CITY OF RIO VISTA

Water and Sewer Rate Study Report

Rates Effective July 1, 2025

March 2025

NBS
helping communities
fund tomorrow

nbsgov.com

TABLE OF CONTENTS

1. Introduction 1

1.1 Purpose 1

1.2 Overview of the Study 1

2. Water Rate Study 6

2.1 Key Water Rate Study Issues 6

2.2 Financial Plan 6

2.3 Cost-of-Service Analysis 8

2.4 Characteristics of Water Customers by Customer Class 10

2.5 Rate Design Analysis 12

2.6 Proposed Water Rates 14

2.7 Comparison of Current and Proposed Water Bills 15

3. Sewer Rate Study – Northwest 17

3.1 Key Northwest Sewer Rate Study Issues 17

3.2 Financial Plan 17

3.3 Cost-of-Service Analysis 18

3.4 Rate Design Analysis 20

3.5 Proposed Sewer Rates 21

3.6 Comparison of Current and Proposed Sewer Bills 22

4. Sewer Rate Study – Beach 26

4.1 Key Beach Sewer Rate Study Issues 26

4.2 Financial Plan 26

4.3 Cost-of-Service Analysis 27

4.4 Rate Design Analysis 29

4.5 Proposed Sewer Rates 30

4.6 Comparison of Current and Proposed Sewer Bills 31

5. Recommendations and Next Steps 37

5.1 Consultant Recommendations 37

5.2 Next steps 37

5.3 NBS' Principal Assumptions and Considerations 37

Technical Appendices 38

Appendix A. Water Rate Study Tables and Figures

Appendix B. Northwest Sewer Rate Study Tables and Figures

Appendix C. Beach Sewer Rate Study Tables and Figures

TABLE OF FIGURES

Figure 1. Primary Components of a Rate Study 2
Figure 2. Summary of Water Revenue Requirements 8
Figure 3. Summary of Unrestricted Water Reserve Funds 8
Figure 4. Allocation Percentages of Revenue Requirements 10
Figure 5. Allocated Net Revenue Requirements – Preferred Rate Alternative 10
Figure 6. Water Consumption by Customer Class 11
Figure 7. Peaking Factors by Customer Class 11
Figure 8. Number of Meters by Customer Class 12
Figure 9. Hydraulic Capacity Factors 13
Figure 10. Equivalent Meters 13
Figure 11. Calculation of Fixed Service Charges 14
Figure 12. Uniform Tier Rates for FY 2025/26 14
Figure 13. Current and Proposed Water Rates 15
Figure 14. Monthly Water Bill Comparison for Residential Customers 15
Figure 15. Monthly Water Bill Comparison for Commercial Customers 16
Figure 16. Residential Bills Comparison for Similar Communities 16
Figure 17. Summary of Sewer Revenue Requirements 18
Figure 18. Summary of Unrestricted Sewer Reserve Funds 18
Figure 19. Development of the Flow Allocation Factor 19
Figure 20. Development of the Strength Allocation Factor 19
Figure 21. Development of the Customer Allocation Factor 20
Figure 22. Allocation of Revenue Requirements by Customer Class 20
Figure 23. Development of Fixed and Variable Charges 21
Figure 24. Current vs. Proposed Sewer Rates 21
Figure 25. Single-Family Residential Sewer Bill Comparison 22
Figure 26. Non-Residential Low Strength Sewer Bill Comparison 23
Figure 27. Non-Residential Domestic Strength Sewer Bill Comparison 23
Figure 28. Non-Residential High Strength Sewer Bill Comparison 24
Figure 29. Single-Family Residential Regional Sewer Bill Comparison 25
Figure 30. Summary of Sewer Revenue Requirements 27
Figure 31. Summary of Sewer Reserve Funds 27
Figure 32. Development of the Flow Allocation Factor 28
Figure 33. Development of the Strength Allocation Factor 28
Figure 34. Development of the Customer Allocation Factor 29
Figure 35. Allocation of Revenue Requirements by Customer Class 29
Figure 36. Development of Fixed and Variable Charges 30
Figure 37. Current vs. Proposed Sewer Rates 31
Figure 38. Single-Family Residential Sewer Bill Comparison 31
Figure 39. Multi-Family Residential Sewer Bill Comparison 32
Figure 40. Non-Residential Low Strength Sewer Bill Comparison 33
Figure 41. Non-Residential Domestic Strength Sewer Bill Comparison 34
Figure 42. Non-Residential High Strength Sewer Bill Comparison 35
Figure 43. Single-Family Residential Regional Sewer Bill Comparison 36

1. Introduction

1.1 Purpose

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

In developing new rates for the City's enterprise funds, NBS worked cooperatively with City staff and the City's Municipal Rates and Utilities Committee (Committee) in selecting the appropriate rate alternatives that address the City's goals and objectives. Based on input provided by City staff and the Committee, NBS proposes the rates summarized in this report. The City Council (Council) 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, and the Water Environment Federation's *Financing and Charges for Wastewater Systems* (Manual of Practice No. 27).[2]

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.

[2] *Financing and Charges for Wastewater Systems*, Manual of Practice No. 27, Water Environment Federation, Fourth Edition, 2018.

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 and sewer rates for the City using this approach. The following sections in this report present an overview of the methodologies, assumptions, and data used along with the financial plans and rates developed. Detailed tables and figures documenting the development of the proposed rates are provided in the Appendices.

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

FINANCIAL PLAN

As a part of the rate study, NBS projected revenues and expenditures on a cash-flow basis for the next five (5) years. The amount of rate revenue required, that will allow reserves to be maintained at the recommended levels, is known as the net revenue requirement. As current rate revenue falls short of the net revenue requirement, rate adjustments – or more accurately, adjustments in the total revenue collected from rates – are recommended. This report presents an overview of the methodologies, assumptions, and data used along with the financial plan and proposed rates developed in this study.[3]

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

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

For the sewer utility, the normal classification of sewer revenue requirements uses the following categories:

- Volume related costs
- Strength related costs
- Customer service-related costs

Together, these three allocation factors represent the cost allocation classifications used in the cost-of-service analysis. Further details are discussed below and documented in the Technical Appendices.

RATE DESIGN ANALYSIS

During the rate design phase of the study, NBS and City staff worked together to develop rate alternatives that will meet the City's objectives. It is important for the City 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*,[4] 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 City 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 or sewage treated. In contrast, variable costs, such as the cost of purchased water, chemicals, and electricity, tend to change with the quantity of water sold or the quantity and strength of sewage treated. Most rate structures contain a fixed, or minimum, charge in combination with a volumetric charge.

[4] 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.

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.[5] 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. Fixed charges for sewer utilities typically increase by equivalent dwelling unit (EDU) for residential customers.

Variable (Consumption-Based) Charges – In contrast to fixed charges, variable costs, such as purchased water, groundwater replenishment costs, and the cost of electricity used in pumping water and chemicals for treatment, tend to change with the quantity of water produced. For a water utility, variable charges are calculated based on a metered consumption per unit price (e.g., per 100 cubic feet, or HCF). For a sewer utility, variable charges are calculated based on strength which is comprised of factors measuring the biochemical oxygen demand and total suspended solids of the influent wastewater as those affect the cost of treatment.

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 City's rate administration.

KEY FINANCIAL ASSUMPTIONS

The following is a summary of the key financial assumptions used in the analyses. The following capital and operational fund targets reflect input from City 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 City'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 – For each utility (i.e., water and sewer), the City maintains reserves for operations, capital, and other specific needs. The details of each utility's reserve targets are covered in their respective sections of this report.

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

- Customer growth is estimated at 2.08% in 2025 and decreases by 0.04% each year.
- General cost inflation is set at 3.45% annually.
- Labor cost inflation is set at 3.02% annually.

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

- Energy cost inflation is set at 10.84% annually.
- Fuel & Utilities cost inflation is set at 7.08% annually.

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

2. Water Rate Study

2.1 Key Water Rate Study Issues

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

- Generating sufficient revenue to meet anticipated operating and maintenance costs and fund necessary capital improvement projects for the next five years.
- Continuing with a rate design that promotes revenue stability.
- Verifying the cost-of-service linkage between the current rate structure and the proposed water rates.
- 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.

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

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 from City staff, the rates proposed in this report will collect 85% of the rate revenue from the fixed charge and 15% from the variable charges.

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

Meeting Net Revenue Requirements: For FY 2025/26 through FY 2029/30, 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 $3.5 - $5.1 million annually. If no rate adjustments are implemented, the City is projected to run an annual deficit of ranging from $100,000 to $1.6 during the 5-year rate period.

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

- The City's existing reserves are currently underfunded by about $1.2 million, and the challenge is to meet future revenue requirements and build adequate reserves. NBS, together with City staff, have chosen to set the following reserve targets:
    - **Operating Reserve** equal to 180 days of operating and maintenance expenses, or approximately $1.52 million in FY 2025/26. An operating reserve is intended to promote financial viability in the event of any short-term fluctuation in revenues and/or expenditures, such as those caused by weather patterns, the natural inflow and outflow of cash during billing cycles, natural variability in demand-based revenue streams (e.g., volumetric charges), and – particularly in periods of economic distress – changes or trends in the age of receivables. NBS considers a 90 day operating reserve to be in line with many municipal water utilities operating reserve targets.
    - **Capital Rehabilitation & Replacement Reserve** equal to 3% of the net capital assets, or capital assets less depreciation, which is $1.4 million in 2025/26. This reserve is intended to be a cash resource set aside to address long-term capital system replacement and rehabilitation needs. Many utilities aim for 3% to 6% of net assets, and the City is at the low end of this norm.

Funding Capital Improvement Projects: The City must fund necessary capital improvements to maintain current service levels. City staff has identified roughly $28 million in expected capital expenditures over the next five years (FY 2025/26 through FY 2029/30) which is an average of $5.5 million in capital expenditures annually. This rate study assumes the City will be securing a loan from the State Revolving Fund (SRF) in the amount of $20 million in FY 2025/26. Proceeds from the SRF loan along with the recommended rate increases, enable the City to fund these capital expenditures.

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 2.08 in FY 2025/26 and decrease annually by 0.04% through 2029/30. This factor was used in the analysis for rate revenues while inflation factors, including the Consumer Price Index,[6] were used in projecting expenses.

Maintaining Adequate Bond Coverage: The water utility currently has a capital lease and two installment purchase agreements. Additionally, this analysis assumes that the City will obtain an SRF Loan in the amount of $20 million to fund capital projects.

[6] Consumer Price Index for all urban consumers in the San Francisco area. Source: Website: *https://www.bls.gov/cpi/.*

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

Figure 2. Summary of Water Revenue Requirements

Summary of Sources and Uses of Funds and Net Revenue Requirements	Budget	5-Year Projected Rate Period				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
Sources of Water Funds						
Rate Revenue	$ 3,256,054	$ 3,323,914	$ 3,391,773	$ 3,459,633	$ 3,527,492	$ 3,595,352
Non-Rate Revenue	31,646	32,306	32,965	33,625	34,284	34,944
Interest Earnings	-	19,678	20,189	16,807	34,636	54,497
Transfer In	20,680	20,680	-	-	-	-
Total Sources of Funds:	**$ 3,287,700**	**$ 3,375,898**	**$ 3,444,928**	**$ 3,510,065**	**$ 3,596,412**	**$ 3,684,792**
Uses of Water Funds						
Operating Expenses	$ 2,927,668	$ 3,040,761	$ 3,159,006	$ 3,282,689	$ 3,412,113	$ 3,547,601
Debt Service	322,493	321,361	330,110	323,559	321,950	1,350,608
Rate-Funded Capital Expenses	537,274	858,477	1,530,193	-	-	335,248
Total Use of Funds:	**$ 3,787,435**	**$ 4,220,599**	**$ 5,019,310**	**$ 3,606,248**	**$ 3,734,064**	**$ 5,233,458**
Surplus (Deficiency) before Rate Increase	**$ (499,735)**	**$ (844,701)**	**$ (1,574,382)**	**$ (96,184)**	**$ (137,651)**	**$ (1,548,666)**
Additional Revenue from Rate Increases[1]	-	843,974	1,291,818	1,462,495	1,643,809	1,836,239
Surplus (Deficiency) after Rate Increase	**$ (499,735)**	**$ (726)**	**$ (282,564)**	**$ 1,366,312**	**$ 1,506,158**	**$ 287,573**
Projected Annual Rate Increase	***0.00%***	***25.00%***	***10.00%***	***3.00%***	***3.00%***	***3.00%***
Cumulative Rate Increases	*0.00%*	*25.00%*	*10.00%*	*13.30%*	*16.70%*	*20.20%*
Net Revenue Requirement[2]	**$ 3,735,109**	**$ 4,147,934**	**$ 4,966,156**	**$ 3,555,816**	**$ 3,665,144**	**$ 5,144,017**

1. Assumes new rates are implemented July 1, 2025.
2. This is the annual amount needed from water rates. [Net Revenue Requirement = Total Use of Funds - (Non-Rate Revenues + Interest Earnings)].

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

Figure 3. Summary of Unrestricted Water Reserve Funds

Beginning Reserve Fund Balances and Recommended Reserve Targets	Budget	5-Year Projected Rate Period				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
Operating Reserve						
Ending Balance	$ 930,945	$ 962,899	$ 692,746	$ 1,649,929	$ 1,727,268	$ 1,796,264
Recommended Minimum Target	*1,464,000*	*1,520,000*	*1,580,000*	*1,641,000*	*1,706,000*	*1,774,000*
Capital Reserve						
Ending Balance	$ 595,701	$ 603,380	$ 611,157	$ 1,037,092	$ 2,500,548	$ 2,773,621
Recommended Minimum Target	*1,270,700*	*1,418,100*	*1,668,700*	*1,975,000*	*2,281,300*	*2,677,600*
Total Ending Balance	**$ 1,526,646**	**$ 1,566,278**	**$ 1,303,903**	**$ 2,687,022**	**$ 4,227,815**	**$ 4,569,885**
Total Recommended Minimum Target	***$ 2,734,700***	***$ 2,938,100***	***$ 3,248,700***	***$ 3,616,000***	***$ 3,987,300***	***$ 4,451,600***

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 City'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 City'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 *Appendices* show how the City'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.[7]

NBS functionalized the City's costs into categories that represent fixed and variable costs. This analysis resulted in a cost distribution that is approximately 60% fixed and 40% variable (i.e., volumetric). However, the City's current rates collect revenue from customers in proportions of approximately 85% fixed and 15% variable. City staff agrees with NBS that the current rate design is the preferred rate alternative; it provides continuity for the City's rate design while also encouraging water conservation. Therefore, the proposed new rates are based on these 85% fixed and 15% variable allocations. NBS also evaluated an 80% fixed/20% variable rate structure and compares the results below; however, City Staff and the Committee recommended the 85% fixed/20% variable rate structure as the preferred alternative.

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.

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

Figure 4. Allocation Percentages of Revenue Requirements

Classification Components	Cost-of-Service Net Revenue Requirements *(FY 2025/26)*	
Commodity-Related Costs	$ 1,687,949	*40.0%*
Capacity-Related Costs	2,363,128	*56.0%*
Customer-Related Costs	168,795	*4.0%*
Net Revenue Requirement	**$ 4,219,872**	*100.0%*

Figure 5. Allocated Net Revenue Requirements – Preferred Rate Alternative

Customer Classes	Classification Components			Cost of Service Net Rev. Req'ts	% of COS Net Revenue Req'ts
	VARIABLE	*FIXED*			
	Commodity-Related Costs	Capacity-Related Costs	Customer-Related Costs		
Residential	$ 1,308,537	$ 1,792,810	$ 150,485	$ 3,251,832	*77.1%*
Mobile Home	6,305	9,198	1,603	17,106	*0.4%*
Multi-Family	51,394	59,483	8,199	119,076	*2.8%*
Commercial	76,825	89,511	4,901	171,237	*4.1%*
Irrigation Only	244,889	412,126	3,606	660,621	*15.7%*
Total Net Revenue Requirement	**$ 1,687,949**	**$ 2,363,128**	**$ 168,795**	**$ 4,219,872**	**100%**

2.4 Characteristics of Water Customers by Customer Class

Customer classes are typically determined by grouping customers with similar demand characteristics into categories that reflect the cost differentials to serve each type of customer. Customer classes are most often identified as single-family, multi-family, commercial, landscape, etc., and the City 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 uniform volumetric rate based on zones.

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

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

Figure 6. Water Consumption by Customer Class

Customer Class	FY 2022/23 Consumption (HCF)	% of Total Volume
Residential	633,037	**77.5%**
Mobile Home	3,050	**0.4%**
Multi-Family	24,863	**3.0%**
Commercial	37,166	**4.6%**
Irrigation Only	118,471	**14.5%**
Total	**816,587**	**100.0%**

Figure 7 shows the peaking factors for each customer class. A "peaking factor" is the relationship between the average use by meter size to its peak use.

Figure 7. Peaking Factors by Customer Class

Customer Class	Average Monthly Use (HCF)	Peak Monthly Use (HCF)[1]	Peak Monthly Factor	% of Max Month Capacity
Residential	52,753	90,631	**1.72**	**75.9%**
Mobile Home	254	465	**1.83**	**0.4%**
Multi-Family	2,072	3,007	**1.45**	**2.5%**
Commercial	3,097	4,525	**1.46**	**3.8%**
Irrigation Only	9,873	20,834	**2.11**	**17.4%**
Total	**68,049**	**119,462**	**1.76**	**100.0%**

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. These peaking factors are used to allocate the capacity-related costs to each customer class and are described in more detail later in this study.

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.

Figure 8. Number of Meters by Customer Class

Customer Class	No. of Meters/EDUs FY 2022/23[1]	% of Total Meters/EDUs
Residential	4,882	**89.2%**
Mobile Home	52	**0.9%**
Multi-Family[2]	266	**4.9%**
Commercial	159	**2.9%**
Irrigation Only	117	**2.1%**
Total	**5,476**	**100.0%**

2.5 Rate Design Analysis

Evaluating the water rate structure includes reviewing rate-design objectives and policies, including continuity of rate design, revenue stability, equity among customers, and water conservation. NBS discussed the 85%/15% (preferred) and 80%/20% rate designs with City staff over the course of this study. Ultimately, City staff selected the 85%/15% rate alternative, as it maintains continuity with the existing rate revenue collection structure. Also, because of the difficulty meeting Prop 218 legal requirements of demonstrating the cost basis for tiered rates given the City's water supply costs, the preferred rate structure proposes a uniform tier for all customers. The following section describes how the proposed water rates were determined.

DEVELOPMENT OF PROPOSED RATES

Fixed Service Charges

The fixed meter charge recognizes that the water utility incurs fixed costs regardless of whether customers use water. Two components comprise the fixed meter charge: (1) the capacity component, and (2) the customer component. The capacity component recovers costs associated with sizing the water system to ensure there is sufficient capacity in the system to meet peak demand. A user class with higher-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.[8] 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.[9] The AWWA capacity ratios used for this report are shown in Figure 9.

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

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

Figure 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.*

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, the hydraulic capacity factors, and the number of equivalent meters (i.e., the number of meters multiplied by the hydraulic capacity factor) by customer class and meter size.

Figure 10. Equivalent Meters

Number of Meters by Class and Size[1]	FY 2025/26							Total
	3/4" meter	1" meter	1.5" meter	2" meter	3" meter	4" meter	6" meter	
Residential	3,435	1,447	0	0	0	0	0	4,882
Mobile Home	52	0	0	0	0	0	0	52
Multi-Family	207	14	1	2	1	0	0	225
Commercial	93	32	6	24	1	3	0	159
Irrigation Only	34	32	15	19	13	4	0	117
Total Meters/Accounts	**3,821**	**1,525**	**22**	**45**	**15**	**7**	**0**	**5,435**
Hydraulic Capacity Factor[2]	*1.00*	*1.67*	*3.33*	*5.33*	*10.67*	*16.67*	*33.33*	
Total Equivalent Meters	**3,821**	**2,542**	**73**	**240**	**160**	**117**	**0**	**6,953**

Using the costs allocated to each customer class from Figure 4, Figure 11 shows the calculation of the fixed monthly service charges for all customer classes based on meter size. As previously mentioned, the customer service charge is calculated by dividing the customer service-related costs by the total number of meters, whereas the fixed capacity charge is calculated by dividing the capacity-related costs by the total number of equivalent meters for each meter size.

Figure 11. Calculation of Fixed Service Charges

Number of Meters by Class and Size[1]	FY 2025/26							Total
	3/4" meter	1" meter	1.5" meter	2" meter	3" meter	4" meter	6" meter	
Residential	3,435	1,447	0	0	0	0	0	4,882
Mobile Home	52	0	0	0	0	0	0	52
Multi-Family	207	14	1	2	1	0	0	225
Commercial	93	32	6	24	1	3	0	159
Irrigation Only	34	32	15	19	13	4	0	117
Total Meters/Accounts	**3,821**	**1,525**	**22**	**45**	**15**	**7**	**0**	**5,435**
Hydraulic Capacity Factor[2]	*1.00*	*1.67*	*3.33*	*5.33*	*10.67*	*16.67*	*33.33*	
Total Equivalent Meters	**3,821**	**2,542**	**73**	**240**	**160**	**117**	**0**	**6,953**
Monthly Fixed Service Charges								
Customer Costs ($/Acct/month)[3]	$2.59	$2.59	$2.59	$2.59	$2.59	$2.59	$2.59	
Capacity Costs ($/Acct/month)[4]	$40.97	$68.28	$136.56	$218.50	$437.00	$682.81	$1,365.62	
Total Monthly Meter Charge	**$43.56**	**$70.87**	**$139.15**	**$221.09**	**$439.59**	**$685.40**	**$1,368.21**	
Annual Fixed Costs Allocated to Monthly Meter Charges								
Customer Costs	$ 168,795							
Capacity Costs	3,418,096							
Total Fixed Meter Costs	$ 3,586,891							
Annual Revenue from Monthly Meter Charges								
Customer Charges	$ 118,669	$ 47,362	$ 683	$ 1,398	$ 466	$ 217	$ -	**$ 168,795**
Capacity Charges	$ 1,878,495	$ 1,249,544	$ 36,052	$ 117,990	$ 78,660	$ 57,356	$ -	**$ 3,418,096**
Total Revenue from Monthly Meter Charges	**$ 1,997,163**	**$ 1,296,906**	**$ 36,736**	**$ 119,387**	**$ 79,126**	**$ 57,574**	**$ -**	**$ 3,586,891**

1. Meter by Class and Size are based on June 2023 customer billing data.
2. Source: *Principles of Water Rates, Fees, and Charges* , Manual M1, AWWA, Table B-1.
3. Customer costs are allocated to each customer by dividing the total customer costs by the total number of customers.
4. Capacity costs are allocated by meter size and the hydraulic capacity of the meter.

Volumetric Rates

The proposed rates are based on a uniform, or single tier, volumetric rate. As discussed previously, given the single source of water supply, a uniform volumetric rate is the most defensible from a Prop 218 perspective.

Figure 12 shows the calculation of the uniform tier rate per unit of water for all customers.

Figure 12. Uniform Tier Rates for FY 2025/26

Customer Classes	Water Consumption (HCF/yr)	Total Target Rev. Req't from Vol. Charges	% of Total Rate Revenue	Uniform Commodity Rates ($/HCF)	*Proposed Rate Structure*
Residential	633,037	$ 487,775	*11.6%*	$0.775	*Uniform*
Mobile Home	3,050	2,566	*0.1%*	$0.775	*Uniform*
Multi-Family	24,863	17,861	*0.4%*	$0.775	*Uniform*
Commercial	37,166	25,686	*0.6%*	$0.775	*Uniform*
Irrigation Only	118,471	99,093	*2.3%*	$0.775	*Uniform*
Total Water	**816,587**	**$ 632,981**	***15.0%***		

2.6 Proposed Water Rates

The City's water rates were last adjusted in 2012. 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 5-year rate adoption period. In contrast, in the subsequent four years of the rate planning period, proposed charges are simply adjusted by the proposed adjustment in total rate revenue needed to meet projected revenue requirements.

Figure 13 provides a comparison of the current and proposed water rates for FY 2025/26 through 2029/30 for each customer class and meter size. Projected rates for each fiscal year[10] reflect adjustments based on

[10] First year rate adjustments are scheduled to be effective on January 1, 2025.

the cost-of-service analysis, the 85% fixed/15% 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 Appendix A. Water Rate Study Tables and Figures.

Figure 13. Current and Proposed Water Rates

Water Rate Schedule	Current Rates	Proposed Rates				
		FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
Monthly Fixed Service Charges (in $/mo)						
Residential (SFR, MFR, MH)						
3/4 inch	$34.32	$43.56	$47.91	$49.35	$50.83	$52.36
1 inch	$34.32	$70.87	$77.96	$80.29	$82.70	$85.18
1 1/2 inch	$34.32	$139.15	$153.07	$157.66	$162.39	$167.26
2 inch	$34.32	$221.09	$243.20	$250.49	$258.01	$265.75
3 inch	$34.32	$439.59	$483.55	$498.05	$512.99	$528.38
4 inch	$34.32	$685.40	$753.94	$776.56	$799.85	$823.85
Non-Residential (COMM & IRR)						
3/4 inch	$34.32	$43.56	$47.91	$49.35	$50.83	$52.36
1 inch	$85.79	$70.87	$77.96	$80.29	$82.70	$85.18
1 1/2 inch	$171.58	$139.15	$153.07	$157.66	$162.39	$167.26
2 inch	$274.52	$221.09	$243.20	$250.49	$258.01	$265.75
3 inch	$514.73	$439.59	$483.55	$498.05	$512.99	$528.38
4 inch	$857.88	$685.40	$753.94	$776.56	$799.85	$823.85
6 inch	$1,715.75	$1,368.21	$1,505.03	$1,550.18	$1,596.69	$1,644.59
Variable Charges for All Water Consumed (in $/HCF)						
Uniform Rate for All Customers	$0.56	$0.78	$0.85	$0.88	$0.90	$0.93

2.7 Comparison of Current and Proposed Water Bills

Figure 14 and Figure 15 compare a range of monthly water bills under the current and proposed water rates for residential and commercial customers. These monthly bills are based on typical meter sizes and highlight the average consumption levels for each customer.

Figure 14. Monthly Water Bill Comparison for Residential Customers

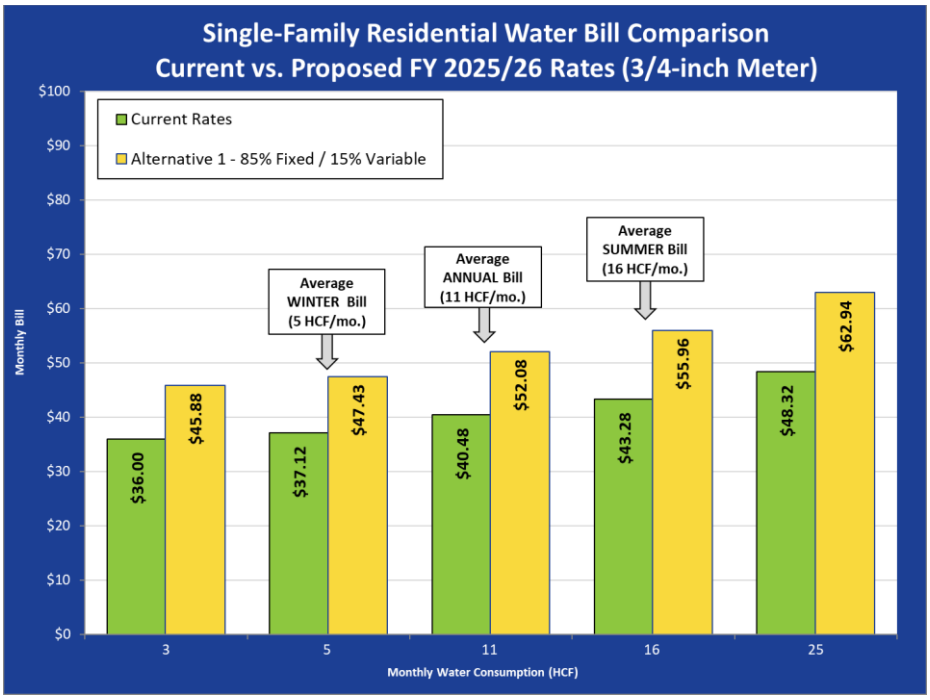


Figure 15. Monthly Water Bill Comparison for Commercial Customers

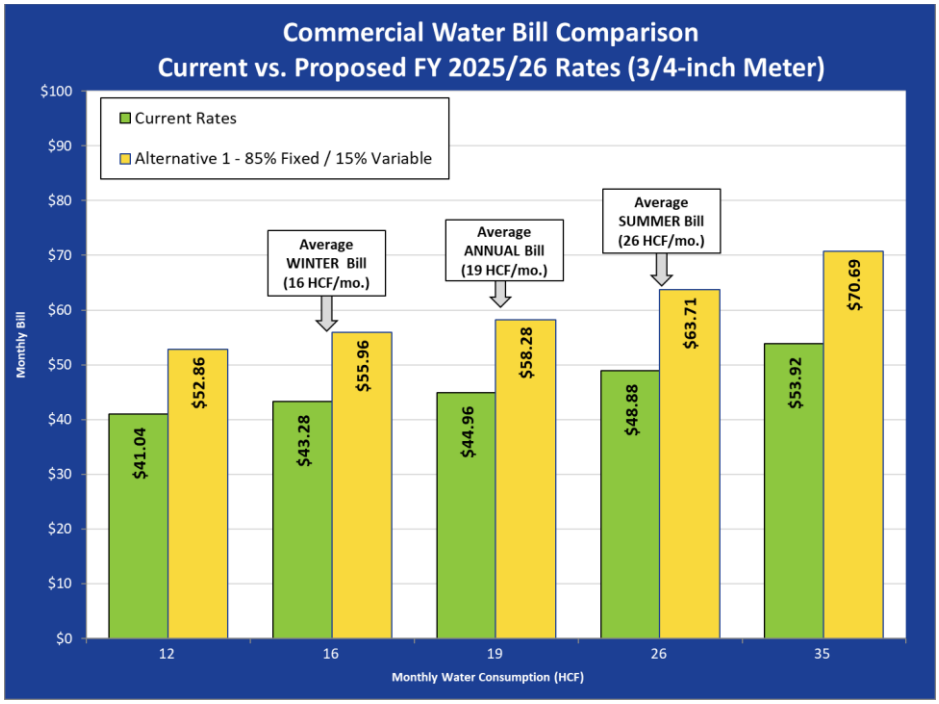
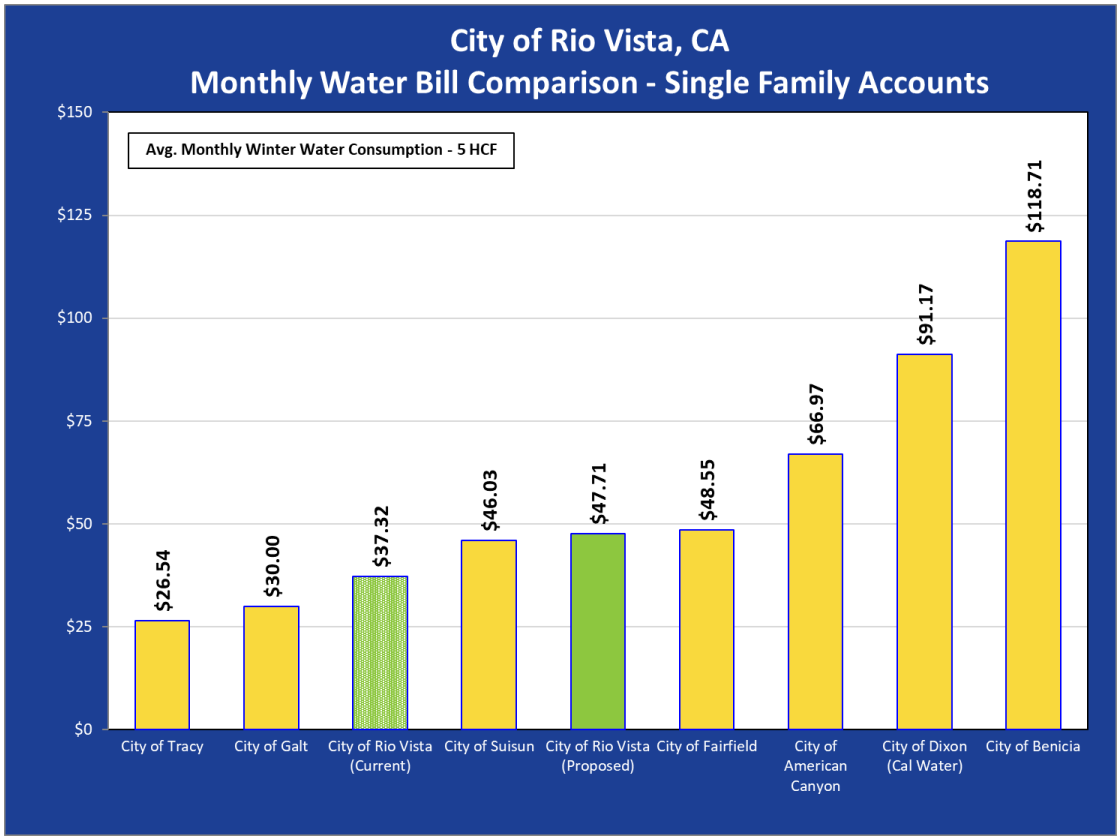


Figure 16 presents a comparison of residential water rates for similar communities.

Figure 16. Residential Bills Comparison for Similar Communities



3. Sewer Rate Study – Northwest

3.1 Key Northwest Sewer Rate Study Issues

The City's Northwest sewer rate analysis was undertaken with a few specific objectives, including:

- Ensuring equity among customer classes by collecting rate revenue through the cost-of-service process based on both fixed monthly charges and volumetric rates.
- Maintain adequate reserve levels to ensure continuity in operations.
- Ensure adequate funding for the utility's capital projects, due to the level of capital investment planned over the next five years.
- Comply with Prop 218 requirements to ensure costs are properly allocated between user classifications.

3.2 Financial Plan

Like the water utility, it is important for the sewer utility to ensure rates provide sufficient funding to cover operating and maintenance costs, planned capital expenditures, and maintain reasonable reserves. The sewer utility's rate increases are governed by these needs, and the current state of the City's sewer utility is as follows:

Meeting Net Revenue Requirements: For FY 2025/26 through FY 2029/30, the projected net revenue requirements (that is, total operating expenses plus rate-funded capital costs less non-rate revenues) for the City averages approximately $3.5 million to $5.6 million annually. If no rate increases are implemented, the City is projected to run an annual deficit of approximately $1.2 million beginning in FY 2025/26 but increasing to $3.5 million by FY 2029/30, and the utility would struggle to meet its debt service coverage requirements.

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 emergencies. The reserve funds for the sewer utility are considered unrestricted reserves and consist of the following:

- **Operating Reserve**: The target ending fund balance for the operating reserve is equal to 90 days of operating expenses, or approximately $646,000 in FY 2025/26. An operating reserve is intended to promote financial viability in the event of any short-term fluctuation in revenues and/or expenditures. Fluctuations in revenue can be caused by weather patterns, the natural inflow and outflow of cash during billing cycles, natural variability in demand-based revenue streams (such as volumetric charges), and – particularly in periods of economic distress – changes or trends in age of receivables.
- **Capital Rehabilitation & Replacement Reserve** equal to 3% of net assets which is approximately $957,000 in FY 2025/26. This reserve is set aside to address long-term capital system replacement and rehabilitation needs.

The recommended rate revenue increases 55% in FY 2025/26, 35% in FY 2026/27 and 5% each year through 2029/30. Figure 17 summarizes the sources and uses of funds, net revenue requirements, and the recommended annual increases in sewer rate revenue proposed for the next five years. Figure 18 summarizes the projected reserve fund balances and reserve targets for the sewer utility's unrestricted funds.

Figure 17. Summary of Sewer Revenue Requirements

Summary of Sources and Uses of Funds and Net Revenue Requirements	Budget	5-Year Projected Rate Period				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
Sources of Sewer Funds						
Rate Revenue	$ 2,201,866	$ 2,247,755	$ 2,293,644	$ 2,339,533	$ 2,385,422	$ 2,431,311
Non-Rate Revenue	15,312	15,631	15,950	16,269	16,588	16,908
Interest Earnings	-	-	-	9,016	17,987	33,333
Transfer In	12,000	12,000	12,000	12,000	12,000	12,000
Total Sources of Funds:	**$ 2,229,178**	**$ 2,275,386**	**$ 2,321,594**	**$ 2,376,819**	**$ 2,431,998**	**$ 2,493,552**
Uses of Sewer Funds						
Operating Expenses	$ 2,486,139	$ 2,584,221	$ 2,687,044	$ 2,794,913	$ 2,908,155	$ 3,027,127
Debt Service	128,295	112,479	96,675	98,063	99,465	681,072
Rate-Funded Capital Expenses	20,000	860,043	1,374,108	1,674,127	1,447,505	1,974,483
Total Use of Funds:	**$ 2,634,434**	**$ 3,556,742**	**$ 4,157,827**	**$ 4,567,102**	**$ 4,455,125**	**$ 5,682,682**
Surplus (Deficiency) before Rate Increase	**$ (405,256)**	**$ (1,281,357)**	**$ (1,836,233)**	**$ (2,190,284)**	**$ (2,023,127)**	**$ (3,189,130)**
Additional Revenue from Rate Increases[1]	-	1,236,265	2,505,806	2,800,714	3,117,702	3,458,128
Surplus (Deficiency) after Rate Increase	**$ (405,256)**	**$ (45,092)**	**$ 669,573**	**$ 610,430**	**$ 1,094,575**	**$ 268,998**
Projected Annual Rate Increase	***0.00%***	***55.00%***	***35.00%***	***5.00%***	***5.00%***	***5.00%***
Cumulative Rate Increases	*0.00%*	*55.00%*	*109.25%*	*119.71%*	*130.70%*	*142.23%*
Net Revenue Requirement[2]	**$ 2,607,122**	**$ 3,529,111**	**$ 4,129,877**	**$ 4,529,817**	**$ 4,408,550**	**$ 5,620,441**

1. Assumes new rates are implemented July 1, 2025.
2. This is the annual amount needed from sewer rates. [Net Revenue Requirement = Total Use of Funds - (Non-Rate Revenues + Interest Earnings + Transfer In)].

Figure 18. Summary of Unrestricted Sewer Reserve Funds

Beginning Reserve Fund Balances and Recommended Reserve Targets	Budget	5-Year Projected Rate Period				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
Operating Reserve						
Ending Balance	$ 35,467	$ (45,092)	$ 672,000	$ 707,662	$ 736,122	$ 766,489
Recommended Minimum Target	*622,000*	*646,000*	*672,000*	*699,000*	*727,000*	*757,000*
Capital Reserve						
Ending Balance	$ -	$ -	$ 27,481	$ 687,766	$ 1,849,869	$ 1,802,566
Recommended Minimum Target	*916,600*	*956,900*	*1,104,500*	*1,279,100*	*1,357,900*	*1,451,100*
Total Ending Balance	**$ 35,467**	**$ (45,092)**	**$ 699,481**	**$ 1,395,428**	**$ 2,585,991**	**$ 2,569,055**
Recommended Minimum Target	***$ 1,538,600***	***$ 1,602,900***	***$ 1,776,500***	***$ 1,978,100***	***$ 2,084,900***	***$ 2,208,100***

A more detailed version of the utility's proposed five-year financial plan is included in Appendix B. The appendix tables include revenue requirements, reserve funds, revenue sources, proposed rate increases, and the City's capital improvement program.

3.3 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 the classification of expenses and then the allocation of those expenses to customer classes based on allocation factors, such as water consumption and number of equivalent dwelling units (EDUs), or accounts. Ultimately, a COSA is intended to result in rates that are proportional to the cost of providing service to each customer class.

CUSTOMER CLASSES AND ALLOCATION FACTORS

Customer classes are determined by combining customers with similar demand characteristics and types of use into categories that reflect the cost differentials to serve each type of customer. The most recent water consumption data was the basis for estimating the amount of flow that each customer class sends to the treatment plant. Figure 19 shows the development of the flow/volume allocation factors by customer class calculated by taking the lowest consecutive 3-month water usage for FY 2022/23 for residential customers, annualizing that usage, and using the annual consumption for non-residential customer classes.

Figure 19. Development of the Flow Allocation Factor

Customer Class	Number of Accounts	Number of EDUs	Total Annual Consumption (HCF)	Winter Consumption (Jan-Mar '22)[2]	Estimated Annual Volume (HCF)[3]	Adjusted Annual Volume Total (HCF)	Percentage of Adjusted Volume
RESIDENTIAL CUSTOMERS							
Residential	3,509	3,509	423,828	50,057	200,228	126,396	**98.5%**
NON-RESIDENTIAL CUSTOMERS							
Domestic Strength	11	11	2,760	*N/A*	2,760	1,742	**1.4%**
High Strength	1	1	199	*N/A*	199	126	**0.1%**
Total:	**3,521**	**3,521**	**426,787**	**50,057**	**203,187**	**128,264**	**100.0%**
						128,264	*Flow (hcf/yr.)*
						0.63	*Flow Adj. Factor*

1. Consumption, customer accounts, and EDUs provided by City Staff. Source file: *UB DATA - FY 22-23 - JULY 22 TO JUNE 23.xlsx* .
2. The three consecutive month period of lowest water usage overall during FY 2021/22.
3. Estimated sewer flow based on average winter consumption for residential customers. Commercial customers are based on annual consumption.

Volumetric charges for non-residential customer classes were based on the annual consumption and their estimated effluent strengths (Residential customers do not have volumetric charges, just fixed monthly charges). Figure 20 summarizes the development of the strength allocation factors by customer class. These strength-related percentages were used to allocate strength-related costs. (Note: Although residential customers do not have volumetric charges, their strengths, and their estimated pounds of BOD and TSS, are used to allocate capacity-related costs to single- and multi-family customers.)

Figure 20. Development of the Strength Allocation Factor

Customer Class	Adjusted Total Annual Volume (HCF)[1]	Biochemical Oxygen Demand (BOD)				Total Suspended Solids (TSS)			
		Avg. Strength Factor (mg/l)[2]	Calculated BOD (lbs./yr.)[3]	Adjusted BOD (lbs./yr.)	Percent of Total	Avg. Strength Factor (mg/l)[2]	Calculated TSS (lbs./yr.)[3]	Adjusted TSS (lbs./yr.)	Percent of Total
RESIDENTIAL CUSTOMERS									
Residential	126,396	175	137,988	237,443	**97.3%**	175	137,988	159,487	**98.7%**
NON-RESIDENTIAL CUSTOMERS									
Domestic Strength	1,742	310	3,369	5,798	**2.4%**	120	1,304	1,507	**0.9%**
High Strength	126	670	525	903	**0.4%**	680	533	616	**0.4%**
Total:	**128,264**		**141,882**	**244,144**	**100.0%**		**139,825**	**161,611**	**100.0%**
	Target, from WWTP Data			*244,144*	*BOD (lbs./yr.)*			*161,611*	*TSS (lbs./yr.)*
				1.721	*BOD Adj. Factor*			*1.156*	*TSS Adj. Factor*

1. Estimated sewer flow based on average winter consumption for residential customers. Commercial customers are based on annual consumption.
2. Source: CA State Water Resources Control Board, *Revenue Program Guidelines (Appendix G) , G-21* .
3. Calculated BOD and TSS are from source file: *Rio Vista Influent Flow Analysis_CL_GF_NV_v2.xlsx* .

Figure 21 summarizes the development of the customer allocation factor.

Figure 21. Development of the Customer Allocation Factor

Sewer Customer Classes	Number of Accounts	Percent of Total	Number of EDUs	Percent of Total
RESIDENTIAL CUSTOMERS				
Residential	3,509	**99.7%**	3,509	**99.7%**
NON-RESIDENTIAL CUSTOMERS				
Domestic Strength	11	**0.31%**	11	**0.31%**
High Strength	1	**0.03%**	1	**0.03%**
Total:	**3,521**	**100.0%**	**3,521**	**100.0%**

1. Number of accounts and EDUs provided by City Staff. Source file: *UB DATA - FY 22-23 - JULY 22 TO JUNE 23.xlsx* .

CLASSIFICATION AND ALLOCATION OF COSTS

As previously noted, costs are classified into the following four categories: (1) flow-related costs, (2) strength-related costs (BOD and TSS), and (3) customer-related costs. The City's budgeted costs were allocated to these three categories which serve as the basis for calculating the fixed and variable charges. Tables in Appendix B. Northwest Sewer Rate Study Tables and Figuresshow how the City's expenses were classified and allocated to these cost-causation components.

Figure 22 summarizes the allocation of the net revenue requirements to each cost causation component for the proposed rates.

Figure 22. Allocation of Revenue Requirements by Customer Class

Customer Class	Cost Classification Components				Cost-of-Service Net Revenue Req'ts.	% of COS Net Revenue Req'ts.
	Volume	Treatment		Customer Related		
		BOD	TSS			
Net Revenue Requirements [1]	***$ 2,353,560***	***$ 558,770***	***$ 558,770***	***$ 12,919***	***$ 3,484,020***	--
	67.6%	*16.0%*	*16.0%*	*0.4%*	*100.0%*	
RESIDENTIAL CUSTOMERS						
Residential	$ 2,319,286	$ 543,433	$ 551,428	$ 12,875	**$ 3,427,022**	*98.4%*
NON-RESIDENTIAL CUSTOMERS						
Domestic Strength	31,970	13,269	5,212	40	**50,492**	*1.4%*
High Strength	2,305	2,068	2,130	4	**6,506**	*0.2%*
Total:	**$ 2,353,560**	**$ 558,770**	**$ 558,770**	**$ 12,919**	**$ 3,484,020**	***100%***

1. The revenue requirement for each customer class is determined by multiplying the revenue requirement from each cost classification by the allocation factors for each customer class.

3.4 Rate Design Analysis

During this rate study, NBS discussed with City staff various rate alternatives that collected revenue differently from fixed vs. variable charges. Ultimately, the rate alternative selected by City staff is one similar to the existing rate design. The reasons for selecting this alternative are (1) it maintains the existing rate design developed during the last study which utilize sewer strengths for various customers types based on values in the State Water Resources Control Board guidelines, (2) it provides continuity for sewer customers, and (3) it is easy to understand from a customer's perspective and easy to administrate from City staff's perspective.

FIXED CHARGES

The fixed charge recognizes that the sewer utility incurs fixed costs regardless of whether customers send any sewer into the City's collection system. There are three factors used to develop the fixed charge: 1) the

number of dwelling units for residential customers, 2) the number of accounts for non-residential customers, and 3) the annual revenue requirement. The monthly fixed charge is calculated by taking 100% of total revenue requirements for residential customer classes and dividing by the number of accounts (for single-family) and by the number of dwelling units (for multi-family).

VARIABLE CHARGES

The variable charges are calculated by dividing 100% of the annual net revenue requirements for the non-residential strength-related customer classes by the annual consumption.

The residential and non-residential fixed and variable charge calculations are summarized in Figure 23.

Figure 23. Development of Fixed and Variable Charges

Customer Class	COSA Net Revenue Requirements		Net Revenue Allocation			
	FY 2025/26 COS Rev. Req't	% of COS Rev. Req't.	% Fixed Revenue	% Variable Revenue	Revenue from Fixed Charges	Revenue from Volumetric Charges
RESIDENTIAL CUSTOMERS						
Residential	$ 3,427,022	98.4%	100%	0%	$ 3,427,022	$ -
NON-RESIDENTIAL CUSTOMERS						
Domestic Strength	50,492	1.4%	0%	100%	-	50,492
High Strength	6,506	0.2%	0%	100%	-	6,506
Total	**$ 3,484,020**	**100.0%**			**$ 3,427,022**	**$ 56,998**
	Percent of Total Revenue Collected		*98%*	*2%*		

3.5 Proposed Sewer Rates

The proposed sewer rates are similar to existing rates in terms of the rate design and rate methodology. Figure 24 compares the current and proposed rates for FY 2025/26 through FY 2029/30 by customer class. While proposed rates in the first year (FY 2025/26) reflect the cost-of-service adjustments that must occur when they have not been updated in over a decade, the projected rates for future years are strictly tied to annual rate increase in an "across-the-board" adjustment. More detailed tables on the development of the proposed rates are documented in Appendix B.

