,584	$6.300	5,888	$0.583	*0.1%*
Industrial	33	6,091	10,543	27,832	38,375	$6.300	3,553	$0.583	*0.1%*
Fire Protection	92	499	863	2,279	3,142	$6.300	291	$0.583	*0.0%*
Total Potable Water	**36,396**	**7,077,344**	**$ 12,249,974**	**$ 32,336,585**	**$ 44,586,559**	**--**	**$ 4,128,613**	**--**	***100%***

1. Consumption data is based on the SWA billing data.
2. Water consumption is actual consumption for FY 2021/22 and includes an adjustment of 5% for conservation. See Table 30.
3. Excluding SDCWA Wholesale Water Purchase costs.

TABLE 81 : RESIDENTIAL TIERED RATES FOR FY 2025/26

							(21% Fixed / 79% Variable)
	Source of Supply Costs		**Other Volumetric Costs**				
Source of Supply	**% of Supply Costs**	**Source of Supply Costs**	**% of Consumption**	**Other Volumetric Costs**	**Total Resid. Share of Vol. Costs by Tier**	**Residential Consumption by Tier**	**Residential Tiered Rates ($/hcf)**
Residential Tier 1	5.9%	$ 276,229	11.2%	$ 1,384,935	$ 1,661,163	303,114	**$5.48**
Residential Tier 2	27.1%	1,271,148	34.4%	4,261,954	5,533,102	932,792	**$5.93**
Residential Tier 3	33.5%	1,568,522	38.3%	4,737,934	6,306,456	1,036,968	**$6.08**
Residential Tier 4	33.5%	1,572,822	16.1%	1,992,119	3,564,941	436,005	**$8.18**
Total	**100.0%**	**$ 4,688,721**	**100.0%**	**$12,376,942**	**$17,065,663**	**2,708,878**	**--**

1. Total Contracted Supply Purchase Costs are from the *Source of Supply* tab, Table 33.
2. Residential consumption for FY 2021/22 is from the *Allocation Factors* tab, Table 30.
3. Contracted Supply Costs are from the *Source of Supply* tab, Table 34.

SWEETWATER AUTHORITY
WATER RATE STUDY
Cost-of-Service Analysis & Rate Design

TABLE 82 : CURRENT SDCWA & MWD VOLUMETRIC PASS-THROUGH CHARGES

CURRENT SDCWA & MWD Volumetric Pass-through Charges					
Uniform Rate for Bi-Monthly Pass Through Charge	**SDCWA Customer Service Charge**	**SDCWA Emergency Storage Charge**	**SDCWA Supply Reliability Charge**	**MWD Readiness to Serve Charge**	**MWD Capacity Charge**
All Customer Classes	***$/HCF*** [2]	***$/HCF*** [2]	***$/HCF*** [2]	***$/HCF*** [2]	***$/HCF*** [2]
Current Passthrough Rate ($/HCF)	$ 0.03	$ 0.08	$ 0.08	$ 0.01	$ 0.04

TABLE 83 : SDCWA & MWD VOLUMETRIC PASS-THROUGH REV. REQTS. AND CHARGES

Uniform Rate for Bi-Monthly Pass Through Charge (FY'23/24)	SDCWA Customer Service Charge	SDCWA Emergency Storage Charge	SDCWA Supply Reliability Charge	MWD Readiness to Serve Charge	MWD Capacity Charge	Total FY'23/24 Pass-through Costs
MWD Readiness-to-Serve				$ (39,400)		$ (39,400)
SDCWA Customer Service Charge	$ 202,400					202,400
SDCWA Emergency Storage Charge		$ 460,100				460,100
MWD Capacity Reservation Charge					$ 125,800	125,800
SDCWA Supply Reliability Charge			$ 446,500			446,500
FY'23/24 Total Consumption (HCF)	7,077,344	7,077,344	7,077,344	7,077,344	7,077,344	
Proposed Passthrough Rate ($/HCF)	**$ 0.03**	**$ 0.07**	**$ 0.06**	**$ (0.01)**	**$ 0.02**	**$ 1,195,400**

TABLE 84 : SDCWA & MWD VOLUMETRIC PASS-THROUGH REV. REQTS. AND CHARGES

Uniform Rate for Bi-Monthly Pass Through Charge (FY'23/24)	SDCWA Customer Service Charge	SDCWA Emergency Storage Charge	SDCWA Supply Reliability Charge	MWD Readiness to Serve Charge	MWD Capacity Charge	Total FY'24/25 Pass-through Costs
MWD Readiness-to-Serve				$ (41,370)		$ (41,370)
SDCWA Customer Service Charge	$ 212,520					212,520
SDCWA Emergency Storage Charge		$ 483,105				483,105
MWD Capacity Reservation Charge					$ 132,090	132,090
SDCWA Supply Reliability Charge			$ 468,825			468,825
FY'23/24 Total Consumption (HCF)	7,077,344	7,077,344	7,077,344	7,077,344	7,077,344	
Proposed Passthrough Rate ($/HCF)	**$ 0.03**	**$ 0.07**	**$ 0.07**	**$ (0.01)**	**$ 0.02**	**$ 1,255,170**

SWEETWATER AUTHORITY
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TABLE 85 : SDCWA & MWD VOLUMETRIC PASS-THROUGH REV. REQTS. AND CHARGES

Uniform Rate for Bi-Monthly Pass Through Charge (FY'23/24)	SDCWA Customer Service Charge	SDCWA Emergency Storage Charge	SDCWA Supply Reliability Charge	MWD Readiness to Serve Charge	MWD Capacity Charge	Total FY'25/26 Pass-through Costs
MWD Readiness-to-Serve				$ (43,439)		$ (43,439)
SDCWA Customer Service Charge	$ 223,146					223,146
SDCWA Emergency Storage Charge		$ 507,260				507,260
MWD Capacity Reservation Charge					$ 138,695	138,695
SDCWA Supply Reliability Charge			$ 492,266			492,266
FY'23/24 Total Consumption (HCF)	7,077,344	7,077,344	7,077,344	7,077,344	7,077,344	
Proposed Passthrough Rate ($/HCF)	**$ 0.03**	**$ 0.07**	**$ 0.07**	**$ (0.01)**	**$ 0.02**	**$ 1,317,929**

