City of Arcata
Water and Wastewater Rate Study

January 28, 2026 *Draft*

BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

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January 14, 2026

City of Arcata
736 F Street
Arcata, CA 95521

Attention: Tabatha Miller, Finance Director

Re: Water and Wastewater Rate Study

Bartle Wells Associates (BWA) is pleased to submit to the City of Arcata (City) the attached Water and Wastewater Rate Study. The study presents Bartle Wells Associate's analysis of the operating and non-operating expenses of the City's water and wastewater enterprise funds and provides five-year cash flow projections and rates. The primary purpose of this study was to make recommendations that would achieve their financial sustainability while improving legal compliance and proportionality.

BWA finds that the rates and charges proposed in our report reflect the cost-of-service for each customer, follow generally accepted rate setting principles, and adhere to the substantive requirements of Proposition 218. BWA believes the proposed rates are fair and reasonable to the City's customers.

We have enjoyed working with the City on this rate study and appreciate the assistance of City staff members throughout the project. Please contact us with any future questions about this study and the rate recommendations.

Sincerely,

Erik Helgeson, MBA
Principal / Vice President

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TABLE OF CONTENTS

TABLES

FIGURES

Glossary of Terms

Terms	Descriptions
AWWA	American Water Works Association
BWA	Bartle Wells Associates
HCF	One Hundred Cubic Feet
CIP	Capital Improvement Projects
City	The City of Arcata
COS	Cost of Service
Cost Allocation	Apportioning expenses to utility user fees and rates in order to charge customers proportionally to the level of benefit they receive
CPI	Consumer Price Index/Indices
Enterprise Fund	Funds are established to account for governmental activities that provide goods or services primarily to the public at large on a consumer fee basis
Fixed Charges	A charge that is held constant over a period of time and applied at even intervals
FYE	Fiscal Year End (June 30)
General Fund	The main operating fund for the City
M1 Manual	"Principles of Water Rates, Fees, and Charges: Manual of Water Supply Practices M1", 6th edition published by AWWA
Meter Equivalent Ratios	The ratio of a water meter's maximum safe flow in comparison to a smaller water meter
Multi-family	Utility customers meeting the criteria of the multi-family class
O&M	Operations and maintenance
Prop. 218	Proposition 218, Added Articles 13C & 13D to the California Constitution
R&R	Repair and Replacement
Rate Setting Period	Limited to five (5) years under Prop. 218.
Revenue Requirements	The amount of future funding which needs to be recovered from an enterprise's user fees/rates
Solvent	Able to pay long-term debts and other financial obligations
Volumetric Rates	Utility rate based on a metered volume of water

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1 EXECUTIVE SUMMARY

1.1 Introduction

The City of Arcata provides water and wastewater services to an estimated population of approximately 19,000. The water and wastewater utilities are financially self-supporting enterprises that rely primarily on revenues from service charges to fund the costs of providing service. As such, the City's rates need to be set at adequate levels to a) fund the costs of operating and maintaining the water and wastewater systems, b) fund necessary capital improvements to keep the City's infrastructure in good operating condition, and c) meet annual debt service funding requirements.

In 2025, the City engaged BWA to perform a rate study analyzing the capital and operating costs associated with the City's water and wastewater utilities and to determine recovery of costs for providing water and wastewater utility services. Proposed rates are designed to fund the operating and capital needs of the City's utilities and equitably recover costs from all customers. Final recommendations incorporate input from City Staff.

1.2 Key Drivers of Proposed Rate Increases

The City is anticipating a number of financial challenges that will require rate increases in upcoming years. Key drivers of future rate increases are:

Ongoing Cost Inflation

The City's water and wastewater enterprises face ongoing operating cost inflation due to annual increases in a range of expenses including staffing, utilities, insurance, supplies, etc. On top of rate increases needed for other purposes, annual rate increases are needed to keep revenues aligned with cost inflation and prevent rates from falling behind the cost of providing service. Historically, inflation consistently hovered between 2% and 3%. Currently, inflation has mostly normalized after forty-year highs but remains near 3%. Given the recent volatility, BWA designed the inflation projections to be slightly conservative to leave the City in a strong financial position while not driving excessive rate increases.