Figure 24. Current vs. Proposed Sewer Rates

Sewer Rate Schedule	*Current Rates*	*Description*	Proposed Monthly Sewer Rates				
			Year 1	Year 2	Year 3	Year 4	Year 5
			FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
Projected Increase in Rate Revenue:			*55.00%*	*35.00%*	*5.00%*	*5.00%*	*5.00%*
Fixed Service Charges (Per EDU or Accounts)							
RESIDENTIAL CUSTOMERS							
Residential	$51.60	Per Account	$81.39	$109.87	$115.36	$121.13	$127.19
Multi-Family	$84.37	Per Account	-	-	-	-	-
Duplex/SFR with ADU	N/A	Per Account	$163.95	$221.34	$232.41	$244.03	$256.23
Triplex	N/A	Per Account	$245.93	$332.01	$348.61	$366.04	$384.34
Quadplex	N/A	Per Account	$327.91	$442.67	$464.80	$488.04	$512.44
Charge for each additional unit above 4	N/A	Per Each Additional Dwelling Unit	$81.98	$110.67	$116.20	$122.01	$128.11
Volumetric Rate ($/hcf) [1]							
NON-RESIDENTIAL CUSTOMERS							
Low Strength	$9.77	Per HCF	$15.46	$20.87	$21.91	$23.01	$24.16
Domestic Strength	$12.11	Per HCF	$15.75	$21.26	$22.32	$23.44	$24.61
High Strength	$27.44	Per HCF	$27.76	$37.47	$39.34	$41.31	$43.38

1. One Unit is equal to one HCF (Hundred Cubic Feet) or 748 gallons.

3.6 Comparison of Current and Proposed Sewer Bills

The following figures compare monthly sewer bills under current and proposed rates for various customers over the 5-year rate period. These bill comparisons are calculated at typical levels of consumption. The last figure presents a comparison of residential sewer rates for similar communities.

Figure 25. Single-Family Residential Sewer Bill Comparison

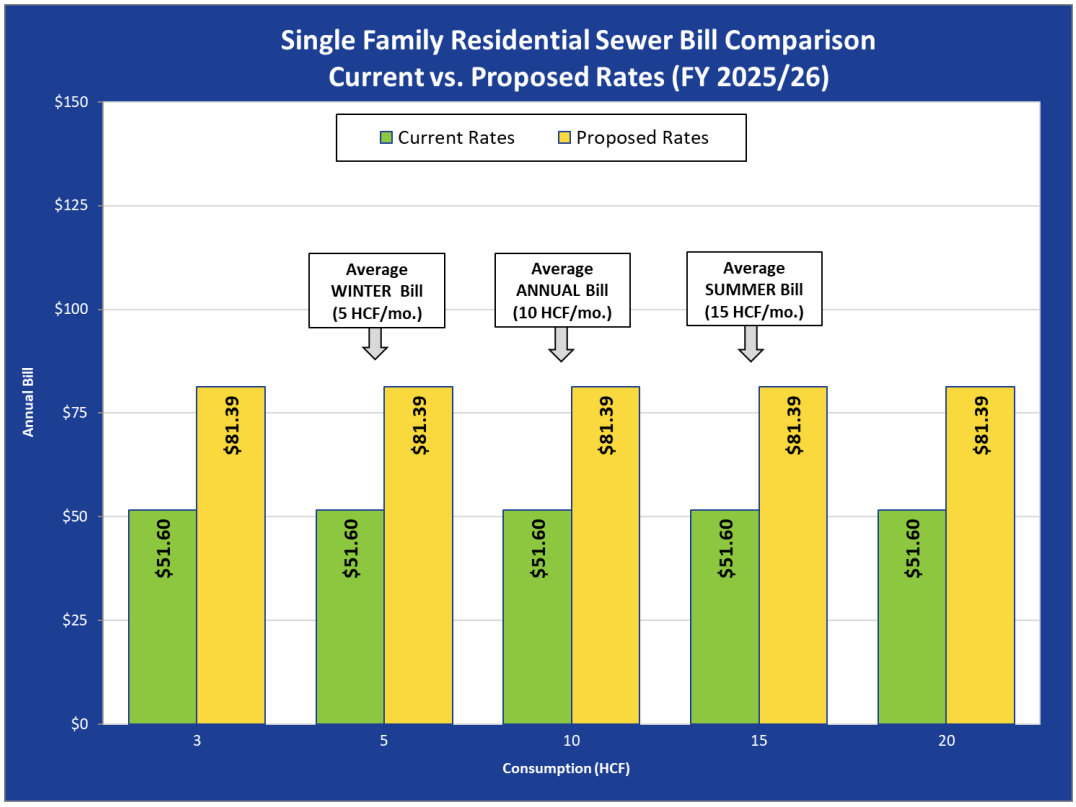


Figure 26. Non-Residential Low Strength Sewer Bill Comparison

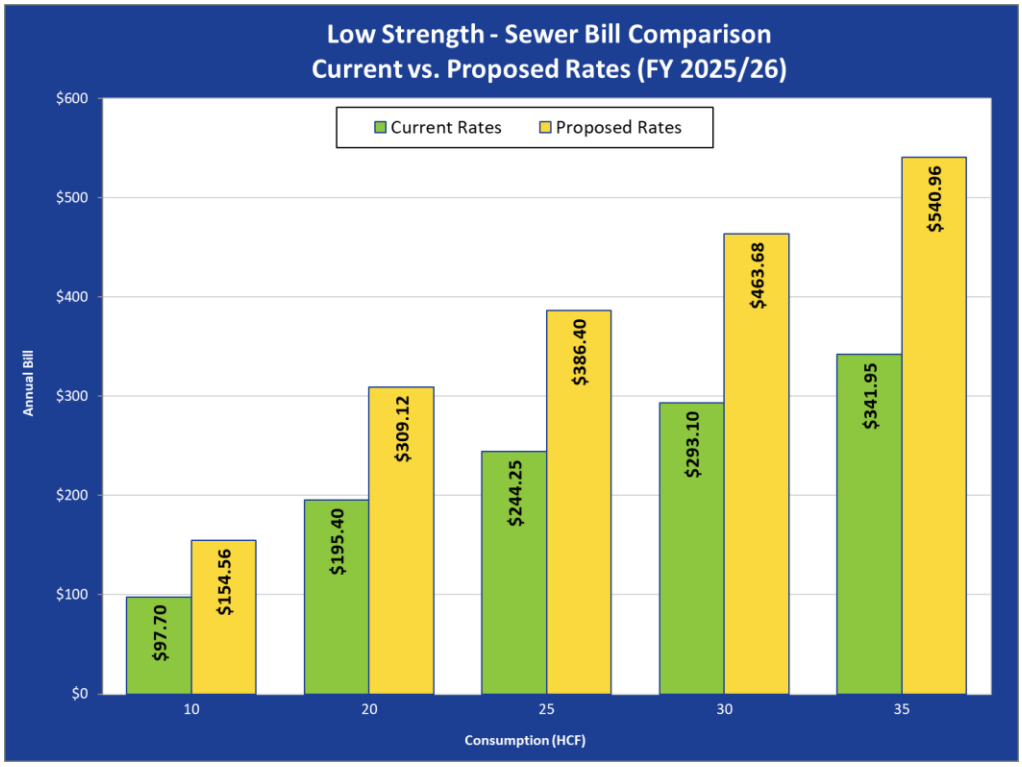


Figure 27. Non-Residential Domestic Strength Sewer Bill Comparison

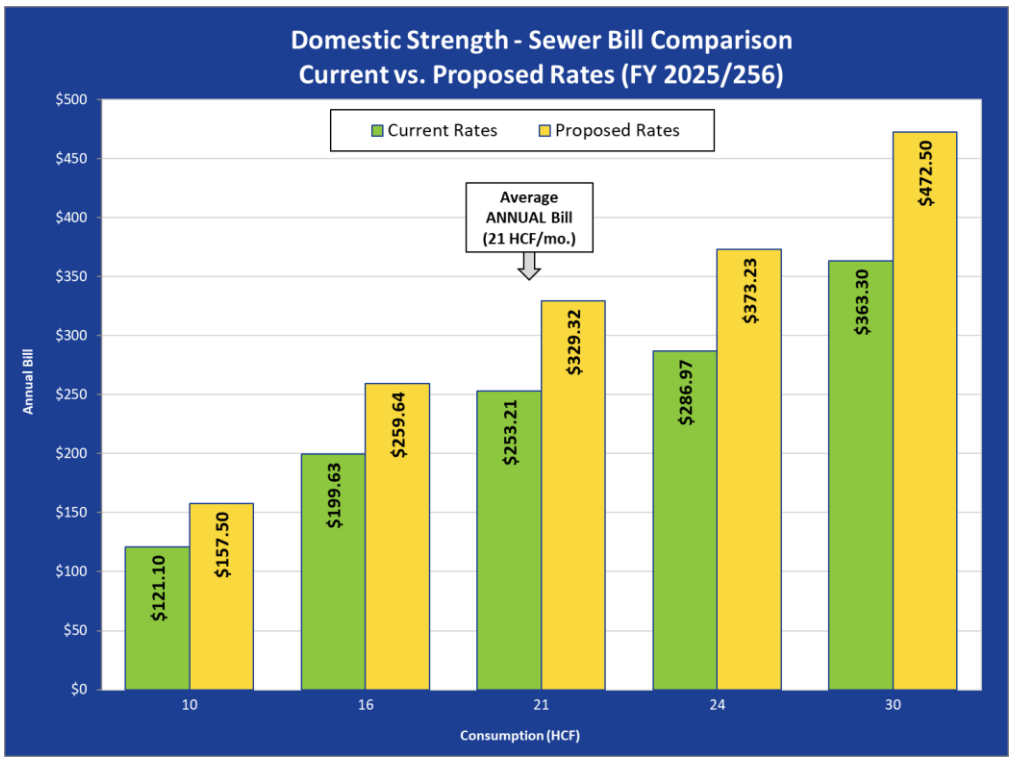


Figure 28. Non-Residential High Strength Sewer Bill Comparison

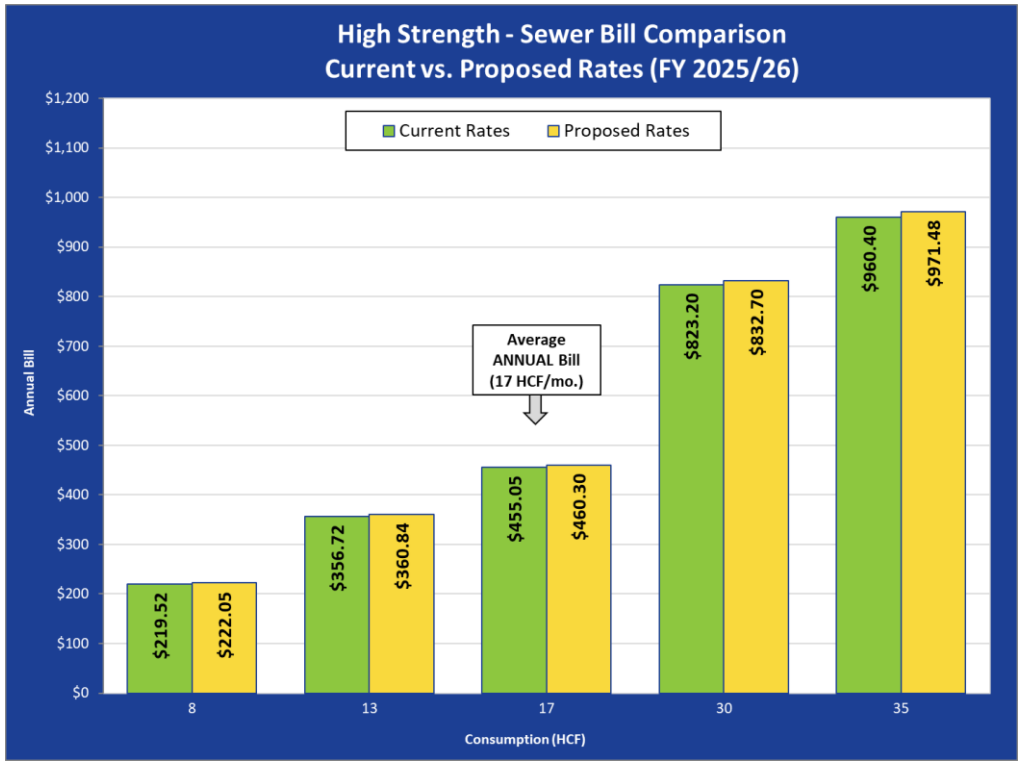
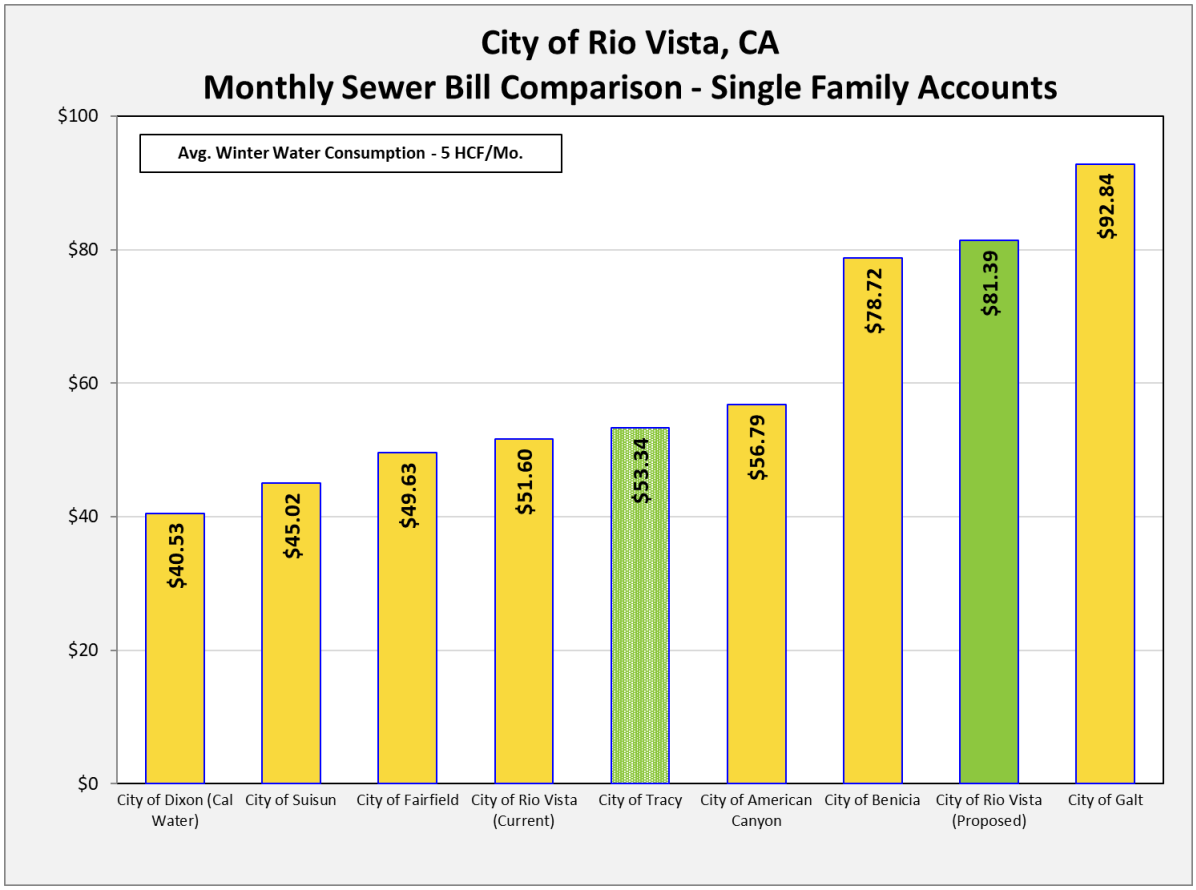


Figure 29. Single-Family Residential Regional Sewer Bill Comparison



4. Sewer Rate Study – Beach

4.1 Key Beach Sewer Rate Study Issues

The City's Beach sewer rate analysis was undertaken with a few specific objectives, including:

- Ensuring equity among customer classes by collecting rate revenue through the cost-of-service process based on both fixed monthly charges and volumetric rates.
- Maintain adequate reserve levels to ensure continuity in operations.
- Ensure adequate funding for the utility's capital projects, due to the level of capital investment planned over the next five years.
- Comply with Prop 218 requirements to ensure costs are properly allocated between user classifications.

4.2 Financial Plan

Like the water utility, it is important for the sewer utility to ensure rates provide sufficient funding to cover operating and maintenance costs, planned capital expenditures, and maintain reasonable reserves. The sewer utility's rate increases are governed by these needs, and the current state of the City's sewer utility is as follows:

Meeting Net Revenue Requirements: For FY 2025/26 through FY 2029/30, the projected net revenue requirements (that is, total operating expenses plus rate-funded capital costs less non-rate revenues) for the City averages approximately $3.1 million to $4.8 million annually. If no rate increases are implemented, the City is projected to run an annual deficit of approximately $148,000 beginning in FY 2024/25 but increasing to $2.5 million by FY 2029/30, and the utility would struggle to meet its debt service coverage requirements.

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 emergencies. The reserve funds for the sewer utility are considered unrestricted reserves and consist of the following:

- **Operating Reserve**: The target ending fund balance for the operating reserve is equal to 90 days of operating expenses, or approximately $730,000 in FY 2025/26. An operating reserve is intended to promote financial viability in the event of any short-term fluctuation in revenues and/or expenditures. Fluctuations in revenue can be caused by weather patterns, the natural inflow and outflow of cash during billing cycles, natural variability in demand-based revenue streams (such as volumetric charges), and – particularly in periods of economic distress – changes or trends in age of receivables.
- **Capital Rehabilitation & Replacement Reserve** equal to 3% of net assets which is approximately $730,000 in FY 2025/26. This reserve is set aside to address long-term capital system replacement and rehabilitation needs.

The recommended rate revenue increases 20% in FY 2025/26, 15% in FY 2026/27 and 5% each year through 2029/30.

Figure 30 summarizes the sources and uses of funds, net revenue requirements, and the recommended annual increases in sewer rate revenue proposed for the next five years. Figure 31 summarizes the projected reserve fund balances and reserve targets for the sewer utility's unrestricted funds.

Figure 30. Summary of Sewer Revenue Requirements

Summary of Sources and Uses of Funds and Net Revenue Requirements	Budget	5-Year Projected Rate Period				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
Sources of Sewer Funds						
Rate Revenue	$ 2,929,814	$ 2,990,874	$ 3,051,934	$ 3,112,995	$ 3,174,055	$ 3,235,115
Non-Rate Revenue	24,500	25,011	25,521	26,032	26,543	27,053
Interest Earnings	-	38,597	16,296	29,640	26,593	34,459
Transfer In	-	-	-	-	-	-
Total Sources of Funds:	**$ 2,954,314**	**$ 3,054,481**	**$ 3,093,751**	**$ 3,168,667**	**$ 3,227,190**	**$ 3,296,628**
Uses of Sewer Funds						
Operating Expenses	$ 2,823,414	$ 2,919,396	$ 2,876,089	$ 2,979,710	$ 3,087,411	$ 3,199,377
Debt Service	141,439	127,393	108,206	106,192	109,187	1,035,576
Rate-Funded Capital Expenses	20,000	374,557	138,027	772,523	597,362	682,636
Total Use of Funds:	**$ 2,984,853**	**$ 3,421,346**	**$ 3,122,322**	**$ 3,858,425**	**$ 3,793,960**	**$ 4,917,589**
Surplus (Deficiency) before Rate Increase	**$ (30,539)**	**$ (366,865)**	**$ (28,571)**	**$ (689,758)**	**$ (566,770)**	**$ (1,620,962)**
Additional Revenue from Rate Increases[1]	-	598,175	1,159,735	1,397,735	1,655,111	1,933,054
Surplus (Deficiency) after Rate Increase	**$ (30,539)**	**$ 231,310**	**$ 1,131,164**	**$ 707,976**	**$ 1,088,341**	**$ 312,093**
Projected Annual Rate Increase	***0.00%***	***20.00%***	***15.00%***	***5.00%***	***5.00%***	***5.00%***
Cumulative Rate Increases	*0.00%*	*20.00%*	*38.00%*	*44.90%*	*52.15%*	*59.75%*
Net Revenue Requirement[2]	**$ 2,960,353**	**$ 3,357,739**	**$ 3,080,505**	**$ 3,802,753**	**$ 3,740,825**	**$ 4,856,077**

1. Assumes new rates are implemented July 1, 2025.
2. This is the annual amount needed from sewer rates. [Net Revenue Requirement = Total Use of Funds - (Non-Rate Revenues + Interest Earnings)].

Figure 31. Summary of Sewer Reserve Funds

Beginning Reserve Fund Balances and Recommended Reserve Targets	Budget	5-Year Projected Rate Period				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
Operating Reserve						
Ending Balance	$ 706,000	$ 739,100	$ 728,527	$ 754,391	$ 781,724	$ 810,076
Recommended Minimum Target	*706,000*	*730,000*	*719,000*	*745,000*	*772,000*	*800,000*
Capital Reserve						
Ending Balance	$ 2,288,301	$ 525,107	$ 1,570,933	$ 1,308,653	$ 1,891,600	$ 1,290,200
Recommended Minimum Target	*218,600*	*331,300*	*412,900*	*596,900*	*804,000*	*972,000*
Total Ending Balance	**$ 2,994,301**	**$ 1,264,207**	**$ 2,299,460**	**$ 2,063,043**	**$ 2,673,324**	**$ 2,100,276**
Recommended Minimum Target	***$ 924,600***	***$ 1,061,300***	***$ 1,131,900***	***$ 1,341,900***	***$ 1,576,000***	***$ 1,772,000***

A more detailed version of the utility's proposed five-year financial plan is included in Appendix C. The appendix tables include revenue requirements, reserve funds, revenue sources, proposed rate increases, and the City's capital improvement program.

4.3 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 the classification of expenses and then the allocation of those expenses to customer classes based on allocation factors, such as water consumption and number of equivalent dwelling units (EDUs), or accounts. Ultimately, a COSA is intended to result in rates that are proportional to the cost of providing service to each customer class.

CUSTOMER CLASSES AND ALLOCATION FACTORS

Customer classes are determined by combining customers with similar demand characteristics and types of use into categories that reflect the cost differentials to serve each type of customer. The most recent water consumption data was the basis for estimating the amount of flow that each customer class sends to the treatment plant. Figure 32 shows the development of the flow/volume allocation factors by customer class calculated by taking the lowest consecutive 3-month water usage for FY 2022/23 for residential customers, annualizing that usage, and using the annual consumption for non-residential customer classes.

Figure 32. Development of the Flow Allocation Factor

Customer Class	Number of Accounts	Number of EDUs	Total Annual Consumption (HCF)	Winter Consumption (Jan-Mar '22)[4]	Estimated Annual Volume (HCF)[5]	Adjusted Annual Volume Total (HCF)	Percentage of Adjusted Volume
RESIDENTIAL CUSTOMERS							
Residential[2]	1,542	1,542	330,730	35,207	140,828	152,238	**69.4%**
Multi-Family	224	442	24,863	4,694	24,863	26,877	**12.3%**
NON-RESIDENTIAL CUSTOMERS[3]							
Low Strength	22	22	10,394	2,215	10,394	11,236	**5.1%**
Domestic Strength	118	118	20,777	4,086	20,777	22,460	**10.2%**
High Strength	19	19	5,995	1,521	5,995	6,481	**3.0%**
Total:	**1,925**	**2,143**	**392,759**	**47,723**	**202,857**	**219,292**	**100.0%**
						219,292	*Flow (hcf/yr.)*
						1.08	*Flow Adj. Factor*

1. Consumption, customer accounts, and EDUs provided by City Staff. Source file: *UB DATA - FY 22-23 - JULY 22 TO JUNE 23.xlsx* .
2. Residential customers include Mobile Home (52 total) and Irrigation Only accounts (114 total).
3. Data for non-residential customers includes the consumption and number of customer accounts (12) for the Northwest Plant.
4. The three consecutive month period of lowest water usage overall during FY 2021/22.
5. Estimated sewer flow based on average winter consumption for residential customers. Multi-family and commercial customers are based on annual consumption

Volumetric charges for non-residential customer classes were based on the annual consumption and their estimated effluent strengths (Residential customers do not have volumetric charges, just fixed monthly charges). Figure 33 summarizes the development of the strength allocation factors by customer class. These strength-related percentages were used to allocate strength-related costs. (Note: Although residential customers do not have volumetric charges, their strengths, and their estimated pounds of BOD and TSS, are used to allocate capacity-related costs to single- and multi-family customers.)

Figure 33. Development of the Strength Allocation Factor

Customer Class	Adjusted Total Annual Volume (HCF)[1]	Biochemical Oxygen Demand (BOD)				Total Suspended Solids (TSS)			
		Avg. Strength Factor (mg/l)[2]	Calculated BOD (lbs./yr.)[3]	Adjusted BOD (lbs./yr.)	Percent of Total	Avg. Strength Factor (mg/l)[2]	Calculated TSS (lbs./yr.)[3]	Adjusted TSS (lbs./yr.)	Percent of Total
RESIDENTIAL CUSTOMERS									
Residential	152,238	175	166,199	150,514	**60.1%**	175	166,199	96,709	**66.4%**
Multi-Family	26,877	175	29,342	26,573	**10.6%**	175	29,342	17,074	**11.7%**
NON-RESIDENTIAL CUSTOMERS									
Low Strength	11,236	150	10,514	9,522	**3.8%**	150	10,514	6,118	**4.2%**
Domestic Strength	22,460	310	43,436	39,336	**15.7%**	120	16,814	9,784	**6.7%**
High Strength	6,481	670	27,087	24,531	**9.8%**	680	27,492	15,997	**11.0%**
Total:	**219,292**		**276,578**	**250,475**	**100.0%**		**250,361**	**145,681**	**100.0%**
	Target, from WWTP Data			*250,475*	*BOD (lbs./yr.)*			*145,681*	*TSS (lbs./yr.)*
				0.906	*BOD Adj. Factor*			*0.582*	*TSS Adj. Factor*

1. Estimated sewer flow based on average winter consumption for residential customers. Commercial customers are based on annual consumption.
2. Source: CA State Water Resources Control Board, *Revenue Program Guidelines (Appendix G) , G-21* .
3. Calculated BOD and TSS are from source file: *Rio Vista Influent Flow Analysis_CL_GF_NV_v2.xlsx* .

Figure 34 summarizes the development of the customer allocation factor.

Figure 34. Development of the Customer Allocation Factor

Customer Class	FY 2021/22 Rate Revenue[1]	Percentage of Accounts
RESIDENTIAL CUSTOMERS		
Residential	$ 1,821,197	**71.1%**
Multi-Family	223,583	**8.7%**
NON-RESIDENTIAL CUSTOMERS		
Low Strength	101,023	**3.9%**
Domestic Strength	251,610	**9.8%**
High Strength	164,501	**6.4%**
Total:	**$ 2,561,914**	**100.0%**

1. Source file: *UB DATA - FY 22-23 - JULY 22 TO JUNE 23.xlsx* .

CLASSIFICATION AND ALLOCATION OF COSTS

As previously noted, costs are classified into the following three categories: (1) flow-related costs, (2) strength-related costs (BOD and TSS), and (3) customer-related costs. The City's budgeted costs were allocated to these three categories which serve as the basis for calculating the fixed and variable charges. Tables in Appendix B. Northwest Sewer Rate Study Tables and Figures show how the City's expenses were classified and allocated to these cost-causation components.

Figure 35 summarizes the allocation of the net revenue requirements to each cost causation component for the proposed rates.

Figure 35. Allocation of Revenue Requirements by Customer Class

Allocation of FY 2025/26 Revenue Requirements by Customer Class						
Customer Class	Cost Classification Components				Cost-of-Service Net Revenue Req'ts.	% of COS Net Revenue Req'ts.
	Volume	Treatment		Customer Related		
		BOD	TSS			
Net Revenue Requirements [1,2]	***$ 2,582,499***	***$ 518,822***	***$ 510,826***	***$ 16,351***	***$ 3,628,499***	--
	71.2%	*14.3%*	*14.1%*	*0.5%*	*100.0%*	
RESIDENTIAL CUSTOMERS						
Residential	$ 1,792,831	$ 311,766	$ 339,106	$ 11,766	**$ 2,455,468**	*67.7%*
Multi-Family	316,522	55,042	59,869	3,373	**434,805**	*12.0%*
NON-RESIDENTIAL CUSTOMERS[2]						
Low Strength	$ 132,322	$ 19,723	$ 21,453	$ 168	**$ 173,666**	*4.8%*
Domestic Strength	264,505	81,479	34,306	900	**381,190**	*10.5%*
High Strength	76,320	50,812	56,093	145	**183,370**	*5.1%*
Total:	**$ 2,582,499**	**$ 518,822**	**$ 510,826**	**$ 16,351**	**$ 3,628,499**	***100%***

1. The revenue requirement for each customer class is determined by multiplying the revenue requirement from each cost classification by the allocation factors for each customer class.
2. Includes the net revenue requirements for commercial customers at the Northwest Plant.

4.4 Rate Design Analysis

During this rate study, NBS discussed with City staff various rate alternatives that collected revenue differently from fixed vs. variable charges. Ultimately, the rate alternative selected by City staff is one similar to the existing rate design. The reasons for selecting this alternative are (1) it maintains the existing rate design developed during the last study which utilize sewer strengths for various customers types based

on values in the State water Resources Control Board guidelines, (2) it provides continuity for sewer customers, and (3) it is easy to understand from a customer's perspective and easy to administrate from City staff's perspective.

FIXED CHARGES

The fixed charge recognizes that the sewer utility incurs fixed costs regardless of whether customers send any sewer into the City's collection system. There are three factors used to develop the fixed charge: 1) the number of dwelling units for residential customers, 2) the number of accounts for non-residential customers, and 3) the annual revenue requirement. The monthly fixed charge is calculated by taking 100% of total revenue requirements for residential customer classes and dividing by the number of accounts (for single-family) and by the number of dwelling units (for multi-family).

VARIABLE CHARGES

The variable charges are calculated by dividing 100% of the annual net revenue requirements for the non-residential strength-related customer classes by the annual consumption.

The residential and non-residential fixed and variable charge calculations are summarized in Figure 36.

Figure 36. Development of Fixed and Variable Charges

Customer Class	Number of Units[1]	Annualized Winter Consumption (HCF)[2]	Net Revenue Requirement	Estimated Fixed Revenue	Estimated Variable Revenue	Monthly Fixed Charge[3]	Volumetric Rate ($/HCF)[3]
RESIDENTIAL CUSTOMERS							
Residential	1,542	152,238	$ 2,455,468	$ 2,455,468	$ -	$132.70	*N/A*
Multi-Family	442	26,877	434,805	434,805	-	$81.98	*N/A*
NON-RESIDENTIAL CUSTOMERS							
Low Strength	22	11,236	$ 173,666	$ -	$ 173,666	*N/A*	$15.46
Domestic Strength	129	24,203	381,190	-	381,190	*N/A*	$15.75
High Strength	20	6,606	183,370	-	183,370	*N/A*	$27.76
Total	**2,155**	**221,160**	**$ 3,628,499**	**$ 2,890,273**	**$ 738,226**		

1. Number of accounts and EDUs provided by City Staff. Source file: *UB DATA - FY 22-23 - JULY 22 TO JUNE 23.xlsx*.
2. Estimated sewer flow based on average winter consumption for residential customers. Commercial customers are based on annual consumption.
3. Fixed and volumetric charges calculated based on the City's current rate structure.

4.5 Proposed Sewer Rates

The proposed sewer rates are similar to existing rates in terms of the rate design and rate methodology. **Figure 37** compares the current and proposed rates for FY 2025/26 through FY 2029/30 by customer class. While proposed rates in the first year (FY 2025/26) reflect the cost-of-service adjustments that often occur when they have not been updated in eight years, the projected rates for future years are strictly tied to annual rate increase in an "across-the-board" adjustment. More detailed tables on the development of the proposed rates are documented in Appendix C.

Figure 37. Current vs. Proposed Sewer Rates

Sewer Rate Schedule	*Current Rates*	*Description*	Proposed Monthly Sewer Rates				
			Year 1	Year 2	Year 3	Year 4	Year 5
			FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
Projected Increase in Rate Revenue:			*20.00%*	*15.00%*	*5.00%*	*5.00%*	*5.00%*
Fixed Service Charges							
RESIDENTIAL CUSTOMERS							
Residential	$110.92	Per Account	$132.70	$152.60	$160.23	$168.24	$176.65
Multi-Family	$84.37	Per Account	-	-	-	-	-
Duplex/SFR with ADU	N/A	Per Account	$163.95	$188.55	$197.98	$207.88	$218.27
Triplex	N/A	Per Account	$245.93	$282.82	$296.96	$311.81	$327.40
Quadplex	N/A	Per Account	$327.91	$377.09	$395.94	$415.74	$436.53
Charge for each additional unit above 4	N/A	Per Additional Dwelling Unit	$81.98	$94.27	$98.98	$103.93	$109.13
Volumetric Rate ($/hcf) [1]							
NON-RESIDENTIAL CUSTOMERS							
Low Strength	$9.77	Per HCF	$15.46	$17.77	$18.66	$19.59	$20.57
Domestic Strength	$12.11	Per HCF	$15.75	$18.11	$19.02	$19.97	$20.97
High Strength	$27.44	Per HCF	$27.76	$31.92	$33.52	$35.20	$36.96

1. One Unit is equal to one HCF (Hundred Cubic Feet) or 748 gallons.

4.6 Comparison of Current and Proposed Sewer Bills

The following figures compare monthly sewer bills under current and proposed rates for various customers over the 5-year rate period. These bill comparisons are calculated at typical levels of consumption. The last figure presents a comparison of residential sewer rates for similar communities.