TABLE 86 : SDCWA & MWD VOLUMETRIC PASS-THROUGH REV. REQTS. AND CHARGES

Uniform Rate for Bi-Monthly Pass Through Charge (FY'23/24)	SDCWA Customer Service Charge	SDCWA Emergency Storage Charge	SDCWA Supply Reliability Charge	MWD Readiness to Serve Charge	MWD Capacity Charge	Total FY'26/27 Pass-through Costs
MWD Readiness-to-Serve				$ (45,610)		$ (45,610)
SDCWA Customer Service Charge	$ 234,303					234,303
SDCWA Emergency Storage Charge		$ 532,623				532,623
MWD Capacity Reservation Charge					$ 145,629	145,629
SDCWA Supply Reliability Charge			$ 516,880			516,880
FY'23/24 Total Consumption (HCF)	7,077,344	7,077,344	7,077,344	7,077,344	7,077,344	
Proposed Passthrough Rate ($/HCF)	**$ 0.03**	**$ 0.08**	**$ 0.07**	**$ (0.01)**	**$ 0.02**	**$ 1,383,825**

TABLE 87 : SDCWA & MWD VOLUMETRIC PASS-THROUGH REV. REQTS. AND CHARGES

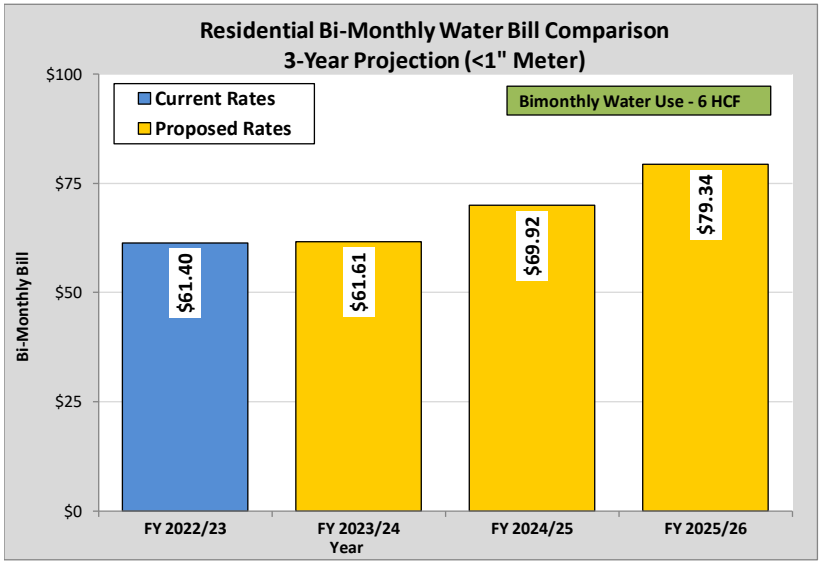
Uniform Rate for Bi-Monthly Pass Through Charge (FY'23/24)	SDCWA Customer Service Charge	SDCWA Emergency Storage Charge	SDCWA Supply Reliability Charge	MWD Readiness to Serve Charge	MWD Capacity Charge	Total FY'27/28 Pass-through Costs
MWD Readiness-to-Serve				$ (47,891)		$ (47,891)
SDCWA Customer Service Charge	$ 246,018					246,018
SDCWA Emergency Storage Charge		$ 559,254				559,254
MWD Capacity Reservation Charge					$ 152,911	152,911
SDCWA Supply Reliability Charge			$ 542,724			542,724
FY'23/24 Total Consumption (HCF)	7,077,344	7,077,344	7,077,344	7,077,344	7,077,344	
Proposed Passthrough Rate ($/HCF)	**$ 0.03**	**$ 0.08**	**$ 0.08**	**$ (0.01)**	**$ 0.02**	**$ 1,453,016**

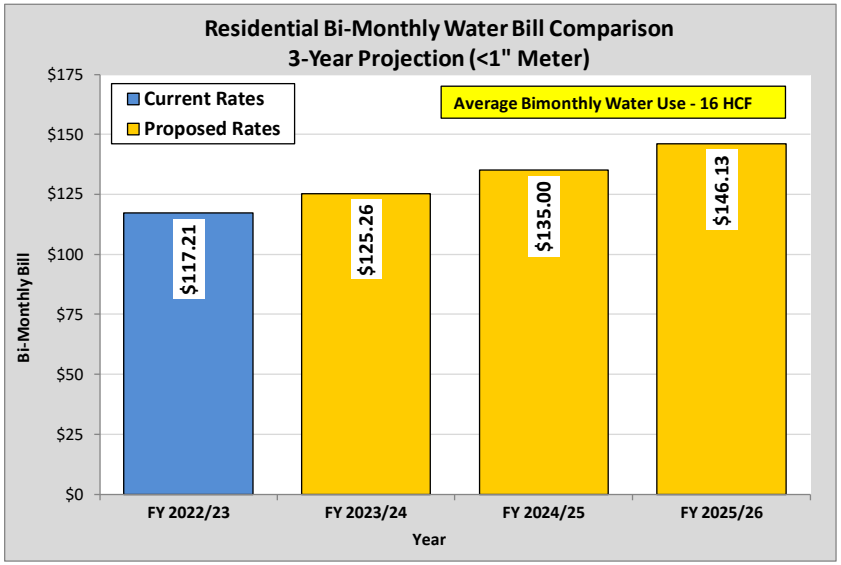
TABLE 88 : CURRENT VS. PROPOSED WATER RATES