Capital Improvement Needs & Rehabilitation of Aging Infrastructure

The City takes a proactive approach to maintaining its water and wastewater systems which requires a steady stream of repair, improvement, and replacement projects. Accounting for construction cost inflation, the City has identified approximately $36.0 million of water improvement projects and $51.4 million of wastewater improvement projects over the next 5 years.

This study assumes the City will finance the majority of project costs by issuing new debt. While the recommended rate increases ensure the City will meet its new debt servicing requirements, it is important to note that the additional debt servicing will impact the City's ability to use future rate revenues to fund other ongoing water and wastewater projects.

1.3 Rate Recommendations

Updated financial projections for the water and wastewater enterprises indicate a need for annual revenue increases over the next five years. This report details the proposed water rates for two different water rate revenue scenarios and the proposed wastewater rates. With the recommended rate increases, the City will be able to fund the capital projects necessary to continue providing a high level of service, pay for rising operating costs, and maintain the financial health of the utilities.

BWA reviewed the City's water and wastewater rates and has the following recommendations to align rates with the current cost of providing service and improve compliance with the requirements of Proposition 218:

- Update the fixed and variable rates to proportionally reflect the cost-of-service analysis in this report.
- Charge outside city customers the same rates charged to inside-city customers.

Due to the cost-of-service analysis and structure adjustments, there will be some variation in the impacts to each customer class in the first year of the recommended rates. The remaining four years of the recommended rate increases are applies on an across-the-board basis with the same percentage increase to all charges. The following tables show a schedule of proposed rates for the next five years.

Table 1. Scenario 1 Recommended Water Rates

	2025/26 *Current*	5/1/2026 *Proposed*	7/1/2027 *Proposed*	7/1/2028 *Proposed*	7/1/2029 *Proposed*	7/1/2030 *Proposed*
Volumetric Rates ($/HCF)						
All Usage	$7.15	$10.33	$10.33	$11.37	$12.50	$13.50
Fixed Charges ($/meter)						
Meter Size						
5/8" and 3/4"	$12.23	$18.05	$18.05	$19.85	$21.84	$23.58
1"	$20.43	$30.14	$30.14	$33.15	$36.47	$39.39
1 1/2"	$40.73	$60.10	$60.10	$66.11	$72.72	$78.53
2"	$65.19	$96.19	$96.19	$105.81	$116.39	$125.70
3"	$122.31	$180.47	$180.47	$198.52	$218.37	$235.84
4"	$203.89	$300.85	$300.85	$330.93	$364.02	$393.14
6"	$407.65	$601.51	$601.51	$661.66	$727.83	$786.05
8"	$652.27	$962.45	$962.45	$1,058.70	$1,164.57	$1,257.73
10"	$937.74	$1,383.67	$1,383.67	$1,522.04	$1,674.24	$1,808.18

Table 2. Scenario 2 Recommended Water Rates

	2025/26 *Current*	5/1/2026 *Proposed*	1/1/2027 *Proposed*	1/1/2028 *Proposed*	1/1/2029 *Proposed*	1/1/2030 *Proposed*
Volumetric Rates ($/HCF)						
All Usage	$7.15	$8.83	$10.42	$11.67	$12.83	$14.12
Fixed Charges ($/meter)						
Meter Size						
5/8" and 3/4"	$12.23	$15.42	$18.19	$20.37	$22.41	$24.65
1"	$20.43	$25.74	$30.38	$34.02	$37.42	$41.17
1 1/2"	$40.73	$51.33	$60.57	$67.84	$74.63	$82.09
2"	$65.19	$82.16	$96.95	$108.59	$119.45	$131.39
3"	$122.31	$154.15	$181.90	$203.73	$224.10	$246.51
4"	$203.89	$256.97	$303.23	$339.61	$373.58	$410.93
6"	$407.65	$513.79	$606.27	$679.03	$746.93	$821.62
8"	$652.27	$822.10	$970.07	$1,086.48	$1,195.13	$1,314.64
10"	$937.74	$1,181.89	$1,394.63	$1,561.98	$1,718.18	$1,890.00