Figure 38. Single-Family Residential Sewer Bill Comparison

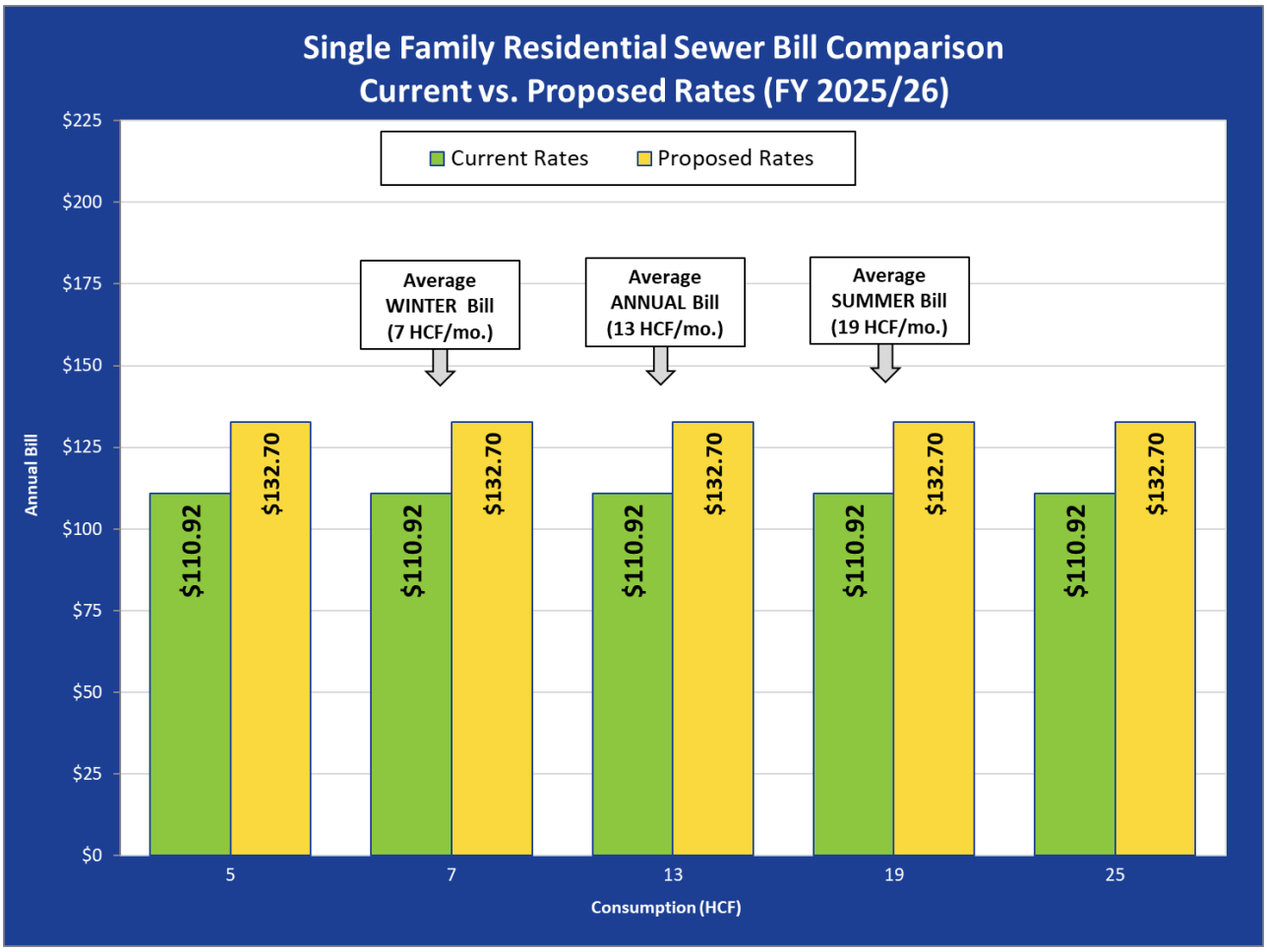


Figure 39. Multi-Family Residential Sewer Bill Comparison

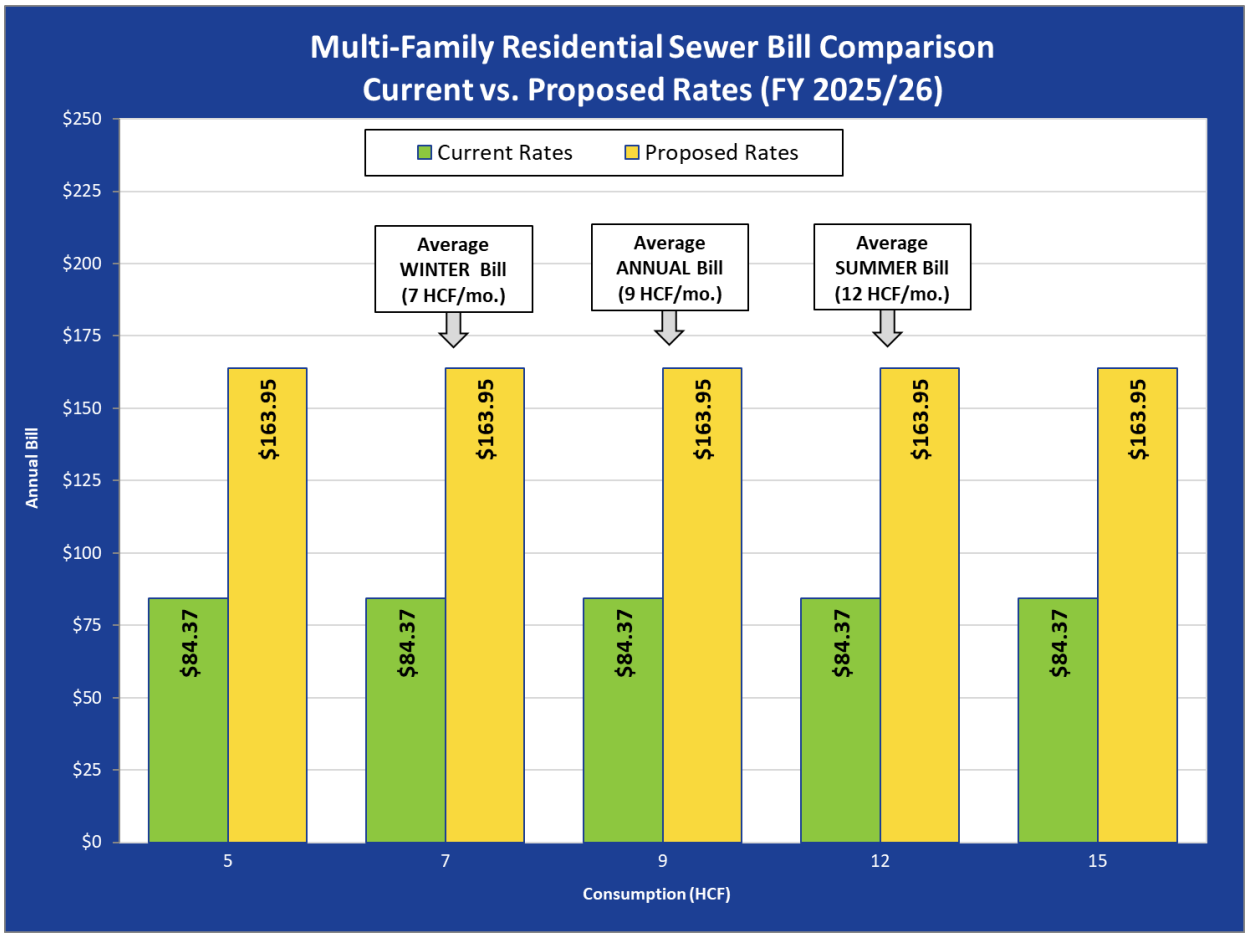


Figure 40. Non-Residential Low Strength Sewer Bill Comparison

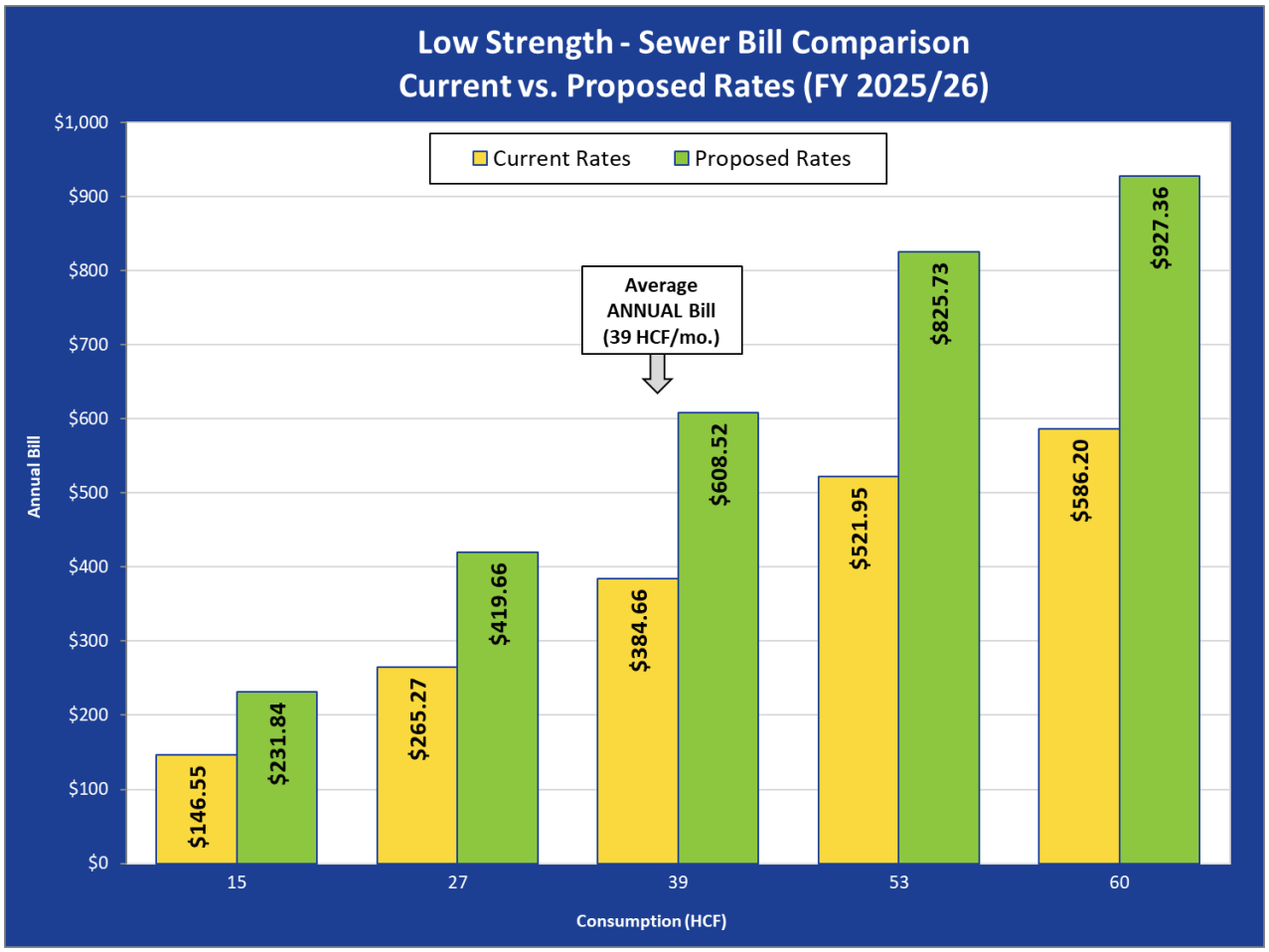


Figure 41. Non-Residential Domestic Strength Sewer Bill Comparison

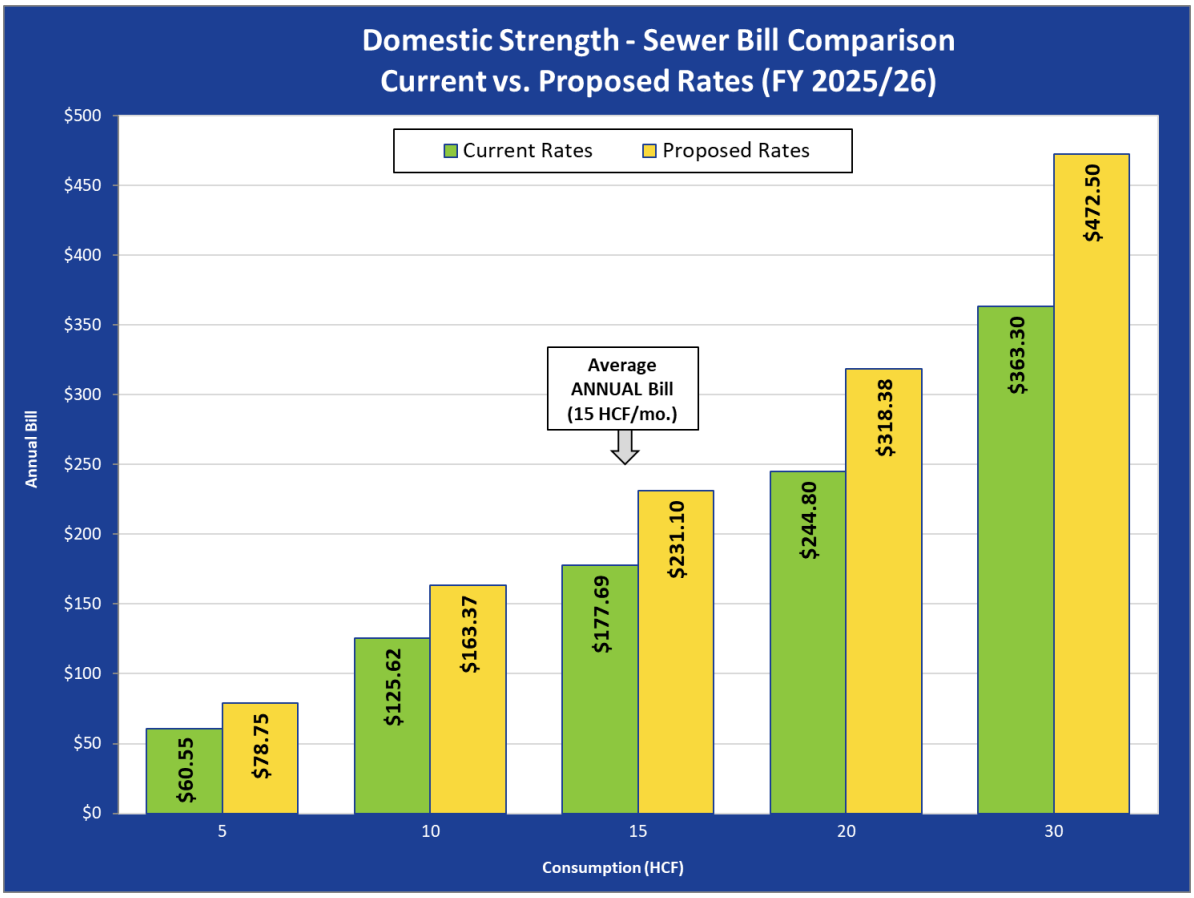


Figure 42. Non-Residential High Strength Sewer Bill Comparison

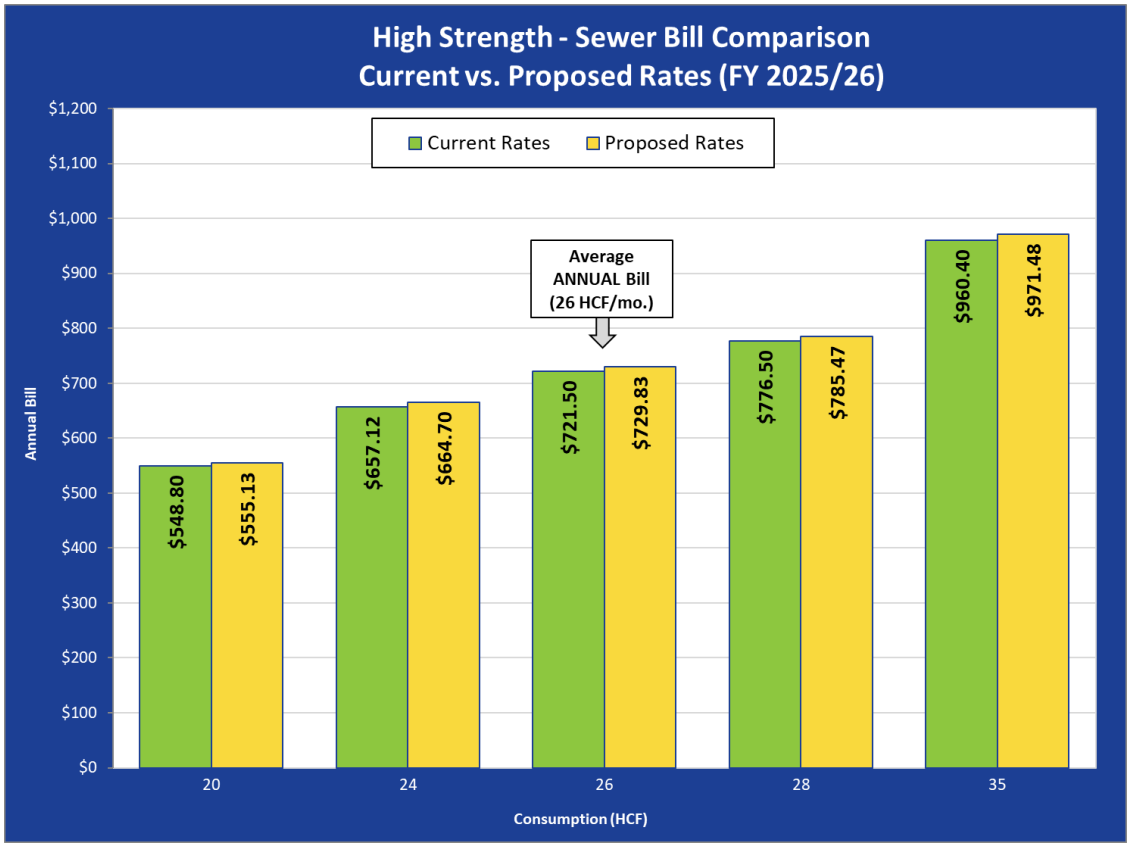
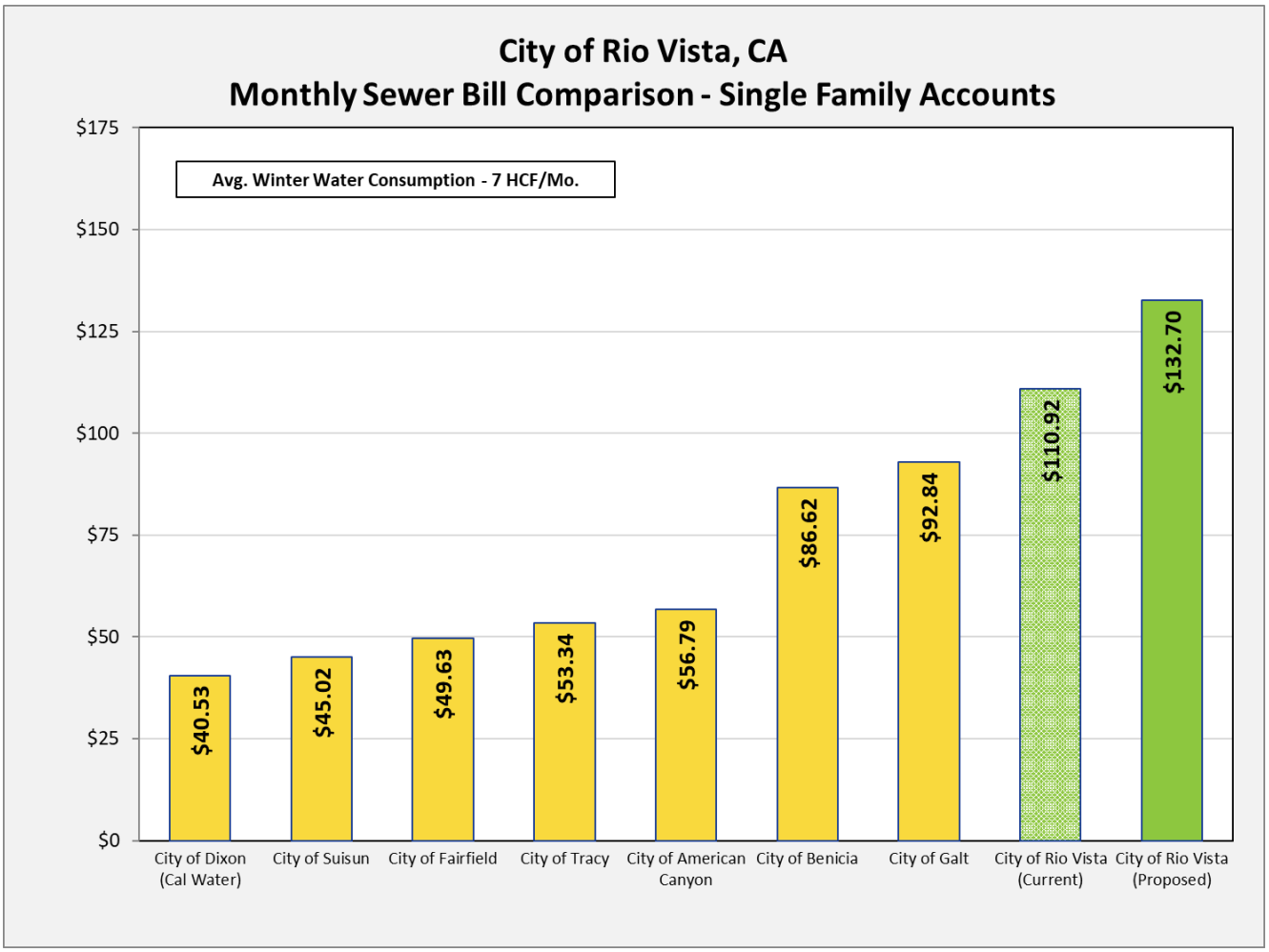


Figure 43. Single-Family Residential Regional Sewer Bill Comparison



5. Recommendations and Next Steps

5.1 Consultant Recommendations

NBS recommends the City take the following actions:

- **Approve and Accept this Study:** NBS recommends the City Council formally approve and adopt this Study and its recommendations and proceed with the next steps outlined below to implement the proposed rates. This will provide documentation of the rate study analyses and the basis for analyzing potential changes to future rates.
- **Implement Recommended Levels of Rate Increases and Proposed Rates:** Based on successfully meeting the Prop 218 procedural requirements, the City should proceed with implementing the 5-year schedule of proposed rates and rate increases previously shown in Figure 13, Figure 24 and Figure 37. This will help ensure the continued financial health of City's utilities.

5.2 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 Technical Appendices provide more detailed information on the analysis of the financial plan, revenue requirements, cost-of-service, and the rate design analyses that have been summarized in this report.

5.3 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 City's budgets, capital improvement costs, customer accounts and consumption, and information from City 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.

Technical Appendices

These Appendices contain:

- Appendix A: Water Rate Study Tables and Figures
- Appendix B: Northwest Sewer Rate Study Tables and Figures
- Appendix C: Beach Sewer Rate Study Tables and Figures

Appendix A. Water Rate Study Tables and Figures

TABLE 1 : FINANCIAL PLAN AND SUMMARY OF REVENUE REQUIREMENTS

RATE REVENUE REQUIREMENTS SUMMARY	Budget	5-Year Projected Rate Period					Projected				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Sources of Water Funds [1]											
Rate Revenue	$ 3,256,054	$ 3,323,914	$ 3,391,773	$ 3,459,633	$ 3,527,492	$ 3,595,352	$ 3,663,211	$ 3,731,071	$ 3,798,930	$ 3,866,790	$ 3,934,649
Non-Rate Revenue	31,646	32,306	32,965	33,625	34,284	34,944	35,603	36,263	36,922	37,582	38,241
Interest Earnings[2]	-	19,678	20,189	16,807	34,636	54,497	58,906	36,213	36,680	37,152	37,631
Transfer In	20,680	20,680	-	-	-	-	-	-	-	-	-
Total Sources of Funds:	**$ 3,308,380**	**$ 3,396,578**	**$ 3,444,928**	**$ 3,510,065**	**$ 3,596,412**	**$ 3,684,792**	**$ 3,757,720**	**$ 3,803,547**	**$ 3,872,532**	**$ 3,941,524**	**$ 4,010,522**
Uses of Water Funds [1]											
Operating Expenses:											
Water System	$ 2,927,668	$ 3,040,761	$ 3,159,006	$ 3,282,689	$ 3,412,113	$ 3,547,601	$ 3,689,498	$ 3,838,171	$ 3,994,014	$ 4,157,444	$ 4,328,910
Subtotal: Operating Expenses	$ 2,927,668	$ 3,040,761	$ 3,159,006	$ 3,282,689	$ 3,412,113	$ 3,547,601	$ 3,689,498	$ 3,838,171	$ 3,994,014	$ 4,157,444	$ 4,328,910
Other Expenditures:											
Existing Debt Service	$ 322,493	$ 321,361	$ 330,110	$ 323,559	$ 321,950	$ 330,223	$ 323,196	$ 321,111	$ 168,908	$ 9,532	$ -
New Debt Service	-	-	-	-	-	1,020,385	1,020,385	1,020,385	1,020,385	1,020,385	1,020,385
Rate-Funded Capital Expenses	537,274	858,477	1,530,193	-	-	335,248	4,267,944	4,482,706	6,740,686	16,184,084	7,278,113
Subtotal: Other Expenditures	$ 859,767	$ 1,179,838	$ 1,860,304	$ 323,559	$ 321,950	$ 1,685,856	$ 5,611,525	$ 5,824,202	$ 7,929,979	$ 17,214,001	$ 8,298,498
Total Uses of Water Funds:	**$ 3,787,435**	**$ 4,220,599**	**$ 5,019,310**	**$ 3,606,248**	**$ 3,734,064**	**$ 5,233,458**	**$ 9,301,023**	**$ 9,662,373**	**$ 11,923,993**	**$ 21,371,445**	**$ 12,627,408**
plus: Revenue from Rate Increases[3]	-	843,974	1,291,818	1,462,495	1,643,809	1,836,239	2,152,327	2,491,985	2,857,801	3,251,368	3,674,375
Annual Surplus/(Deficit)	**$ (479,055)**	**$ 19,954**	**$ (282,564)**	**$ 1,366,312**	**$ 1,506,158**	**$ 287,573**	**$ (3,390,975)**	**$ (3,366,841)**	**$ (5,193,660)**	**$(14,178,553)**	**$ (4,942,511)**
Net Revenue Req't. *(Total Uses less Non-Rate Revenue)*	**$ 3,735,109**	**$ 4,147,934**	**$ 4,966,156**	**$ 3,555,816**	**$ 3,665,144**	**$ 5,144,017**	**$ 9,206,514**	**$ 9,589,898**	**$ 11,850,391**	**$ 21,296,710**	**$ 12,551,535**
Total Rate Revenue After Rate Increases (Water)	**$ 3,256,054**	**$ 4,167,888**	**$ 4,683,591**	**$ 4,922,128**	**$ 5,171,302**	**$ 5,431,590**	**$ 5,815,538**	**$ 6,223,056**	**$ 6,656,731**	**$ 7,118,158**	**$ 7,609,024**
Projected Annual Rate Revenue Increase	***0.00%***	***25.00%***	***10.00%***	***3.00%***	***3.00%***	***3.00%***	***5.00%***	***5.00%***	***5.00%***	***5.00%***	***5.00%***
Cumulative Increase from Annual Revenue Increases	*0.00%*	*25.00%*	*10.00%*	*13.30%*	*16.70%*	*20.20%*	*26.21%*	*32.52%*	*39.15%*	*46.10%*	*53.41%*
Debt Coverage After Rate Increase	*N/A*	*3.73*	*4.78*	*5.22*	*5.68*	*1.46*	*1.65*	*1.83*	*2.30*	*2.95*	*3.29*

1. Revenue and expenses for FY 2021/22 through FY 2023/24 provided by the City. Revenues and expenses for all other years are escalated based on the forecasting assumptions in Table 8. Source file: *FINAL ADOPTED BUDGET - FY23-24 and revexpbyfund - 6.30.23.*
2. Interest earnings for FY 2021/22 through FY 2023/24 are from the City's Budget. For all other years, interest is calculated based on historical LAIF returns. Source file: *Rio Vista_Financial Data_FY 2023-2024* .
3. Revenue from rate increases assumes an implementation date of July 1, 2024 for new rates. For each year thereafter, the assumption is that new rates will be implemented on July 1st of each year.

3	*<-- Select Financial Plan Scenario Here*										
Financial Plan Alternatives		FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
1	Alternative 1 - 1% Annual Rate Increases	*0.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*
2	Alternative 2 - 3% Inflationary Rate Increases	*0.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*
3	Alternative 3 - Custom Rate Increases	*0.00%*	*25.00%*	*10.00%*	*3.00%*	*3.00%*	*3.00%*	*5.00%*	*5.00%*	*5.00%*	*5.00%*	*5.00%*
4	Alternative 4 - No Rate Increases	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

©2023 NBS Government Finance Group.

TABLE 2 : RESERVE FUND SUMMARY

SUMMARY OF CASH ACTIVITY	Budget	5-Year Projected Rate Period					Projected				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Unrestricted Reserve:											
Total Beginning Cash[1]	$ 2,005,701										
Operating Reserve											
Beginning Reserve Balance	$ 1,410,000	$ 930,945	$ 962,899	$ 692,746	$ 1,649,929	$ 1,727,268	$ 1,796,264	$ (1,571,557)	$ (4,938,398)	$(10,132,058)	$(24,310,611)
Plus: Net Cash Flow (After Rate Increases)	(479,055)	19,954	(282,564)	1,366,312	1,506,158	287,573	(3,390,975)	(3,366,841)	(5,193,660)	(14,178,553)	(4,942,511)
Plus: Transfer in of Debt Reserve Surplus	-	-	-	-	-	-	-	-	-	-	-
Plus: Interest Earnings	-	12,000	12,412	8,929	21,268	22,264	23,154	-	-	-	-
Less: Transfer out to Capital and Infrastructure Reserve	-	-	-	(418,057)	(1,450,087)	(240,841)	-	-	-	-	-
Ending Operating Reserve Balance	***$ 930,945***	***$ 962,899***	***$ 692,746***	***$ 1,649,929***	***$ 1,727,268***	***$ 1,796,264***	***$ (1,571,557)***	***$ (4,938,398)***	***$ (10,132,058)***	**********	**********
Target Ending Balance (180 days of O&M)[2]	*$ 1,464,000*	*$ 1,520,000*	*$ 1,580,000*	*$ 1,641,000*	*$ 1,706,000*	*$ 1,774,000*	*$ 1,845,000*	*$ 1,919,000*	*$ 1,997,000*	*$ 2,079,000*	*$ 2,164,000*
Capital Reserve											
Beginning Reserve Balance	$ 595,701	$ 595,701	$ 603,380	$ 611,157	$ 1,037,092	$ 2,500,548	$ 2,773,621	$ 2,809,372	$ 2,845,585	$ 2,882,265	$ 2,919,417
Plus: Grant Proceeds	-	-	-	-	-	-	-	-	-	-	-
Plus: Transfer of Operating Reserve Surplus	-	-	-	418,057	1,450,087	240,841	-	-	-	-	-
Plus: Interest Earnings	-	7,679	7,778	7,878	13,368	32,232	35,752	36,213	36,680	37,152	37,631
Less: Use of Reserves for Capital Projects	-	-	-	-	-	-	-	-	-	-	-
Plus/Less: Other Revenue/Expenses											
Ending Capital Reserve Balance	***$ 595,701***	***$ 603,380***	***$ 611,157***	***$ 1,037,092***	***$ 2,500,548***	***$ 2,773,621***	***$ 2,809,372***	***$ 2,845,585***	***$ 2,882,265***	***$ 2,919,417***	***$ 2,957,049***
Target Ending Balance (3% of net assets)[3]	*$ 1,270,700*	*$ 1,418,100*	*$ 1,668,700*	*$ 1,975,000*	*$ 2,281,300*	*$ 2,677,600*	*$ 2,983,600*	*$ 3,301,000*	*$ 3,630,300*	*$ 4,723,400*	*$ 5,044,200*
Ending Balance - Excl. Restricted Reserves	***$ 1,526,646***	***$ 1,566,278***	***$ 1,303,903***	***$ 2,687,022***	***$ 4,227,815***	***$ 4,569,885***	***$ 1,237,815***	***$ (2,092,813)***	***$ (7,249,793)***	***$(21,391,194)***	***$(26,296,073)***
Min. Target Ending Balance -Excl. Restricted Reserves	***$ 2,734,700***	***$ 2,938,100***	***$ 3,248,700***	***$ 3,616,000***	***$ 3,987,300***	***$ 4,451,600***	***$ 4,828,600***	***$ 5,220,000***	***$ 5,627,300***	***$ 6,802,400***	***$ 7,208,200***
Ending Surplus/(Deficit) Compared to Reserve Targets	***$ (1,208,054)***	***$ (1,371,822)***	***$ (1,944,797)***	***$ (928,978)***	***$ 240,515***	***$ 118,285***	***$ (3,590,785)***	***$ (7,312,813)***	***$ (12,877,093)***	**********	**********
Annual Interest Earnings Rate[4]	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*

1. Beginning cash balances provided by City staff for Fund 80 Water System and Fund 81 Water Construction. Source file: *NBS - CASH BALANCE 8.25.23* .
2. The target ending balance is set equal to 90 days of O&M expenses.
3. The target ending balance is set equal to 3% of net capital assets. See *Exhibit 2 (CIP)* for details.
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* .

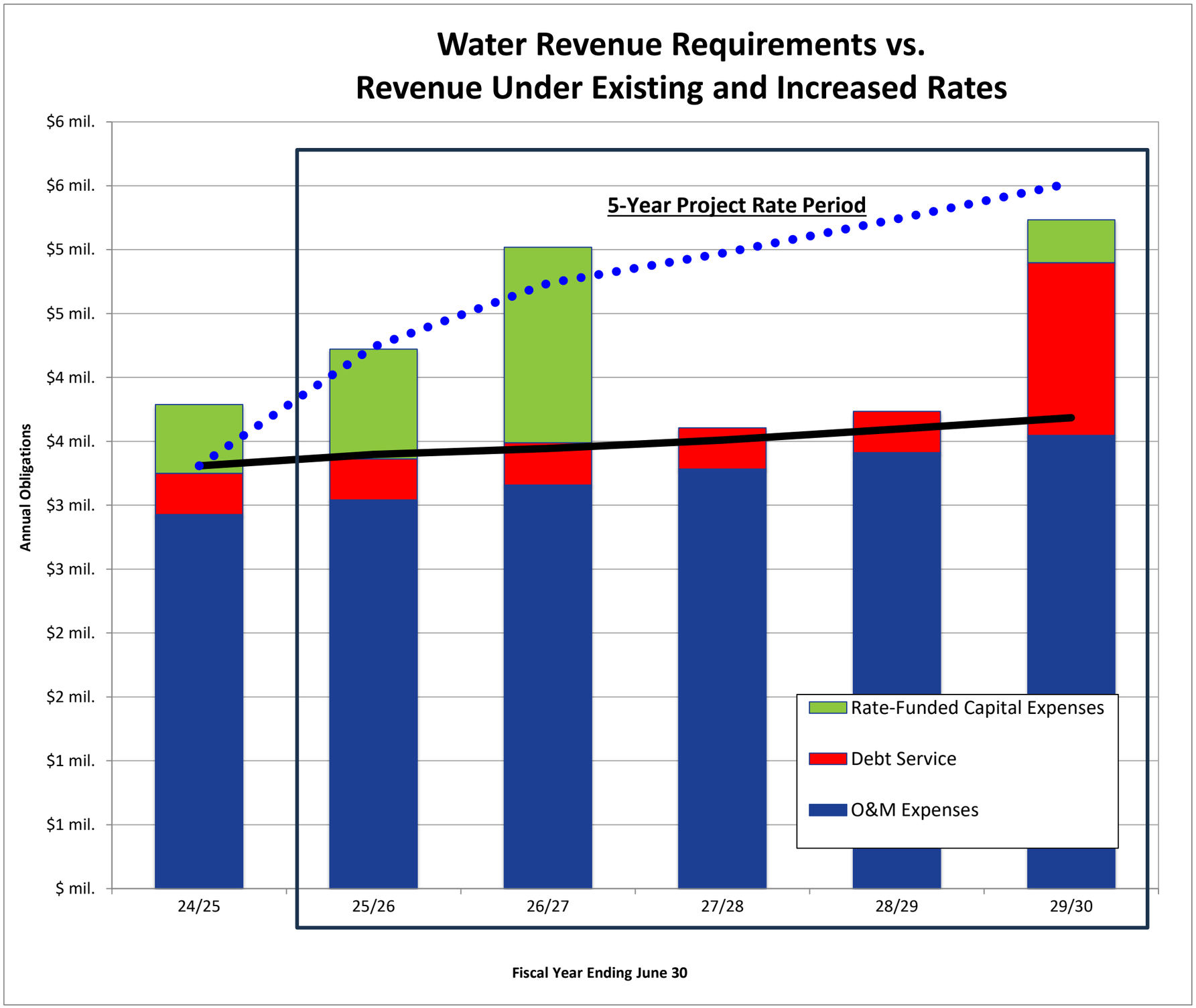
TABLE 3 : RESERVE FUND SUMMARY, cont.

SUMMARY OF CASH ACTIVITY	Budget	5-Year Projected Rate Period					Projected				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Restricted Reserve:											
Capacity Fee Reserve											
Beginning Reserve Balance	$ -	$ -	$ -	$ 1,813,531	$ 3,159,085	$ 4,174,801	$ 4,958,684	$ 5,801,358	$ 6,623,473	$ 9,456,897	$ 8,980,366
Plus: Interest Earnings	-	-	-	23,376	40,721	53,813	63,917	74,780	85,377	121,899	115,757
Plus: Capacity Fee Revenue[1]	-	-	2,590,758	2,676,072	2,764,195	2,855,220	2,949,243	3,046,361	3,146,678	3,250,298	3,357,331
Less: Use of Reserves for Capital Projects	-	-	(777,227)	(1,353,894)	(1,789,200)	(2,125,150)	(2,170,486)	(2,299,025)	(398,631)	(3,848,728)	(430,413)
Ending Connection Fee Fund Balance	***$ -***	***$ -***	***$ 1,813,531***	***$ 3,159,085***	***$ 4,174,801***	***$ 4,958,684***	***$ 5,801,358***	***$ 6,623,473***	***$ 9,456,897***	***$ 8,980,366***	***$ 12,023,040***
Target Ending Balance (3% of net assets)[2]	*$ 1,270,700*	*$ 1,418,100*	*$ 1,668,700*	*$ 1,975,000*	*$ 2,281,300*	*$ 2,677,600*	*$ 2,983,600*	*$ 3,301,000*	*$ 3,630,300*	*$ 4,723,400*	*$ 5,044,200*
Annual Interest Earnings Rate[3]	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*

1. Capacity fee revenue is based on the preliminary results of the 2024 Capacity Fee Study and the future connection projections provided by City staff.
2. The target ending balance is set equal to 3% of net capital assets. See *Exhibit 2 (CIP)* for details.
3. Historical interest earning rates are per the average annual yields for funds invested in LAIF (2017-2021). The source is the California State Treasurer's website: *https://www.treasurer.ca.gov/pmia-laif/historical/annual.asp* .

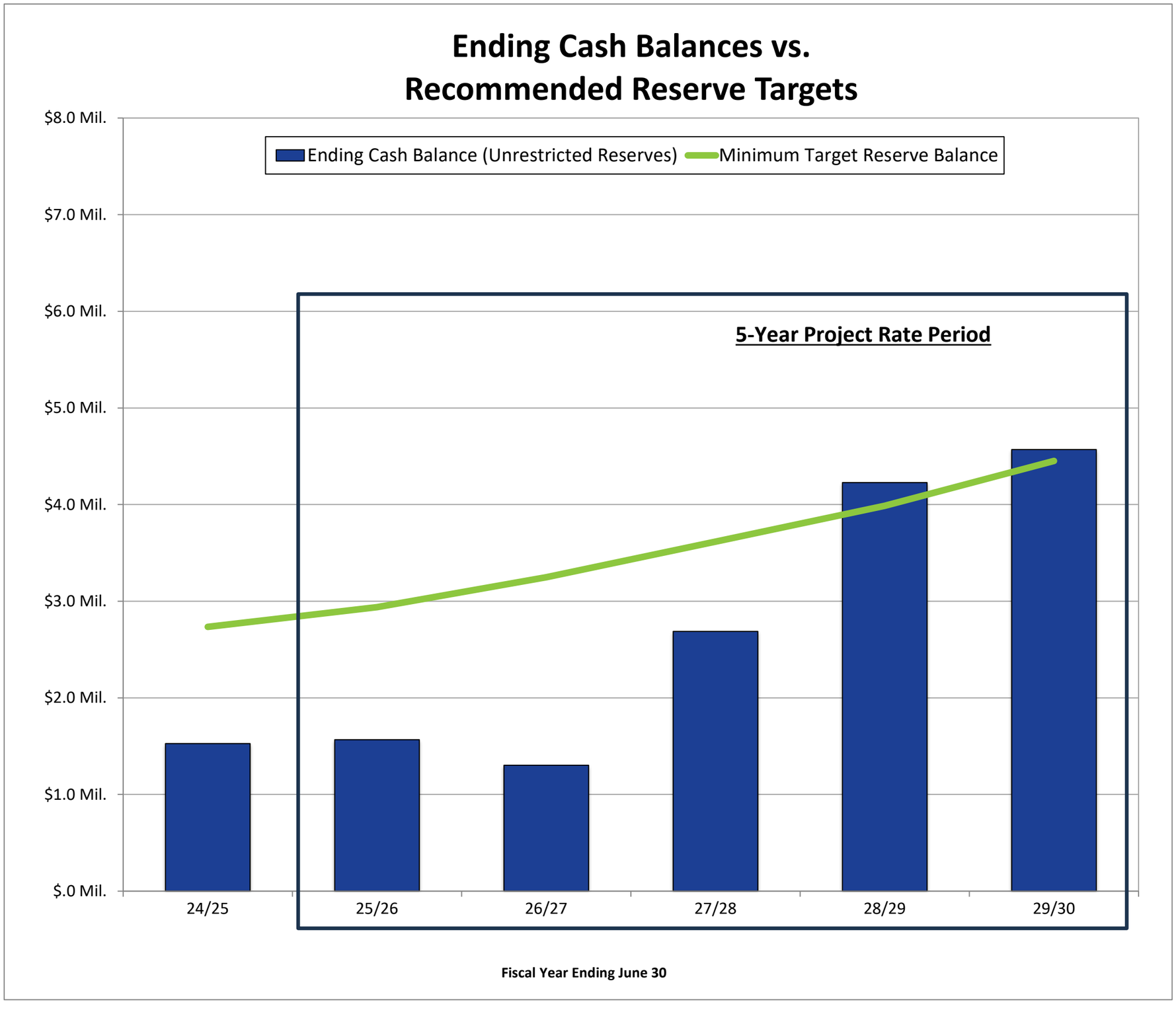
©2023 NBS Government Finance Group.

CHART 1



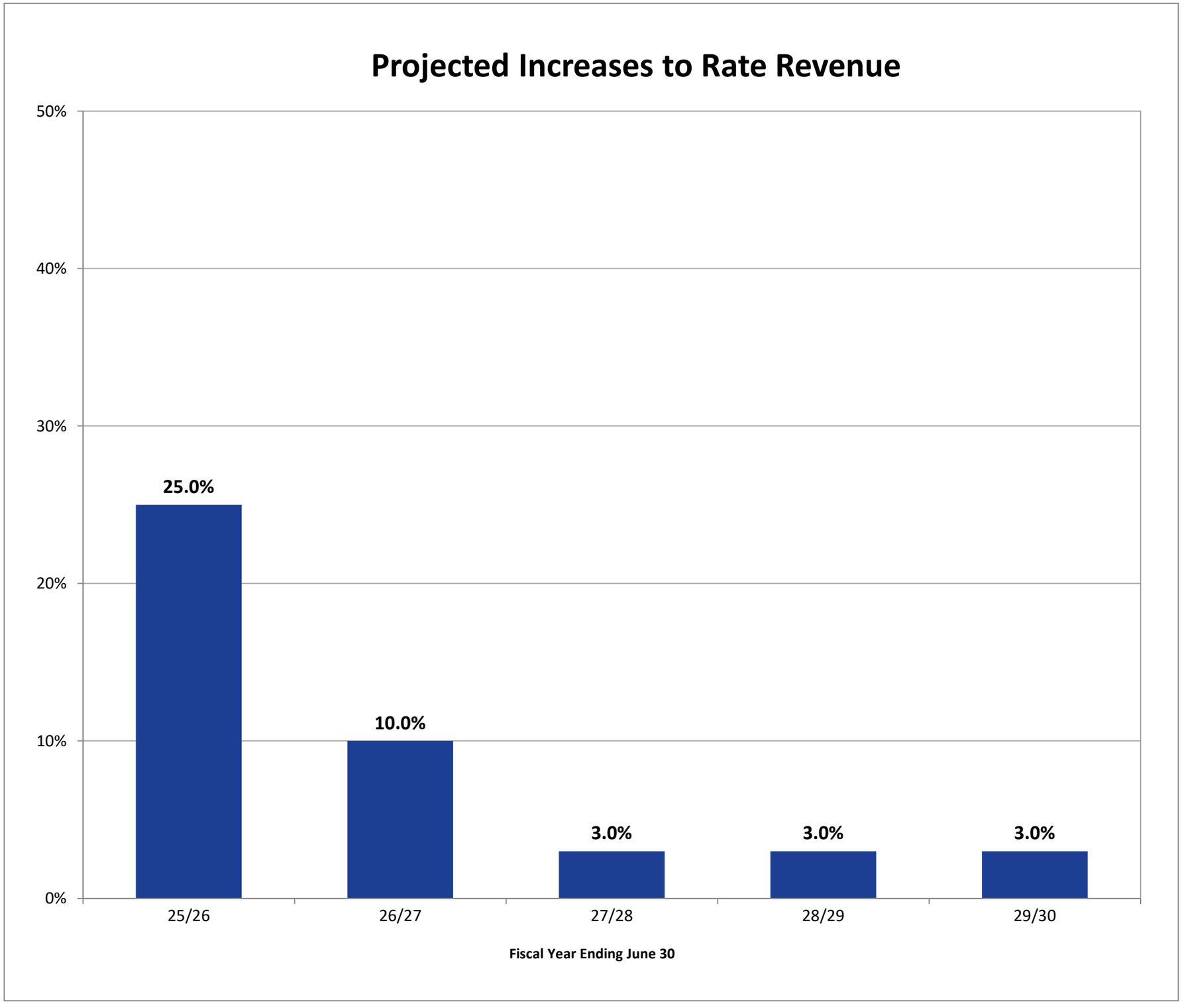
©2023 NBS Government Finance Group.

CHART 2



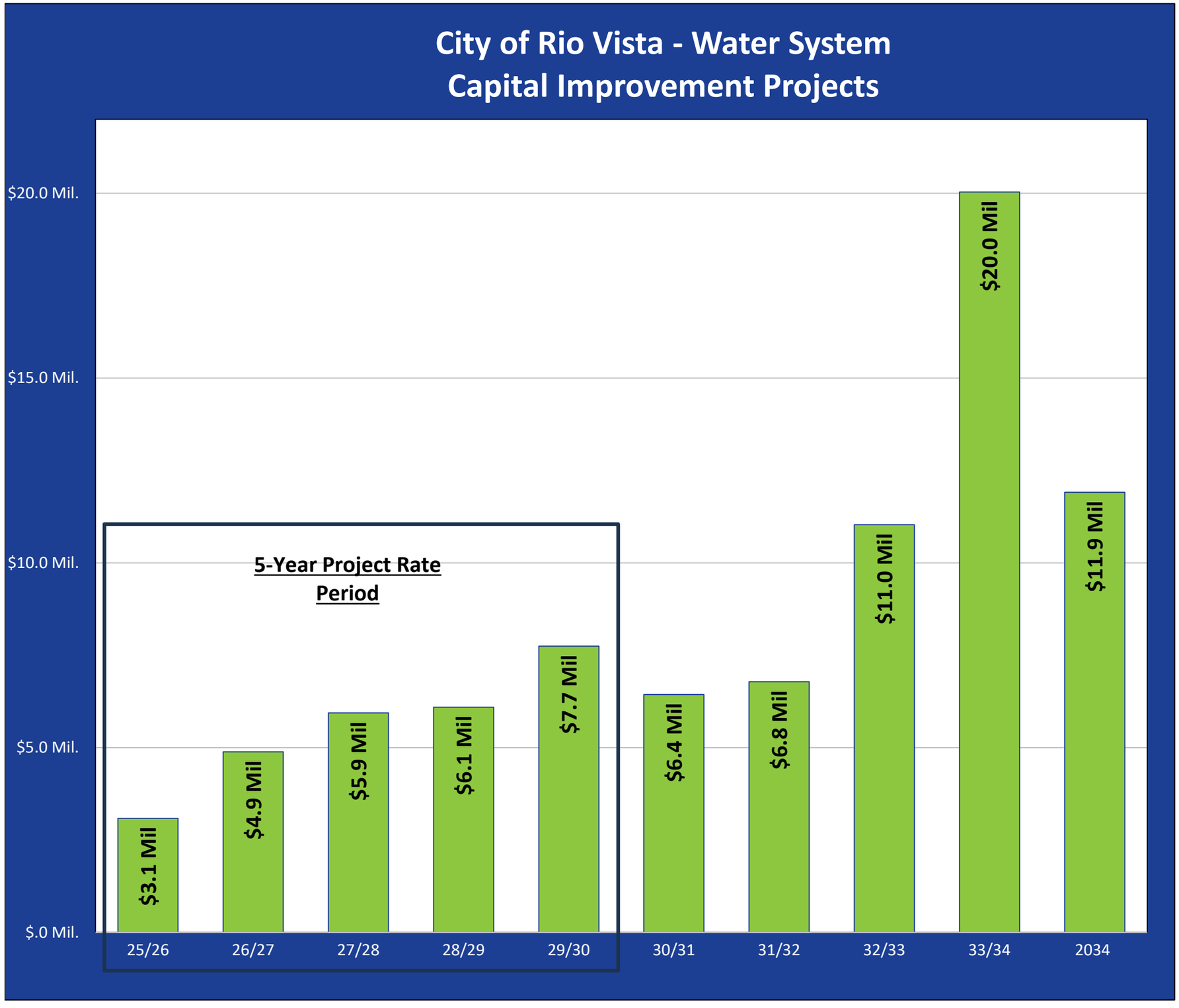
©2023 NBS Government Finance Group.

CHART 3



©2023 NBS Government Finance Group.

CHART 4



©2023 NBS Government Finance Group.

TABLE 4 : REVENUE FORECAST [1]

DESCRIPTION	Basis	Budget	5-Year Projected Rate Period					Projected				
		FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Operating Revenue												
Forfeitures/Penalties	1	$ 30,625	$ 31,263	$ 31,902	$ 32,540	$ 33,178	$ 33,817	$ 34,455	$ 35,093	$ 35,731	$ 36,370	$ 37,008
Asset Sales	1	-	-	-	-	-	-	-	-	-	-	-
Grant Revenues	9	-	-	-	-	-	-	-	-	-	-	-
Utility Service Fees	1	3,256,054	3,323,914	3,391,773	3,459,633	3,527,492	3,595,352	3,663,211	3,731,071	3,798,930	3,866,790	3,934,649
Interim Water Fees - Construction	1	-	-	-	-	-	-	-	-	-	-	-
Water Reconnect Fee	1	1,021	1,042	1,063	1,085	1,106	1,127	1,148	1,170	1,191	1,212	1,234
Miscellaneous Revenue	1	-	-	-	-	-	-	-	-	-	-	-
Non-Operating Revenue												
Interest Income	See FP	-	-	-	-	-	-	-	-	-	-	-
Transfer In	9	20,680	20,680	-	-	-	-	-	-	-	-	-
Capacity Fee Revenue												
Fee Revenue[2]	1	-	-	2,590,758	2,676,072	2,764,195	2,855,220	2,949,243	3,046,361	3,146,678	3,250,298	3,357,331
Interest Income	See FP	-	-	-	-	-	-	-	-	-	-	-
TOTAL: REVENUE		**$ 3,308,380**	**$ 3,376,899**	**$ 3,424,738**	**$ 3,493,257**	**$ 3,561,776**	**$ 3,630,296**	**$ 3,698,815**	**$ 3,767,334**	**$ 3,835,853**	**$ 3,904,372**	**$ 3,972,891**

TABLE 5 : REVENUE SUMMARY

DESCRIPTION	Basis	Budget	5-Year Projected Rate Period					Projected				
		FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Rate Revenue		$ 3,256,054	$ 3,323,914	$ 3,391,773	$ 3,459,633	$ 3,527,492	$ 3,595,352	$ 3,663,211	$ 3,731,071	$ 3,798,930	$ 3,866,790	$ 3,934,649
Non-Rate Revenue		31,646	32,306	32,965	33,625	34,284	34,944	35,603	36,263	36,922	37,582	38,241
Interest Income	See FP	-	-	-	-	-	-	-	-	-	-	-
Transfer In		20,680	20,680	-	-	-	-	-	-	-	-	-
TOTAL: REVENUE		**$ 3,308,380**	**$ 3,376,899**	**$ 3,424,738**	**$ 3,493,257**	**$ 3,561,776**	**$ 3,630,296**	**$ 3,698,815**	**$ 3,767,334**	**$ 3,835,853**	**$ 3,904,372**	**$ 3,972,891**

©2023 NBS Government Finance Group.

TABLE 6 : OPERATING EXPENSE FORECAST[1]

DESCRIPTION	Basis	Budget	5-Year Projected Rate Period					Projected				
		FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
FUND 80 WATER SYSTEM												
Salaries & Wages	3	$ 786,533	$ 810,286	$ 834,757	$ 859,967	$ 885,938	$ 912,693	$ 940,256	$ 968,652	$ 997,905	$ 1,028,042	$ 1,059,089
Overtime	3	24,364	25,100	25,858	26,639	27,443	28,272	29,126	30,006	30,912	31,845	32,807
Dental Insurance	3	12,853	13,241	13,641	14,053	14,477	14,914	15,365	15,829	16,307	16,799	17,307
Health Insurance	3	123,960	127,703	131,560	135,533	139,626	143,843	148,187	152,662	157,273	162,022	166,915
Life Insurance	3	1,978	2,038	2,099	2,163	2,228	2,295	2,365	2,436	2,510	2,585	2,663
Employee Assistance Program	3	212	219	225	232	239	246	254	261	269	277	286
Vision Insurance	3	1,821	1,876	1,933	1,991	2,052	2,114	2,177	2,243	2,311	2,381	2,453
PERS Retirement	3	165,158	170,145	175,284	180,577	186,031	191,649	197,437	203,399	209,542	215,870	222,389
Social Security/FICA	3	58,159	59,915	61,725	63,589	65,509	67,488	69,526	71,625	73,788	76,017	78,313
Worker's Comp. Insurance	3	41,358	42,607	43,894	45,220	46,585	47,992	49,442	50,935	52,473	54,058	55,690
Boot/Uniform/Equipment Allowance	3	1,829	1,884	1,941	1,999	2,060	2,122	2,186	2,252	2,320	2,390	2,462
State Unemployment Insurance	3	3,400	3,502	3,608	3,717	3,829	3,945	4,064	4,187	4,313	4,444	4,578
Accounting & Auditing	2	6,520	6,745	6,978	7,219	7,468	7,726	7,992	8,268	8,553	8,848	9,153
Legal Fees	2	5,173	5,351	5,536	5,727	5,924	6,128	6,340	6,559	6,785	7,019	7,261
Printing	2	6,207	6,421	6,643	6,872	7,109	7,354	7,608	7,870	8,142	8,423	8,713
Chemicals & Gases	4	158,171	166,786	175,871	185,451	195,553	206,204	217,437	229,280	241,769	254,939	268,825
Conferences & Meetings	2	25,863	26,755	27,678	28,633	29,621	30,642	31,700	32,793	33,925	35,095	36,306
Contractual Services	2	310,350	321,057	332,134	343,592	355,446	367,709	380,395	393,519	407,095	421,140	435,669
Equipment Rental	2	20,690	21,404	22,142	22,906	23,696	24,514	25,360	26,235	27,140	28,076	29,045
Equipment (Non-Capital)	2	5,173	5,351	5,536	5,727	5,924	6,128	6,340	6,559	6,785	7,019	7,261
Fuel & Mileage	7	32,123	34,397	36,832	39,439	42,231	45,220	48,421	51,848	55,518	59,448	63,656
Flood & Fire Insurance	2	86,707	89,698	92,793	95,994	99,306	102,732	106,276	109,943	113,736	117,659	121,719
Liability Insurance	2	101,619	105,125	108,752	112,504	116,385	120,400	124,554	128,851	133,296	137,895	142,653
Finance Charge	2	517	535	554	573	592	613	634	656	678	702	726
Laboratory Testing	2	51,725	53,510	55,356	57,265	59,241	61,285	63,399	65,586	67,849	70,190	72,612
Legal Notices & Publications	2	6,207	6,421	6,643	6,872	7,109	7,354	7,608	7,870	8,142	8,423	8,713
M & R Machinery & Equipment	2	41,380	42,808	44,284	45,812	47,393	49,028	50,719	52,469	54,279	56,152	58,089
M & R Real Property	2	62,070	64,211	66,427	68,718	71,089	73,542	76,079	78,704	81,419	84,228	87,134
M & R Vehicles	2	6,207	6,421	6,643	6,872	7,109	7,354	7,608	7,870	8,142	8,423	8,713
Membership Dues	2	10,655	11,023	11,403	11,797	12,204	12,625	13,060	13,511	13,977	14,459	14,958
Misc. Services & Supplies	2	31,035	32,106	33,213	34,359	35,545	36,771	38,039	39,352	40,709	42,114	43,567
Computer Hardware	2	20,690	21,404	22,142	22,906	23,696	24,514	25,360	26,235	27,140	28,076	29,045
Office Supplies & Materials	2	12,414	12,842	13,285	13,744	14,218	14,708	15,216	15,741	16,284	16,846	17,427
Computer Software	2	25,863	26,755	27,678	28,633	29,621	30,642	31,700	32,793	33,925	35,095	36,306
Permits & licenses	2	62,070	64,211	66,427	68,718	71,089	73,542	76,079	78,704	81,419	84,228	87,134
Postage	2	3,621	3,746	3,875	4,009	4,147	4,290	4,438	4,591	4,749	4,913	5,083
Safety Equipment	2	3,621	3,746	3,875	4,009	4,147	4,290	4,438	4,591	4,749	4,913	5,083
Bad Debt	9	-	-	-	-	-	-	-	-	-	-	-
Telephone	2	12,414	12,842	13,285	13,744	14,218	14,708	15,216	15,741	16,284	16,846	17,427
Utilities - PG&E	6	281,712	305,236	330,725	358,343	388,266	420,689	455,819	493,882	535,124	579,811	628,228
Emergency Repairs	2	134,485	139,125	143,925	148,890	154,027	159,341	164,838	170,525	176,408	182,494	188,790
SUBTOTAL: WATER SYSTEM EXPENSES		**$ 2,753,111**	**$ 2,860,971**	**$ 2,973,800**	**$ 3,091,877**	**$ 3,215,499**	**$ 3,344,981**	**$ 3,480,662**	**$ 3,622,903**	**$ 3,772,087**	**$ 3,928,626**	**$ 4,092,960**

©2023 NBS Government Finance Group.

TABLE 7 : OPERATING EXPENSE FORECAST, cont.[1]

DESCRIPTION	Basis	Budget	5-Year Projected Rate Period					Projected				
		FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Miscellaneous Expense	2	2,069	2,140	2,214	2,291	2,370	2,451	2,536	2,623	2,714	2,808	2,904
Capital Outlay - Mach & Equip	8	-	-	-	-	-	-	-	-	-	-	-
Capital Outlay - Vehicles	8	147,488	152,650	157,992	163,522	169,245	175,169	181,300	187,645	194,213	201,010	208,046
Transfer Out	9	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
SUBTOTAL: WATER SYSTEM EXPENSES		**$ 2,927,668**	**$ 3,040,761**	**$ 3,159,006**	**$ 3,282,689**	**$ 3,412,113**	**$ 3,547,601**	**$ 3,689,498**	**$ 3,838,171**	**$ 3,994,014**	**$ 4,157,444**	**$ 4,328,910**
GRAND TOTAL: WATER SYSTEM EXPENSES		**$ 2,927,668**	**$ 3,040,761**	**$ 3,159,006**	**$ 3,282,689**	**$ 3,412,113**	**$ 3,547,601**	**$ 3,689,498**	**$ 3,838,171**	**$ 3,994,014**	**$ 4,157,444**	**$ 4,328,910**

DESCRIPTION	Basis	Budget	5-Year Projected Rate Period					Projected				
		FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Salary Adjustments	3	-	-	-	-	-	-	-	-	-	-	-
TOTAL: ADJUSTMENTS		**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

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

DESCRIPTION	Basis	Budget	5-Year Projected Rate Period					Projected				
		FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
CAPITAL MAINTENANCE PROJECTS												
Project 6 - Required State & Federal Reporting												
Annual Lead Service Reporting To State	8	-	20,000	22,000	24,000	26,000	28,000	30,000	32,000	34,000	36,000	38,000
Annual Water Supply And Demand Assessment	8	-	10,000	11,000	12,000	13,000	14,000	15,000	16,000	17,000	18,000	19,000
Annual Water Loss Audit & Water Loss Control Performance Standards	8	-	15,000	17,000	19,000	21,000	23,000	25,000	27,000	29,000	31,000	33,000
Annual Urban Water Use Objectives (Jan 2024)	8	-	-	17,000	19,000	21,000	23,000	25,000	27,000	29,000	31,000	33,000
Monthly Drought And Conservation Reporting (Due Quarterly)	8	-	20,000	22,000	24,000	26,000	28,000	30,000	32,000	34,000	36,000	38,000
EPA Initial Lead Service Inventory (Oct 2024)	8	-	-	30,000	-	-	-	-	-	-	-	-
Urban Water Management Plan (July 2026)	8	-	-	-	-	30,000	-	40,000	-	50,000	-	60,000
EPA Risk And Resilience Assessment (June 2026) And Emergency Response Plan (Dec 2026)	8	-	-	-	-	10,000	-	14,000	-	18,000	-	22,000
Project 7 - Public Works Staff Support												
Engineering Support For Public Works	8	-	20,000	22,000	24,000	26,000	28,000	30,000	32,000	34,000	36,000	38,000
Project 8 - Hydraulic Modeling												
Water System Evaluation Update	8	-	100,000	-	-	-	-	-	-	-	-	-
Engineering Support For Hydraulic Modeling	8	-	20,000	22,000	24,000	26,000	28,000	30,000	32,000	34,000	36,000	38,000
Project 9 - Hydraulic Modeling Support												
Annual Hydraulic Modeling On-Call Support For Improvement Projects	8	-	10,000	11,000	12,000	13,000	14,000	15,000	16,000	17,000	18,000	19,000
Project 10 - SCADA												
SCADA	8	-	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
TOTAL: CAPITAL MAINTENANCE PROJECTS		**$ -**	**$ 265,000**	**$ 224,000**	**$ 208,000**	**$ 262,000**	**$ 236,000**	**$ 304,000**	**$ 264,000**	**$ 346,000**	**$ 292,000**	**$ 388,000**

GRAND TOTAL: WATER EXPENSES	**$ 2,927,668**	**$ 3,305,761**	**$ 3,383,006**	**$ 3,490,689**	**$ 3,674,113**	**$ 3,783,601**	**$ 3,993,498**	**$ 4,102,171**	**$ 4,340,014**	**$ 4,449,444**	**$ 4,716,910**

©2023 NBS Government Finance Group.