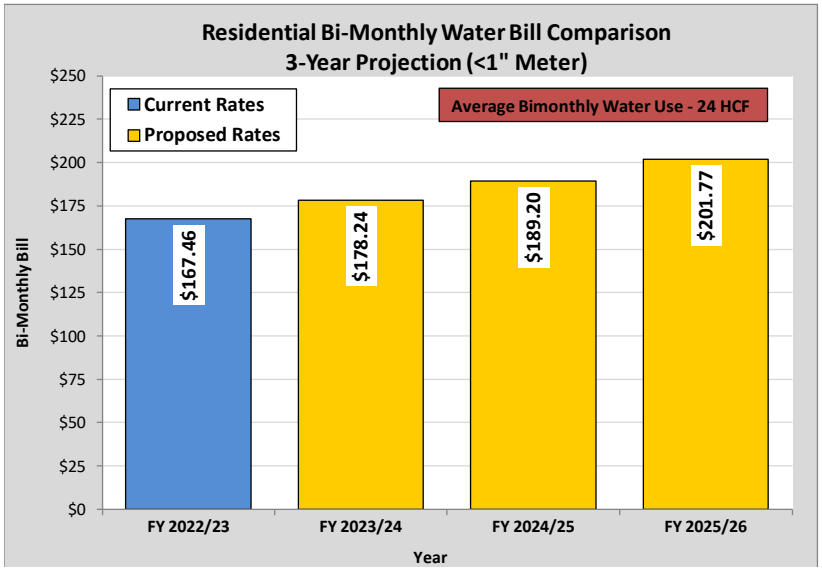
Water Rate Schedule	Current Rates	Proposed Rates (with 3-Year Phase-In)		
		FY 2023/24	FY 2024/25	FY 2025/26
Projected Increase in Rate Revenue per Financial Plan:		*0.50%*	*6.00%*	*6.50%*
Bi-Monthly Fixed Service Charges (in $/2-mo)		*13% F/87% V*	*16% F/84% V*	*19% F/81% V*
Sweetwater Authority Rates for Bi-Monthly Fixed Charge				
< 1 inch	$ 21.70	$ 17.27	$ 24.36	$ 32.35
1 inch	32.30	25.09	35.77	47.83
1-1/2 inches	51.18	44.65	64.31	86.54
2 inches	72.40	68.13	98.56	132.98
3 inches	137.90	130.72	189.89	256.84
4 inches	232.76	201.14	292.63	396.18
6 inches	468.52	396.76	578.02	783.24
8 inches	772.48	631.50	920.49	1,247.71
10 inches	1,175.02	1,648.69	2,404.53	3,260.41
Sweetwater Authority Bi-Monthly Fixed Charges for Irrigation Meters				
< 1 inch	N.A.	$ 18.88	$ 27.54	$ 37.34
1 inch	N.A.	31.46	45.89	62.23
1-1/2 inches	N.A.	62.93	91.79	124.47
2 inches	N.A.	100.68	146.86	199.15
3 inches	N.A.	201.36	293.72	398.30
4 inches	N.A.	314.63	458.93	622.34
6 inches	N.A.	629.26	917.87	1,244.69
8 inches	N.A.	1,006.82	1,468.59	1,991.50
10 inches	N.A.	2,642.91	3,855.05	5,227.68
Sweetwater Authority Bi-Monthly Fixed Charges for Fire Meters				
< 1 inch	*N.A.*	$ 9.67	$ 12.62	$ 15.96
1 inch	*N.A.*	16.12	21.03	26.59
1-1/2 inches	*N.A.*	32.23	42.05	53.18
2 inches	*N.A.*	51.58	67.29	85.10
3 inches	*N.A.*	112.82	147.19	186.15
4 inches	*N.A.*	225.64	294.38	372.29
6 inches	*N.A.*	515.75	672.86	850.96
8 inches	*N.A.*	902.57	1,177.51	1,489.18
10 inches (and larger)	*N.A.*	2,127.49	2,775.55	3,510.20

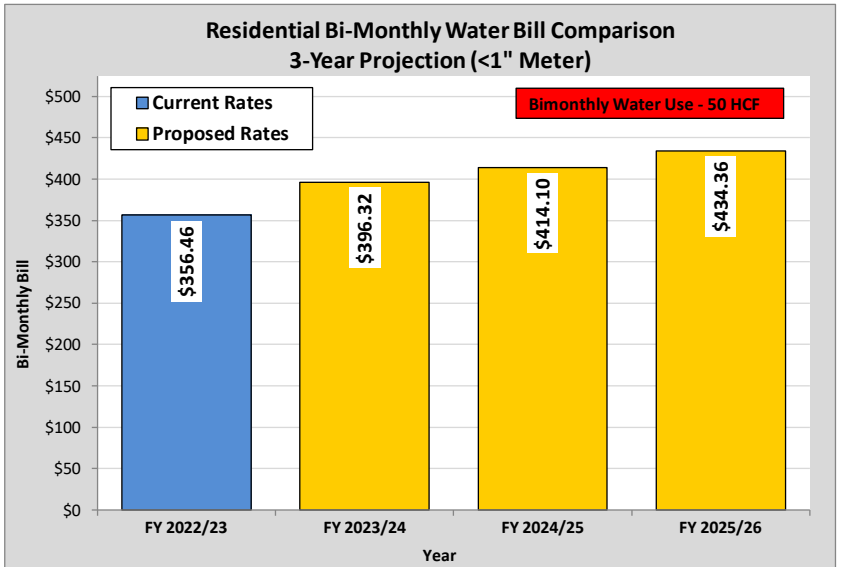
TABLE 89 : CURRENT VS. PROPOSED WATER RATES, cont.

Water Rate Schedule	Current Rates	Proposed Rates (with 3-Year Phase-In)		
		FY 2023/24	FY 2024/25	FY 2025/26
Projected Increase in Rate Revenue per Financial Plan:		*0.50%*	*6.00%*	*6.50%*
Variable Charges for All Water Consumed (in $/hcf)				
Variable Rate for Bi-Monthly Sweetwater Authority Charge				
Residential Use				
Tier 1 - 0 - 10 HCF	$ 4.31	*N.A.*	*N.A.*	*N.A.*
Tier 2 - 11 - 16 HCF	5.14	*N.A.*	*N.A.*	*N.A.*
Tier 3 - 17 - 27 HCF	5.29	*N.A.*	*N.A.*	*N.A.*
Tier 4 - ≥ 28 HCF	6.37	*N.A.*	*N.A.*	*N.A.*
Tier 1 (0-4 HCF)	*N.A.*	$ 5.30	$ 5.38	$ 5.48
Tier 2 (4-13 HCF)	*N.A.*	5.70	5.81	5.93
Tier 3 (13-24 HCF)	*N.A.*	5.84	5.95	6.08
Tier 4 (24 HCF +)	*N.A.*	7.70	7.93	8.18
Multi-Family	5.92	6.03	6.15	6.30
Commercial	5.66	6.03	6.15	6.30
Public Agencies	6.99	6.03	6.15	6.30
Irrigation	*N.A.*	6.03	6.15	6.30
Other-Construction	8.54	6.03	6.15	6.30
Industrial	*N.A.*	6.03	6.15	6.30
Fire Protection	*N.A.*	6.03	6.15	6.30
Variable Rate for Bi-Monthly SDCWA Wholesale Water Purchase Charge				
Residential Use				
Tier 1 - 0 - 10 HCF	0.54	*N.A.*	*N.A.*	*N.A.*
Tier 2 - 11 - 16 HCF	0.65	*N.A.*	*N.A.*	*N.A.*
Tier 3 - 17 - 27 HCF	0.66	*N.A.*	*N.A.*	*N.A.*
Tier 4 - ≥ 28 HCF	0.80	*N.A.*	*N.A.*	*N.A.*
Tier 1 (0-4 HCF)	*N.A.*	$ 0.52	$ 0.55	$ 0.58
Tier 2 (4-13 HCF)	*N.A.*	0.52	0.55	0.58
Tier 3 (13-24 HCF)	*N.A.*	0.52	0.55	0.58
Tier 4 (24 HCF +)	*N.A.*	0.52	0.55	0.58
Multi-Family	0.74	0.52	0.55	0.58
Commercial	0.71	0.52	0.55	0.58
Public Agencies	0.87	0.52	0.55	0.58
Irrigation	*N.A.*	0.52	0.55	0.58
Other-Construction	1.07	0.52	0.55	0.58
Industrial	*N.A.*	0.52	0.55	0.58
Fire Protection	*N.A.*	0.52	0.55	0.58