Table 3. Proposed Wastewater Rates

Wastewater User	2025/26 *Current*	7/1/2026 *Proposed*	7/1/2027 *Proposed*	7/1/2028 *Proposed*	7/1/2029 *Proposed*	7/1/2030 *Proposed*
Residential - Fixed Monthly Rate per Unit						
Single Family	$77.61	$82.31	$82.31	$86.43	$90.75	$95.29
Multi-Family	n/a	67.44	67.44	70.81	74.35	78.07
Residential - Volumetric Rates per Hundred Cubic Feet (hcf) of Water Use Greater Than 4 HCF						
Single Family	$11.34	$0.00	$0.00	$0.00	$0.00	$0.00
Commercial - Volumetric Rates per Hundred Cubic Feet (hcf) of Water Use Greater Than 4 HCF						
Low Strength	$9.88	$11.91	$11.91	$12.51	$13.13	$13.79
Medium Strength	12.01	14.59	14.59	15.32	16.09	16.89
High Strength	20.14	20.24	20.24	21.25	22.31	23.43
Commercial - Minimum Monthly Fixed Rate per Connection						
Low Strength	$81.05	$47.64	$47.64	$50.02	$52.52	$55.15
Medium Strength	81.05	58.38	58.38	61.29	64.36	67.58
High Strength	81.05	80.95	80.95	84.99	89.24	93.71

In future years, the City can re-evaluate its finances and revenue requirements and adjust rates as needed based on updated projections. However, while the City always has the flexibility to implement rate adjustments that are lower than adopted pursuant to Proposition 218, future rates cannot exceed adopted increases without going through the Proposition 218 process again. Rates adopted pursuant to Proposition 218 are essentially future rate caps.

2 BACKGROUND & OBJECTIVES

Background

The City of Arcata is framed by the Pacific Ocean on the west, forested hills on the east, the Mad River on the North, and Humboldt Bay to the south. It is situated in an 11 square mile area in the northern coast region of California at the western mid-point of Humboldt County and is located 275 miles north of San Francisco. The City provides water and wastewater services to an estimated population of approximately 19,000.

In 2025, the City engaged BWA to perform a rate study analyzing the capital and operating costs associated with the City's water and wastewater utilities and to determine recovery of costs for providing water and wastewater utility services. This report along with all included exhibits and appendixes presents BWA's analysis of the operating and non-operating expenses of the City's water and wastewater enterprises. The primary purpose of this study was to analyze the City's enterprise funds and make recommendations that enhance the financial sustainability of each enterprise and to review utility rates to ensure that they adhere to the State's legal requirements.

Rate Study Objectives

Key goals and objectives of the rate study include developing water and wastewater rates that:

- Capture enough revenues to move forward with and complete capital projects that will provide City of Arcata water rate payers with clean and safe drinking water.
- Capture enough revenues to move forward with and complete capital projects and that will ensure reliable wastewater collection and treatment services for City of Arcata wastewater rate payers.
- Recover the costs of providing utility services including operating costs, capital costs, and build prudent reserves to ensure the water and wastewater funds continue to operate as financially self-sustaining Enterprise Funds.
- Are fair and equitable to all customers.
- Are easy to understand and implement.
- Comply with the substantive cost-of-service requirements of the California Constitution, Article 13D, Section 6 (established by Proposition 218) and the general mandate of Article 10, Section 2 that prohibits the wasteful use of water.
- Support the City's long-term operational and financial stability.

This report summarizes key findings and recommendations for overall rate revenue increases over the next five years. The full set of tables are included in the appendix to this report.

3 LEGAL REQUIREMENTS & RATE METHODOLOGY

3.1 Constitutional Rate Requirements

The California Constitution includes two key articles that directly govern or impact the City's water and wastewater rates: Article 10 and Article 13D. The water rate recommendations developed in this study were designed to comply with constitutional mandates, provisions of the California Water Code and Government Code. In accordance with California constitutional provisions, the proposed rates are designed to a) recover the City's cost of providing service, b) recover revenues in proportion to the cost for serving each customer, and c) promote conservation and discourage waste.