TABLE 10 : FORECASTING ASSUMPTIONS

INFLATION FACTORS[3]	Basis	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Customer Growth[4]	1	2.08%	2.08%	2.04%	2.00%	1.96%	1.92%	1.89%	1.85%	1.82%	1.79%	1.75%
General Cost Inflation[5]	2	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%
Labor Cost Inflation[6]	3	3.02%	3.02%	3.02%	3.02%	3.02%	3.02%	3.02%	3.02%	3.02%	3.02%	3.02%
Chemicals[7]	4	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%
Energy[8]	5	10.84%	10.84%	10.84%	10.84%	10.84%	10.84%	10.84%	10.84%	10.84%	10.84%	10.84%
Electricty[9]	6	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%
Fuel & Utilities[10]	7	7.08%	7.08%	7.08%	7.08%	7.08%	7.08%	7.08%	7.08%	7.08%	7.08%	7.08%
Construction Cost Inflation[11]	8	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
No Escalation	9	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

1. Revenue and expenses for FY 2021/22 through FY 2023/24 provided by the City. Revenues and expenses for all other years are escalated based on the forecasting assumptions in Table 8. Source file: *FINAL ADOPTED BUDGET - FY23-24 and* revexpbyfund - 6.30.23.
2. Capacity fee revenue is based on the preliminary results of the 2024 Capacity Fee Study and the future connection projections provided by City staff.
3. Expenses are inflated each year by the following annual inflation factor categories.
4. Customer growth is based on the population projections in the City's Water System Evaluation Plan. Source file: *20190214_Final Draft* , Page 7, Section 2.1.
5. General cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers in the San Francisco-Oakland-Hayward, CA area.
6. Labor cost inflation is based on the 10-year average annual change in the Quarterly Census of Employment and Wages for San Francisco County, CA.
7. Chemical cost inflation is based on the 5-year average annual change in the Producer Price Index for Chemical Manufacturing.
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 Francisco-Oakland-Hayward, CA area.
9. Electricity cost inflation is based on the 5-year average change in the Consumer Price Index for San Francisco County.
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.
11. 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*).

©2023 NBS Government Finance Group.

TABLE 11 : CAPITAL FUNDING SUMMARY

CAPITAL FUNDING FORECAST	Budget	5-Year Projected Rate Period					Projected				
Funding Sources:	**FY 2024/25**	**FY 2025/26**	**FY 2026/27**	**FY 2027/28**	**FY 2028/29**	**FY 2029/30**	**FY 2030/31**	**FY 2031/32**	**FY 2032/33**	**FY 2033/34**	**FY 2034/35**
Grants	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Use of Capacity Fee Reserves	-	-	777,227	1,353,894	1,789,200	2,125,150	2,170,486	2,299,025	398,631	3,848,728	430,413
SRF Loan Funding	-	2,232,726	2,578,228	4,911,199	4,991,497	5,286,351	-	-	-	-	-
Use of New Revenue Bond Proceeds	-	-	-	-	-	-	-	-	-	-	-
Use of Capital Rehabilitation and Replacement Reserve	-	-	-	-	-	-	-	-	-	-	-
Rate Revenue	537,274	858,477	1,530,193	-	-	335,248	4,267,944	4,482,706	6,740,686	16,184,084	7,278,113
Total Sources of Capital Funds	**$ 537,274**	**$ 3,091,203**	**$ 4,885,649**	**$ 6,265,093**	**$ 6,780,697**	**$ 7,746,749**	**$ 6,438,429**	**$ 6,781,731**	**$ 7,139,317**	**$ 20,032,812**	**$ 7,708,526**
Uses of Capital Funds:											
Total Project Costs	$ 537,274	$ 3,091,203	$ 4,885,649	$ 5,940,576	$ 6,091,246	$ 7,746,749	$ 6,438,429	$ 6,781,731	$ 7,139,317	$ 20,032,812	$ 7,708,526
Capital Funding Surplus (Deficiency)	***$ -***	***$ -***	***$ -***	***$ 324,516***	***$ 689,451***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***

SRF Loan Funding [1]	***$ -***	***$ 20,000,000***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***
New Revenue Bond Proceeds	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***

1. Funds from the SRF Loan will be used to pay for the development of Wells 17 and 18 with arsenic and lead treatment currently estimated at $16.7 million (See Projects 3-5 in Table 13). This estimate does not include the cost for lead treatment.

TABLE 12 : CAPITAL IMPROVEMENT PROGRAM FUNDING OPTIONS

Policy Choice		FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
1	Alternative 1 - Full Funding of CIP	$ 537,274	$ 3,091,203	$ 4,885,649	$ 5,940,576	$ 6,091,246	$ 7,746,749	$ 6,438,429	$ 6,781,731	$ 7,139,317	$ 20,032,812	$ 7,708,526
2	Alternative 2 - 75% Funding of CIP	$ 402,956	$ 2,318,402	$ 3,664,237	$ 4,455,432	$ 4,568,434	$ 5,810,061	$ 4,828,822	$ 5,086,298	$ 5,354,488	$ 15,024,609	$ 5,781,394
3	Alternative 3 - 50% Funding of CIP	$ 268,637	$ 1,545,602	$ 2,442,824	$ 2,970,288	$ 3,045,623	$ 3,873,374	$ 3,219,215	$ 3,390,865	$ 3,569,658	$ 10,016,406	$ 3,854,263

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

Capital Improvement Program Funding Choice	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Effective Annual Funding Amount	$ 537,274	$ 3,091,203	$ 4,885,649	$ 5,940,576	$ 6,091,246	$ 7,746,749	$ 6,438,429	$ 6,781,731	$ 7,139,317	$ 20,032,812	$ 7,708,526

©2023 NBS Government Finance Group.

CITY OF RIO VISTA
WATER RATE STUDY
Capital Improvement Plan Expenditures

CAPITAL IMPROVEMENT PROGRAM

TABLE 13 : CAPITAL IMPROVEMENT PROGRAM COSTS (*in Current-Year Dollars*)[1]

Project #	Project Description[2]	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Capital Outlay												
	Capital Construction	$ 135,914	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	CIP - 2020 Water & Sewer CIP Project	-	-	-	-	-	-	-	-	-	-	-
	CIP - 2021 Water & Sewer CIP Project - Waterline Replaceme	301,360	-	-	-	-	-	-	-	-	-	-
	CIP - Water System Project	-	-	-	-	-	-	-	-	-	-	-
	CIP - Well#16 Scada Integration and Upgrades	100,000	-	-	-	-	-	-	-	-	-	-
Project 1 - 5 Year CIP Plan												
1	Highland Dr., Hamilton Ave., Bruning Ave., St. Gertrudes Ave., Riverview St.	-	1,000,000	-	-	-	-	-	-	-	-	-
2	Crescent Dr., Delta Way	-	-	1,000,000	-	-	-	-	-	-	-	-
3	Rolling Green Dr., Virginia Dr.	-	-	-	1,000,000	-	-	-	-	-	-	-
4	Laurel Way, Thereza Way, Linda Vista Way	-	-	-	-	1,000,000	-	-	-	-	-	-
5	Montezuma St., Seventh St., Morgan Lane	-	-	-	-	SR	1,000,000	-	-	-	-	-
6	3Rd Street	-	-	-	-	-	800,000	-	-	-	-	-
7	Various Remaining Locations	-	-	-	-	-	-	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
Project 2 - Lead Service Replacement												
1	Lead Service Replacement	-	-	250,000	250,000	250,000	-	-	-	-	-	-
Project 3 - Well 17 Development/Booster Station/Storage Tank												
1	Well 17, Booster Station, Storage Tank	-	1,360,000	1,360,000	1,360,000	1,360,000	1,360,000	-	-	-	-	-
2	Well 17 Arsenic Treatment	-	500,000	500,000	500,000	500,000	500,000	-	-	-	-	-
Project 4 - Well 18 Development												
1	Well 18	-	-	-	1,000,000	1,000,000	700,000	-	-	-	-	-
2	Well 18 Arsenic Treatment	-	-	-	1,000,000	1,000,000	500,000	-	-	-	-	-
Project 5 - Booster Station at Amador Tank												
1	Booster Station	-	-	-	-	-	1,250,000	-	-	-	-	-
2	Generators	-	-	-	-	-	100,000	-	-	-	-	-
Project 11 - Emergency Fund for Well 20 Development												
1	Well 20	-	-	-	-	-	-	3,000,000	3,000,000	-	-	-
Project 12 - Fire Hydrant Maintenance												
1	Fire Hydrants	-	114,885	114,885	114,885	114,885	114,885	114,885	114,885	114,885	114,885	114,885
Project 13 - Well 22 Development (Replacement 10)												
1	Well 22	-	-	-	-	-	-	-	-	6,000,000	-	-
Subtotal: CIP Program Costs *(Current-Year Dollars)*		**$ 537,274**	**$ 2,974,885**	**$ 3,224,885**	**$ 5,224,885**	**$ 5,224,885**	**$ 6,324,885**	**$ 4,614,885**	**$ 4,614,885**	**$ 7,614,885**	**$ 1,614,885**	**$ 1,614,885**

©2023 NBS Government Finance Group.

TABLE 14 : CAPITAL IMPROVEMENT PROGRAM COSTS (*in Current-Year Dollars*)[1]

Project #	Project Description[2]	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Project 14 - Well 23 Development (Replacement 11)												
1	Well 23	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,000,000	$ -
2	Well 24	-	-	-	-	-	-	-	-	-	-	6,000,000
Project 15 - Well 24 Development (Replacement 13)												
1	Well 24	-	-	-	-	-	-	-	-	-	6,000,000	-
Project 16 - Well 25 Development (Replacement 14)												
1	Well 25	-	-	-	-	-	-	-	-	-	-	-
Project 17 - Well 26 Development (Replacement 15)												
1	Well 26	-	-	-	-	-	-	-	-	-	-	-
Project 18 - Well 27 Development (Replacement 16)												
1	Well 27	-	-	-	-	-	-	-	-	-	-	-
Project 19 - Well 27 Development (Replacement 17)												
1	Well 28	-	-	-	-	-	-	-	-	-	-	-
Project 20 - Well 28 Development (Replacement 18)												
1	Well 29	-	-	-	-	-	-	-	-	-	-	-
Project 21 - Well 29 Development (Replacement 19)												
1	Well 30	-	-	-	-	-	-	-	-	-	-	-
Project 22 - Well 30 Development (Replacement 20)												
1	Well 31	-	-	-	-	-	-	-	-	-	-	-
Project 23 - Airport Road Tank Lining												
1	Airport Road Tank	-	-	1,000,000	-	-	-	-	-	-	-	-
Project 24 - Amador Tank Lining												
1	Amador Circle Tank	-	-	-	-	-	-	-	-	-	-	-
Project 25 - Corp Yard Tank Lining												
1	Corp Yard Tank	-	-	-	-	-	-	-	-	-	-	-
Project 26 - Esperson Tank Lining												
1	Esperson Tank	-	-	-	-	-	-	-	-	-	-	-
Project 27 - Well 10 Media Replacement												
1	Well 10 Media Replacement	-	-	-	-	-	-	-	-	-	-	-
Project 28 - Well 16 Media Repair and Replacement												
1	Well 16 Media Repair and Replacement	-	-	300,000	70,000	-	70,000	-	70,000	-	70,000	-
Project 29 - System Maintenance And Upgrades												
1	Annual Additional System Major Maintenance And Upgrades	-	-	-	-	-	-	500,000	500,000	500,000	500,000	500,000
Subtotal: CIP Program Costs *(Current-Year Dollars)*		**$ -**	**$ -**	**$ 1,300,000**	**$ 70,000**	**$ -**	**$ 70,000**	**$ 500,000**	**$ 570,000**	**$ 500,000**	**$ 12,570,000**	**$ 6,500,000**
Total: CIP Program Costs *(Current-Year Dollars)*		**$ 537,274**	**$ 2,974,885**	**$ 4,524,885**	**$ 5,294,885**	**$ 5,224,885**	**$ 6,394,885**	**$ 5,114,885**	**$ 5,184,885**	**$ 8,114,885**	**$ 14,184,885**	**$ 8,114,885**

©2023 NBS Government Finance Group.

TABLE 15 : CAPITAL IMPROVEMENT PROGRAM COSTS (*in Future-Year Dollars*)[3]

Project Description	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Capital Outlay											
Capital Construction	$ 135,914	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CIP - 2020 Water & Sewer CIP Project	-	-	-	-	-	-	-	-	-	-	-
CIP - 2021 Water & Sewer CIP Project - Waterline Replacement	301,360	-	-	-	-	-	-	-	-	-	-
CIP - Water System Project	-	-	-	-	-	-	-	-	-	-	-
CIP - Well#16 Scada Integration and Upgrades	100,000	-	-	-	-	-	-	-	-	-	-
Project 1 - 5 Year CIP Plan											
1 Highland Dr., Hamilton Ave., Bruning Ave., St. Gertrudes	-	1,039,100	-	-	-	-	-	-	-	-	-
2 Crescent Dr., Delta Way	-	-	1,079,729	-	-	-	-	-	-	-	-
3 Rolling Green Dr., Virginia Dr.	-	-	-	1,121,946	-	-	-	-	-	-	-
4 Laurel Way, Thereza Way, Linda Vista Way	-	-	-	-	1,165,814	-	-	-	-	-	-
5 Montezuma St., Seventh St., Morgan Lane	-	-	-	-	-	1,211,398	-	-	-	-	-
6 3Rd Street	-	-	-	-	-	969,118	-	-	-	-	-
Project 2 - Lead Service Replacement											
1 Lead Service Replacement	-	-	269,932	280,487	291,454	-	-	-	-	-	-
Project 3 - Well 17 Development/Booster Station/Storage Tank											
1 Well 17, Booster Station, Storage Tank	-	1,413,176	1,468,431	1,525,847	1,585,507	1,647,501	-	-	-	-	-
2 Well 17 Arsenic Treatment	-	519,550	539,864	560,973	582,907	605,699	-	-	-	-	-
Project 4 - Well 18 Development											
1 Well 18	-	-	-	1,121,946	1,165,814	847,978	-	-	-	-	-
2 Well 18 Arsenic Treatment	-	-	-	1,121,946	1,165,814	605,699	-	-	-	-	-
Project 5 - Booster Station at Amador Tank											
1 Booster Station	-	-	-	-	-	1,514,247	-	-	-	-	-
2 Generators	-	-	-	-	-	121,140	-	-	-	-	-
Project 12 - Fire Hydrant Maintenance											
1 Fire Hydrants	-	119,377	124,045	128,895	133,935	139,171	144,613	150,267	156,143	162,248	168,592
Total: CIP Program Costs *(Future-Year Dollars)*	**$ 537,274**	**$ 3,091,203**	**$ 3,482,001**	**$ 5,862,040**	**$ 6,091,246**	**$ 7,661,951**	**$ 5,809,048**	**$ 6,036,182**	**$ 10,349,565**	**$ 2,280,645**	**$ 2,369,818**

©2023 NBS Government Finance Group.

TABLE 16 : CAPITAL IMPROVEMENT PROGRAM COSTS (*in Future-Year Dollars*)[3]

Project #	Project Description[2]	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Project 23 - Airport Road Tank Lining												
1	Airport Road Tank	-	-	1,079,729	-	-	-	-	-	-	-	-
Project 27 - Well 10 Media Replacement												
1	Well 10 Media Replacement	-	-	323,919	-	-	-	-	-	-	-	-
Project 28 - Well 16 Media Replacement												
1	Well 16 Media Replacement	-	-	-	78,536	-	84,798	-	91,559	-	98,859	-
Subtotal: CIP Program Costs *(Current-Year Dollars)*		**$ -**	**$ -**	**$ 1,403,647**	**$ 78,536**	**$ -**	**$ 84,798**	**$ 629,382**	**$ 745,549**	**$ 679,561**	**$ 17,752,167**	**$ 9,538,648**
Total: CIP Program Costs *(Current-Year Dollars)*		**$ 537,274**	**$ 3,091,203**	**$ 4,885,649**	**$ 5,940,576**	**$ 6,091,246**	**$ 7,746,749**	**$ 6,438,429**	**$ 6,781,731**	**$ 11,029,127**	**$ 20,032,812**	**$ 11,908,466**

©2023 NBS Government Finance Group.

TABLE 17 : FORECASTING ASSUMPTIONS

Economic Variables	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Annual Construction Cost Inflation, Per Engineering News Record[4]	*0.00%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*
Cumulative Construction Cost Multiplier from FY 2024/25	*1.00*	*1.04*	*1.08*	*1.12*	*1.17*	*1.21*	*1.26*	*1.31*	*1.36*	*1.41*	*1.47*

1. Capital project costs were provided by City Staff and assumes Year 1 begins in FY 2024/25. Source file: *FY23-24 CIP PROJECTS FOR BUDGET* .
2. Project costs beyond Year 5 in the City's capital improvement plan have been allocated equally across a 7-year period (FY 2029/30 through FY 2035/36).
3. The capital project costs have been inflated using the Construction Cost Index (See Table 13). Website: *http://enr.construction.com* .
4. For reference purposes, the annual Construction Cost Inflation percentage is the 5-year average change in the Construction Cost Index from 2017 to 2022 (3.91%). Source: Engineering News Record website (*http://enr.construction.com*).

©2023 NBS Government Finance Group.

TABLE 18 : EXISTING DEBT OBLIGATIONS

EXISTING DEBT OBLIGATIONS	Actual	Actual	Budget	5-Year Projected Rate Period					Projected				
Annual Repayment Schedules:	**FY 2022/23**	**FY 2023/24**	**FY 2024/25**	**FY 2025/26**	**FY 2026/27**	**FY 2027/28**	**FY 2028/29**	**FY 2029/30**	**FY 2030/31**	**FY 2031/32**	**FY 2032/33**	**FY 2033/34**	**FY 2034/35**
2013 Capital Lease for Land Purchase - $78,354.83[1]													
Principal Payment	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 3,355	$ -
Interest Payment	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Annual Debt Service	**$ 6,000**	**$ 6,000**	**$ 6,000**	**$ 6,000**	**$ 6,000**	**$ 6,000**	**$ 6,000**	**$ 6,000**	**$ 6,000**	**$ 6,000**	**$ 6,000**	**$ 3,355**	**$ -**
Coverage Requirement ($-Amnt above annual payment)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Reserve Requirement (total fund balance)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2016 Installment Purchase Agreement - $3,990,000[2]													
Principal Payment	$ 240,000	$ 255,000	$ 255,000	$ 260,000	$ 275,000	$ 275,000	$ 280,000	$ 295,000	$ 295,000	$ 300,000	$ 155,000	$ -	$ -
Interest Payment	68,648	62,755	56,558	50,301	43,922	37,240	30,497	23,632	16,463	9,234	1,883	-	-
Subtotal: Annual Debt Service	**$ 308,648**	**$ 317,755**	**$ 311,558**	**$ 310,301**	**$ 318,922**	**$ 312,240**	**$ 310,497**	**$ 318,632**	**$ 311,463**	**$ 309,234**	**$ 156,883**	**$ -**	**$ -**
Coverage Requirement ($-Amnt above annual payment)[3]	$ 370,377	$ 381,306	$ 373,870	$ 372,361	$ 382,707	$ 374,688	$ 372,596	$ 382,358	$ 373,756	$ 371,081	$ 188,260	$ -	$ -
Reserve Requirement (total fund balance)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2020 Lease Purchase Agreement - $1,944,352[4]													
Principal Payment	$ 3,536	$ 3,729	$ 3,929	$ 4,137	$ 4,352	$ 4,574	$ 4,804	$ 5,043	$ 5,289	$ 5,545	$ 5,809	$ 6,083	$ -
Interest Payment	1,158	1,084	1,006	923	836	745	649	549	443	332	216	94	-
Subtotal: Annual Debt Service	**$ 4,694**	**$ 4,813**	**$ 4,935**	**$ 5,060**	**$ 5,188**	**$ 5,319**	**$ 5,454**	**$ 5,591**	**$ 5,732**	**$ 5,877**	**$ 6,025**	**$ 6,177**	**$ -**
Coverage Requirement ($-Amnt above annual payment)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Reserve Requirement (total fund balance)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Grand Total: Existing Annual Debt Service	**$ 319,341**	**$ 328,568**	**$ 322,493**	**$ 321,361**	**$ 330,110**	**$ 323,559**	**$ 321,950**	**$ 330,223**	**$ 323,196**	**$ 321,111**	**$ 168,908**	**$ 9,532**	**$ -**
Grand Total: Existing Annual Coverage Requirement	**$ 370,377**	**$ 381,306**	**$ 373,870**	**$ 372,361**	**$ 382,707**	**$ 374,688**	**$ 372,596**	**$ 382,358**	**$ 373,756**	**$ 371,081**	**$ 188,260**	**$ -**	**$ -**
Grand Total: Existing Debt Reserve Target	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

1. Ground lease agreement for the installation of the arsenic removal treatment plant at Well 10 site. Source file: *#1 - 19-00183 - Tami Mitchell $78,354.83*
2. Purchase agreement to fund the acquisition of the Water Meter Direct Placement Series 2016 Project. The water utility portion is 3.0%, or $58,331 (Principal). Source file: *#3 - Rio Vista Installment Purchase Agreement* .
3. The City is required to maintain a debt service coverage ratio of 1.20 times the sum of the 2016 Installment payments becoming due and payable in such fiscal year. Source file: *#3 - Rio Vista Installment Purchase Agreement* , page 17.
4. Lease/purchase agreement between the City and Sterling National Bank to refinance various energy conservation measures at several City facilities. The water utility's portion is 3%, or $58,330.57 (Principal). Source file: *#4 - 01 Tab - Lease-Purchase Agreement (SC236716xAAE13)* .

TABLE 19 : EXISTING ANNUAL DEBT OBLIGATIONS TO BE SATISFIED BY WATER RATES

Annual Obligations	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Existing Annual Debt Service	*$ 319,341*	*$ 328,568*	*$ 322,493*	*$ 321,361*	*$ 330,110*	*$ 323,559*	*$ 321,950*	*$ 330,223*	*$ 323,196*	*$ 321,111*	*$ 168,908*	*$ 9,532*	*$ -*
Existing Annual Coverage Requirement	*$ 370,377*	*$ 381,306*	*$ 373,870*	*$ 372,361*	*$ 382,707*	*$ 374,688*	*$ 372,596*	*$ 382,358*	*$ 373,756*	*$ 371,081*	*$ 188,260*	*$ -*	*$ -*
Existing Debt Reserve Target	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*

©2023 NBS Government Finance Group.

TABLE 20 : FUTURE DEBT FINANCING ASSUMPTIONS

Long-Term Debt Terms	State Revolving Fund Loan	Revenue Bonds
Issuance Cost	2.00%	2.00%
Annual Interest Cost (%)	3.00%	5.50%
Term	30	30
Debt Reserve Funded	No	Yes
Coverage Requirement (% above annual pmt)	120%	125%

TABLE 21 : FUTURE DEBT OBLIGATIONS

Annual Repayment Schedules	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
SRF Loan Funding													
Principal Payment	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 420,385	$ 432,997	$ 445,987	$ 459,366	$ 473,147	$ 487,342
Interest Payment	-	-	-	-	-	-	-	600,000	587,388	574,399	561,019	547,238	533,044
Subtotal: Annual Debt Service	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,020,385**	**$ 1,020,385**	**$ 1,020,385**	**$ 1,020,385**	**$ 1,020,385**	**$ 1,020,385**
Grand Total: Future Annual Debt Service	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,020,385**	**$ 1,020,385**	**$ 1,020,385**	**$ 1,020,385**	**$ 1,020,385**	**$ 1,020,385**
Grand Total: New Annual Coverage Requirement	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,224,462**	**$ 1,224,462**	**$ 1,224,462**	**$ 1,224,462**	**$ 1,224,462**	**$ 1,224,462**
Grand Total: Future Debt Reserve Target	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

TABLE 22 : TOTAL DEBT SERVICE

Annual Obligations	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Annual Debt Service	*$ 319,341*	*$ 328,568*	*$ 322,493*	*$ 321,361*	*$ 330,110*	*$ 323,559*	*$ 321,950*	*$ 1,350,608*	*$ 1,343,581*	*$ 1,341,496*	*$ 1,189,294*	*$ 1,029,917*	*$ 1,020,385*
Annual Coverage Requirement	*$ 370,377*	*$ 381,306*	*$ 373,870*	*$ 372,361*	*$ 382,707*	*$ 374,688*	*$ 372,596*	*$ 1,606,820*	*$ 1,598,218*	*$ 1,595,543*	*$ 1,412,722*	*$ 1,224,462*	*$ 1,224,462*
Total Debt Reserve Target	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*
Check	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*

©2023 NBS Government Finance Group.

CITY OF RIO VISTA
WATER RATE STUDY
Projected Water Rates Under Existing Rate Schedule

TABLE 23 : CURRENT WATER RATE SCHEDULE

Water Rate Schedule	Current Rates as of July 1, 2012[1]
Monthly Fixed Charge	
Residential & Multi-Family	$34.32
All Other Customers[2]	
3/4 inch	$34.32
1 inch	$85.79
1 1/2 inch	$171.58
2 inch	$274.52
3 inch	$514.73
4 inch	$857.88
6 inch	$1,715.75
Volumetric Charge ($/HCF) [3]	
Uniform Rate for All Customers	$0.56

1. Rates available on the City's website: *https://www.riovistacity.com/finance/page/rates* .
2. All other customers include commercial, industrial, retail and government users.
3. HCF = Hundred Cubic Feet or 748 gallons.

©2023 NBS Government Finance Group.

TABLE 24 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS

Classification of Expenses							
Budget Categories	Total Revenue Requirements	Commodity	Capacity	Customer	Basis of Classification		
	FY 2025/26	(COM)	(CAP)	(CA)	(COM)	(CAP)	(CA)
Fund 80 Water System							
Salaries & Wages	$ 810,286	$ 405,143	$ 324,115	$ 81,029	50.0%	40.0%	10.0%
Overtime	25,100	12,550	10,040	2,510	50.0%	40.0%	10.0%
Dental Insurance	13,241	6,620	5,296	1,324	50.0%	40.0%	10.0%
Health Insurance	127,703	63,852	51,081	12,770	50.0%	40.0%	10.0%
Life Insurance	2,038	1,019	815	204	50.0%	40.0%	10.0%
Employee Assistance Program	219	109	87	22	50.0%	40.0%	10.0%
Vision Insurance	1,876	938	751	188	50.0%	40.0%	10.0%
Pers Retirement	170,145	85,073	68,058	17,015	50.0%	40.0%	10.0%
Social Security/Fica	59,915	29,958	23,966	5,992	50.0%	40.0%	10.0%
Worker'S Comp. Insurance	42,607	21,304	17,043	4,261	50.0%	40.0%	10.0%
Boot/Uniform/Equipment Allowance	1,884	942	754	188	50.0%	40.0%	10.0%
State Unemployment Insurance	3,502	1,751	1,401	350	50.0%	40.0%	10.0%
Accounting & Auditing	6,745	-	-	6,745	0.0%	0.0%	100.0%
Advertising	-	-	-	-	0.0%	0.0%	100.0%
Legal Fees	5,351	-	-	5,351	0.0%	0.0%	100.0%
Debt Issuance Costs	-	-	-	-	50.0%	50.0%	0.0%
Printing	6,421	-	-	6,421	0.0%	0.0%	100.0%
Chemicals & Gases	166,786	166,786	-	-	100.0%	0.0%	0.0%
Conferences & Meetings	26,755	13,377	13,377	-	50.0%	50.0%	0.0%
Contractual Services	321,057	160,529	160,529	-	50.0%	50.0%	0.0%
Debt Service - Interest	-	-	-	-	50.0%	50.0%	0.0%
Debt Service - Principal	-	-	-	-	50.0%	50.0%	0.0%
Equipment Rental	21,404	10,702	10,702	-	50.0%	50.0%	0.0%
Equipment (Non-Capital)	5,351	2,675	2,675	-	50.0%	50.0%	0.0%
Fuel & Mileage	34,397	17,199	17,199	-	50.0%	50.0%	0.0%
Flood & Fire Insurance	89,698	44,849	44,849	-	50.0%	50.0%	0.0%
Liability Insurance	105,125	52,562	52,562	-	50.0%	50.0%	0.0%
Finance Charge	535	268	268	-	50.0%	50.0%	0.0%
Laboratory Testing	53,510	26,755	26,755	-	50.0%	50.0%	0.0%
Legal Notices & Publications	6,421	3,211	3,211	-	50.0%	50.0%	0.0%
M & R Machinery & Equipment	42,808	21,404	21,404	-	50.0%	50.0%	0.0%
M & R Real Property	64,211	32,106	32,106	-	50.0%	50.0%	0.0%
M & R Vehicles	6,421	3,211	3,211	-	50.0%	50.0%	0.0%
Membership Dues	11,023	5,511	5,511	-	50.0%	50.0%	0.0%
Misc. Services & Supplies	32,106	16,053	16,053	-	50.0%	50.0%	0.0%
Computer Hardware	21,404	10,702	8,562	2,140	50.0%	40.0%	10.0%
Office Supplies & Materials	12,842	-	-	12,842	0.0%	0.0%	100.0%
Computer Software	26,755	13,377	10,702	2,675	50.0%	40.0%	10.0%
Permits & Licenses	64,211	32,106	32,106	-	50.0%	50.0%	0.0%
Postage	3,746	-	-	3,746	0.0%	0.0%	100.0%
Safety Equipment	3,746	1,873	1,873	-	50.0%	50.0%	0.0%
Telephone	12,842	6,421	5,137	1,284	50.0%	40.0%	10.0%
Utilities - Pg&E	305,236	305,236	-	-	100.0%	0.0%	0.0%
Bond Principal	-	-	-	-	50.0%	50.0%	0.0%
Land Lease - Well #10	6,421	3,211	3,211	-	50.0%	50.0%	0.0%
Emergency Repairs	139,125	-	139,125	-	0.0%	100.0%	0.0%
Subtotal: Water System Expenses	**$ 2,860,971**	**$ 1,579,381**	**$ 1,114,532**	**$ 167,057**	**55.2%**	**39.0%**	**5.8%**

©2023 NBS Government Finance Group.

TABLE 25 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses, continued							
Budget Categories	Total Revenue Requirements	Commodity	Capacity	Customer	Basis of Classification		
	FY 2025/26	(COM)	(CAP)	(CA)	(COM)	(CAP)	(CA)
Fund 80 Water System							
Miscellaneous Expense	$ 2,140	$ 1,070	$ 1,070	$ -	50.0%	50.0%	0.0%
Capital Outlay - Mach & Equip	-	-	-	-	50.0%	50.0%	0.0%
Capital Outlay - Vehicles	152,650	76,325	76,325	-	50.0%	50.0%	0.0%
Transfer Out	25,000	12,500	12,500	-	50.0%	50.0%	0.0%
Subtotal: Water System Expenses	**$ 179,790**	**$ 89,895**	**$ 89,895**	**$ -**	**50.0%**	**50.0%**	**0.0%**

TABLE 26 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses, continued							
Budget Categories	Total Revenue Requirements	Commodity	Capacity	Customer	Basis of Classification		
	FY 2025/26	(COM)	(CAP)	(CA)	(COM)	(CAP)	(CA)
Salary Adjustments							
Salary Adjustments	$ -	$ -	$ -	$ -	50.0%	40.0%	10.0%
Total: Adjustments	**$ -**	**$ -**	**$ -**	**$ -**	**0.0%**	**0.0%**	**0.0%**
SUBTOTAL: WATER SYSTEM EXPENSES	**$ 3,040,761**	**$ 1,669,276**	**$ 1,204,427**	**$ 167,057**	**54.9%**	**39.6%**	**5.5%**

TABLE 27 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses, cont.							
Budget Categories	Total Revenue Requirements	Commodity	Capacity	Customer	Basis of Classification		
	FY 2025/26	(COM)	(CAP)	(CA)	(COM)	(CAP)	(CA)
Debt Service Payments							
Outstanding Debt	$ 321,361	$ -	$ 321,361	$ -	0.0%	100.0%	0.0%
New Debt Issue - SRF Loan	-	-	-	-	0.0%	100.0%	0.0%
New Debt Issue - Revenue Bond	-	-	-	-	0.0%	100.0%	0.0%
Total Debt Service Payments	**$ 321,361**	**$ -**	**$ 321,361**	**$ -**	**0.0%**	**100.0%**	**0.0%**
Capital Expenditures							
Rate Funded Capital Expenses	$ 858,477	$ -	$ 858,477	$ -	0.0%	100.0%	0.0%
TOTAL REVENUE REQUIREMENTS	**$ 4,220,599**	**$ 1,669,276**	**$ 2,384,265**	**$ 167,057**	**39.6%**	**56.5%**	**4.0%**
Less: Non-Rate Revenues							
Non-Operating Revenue							
Interest Income	$ (19,678)	$ -	$ (19,678)	$ -	0.0%	100.0%	0.0%
Forfeitures/Penalties	(31,263)	-	(31,263)	-	0.0%	100.0%	0.0%
Water Reconnect Fee	(1,042)	-	(1,042)	-	0.0%	100.0%	0.0%
Transfer In	(20,680)	-	(20,680)	-	0.0%	100.0%	0.0%
NET REVENUE REQUIREMENTS	**$ 4,147,934**	**$ 1,669,276**	**$ 2,311,601**	**$ 167,057**			
Allocation of Revenue Requirements	**100.0%**	**40.2%**	**55.7%**	**4.0%**			

©2023 NBS Government Finance Group.

TABLE 28 : ADJUSTMENT TO CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS

Adjustments to Classification of Expenses				
Adjustment for Current Rate Level:	**Total**	**(COM)**	**(CAP)**	**(CA)**
Test Year (FY 2025/26) Target Rate Rev. After Rate Increases	$ 4,219,872			
Projected Rate Revenue at Current Rates	$ 3,375,898			
Test Year (FY 2025/26) Projected Rate Adjustment	25%			
Adjusted Net Revenue Req'ts	**$ 4,219,872**	**$ 1,698,227**	**$ 2,351,691**	**$ 169,955**
Percent of Revenue	*100.0%*	*40.2%*	*55.7%*	*4.0%*

TABLE 29 : NET REVENUE REQUIREMENTS PER COSA RESULTS

Net Revenue Requirements - Per COSA Results	Total Rate Revenue Requirements FY 2023/24	Commodity Related Costs	Fixed Costs	
			Capacity Related Costs	Customer Related Costs
Rate-Design Adjustments to Fixed/Variable %	**100.0%**	**40.0%**	**56.0%**	**4.0%**
Rate-Design Adjustments to Fixed/Variable ($)	**$4,219,872**	**$1,687,949**	**$2,363,128**	**$168,795**

©2023 NBS Government Finance Group.

TABLE 30 : DEVELOPMENT OF THE COMMODITY ALLOCATION FACTOR

Development of the Volumetric/Variable Allocation Factor[1]		
Customer Class	**FY 2022/23 Consumption (HCF)**	**% of Total Volume**
Residential	633,037	**77.5%**
Mobile Home	3,050	**0.4%**
Multi-Family	24,863	**3.0%**
Commercial	37,166	**4.6%**
Irrigation Only	118,471	**14.5%**
Total	**816,587**	**100.0%**

1. Consumption data is based on the City of Rio Vista's billing data.

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

TABLE 31 : DEVELOPMENT OF THE CAPACITY ALLOCATION FACTORS

Development of the PEAK CAPACITY (MAX MONTH) Allocation Factors				
Customer Class	**Average Monthly Use (HCF)**	**Peak Monthly Use (HCF)[1]**	**Peak Monthly Factor**	**% of Max Month Capacity**
Residential	52,753	90,631	**1.72**	**75.9%**
Mobile Home	254	465	**1.83**	**0.4%**
Multi-Family	2,072	3,007	**1.45**	**2.5%**
Commercial	3,097	4,525	**1.46**	**3.8%**
Irrigation Only	9,873	20,834	**2.11**	**17.4%**
Total	**68,049**	**119,462**	**1.76**	**100.0%**

1. Based on peak monthly data (peak day data not available).

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 32 : DEVELOPMENT OF THE CUSTOMER ALLOCATION FACTORS

Development of the Customer Allocation Factor		
Customer Class	**No. of Meters/EDUs FY 2022/23[1]**	**% of Total Meters/EDUs**
Residential	4,882	**89.2%**
Mobile Home	52	**0.9%**
Multi-Family[2]	266	**4.9%**
Commercial	159	**2.9%**
Irrigation Only	117	**2.1%**
Total	**5,476**	**100.0%**

1. Meter count data is based on the City's billing data for June 2023.
2. Multi-family residential customers are by dwelling units.

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*

©2023 NBS Government Finance Group.

TABLE 33 : ALLOCATION OF WATER REVENUE REQUIREMENTS

Classification Components	Cost-of-Service Net Revenue Requirements *(FY 2025/26)*	
Commodity-Related Costs	$ 1,687,949	*40.0%*
Capacity-Related Costs	2,363,128	*56.0%*
Customer-Related Costs	168,795	*4.0%*
Net Revenue Requirement	**$ 4,219,872**	*100.0%*

TABLE 34 : ALLOCATION OF NET REVENUE REQUIREMENTS - FY 2025/26

Customer Classes	Classification Components			Cost of Service Net Rev. Req'ts	% of COS Net Revenue Req'ts
	VARIABLE	*FIXED*			
	Commodity-Related Costs	Capacity-Related Costs	Customer-Related Costs		
Residential	$ 1,308,537	$ 1,792,810	$ 150,485	$ 3,251,832	*77.1%*
Mobile Home	6,305	9,198	1,603	17,106	*0.4%*
Multi-Family	51,394	59,483	8,199	119,076	*2.8%*
Commercial	76,825	89,511	4,901	171,237	*4.1%*
Irrigation Only	244,889	412,126	3,606	660,621	*15.7%*
Total Net Revenue Requirement	**$ 1,687,949**	**$ 2,363,128**	**$ 168,795**	**$ 4,219,872**	**100%**
Total Net Revenue Requirement by Classification Component	*VARIABLE $1,687,949*	*FIXED $2,531,923*		*$4,219,872*	

TABLE 35 : RATE DESIGN - SUMMARY OF REVENUE REQUIREMENTS

Customer Class	COSA Net Revenue Requirements		NET REVENUE REQUIREMENT - ALTERNATIVE 1					
	FY 2025/26	% of COS Rev. Req't.	% Fixed Revenue	% Variable Revenue	Revenue from Volumetric Charges	Revenue from Hydraulic Capacity Charges	Revenue from Customer Costs	
Residential	$ 3,251,832	77.1%	85%	15%	$ 487,775	$ 2,613,572	$ 150,485	*$ 3,251,832*
Mobile Home	17,106	0.4%	85%	15%	2,566	12,937	1,603	*17,106*
Multi-Family	119,076	2.8%	85%	15%	17,861	93,015	8,199	*119,076*
Commercial	171,237	4.1%	85%	15%	25,686	140,650	4,901	*171,237*
Irrigation Only	660,621	15.7%	85%	15%	99,093	557,922	3,606	*660,621*
Total	**$ 4,219,872**	**100.0%**			**$ 632,981**	**$ 3,418,096**	**$ 168,795**	*$ 4,219,872*
	Percent of Total Revenue Collected		*85%*	*15%*				*$ - Check*

©2023 NBS Government Finance Group.

TABLE 36 : RATE DESIGN - SUMMARY OF REVENUE REQUIREMENTS

Customer Class	COSA Net Revenue Requirements		NET REVENUE REQUIREMENT - ALTERNATIVE 2					
	FY 2025/26	% of COS Rev. Req't.	% Fixed Revenue	% Variable Revenue	Revenue from Volumetric Charges	Revenue from Hydraulic Capacity Charges	Revenue from Customer Costs	
Residential	$ 3,251,832	77.1%	80%	20%	$ 650,366	$ 2,450,981	$ 150,485	*$ 3,251,832*
Mobile Home	17,106	0.4%	80%	20%	3,421	12,082	1,603	*17,106*
Multi-Family	119,076	2.8%	80%	20%	23,815	87,061	8,199	*119,076*
Commercial	171,237	4.1%	80%	20%	34,247	132,089	4,901	*171,237*
Irrigation Only	660,621	15.7%	80%	20%	132,124	524,891	3,606	*660,621*
Total	**$ 4,219,872**	**100.0%**			**$ 843,974**	**$ 3,207,103**	**$ 168,795**	*$ 4,219,872*
	Percent of Total Revenue Collected		*80%*	*20%*				*$ - Check*

TABLE 37 : METER EQUIVALENCY FACTORS USED IN FIXED CHARGES CALCULATION

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

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

©2023 NBS Government Finance Group.

TABLE 38 : CALCULATION OF MONTHLY FIXED METER SERVICE CHARGES FOR FY 2024/25

NET REVENUE REQUIREMENT - ALTERNATIVE 1								
Number of Meters by Class and Size[1]	**FY 2025/26**							**Total**
	3/4" meter	**1" meter**	**1.5" meter**	**2" meter**	**3" meter**	**4" meter**	**6" meter**	
Residential	3,435	1,447	0	0	0	0	0	4,882
Mobile Home	52	0	0	0	0	0	0	52
Multi-Family	207	14	1	2	1	0	0	225
Commercial	93	32	6	24	1	3	0	159
Irrigation Only	34	32	15	19	13	4	0	117
Total Meters/Accounts	**3,821**	**1,525**	**22**	**45**	**15**	**7**	**0**	**5,435**
Hydraulic Capacity Factor [2]	*1.00*	*1.67*	*3.33*	*5.33*	*10.67*	*16.67*	*33.33*	
Total Equivalent Meters	**3,821**	**2,542**	**73**	**240**	**160**	**117**	**0**	**6,953**
Monthly Fixed Service Charges								
Customer Costs ($/Acct/month)[3]	$2.59	$2.59	$2.59	$2.59	$2.59	$2.59	$2.59	
Capacity Costs ($/Acct/month)[4]	$40.97	$68.28	$136.56	$218.50	$437.00	$682.81	$1,365.62	
Total Monthly Meter Charge	**$43.56**	**$70.87**	**$139.15**	**$221.09**	**$439.59**	**$685.40**	**$1,368.21**	
Annual Fixed Costs Allocated to Monthly Meter Charges								
Customer Costs	$ 168,795							
Capacity Costs	3,418,096							
Total Fixed Meter Costs	$ 3,586,891							
Annual Revenue from Monthly Meter Charges								
Customer Charges	$ 118,669	$ 47,362	$ 683	$ 1,398	$ 466	$ 217	$ -	**$ 168,795**
Capacity Charges	$ 1,878,495	$ 1,249,544	$ 36,052	$ 117,990	$ 78,660	$ 57,356	$ -	**$ 3,418,096**
Total Revenue from Monthly Meter Charges	**$ 1,997,163**	**$ 1,296,906**	**$ 36,736**	**$ 119,387**	**$ 79,126**	**$ 57,574**	**$ -**	**$ 3,586,891**

1. Meter by Class and Size are based on June 2023 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.

©2023 NBS Government Finance Group.

TABLE 39 : CALCULATION OF MONTHLY FIXED METER SERVICE CHARGES FOR FY 2024/25

NET REVENUE REQUIREMENT - ALTERNATIVE 2								
Number of Meters by Class and Size[1]	**FY 2024/25**							**Total**
	3/4" meter	**1" meter**	**1.5" meter**	**2" meter**	**3" meter**	**4" meter**	**6" meter**	
Residential	3,435	1,447	0	0	0	0	0	4,882
Mobile Home	52	0	0	0	0	0	0	52
Multi-Family	207	14	1	2	1	0	0	225
Commercial	93	32	6	24	1	3	0	159
Irrigation Only	34	32	15	19	13	4	0	117
Total Meters/Accounts	**3,821**	**1,525**	**22**	**45**	**15**	**7**	**0**	**5,435**
Hydraulic Capacity Factor[2]	*1.00*	*1.67*	*3.33*	*5.33*	*10.67*	*16.67*	*33.33*	
Total Equivalent Meters	**3,821**	**2,542**	**73**	**240**	**160**	**117**	**0**	**6,953**
Monthly Fixed Service Charges								
Customer Costs ($/Acct/month)[3]	$2.59	$2.59	$2.59	$2.59	$2.59	$2.59	$2.59	
Capacity Costs ($/Acct/month)[4]	$38.44	$64.07	$128.13	$205.01	$410.02	$640.66	$1,281.32	
Total Monthly Meter Charge	**$41.03**	**$66.65**	**$130.72**	**$207.60**	**$412.61**	**$643.25**	**$1,283.91**	
Annual Fixed Costs Allocated to Monthly Meter Charges								
Customer Costs	$ 168,795							
Capacity Costs	3,207,103							
Total Fixed Meter Costs	$ 3,375,898							
Annual Revenue from Monthly Meter Charges								
Customer Charges	$ 118,669	$ 47,362	$ 683	$ 1,398	$ 466	$ 217	$ -	**$ 168,795**
Capacity Charges	$ 1,762,538	$ 1,172,412	$ 33,827	$ 110,706	$ 73,804	$ 53,816	$ -	**$ 3,207,103**
Total Revenue from Monthly Meter Charges	**$ 1,881,207**	**$ 1,219,773**	**$ 34,510**	**$ 112,104**	**$ 74,270**	**$ 54,033**	**$ -**	**$ 3,375,898**

1. Meter by Class and Size are based on June 2023 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.

©2023 NBS Government Finance Group.

TABLE 40 : ESTIMATED FIXED REVENUE BY CUSTOMER CLASS

NET REVENUE REQUIREMENT - ALTERNATIVE 1							
Customer Class and Meter Size	Hydraulic Capacity Factor	Number of Meters	Total Equivalent Meters	Fixed Meter Charge		Total Fixed Meter Charge	Estimated Revenue from Fixed Charges
				Customer Component	Capacity Component		
3/4"	1.00	3,821	3,821	$2.59	$40.97	$43.56	$ 1,997,163
1"	1.67	1,525	2,542	$2.59	$68.28	$70.87	1,296,906
1 1/2"	3.33	22	73	$2.59	$136.56	$139.15	36,736
2"	5.33	45	240	$2.59	$218.50	$221.09	119,387
3"	10.67	15	160	$2.59	$437.00	$439.59	79,126
4"	16.67	7	117	$2.59	$682.81	$685.40	57,574
6"	33.33	0	0	$2.59	$1,365.62	$1,368.21	-
Total		**5,435**	**6,953**				**$ 3,586,891**

$ - Check

TABLE 41 : ESTIMATED FIXED REVENUE BY CUSTOMER CLASS

NET REVENUE REQUIREMENT - ALTERNATIVE 2							
Customer Class and Meter Size	Hydraulic Capacity Factor	Number of Meters	Total Equivalent Meters	Fixed Meter Charge		Total Fixed Meter Charge	Estimated Revenue from Fixed Charges
				Customer Component	Capacity Component		
3/4"	1.00	3,821	3,821	$2.59	$38.44	$41.03	$ 1,881,207
1"	1.67	1,525	2,542	$2.59	$64.07	$66.65	1,219,773
1 1/2"	3.33	22	73	$2.59	$128.13	$130.72	34,510
2"	5.33	45	240	$2.59	$205.01	$207.60	112,104
3"	10.67	15	160	$2.59	$410.02	$412.61	74,270
4"	16.67	7	117	$2.59	$640.66	$643.25	54,033
6"	33.33	0	0	$2.59	$1,281.32	$1,283.91	-
Total		**5,435**	**6,953**				**$ 3,375,898**

$ - Check

©2023 NBS Government Finance Group.