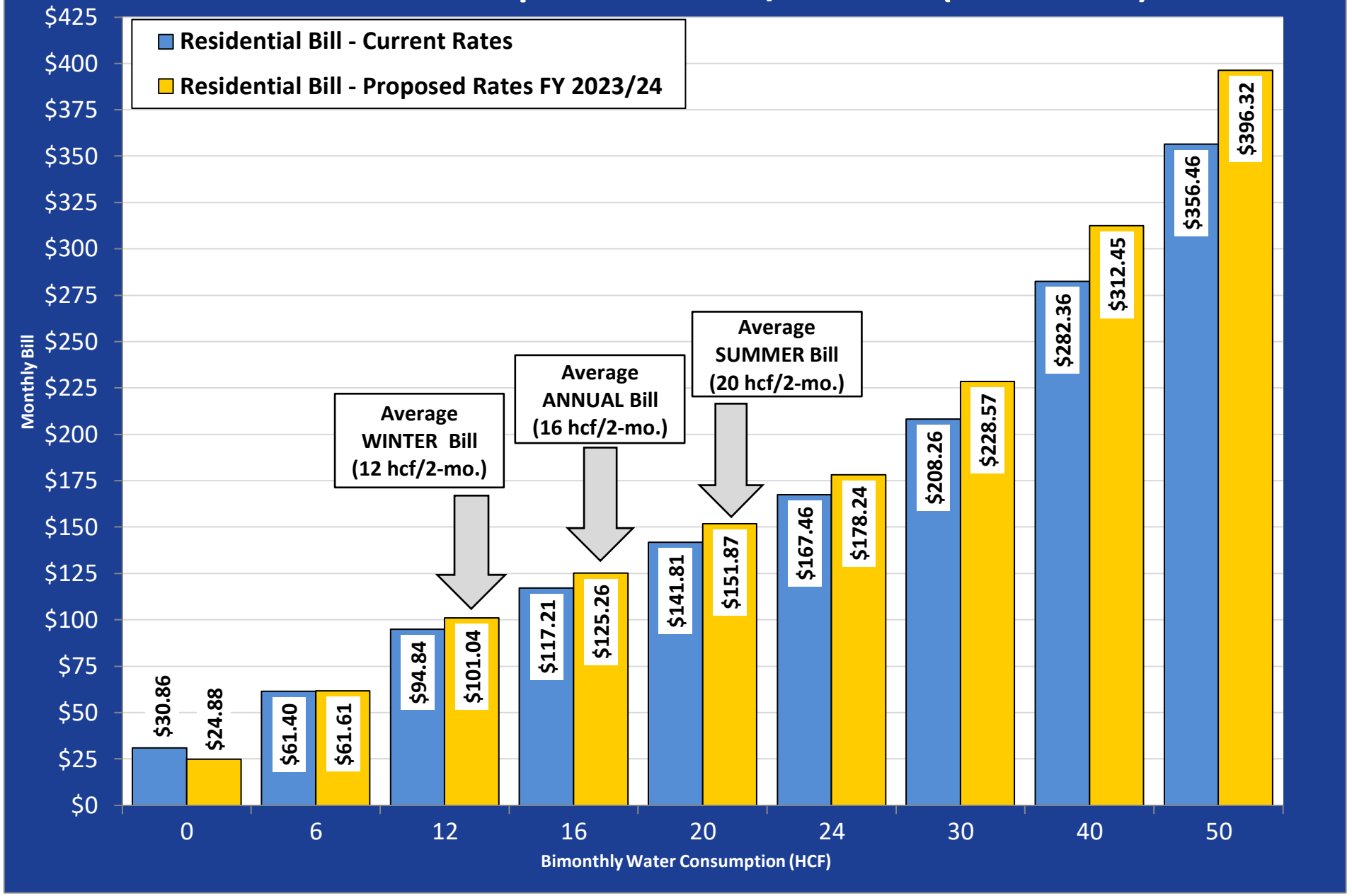

Residential Bi-Monthly Water Bill Comparison
3-Year Projection (<1" Meter)
Current Rates
Proposed Rates
Bimonthly Water Use - 6 HCF
Bi-Monthly Bill
$100
$75
$50
$25
$0
$61.40
$61.61
$69.92
$79.34
FY 2022/23
FY 2023/24
FY 2024/25
FY 2025/26
Year


Residential Bi-Monthly Water Bill Comparison
3-Year Projection (<1" Meter)
Current Rates
Proposed Rates
Average Bimonthly Water Use - 16 HCF
Bi-Monthly Bill
$175
$150
$125
$100
$75
$50
$25
$0
$117.21
$125.26
$135.00
$146.13
FY 2022/23
FY 2023/24
FY 2024/25
FY 2025/26
Year