Article 10, Section 2

Article 10, Section 2 of the California Constitution was established by voter-approval in 1976 and requires public agencies to maximize the beneficial use of water, prevent waste, and encourage conservation. Section 2 states that:

> *It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare.*

Article 13D, Section 6

Proposition 218 was adopted by California voters in 1996 and added Articles 13C and 13D to the California Constitution. Article 13D, Section 6 governs property-related charges, which the California Supreme Court subsequently ruled includes ongoing utility System Charges such as water, wastewater, and garbage rates. Article 13D, Section 6 establishes a) procedural requirements for imposing or increasing property-related charges, and b) substantive requirements for those charges. Article 13D also requires voter approval for new or increased property-related charges but exempts rates for water, wastewater, and garbage service from this voting requirement if the appropriate procedure is followed.

The substantive requirements of Article 13D, Section 6 require the City's water rates to meet the following conditions:

1) Revenues derived from the fee or charge shall not exceed the funds required to provide the property-related service.
2) Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed.

3) The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel.

4) No fee or charge may be imposed for a service unless that service is used by, or immediately available to, the owner of the property in question.

3.2 Statute of Limitations

Pursuant to California Government Code 53759, there is a 120-day statute of limitations for challenging any new, increased, or extended fees. This statute of limitations applies to the wastewater rates proposed in this rate study and is included in the Proposition 218 Notice.

3.3 Water and Wastewater Rate-Setting Methodology

The California Constitution does not give agencies leeway to arbitrarily set rates purely based on policy preferences. Instead, it provides agencies with flexibility to implement rates within a framework established by Articles 10 and 13D. Together, these Articles establish that rates should both a) discourage waste and encourage conservation of water, and b) not exceed the costs of service attributable to each parcel or customer.

Water and wastewater utilities have used a wide range of approaches or perspectives for allocating and recovering their costs for providing service, and these costs are most commonly recovered from a combination of fixed and variable charges. The percentage of revenues derived from the fixed and variable charges varies for each agency. They should be proportional to each utility's expenditures and must not exceed the system's cost of providing service. A higher level of fixed charges provides better revenue stability and less dependence on variable sales. On the other hand, higher dependence on volumetric revenues provides a greater conservation incentive.

Depending on perspective, the same costs can reasonably be allocated one hundred percent to fixed revenue recovery, one hundred percent to variable rate recovery, or to some combination of the two. For example, debt service used to fund treatment facilities can legitimately be treated as a) a fixed annual cost that should be recovered from fixed charges, b) a cost related to providing supply to meet customer demand and therefore a cost that should be recovered from variable rates, or c) a cost that can be recovered from both fixed and variable rates in recognition of the two alternative perspectives.

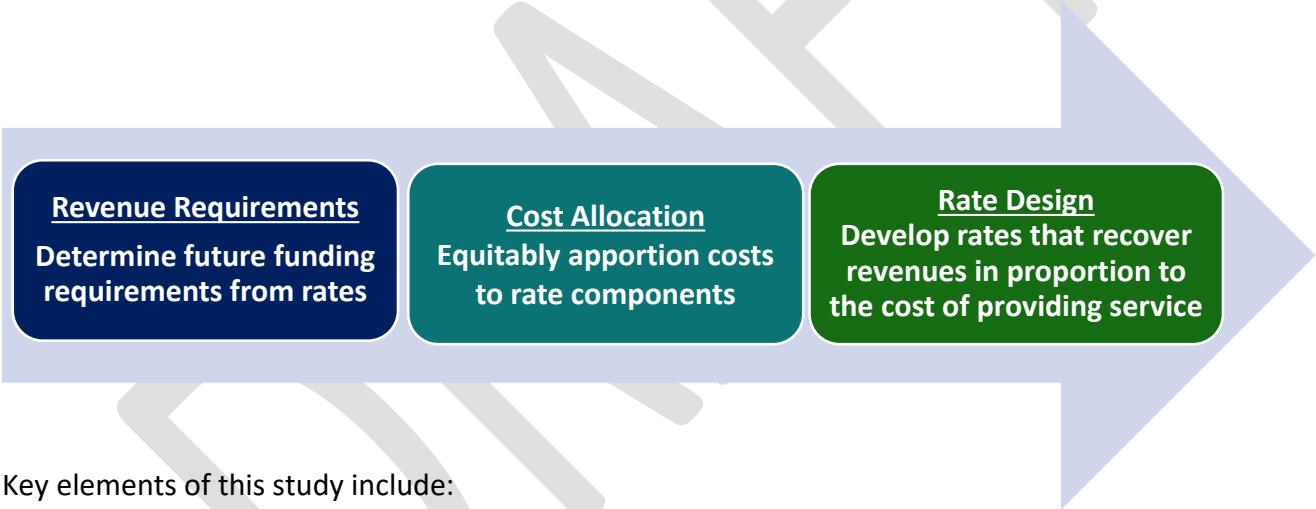
Many of the utility's costs are variable costs that vary by the size of the system including personnel, supplies, and utilities. However, a portion of these variable costs can reasonably be apportioned to fixed rate recovery, and vice versa with fixed costs. For example, a share of the fixed cost of salaries related to treatment plant operations can reasonably be recovered from usage-based charges as these costs are incurred to meet demand flows. For debt service, payments may be fixed annual costs, but it