TABLE 42 : PROPOSED VOLUMETRIC CHARGES FOR FY 2025/26

NET REVENUE REQUIREMENT - ALTERNATIVE 1					
Customer Classes	**Water Consumption (HCF/yr)**	**Total Target Rev. Req't from Vol. Charges**	**% of Total Rate Revenue**	**Uniform Commodity Rates ($/HCF)**	***Proposed Rate Structure***
Residential	633,037	$ 487,775	*11.6%*	$0.775	*Uniform*
Mobile Home	3,050	2,566	*0.1%*	$0.775	*Uniform*
Multi-Family	24,863	17,861	*0.4%*	$0.775	*Uniform*
Commercial	37,166	25,686	*0.6%*	$0.775	*Uniform*
Irrigation Only	118,471	99,093	*2.3%*	$0.775	*Uniform*
Total Water	**816,587**	**$ 632,981**	***15.0%***		

TABLE 43 : PROPOSED VOLUMETRIC CHARGES FOR FY 2025/26

NET REVENUE REQUIREMENT - ALTERNATIVE 2					
Customer Classes	**Water Consumption (HCF/yr)**	**Total Target Rev. Req't from Vol. Charges**	**% of Total Rate Revenue**	**Uniform Commodity Rates ($/HCF)**	***Proposed Rate Structure***
Residential	633,037	$ 650,366	*15.4%*	$1.034	*Uniform*
Mobile Home	3,050	$ 3,421	*0.1%*	$1.034	*Uniform*
Multi-Family	24,863	23,815	*0.6%*	$1.034	*Uniform*
Commercial	37,166	34,247	*0.8%*	$1.034	*Uniform*
Irrigation Only	118,471	132,124	*3.1%*	$1.034	*Uniform*
Total Water	**816,587**	**$ 843,974**	***20.0%***		

TABLE 44 : ESTIMATED VOLUMETRIC REVENUE BY CUSTOMER CLASS — ***NET REVENUE REQUIREMENT - ALTERNATIVE 1***

Customer Class	**Estimated Consumption (HCF)**	**Estimated Variable Revenue**	**% of Variable Rate Revenue**	**Estimated Fixed Revenue**	**Total Estimated Revenue**	**Cost of Service Net Revenue Req'ts**	
Residential	633,037	$ 490,701	*77.5%*	$ 2,764,057	$ 3,254,759	$ 3,251,832	
Mobile Home	3,050	2,364	*0.4%*	14,540	16,904	17,106	
Multi-Family	24,863	19,273	*3.0%*	101,214	120,487	119,076	
Commercial	37,166	28,809	*4.6%*	145,551	174,361	171,237	
Irrigation Only	118,471	91,833	*14.5%*	561,528	653,361	660,621	
Grand Total	**816,587**	**$ 632,981**	***100.0%***	**$ 3,586,891**	**$ 4,219,872**	**$ 4,219,872**	*$ - Check*

TABLE 45 : ESTIMATED VOLUMETRIC REVENUE BY CUSTOMER CLASS — ***NET REVENUE REQUIREMENT - ALTERNATIVE 2***

Customer Class	**Estimated Consumption (HCF)**	**Estimated Variable Revenue**	**% of Variable Rate Revenue**	**Estimated Fixed Revenue**	**Total Estimated Revenue**	**Cost of Service Net Revenue Req'ts**	
Residential	633,037	$ 654,268	*77.5%*	$ 2,601,466	$ 3,255,734	$ 3,251,832	
Mobile Home	3,050	3,152	*0.4%*	13,685	16,837	17,106	
Multi-Family	24,863	25,697	*3.0%*	95,261	120,958	119,076	
Commercial	37,166	38,413	*4.6%*	136,990	175,402	171,237	
Irrigation Only	118,471	122,444	*14.5%*	528,497	650,942	660,621	
Grand Total	**816,587**	**$ 843,974**	***100.0%***	**$ 3,375,898**	**$ 4,219,872**	**$ 4,219,872**	*$ - Check*

©2023 NBS Government Finance Group.

TABLE 46 : ASSUMPTIONS USED IN DROUGHT RATE ANALYSIS

2022/23 Consumption Assumptions[1]					
Stage No.	Percent Shortage Range	Water Supply Conditions	Water Consumption (AF/yr.)	Water Consumption (hcf/yr.)	Difference to Baseline (hcf)
	Baseline Consumption[2]		**1,875**	**816,587**	**0**
1	Up to 15%	Stage 1 - Minimal	1,593	694,099	(122,488)
2	Up to 25%	Stage 2 - Moderate	1,406	612,440	(204,147)
3	Up to 35%	Stage 3 - Severe	1,219	530,782	(285,805)
4	>50%	Stage 4 - Critical	750	326,635	(489,952)

1. Drought stages based on the City's Water Supply Reliability/Drought Contingency Plan. Source files: *1-72 Rio Vista 2015 UWMP* , pages 20-23.
2. This represents the baseline consumption for FY 2022/23. Conservation percentage for each drought stage is relative to the baseline consumption.

TABLE 47 : EXPENSES DIRECTLY IMPACTED BY FUTURE MANDATED WATER USE REDUCTION

Expenses Directly Effected By Consumption Changes					
Description	Commodity-Related Costs				
	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
Chemicals & Gases	$ 166,786	$ 175,871	$ 185,451	$ 195,553	$ 206,204
Utilities - PG&E	305,236	330,725	358,343	388,266	420,689
Total:	**$ 472,022**	**$ 506,596**	**$ 543,794**	**$ 583,819**	**$ 626,893**

TABLE 48 : CALCULATION OF DROUGHT SURCHARGES FOR FY 2025/26

NET REVENUE REQUIREMENT - ALTERNATIVE 1						
Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation[1]	Target Rev. Req't from Vol. Charges	Drought Surcharge *($/hcf)*	Uniform Commodity Rates *($/hcf)*
0%	816,587	$ 632,981	$ -	$ 632,981	$0.0000	$0.78
Up to 15%	694,099	632,981	(70,803)	562,177	$0.0348	$0.81
Up to 25%	612,440	632,981	(118,006)	514,975	$0.0657	$0.84
Up to 35%	530,782	632,981	(165,208)	467,773	$0.1061	$0.88
>50%	326,635	632,981	(283,213)	349,767	$0.2957	$1.07

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

TABLE 49 : CALCULATION OF DROUGHT SURCHARGES FOR FY 2026/27

NET REVENUE REQUIREMENT - ALTERNATIVE 1						
Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation[1]	Target Rev. Req't from Vol. Charges	Drought Surcharge *($/hcf)*	Uniform Commodity Rates *($/hcf)*
0%	816,587	$ 710,512	$ -	$ 710,512	$0.0000	$0.87
Up to 15%	694,099	710,512	(75,989)	634,522	$0.0441	$0.91
Up to 25%	612,440	710,512	(126,649)	583,863	$0.0832	$0.95
Up to 35%	530,782	710,512	(177,309)	533,203	$0.1345	$1.00
>50%	326,635	710,512	(303,958)	406,554	$0.3746	$1.24

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

©2023 NBS Government Finance Group.

TABLE 50 : CALCULATION OF DROUGHT SURCHARGES FOR FY 2027/28

NET REVENUE REQUIREMENT - ALTERNATIVE 1						
Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation[1]	Target Rev. Req't from Vol. Charges	Drought Surcharge *($/hcf)*	Uniform Commodity Rates *($/hcf)*
0%	816,587	$ 745,884	$ -	$ 745,884	$0.0000	$0.91
Up to 15%	694,099	745,884	(81,569)	664,315	$0.0437	$0.96
Up to 25%	612,440	745,884	(135,948)	609,936	$0.0825	$1.00
Up to 35%	530,782	745,884	(190,328)	555,556	$0.1333	$1.05
>50%	326,635	745,884	(326,276)	419,608	$0.3712	$1.28

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

TABLE 51 : CALCULATION OF DROUGHT SURCHARGES FOR FY 2028/29

NET REVENUE REQUIREMENT - ALTERNATIVE 1						
Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation[1]	Target Rev. Req't from Vol. Charges	Drought Surcharge *($/hcf)*	Uniform Commodity Rates *($/hcf)*
0%	816,587	$ 786,033	$ -	$ 786,033	$0.0000	$0.96
Up to 15%	694,099	786,033	(87,573)	698,460	$0.0437	$1.01
Up to 25%	612,440	786,033	(145,955)	640,079	$0.0825	$1.05
Up to 35%	530,782	786,033	(204,337)	581,697	$0.1333	$1.10
>50%	326,635	786,033	(350,291)	435,742	$0.3715	$1.33

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

TABLE 52 : CALCULATION OF DROUGHT SURCHARGES FOR FY 2029/30

NET REVENUE REQUIREMENT - ALTERNATIVE 1						
Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation[1]	Target Rev. Req't from Vol. Charges	Drought Surcharge *($/hcf)*	Uniform Commodity Rates *($/hcf)*
0%	816,587	$ 828,155	$ -	$ 828,155	$0.0000	$1.01
Up to 15%	694,099	828,155	(94,034)	734,121	$0.0435	$1.06
Up to 25%	612,440	828,155	(156,723)	671,431	$0.0822	$1.10
Up to 35%	530,782	828,155	(219,413)	608,742	$0.1327	$1.15
>50%	326,635	828,155	(376,136)	452,019	$0.3697	$1.38

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

TABLE 53 : CALCULATION OF DROUGHT SURCHARGES FOR FY 2025/26

NET REVENUE REQUIREMENT - ALTERNATIVE 2						
Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation[1]	Target Rev. Req't from Vol. Charges	Drought Surcharge *($/hcf)*	Uniform Commodity Rates *($/hcf)*
0%	816,587	$ 843,974	$ -	$ 843,974	$0.0000	$1.03
Up to 15%	694,099	843,974	(70,803)	773,171	$0.0804	$1.11
Up to 25%	612,440	843,974	(118,006)	725,969	$0.1518	$1.19
Up to 35%	530,782	843,974	(165,208)	678,767	$0.2453	$1.28
>50%	326,635	843,974	(283,213)	560,761	$0.6832	$1.72

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

©2023 NBS Government Finance Group.

TABLE 54 : CALCULATION OF DROUGHT SURCHARGES FOR FY 2026/27

NET REVENUE REQUIREMENT - ALTERNATIVE 2						
Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation[1]	Target Rev. Req't from Vol. Charges	Drought Surcharge *($/hcf)*	Uniform Commodity Rates *($/hcf)*
0%	816,587	$ 947,349	$ -	$ 947,349	$0.0000	$1.16
Up to 15%	694,099	947,349	(75,989)	871,360	$0.0952	$1.26
Up to 25%	612,440	947,349	(126,649)	820,700	$0.1799	$1.34
Up to 35%	530,782	947,349	(177,309)	770,040	$0.2906	$1.45
>50%	326,635	947,349	(303,958)	643,391	$0.8096	$1.97

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

TABLE 55 : CALCULATION OF DROUGHT SURCHARGES FOR FY 2027/28

NET REVENUE REQUIREMENT - ALTERNATIVE 2						
Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation[1]	Target Rev. Req't from Vol. Charges	Drought Surcharge *($/hcf)*	Uniform Commodity Rates *($/hcf)*
0%	816,587	$ 994,512	$ -	$ 994,512	$0.0000	$1.22
Up to 15%	694,099	994,512	(81,569)	912,943	$0.0974	$1.32
Up to 25%	612,440	994,512	(135,948)	858,564	$0.1840	$1.40
Up to 35%	530,782	994,512	(190,328)	804,184	$0.2972	$1.52
>50%	326,635	994,512	(326,276)	668,236	$0.8279	$2.05

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

TABLE 56 : CALCULATION OF DROUGHT SURCHARGES FOR FY 2028/29

NET REVENUE REQUIREMENT - ALTERNATIVE 2						
Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation[1]	Target Rev. Req't from Vol. Charges	Drought Surcharge *($/hcf)*	Uniform Commodity Rates *($/hcf)*
0%	816,587	$ 1,048,044	$ -	$ 1,048,044	$0.0000	$1.28
Up to 15%	694,099	1,048,044	(87,573)	960,471	$0.1003	$1.38
Up to 25%	612,440	1,048,044	(145,955)	902,090	$0.1895	$1.47
Up to 35%	530,782	1,048,044	(204,337)	843,708	$0.3061	$1.59
>50%	326,635	1,048,044	(350,291)	697,753	$0.8527	$2.14

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

TABLE 57 : CALCULATION OF DROUGHT SURCHARGES FOR FY 2029/30

NET REVENUE REQUIREMENT - ALTERNATIVE 2						
Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation[1]	Target Rev. Req't from Vol. Charges	Drought Surcharge *($/hcf)*	Uniform Commodity Rates *($/hcf)*
0%	816,587	$ 1,104,206	$ -	$ 1,104,206	$0.0000	$1.35
Up to 15%	694,099	1,104,206	(94,034)	1,010,172	$0.1032	$1.46
Up to 25%	612,440	1,104,206	(156,723)	947,483	$0.1948	$1.55
Up to 35%	530,782	1,104,206	(219,413)	884,793	$0.3147	$1.67
>50%	326,635	1,104,206	(376,136)	728,070	$0.8768	$2.23

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

©2023 NBS Government Finance Group.

TABLE 58 : CURRENT VS. PROPOSED WATER RATES

Water Rate Schedule	Current Rates	*NET REVENUE REQUIREMENT - ALTERNATIVE 1* Proposed Rates				
		FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
Monthly Fixed Service Charges (in $/mo)						
Residential (SFR, MFR, MH)						
3/4 inch	$34.32	$43.56	$47.91	$49.35	$50.83	$52.36
1 inch	$34.32	$70.87	$77.96	$80.29	$82.70	$85.18
1 1/2 inch	$34.32	$139.15	$153.07	$157.66	$162.39	$167.26
2 inch	$34.32	$221.09	$243.20	$250.49	$258.01	$265.75
3 inch	$34.32	$439.59	$483.55	$498.05	$512.99	$528.38
4 inch	$34.32	$685.40	$753.94	$776.56	$799.85	$823.85
Non-Residential (COMM & IRR)						
3/4 inch	$34.32	$43.56	$47.91	$49.35	$50.83	$52.36
1 inch	$85.79	$70.87	$77.96	$80.29	$82.70	$85.18
1 1/2 inch	$171.58	$139.15	$153.07	$157.66	$162.39	$167.26
2 inch	$274.52	$221.09	$243.20	$250.49	$258.01	$265.75
3 inch	$514.73	$439.59	$483.55	$498.05	$512.99	$528.38
4 inch	$857.88	$685.40	$753.94	$776.56	$799.85	$823.85
6 inch	$1,715.75	$1,368.21	$1,505.03	$1,550.18	$1,596.69	$1,644.59
Variable Charges for All Water Consumed (in $/HCF)						
Uniform Rate for All Customers	$0.56	$0.78	$0.85	$0.88	$0.90	$0.93

TABLE 59 : CURRENT VS. PROPOSED WATER RATES

Water Rate Schedule	Current Rates	*NET REVENUE REQUIREMENT - ALTERNATIVE 2* Proposed Rates				
		FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
Monthly Fixed Service Charges (in $/mo)						
Residential (SFR, MFR, MH)						
3/4 inch	$34.32	$41.03	$45.13	$46.48	$47.88	$49.32
1 inch	$34.32	$66.65	$73.32	$75.52	$77.78	$80.12
1 1/2 inch	$34.32	$130.72	$143.79	$148.11	$152.55	$157.13
2 inch	$34.32	$207.60	$228.36	$235.21	$242.27	$249.54
3 inch	$34.32	$412.61	$453.87	$467.49	$481.51	$495.96
4 inch	$34.32	$643.25	$707.58	$728.80	$750.67	$773.19
Non-Residential (COMM & IRR)						
3/4 inch	$34.32	$41.03	$45.13	$46.48	$47.88	$49.32
1 inch	$85.79	$66.65	$73.32	$75.52	$77.78	$80.12
1 1/2 inch	$171.58	$130.72	$143.79	$148.11	$152.55	$157.13
2 inch	$274.52	$207.60	$228.36	$235.21	$242.27	$249.54
3 inch	$514.73	$412.61	$453.87	$467.49	$481.51	$495.96
4 inch	$857.88	$643.25	$707.58	$728.80	$750.67	$773.19
6 inch	$1,715.75	$1,283.91	$1,412.30	$1,454.67	$1,498.31	$1,543.26
Variable Charges for All Water Consumed (in $/HCF)						
Uniform Rate for All Customers	$0.56	$1.03	$1.14	$1.17	$1.21	$1.24

©2023 NBS Government Finance Group.

TABLE 60 : CURRENT VS. PROPOSED DROUGHT SURCHARGES

		NET REVENUE REQUIREMENT - ALTERNATIVE 1				
Drought Surcharge Schedule (in $/HCF)	**Current Rates**	**FY 2025/26**	**FY 2026/27**	**FY 2027/28**	**FY 2028/29**	**FY 2029/30**
Up to 15%	*n/a*	$0.0348	$0.0441	$0.0437	$0.0437	$0.0435
Up to 25%	*n/a*	$0.0657	$0.0832	$0.0825	$0.0825	$0.0822
Up to 35%	*n/a*	$0.1061	$0.1345	$0.1333	$0.1333	$0.1327
>50%	*n/a*	$0.2957	$0.3746	$0.3712	$0.3715	$0.3697

TABLE 61 : CURRENT VS. PROPOSED DROUGHT SURCHARGES

		NET REVENUE REQUIREMENT - ALTERNATIVE 2				
Drought Surcharge Schedule (in $/HCF)	**Current Rates**	**FY 2025/26**	**FY 2026/27**	**FY 2027/28**	**FY 2028/29**	**FY 2029/30**
Up to 15%	*n/a*	$0.0804	$0.0952	$0.0974	$0.1003	$0.1032
Up to 25%	*n/a*	$0.1518	$0.1799	$0.1840	$0.1895	$0.1948
Up to 35%	*n/a*	$0.2453	$0.2906	$0.2972	$0.3061	$0.3147
>50%	*n/a*	$0.6832	$0.8096	$0.8279	$0.8527	$0.8768

©2023 NBS Government Finance Group.

Appendix B. Northwest Sewer Rate Study Tables and Figures

TABLE 1: FINANCIAL PLAN AND SUMMARY OF REVENUE REQUIREMENTS

RATE REVENUE REQUIREMENTS SUMMARY[1]	COMBINED SEWER SYSTEM & PLANT										
	Budget	5-Year Projected Rate Period					Projected				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Sources of Sewer Funds [1]											
Rate Revenue	$ 2,201,866	$ 2,247,755	$ 2,293,644	$ 2,339,533	$ 2,385,422	$ 2,431,311	$ 5,773,376	$ 5,880,326	$ 5,987,275	$ 6,094,225	$ 6,201,174
Recycled Water Revenue	-	-	75,000	76,501	78,001	79,502	160,000	162,964	165,928	168,892	171,856
Non-Rate Revenue	15,312	15,631	15,950	16,269	16,588	16,908	44,791	45,620	46,450	47,280	48,109
Interest Earnings[2]	-	-	-	9,016	17,987	33,333	43,557	21,023	21,294	21,568	21,846
Transfer In	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Total Sources of Funds:	**$ 2,229,178**	**$ 2,275,386**	**$ 2,396,594**	**$ 2,453,319**	**$ 2,509,999**	**$ 2,573,054**	**$ 6,033,724**	**$ 6,121,933**	**$ 6,232,947**	**$ 6,343,965**	**$ 6,454,986**
Uses of Sewer Funds [1]											
Operating Expenses :											
WWTP Collection System And Lift Stations	$ 680,230	$ 704,575	$ 729,909	$ 756,280	$ 783,740	$ 812,345	$ 2,054,045	$ 2,127,666	$ 2,204,270	$ 2,284,002	$ 2,367,018
WWTP Plant	1,805,908	1,879,646	1,957,136	2,038,633	2,124,415	2,214,782	4,413,975	4,593,072	4,781,061	4,978,520	5,186,076
Combined Cost Savings	-	-	-	-	-	-	(100,000)	(103,450)	(107,019)	(110,711)	(114,531)
Subtotal: Operating Expenses	$ 2,486,139	$ 2,584,221	$ 2,687,044	$ 2,794,913	$ 2,908,155	$ 3,027,127	$ 6,368,020	$ 6,617,288	$ 6,878,311	$ 7,151,811	$ 7,438,564
Other Expenditures:											
Existing Debt Service	$ 128,295	$ 112,479	$ 96,675	$ 98,063	$ 99,465	$ 101,481	$ 212,823	$ 122,022	$ 123,952	$ 126,504	$ 39,850
Future Debt Service	-	-	-	-	-	579,591	1,174,482	1,181,860	1,189,460	1,197,288	1,205,351
Rate-Funded Capital Expenses	20,000	860,043	1,374,108	1,674,127	1,447,505	1,974,483	5,553,893	10,096,670	6,892,875	11,826,072	7,155,605
Subtotal: Other Expenditures	$ 148,295	$ 972,522	$ 1,470,783	$ 1,772,190	$ 1,546,970	$ 2,655,555	$ 6,941,198	$ 11,400,552	$ 8,206,287	$ 13,149,863	$ 8,400,805
Total Uses of Sewer Funds:	**$ 2,634,434**	**$ 3,556,742**	**$ 4,157,827**	**$ 4,567,102**	**$ 4,455,125**	**$ 5,682,682**	**$ 13,309,218**	**$ 18,017,839**	**$ 15,084,599**	**$ 20,301,675**	**$ 15,839,369**
plus: Revenue from Rate Increases[3]	-	1,236,265	2,505,806	2,800,714	3,117,702	3,458,128	3,988,236	4,559,239	5,173,632	5,834,062	6,543,326
Annual Surplus/(Deficit)	**$ (405,256)**	**$ (45,092)**	**$ 744,573**	**$ 686,931**	**$ 1,172,576**	**$ 348,500**	**$ (3,287,258)**	**$ (7,336,668)**	**$ (3,678,019)**	**$ (8,123,649)**	**$ (2,841,057)**
Net Revenue Req't. *(Total Uses less Non-Rate Revenue)*	**$ 2,607,122**	**$ 3,529,111**	**$ 4,129,877**	**$ 4,529,817**	**$ 4,408,550**	**$ 5,620,441**	**$ 13,208,870**	**$ 17,939,196**	**$ 15,004,855**	**$ 20,220,827**	**$ 15,757,413**
Total Rate Revenue After Rate Increases	**$ 2,201,866**	**$ 3,484,020**	**$ 4,799,450**	**$ 5,140,247**	**$ 5,503,124**	**$ 5,889,439**	**$ 9,761,612**	**$ 10,439,565**	**$ 11,160,908**	**$ 11,928,287**	**$ 12,744,501**
Projected Annual Rate Revenue Increase	***0.00%***	***55.00%***	***35.00%***	***5.00%***	***5.00%***	***5.00%***	***5.00%***	***5.00%***	***5.00%***	***5.00%***	***5.00%***
Cumulative Increase from Annual Revenue Increases	*0.00%*	*55.00%*	*109.25%*	*119.71%*	*130.70%*	*142.23%*	*154.34%*	*167.06%*	*180.42%*	*194.44%*	*209.16%*
Debt Coverage After Rate Increase [4]	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*2.63*	*3.12*	*3.45*	*3.80*	*4.46*

1. Revenue and expenses for FY 2021/22 through FY 2023/24 provided by the City. Revenues and expenses for all other years are escalated based on the forecasting assumptions in Table 8. Source file: *FINAL ADOPTED BUDGET - FY23-24 and revexpbyfun*
2. Interest earnings for FY 2021/22 through FY 2023/24 are from the City's Budget. For all other years, interest is calculated based on historical LAIF returns. Source file: *Rio Vista_Financial Data_FY 2023-2024* .
3. Revenue from rate increases assumes an implementation date of July 1, 2024 for new rates. For each year thereafter, the assumption is that new rates will be implemented on July 1st of each year.
4. Assumes a debt service coverage requirement for the new SRF loan issued for the Beach Plant in FY 2024/25 with payments scheduled to begin FY 2028/29.

3	*<-- Select Financial Plan Scenario Here*											
Financial Plan Alternatives		FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
1	Alternative 1 - 1% Annual Rate Increases	*0.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*
2	Alternative 2 - 3% Inflationary Rate Increases	*0.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*
3	Alternative 3 - Custom Rate Increases	*0.00%*	*55.00%*	*35.00%*	*5.00%*	*5.00%*	*5.00%*	*5.00%*	*5.00%*	*5.00%*	*5.00%*	*5.00%*
4	Alternative 4 - No Rate Increases	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

©2024 NBS Government Finance Group. All rights reserved.

TABLE 2: RESERVE FUND SUMMARY

SUMMARY OF CASH ACTIVITY	COMBINED SEWER SYSTEM & PLANT										
	Budget	5-Year Projected Rate Period					Projected				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Total Beginning Cash[1]	**$ 440,723**	**$ -**									
Unrestricted Reserves:											
Operating Reserve											
Beginning Reserve Balance	$ 440,723	$ -	$ (45,092)	$ 672,000	$ 707,662	$ 736,122	$ 1,576,565	$ (1,853,719)	$(12,981,626)	$(19,989,825)	$(31,404,114)
Plus: Net Cash Flow (After Rate Increases)	(405,256)	(45,092)	744,573	686,931	1,172,576	348,500	(3,287,258)	(7,336,668)	(3,678,019)	(8,123,649)	(2,841,057)
Plus: Interest Earnings	-	-	-	8,662	9,122	9,489	20,322	-	-	-	-
Less: Transfer Out to Capital Replacement Reserve	-	-	(27,481)	(659,931)	(1,153,238)	(327,621)	-	-	-	-	-
Ending Operating Reserve Balance	***$ 35,467***	***$ (45,092)***	***$ 672,000***	***$ 707,662***	***$ 736,122***	***$ 766,489***	***$ (1,690,371)***	***$ (9,190,386)***	##########	##########	##########
Target Ending Balance (90 days of O&M)[2]	*$ 622,000*	*$ 646,000*	*$ 672,000*	*$ 699,000*	*$ 727,000*	*$ 757,000*	*$ 1,592,000*	*$ 1,654,000*	*$ 1,720,000*	*$ 1,788,000*	*$ 1,860,000*
Capital Reserve											
Beginning Reserve Balance	$ -	$ -	$ -	$ 27,481	$ 687,766	$ 1,849,869	$ 1,802,566	$ 1,630,935	$ 1,651,958	$ 1,673,252	$ 1,694,820
Plus: Grant Proceeds	-	-	-	-	-	-	-	-	-	-	-
Plus: Transfer of Operating Reserve Surplus	-	-	27,481	659,931	1,153,238	327,621	-	-	-	-	-
Plus: Interest Earnings	-	-	-	354	8,865	23,845	23,235	21,023	21,294	21,568	21,846
Less: Use of Reserves for Capital Projects	-	-	-	-	-	(398,769)	(194,866)	-	-	-	-
Ending Capital Reserve Balance	***$ -***	***$ -***	***$ 27,481***	***$ 687,766***	***$ 1,849,869***	***$ 1,802,566***	***$ 1,630,935***	***$ 1,651,958***	***$ 1,673,252***	***$ 1,694,820***	***$ 1,716,666***
Target Ending Balance (3% of net assets)[3]	*$ 916,600*	*$ 956,900*	*$ 1,104,500*	*$ 1,279,100*	*$ 1,357,900*	*$ 1,451,100*	*$ 1,607,700*	*$ 1,891,000*	*$ 2,070,800*	*$ 2,394,200*	*$ 2,568,900*
Ending Balance - Excl. Restricted Reserves	***$ 35,467***	***$ (45,092)***	***$ 699,481***	***$ 1,395,428***	***$ 2,585,991***	***$ 2,569,055***	***$ (59,436)***	***$ (7,538,429)***	##########	##########	##########
Min. Target Ending Balance -Excl. Restricted Reserves	***$ 1,538,600***	***$ 1,602,900***	***$ 1,776,500***	***$ 1,978,100***	***$ 2,084,900***	***$ 2,208,100***	***$ 3,199,700***	***$ 3,545,000***	***$ 3,790,800***	***$ 4,182,200***	***$ 4,428,900***
Ending Surplus/(Deficit) Compared to Reserve Targets	***$ (1,503,133)***	***$ (1,647,992)***	***$ (1,077,019)***	***$ (582,672)***	***$ 501,091***	***$ 360,955***	***$ (3,259,136)***	##########	##########	##########	##########
Annual Interest Earnings Rate[4]	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*

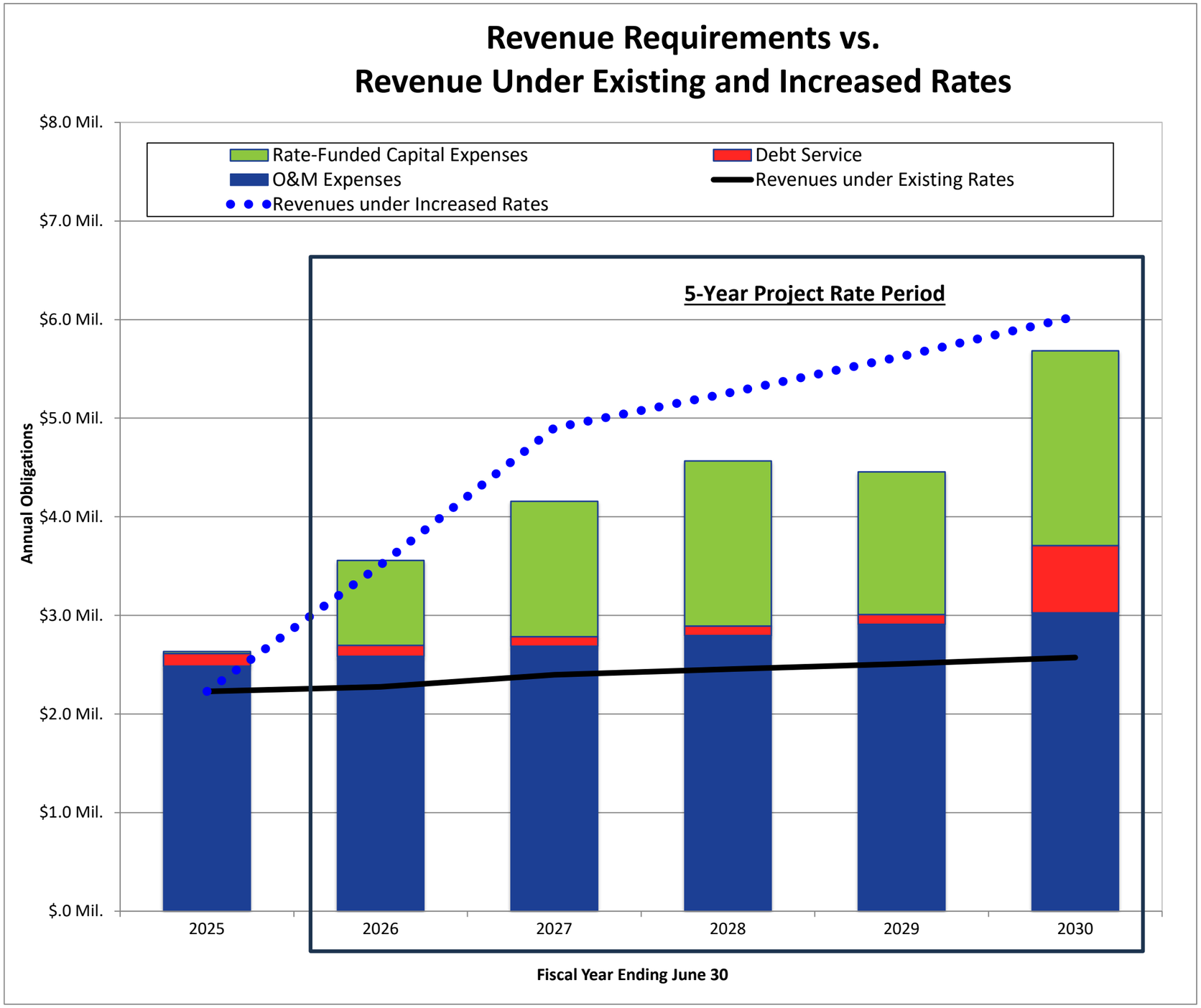
1. Beginning cash balances provided by City staff for Fund 86 NW Sewer System and Plant and Fund 87 NW Sewer Capital Outlay. Source file: *NBS - CASH BALANCE 8.25.23* .
2. The target ending balance is set equal to 90 days of O&M expenses.
3. The target ending balance is set equal to 3% of net capital assets. See *Exhibit 2 (CIP)* for details.
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* .

TABLE 3: RESERVE FUND SUMMARY, cont.

SUMMARY OF CASH ACTIVITY	Budget	5-Year Projected Rate Period					Projected				
	FY 2024/25	FY 2024/25	FY 2024/25	FY 2024/25	FY 2024/25	FY 2024/25	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Restricted Reserves:											
Connection Fee Reserve											
Beginning Reserve Balance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Plus: Interest Earnings	-	-	-	-	-	-	-	-	-	-	-
Plus: Connection Fee Revenue[1]	-	-	2,671,388	2,767,171	2,866,388	2,969,162	3,075,621	3,185,898	3,300,128	3,418,454	3,541,023
Less: Use of Reserves for Capital Projects	-	-	(801,416)	(830,151)	(859,916)	(890,749)	(922,686)	(955,769)	(990,038)	(1,025,536)	(1,062,307)
Ending Impact Fee Fund Balance	***$ -***	***$ -***	***$ 1,869,972***	***$ 1,937,020***	***$ 2,006,471***	***$ 2,078,414***	***$ 2,152,935***	***$ 2,230,129***	***$ 2,310,090***	***$ 2,392,918***	***$ 2,478,716***
Target Ending Balance (3% of net assets)[2]	*$ 916,600*	*$ 956,900*	*$ 1,104,500*	*$ 1,279,100*	*$ 1,357,900*	*$ 1,451,100*	*$ 1,607,700*	*$ 1,891,000*	*$ 2,070,800*	*$ 2,394,200*	*$ 2,568,900*
Annual Interest Earnings Rate[3]	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*

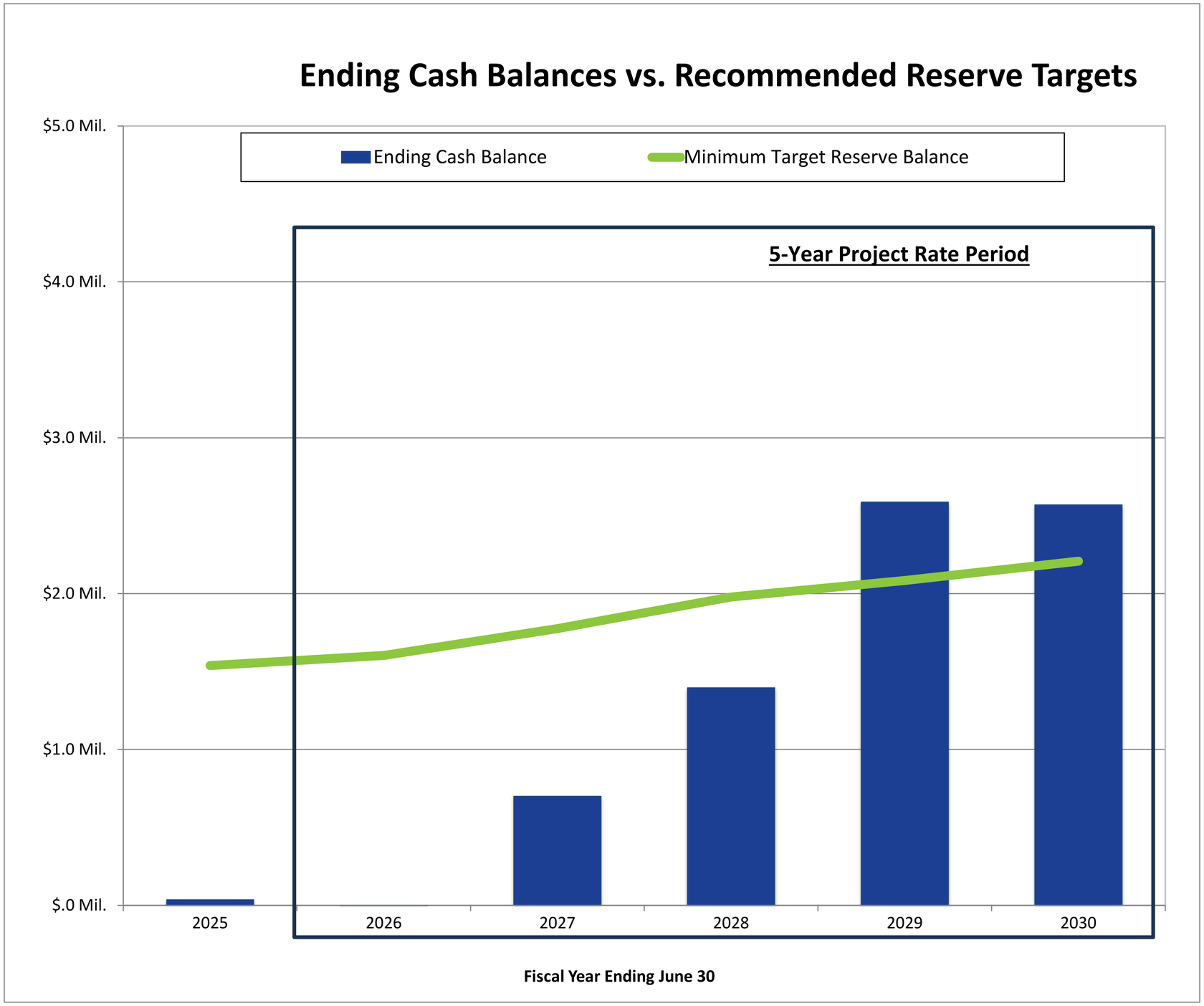
©2024 NBS Government Finance Group. All rights reserved.

CHART 1



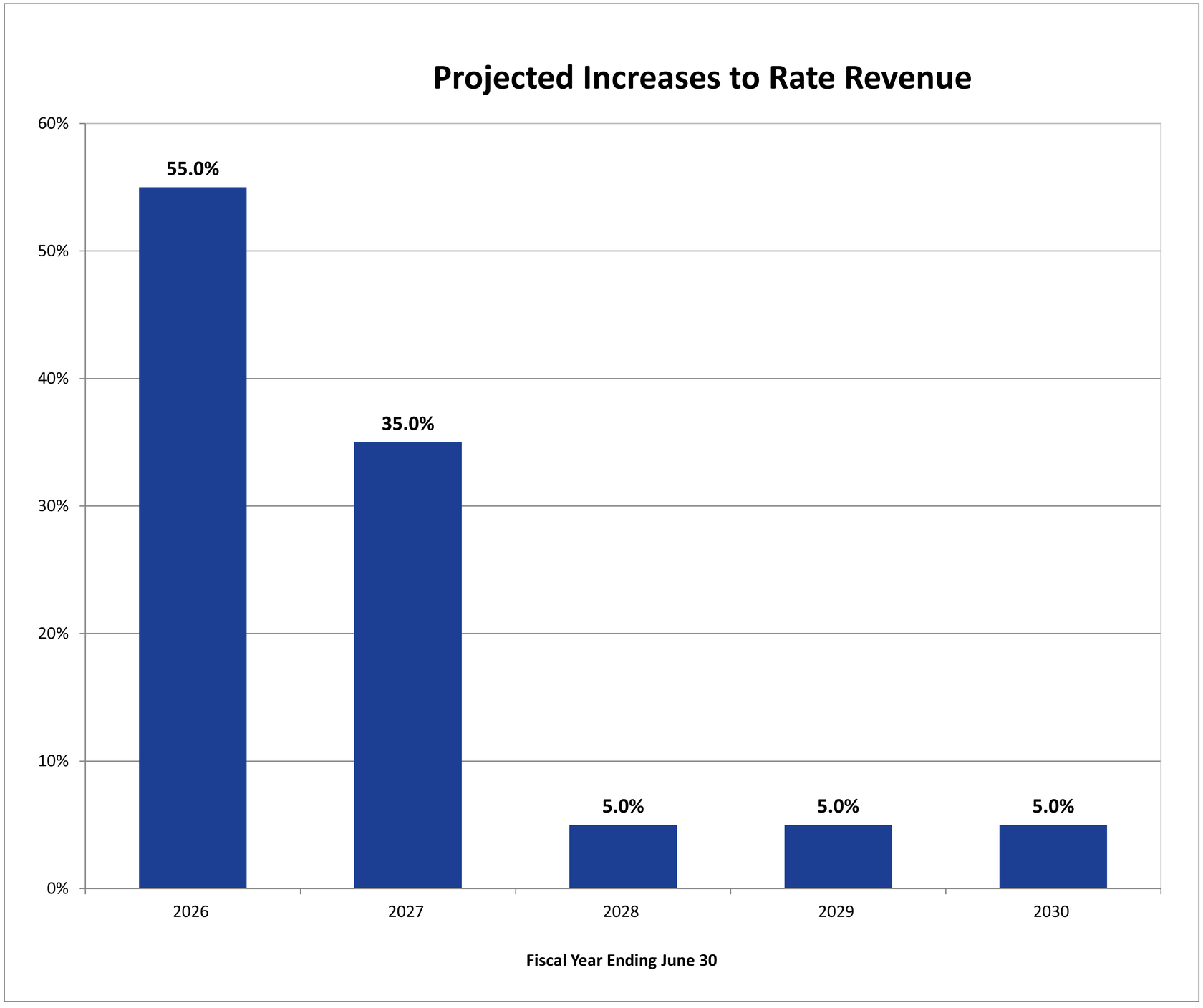
©2024 NBS Government Finance Group. All rights reserved.

CHART 2



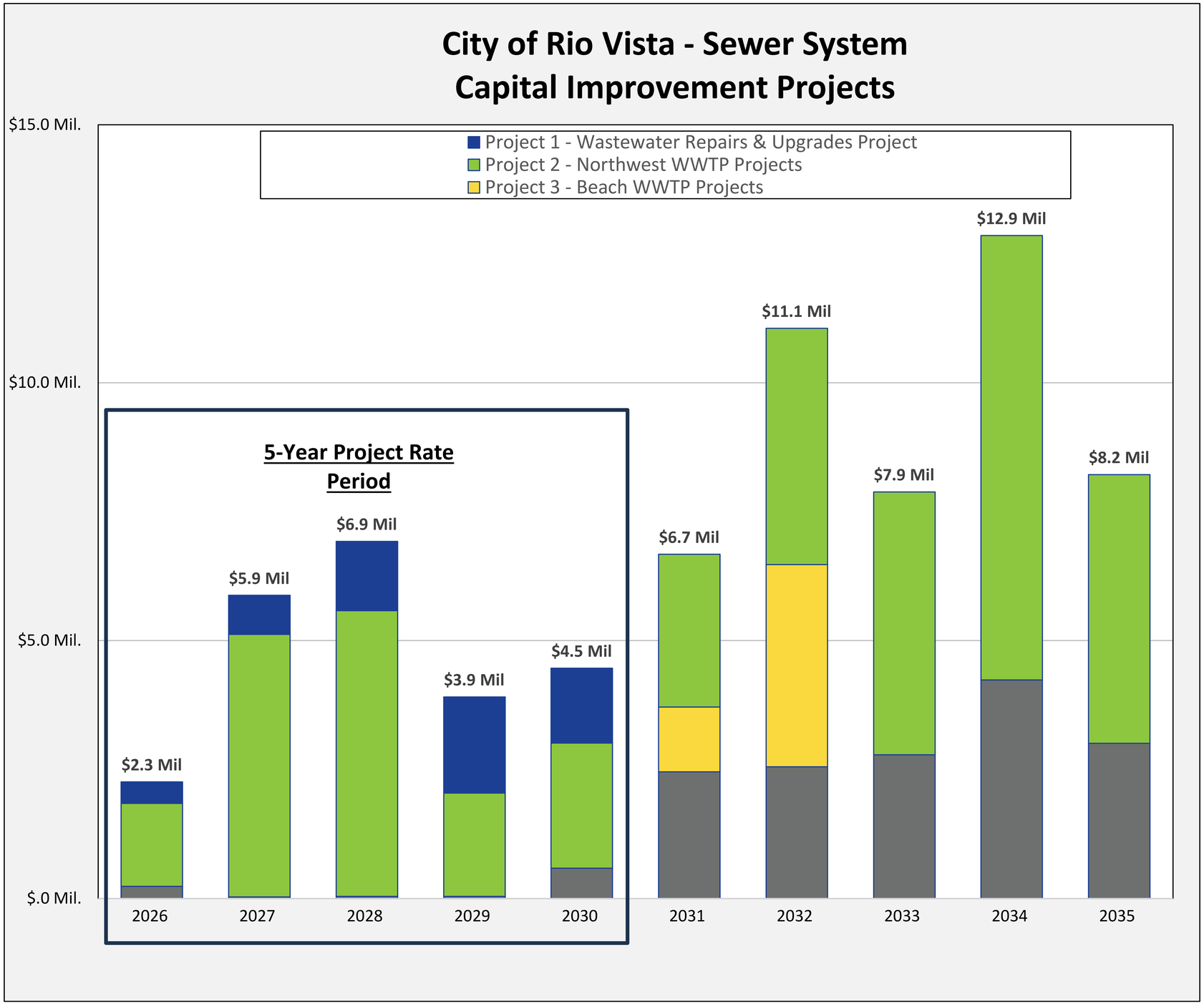
©2024 NBS Government Finance Group. All rights reserved.

CHART 3



©2024 NBS Government Finance Group. All rights reserved.

CHART 4



©2024 NBS Government Finance Group. All rights reserved.

TABLE 4: REVENUE FORECAST[1]

Operations and Maintenance Forecast		Budget	5-Year Projected Rate Period					Projected				
DESCRIPTION	Basis	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Operating Revenue												
Utility Service Fees - Residential	1	$ 2,143,680	$ 2,188,357	$ 2,233,033	$ 2,277,710	$ 2,322,386	$ 2,367,063	$ 2,411,739	$ 2,456,416	$ 2,501,092	$ 2,545,769	$ 2,590,445
Utility Service Fees - Commercial	1	58,186	59,398	60,611	61,824	63,036	64,249	65,461	66,674	67,887	69,099	70,312
Recycled Water Revenue[2]	1	-	-	75,000	76,501	78,001	79,502	160,000	162,964	165,928	168,892	171,856
Forfeitures/Penalties	1	15,312	15,631	15,950	16,269	16,588	16,908	17,227	17,546	17,865	18,184	18,503
Miscellaneous Revenue	1	-	-	-	-	-	-	-	-	-	-	-
Non-Operating Revenue												
Interest Income	See FP	-	-	-	-	-	-	-	-	-	-	-
Transfer In[3]	9	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Connection Fee Revenue												
Fee Revenue[4]	1	-	-	2,671,388	2,767,171	2,866,388	2,969,162	3,075,621	3,185,898	3,300,128	3,418,454	3,541,023
Interest Income	See FP	-	-	-	-	-	-	-	-	-	-	-
TOTAL: REVENUE		**$ 2,229,178**	**$ 2,275,386**	**$ 5,067,982**	**$ 5,211,474**	**$ 5,358,400**	**$ 5,508,883**	**$ 5,742,049**	**$ 5,901,497**	**$ 6,064,900**	**$ 6,232,398**	**$ 6,404,139**

TABLE 5: REVENUE SUMMARY

DESCRIPTION	Basis	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Rate Revenue		$ 2,201,866	$ 2,247,755	$ 2,293,644	$ 2,339,533	$ 2,385,422	$ 2,431,311	$ 2,477,201	$ 2,523,090	$ 2,568,979	$ 2,614,868	$ 2,660,757
Recycled Water Revenue		-	-	75,000	76,501	78,001	79,502	160,000	162,964	165,928	168,892	171,856
Non-Rate Revenue		15,312	15,631	15,950	16,269	16,588	16,908	17,227	17,546	17,865	18,184	18,503
Interest Income	See FP	-	-	-	-	-	-	-	-	-	-	-
Transfer In		12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Connection Fee Revenue		-	-	2,671,388	2,767,171	2,866,388	2,969,162	3,075,621	3,185,898	3,300,128	3,418,454	3,541,023
TOTAL: REVENUE		**$ 2,229,178**	**$ 2,275,386**	**$ 5,067,982**	**$ 5,211,474**	**$ 5,358,400**	**$ 5,508,883**	**$ 5,742,049**	**$ 5,901,497**	**$ 6,064,900**	**$ 6,232,398**	**$ 6,404,139**

©2024 NBS Government Finance Group. All rights reserved.