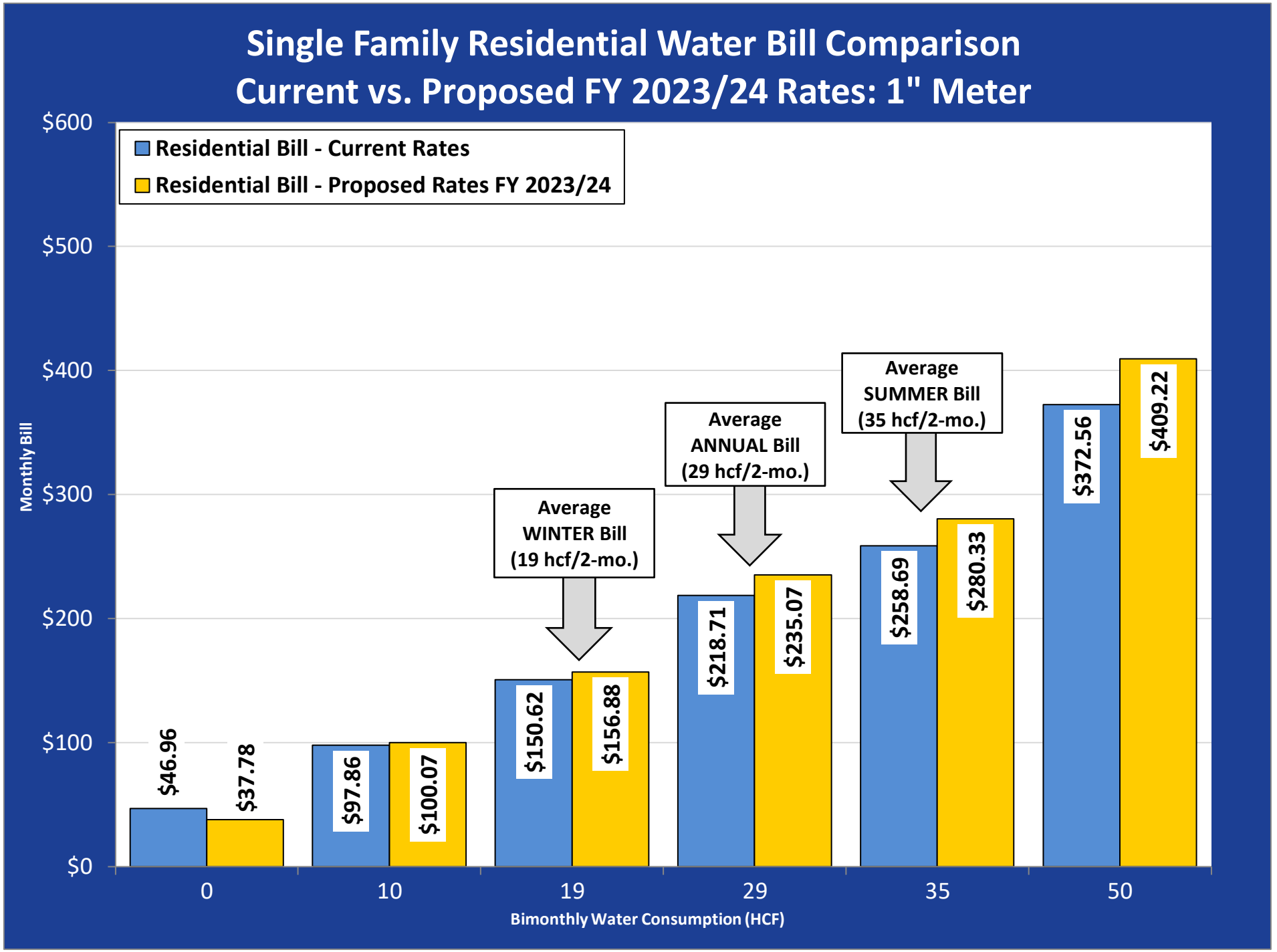

Residential Bi-Monthly Water Bill Comparison
3-Year Projection (<1" Meter)
Current Rates
Proposed Rates
Average Bimonthly Water Use - 24 HCF
Bi-Monthly Bill
$250
$225
$200
$175
$150
$125
$100
$75
$50
$25
$0
$167.46
$178.24
$189.20
$201.77
FY 2022/23
FY 2023/24
FY 2024/25
FY 2025/26
Year

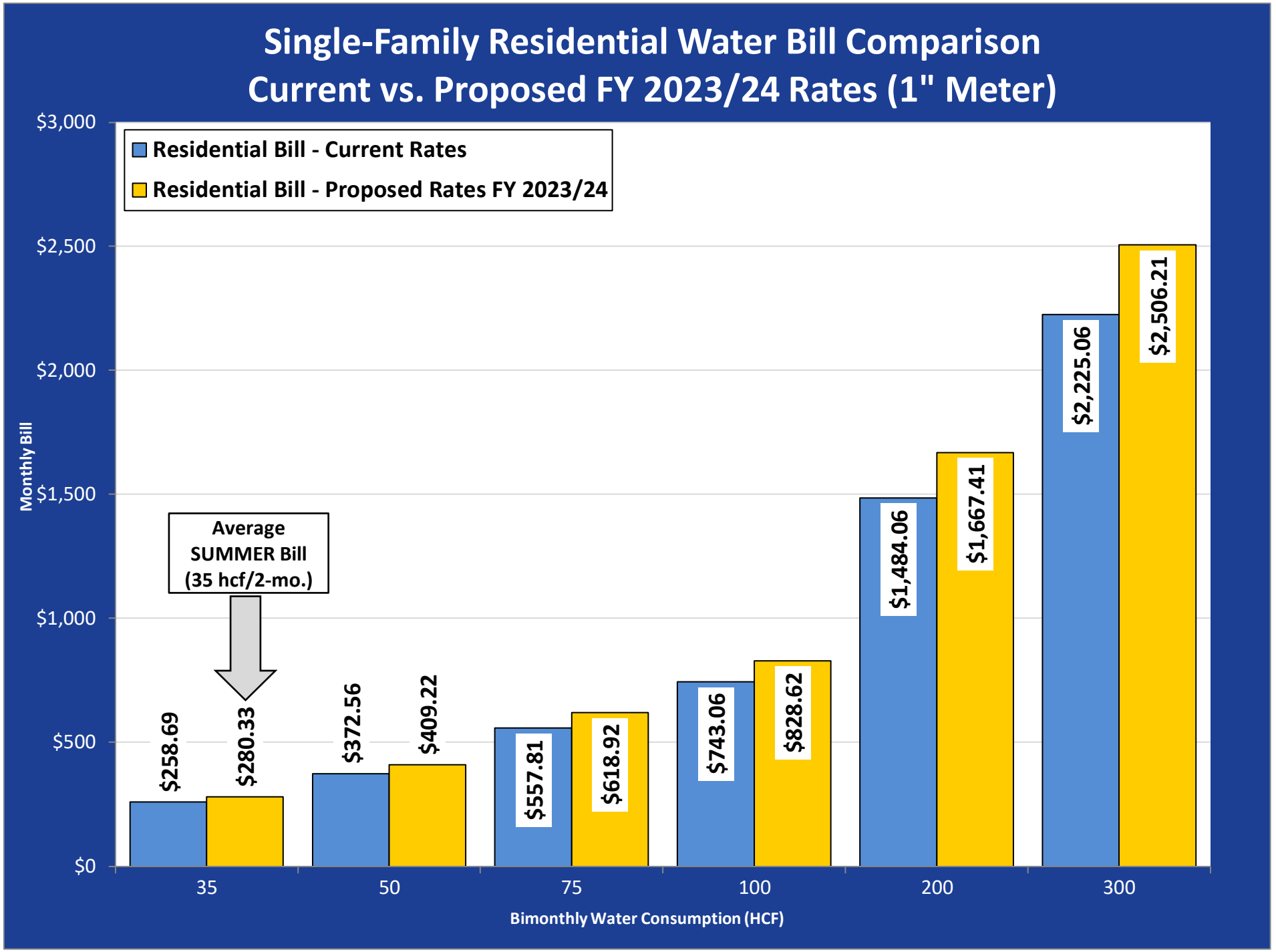

Residential Bi-Monthly Water Bill Comparison
3-Year Projection (<1" Meter)
Current Rates
Proposed Rates
Bimonthly Water Use - 50 HCF
Bi-Monthly Bill
$500
$450
$400
$350
$300
$250
$200
$150
$100
$50
$0
$356.46
$396.32
$414.10
$434.36
FY 2022/23
FY 2023/24
FY 2024/25
FY 2025/26
Year