is reasonable to recover some of these costs from usage-based rates as the costs are incurred to fund infrastructure that will improve the wastewater system. Ultimately, there is no single correct way to allocate or attribute costs. Hence, five similar agencies may have five different rate structures provided each agency can establish a reasonable cost basis for their own particular rate structure within the parameters of meeting the various requirements of the California Constitution.

While there is no single correct approach, BWA believes that costs should be allocated within a reasonable range of fixed and variable allocation that reflects both a) underlying cost causation, to the extent such causation can reasonably be determined or estimated, and b) the policy preferences of the agency in cases where a range of reasonable approaches can be justified.

BWA uses a straightforward methodology to establish equitable charges that recover the cost of providing service and fairly apportion costs. The general methodology is summarized in the following figure.

Figure 1: Cost of Service Rate-Setting Methodology



Key elements of this study include:

- **Project Initiation and Data Collection** – Review financial policies; collect financial and other relevant data; and review rate structures;
- **Demand Analysis** – Analyze past customer demands and customer characteristics to forecast future demands;
- **Long Range Financial Plans** – Develop financial projections to evaluate annual revenue requirements from rates and the overall level of rate increases needed to fund the costs of providing service and support long-term financial stability;
- **Cost Allocation** – Group the City's costs in terms of the function they serve as a basis to proportionally allocate the revenue requirement from rates;
- **Cost-of-Service Rate Design** – Develop rates that proportionately recover costs; and
- **Prop 218 Process** – Ensure compliance with the substantive and procedural requirements of Proposition 218.

4 WATER DEMAND AND CUSTOMER CHARACTERISTICS

4.1 Projected Water Demand

The City's primary water source is water purchased from Humboldt Bay Municipal Water District. Projected FY 25/26 water demand is based on historical metered demand but projected somewhat conservatively due to the financial challenges facing the water enterprise.

Table 4. Historic and Projected Metered Water Demand

Metered Water Use	FY 22-23	FY 23-24	FY 24-25	FY 25-26
	Actual	*Actual*	*Actual*	*Projected*
Water Use (HCF)[1]	620,540	596,621	606,996	**590,000**

1, HCF = One Hundred Cubic Feet

4.2 Water Services and Equivalent Capacity

The size of a customer's meter reflects the portion they require of the water system's capacity. A significant percentage of the costs of any water system is related to its requirement to deliver water to any customer instantaneously at any time, up to the maximum safe flow capacity of a customer's meter. Simply put, as the size of a customer's water meter increases, the instantaneous demand it can place on the City's water system increases.

Fixed charges for each meter size are based on the capacity of a meter relative to the capacity of smallest meter size (e.g., a 5/8-inch meter) in the City's system. In this study, the relative capacity of a meter size, referred to as an Equivalent Demand Unit (EDU), is calculated by dividing the capacity of a given meter size by the capacity of a 5/8" meter. The meter equivalent ratios used are proportional to the maximum safe flow of a 5/8" meter. The sum of all EDU's reflects the total capacity of the water enterprise.

The following table contains the counts of water services and calculations of meter equivalent units. Total meter equivalent units for each meter size are derived by multiplying the meter equivalent ratio by the number of services at each meter size.