TABLE 6: OPERATING EXPENSE FORECAST[1]

FUND	CATEGORY	Basis	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
NW WWTP COLLECTION SYSTEM AND LIFT STATIONS													
	Salaries & Wages	3	$ 219,997	$ 226,641	$ 233,486	$ 240,537	$ 247,801	$ 255,285	$ 262,994	$ 270,937	$ 279,119	$ 287,549	$ 296,232
	Part time - Salaries & Wages	3	-	-	-	-	-	-	-	-	-	-	-
	Overtime	3	4,813	4,959	5,109	5,263	5,422	5,586	5,754	5,928	6,107	6,291	6,481
	Clothing & Work Boots	3	-	-	-	-	-	-	-	-	-	-	-
	Dental Insurance	3	3,581	3,689	3,800	3,915	4,033	4,155	4,281	4,410	4,543	4,680	4,822
	Health Insurance	3	37,655	38,792	39,964	41,170	42,414	43,695	45,014	46,374	47,774	49,217	50,703
	Life Insurance	3	500	515	530	546	563	580	597	615	634	653	673
	Employee Assistance Program	3	58	60	62	63	65	67	69	71	74	76	78
	Vision Insurance	3	460	474	488	503	518	534	550	566	583	601	619
	PERS Retirement	3	40,538	41,762	43,024	44,323	45,661	47,040	48,461	49,925	51,432	52,986	54,586
	Social Security/FICA	3	15,529	15,998	16,481	16,979	17,492	18,020	18,564	19,125	19,702	20,297	20,910
	Workers Comp. Insurance	3	11,278	11,619	11,970	12,331	12,704	13,087	13,483	13,890	14,309	14,741	15,187
	State Unemployment Insurance	3	1,700	1,751	1,804	1,859	1,915	1,972	2,032	2,093	2,157	2,222	2,289
	Boot/Uniform/Equipment Allowance	3	1,829	1,884	1,941	1,999	2,060	2,122	2,186	2,252	2,320	2,390	2,462
	Accounting & Auditing	2	-	-	-	-	-	-	-	-	-	-	-
	Administrative Expense - ABM Loan	2	-	-	-	-	-	-	-	-	-	-	-
	Advertising	2	-	-	-	-	-	-	-	-	-	-	-
	Legal Fees	2	2,069	2,140	2,214	2,291	2,370	2,451	2,536	2,623	2,714	2,808	2,904
	Bond Issuance Costs	2	-	-	-	-	-	-	-	-	-	-	-
	Printing	2	207	214	221	229	237	245	254	262	271	281	290
	Contractual Services	2	23,276	24,079	24,910	25,769	26,658	27,578	28,530	29,514	30,532	31,585	32,675
	Veolia- Contractual services	2	81,859	84,683	87,605	90,627	93,754	96,988	100,334	103,796	107,377	111,081	114,913
	Evidence Expenses	2	17,587	18,193	18,821	19,470	20,142	20,837	21,556	22,299	23,069	23,865	24,688
	Equipment Rental	2	8,276	8,562	8,857	9,162	9,479	9,806	10,144	10,494	10,856	11,230	11,618
	Equipment (Non-Capital,<$5,000)	2	2,069	2,140	2,214	2,291	2,370	2,451	2,536	2,623	2,714	2,808	2,904
	Fuel & Mileage	7	2,142	2,293	2,455	2,629	2,815	3,015	3,228	3,457	3,701	3,963	4,244
	Flood & Fire Insurance	2	6,178	6,392	6,612	6,840	7,076	7,320	7,573	7,834	8,105	8,384	8,673
	Liability Insurance	2	9,513	9,841	10,181	10,532	10,895	11,271	11,660	12,062	12,478	12,909	13,354
	Finance Charge - Collection fee	2	103	107	111	115	118	123	127	131	136	140	145
	M & R Machinery & Equipment	2	25,863	26,755	27,678	28,633	29,621	30,642	31,700	32,793	33,925	35,095	36,306
	M & R Real Property	2	10,345	10,702	11,071	11,453	11,848	12,257	12,680	13,117	13,570	14,038	14,522
	Emergency Repairs	2	51,725	53,510	55,356	57,265	59,241	61,285	63,399	65,586	67,849	70,190	72,612
	M&R Vehicles	2	4,138	4,281	4,428	4,581	4,739	4,903	5,072	5,247	5,428	5,615	5,809
	Membership Dues	2	1,138	1,177	1,218	1,260	1,303	1,348	1,395	1,443	1,493	1,544	1,597
	Misc. Services & Supplies	2	3,104	3,211	3,321	3,436	3,554	3,677	3,804	3,935	4,071	4,211	4,357
	Office Supplies & Materials	2	517	535	554	573	592	613	634	656	678	702	726
	Permits & Licenses	2	10,345	10,702	11,071	11,453	11,848	12,257	12,680	13,117	13,570	14,038	14,522
	Telephone	2	2,586	2,675	2,768	2,863	2,962	3,064	3,170	3,279	3,392	3,509	3,631
	Utilities - PG&E	6	44,424	48,133	52,153	56,508	61,227	66,339	71,879	77,881	84,385	91,432	99,067
	Utilities - City Water Services	6	1,192	1,291	1,399	1,516	1,643	1,780	1,928	2,090	2,264	2,453	2,658
	Capital Outlay - Mach & Equip	8	-	-	-	-	-	-	-	-	-	-	-
	Capital Outlay - Vehicles	8	33,638	34,815	36,033	37,294	38,600	39,951	41,349	42,796	44,294	45,844	47,449
	Loan - Lease Payment - Principal	Exh. 3	-	-	-	-	-	-	-	-	-	-	-
	Loan - Lease Payment - Interest	Exh. 3	-	-	-	-	-	-	-	-	-	-	-
TOTAL: NW WWTP COLLECTION SYSTEM AND LIFT STATIONS			**$ 680,230**	**$ 704,575**	**$ 729,909**	**$ 756,280**	**$ 783,740**	**$ 812,345**	**$ 842,152**	**$ 873,224**	**$ 905,627**	**$ 939,430**	**$ 974,708**

©2024 NBS Government Finance Group. All rights reserved.

TABLE 7: OPERATING EXPENSE FORECAST[1]

FUND	CATEGORY	Basis	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
SEWER TREATMENT PLANT													
	Salaries & Wages	3	$ 132,596	$ 136,600	$ 140,726	$ 144,975	$ 149,354	$ 153,864	$ 158,511	$ 163,298	$ 168,230	$ 173,310	$ 178,544
	Overtime	3	2,392	2,465	2,539	2,616	2,695	2,776	2,860	2,946	3,035	3,127	3,222
	Clothing & Work Boots	3	-	-	-	-	-	-	-	-	-	-	-
	Dental Insurance	3	2,137	2,202	2,269	2,337	2,408	2,480	2,555	2,632	2,712	2,794	2,878
	Health Insurance	3	22,067	22,733	23,420	24,127	24,856	25,607	26,380	27,177	27,997	28,843	29,714
	Life Insurance	3	301	310	319	329	339	349	360	370	382	393	405
	Employee Assistance Program	3	38	39	40	41	42	44	45	46	48	49	51
	Vision Insurance	3	277	285	294	303	312	321	331	341	351	362	373
	PERS Retirement	3	19,893	20,493	21,112	21,750	22,407	23,083	23,781	24,499	25,239	26,001	26,786
	Social Security/FICA	3	9,944	10,244	10,554	10,873	11,201	11,539	11,888	12,247	12,617	12,998	13,390
	Workers Comp. Insurance	3	7,315	7,536	7,764	7,998	8,240	8,489	8,745	9,009	9,281	9,562	9,850
	State Unemployment Insurance	3	-	-	-	-	-	-	-	-	-	-	-
	Accounting & Auditing	2	6,689	6,920	7,159	7,406	7,661	7,925	8,199	8,482	8,774	9,077	9,390
	Legal Fees	2	-	-	-	-	-	-	-	-	-	-	-
	Bond Issuance Costs	Exh. 3	-	-	-	-	-	-	-	-	-	-	-
	Chemicals & Gases	4	24,929	26,287	27,718	29,228	30,820	32,499	34,269	36,136	38,104	40,180	42,369
	Contractual Services	2	151,909	157,150	162,572	168,180	173,983	179,985	186,195	192,618	199,264	206,138	213,250
	Veolia- Contractual services	2	641,250	663,373	686,259	709,935	734,428	759,766	785,978	813,094	841,146	870,165	900,186
	Property Tax	2	4,042	4,181	4,325	4,475	4,629	4,789	4,954	5,125	5,302	5,485	5,674
	Debt Service - Principal	Exh. 3	-	-	-	-	-	-	-	-	-	-	-
	Debt Service - Interest	Exh. 3	-	-	-	-	-	-	-	-	-	-	-
	Equipment Rental	2	4,138	4,281	4,428	4,581	4,739	4,903	5,072	5,247	5,428	5,615	5,809
	Equipment (Non-Capital,<$5,000)	2	25,863	26,755	27,678	28,633	29,621	30,642	31,700	32,793	33,925	35,095	36,306
	Fuel & Mileage	7	3,212	3,440	3,683	3,944	4,223	4,522	4,842	5,185	5,552	5,945	6,366
	Flood & Fire Insurance	2	47,066	48,690	50,369	52,107	53,905	55,765	57,688	59,679	61,738	63,868	66,071
	Liability Insurance	2	50,078	51,805	53,593	55,442	57,354	59,333	61,380	63,498	65,688	67,955	70,299
	Legal Notices & Publications	2	6,207	6,421	6,643	6,872	7,109	7,354	7,608	7,870	8,142	8,423	8,713
	M & R Machinery & Equipment	2	155,175	160,529	166,067	171,796	177,723	183,854	190,197	196,759	203,547	210,570	217,835
	M & R Real Property	2	165,520	171,230	177,138	183,249	189,571	196,111	202,877	209,877	217,117	224,608	232,357
	Office Supplies & Materials	2	7,242	7,491	7,750	8,017	8,294	8,580	8,876	9,182	9,499	9,827	10,166
	Computer Hardware	2	-	-	-	-	-	-	-	-	-	-	-
	Computer Software	2	26,251	27,157	28,094	29,063	30,066	31,103	32,176	33,286	34,435	35,623	36,852
	Permits & Licenses	2	36,208	37,457	38,749	40,086	41,469	42,899	44,379	45,910	47,494	49,133	50,828
	Postage	2	2,069	2,140	2,214	2,291	2,370	2,451	2,536	2,623	2,714	2,808	2,904
	Telephone	2	23,276	24,079	24,910	25,769	26,658	27,578	28,530	29,514	30,532	31,585	32,675
	Utilities - PG&E	6	54,175	58,699	63,601	68,912	74,667	80,902	87,657	94,977	102,909	111,502	120,813
	Utilities - City Water Services	6	-	-	-	-	-	-	-	-	-	-	-
	Solar Energy	5	121,925	135,143	149,793	166,032	184,031	203,982	226,095	250,606	277,773	307,886	341,264
	Emergency Repairs	2	51,725	53,510	55,356	57,265	59,241	61,285	63,399	65,586	67,849	70,190	72,612
TOTAL: SEWER TREATMENT PLANT			**$ 1,805,908**	**$ 1,879,646**	**$ 1,957,136**	**$ 2,038,633**	**$ 2,124,415**	**$ 2,214,782**	**$ 2,310,063**	**$ 2,410,614**	**$ 2,516,823**	**$ 2,629,114**	**$ 2,747,950**

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

DESCRIPTION	Basis	Budget	5-Year Projected Rate Period					Projected				
		FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
GRAND TOTAL: SEWER EXPENSES - NORTHWEST		**$ 2,486,139**	**$ 2,584,221**	**$ 2,687,044**	**$ 2,794,913**	**$ 2,908,155**	**$ 3,027,127**	**$ 3,152,215**	**$ 3,283,838**	**$ 3,422,450**	**$ 3,568,544**	**$ 3,722,658**
COMBINED COST SAVINGS	2	***N/A***	***N/A***	***N/A***	***N/A***	***N/A***	***N/A***	**$ (100,000)**	**$ (103,450)**	**$ (107,019)**	**$ (110,711)**	**$ (114,531)**

©2024 NBS Government Finance Group. All rights reserved.

TABLE 9: FORECASTING ASSUMPTIONS[5]

INFLATION FACTORS	Basis	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Customer Growth[6]	1	2.08%	2.08%	2.04%	2.00%	1.96%	1.92%	1.89%	1.85%	1.82%	1.79%	1.75%
General Cost Inflation[7]	2	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%
Labor Cost Inflation[8]	3	3.02%	3.02%	3.02%	3.02%	3.02%	3.02%	3.02%	3.02%	3.02%	3.02%	3.02%
Chemicals[9]	4	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%
Energy[10]	5	10.84%	10.84%	10.84%	10.84%	10.84%	10.84%	10.84%	10.84%	10.84%	10.84%	10.84%
Electricity[11]	6	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%
Fuel & Utilities[12]	7	7.08%	7.08%	7.08%	7.08%	7.08%	7.08%	7.08%	7.08%	7.08%	7.08%	7.08%
Construction Cost Inflation[13]	8	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
No Escalation	9	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

1. Revenue and expenses for FY 2021/22 through FY 2023/24 provided by the City. Revenues and expenses for all other years are escalated based on the forecasting assumptions in Table 8. Source file: *FINAL ADOPTED BUDGET - FY23-24 and revexpbyfund -*
2. According to the City, recycled water sales are estimated at $75K annually pre-consolidation and post recycled water project. This revenue is expected to increase to about $160K annually after the completion of the wastewater consolidation project.
3. Receipt from Transit Fund 032 for rental space used by transit services at the Northwest Treatment Plant.
4. Connection fee revenue is based on the preliminary results of the 2024 Connection Fee Study and the future connection projections provided by City staff.
5. Expenses are inflated each year by the following annual inflation factor categories.
6. Customer growth is based on the population projections in the City's Water System Evaluation Plan. Source file: *20190214_Final Draft* , Page 7, Section 2.1.
7. General cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers in the San Francisco-Oakland-Hayward, CA area.
8. Labor cost inflation is based on the 10-year average annual change in the Quarterly Census of Employment and Wages for San Francisco County, CA.
9. Chemical cost inflation is based on the 5-year average annual change in the Producer Price Index for Chemical Manufacturing.
10. Energy cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers in the San Francisco-Oakland-Hayward, CA area./
11. Electricity cost inflation is based on the 5-year average change in the Consumer Price Index for San Francisco County.
12. 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.
13. 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*).

©2024 NBS Government Finance Group. All rights reserved.

TABLE 10: CAPITAL FUNDING SUMMARY

CAPITAL FUNDING FORECAST	Budget	5-Year Projected Rate Period					COMBINED SEWER SYSTEM & PLANT Projected				
Funding Sources:	**FY 2024/25**	**FY 2025/26**	**FY 2026/27**	**FY 2027/28**	**FY 2028/29**	**FY 2029/30**	**FY 2030/31**	**FY 2031/32**	**FY 2032/33**	**FY 2033/34**	**FY 2034/35**
Grants[1]	$ -	$ -	$ 959,752	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Use of Connection Fee Reserves	-	-	801,416	830,151	859,916	890,749	922,686	955,769	990,038	1,025,536	1,062,307
SRF Loan Funding	-	1,400,000	2,740,248	4,420,000	1,600,000	1,200,000	-	-	-	-	-
Use of New Revenue Bond Proceeds	-	-	-	-	-	-	-	-	-	-	-
Use of Capital Rehabilitation and Replacement Reserve	-	-	-	-	-	398,769	194,866	-	-	-	-
Rate Revenue	20,000	860,043	1,374,108	1,674,127	1,447,505	1,974,483	5,553,893	10,096,670	6,892,875	11,826,072	7,155,605
Total Sources of Capital Funds	**$ 20,000**	**$ 2,260,043**	**$ 5,875,524**	**$ 6,924,278**	**$ 3,907,421**	**$ 4,464,001**	**$ 6,671,446**	**$ 11,052,439**	**$ 7,882,913**	**$ 12,851,608**	**$ 8,217,912**
Uses of Capital Funds:											
Total Project Costs	$ 20,000	$ 2,260,043	$ 5,875,524	$ 6,924,278	$ 3,907,421	$ 4,464,000	$ 6,671,445	$ 11,052,439	$ 7,882,913	$ 12,851,609	$ 8,217,912
Capital Funding Surplus (Deficiency)	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***
SRF Loan Funding	***$ -***	***$ 11,360,248***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***
New Revenue Bond Proceeds	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***

1. City received a grant to help fund the purple pipe for the recycled water project.

TABLE 11: CAPITAL IMPROVEMENT PROGRAM FUNDING OPTIONS

Policy Choice		FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
1	Alternative 1 - Full Funding of CIP	$ 20,000	$ 2,260,043	$ 5,875,524	$ 6,924,278	$ 3,907,421	$ 4,464,000	$ 6,671,445	$ 11,052,439	$ 7,882,913	$ 12,851,609	$ 8,217,912
2	Alternative 2 - 75% Funding of CIP	$ 15,000	$ 1,695,032	$ 4,406,643	$ 5,193,209	$ 2,930,566	$ 3,348,000	$ 5,003,584	$ 8,289,329	$ 5,912,185	$ 9,638,707	$ 6,163,434
3	Alternative 3 - 50% Funding of CIP	$ 10,000	$ 1,130,021	$ 2,937,762	$ 3,462,139	$ 1,953,710	$ 2,232,000	$ 3,335,723	$ 5,526,219	$ 3,941,457	$ 6,425,804	$ 4,108,956

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

Capital Improvement Program Funding Choice	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Effective Annual Funding Amount	$ 20,000	$ 2,260,043	$ 5,875,524	$ 6,924,278	$ 3,907,421	$ 4,464,000	$ 6,671,445	$ 11,052,439	$ 7,882,913	$ 12,851,609	$ 8,217,912

©2024 NBS Government Finance Group. All rights reserved.

CAPITAL IMPROVEMENT PROGRAM

TABLE 12: CAPITAL IMPROVEMENT PROGRAM COSTS (*in Current-Year Dollars*)[1]

								COMBINED SEWER SYSTEM & PLANT				
Project Description[2]	**FY 2024/25**	**FY 2025/26**	**FY 2026/27**	**FY 2027/28**	**FY 2028/29**	**FY 2029/30**	**FY 2030/31**	**FY 2031/32**	**FY 2032/33**	**FY 2033/34**	**FY 2034/35**
Capital Outlay											
ABM Citywide Energy Efficiency Program	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CIP - Beach & NW Wastewater Plant Consolidation	-	-	-	-	-	-	-	-	-	-	-
CIP - CCTV Trilogy Wastewater Lines	-	-	-	-	-	-	-	-	-	-	-
Project 1 - Wastewater Repairs and Upgrades											
1 Wastewater Repairs and Upgrades	-	400,000	700,000	1,200,000	1,600,000	1,200,000	-	-	-	-	-
Project 2 - Northwest WWTP Projects											
1 Interim Improvements	-	-	1,166,667	1,166,667	1,166,667	1,450,000	-	-	-	-	-
2 Solar Greenhouse/Dryers	-	-	-	-	-	-	500,000	1,000,000	1,500,000	-	-
3 Belt Press	-	-	-	-	-	-	300,000	1,500,000	700,000	-	-
4 UV Upgrades and Lamp Replacement	-	-	-	-	-	-	-	450,000	1,000,000	2,550,000	-
5 Membrane Replacement	-	-	-	-	-	-	1,000,000	-	-	-	-
6 Recycled Water Tank, Pump Station, Distribution	-	1,000,000	3,000,000	3,220,000	-	-	-	-	-	-	-
7 WWTP Expansion	-	-	-	-	-	-	-	-	-	3,000,000	3,000,000
8 As-Needed Annual Upgrades	-	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000
9 As-Needed Annual Maintenance	-	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Project 3 - Beach WWTP Projects											
1 Interim Improvements	-	-	-	-	-	-	-	-	-	-	-
2 Decommissioning, Abandonment, Demolition	-	-	-	-	-	-	1,000,000	3,000,000	-	-	-
Project 4 - Wastewater Enterprise Projects											
1 Lift Station Scada Upgrades And Service	-	-	-	-	-	-	400,000	400,000	400,000	400,000	400,000
2 NPDES Permit	10,000	12,500	12,500	20,000	20,000	20,000	40,000	40,000	40,000	40,000	40,000
3 Ongoing Regulatory Support	10,000	12,500	12,500	15,000	15,000	15,000	30,000	30,000	30,000	30,000	30,000
4 Cmms/Documentation/GIS	-	-	-	-	-	-	30,000	30,000	30,000	30,000	30,000
5 Master Planning	-	-	-	-	-	-	-	-	-	500,000	-
6 Unplanned CIP	-	-	-	-	-	-	500,000	500,000	500,000	500,000	500,000
7 CCTV	-	200,000	-	-	-	225,000	-	-	-	450,000	-
8 Sewer Pipeline Repairs	-	-	-	-	-	-	-	-	-	-	-
9 Existing CIP - Sewer Collection System	-	-	-	-	-	225,000	450,000	450,000	450,000	450,000	450,000
10 Infrastructure Maintenance/Reliability Improvements - WWTP And Lift Stations	-	-	-	-	-	-	500,000	500,000	600,000	600,000	600,000
Estimated Future Projects											
Future Projects[3]	-	-	-	-	-	-	-	-	-	-	-
Total: CIP Program Costs *(Current-Year Dollars)*	**$ 20,000**	**$ 2,175,000**	**$ 5,441,667**	**$ 6,171,667**	**$ 3,351,667**	**$ 3,685,000**	**$ 5,300,000**	**$ 8,450,000**	**$ 5,800,000**	**$ 9,100,000**	**$ 5,600,000**

©2024 NBS Government Finance Group. All rights reserved.

TABLE 13: CAPITAL IMPROVEMENT PROGRAM COSTS *(in Future-Year Dollars)* [4]

		COMBINED SEWER SYSTEM & PLANT										
Project Description [2]		**FY 2024/25**	**FY 2025/26**	**FY 2026/27**	**FY 2027/28**	**FY 2028/29**	**FY 2029/30**	**FY 2030/31**	**FY 2031/32**	**FY 2032/33**	**FY 2033/34**	**FY 2034/35**
Capital Outlay												
ABM Citywide Energy Efficiency Program		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CIP - Beach & NW Wastewater Plant Consolidation		-	-	-	-	-	-	-	-	-	-	-
CIP - CCTV Trilogy Wastewater Lines		-	-	-	-	-	-	-	-	-	-	-
Project 1 - Wastewater Repairs and Upgrades												
1	Wastewater Repairs and Upgrades	-	415,640	755,810	1,346,335	1,865,303	1,453,677	-	-	-	-	-
Project 2 - Northwest WWTP Projects												
1	Interim Improvements	-	-	1,259,684	1,308,937	1,360,117	1,756,527	-	-	-	-	-
2	Solar Greenhouse/Dryers	-	-	-	-	-	-	629,382	1,307,981	2,038,684	-	-
3	Belt Press	-	-	-	-	-	-	377,629	1,961,971	951,386	-	-
4	UV Upgrades and Lamp Replacement	-	-	-	-	-	-	-	588,591	1,359,123	3,601,275	-
5	Membrane Replacement	-	-	-	-	-	-	1,258,763	-	-	-	-
6	Recycled Water Tank, Pump Station, Distribution	-	1,039,100	3,239,186	3,612,667	-	-	-	-	-	-	-
7	WWTP Expansion	-	-	-	-	-	-	-	-	-	4,236,794	4,402,453
8	As-Needed Annual Upgrades	-	519,550	539,864	560,973	582,907	605,699	629,382	653,990	679,561	706,132	733,742
9	As-Needed Annual Maintenance	-	51,955	53,986	56,097	58,291	60,570	62,938	65,399	67,956	70,613	73,374
Project 3 - Beach WWTP Projects												
1	Interim Improvements	-	-	-	-	-	-	-	-	-	-	-
2	Decommissioning, Abandonment, Demolition	-	-	-	-	-	-	1,258,763	3,923,943	-	-	-
Project 4 - Wastewater Enterprise Projects												
1	Lift Station Scada Upgrades And Service	-	-	-	-	-	-	503,505	523,192	543,649	564,906	586,994
2	NPDES Permit	10,000	12,989	13,497	22,439	23,316	24,228	50,351	52,319	54,365	56,491	58,699
3	Ongoing Regulatory Support	10,000	12,989	13,497	16,829	17,487	18,171	37,763	39,239	40,774	42,368	44,025
4	Cmms/Documentation/GIS	-	-	-	-	-	-	37,763	39,239	40,774	42,368	44,025
5	Master Planning	-	-	-	-	-	-	-	-	-	706,132	-
6	Unplanned CIP	-	-	-	-	-	-	629,382	653,990	679,561	706,132	733,742
7	CCTV	-	207,820	-	-	-	272,564	-	-	-	635,519	-
8	Sewer Pipeline Repairs	-	-	-	-	-	-	-	-	-	-	-
9	Existing CIP - Sewer Collection System	-	-	-	-	-	272,564	566,443	588,591	611,605	635,519	660,368
10	Infrastructure Maintenance/Reliability Improvements - WWTP And Lift Stations	-	-	-	-	-	-	629,382	653,990	815,474	847,359	880,491
Estimated Future Projects												
Future Projects [3]		-	-	-	-	-	-	-	-	-	-	-
Total: CIP Program Costs *(Future-Year Dollars)*		**$ 20,000**	**$ 2,260,043**	**$ 5,875,524**	**$ 6,924,278**	**$ 3,907,421**	**$ 4,464,000**	**$ 6,671,445**	**$ 11,052,439**	**$ 7,882,913**	**$ 12,851,609**	**$ 8,217,912**

TABLE 14: FORECASTING ASSUMPTIONS

Economic Variables	**FY 2024/25**	**FY 2025/26**	**FY 2026/27**	**FY 2027/28**	**FY 2028/29**	**FY 2029/30**	**FY 2030/31**	**FY 2031/32**	**FY 2032/33**	**FY 2033/34**	**FY 2034/35**
Annual Construction Cost Inflation, Per Engineering News Record [5]	*0.00%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*
Cumulative Construction Cost Multiplier from FY 2024/25	*1.00*	*1.04*	*1.08*	*1.12*	*1.17*	*1.21*	*1.26*	*1.31*	*1.36*	*1.41*	*1.47*

1. Capital project costs were provided by City Staff and assumes Year 1 begins in FY 2024/25. Source file: *FY23-24 CIP PROJECTS FOR BUDGET* & *SEWER SYSTEM IMPROVEMENTS 032323* .
2. Project costs beyond Year 5 in the City's capital improvement plan have been allocated equally across a 7-year period (FY 2029/30 through FY 2035/36).
3. Future project costs beyond FY 2033/34 are calculated based on the City's 10-year average.
4. The capital project costs have been inflated using the Construction Cost Index (See Table 13). Website: *http://enr.construction.com* .
5. 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*).

©2024 NBS Government Finance Group. All rights reserved.

TABLE 15: EXISTING DEBT OBLIGATIONS

EXISTING DEBT OBLIGATIONS	Actual	Budget	Budget	5-Year Projected Rate Period					COMBINED SEWER SYSTEM & PLANT Projected				
Annual Repayment Schedules:	**FY 2022/23**	**FY 2023/24**	**FY 2024/25**	**FY 2025/26**	**FY 2026/27**	**FY 2027/28**	**FY 2028/29**	**FY 2029/30**	**FY 2030/31**	**FY 2031/32**	**FY 2032/33**	**FY 2033/34**	**FY 2034/35**
2020 Lease/Purchase Agreement (Sterling National Bank) - $1,077,000[1]													
Principal Payment	$ 25,960	$ 26,550	$ 27,140	$ 27,730	$ 28,320	$ 28,910	$ 29,500	$ 30,680	$ 31,270	$ 31,860	$ 32,450	$ 33,630	$ 34,220
Interest Payment	13,748	13,156	12,544	11,925	11,286	10,641	9,975	9,295	8,589	7,883	7,150	6,396	5,630
Subtotal: Annual Debt Service	**$ 39,708**	**$ 39,706**	**$ 39,684**	**$ 39,655**	**$ 39,606**	**$ 39,551**	**$ 39,475**	**$ 39,975**	**$ 39,859**	**$ 39,743**	**$ 39,600**	**$ 40,026**	**$ 39,850**
Coverage Requirement ($-Amnt above annual payment)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Reserve Requirement (total fund balance)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2020 Lease Purchase Agreement - $1,944,352[2]													
Principal Payment	$ 38,894	$ 41,021	$ 43,223	$ 45,505	$ 47,868	$ 50,314	$ 52,847	$ 55,469	$ 74,052	$ 77,627	$ 81,327	$ 85,155	$ -
Interest Payment	12,739	11,923	11,062	10,156	9,201	8,198	7,143	6,036	6,203	4,651	3,025	1,322	-
Subtotal: Annual Debt Service	**$ 51,633**	**$ 52,943**	**$ 54,285**	**$ 55,660**	**$ 57,069**	**$ 58,512**	**$ 59,991**	**$ 61,505**	**$ 80,255**	**$ 82,279**	**$ 84,352**	**$ 86,477**	**$ -**
Coverage Requirement ($-Amnt above annual payment)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Reserve Requirement (total fund balance)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2020 Vactor Truck Loan (KS State Bank) - $308,740[3]													
Principal Payment	$ 30,230	$ 31,436	$ 32,690	$ 16,831	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Interest Payment	4,096	2,890	1,636	332	-	-	-	-	-	-	-	-	-
Subtotal: Annual Debt Service	**$ 34,326**	**$ 34,326**	**$ 34,326**	**$ 17,163**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Coverage Requirement ($-Amnt above annual payment)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Reserve Requirement (total fund balance)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2016 Installment Purchased Agreement (Umpqua Bank) - $1,040,000[4]													
Principal Payment	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 90,000	$ -	$ -	$ -	$ -
Interest Payment	-	-	-	-	-	-	-	-	2,709	-	-	-	-
Subtotal: Annual Debt Service	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 92,709**	**$ -**	**$ -**	**$ -**	**$ -**
Coverage Requirement ($-Amnt above annual payment)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Reserve Requirement (total fund balance)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Grand Total: Existing Annual Debt Service	**$ 125,667**	**$ 126,975**	**$ 128,295**	**$ 112,479**	**$ 96,675**	**$ 98,063**	**$ 99,465**	**$ 101,481**	**$ 212,823**	**$ 122,022**	**$ 123,952**	**$ 126,504**	**$ 39,850**
Grand Total: Existing Annual Coverage Requirement	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Grand Total: Existing Debt Reserve Target	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

1. Lease agreement for all equipment acquired and installed in connection with the Energy Savings Phase II Project. The Northwest Plant portion is 59%, or $635,430 (Principal) Source file: *#5 - Lease Purchase Agreement.pdf*
2. Purchase agreement to fund the acquisition of the Water Meter Direct Placement Series 2016 Project. The Northwest Plant portion is 33%, or $641,636 (Principal). Source file: *#3 - Rio Vista Installment Purchase Agreement* .
3. Vehicle equipment purchase split 50/50 between the Beach and Northwest wastewater facilities. Source file: *#6 - 3356018_Contract - Executed Agreement - 9.9.19 (SC236716xAAE13)* .
4. Installment purchase agreement for the transfer and purchase of the Wastewater System to the City. Source file: *#2 - City of Rio Vista - 2015 Wastewater Installment Purchase Agreement* .

TABLE 16: EXISTING ANNUAL DEBT OBLIGATIONS TO BE SATISFIED BY WATER RATES

Annual Obligations	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	COMBINED SEWER SYSTEM & PLANT FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Existing Annual Debt Service	*$ 125,667*	*$ 126,975*	*$ 128,295*	*$ 112,479*	*$ 96,675*	*$ 98,063*	*$ 99,465*	*$ 101,481*	*$ 212,823*	*$ 122,022*	*$ 123,952*	*$ 126,504*	*$ 39,850*
Existing Annual Coverage Requirement	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*
Existing Debt Reserve Target	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*

©2024 NBS Government Finance Group. All rights reserved.

TABLE 17: FUTURE DEBT FINANCING ASSUMPTIONS

Long-Term Debt Terms	State Revolving Fund Loan	Revenue Bonds
Issuance Cost	2.00%	2.00%
Annual Interest Cost (%)	3.00%	4.00%
Term	30	20
Debt Reserve Funded?	No	No
Coverage Requirement (% above annual pmt)	120%	125%

TABLE 18: FUTURE DEBT OBLIGATIONS

									COMBINED SEWER SYSTEM & PLANT				
Annual Repayment Schedules	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Loan Proceeds													
Principal Payment	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 238,784	$ 639,968	$ 659,167	$ 678,942	$ 699,310	$ 720,289
Interest Payment	-	-	-	-	-	-	-	340,807	534,514	522,694	510,518	497,978	485,061
Subtotal: Annual Debt Service	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 579,591**	**$ 1,174,482**	**$ 1,181,860**	**$ 1,189,460**	**$ 1,197,288**	**$ 1,205,351**
WIFIA Loan Funding													
Principal Payment	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Interest Payment	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Annual Debt Service	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Grand Total: Future Annual Debt Service	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 579,591**	**$ 1,174,482**	**$ 1,181,860**	**$ 1,189,460**	**$ 1,197,288**	**$ 1,205,351**
Grand Total: Future Annual Coverage Requirement	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 695,510**	**$ 1,409,378**	**$ 1,418,232**	**$ 1,427,352**	**$ 1,436,746**	**$ 1,446,421**
Grand Total: Future Debt Reserve Target	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

TABLE 19: TOTAL DEBT SERVICE

									COMBINED SEWER SYSTEM & PLANT				
Annual Obligations	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Annual Debt Service	**$ 125,667**	**$ 126,975**	**$ 128,295**	**$ 112,479**	**$ 96,675**	**$ 98,063**	**$ 99,465**	**$ 681,072**	**$ 1,387,305**	**$ 1,303,882**	**$ 1,313,412**	**$ 1,323,791**	**$ 1,245,200**
Annual Coverage Requirement	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**695,510**	**1,409,378**	**1,418,232**	**1,427,352**	**1,436,746**	**1,446,421**
Total Debt Reserve Target	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

©2024 NBS Government Finance Group. All rights reserved.

TABLE 20: CURRENT SEWER RATES

Sewer Rate Schedule	Description	Current Rates as of July 1, 2013[1]
RESIDENTIAL CUSTOMERS - Northwest Sewer System		
Residential (Trilogy, Liberty, Luminescence & Summit I & II)	Per Dwelling Unit	$51.60
Multi-Family	Per Dwelling Unit	$84.37
RESIDENTIAL CUSTOMERS - Beach Sewer System		
Residential	Per Dwelling Unit	$110.92
Multi-Family	Per Dwelling Unit	$84.37
NON-RESIDENTIAL CUSTOMERS [2]		
Low Strength	Per HCF	$9.77
Domestic Strength	Per HCF	$12.11
High Strength	Per HCF	$27.44

1. Rates available on the City's website: *https://www.riovistacity.com/finance/page/rates* .
2. Non-residential include commercial, industrial, retail and government customers.

©2024 NBS Government Finance Group. All rights reserved.

TABLE 41: CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS

Classification of Expenses									
Budget Categories	**Total Revenue Requirements**	**Flow**	**Strength**		**Customer**	**Basis of Classification**			
	FY 2025/26	**(VOL)**	**(BOD)**	**(TSS)**	**(CA)**	**(VOL)**	**(BOD)**	**(TSS)**	**(CA)**
NW WWTP COLLECTION SYSTEM AND LIFT STATIONS									
Salaries & Wages	$ 226,641	$ 226,641	$ -	$ -	$ -	100.0%	0.0%	0.0%	0.0%
Part time - Salaries & Wages	-	-	-	-	-	100.0%	0.0%	0.0%	0.0%
Overtime	4,959	4,959	-	-	-	100.0%	0.0%	0.0%	0.0%
Clothing & Work Boots	-	-	-	-	-	100.0%	0.0%	0.0%	0.0%
Dental Insurance	3,689	3,689	-	-	-	100.0%	0.0%	0.0%	0.0%
Health Insurance	38,792	38,792	-	-	-	100.0%	0.0%	0.0%	0.0%
Life Insurance	515	515	-	-	-	100.0%	0.0%	0.0%	0.0%
Employee Assistance Program	60	60	-	-	-	100.0%	0.0%	0.0%	0.0%
Vision Insurance	474	474	-	-	-	100.0%	0.0%	0.0%	0.0%
PERS Retirement	41,762	41,762	-	-	-	100.0%	0.0%	0.0%	0.0%
Social Security/FICA	15,998	15,998	-	-	-	100.0%	0.0%	0.0%	0.0%
Workers Comp. Insurance	11,619	11,619	-	-	-	100.0%	0.0%	0.0%	0.0%
State Unemployment Insurance	1,751	1,751	-	-	-	100.0%	0.0%	0.0%	0.0%
Boot/Uniform/Equipment Allowance	1,884	1,884	-	-	-	100.0%	0.0%	0.0%	0.0%
Accounting & Auditing	-	-	-	-	-	100.0%	0.0%	0.0%	0.0%
Administrative Expense - ABM Loan	-	-	-	-	-	100.0%	0.0%	0.0%	0.0%
Advertising	-	-	-	-	-	100.0%	0.0%	0.0%	0.0%
Legal Fees	2,140	2,140	-	-	-	100.0%	0.0%	0.0%	0.0%
Bond Issuance Costs	-	-	-	-	-	100.0%	0.0%	0.0%	0.0%
Printing	214	214	-	-	-	100.0%	0.0%	0.0%	0.0%
Contractual Services	24,079	24,079	-	-	-	100.0%	0.0%	0.0%	0.0%
Veolia- Contractual services	84,683	84,683	-	-	-	100.0%	0.0%	0.0%	0.0%
Evidence Expenses	18,193	18,193	-	-	-	100.0%	0.0%	0.0%	0.0%
Equipment Rental	8,562	8,562	-	-	-	100.0%	0.0%	0.0%	0.0%
Equipment (Non-Capital,<$5,000)	2,140	2,140	-	-	-	100.0%	0.0%	0.0%	0.0%
Fuel & Mileage	2,293	2,293	-	-	-	100.0%	0.0%	0.0%	0.0%
Flood & Fire Insurance	6,392	6,392	-	-	-	100.0%	0.0%	0.0%	0.0%
Liability Insurance	9,841	9,841	-	-	-	100.0%	0.0%	0.0%	0.0%
Finance Charge - Collection fee	107	107	-	-	-	100.0%	0.0%	0.0%	0.0%
M & R Machinery & Equipment	26,755	26,755	-	-	-	100.0%	0.0%	0.0%	0.0%
M & R Real Property	10,702	10,702	-	-	-	100.0%	0.0%	0.0%	0.0%
Emergency Repairs	53,510	53,510	-	-	-	100.0%	0.0%	0.0%	0.0%
M&R Vehicles	4,281	4,281	-	-	-	100.0%	0.0%	0.0%	0.0%
Membership Dues	1,177	1,177	-	-	-	100.0%	0.0%	0.0%	0.0%
Misc. Services & Supplies	3,211	3,211	-	-	-	100.0%	0.0%	0.0%	0.0%
Office Supplies & Materials	535	535	-	-	-	100.0%	0.0%	0.0%	0.0%
Permits & Licenses	10,702	10,702	-	-	-	100.0%	0.0%	0.0%	0.0%
Telephone	2,675	2,675	-	-	-	100.0%	0.0%	0.0%	0.0%
Utilities - PG&E	48,133	48,133	-	-	-	100.0%	0.0%	0.0%	0.0%
Utilities - City Water Services	1,291	1,291	-	-	-	100.0%	0.0%	0.0%	0.0%
Capital Outlay - Mach & Equip	-	-	-	-	-	100.0%	0.0%	0.0%	0.0%
Capital Outlay - Vehicles	34,815	34,815	-	-	-	100.0%	0.0%	0.0%	0.0%
Loan - Lease Payment - Principal	-	-	-	-	-	100.0%	0.0%	0.0%	0.0%
Loan - Lease Payment - Interest	-	-	-	-	-	100.0%	0.0%	0.0%	0.0%
Total: Nw Wwtp Collection System And Lift Stations	**$ 704,575**	**$ 704,575**	**$ -**	**$ -**	**$ -**	**100.0%**	**0.0%**	**0.0%**	**0.0%**

©2024 NBS Government Finance Group. All rights reserved.

TABLE 42: CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses									
Budget Categories	Total Revenue Requirements	Flow	Strength		Customer	Basis of Classification			
	FY 2025/26	(VOL)	(BOD)	(TSS)	(CA)	(VOL)	(BOD)	(TSS)	(CA)
SEWER TREATMENT PLANT									
Salaries & Wages	$ 136,600	$ 75,130	$ 27,320	$ 27,320	$ 6,830	55.0%	20.0%	20.0%	5.0%
Overtime	2,465	1,356	493	493	123	55.0%	20.0%	20.0%	5.0%
Clothing & Work Boots	-	-	-	-	-	55.0%	20.0%	20.0%	5.0%
Dental Insurance	2,202	1,211	440	440	110	55.0%	20.0%	20.0%	5.0%
Health Insurance	22,733	12,503	4,547	4,547	1,137	55.0%	20.0%	20.0%	5.0%
Life Insurance	310	170	62	62	15	55.0%	20.0%	20.0%	5.0%
Employee Assistance Program	39	21	8	8	2	55.0%	20.0%	20.0%	5.0%
Vision Insurance	285	157	57	57	14	55.0%	20.0%	20.0%	5.0%
PERS Retirement	20,493	11,271	4,099	4,099	1,025	55.0%	20.0%	20.0%	5.0%
Social Security/FICA	10,244	5,634	2,049	2,049	512	55.0%	20.0%	20.0%	5.0%
Workers Comp. Insurance	7,536	4,145	1,507	1,507	377	55.0%	20.0%	20.0%	5.0%
State Unemployment Insurance	-	-	-	-	-	55.0%	20.0%	20.0%	5.0%
Accounting & Auditing	6,920	4,152	1,384	1,384	-	60.0%	20.0%	20.0%	0.0%
Legal Fees	-	-	-	-	-	60.0%	20.0%	20.0%	0.0%
Bond Issuance Costs	-	-	-	-	-	60.0%	20.0%	20.0%	0.0%
Chemicals & Gases	26,287	15,772	5,257	5,257	-	60.0%	20.0%	20.0%	0.0%
Contractual Services	157,150	94,290	31,430	31,430	-	60.0%	20.0%	20.0%	0.0%
Veolia- Contractual services	663,373	398,024	132,675	132,675	-	60.0%	20.0%	20.0%	0.0%
Property Tax	4,181	2,509	836	836	-	60.0%	20.0%	20.0%	0.0%
Debt Service - Principal	-	-	-	-	-	60.0%	20.0%	20.0%	0.0%
Debt Service - Interest	-	-	-	-	-	60.0%	20.0%	20.0%	0.0%
Equipment Rental	4,281	2,568	856	856	-	60.0%	20.0%	20.0%	0.0%
Equipment (Non-Capital,<$5,000)	26,755	16,053	5,351	5,351	-	60.0%	20.0%	20.0%	0.0%
Fuel & Mileage	3,440	2,064	688	688	-	60.0%	20.0%	20.0%	0.0%
Flood & Fire Insurance	48,690	29,214	9,738	9,738	-	60.0%	20.0%	20.0%	0.0%
Liability Insurance	51,805	31,083	10,361	10,361	-	60.0%	20.0%	20.0%	0.0%
Legal Notices & Publications	6,421	3,853	1,284	1,284	-	60.0%	20.0%	20.0%	0.0%
M & R Machinery & Equipment	160,529	96,317	32,106	32,106	-	60.0%	20.0%	20.0%	0.0%
M & R Real Property	171,230	102,738	34,246	34,246	-	60.0%	20.0%	20.0%	0.0%
Office Supplies & Materials	7,491	4,120	1,498	1,498	375	55.0%	20.0%	20.0%	5.0%
Computer Hardware	-	-	-	-	-	55.0%	20.0%	20.0%	5.0%
Computer Software	27,157	14,936	5,431	5,431	1,358	55.0%	20.0%	20.0%	5.0%
Permits & Licenses	37,457	22,474	7,491	7,491	-	60.0%	20.0%	20.0%	0.0%
Postage	2,140	1,177	428	428	107	55.0%	20.0%	20.0%	5.0%
Telephone	24,079	13,244	4,816	4,816	1,204	55.0%	20.0%	20.0%	5.0%
Utilities - PG&E	58,699	35,220	11,740	11,740	-	60.0%	20.0%	20.0%	0.0%
Solar Energy	135,143	81,086	27,029	27,029	-	60.0%	20.0%	20.0%	0.0%
Emergency Repairs	53,510	32,106	10,702	10,702	-	60.0%	20.0%	20.0%	0.0%
Total: Sewer Treatment Plant	**$ 1,879,646**	**$ 1,114,599**	**$ 375,929**	**$ 375,929**	**$ 13,189**	**59.3%**	**20.0%**	**20.0%**	**0.7%**

TABLE 43 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses, continued										
Budget Categories	Total Revenue Requirements	Flow	Strength		Customer	Basis of Classification				
	FY 2025/26	(VOL)	(BOD)	(TSS)	(CA)	(VOL)	(BOD)	(TSS)	(CA)	
Salary Adjustments										
Salary Adjustments	$ -	$ -	$ -	$ -	$ -	60.0%	20.0%	20.0%	0.0%	$ -
Total: Adjustments	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	$ -
Grand Total: Sewer Expenses - Northwest	**$ 2,584,221**	**$ 1,819,174**	**$ 375,929**	**$ 375,929**	**$ 13,189**	**70.4%**	**14.5%**	**14.5%**	**0.5%**	

©2024 NBS Government Finance Group. All rights reserved.

TABLE 44: CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses									
Budget Categories	Total Revenue Requirements	Flow	Strength		Customer	Basis of Classification			
	FY 2025/26	(VOL)	(BOD)	(TSS)	(CA)	(VOL)	(BOD)	(TSS)	(CA)
Debt Service Payments									
Outstanding Debt	$ 112,479	$ 67,487	$ 22,496	$ 22,496	$ -	60.0%	20.0%	20.0%	0.0%
New Debt Issue - SRF Loan	-	-	-	-	-	60.0%	20.0%	20.0%	0.0%
New Debt Issue - Revenue Bond	-	-	-	-	-	60.0%	20.0%	20.0%	0.0%
Total Debt Service Payments	**$ 112,479**	**$ 67,487**	**$ 22,496**	**$ 22,496**	**$ -**	**60.0%**	**20.0%**	**20.0%**	**0.0%**
Capital Expenditures									
Rate Funded Capital Expenses	$ 860,043	$ 516,026	$ 172,009	$ 172,009	$ -	60.0%	20.0%	20.0%	0.0%
TOTAL REVENUE REQUIREMENTS	**$ 3,556,742**	**$ 2,402,687**	**$ 570,433**	**$ 570,433**	**$ 13,189**	**67.6%**	**16.0%**	**16.0%**	**0.4%**
Less: Non-Rate Revenues									
Non-Operating Revenue									
Forfeitures/Penalties	(15,631)	(10,559)	(2,507)	(2,507)	(58)	67.6%	16.0%	16.0%	0.4%
Interest Income	-	-	-	-	-	67.6%	16.0%	16.0%	0.4%
Transfer In	(12,000)	(8,106)	(1,925)	(1,925)	(44)	67.6%	16.0%	16.0%	0.4%
NET REVENUE REQUIREMENTS	**$ 3,529,111**	**$ 2,384,021**	**$ 566,002**	**$ 566,002**	**$ 13,086**				
Allocation of Revenue Requirements	**100.0%**	**67.6%**	**16.0%**	**16.0%**	**0.4%**				
Net Revenue Req't. Check from Financial Plan	*$ -*								

TABLE 45: ADJUSTMENT TO CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS

Adjustments to Classification of Expenses		Flow	Strength		Customer
Adjustment to Current Rate Level:	**Total**	**(VOL)**	**(BOD)**	**(TSS)**	**(CA)**
Test Year (FY 2025/26) Target Rate Rev. After Rate Increase	$ 3,484,020				
Projected Rate Revenue at Current Rates	2,247,755				
Test Year (FY 2025/26) Projected Rate Adjustment	55.0%				
Adjusted Net Revenue Req'ts	**$ 3,484,020**	**$ 2,353,560**	**$ 558,770**	**$ 558,770**	**$ 12,919**
Percent of Revenue	*100.0%*	*67.6%*	*16.0%*	*16.0%*	*0.4%*

©2024 NBS Government Finance Group. All rights reserved.