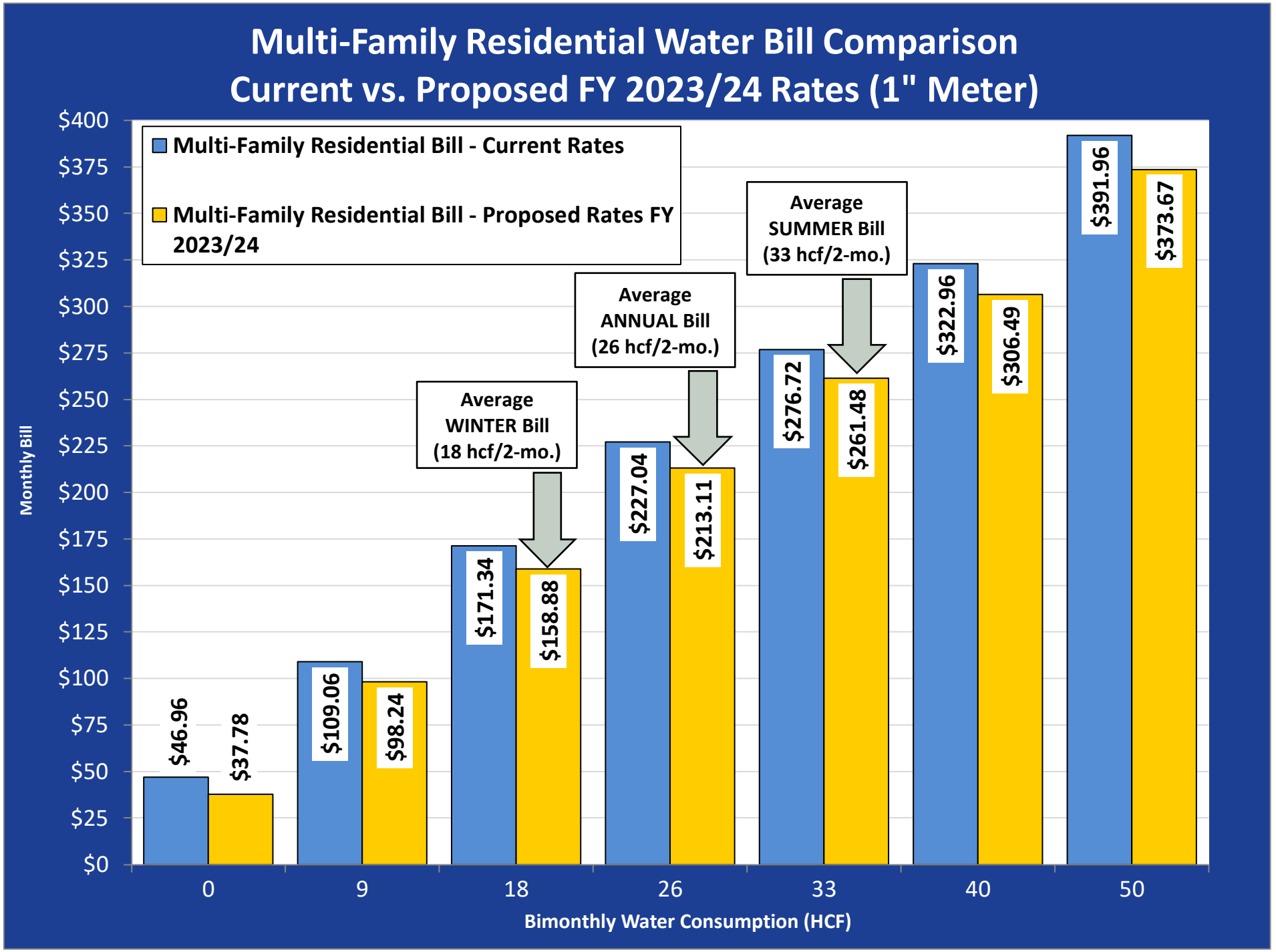
Single-Family Residential Water Bill Comparison
Current vs. Proposed FY 2023/24 Rates (< 1" Meter)