Table 5. Water Services and Meter Equivalent Units

Meter Size	Total Meters	AWWA Capacity Factor[1]	Equivalent Demand Units (EDUs)	Annual EDUs
5/8"	5,540	1.00	5,540	66,480
3/4"	429	1.00	429	5,148
1"	359	1.67	600	7,194
1 1/2"	71	3.33	236	2,837
2"	192	5.33	1,023	12,280
3"	31	10.00	310	3,720
4"	8	16.67	133	1,600
6"	10	33.33	333	4,000
8"	1	53.33	53	640
10"	1	76.67	77	920
Totals	**6,642**		**8,735**	**104,820**

1, Based on the safe maximum operating capacity as published by the American Water Works Association (AWWA).

5 WATER FINANCES & CASH FLOW PROJECTIONS

5.1 Water Financial Overview

Bartle Wells Associates conducted an independent evaluation of the water enterprise's finances. Key observations include:

- The approved loan from the Wastewater Fund is not sufficient to fund the capital projects that are under way. It is very helpful to temporarily bridge the gap until new debt funding can be secured after rate increases are effective.
- The water enterprise will need rate increases to keep revenues in line with rising costs and fund needed capital improvements.
- Over the next five years it is projected that priority capital projects will cost $36.0 million.
- The enterprise needs to maintain prudent reserves to be prepared for water use fluctuations, remain able to operate during a disaster, and qualify for grants or low-cost financing.

BWA developed long-term cash flow projections to determine the water enterprise's annual revenue requirements and project required water rate revenue increases. The financial projections incorporate the latest information available as well as reasonable and slightly conservative assumptions. This report explores the financial plan and rates for two different revenue recovery scenarios which are described throughout the remainder of this report.

5.2 Water Financial Plan Assumptions

Assumptions were developed based on input from City Staff, historical escalation factors, and conservative projections for future escalation factors to reasonably ensure that the maximum rates adopted by the City will provide sufficient revenues to support the City's water operations.

Key information and assumptions include:

Reserves

- BWA recommends the City aim to maintain prudent fund reserves of a least one year of operating costs. BWA recommends the water enterprise maintain one year of operating expenses in reserves for cash flow and liquidity purposes in case of revenue loss/interruption, and to provide additional funds during unforeseen emergencies. Fund reserves will fluctuate based on the timing of revenues and expenses, but the proposed rates are projected to provide the water enterprise with sufficient fund reserves. At a minimum, the water enterprise should aim to hold at least three months of operating expenses in reserve.

Revenue Assumptions

- The water enterprise is projected to begin FY 2025-26 with $9.2 million in reserves. This amount approximately meets BWA's recommended level of operating reserves.
- BWA did not escalate revenues for miscellaneous non-rate water revenues in its projections. Recommended rates are the maximum rates the City can adopt, which is why BWA uses conservative estimates when making revenue projections.
- As new construction can be unpredictable, BWA did not escalate revenues for growth or connection charges in its projections. Recommended rates are the maximum rates the City can adopt, which is why BWA uses conservative estimates when making revenue projections.
- Interest income is estimated based on projected reserve levels. Future projections are estimated based on a conservative interest earning estimate of 2%. Actual interest amounts will vary based on reserves and future interest earning rates.

Expense Assumptions

- Operating and maintenance costs are based on the FY 2025-26 budget and include updated estimates developed with the help of City Staff.
- General operating and capital cost inflation is projected to escalate at an annual rate of 4% in FY 2026-27 and at an annual rate of 4% thereafter. This is a conservative estimate to account for future cost inflation and is based on recent and historic inflation.
- The Water Enterprise will need to cash fund at least $6.7 million in capital spending in the next five years.
- Debt service projections are based on outstanding debt schedules and projected issuances of new debt. The financial plan assumes the issuance of thirty-year bonds at 5.5% interest for $9.5 million in FY 2025-26 and $20.0 million in FY 2028-29 to fund critical waterline and tank improvement projects.