TABLE 46: COST-OF-SERVICE NET REVENUE REQUIREMENTS

COSA NET REVENUE REQUIREMENTS	Total	Flow	Strength		Customer
		(VOL)	(BOD)	(TSS)	(CA)
Rate-Design Adjustments to Fixed/Variable %	100.0%	67.6%	16.0%	16.0%	0.4%
Rate-Design Adjustments to Fixed/Variable ($)	$ 3,484,020	$2,353,560	$558,770	$558,770	$12,919

Variable (Volumetric) Rates	**68%**
Fixed Charges	**32%**

©2024 NBS Government Finance Group. All rights reserved.

TABLE 47: DEVELOPMENT OF THE VOLUME ALLOCATION FACTOR

Development of the VOLUME Allocation Factor[1]							
Customer Class	Number of Accounts	Number of EDUs	Total Annual Consumption (HCF)	Winter Consumption (Jan-Mar '22)[2]	Estimated Annual Volume (HCF)[3]	Adjusted Annual Volume Total (HCF)	Percentage of Adjusted Volume
RESIDENTIAL CUSTOMERS							
Residential	3,509	3,509	423,828	50,057	200,228	126,396	**98.5%**
NON-RESIDENTIAL CUSTOMERS							
Domestic Strength	11	11	2,760	*N/A*	2,760	1,742	**1.4%**
High Strength	1	1	199	*N/A*	199	126	**0.1%**
Total:	**3,521**	**3,521**	**426,787**	**50,057**	**203,187**	**128,264**	**100.0%**
						128,264	*Flow (hcf/yr.)*
						0.63	*Flow Adj. Factor*

1. Consumption, customer accounts, and EDUs provided by City Staff. Source file: *UB DATA - FY 22-23 - JULY 22 TO JUNE 23.xlsx* .
2. The three consecutive month period of lowest water usage overall during FY 2021/22.
3. Estimated sewer flow based on average winter consumption for residential customers. Commercial customers are based on annual consumption.

TABLE 48: DEVELOPMENT OF THE STRENGTH ALLOCATION FACTOR

Development of the STRENGTH Allocation Factor									
Customer Class	Adjusted Total Annual Volume (HCF)[1]	Biochemical Oxygen Demand (BOD)				Total Suspended Solids (TSS)			
		Avg. Strength Factor (mg/l)[2]	Calculated BOD (lbs./yr.)[3]	Adjusted BOD (lbs./yr.)	Percent of Total	Avg. Strength Factor (mg/l)[2]	Calculated TSS (lbs./yr.)[3]	Adjusted TSS (lbs./yr.)	Percent of Total
RESIDENTIAL CUSTOMERS									
Residential	126,396	175	137,988	237,443	**97.3%**	175	137,988	159,487	**98.7%**
NON-RESIDENTIAL CUSTOMERS									
Domestic Strength	1,742	310	3,369	5,798	**2.4%**	120	1,304	1,507	**0.9%**
High Strength	126	670	525	903	**0.4%**	680	533	616	**0.4%**
Total:	**128,264**		**141,882**	**244,144**	**100.0%**		**139,825**	**161,611**	**100.0%**
	Target, from WWTP Data			*244,144*	*BOD (lbs./yr.)*			*161,611*	*TSS (lbs./yr.)*
				1.721	*BOD Adj. Factor*			*1.156*	*TSS Adj. Factor*

1. Estimated sewer flow based on average winter consumption for residential customers. Commercial customers are based on annual consumption.
2. Source: CA State Water Resources Control Board, *Revenue Program Guidelines (Appendix G) , G-21* .
3. Calculated BOD and TSS are from source file: *Rio Vista Influent Flow Analysis_CL_GF_NV_v2.xlsx* .

©2024 NBS Government Finance Group. All rights reserved.

TABLE 49: DEVELOPMENT OF THE CUSTOMER ALLOCATION FACTOR

Development of the CUSTOMER Allocation Factor[1]				
Sewer Customer Classes	Number of Accounts	Percent of Total	Number of EDUs	Percent of Total
RESIDENTIAL CUSTOMERS				
Residential	3,509	**99.7%**	3,509	**99.7%**
NON-RESIDENTIAL CUSTOMERS				
Domestic Strength	11	**0.31%**	11	**0.31%**
High Strength	1	**0.03%**	1	**0.03%**
Total:	**3,521**	**100.0%**	**3,521**	**100.0%**

1. Number of accounts and EDUs provided by City Staff. Source file: *UB DATA - FY 22-23 - JULY 22 TO JUNE 23.xlsx* .

TABLE 50 : TOTAL REVENUE BY CUSTOMER CLASS

Customer Class	FY 2021/22 Rate Revenue[1]	Percentage of Accounts
RESIDENTIAL CUSTOMERS		
Residential	$ 2,126,694	**98.2%**
NON-RESIDENTIAL CUSTOMERS		
Domestic Strength	33,424	**1.5%**
High Strength	5,461	**0.3%**
Total:	**$ 2,165,578**	**100.0%**

1. Source file: *UB DATA - FY 22-23 - JULY 22 TO JUNE 23.xlsx* .

©2024 NBS Government Finance Group. All rights reserved.

TABLE 51: ALLOCATION OF NET REVENUE REQUIREMENTS — *COSA NET REVENUE REQUIREMENTS*

Allocation of FY 2025/26 Revenue Requirements by Customer Class

Customer Class	Cost Classification Components				Cost-of-Service Net Revenue Req'ts.	% of COS Net Revenue Req'ts.
	Volume	Treatment		Customer Related		
		BOD	TSS			
Net Revenue Requirements [1]	***$ 2,353,560***	***$ 558,770***	***$ 558,770***	***$ 12,919***	***$ 3,484,020***	--
	67.6%	*16.0%*	*16.0%*	*0.4%*	*100.0%*	
RESIDENTIAL CUSTOMERS						
Residential	$ 2,319,286	$ 543,433	$ 551,428	$ 12,875	**$ 3,427,022**	*98.4%*
NON-RESIDENTIAL CUSTOMERS						
Domestic Strength	31,970	13,269	5,212	40	**50,492**	*1.4%*
High Strength	2,305	2,068	2,130	4	**6,506**	*0.2%*
Total:	**$ 2,353,560**	**$ 558,770**	**$ 558,770**	**$ 12,919**	**$ 3,484,020**	***100%***

1. The revenue requirement for each customer class is determined by multiplying the revenue requirement from each cost classification by the allocation factors for each customer class.

TABLE 52 : RATE DESIGN - SUMMARY OF REVENUE REQUIREMENTS

Customer Class	COSA Net Revenue Requirements		Net Revenue Allocation				
	FY 2025/26 COS Rev. Req't	% of COS Rev. Req't.	% Fixed Revenue	% Variable Revenue	Revenue from Fixed Charges	Revenue from Volumetric Charges	
RESIDENTIAL CUSTOMERS							
Residential	$ 3,427,022	98.4%	100%	0%	$ 3,427,022	$ -	$ 3,427,022
NON-RESIDENTIAL CUSTOMERS							
Domestic Strength	50,492	1.4%	0%	100%	-	50,492	$ 50,492
High Strength	6,506	0.2%	0%	100%	-	6,506	$ 6,506
Total	**$ 3,484,020**	**100.0%**			**$ 3,427,022**	**$ 56,998**	$ 3,484,020
	Percent of Total Revenue Collected		*98%*	*2%*			$ - Check

TABLE 53 : PROPOSED SEWER RATES

NET REVENUE REQUIREMENTS (100% Fixed Residential)

Customer Class	Number of Units	Annualized Winter Consumption (HCF)	Net Revenue Requirement	Estimated Fixed Revenue	Estimated Variable Revenue	Monthly Fixed Charge Per Unit	Volumetric Rate ($/HCF)	*Fixed Revenue*	*Variable Revenue*	*Total Revenue*	*Total Revenue check*
RESIDENTIAL CUSTOMERS											
Residential	3,509	126,396	$ 3,427,022	$ 3,427,022	$ -	$81.39	*N/A*	*$ 3,427,022*	*$ -*	*$ 3,427,022*	*$ -*
Total	**3,509**	**126,396**	**$ 3,427,022**	**$ 3,427,022**	**$ -**			***$ 3,427,022***	***$ -***	***$ 3,427,022***	***$ -***

©2024 NBS Government Finance Group. All rights reserved.

TABLE 54: CURRENT VS. PROPOSED SEWER RATES

Sewer Rate Schedule	*Current Rates*	*Description*	*NET REVENUE REQUIREMENTS (100% Fixed Residential)* Proposed Monthly Sewer Rates				
			Year 1	Year 2	Year 3	Year 4	Year 5
			FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
Projected Increase in Rate Revenue:			*55.00%*	*35.00%*	*5.00%*	*5.00%*	*5.00%*
Fixed Service Charges (Per EDU or Accounts)							
RESIDENTIAL CUSTOMERS							
Residential	$51.60	Per Account	$81.39	$109.87	$115.36	$121.13	$127.19
Multi-Family	$84.37	Per Account	-	-	-	-	-
Duplex/SFR with ADU	N/A	Per Account	$163.95	$221.34	$232.41	$244.03	$256.23
Triplex	N/A	Per Account	$245.93	$332.01	$348.61	$366.04	$384.34
Quadplex	N/A	Per Account	$327.91	$442.67	$464.80	$488.04	$512.44
Charge for each additional unit above 4	N/A	Per Each Additional Dwelling Unit	$81.98	$110.67	$116.20	$122.01	$128.11
Volumetric Rate ($/hcf) [1]							
NON-RESIDENTIAL CUSTOMERS							
Low Strength	$9.77	Per HCF	$15.46	$20.87	$21.91	$23.01	$24.16
Domestic Strength	$12.11	Per HCF	$15.75	$21.26	$22.32	$23.44	$24.61
High Strength	$27.44	Per HCF	$27.76	$37.47	$39.34	$41.31	$43.38

1. One Unit is equal to one HCF (Hundred Cubic Feet) or 748 gallons.

©2024 NBS Government Finance Group. All rights reserved.

Appendix C. Beach Sewer Rate Study Tables and Figures

TABLE 21: FINANCIAL PLAN AND SUMMARY OF REVENUE REQUIREMENTS

RATE REVENUE REQUIREMENTS SUMMARY[1]	Budget	5-Year Projected Rate Period					Projected				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Sources of Sewer Funds [1]											
Rate Revenue	$ 2,929,814	$ 2,990,874	$ 3,051,934	$ 3,112,995	$ 3,174,055	$ 3,235,115	$ 3,296,176	$ 3,357,236	$ 3,418,297	$ 3,479,357	$ 3,540,417
Non-Rate Revenue	24,500	25,011	25,521	26,032	26,543	27,053	27,564	28,074	28,585	29,096	29,606
Interest Earnings[2]	-	38,597	16,296	29,640	26,593	34,459	27,073	13,329	13,500	13,674	13,851
Transfer In	-	-	-	-	-	-	-	-	-	-	-
Total Sources of Funds:	**$ 2,954,314**	**$ 3,054,481**	**$ 3,093,751**	**$ 3,168,667**	**$ 3,227,190**	**$ 3,296,628**	**$ 3,350,812**	**$ 3,398,639**	**$ 3,460,382**	**$ 3,522,127**	**$ 3,583,874**
Uses of Sewer Funds [1]											
Operating Expenses :											
WWTP Collection System And Lift Stations	$ 987,537	$ 1,021,553	$ 1,056,843	$ 1,093,462	$ 1,131,469	$ 1,170,924	$ 1,211,893	$ 1,254,442	$ 1,298,643	$ 1,344,573	$ 1,392,310
WWTP Plant	1,835,877	1,897,843	1,819,246	1,886,248	1,955,942	2,028,453	2,103,912	2,182,458	2,264,237	2,349,406	2,438,127
Subtotal: Operating Expenses	$ 2,823,414	$ 2,919,396	$ 2,876,089	$ 2,979,710	$ 3,087,411	$ 3,199,377	$ 3,315,804	$ 3,436,899	$ 3,562,881	$ 3,693,978	$ 3,830,436
Other Expenditures:				$ 106,192							
Existing Debt Service	$ 141,439	$ 127,393	$ 108,206		$ 109,187	$ 107,042	$ 109,906	$ 17,631	$ 18,075	$ 18,531	$ -
Future Debt Service	-	-	-	-	-	928,534	928,534	928,534	928,534	928,534	928,534
Rate-Funded Capital Expenses	20,000	374,557	138,027	772,523	597,362	682,636	2,213,258	5,199,224	1,393,101	2,118,397	1,504,171
Subtotal: Other Expenditures	$ 161,439	$ 501,950	$ 246,233	$ 878,715	$ 706,549	$ 1,718,212	$ 3,251,699	$ 6,145,390	$ 2,339,711	$ 3,065,462	$ 2,432,705
Total Uses of Sewer Funds:	**$ 2,984,853**	**$ 3,421,346**	**$ 3,122,322**	**$ 3,858,425**	**$ 3,793,960**	**$ 4,917,589**	**$ 6,567,503**	**$ 9,582,289**	**$ 5,902,591**	**$ 6,759,441**	**$ 6,263,142**
plus: Revenue from Rate Increases[3]	-	598,175	1,159,735	1,397,735	1,655,111	1,933,054	2,232,825	2,555,758	2,903,269	3,276,853	3,678,099
Annual Surplus/(Deficit)	**$ (30,539)**	**$ 231,310**	**$ 1,131,164**	**$ 707,976**	**$ 1,088,341**	**$ 312,093**	**$ (983,866)**	**$ (3,627,891)**	**$ 461,059**	**$ 39,540**	**$ 998,831**
Net Revenue Req't. *(Total Uses less Non-Rate Revenue)*	**$ 2,960,353**	**$ 3,357,739**	**$ 3,080,505**	**$ 3,802,753**	**$ 3,740,825**	**$ 4,856,077**	**$ 6,512,867**	**$ 9,540,886**	**$ 5,860,506**	**$ 6,716,670**	**$ 6,219,685**
Total Rate Revenue After Rate Increases	**$ 2,929,814**	**$ 3,589,049**	**$ 4,211,670**	**$ 4,510,729**	**$ 4,829,166**	**$ 5,168,170**	**$ 5,529,001**	**$ 5,912,995**	**$ 6,321,565**	**$ 6,756,210**	**$ 7,218,516**
Projected Annual Rate Revenue Increase	***0.00%***	***20.00%***	***15.00%***	***5.00%***	***5.00%***	***5.00%***	***5.00%***	***5.00%***	***5.00%***	***5.00%***	***5.00%***
Cumulative Increase from Annual Revenue Increases	*0.00%*	*20.00%*	*38.00%*	*44.90%*	*52.15%*	*59.75%*	*67.74%*	*76.13%*	*84.93%*	*94.18%*	*103.89%*
Debt Coverage After Rate Increase	*N/A*	*5.76*	*12.73*	*14.94*	*16.44*	*1.96*	*2.18*	*2.66*	*2.96*	*3.28*	*3.70*

1. Revenue and expenses for FY 2021/22 through FY 2023/24 provided by the City. Revenues and expenses for all other years are escalated based on the forecasting assumptions in Table 8. Source file: *FINAL ADOPTED BUDGET - FY23-24 and revexpbyfun*
2. Interest earnings for FY 2021/22 through FY 2023/24 are from the City's Budget. For all other years, interest is calculated based on historical LAIF returns. Source file: *Rio Vista_Financial Data_FY 2023-2024* .
3. Revenue from rate increases assumes an implementation date of July 1, 2024 for new rates. For each year thereafter, the assumption is that new rates will be implemented on July 1st of each year.

3	*<-- Select Financial Plan Scenario Here*

Financial Plan Alternatives		FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
1	Alternative 1 - 1% Annual Rate Increases	*0.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*
2	Alternative 2 - 3% Inflationary Rate Increases	*0.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*
3	Alternative 3 - Custom Rate Increases	*0.00%*	*20.00%*	*15.00%*	*5.00%*	*5.00%*	*5.00%*	*5.00%*	*5.00%*	*5.00%*	*5.00%*	*5.00%*
4	Alternative 4 - No Rate Increases	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

©2024 NBS Government Finance Group. All rights reserved.

TABLE 22: RESERVE FUND SUMMARY

SUMMARY OF CASH ACTIVITY	Budget	5-Year Projected Rate Period					Projected				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Total Beginning Cash[1]	**$ 3,024,840**	**$ 2,994,301**									
Unrestricted Reserves:											
Operating Reserve											
Beginning Reserve Balance	$ 3,024,840	$ 706,000	$ 739,100	$ 728,527	$ 754,391	$ 781,724	$ 810,076	$ (163,348)	$ (3,791,239)	$ (3,330,180)	$ (3,290,640)
Plus: Net Cash Flow (After Rate Increases)	(30,539)	231,310	1,131,164	707,976	1,088,341	312,093	(983,866)	(3,627,891)	461,059	39,540	998,831
Plus: Interest Earnings	-	9,100	9,527	9,391	9,724	10,076	10,442	-	-	-	-
Less: Transfer Out to Capital Replacement Reserve	(2,288,301)	(207,310)	(1,151,264)	(691,503)	(1,070,732)	(293,817)	-	-	-	-	-
Ending Operating Reserve Balance	***$ 706,000***	***$ 739,100***	***$ 728,527***	***$ 754,391***	***$ 781,724***	***$ 810,076***	***$ (163,348)***	***$ (3,791,239)***	***$ (3,330,180)***	***$ (3,290,640)***	***$ (2,291,809)***
Target Ending Balance (90 days of O&M) [2]	*$ 706,000*	*$ 730,000*	*$ 719,000*	*$ 745,000*	*$ 772,000*	*$ 800,000*	*$ 829,000*	*$ 859,000*	*$ 891,000*	*$ 923,000*	*$ 958,000*
Capital Reserve											
Beginning Reserve Balance	$ -	$ 2,288,301	$ 525,107	$ 1,570,933	$ 1,308,653	$ 1,891,600	$ 1,290,200	$ 1,034,031	$ 1,047,359	$ 1,060,860	$ 1,074,534
Plus: Grant Proceeds	-	-	-	-	-	-	-	-	-	-	-
Plus: Transfer of Operating Reserve Surplus	2,288,301	207,310	1,151,264	691,503	1,070,732	293,817	-	-	-	-	-
Plus: Interest Earnings	-	29,496	6,769	20,249	16,869	24,383	16,631	13,329	13,500	13,674	13,851
Less: Use of Reserves for Capital Projects	-	(2,000,000)	(112,207)	(974,033)	(504,653)	(919,600)	(272,800)	-	-	-	-
Ending Capital Reserve Balance	***$ 2,288,301***	***$ 525,107***	***$ 1,570,933***	***$ 1,308,653***	***$ 1,891,600***	***$ 1,290,200***	***$ 1,034,031***	***$ 1,047,359***	***$ 1,060,860***	***$ 1,074,534***	***$ 1,088,385***
Target Ending Balance (3% of net assets) [3]	*$ 218,600*	*$ 331,300*	*$ 412,900*	*$ 596,900*	*$ 804,000*	*$ 972,000*	*$ 1,017,400*	*$ 1,142,900*	*$ 1,150,400*	*$ 1,179,400*	*$ 1,189,100*
Ending Balance - Excl. Restricted Reserves	***$ 2,994,301***	***$ 1,264,207***	***$ 2,299,460***	***$ 2,063,043***	***$ 2,673,324***	***$ 2,100,276***	***$ 870,683***	***$ (2,743,880)***	***$ (2,269,320)***	***$ (2,216,106)***	***$ (1,203,424)***
Min. Target Ending Balance -Excl. Restricted Reserves	***$ 924,600***	***$ 1,061,300***	***$ 1,131,900***	***$ 1,341,900***	***$ 1,576,000***	***$ 1,772,000***	***$ 1,846,400***	***$ 2,001,900***	***$ 2,041,400***	***$ 2,102,400***	***$ 2,147,100***
Ending Surplus/(Deficit) Compared to Reserve Targets	***$ 2,069,701***	***$ 202,907***	***$ 1,167,560***	***$ 721,143***	***$ 1,097,324***	***$ 328,276***	***$ (975,717)***	***$ (4,745,780)***	***$ (4,310,720)***	***$ (4,318,506)***	***$ (3,350,524)***
Annual Interest Earnings Rate [4]	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*

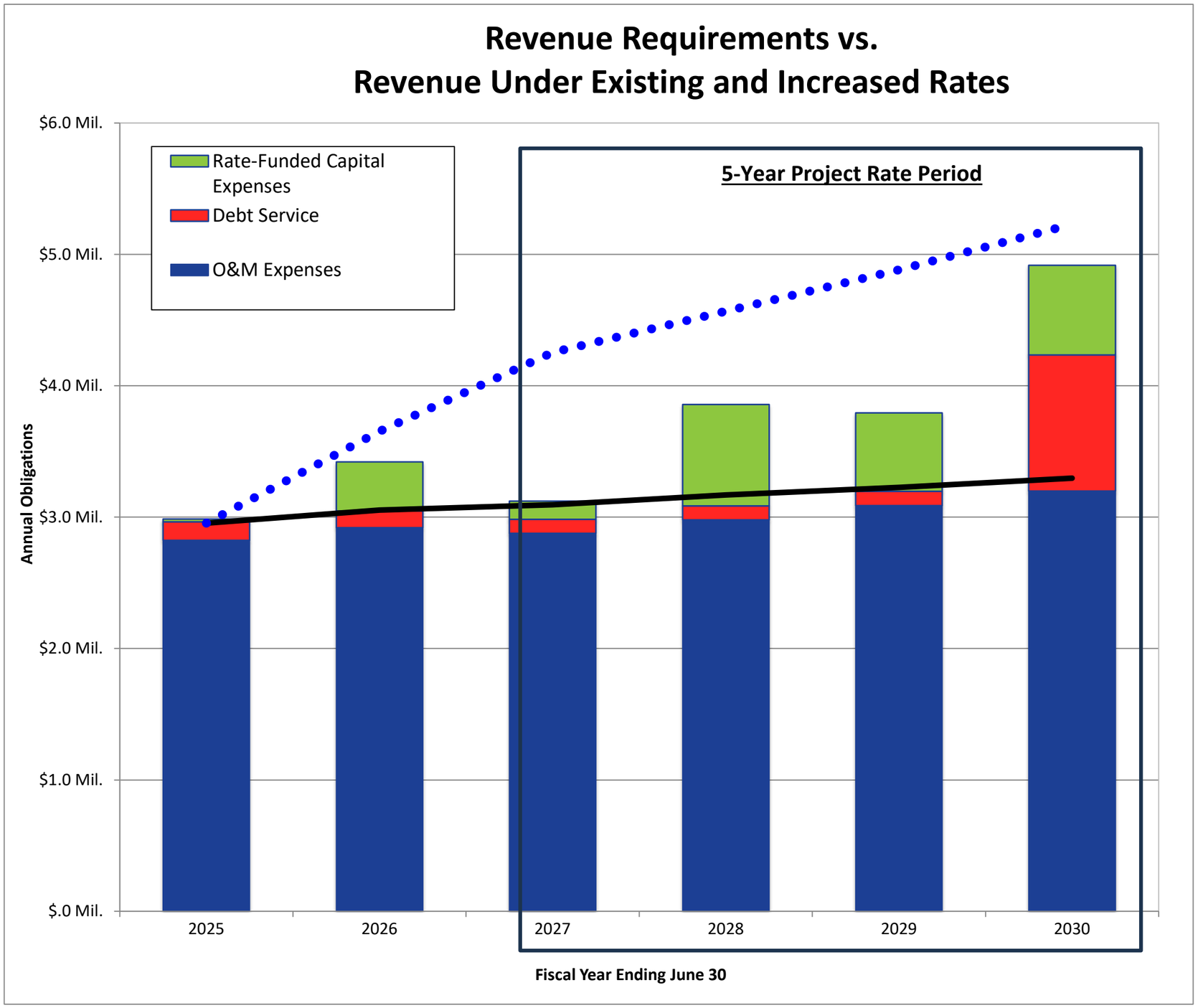
1. Beginning cash balances provided by City staff for Fund 85 Beach Sewer System and Plant and Fund 88 Beach Sewer Capital Outlay. Source file: *NBS - CASH BALANCE 8.25.23* .
2. The target ending balance is set equal to 90 days of O&M expenses.
3. The target ending balance is set equal to 3% of net capital assets. See *Exhibit 2 (CIP)* for details.
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* .

TABLE 23: RESERVE FUND SUMMARY, cont.

SUMMARY OF CASH ACTIVITY	Budget	w					Projected				
	FY 2024/25	FY 2024/25	FY 2024/25	FY 2024/25	FY 2024/25	FY 2024/25	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Restricted Reserves:											
Connection Fee Reserve											
Beginning Reserve Balance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Plus: Interest Earnings	-	-	-	-	-	-	-	-	-	-	-
Plus: Connection Fee Revenue[1]	74,756	74,756	74,898	75,041	75,183	75,326	-	-	-	-	-
Less: Use of Reserves for Capital Projects	-	(37,378)	(37,449)	(37,520)	(37,592)	(37,663)	-	-	-	-	-
Ending Impact Fee Fund Balance	***$ 74,756***	***$ 37,378***	***$ 37,449***	***$ 37,520***	***$ 37,592***	***$ 37,663***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***
Target Ending Balance (3% of net assets) [2]	*$ 218,600*	*$ 331,300*	*$ 412,900*	*$ 596,900*	*$ 804,000*	*$ 972,000*	*$ 1,017,400*	*$ 1,142,900*	*$ 1,150,400*	*$ 1,179,400*	*$ 1,189,100*
Annual Interest Earnings Rate [3]	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*

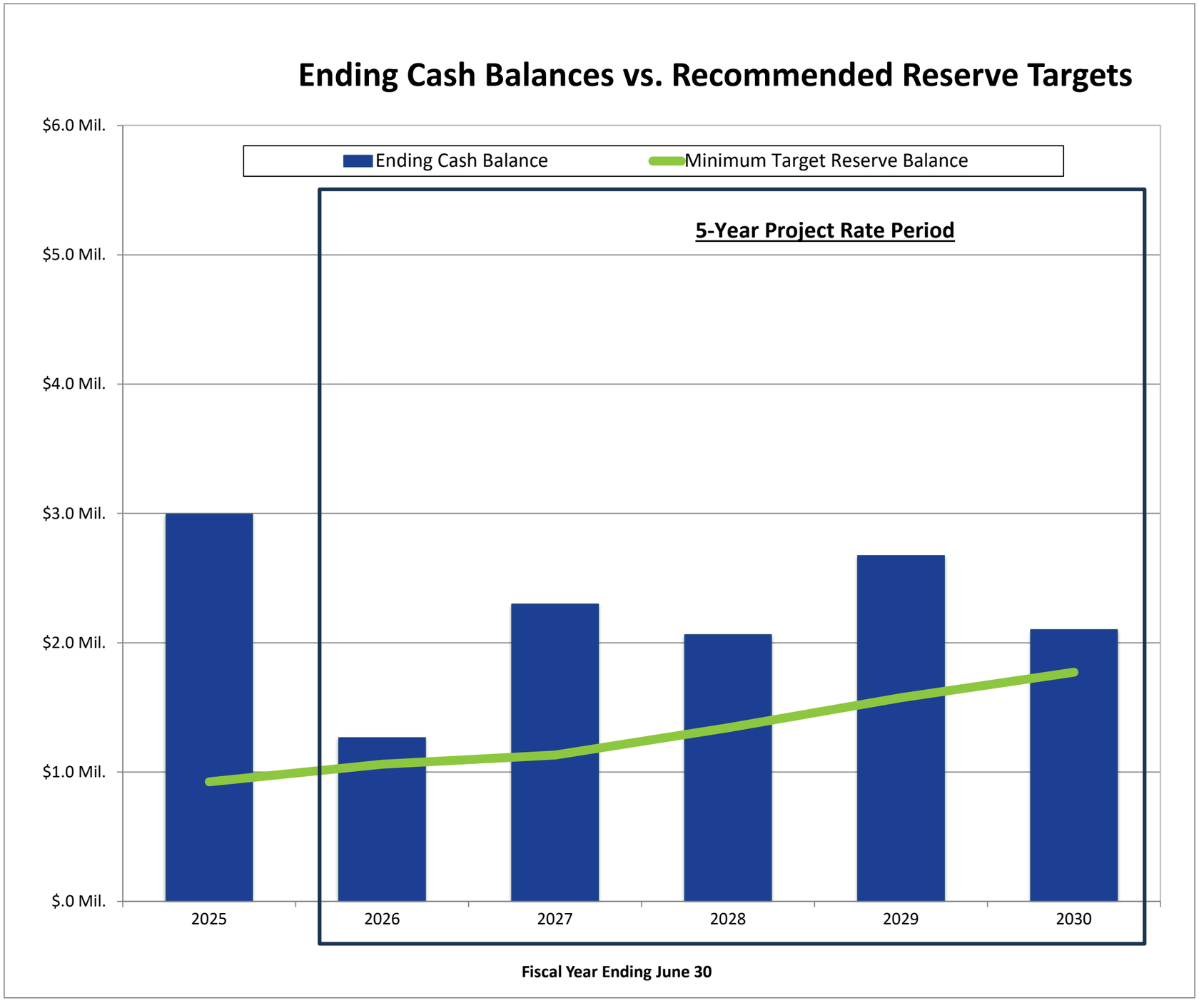
©2024 NBS Government Finance Group. All rights reserved.

CHART 1



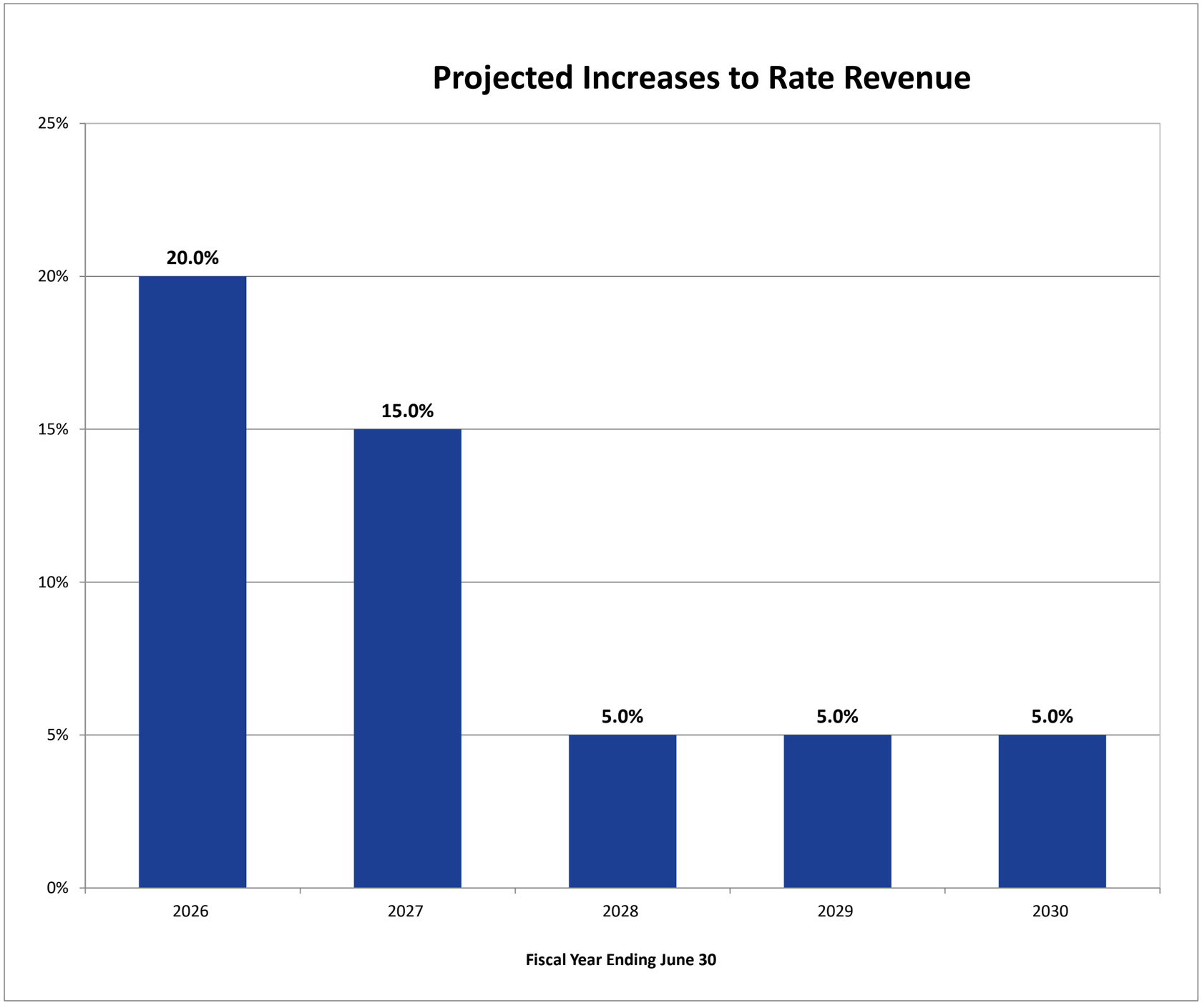
©2024 NBS Government Finance Group. All rights reserved.

CHART 2



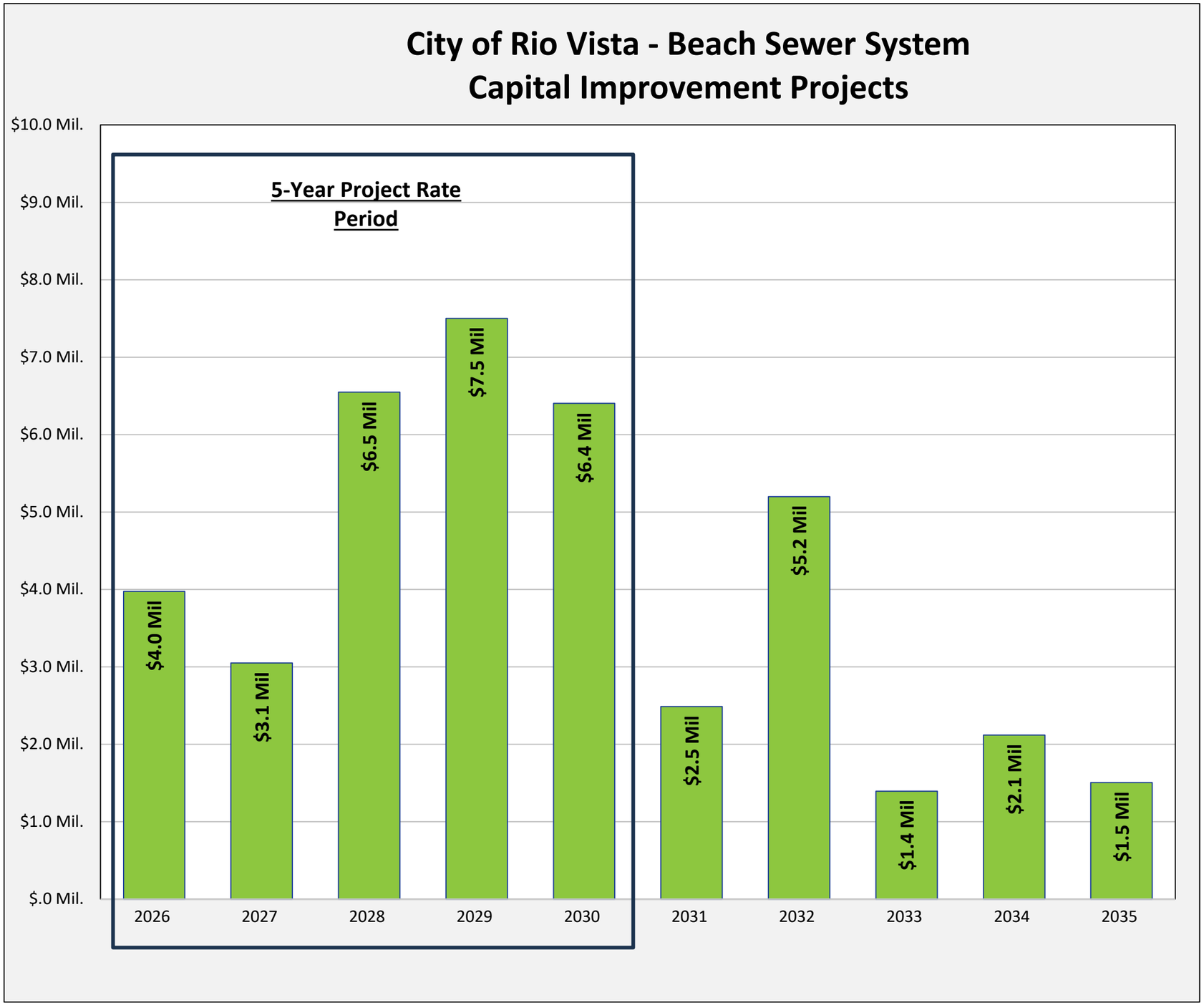
©2024 NBS Government Finance Group. All rights reserved.

CHART 3



©2024 NBS Government Finance Group. All rights reserved.

CHART 4



©2024 NBS Government Finance Group. All rights reserved.

TABLE 24: REVENUE FORECAST[1]

Operations and Maintenance Forecast		Budget	5-Year Projected Rate Period					Projected				
DESCRIPTION	Basis	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Operating Revenue												
Utility Service Fees - Residential	1	$ 2,470,435	$ 2,521,922	$ 2,573,408	$ 2,624,895	$ 2,676,381	$ 2,727,867	$ 2,779,354	$ 2,830,840	$ 2,882,327	$ 2,933,813	$ 2,985,300
Utility Service Fees - Commercial	1	459,378	468,952	478,526	488,100	497,674	507,248	516,822	526,396	535,970	545,544	555,118
Forfeitures/Penalties	1	24,500	25,011	25,521	26,032	26,543	27,053	27,564	28,074	28,585	29,096	29,606
Miscellaneous Revenue	1	-	-	-	-	-	-	-	-	-	-	-
Connection Fees	1	-	-	-	-	-	-	-	-	-	-	-
Non-Operating Revenue												
Interest Income	See FP	-	-	-	-	-	-	-	-	-	-	-
Transfer In	9	-	-	-	-	-	-	-	-	-	-	-
Connection Fee Revenue												
Fee Revenue[2]	1	74,756	74,756	74,898	75,041	75,183	75,326	-	-	-	-	-
Interest Income	See FP	-	-	-	-	-	-	-	-	-	-	-
TOTAL: REVENUE		**$ 2,954,314**	**$ 3,015,885**	**$ 3,077,456**	**$ 3,139,027**	**$ 3,200,598**	**$ 3,262,169**	**$ 3,323,740**	**$ 3,385,311**	**$ 3,446,882**	**$ 3,508,453**	**$ 3,570,023**

TABLE 25: REVENUE SUMMARY

DESCRIPTION	Basis	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Rate Revenue		$ 2,929,814	$ 2,990,874	$ 3,051,934	$ 3,112,995	$ 3,174,055	$ 3,235,115	$ 3,296,176	$ 3,357,236	$ 3,418,297	$ 3,479,357	$ 3,540,417
Non-Rate Revenue		24,500	25,011	25,521	26,032	26,543	27,053	27,564	28,074	28,585	29,096	29,606
Interest Income	See FP	-	-	-	-	-	-	-	-	-	-	-
Transfer In		-	-	-	-	-	-	-	-	-	-	-
TOTAL: REVENUE		**$ 2,954,314**	**$ 3,015,885**	**$ 3,077,456**	**$ 3,139,027**	**$ 3,200,598**	**$ 3,262,169**	**$ 3,323,740**	**$ 3,385,311**	**$ 3,446,882**	**$ 3,508,453**	**$ 3,570,023**

©2024 NBS Government Finance Group. All rights reserved.

TABLE 26: OPERATING EXPENSE FORECAST[1]

FUND / CATEGORY	Basis	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
WWTP COLLECTION SYSTEM AND LIFT STATIONS												
Salaries & Wages	3	$ 328,379	$ 338,296	$ 348,512	$ 359,037	$ 369,880	$ 381,051	$ 392,558	$ 404,414	$ 416,627	$ 429,209	$ 442,171
Part time - Salaries & Wages	3	-	-	-	-	-	-	-	-	-	-	-
Overtime	3	8,536	8,794	9,059	9,333	9,615	9,905	10,204	10,513	10,830	11,157	11,494
Clothing & Work Boots	3	-	-	-	-	-	-	-	-	-	-	-
Dental Insurance	3	5,228	5,386	5,549	5,717	5,889	6,067	6,250	6,439	6,633	6,834	7,040
Health Insurance	3	55,909	57,597	59,337	61,129	62,975	64,876	66,836	68,854	70,934	73,076	75,283
Life Insurance	3	812	836	862	888	914	942	970	1,000	1,030	1,061	1,093
Employee Assistance Program	3	87	89	92	95	98	100	103	107	110	113	117
Vision Insurance	3	747	770	793	817	842	867	893	920	948	977	1,006
PERS Retirement	3	62,479	64,366	66,310	68,312	70,375	72,501	74,690	76,946	79,270	81,663	84,130
Social Security/FICA	3	23,439	24,147	24,876	25,627	26,401	27,199	28,020	28,866	29,738	30,636	31,561
Workers Comp. Insurance	3	16,835	17,343	17,867	18,406	18,962	19,535	20,125	20,733	21,359	22,004	22,668
State Unemployment Insurance	3	1,700	1,751	1,804	1,859	1,915	1,972	2,032	2,093	2,157	2,222	2,289
Boot/Uniform/Equipment Allowance	3	1,829	1,884	1,941	1,999	2,060	2,122	2,186	2,252	2,320	2,390	2,462
Accounting & Auditing	2	-	-	-	-	-	-	-	-	-	-	-
Administrative Expense - ABM Loan	2	-	-	-	-	-	-	-	-	-	-	-
Legal Fees	2	10,345	10,702	11,071	11,453	11,848	12,257	12,680	13,117	13,570	14,038	14,522
Contractual Services	2	99,829	103,273	106,836	110,522	114,335	118,280	122,360	126,582	130,949	135,467	140,140
Veolia- Contractual services	2	125,245	129,566	134,036	138,660	143,444	148,393	153,512	158,809	164,287	169,955	175,819
Equipment Rental	2	8,276	8,562	8,857	9,162	9,479	9,806	10,144	10,494	10,856	11,230	11,618
Equipment (Non-Capital,<$5,000)	2	2,069	2,140	2,214	2,291	2,370	2,451	2,536	2,623	2,714	2,808	2,904
Fuel & Mileage	7	21,416	22,932	24,555	26,293	28,154	30,147	32,280	34,565	37,012	39,632	42,437
Flood & Fire Insurance	2	402	416	430	445	460	476	493	510	527	545	564
Liability Insurance	2	17,732	18,344	18,977	19,632	20,309	21,010	21,734	22,484	23,260	24,062	24,893
Finance Charge - Collection fee	2	103	107	111	115	118	123	127	131	136	140	145
M & R Machinery & Equipment	2	40,346	41,737	43,177	44,667	46,208	47,802	49,451	51,157	52,922	54,748	56,637
M&R Real Property	2	25,863	26,755	27,678	28,633	29,621	30,642	31,700	32,793	33,925	35,095	36,306
M&R Vehicles	2	3,104	3,211	3,321	3,436	3,554	3,677	3,804	3,935	4,071	4,211	4,357
Membership Dues	2	724	749	775	802	829	858	888	918	950	983	1,017
Misc. Services & Supplies	2	2,069	2,140	2,214	2,291	2,370	2,451	2,536	2,623	2,714	2,808	2,904
Office Supplies & Materials	2	2,069	2,140	2,214	2,291	2,370	2,451	2,536	2,623	2,714	2,808	2,904
Permits & Licenses	2	4,345	4,495	4,650	4,810	4,976	5,148	5,326	5,509	5,699	5,896	6,099
Postage	2	-	-	-	-	-	-	-	-	-	-	-
Telephone	2	5,173	5,351	5,536	5,727	5,924	6,128	6,340	6,559	6,785	7,019	7,261
Utilities - PG&E	6	27,088	29,350	31,800	34,456	37,333	40,451	43,829	47,489	51,454	55,751	60,407
Emergency Repairs	2	51,725	53,510	55,356	57,265	59,241	61,285	63,399	65,586	67,849	70,190	72,612
Capital Outlay - Vehicles	8	33,638	34,815	36,033	37,294	38,600	39,951	41,349	42,796	44,294	45,844	47,449
Loan - Lease Payment - Principal	Exh. 3	-	-	-	-	-	-	-	-	-	-	-
Loan - Lease Payment - Interest	Exh. 3	-	-	-	-	-	-	-	-	-	-	-
TOTAL: WWTP COLLECTION SYSTEM AND LIFT STATIONS		**$ 987,537**	**$ 1,021,553**	**$ 1,056,843**	**$ 1,093,462**	**$ 1,131,469**	**$ 1,170,924**	**$ 1,211,893**	**$ 1,254,442**	**$ 1,298,643**	**$ 1,344,573**	**$ 1,392,310**

©2024 NBS Government Finance Group. All rights reserved.