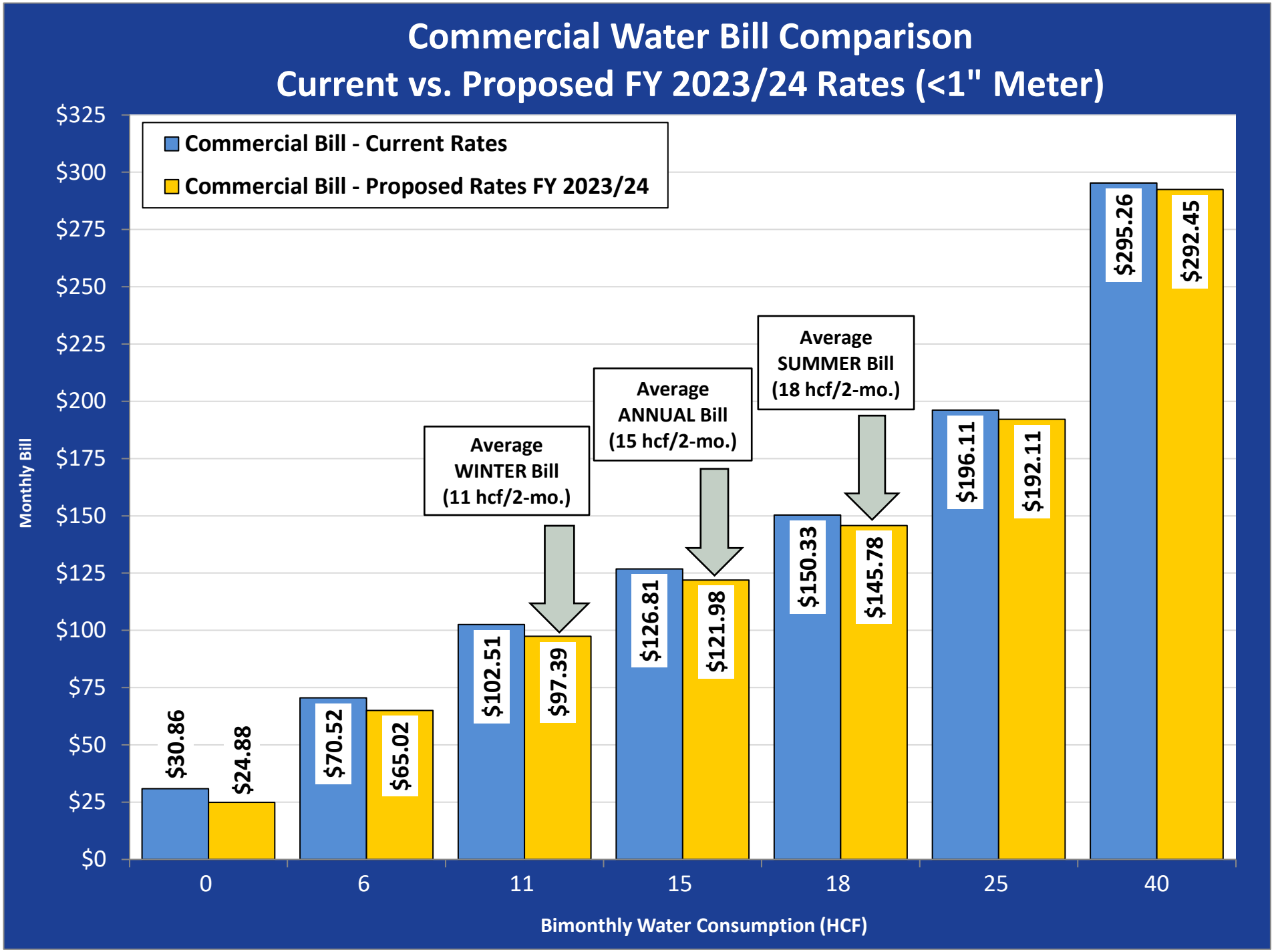
Single Family Residential Water Bill Comparison
Current vs. Proposed FY 2023/24 Rates: 1" Meter