TABLE 27: OPERATING EXPENSE FORECAST[1]

FUND	Basis	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
BEACH WWTP PLANT												
Salaries & Wages	3	$ 163,587	$ 168,527	$ 173,617	$ 178,860	$ 184,261	$ 189,826	$ 195,559	$ 201,465	$ 207,549	$ 213,817	$ 220,274
Overtime	3	4,549	4,687	4,828	4,974	5,124	5,279	5,438	5,602	5,772	5,946	6,126
Clothing & Work Boots	3	-	-	-	-	-	-	-	-	-	-	-
Dental Insurance	3	2,799	2,883	2,970	3,060	3,152	3,248	3,346	3,447	3,551	3,658	3,768
Health Insurance	3	30,727	31,655	32,611	33,596	34,610	35,656	36,732	37,842	38,984	40,162	41,375
Life Insurance	3	439	452	466	480	494	509	524	540	556	573	591
Employee Assistance Program	3	49	50	52	54	55	57	59	60	62	64	66
Vision Insurance	3	404	416	428	441	455	468	483	497	512	528	544
PERS Retirement	3	25,667	26,442	27,241	28,064	28,911	29,784	30,684	31,610	32,565	33,549	34,562
Social Security/FICA	3	13,141	13,538	13,947	14,368	14,802	15,249	15,709	16,184	16,673	17,176	17,695
Workers Comp. Insurance	3	9,526	9,813	10,110	10,415	10,729	11,053	11,387	11,731	12,085	12,450	12,826
State Unemployment Insurance	3	-	-	-	-	-	-	-	-	-	-	-
Accounting & Auditing	2	8,658	8,957	9,266	9,586	9,917	10,259	10,613	10,979	11,357	11,749	12,155
Legal Fees	2	2,069	2,140	2,214	2,291	2,370	2,451	2,536	2,623	2,714	2,808	2,904
Debt Issuance Costs	Exh 3	-	-	-	-	-	-	-	-	-	-	-
Chemicals & Gases	4	52,724	55,595	58,624	61,817	65,184	68,735	72,479	76,427	80,590	84,980	89,608
Contractual Services	2	158,772	164,250	169,916	175,778	181,843	188,116	194,606	201,320	208,266	215,451	222,884
VEOLIA- Contractual Services	2	894,100	924,947	956,857	989,869	1,024,019	1,059,348	1,095,896	1,133,704	1,172,817	1,213,279	1,255,137
Equipment Rental	2	4,862	5,030	5,203	5,383	5,569	5,761	5,960	6,165	6,378	6,598	6,825
Equipment (Non-Capital,<$5,000)	2	24,828	25,685	26,571	27,487	28,436	29,417	30,432	31,481	32,568	33,691	34,854
Fuel and Mileage	7	857	917	982	1,052	1,126	1,206	1,291	1,383	1,480	1,585	1,697
Flood & Fire Insurance	2	6,006	6,213	6,427	6,649	6,878	7,115	7,361	7,615	7,878	8,149	8,431
Liability Insurance	2	59,245	61,289	63,403	65,591	67,854	70,194	72,616	75,121	77,713	80,394	83,168
Interest Expense - Interfund Loan	2	-	-	-	-	-	-	-	-	-	-	-
Legal Notices/Publications	2	-	-	-	-	-	-	-	-	-	-	-
M & R Machinery & Equipment	2	9,311	9,632	9,964	10,308	10,663	11,031	11,412	11,806	12,213	12,634	13,070
M & R Real Property	2	31,035	32,106	33,213	34,359	35,545	36,771	38,039	39,352	40,709	42,114	43,567
Office Supplies & Materials	2	6,207	6,421	6,643	6,872	7,109	7,354	7,608	7,870	8,142	8,423	8,713
Computer Hardware	2	-	-	-	-	-	-	-	-	-	-	-
Computer Software	2	27,317	28,259	29,234	30,243	31,286	32,366	33,482	34,637	35,832	37,069	38,348
Permits & Licenses	2	14,483	14,983	15,500	16,034	16,587	17,160	17,752	18,364	18,998	19,653	20,331
Postage	2	1,655	1,712	1,771	1,832	1,896	1,961	2,029	2,099	2,171	2,246	2,324
Telephone	2	15,518	16,053	16,607	17,180	17,772	18,385	19,020	19,676	20,355	21,057	21,783
Utilities - PG&E	6	72,595	78,657	85,225	92,342	100,053	108,408	117,461	127,270	137,897	149,413	161,890
Utilities - City Water Services	6	-	-	-	-	-	-	-	-	-	-	-
Bond Interest Expense	Exh 3	-	-	-	-	-	-	-	-	-	-	-
Bond Principal	Exh 3	-	-	-	-	-	-	-	-	-	-	-
Bond Principal Retirement	Exh 3	-	-	-	-	-	-	-	-	-	-	-
Emergency Repairs	2	51,725	53,510	55,356	57,265	59,241	61,285	63,399	65,586	67,849	70,190	72,612
Transfer Out[3]	9	143,025	143,025	-	-	-	-	-	-	-	-	-
TOTAL: TREATMENT PLANT		**$ 1,835,877**	**$ 1,897,843**	**$ 1,819,246**	**$ 1,886,248**	**$ 1,955,942**	**$ 2,028,453**	**$ 2,103,912**	**$ 2,182,458**	**$ 2,264,237**	**$ 2,349,406**	**$ 2,438,127**

TABLE 28 : OPERATING EXPENSE FORECAST, cont.[1]

DESCRIPTION	Basis	Budget	5-Year Projected Rate Period					Projected				
		FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
GRAND TOTAL: SEWER EXPENSES - BEACH		**$ 2,823,414**	**$ 2,919,396**	**$ 2,876,089**	**$ 2,979,710**	**$ 3,087,411**	**$ 3,199,377**	**$ 3,315,804**	**$ 3,436,899**	**$ 3,562,881**	**$ 3,693,978**	**$ 3,830,436**

©2024 NBS Government Finance Group. All rights reserved.

TABLE 29: FORECASTING ASSUMPTIONS[4]

INFLATION FACTORS	Basis	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Customer Growth[5]	1	2.08%	2.08%	2.04%	2.00%	1.96%	1.92%	1.89%	1.85%	1.82%	1.79%	1.75%
General Cost Inflation[6]	2	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%
Labor Cost Inflation[7]	3	3.02%	3.02%	3.02%	3.02%	3.02%	3.02%	3.02%	3.02%	3.02%	3.02%	3.02%
Chemicals[8]	4	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%
Energy[9]	5	10.84%	10.84%	10.84%	10.84%	10.84%	10.84%	10.84%	10.84%	10.84%	10.84%	10.84%
Electricity[10]	6	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%
Fuel & Utilities[11]	7	7.08%	7.08%	7.08%	7.08%	7.08%	7.08%	7.08%	7.08%	7.08%	7.08%	7.08%
Construction Cost Inflation[12]	8	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
No Escalation	9	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

1. Revenue and expenses for FY 2021/22 through FY 2023/24 provided by the City. Revenues and expenses for all other years are escalated based on the forecasting assumptions in Table 8. Source file: *FINAL ADOPTED BUDGET - FY23-24 and revexpbyfund*
2. Connection fee revenue is based on the preliminary results of the 2024 Connection Fee Study and the future connection projections provided by City staff.
3. These transfers are interfund loan payments to the following funds: (1) Water - $20,680; (2) Parks and Recreation - $5,170; and (3) Municipal Improvements - $117,175.
4. Expenses are inflated each year by the following annual inflation factor categories.
5. Customer growth is based on the population projections in the City's Water System Evaluation Plan. Source file: *20190214_Final Draft* , Page 7, Section 2.1.
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 Francisco-Oakland-Hayward, CA area.
7. Labor cost inflation is based on the 10-year average annual change in the Quarterly Census of Employment and Wages for San Francisco County, CA.
8. Chemical cost inflation is based on the 5-year average annual change in the Producer Price Index for Chemical Manufacturing.
9. Energy cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers in the San Francisco-Oakland-Hayward, CA area.
10. Electricity cost inflation is based on the 5-year average change in the Consumer Price Index for San Francisco County.
11. 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.
12. 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*).

©2024 NBS Government Finance Group. All rights reserved.

TABLE 30: CAPITAL FUNDING SUMMARY

CAPITAL FUNDING FORECAST	Budget	5-Year Projected Rate Period					Projected				
Funding Sources:	**FY 2024/25**	**FY 2025/26**	**FY 2026/27**	**FY 2027/28**	**FY 2028/29**	**FY 2029/30**	**FY 2030/31**	**FY 2031/32**	**FY 2032/33**	**FY 2033/34**	**FY 2034/35**
ARPA Funds[1]	$ -	$ -	$ -	$ 670,904	$ 670,904	$ 670,904	$ -	$ -	$ -	$ -	$ -
Use of Connection Fee Reserves	-	37,378	37,449	37,520	37,592	37,663	-	-	-	-	-
SRF Loan Funding	-	1,562,622	2,762,551	4,091,576	5,691,504	4,091,433	-	-	-	-	-
Use of New Revenue Bond Proceeds	-	-	-	-	-	-	-	-	-	-	-
Use of Capital Rehabilitation and Replacement Reserve	-	2,000,000	112,207	974,033	504,653	919,600	272,800	-	-	-	-
Rate Revenue	20,000	374,557	138,027	772,523	597,362	682,636	2,213,258	5,199,224	1,393,101	2,118,397	1,504,171
Total Sources of Capital Funds	**$ 20,000**	**$ 3,974,557**	**$ 3,050,234**	**$ 6,546,556**	**$ 7,502,015**	**$ 6,402,236**	**$ 2,486,058**	**$ 5,199,224**	**$ 1,393,101**	**$ 2,118,397**	**$ 1,504,171**
Uses of Capital Funds:											
Total Project Costs	$ 20,000	$ 3,974,558	$ 3,050,234	$ 6,546,556	$ 7,502,015	$ 6,402,237	$ 2,486,057	$ 5,199,224	$ 1,393,101	$ 2,118,397	$ 1,504,171
Capital Funding Surplus (Deficiency)	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***
SRF Loan Funding	***$ -***	***$ 18,199,685***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***
New Revenue Bond Proceeds	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***

1. ARPA funds earmarked for the Wastewater Consolidation Project per City staff email dated 8-24-2023. The funds have been spread over a 3 years.
2. Funds from the SRF Loan will be used to pay for the Wastewater Consolidation Project currently estimated at $23.3 million.

TABLE 31: CAPITAL IMPROVEMENT PROGRAM FUNDING OPTIONS

Policy Choice		FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
1	Alternative 1 - Full Funding of CIP	$ 20,000	$ 3,974,558	$ 3,050,234	$ 6,546,556	$ 7,502,015	$ 6,402,237	$ 2,486,057	$ 5,199,224	$ 1,393,101	$ 2,118,397	$ 1,504,171
2	Alternative 2 - 75% Funding of CIP	$ 15,000	$ 2,980,918	$ 2,287,675	$ 4,909,917	$ 5,626,511	$ 4,801,677	$ 1,864,543	$ 3,899,418	$ 1,044,826	$ 1,588,798	$ 1,128,129
3	Alternative 3 - 50% Funding of CIP	$ 10,000	$ 1,987,279	$ 1,525,117	$ 3,273,278	$ 3,751,008	$ 3,201,118	$ 1,243,029	$ 2,599,612	$ 696,551	$ 1,059,199	$ 752,086

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

Capital Improvement Program Funding Choice	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Effective Annual Funding Amount	$ 20,000	$ 3,974,558	$ 3,050,234	$ 6,546,556	$ 7,502,015	$ 6,402,237	$ 2,486,057	$ 5,199,224	$ 1,393,101	$ 2,118,397	$ 1,504,171

©2024 NBS Government Finance Group. All rights reserved.

CAPITAL IMPROVEMENT PROGRAM

TABLE 32: CAPITAL IMPROVEMENT PROGRAM COSTS (*in Current-Year Dollars*)[1]

Project Description[2]	FY 2023/24	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Capital Outlay											
CIP - Wastewater Collection System & Plant Upgrade	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CIP - Beach & NW Wastewater Plant Consolidation	-	-	-	-	-	-	-	-	-	-	-
CIP - 2020 Water & Sewer CIP Project	-	-	-	-	-	-	-	-	-	-	-
Project 1 - Wastewater Consolidation Project											
1 Wastewater Consolidation Project	-	1,600,000	2,800,000	4,800,000	6,400,000	4,800,000	-	-	-	-	-
Project 2 - Northwest WWTP Projects											
1 Interim Improvements	-	-	-	-	-	-	-	-	-	-	-
2 Solar Greenhouse/Dryers	-	-	-	-	-	-	-	-	-	-	-
3 Belt Press	-	-	-	-	-	-	-	-	-	-	-
4 UV Upgrades and Lamp Replacement	-	-	-	-	-	-	-	-	-	-	-
5 Membrane Replacement	-	-	-	-	-	-	-	-	-	-	-
6 Recycled Water Tank, Pump Station, Distribution	-	-	-	-	-	-	-	-	-	-	-
7 WWTP Expansion	-	-	-	-	-	-	-	-	-	-	-
8 As-Needed Annual Upgrades	-	-	-	-	-	-	-	-	-	-	-
9 As-Needed Annual Maintenance	-	-	-	-	-	-	-	-	-	-	-
Project 3 - Beach WWTP Projects											
1 Interim Improvements	-	2,000,000	-	1,000,000	-	-	-	-	-	-	-
2 Decommissioning, Abandonment, Demolition	-	-	-	-	-	-	1,000,000	3,000,000	-	-	-
Project 4 - Wastewater Enterprise Projects											
1 Lift Station Scada Upgrades And Service	-	-	-	-	-	-	200,000	200,000	200,000	200,000	200,000
2 NPDES Permit	10,000	12,500	12,500	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
3 Ongoing Regulatory Support	10,000	12,500	12,500	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
4 Cmms/Documentation/GIS	-	-	-	-	-	-	15,000	15,000	15,000	15,000	15,000
5 Master Planning	-	-	-	-	-	-	-	-	-	250,000	-
6 Unplanned CIP	-	-	-	-	-	-	250,000	250,000	250,000	250,000	250,000
7 CCTV	-	200,000	-	-	-	225,000	-	-	-	225,000	-
8 Sewer Pipeline Repairs	-	-	-	-	-	-	-	-	-	-	-
9 Existing CIP - Sewer Collection System	-	-	-	-	-	225,000	225,000	225,000	225,000	225,000	225,000
10 Infrastructure Maintenance/Reliability Improvements - WWTP And Lift Stations	-	-	-	-	-	-	250,000	250,000	300,000	300,000	300,000
Estimated Future Projects											
Future Projects[3]	-	-	-	-	-	-	-	-	-	-	-
Total: CIP Program Costs *(Current-Year Dollars)*	**$ 20,000**	**$ 3,825,000**	**$ 2,825,000**	**$ 5,835,000**	**$ 6,435,000**	**$ 5,285,000**	**$ 1,975,000**	**$ 3,975,000**	**$ 1,025,000**	**$ 1,500,000**	**$ 1,025,000**

©2024 NBS Government Finance Group. All rights reserved.

TABLE 33: CAPITAL IMPROVEMENT PROGRAM COSTS *(in Future-Year Dollars)* [4]

Project Description[2]	FY 2023/24	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Capital Outlay											
CIP - Wastewater Collection System & Plant Upgrade	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CIP - Beach & NW Wastewater Plant Consolidation	-	-	-	-	-	-	-	-	-	-	-
CIP - 2020 Water & Sewer CIP Project	-	-	-	-	-	-	-	-	-	-	-
Project 1 - Wastewater Consolidation Project											
1 Wastewater Consolidation Project	-	1,662,560	3,023,241	5,385,342	7,461,212	5,814,709	-	-	-	-	-
Project 2 - Northwest WWTP Projects											
1 Interim Improvements	-	-	-	-	-	-	-	-	-	-	-
2 Solar Greenhouse/Dryers	-	-	-	-	-	-	-	-	-	-	-
3 Belt Press	-	-	-	-	-	-	-	-	-	-	-
4 UV Upgrades and Lamp Replacement	-	-	-	-	-	-	-	-	-	-	-
5 Membrane Replacement	-	-	-	-	-	-	-	-	-	-	-
6 Recycled Water Tank, Pump Station, Distribution	-	-	-	-	-	-	-	-	-	-	-
7 WWTP Expansion	-	-	-	-	-	-	-	-	-	-	-
8 As-Needed Annual Upgrades	-	-	-	-	-	-	-	-	-	-	-
9 As-Needed Annual Maintenance	-	-	-	-	-	-	-	-	-	-	-
Project 3 - Beach WWTP Projects											
1 Interim Improvements	-	2,078,200	-	1,121,946	-	-	-	-	-	-	-
2 Decommissioning, Abandonment, Demolition	-	-	-	-	-	-	1,258,763	3,923,943	-	-	-
Project 4 - Wastewater Enterprise Projects											
1 Lift Station Scada Upgrades And Service	-	-	-	-	-	-	251,753	261,596	271,825	282,453	293,497
2 NPDES Permit	10,000	12,989	13,497	22,439	23,316	24,228	25,175	26,160	27,182	28,245	29,350
3 Ongoing Regulatory Support	10,000	12,989	13,497	16,829	17,487	18,171	18,881	19,620	20,387	21,184	22,012
4 Cmms/Documentation/GIS	-	-	-	-	-	-	18,881	19,620	20,387	21,184	22,012
5 Master Planning	-	-	-	-	-	-	-	-	-	353,066	-
6 Unplanned CIP	-	-	-	-	-	-	314,691	326,995	339,781	353,066	366,871
7 CCTV	-	207,820	-	-	-	272,564	-	-	-	317,760	-
8 Sewer Pipeline Repairs	-	-	-	-	-	-	-	-	-	-	-
9 Existing CIP - Sewer Collection System	-	-	-	-	-	272,564	283,222	294,296	305,803	317,760	330,184
10 Infrastructure Maintenance/Reliability Improvements - WWTP And Lift Stations	-	-	-	-	-	-	314,691	326,995	407,737	423,679	440,245
Estimated Future Projects											
Future Projects[3]	-	-	-	-	-	-	-	-	-	-	-
Total: CIP Program Costs *(Future-Year Dollars)*	**$ 20,000**	**$ 3,974,558**	**$ 3,050,234**	**$ 6,546,556**	**$ 7,502,015**	**$ 6,402,237**	**$ 2,486,057**	**$ 5,199,224**	**$ 1,393,101**	**$ 2,118,397**	**$ 1,504,171**

TABLE 34: FORECASTING ASSUMPTIONS

Economic Variables	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Annual Construction Cost Inflation, Per Engineering News Record[5]	*0.00%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*	*3.91%*
Cumulative Construction Cost Multiplier from FY 2024/25	*1.00*	*1.04*	*1.08*	*1.12*	*1.17*	*1.21*	*1.26*	*1.31*	*1.36*	*1.41*	*1.47*

1. Capital project costs were provided by City Staff and assumes Year 1 begins in FY 2024/25. Source file: *FY23-24 CIP PROJECTS FOR BUDGET & SEWER SYSTEM IMPROVEMENTS 032323* .
2. Project costs beyond Year 5 in the City's capital improvement plan have been allocated equally across a 7-year period (FY 2029/30 through FY 2035/36).
3. Future project costs beyond FY 2033/34 are calculated based on the City's 10-year average.
4. The capital project costs have been inflated using the Construction Cost Index (See Table 13). Website: *http://enr.construction.com* .
5. 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*).

©2024 NBS Government Finance Group. All rights reserved.

TABLE 35: EXISTING DEBT OBLIGATIONS

EXISTING DEBT OBLIGATIONS	Actuals	Budget	Budget	5-Year Projected Rate Period					Projected				
Annual Repayment Schedules:	**FY 2022/23**	**FY 2023/24**	**FY 2024/25**	**FY 2025/26**	**FY 2026/27**	**FY 2027/28**	**FY 2028/29**	**FY 2029/30**	**FY 2030/31**	**FY 2031/32**	**FY 2032/33**	**FY 2033/34**	**FY 2034/35**
2016 Installment Purchased Agreement (Umpqua Bank) - $1,040,000[1]													
Principal Payment	$ 70,000	$ 70,000	$ 75,000	$ 80,000	$ 80,000	$ 80,000	$ 85,000	$ 85,000	$ 90,000	$ -	$ -	$ -	$ -
Interest Payment	21,522	19,415	17,308	15,050	12,642	10,234	7,826	5,268	2,709	-	-	-	-
Subtotal: Annual Debt Service	**$ 91,522**	**$ 89,415**	**$ 92,308**	**$ 95,050**	**$ 92,642**	**$ 90,234**	**$ 92,826**	**$ 90,268**	**$ 92,709**	**$ -**	**$ -**	**$ -**	**$ -**
Coverage Requirement ($-Amnt above annual payment)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Reserve Requirement (total fund balance)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2020 Lease Purchase Agreement - $1,944,352[2]													
Principal Payment	$ 10,608	$ 11,187	$ 11,788	$ 12,410	$ 13,055	$ 13,722	$ 14,413	$ 15,128	$ 15,868	$ 16,634	$ 17,427	$ 18,248	$ -
Interest Payment	3,474	3,252	3,017	2,770	2,509	2,236	1,948	1,646	1,329	997	648	283	-
Subtotal: Annual Debt Service	**$ 14,082**	**$ 14,439**	**$ 14,805**	**$ 15,180**	**$ 15,564**	**$ 15,958**	**$ 16,361**	**$ 16,774**	**$ 17,197**	**$ 17,631**	**$ 18,075**	**$ 18,531**	**$ -**
Coverage Requirement ($-Amnt above annual payment)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Reserve Requirement (total fund balance)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2020 Vactor Truck Loan (KS State Bank) - $308,740[3]													
Principal Payment	$ 30,230	$ 31,436	$ 32,690	$ 16,831	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Interest Payment	4,096	2,890	1,636	332	-	-	-	-	-	-	-	-	-
Subtotal: Annual Debt Service	**$ 34,326**	**$ 34,326**	**$ 34,326**	**$ 17,163**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Coverage Requirement ($-Amnt above annual payment)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Reserve Requirement (total fund balance)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Grand Total: Existing Annual Debt Service	**$ 139,929**	**$ 138,180**	**$ 141,439**	**$ 127,393**	**$ 108,206**	**$ 106,192**	**$ 109,187**	**$ 107,042**	**$ 109,906**	**$ 17,631**	**$ 18,075**	**$ 18,531**	**$ -**
Grand Total: Existing Annual Coverage Requirement	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Grand Total: Existing Debt Reserve Target	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

1. Installment purchase agreement for the transfer and purchase of the Wastewater System to the City. Source file: *#2 - City of Rio Vista - 2015 Wastewater Installment Purchase Agreement* .
2. Purchase agreement to fund the acquisition of the Water Meter Direct Placement Series 2016 Project. The Beach Plant portion is 9%, or $174,992 (Principal). Source file: *#3 - Rio Vista Installment Purchase Agreement* .
3. Vehicle equipment purchase split 50/50 between the Beach and Northwest wastewater facilities. Source file: *#6 - 3356018_Contract - Executed Agreement - 9.9.19 (SC236716xAAE13)* .

TABLE 36: EXISTING ANNUAL DEBT OBLIGATIONS TO BE SATISFIED BY WATER RATES

Annual Obligations	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Existing Annual Debt Service	*$ 139,929*	*$ 138,180*	*$ 141,439*	*$ 127,393*	*$ 108,206*	*$ 106,192*	*$ 109,187*	*$ 107,042*	*$ 109,906*	*$ 17,631*	*$ 18,075*	*$ 18,531*	*$ -*
Existing Annual Coverage Requirement	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*
Existing Debt Reserve Target	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*

©2024 NBS Government Finance Group. All rights reserved.

TABLE 37: FUTURE DEBT FINANCING ASSUMPTIONS

Long-Term Debt Terms	State Revolving Fund Loan	Revenue Bonds
Issuance Cost	2.00%	2.00%
Annual Interest Cost (%)	3.00%	4.00%
Term	30	20
Debt Reserve Funded?	No	No
Coverage Requirement (% above annual pmt)	120%	125%

TABLE 38: FUTURE DEBT OBLIGATIONS

Annual Repayment Schedules	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Loan Proceeds													
Principal Payment	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 382,544	$ 394,020	$ 405,841	$ 418,016	$ 430,557	$ 443,473
Interest Payment	-	-	-	-	-	-	-	545,991	534,514	522,694	510,518	497,978	485,061
Subtotal: Annual Debt Service	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 928,534**	**$ 928,534**	**$ 928,534**	**$ 928,534**	**$ 928,534**	**$ 928,534**
WIFIA Loan Funding													
Principal Payment	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Interest Payment	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Annual Debt Service	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Grand Total: Future Annual Debt Service	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 928,534**	**$ 928,534**	**$ 928,534**	**$ 928,534**	**$ 928,534**	**$ 928,534**
Grand Total: Future Annual Coverage Requirement	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,114,241**	**$ 1,114,241**	**$ 1,114,241**	**$ 1,114,241**	**$ 1,114,241**	**$ 1,114,241**
Grand Total: Future Debt Reserve Target	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

TABLE 39: TOTAL DEBT SERVICE

Annual Obligations	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Annual Debt Service	**$ 139,929**	**$ 138,180**	**$ 141,439**	**$ 127,393**	**$ 108,206**	**$ 106,192**	**$ 109,187**	**$ 1,035,576**	**$ 1,038,441**	**$ 946,166**	**$ 946,610**	**$ 947,065**	**$ 928,534**
Annual Coverage Requirement	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1,114,241**	**1,114,241**	**1,114,241**	**1,114,241**	**1,114,241**	**1,114,241**
Total Debt Reserve Target	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

©2024 NBS Government Finance Group. All rights reserved.

THE CITY OF RIO VISTA
SEWER RATE STUDY - BEACH DRIVE SEWER SYSTEM & PLANT
Projected Sewer Rates Under Existing Rate Schedule

TABLE 40: CURRENT SEWER RATES

Sewer Rate Schedule	Description	Current Rates as of July 1, 2013[1]
RESIDENTIAL CUSTOMERS		
Residential	Per Dwelling Unit	$110.92
Multi-Family	Per Dwelling Unit	$84.37
NON-RESIDENTIAL CUSTOMERS [2]		
Low Strength	Per HCF	$9.77
Domestic Strength	Per HCF	$12.11
High Strength	Per HCF	$27.44

1. Rates available on the City's website: *https://www.riovistacity.com/finance/page/rates* .
2. Non-residential include commercial, industrial, retail and government customers.

©2024 NBS Government Finance Group. All rights reserved.

TABLE 55: CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS

Classification of Expenses										
Budget Categories	Total Revenue Requirements	Flow	Strength		Customer	Basis of Classification				$ Check
	FY 2025/26	(VOL)	(BOD)	(TSS)	(CA)	(VOL)	(BOD)	(TSS)	(CA)	
WWTP COLLECTION SYSTEM AND LIFT STATIONS										
Salaries & Wages	$ 338,296	$ 338,296	$ -	$ -	$ -	100.0%	0.0%	0.0%	0.0%	$ -
Part Time - Salaries & Wages	-	-	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Overtime	8,794	8,794	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Clothing & Work Boots	-	-	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Dental Insurance	5,386	5,386	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Health Insurance	57,597	57,597	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Life Insurance	836	836	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Employee Assistance Program	89	89	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Vision Insurance	770	770	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Pers Retirement	64,366	64,366	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Social Security/Fica	24,147	24,147	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Workers Comp. Insurance	17,343	17,343	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
State Unemployment Insurance	1,751	1,751	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Boot/Uniform/Equipment Allowance	1,884	1,884	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Accounting & Auditing	-	-	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Administrative Expense - Abm Loan	-	-	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Legal Fees	10,702	10,702	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Contractual Services	103,273	103,273	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Veolia- Contractual Services	129,566	129,566	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Equipment Rental	8,562	8,562	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Equipment (Non-Capital,<$5,000)	2,140	2,140	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Fuel & Mileage	22,932	22,932	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Flood & Fire Insurance	416	416	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Liability Insurance	18,344	18,344	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Finance Charge - Collection Fee	107	107	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
M & R Machinery & Equipment	41,737	41,737	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
M&R Real Property	26,755	26,755	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
M&R Vehicles	3,211	3,211	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Membership Dues	749	749	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Misc. Services & Supplies	2,140	2,140	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Office Supplies & Materials	2,140	2,140	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Permits & Licenses	4,495	4,495	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Postage	-	-	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Telephone	5,351	5,351	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Utilities - PG&E	29,350	29,350	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Emergency Repairs	53,510	53,510	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Capital Outlay - Vehicles	34,815	34,815	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Loan - Lease Payment - Principal	-	-	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Loan - Lease Payment - Interest	-	-	-	-	-	100.0%	0.0%	0.0%	0.0%	$ -
Total: Wwtp Collection System And Lift Stations	**$ 1,021,553**	**$ 1,021,553**	**$ -**	**$ -**	**$ -**	**100.0%**	**0.0%**	**0.0%**	**0.0%**	$ -

©2024 NBS Government Finance Group. All rights reserved.

TABLE 56: CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses										
Budget Categories	Total Revenue Requirements	Flow	Strength		Customer	Basis of Classification				
	FY 2025/26	(VOL)	(BOD)	(TSS)	(CA)	(VOL)	(BOD)	(TSS)	(CA)	$ Check
BEACH WWTP PLANT										
Salaries & Wages	$ 168,527	$ 92,690	$ 33,705	$ 33,705	$ 8,426	55.0%	20.0%	20.0%	5.0%	$ -
Overtime	4,687	2,578	937	937	234	55.0%	20.0%	20.0%	5.0%	$ -
Clothing & Work Boots	-	-	-	-	-	55.0%	20.0%	20.0%	5.0%	$ -
Dental Insurance	2,883	1,586	577	577	144	55.0%	20.0%	20.0%	5.0%	$ -
Health Insurance	31,655	17,410	6,331	6,331	1,583	55.0%	20.0%	20.0%	5.0%	$ -
Life Insurance	452	249	90	90	23	55.0%	20.0%	20.0%	5.0%	$ -
Employee Assistance Program	50	28	10	10	3	55.0%	20.0%	20.0%	5.0%	$ -
Vision Insurance	416	229	83	83	21	55.0%	20.0%	20.0%	5.0%	$ -
Pers Retirement	26,442	14,543	5,288	5,288	1,322	55.0%	20.0%	20.0%	5.0%	$ -
Social Security/Fica	13,538	7,446	2,708	2,708	677	55.0%	20.0%	20.0%	5.0%	$ -
Workers Comp. Insurance	9,813	5,397	1,963	1,963	491	55.0%	20.0%	20.0%	5.0%	$ -
State Unemployment Insurance	-	-	-	-	-	55.0%	20.0%	20.0%	5.0%	$ -
Accounting & Auditing	8,957	5,374	1,791	1,791	-	60.0%	20.0%	20.0%	0.0%	$ -
Legal Fees	2,140	1,284	428	428	-	60.0%	20.0%	20.0%	0.0%	$ -
Debt Issuance Costs	-	-	-	-	-	60.0%	20.0%	20.0%	0.0%	$ -
Chemicals & Gases	55,595	33,357	11,119	11,119	-	60.0%	20.0%	20.0%	0.0%	$ -
Contractual Services	164,250	98,550	32,850	32,850	-	60.0%	20.0%	20.0%	0.0%	$ -
Veolia- Contractual Services	924,947	554,968	184,989	184,989	-	60.0%	20.0%	20.0%	0.0%	$ -
Equipment Rental	5,030	3,018	1,006	1,006	-	60.0%	20.0%	20.0%	0.0%	$ -
Equipment (Non-Capital,<$5,000)	25,685	15,411	5,137	5,137	-	60.0%	20.0%	20.0%	0.0%	$ -
Fuel And Mileage	917	550	183	183	-	60.0%	20.0%	20.0%	0.0%	$ -
Flood & Fire Insurance	6,213	3,728	1,243	1,243	-	60.0%	20.0%	20.0%	0.0%	$ -
Liability Insurance	61,289	36,773	12,258	12,258	-	60.0%	20.0%	20.0%	0.0%	$ -
Interest Expense - Interfund Loan	-	-	-	-	-	60.0%	20.0%	20.0%	0.0%	$ -
Legal Notices/Publications	-	-	-	-	-	60.0%	20.0%	20.0%	0.0%	$ -
M & R Machinery & Equipment	9,632	5,779	1,926	1,926	-	60.0%	20.0%	20.0%	0.0%	$ -
M & R Real Property	32,106	19,263	6,421	6,421	-	60.0%	20.0%	20.0%	0.0%	$ -
Office Supplies & Materials	6,421	3,532	1,284	1,284	321	55.0%	20.0%	20.0%	5.0%	$ -
Computer Hardware	-	-	-	-	-	55.0%	20.0%	20.0%	5.0%	$ -
Computer Software	28,259	15,543	5,652	5,652	1,413	55.0%	20.0%	20.0%	5.0%	$ -
Permits & Licenses	14,983	8,990	2,997	2,997	-	60.0%	20.0%	20.0%	0.0%	$ -
Postage	1,712	942	342	342	86	55.0%	20.0%	20.0%	5.0%	$ -
Telephone	16,053	8,829	3,211	3,211	803	55.0%	20.0%	20.0%	5.0%	$ -
Utilities - Pg&E	78,657	47,194	15,731	15,731	-	60.0%	20.0%	20.0%	0.0%	$ -
Bond Interest Expense	-	-	-	-	-	60.0%	20.0%	20.0%	0.0%	$ -
Bond Principal	-	-	-	-	-	60.0%	20.0%	20.0%	0.0%	$ -
Bond Principal Retirement	-	-	-	-	-	60.0%	20.0%	20.0%	0.0%	$ -
Emergency Repairs	53,510	32,106	10,702	10,702	-	60.0%	20.0%	20.0%	0.0%	$ -
Transfer Out	143,025	85,815	28,605	28,605	-	60.0%	20.0%	20.0%	0.0%	$ -
Total: Treatment Plant	**$ 1,897,843**	**$ 1,123,160**	**$ 379,569**	**$ 379,569**	**$ 15,545**	**59.2%**	**20.0%**	**20.0%**	**0.8%**	$ -

©2024 NBS Government Finance Group. All rights reserved.

TABLE 57 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses, continued										
Budget Categories	Total Revenue Requirements	Flow	Strength		Customer	Basis of Classification				
	FY 2025/26	(VOL)	(BOD)	(TSS)	(CA)	(VOL)	(BOD)	(TSS)	(CA)	
Salary Adjustments										
Salary Adjustments	$ -	$ -	$ -	$ -	$ -	60.0%	20.0%	20.0%	0.0%	$ -
Total: Adjustments	**$ -**	**$ -**	**$ -**	**$ -**		**0.0%**	**0.0%**	**0.0%**	**0.0%**	$ -
Grand Total: Sewer Expenses - Beach	**$ 2,919,396**	**$ 2,144,713**	**$ 379,569**	**$ 379,569**	**$ 15,545**	**73.5%**	**13.0%**	**13.0%**	**0.5%**	

TABLE 58: CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses, cont.										
Budget Categories	Total Revenue Requirements	Flow	Strength		Customer	Basis of Classification				
	FY 2025/26	(VOL)	(BOD)	(TSS)	(CA)	(VOL)	(BOD)	(TSS)	(CA)	
Debt Service Payments										*$ Check*
Outstanding Debt	$ 127,393	$ 76,436	$ 25,479	$ 25,479	$ -	60.0%	20.0%	20.0%	0.0%	$ -
New Debt Issue - SRF Loan	-	-	-	-	-	60.0%	20.0%	20.0%	0.0%	$ -
New Debt Issue - Revenue Bond	-	-	-	-	-	60.0%	20.0%	20.0%	0.0%	$ -
Total Debt Service Payments	**$ 127,393**	**$ 76,436**	**$ 25,479**	**$ 25,479**	**$ -**	**60.0%**	**20.0%**	**20.0%**	**0.0%**	$ -
Capital Expenditures										
Rate Funded Capital Expenses	$ 374,557	224,734	74,911	74,911	-	60.0%	20.0%	20.0%	0.0%	$ -
TOTAL REVENUE REQUIREMENTS	**$ 3,421,346**	##########	**$ 479,959**	**$ 479,959**	**$ 15,545**	**71.5%**	**14.0%**	**14.0%**	**0.5%**	$ -
Less: Non-Rate Revenues										
Non-Operating Revenue										
Forfeitures/Penalties	$ (25,011)	$ (17,880)	$ (3,509)	$ (3,509)	$ (114)	71.5%	14.0%	14.0%	0.5%	$ -
Connection Fees	-	-	-	-	-	71.5%	14.0%	14.0%	0.5%	$ -
Interest Income	(38,597)	(27,592)	(5,414)	(5,414)	(175)	71.5%	14.0%	14.0%	0.5%	$ -
Transfer In	-	-	-	-	-	71.5%	14.0%	14.0%	0.5%	$ -
NET REVENUE REQUIREMENTS	**$ 3,357,739**	**$ 2,400,411**	**$ 471,036**	**$ 471,036**	**$ 15,256**					
Allocation of Revenue Requirements	**100.0%**	**71.5%**	**14.0%**	**14.0%**	**0.5%**					
Net Revenue Req't. Check from Financial Plan	*$ -*									

TABLE 59: ADJUSTMENT TO CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS

Adjustments to Classification of Expenses		Flow	Strength		Customer
Adjustment to Current Rate Level:	**Total**	**(VOL)**	**(BOD)**	**(TSS)**	**(CA)**
Test Year (FY 2025/26) Target Rate Rev. After Rate Increases	$ 3,589,049				
Projected Rate Revenue at Current Rates	2,990,874				
Test Year (FY 2025/26) Projected Rate Adjustment	20.0%				
Adjusted Net Revenue Req'ts	**$ 3,589,049**	**$ 2,565,772**	**$ 503,485**	**$ 503,485**	**$ 16,307**
Percent of Revenue	*100.0%*	*71.5%*	*14.0%*	*14.0%*	*0.5%*

©2024 NBS Government Finance Group. All rights reserved.

TABLE 60: COST-OF-SERVICE NET REVENUE REQUIREMENTS

COSA NET REVENUE REQUIREMENTS	Total	Flow	Strength		Customer
		(VOL)	(BOD)	(TSS)	(CA)
Rate-Design Adjustments to Fixed/Variable %	99.5%	71.0%	14.0%	14.0%	0.5%
Rate-Design Adjustments to Fixed/Variable ($)	$ 3,589,049	$2,548,225	$503,485	$503,485	$16,307

Variable (Volumetric) Rates	71%
Fixed Charges	29%

©2024 NBS Government Finance Group. All rights reserved.

TABLE 61: DEVELOPMENT OF THE VOLUME ALLOCATION FACTOR

Development of the VOLUME Allocation Factor[1]							
Customer Class	Number of Accounts	Number of EDUs	Total Annual Consumption (HCF)	Winter Consumption (Jan-Mar '22)[4]	Estimated Annual Volume (HCF)[5]	Adjusted Annual Volume Total (HCF)	Percentage of Adjusted Volume
RESIDENTIAL CUSTOMERS							
Residential[2]	1,542	1,542	330,730	35,207	140,828	152,238	**69.4%**
Multi-Family	224	442	24,863	4,694	24,863	26,877	**12.3%**
NON-RESIDENTIAL CUSTOMERS[3]							
Low Strength	22	22	10,394	2,215	10,394	11,236	**5.1%**
Domestic Strength	118	118	20,777	4,086	20,777	22,460	**10.2%**
High Strength	19	19	5,995	1,521	5,995	6,481	**3.0%**
Total:	**1,925**	**2,143**	**392,759**	**47,723**	**202,857**	**219,292**	**100.0%**
						219,292	*Flow (hcf/yr.)*
						1.08	*Flow Adj. Factor*

1. Consumption, customer accounts, and EDUs provided by City Staff. Source file: *UB DATA - FY 22-23 - JULY 22 TO JUNE 23.xlsx* .
2. Residential customers include Mobile Home (52 total) and Irrigation Only accounts (114 total).
3. Data for non-residential customers includes the consumption and number of customer accounts (12) for the Northwest Plant.
4. The three consecutive month period of lowest water usage overall during FY 2021/22.
5. Estimated sewer flow based on average winter consumption for residential customers. Multi-family and commercial customers are based on annual consumption.

TABLE 62: DEVELOPMENT OF THE STRENGTH ALLOCATION FACTOR

Development of the STRENGTH Allocation Factor									
Customer Class	Adjusted Total Annual Volume (HCF)[1]	Biochemical Oxygen Demand (BOD)				Total Suspended Solids (TSS)			
		Avg. Strength Factor (mg/l)[2]	Calculated BOD (lbs./yr.)[3]	Adjusted BOD (lbs./yr.)	Percent of Total	Avg. Strength Factor (mg/l)[2]	Calculated TSS (lbs./yr.)[3]	Adjusted TSS (lbs./yr.)	Percent of Total
RESIDENTIAL CUSTOMERS									
Residential	152,238	175	166,199	150,514	**60.1%**	175	166,199	96,709	**66.4%**
Multi-Family	26,877	175	29,342	26,573	**10.6%**	175	29,342	17,074	**11.7%**
NON-RESIDENTIAL CUSTOMERS									
Low Strength	11,236	150	10,514	9,522	**3.8%**	150	10,514	6,118	**4.2%**
Domestic Strength	22,460	310	43,436	39,336	**15.7%**	120	16,814	9,784	**6.7%**
High Strength	6,481	670	27,087	24,531	**9.8%**	680	27,492	15,997	**11.0%**
Total:	**219,292**		**276,578**	**250,475**	**100.0%**		**250,361**	**145,681**	**100.0%**
	Target, from WWTP Data			*250,475*	*BOD (lbs./yr.)*			*145,681*	*TSS (lbs./yr.)*
				0.906	*BOD Adj. Factor*			*0.582*	*TSS Adj. Factor*

1. Estimated sewer flow based on average winter consumption for residential customers. Commercial customers are based on annual consumption.
2. Source: CA State Water Resources Control Board, *Revenue Program Guidelines (Appendix G)* , *G-21* .
3. Calculated BOD and TSS are from source file: *Rio Vista Influent Flow Analysis_CL_GF_NV_v2.xlsx* .

©2024 NBS Government Finance Group. All rights reserved.

TABLE 63: DEVELOPMENT OF THE CUSTOMER ALLOCATION FACTOR

Development of the CUSTOMER Allocation Factor[1]				
Sewer Customer Classes	Number of Accounts	Percent of Total	Number of EDUs	Percent of Total
RESIDENTIAL CUSTOMERS				
Residential	1,542	**80.1%**	1,542	**72.0%**
Multi-Family	224	**11.6%**	442	**20.6%**
NON-RESIDENTIAL CUSTOMERS				
Low Strength	22	**1.1%**	22	**1.0%**
Domestic Strength	118	**6.1%**	118	**5.5%**
High Strength	19	**1.0%**	19	**0.9%**
Total:	**1,925**	**100.0%**	**2,143**	**100.0%**

1. Number of accounts and EDUs provided by City Staff. Source file: *UB DATA - FY 22-23 - JULY 22 TO JUNE 23.xlsx* .

TABLE 64 : TOTAL REVENUE BY CUSTOMER CLASS

Customer Class	FY 2021/22 Rate Revenue[1]	Percentage of Accounts
RESIDENTIAL CUSTOMERS		
Residential	$ 1,821,197	**71.1%**
Multi-Family	223,583	**8.7%**
NON-RESIDENTIAL CUSTOMERS		
Low Strength	101,023	**3.9%**
Domestic Strength	251,610	**9.8%**
High Strength	164,501	**6.4%**
Total:	**$ 2,561,914**	**100.0%**

1. Source file: *UB DATA - FY 22-23 - JULY 22 TO JUNE 23.xlsx* .

©2024 NBS Government Finance Group. All rights reserved.

TABLE 65: ALLOCATION OF NET REVENUE REQUIREMENTS — *COSA NET REVENUE REQUIREMENTS*

Allocation of FY 2025/26 Revenue Requirements by Customer Class

Customer Class	Cost Classification Components				Cost-of-Service Net Revenue Req'ts.	% of COS Net Revenue Req'ts.
	Volume	Treatment		Customer Related		
		BOD	TSS			
Net Revenue Requirements [1,2]	***$ 2,582,499***	***$ 518,822***	***$ 510,826***	***$ 16,351***	***$ 3,628,499***	--
	71.2%	*14.3%*	*14.1%*	*0.5%*	*100.0%*	
RESIDENTIAL CUSTOMERS						
Residential	$ 1,792,831	$ 311,766	$ 339,106	$ 11,766	**$ 2,455,468**	*67.7%*
Multi-Family	316,522	55,042	59,869	3,373	**434,805**	*12.0%*
NON-RESIDENTIAL CUSTOMERS[2]						
Low Strength	$ 132,322	$ 19,723	$ 21,453	$ 168	**$ 173,666**	*4.8%*
Domestic Strength	264,505	81,479	34,306	900	**381,190**	*10.5%*
High Strength	76,320	50,812	56,093	145	**183,370**	*5.1%*
Total:	**$ 2,582,499**	**$ 518,822**	**$ 510,826**	**$ 16,351**	**$ 3,628,499**	***100%***

1. The revenue requirement for each customer class is determined by multiplying the revenue requirement from each cost classification by the allocation factors for each customer class.
2. Includes the net revenue requirements for commercial customers at the Northwest Plant.

TABLE 66 : RATE DESIGN - SUMMARY OF REVENUE REQUIREMENTS

Customer Class	COSA Net Revenue		Net Revenue Allocation				
	FY 2025/26 COS Rev. Req't	% of COS Rev. Req't.	% Fixed Revenue	% Variable Revenue	Revenue from Fixed Charges	Revenue from Volumetric Charges	
RESIDENTIAL CUSTOMERS							
Residential	$ 2,455,468	67.7%	100%	0%	$ 2,455,468	$ -	*$ 2,455,468*
Multi-Family	434,805	12.0%	100%	0%	434,805	-	*$ 434,805*
NON-RESIDENTIAL CUSTOMERS							
Low Strength	$ 173,666	4.8%	0%	100%	$ -	$ 173,666	*$ 173,666*
Domestic Strength	381,190	10.5%	0%	100%	-	381,190	*$ 381,190*
High Strength	183,370	5.1%	0%	100%	-	183,370	*$ 183,370*
Total	**$ 3,628,499**	**100.0%**			**$ 2,890,273**	**$ 738,226**	*$ 3,628,499*
	Percent of Total Revenue Collected		*80%*	*20%*			*$ - Check*

TABLE 67 : PROPOSED SEWER RATES

NET REVENUE REQUIREMENTS (100% Fixed Residential)

Customer Class	Number of Units[1]	Annualized Winter Consumption (HCF)[2]	Net Revenue Requirement	Estimated Fixed Revenue	Estimated Variable Revenue	Monthly Fixed Charge[3]	Volumetric Rate ($/HCF)[3]	*Fixed Revenue*	*Variable Revenue*	*Total Revenue*	*Total Revenue check*
RESIDENTIAL CUSTOMERS											
Residential	1,542	152,238	$ 2,455,468	$ 2,455,468	$ -	$132.70	*N/A*	*$ 2,455,468*	*$ -*	*$ 2,455,468*	*$ -*
Multi-Family	442	26,877	434,805	434,805	-	$81.98	*N/A*	*$ 434,805*	*$ -*	*$ 434,805*	*$ -*
NON-RESIDENTIAL CUSTOMERS											
Low Strength	22	11,236	$ 173,666	$ -	$ 173,666	*N/A*	$15.46	*$ -*	*$ 173,666*	*$ 173,666*	*$ -*
Domestic Strength	129	24,203	381,190	-	381,190	*N/A*	$15.75	*$ -*	*$ 381,190*	*$ 381,190*	*$ -*
High Strength	20	6,606	183,370	-	183,370	*N/A*	$27.76	*$ -*	*$ 183,370*	*$ 183,370*	*$ -*
Total	**2,155**	**221,160**	**$ 3,628,499**	**$ 2,890,273**	**$ 738,226**			***$ 2,890,273***	***$ 738,226***	***$ 3,628,499***	***$ -***

1. Number of accounts and EDUs provided by City Staff. Source file: *UB DATA - FY 22-23 - JULY 22 TO JUNE 23.xlsx* .
2. Estimated sewer flow based on average winter consumption for residential customers. Commercial customers are based on annual consumption.
3. Fixed and volumetric charges calculated based on the City's current rate structure.

©2024 NBS Government Finance Group. All rights reserved.

TABLE 68: CURRENT VS. PROPOSED SEWER RATES

Sewer Rate Schedule	*Current Rates*	*Description*	*NET REVENUE REQUIREMENTS (100% Fixed Residential)* Proposed Monthly Sewer Rates				
			Year 1	Year 2	Year 3	Year 4	Year 5
			FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
Projected Increase in Rate Revenue:			*20.00%*	*15.00%*	*5.00%*	*5.00%*	*5.00%*
Fixed Service Charges							
RESIDENTIAL CUSTOMERS							
Residential	$110.92	Per Account	$132.70	$152.60	$160.23	$168.24	$176.65
Multi-Family	$84.37	Per Account	-	-	-	-	-
Duplex/SFR with ADU	N/A	Per Account	$163.95	$188.55	$197.98	$207.88	$218.27
Triplex	N/A	Per Account	$245.93	$282.82	$296.96	$311.81	$327.40
Quadplex	N/A	Per Account	$327.91	$377.09	$395.94	$415.74	$436.53
Charge for each additional unit above 4	N/A	Per Additional Dwelling Unit	$81.98	$94.27	$98.98	$103.93	$109.13
Volumetric Rate ($/hcf) [1]							
NON-RESIDENTIAL CUSTOMERS							
Low Strength	$9.77	Per HCF	$15.46	$17.77	$18.66	$19.59	$20.57
Domestic Strength	$12.11	Per HCF	$15.75	$18.11	$19.02	$19.97	$20.97
High Strength	$27.44	Per HCF	$27.76	$31.92	$33.52	$35.20	$36.96

1. One Unit is equal to one HCF (Hundred Cubic Feet) or 748 gallons.

©2024 NBS Government Finance Group. All rights reserved.