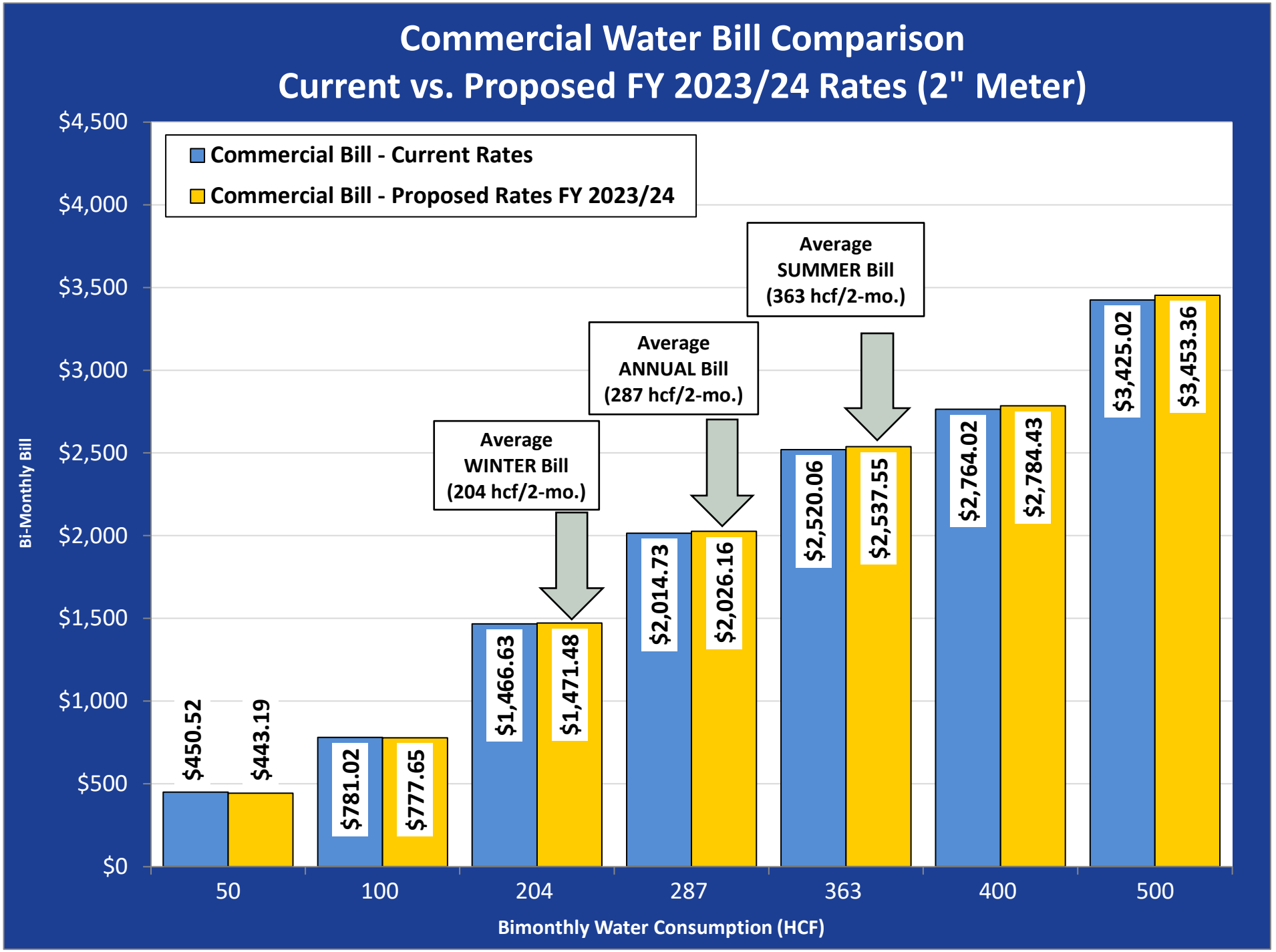


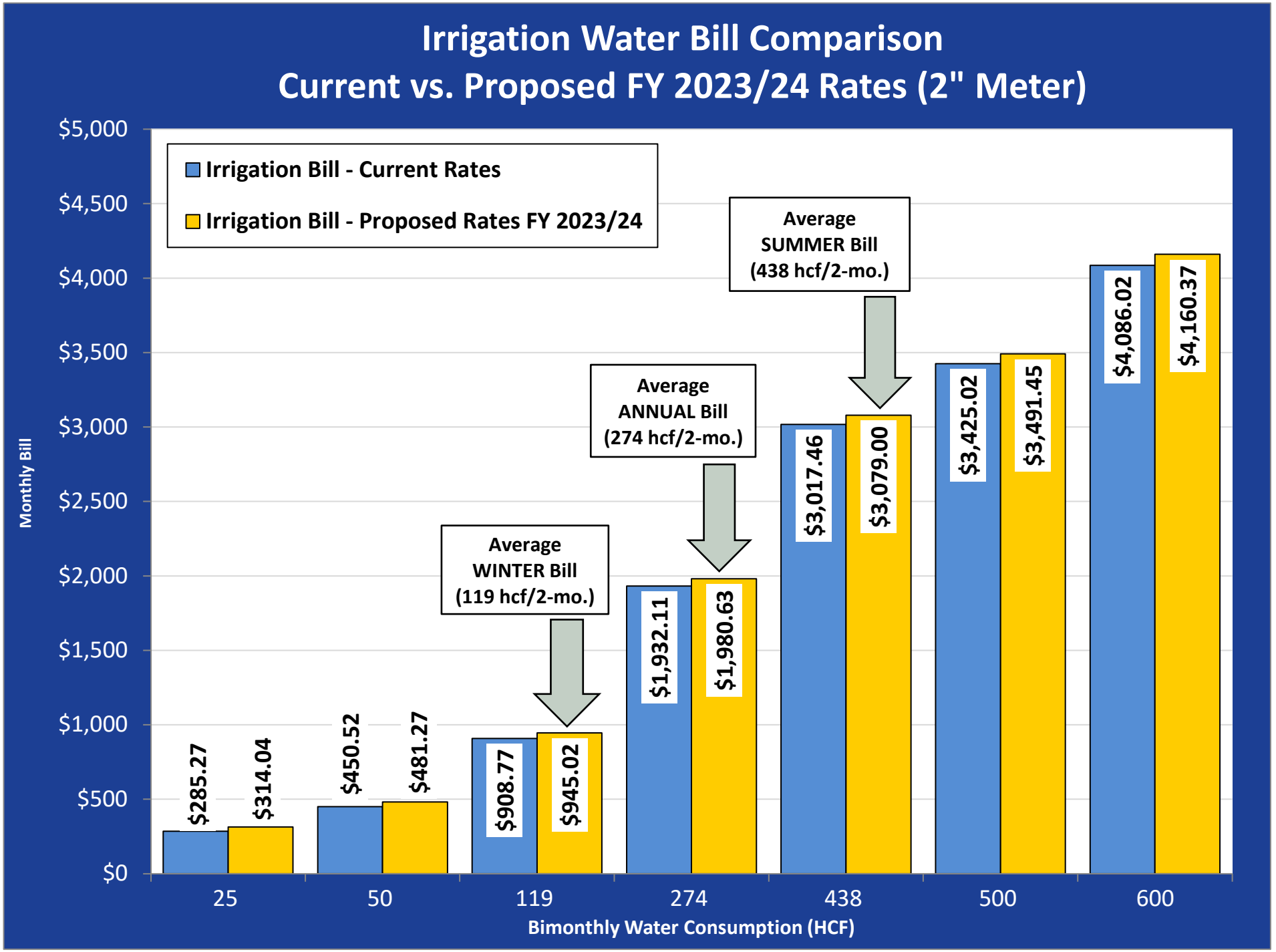

Single-Family Residential Water Bill Comparison
Current vs. Proposed FY 2023/24 Rates (1" Meter)
Residential Bill - Current Rates
Residential Bill - Proposed Rates FY 2023/24
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
Monthly Bill
Average SUMMER Bill (35 hcf/2-mo.)
$258.69
$280.33
$372.56
$409.22
$557.81
$618.92
$743.06
$828.62
$1,484.06
$1,667.41
$2,225.06
$2,506.21
35
50
75
100
200
300
Bimonthly Water Consumption (HCF)


Multi-Family Residential Water Bill Comparison
Current vs. Proposed FY 2023/24 Rates (1" Meter)
Multi-Family Residential Bill - Current Rates
Multi-Family Residential Bill - Proposed Rates FY 2023/24
Average WINTER Bill (18 hcf/2-mo.)
Average ANNUAL Bill (26 hcf/2-mo.)
Average SUMMER Bill (33 hcf/2-mo.)
$46.96
$37.78
$109.06
$98.24
$171.34
$158.88
$227.04
$213.11
$276.72
$261.48
$322.96
$306.49
$391.96
$373.67
$400
$375
$350
$325
$300
$275
$250
$225
$200
$175
$150
$125
$100
$75
$50
$25
$0
Monthly Bill
0
9
18
26
33
40
50
Bimonthly Water Consumption (HCF)

Commercial Water Bill Comparison
Current vs. Proposed FY 2023/24 Rates (<1" Meter)




Commercial Water Bill Comparison
Current vs. Proposed FY 2023/24 Rates (2" Meter)
Commercial Bill - Current Rates
Commercial Bill - Proposed Rates FY 2023/24
Average WINTER Bill (204 hcf/2-mo.)
Average ANNUAL Bill (287 hcf/2-mo.)
Average SUMMER Bill (363 hcf/2-mo.)
$450.52
$443.19
$781.02
$777.65
$1,466.63
$1,471.48
$2,014.73
$2,026.16
$2,520.06
$2,537.55
$2,764.02
$2,784.43
$3,425.02
$3,453.36
$0
$500
$1,000
$1,500
$2,000
$2,500
$3,000
$3,500
$4,000
$4,500
Bi-Monthly Bill
50
100
204
287
363
400
500
Bimonthly Water Consumption (HCF)


Irrigation Water Bill Comparison
Current vs. Proposed FY 2023/24 Rates (2" Meter)
Irrigation Bill - Current Rates
Irrigation Bill - Proposed Rates FY 2023/24
Average WINTER Bill (119 hcf/2-mo.)
Average ANNUAL Bill (274 hcf/2-mo.)
Average SUMMER Bill (438 hcf/2-mo.)
$285.27
$314.04
$450.52
$481.27
$908.77
$945.02
$1,932.11
$1,980.63
$3,017.46
$3,079.00
$3,425.02
$3,491.45
$4,086.02
$4,160.37
$0
$500
$1,000
$1,500
$2,000
$2,500
$3,000
$3,500
$4,000
$4,500
$5,000
Monthly Bill
25
50
119
274
438
500
600
Bimonthly Water Consumption (HCF)