5.3 Financial Plan Drivers

The City is anticipating a number of financial challenges that will require rate increases in upcoming years. Key drivers of future rate increases are:

Current Capital Project Funding

The approved loan from the Wastewater Fund is not sufficient to fund the capital projects that are under way. It is very helpful to temporarily bridge the gap until new debt funding can be secured after rate increases are effective. BWA recommends implementing rate increases at the beginning of 2026 to support issuing bonds for $9.5 million to be used for refunding the wastewater enterprise and maintaining prudent reserves. Without securing additional financing, the water fund reserves are expected to drop to $500,000 which is imprudent and will have a significant impact on the ability of the enterprise to borrow funds in the future.

Capital Improvement Needs & Rehabilitation of Aging Infrastructure

The City takes a proactive approach to maintaining its water system which requires a steady stream of repair, improvement, and replacement projects. Accounting for construction cost inflation, the City has identified approximately $36.0 million of capital improvement projects over the next 5 years.

The largest upcoming capital project is the Citywide Steel Waterline Replacement project. This project involves the removal and replacement of leaking steel and asbestos waterlines throughout the City, approximately 10% of the total water system. This study assumes the City will finance the majority of waterline replacement project costs by issuing new debt. While the recommended rate increases ensure the City will meet its new debt servicing requirements, it is important to note that the additional debt servicing will impact the City's ability to use future water revenues to fund other ongoing water projects.

The following table shows the projected capital funding sources for the next five years.

Table 6. Capital Funding Sources

Capital Improvement Projects	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**
	Projected	*Projected*	*Projected*	*Projected*	*Projected*
Total Project Cost (Inflation $)	**$12,090,000**	**$572,000**	**$162,000**	**$11,368,000**	**$11,774,000**
Capital Funding	$12,090,000	$572,000	$162,000	$11,368,000	$11,774,000
Grants	$0	$0	$0	$0	$0
Use of New Debt Proceeds	**9,100,000**	**400,000**	**0**	**10,000,000**	**10,000,000**
Cash Funded	$2,990,000	$172,000	$162,000	$1,368,000	$1,774,000

Ongoing Cost Inflation

The City's water enterprise faces ongoing operating cost inflation due to annual increases in a range of expenses including staffing, utilities, insurance, supplies, etc. On top of rate increases needed for other purposes, annual rate increases are needed to keep revenues aligned with cost inflation and prevent rates from falling behind the cost of providing service. Historically, inflation consistently hovered between 2% and 3%. Currently, inflation has mostly normalized after forty-year highs, but remains near 3%. Given the recent volatility, BWA designed the inflation projections to be slightly conservative to leave the City in a strong financial position while not driving excessive rate increases.

5.4 Cash Flow Projection Scenarios

Long-term cash flow projections were developed based on the assumptions and key drivers of future rate increases described above. The projections were used to determine the water utility's annual revenue requirements and project required water rate revenue increases. The long-term cash flow projections incorporate the latest information available from the City's budget, annual reports, capital spending projections, metered water demand data, as well as a number of reasonable assumptions developed with input from the City. The overall rate revenue increases are designed to fund the City's cost of providing service, maintain roughly balanced budgets, maintain healthy debt service coverage, and maintain prudent reserves.

The projections indicate the need for rate increases. Actual impacts to customers water bills will vary based meter size and water use due to the outcome of the updated cost-of-service analysis.
This report explores the financial plan and rates for two different rate revenue scenarios which are as follows:

- **Scenario 1**, **Immediate Revenue Increase –** In this scenario rate revenues are increased as soon as possible, at the beginning of 2026 but the next increase is not until (July 1, 2027). There are also increases at the beginning of the following two fiscal years. In FY 2029-30, the final year of noticed rate increases, this scenario will have the lowest rates and highest reserve level of the two scenarios.
- **Scenario 2, Phased-In Revenue Increase –** In this scenario, rate revenues are increased as soon as possible, at the beginning of 2026 and then on January 1st of the subsequent four years. In final year of noticed rate increases, this scenario will have the highest rates and lowest reserve level of the two scenarios.

The following table shows a comparison of the two scenarios.

Table 7. Water Cash Flow Scenario Comparison

Water Rate Scenarios	FY 25-26*	FY 26-27	FY 27-28	FY 28-29	FY 29-30
Scenario 1: Immediate Revenue Recovery					
Rates Effective:	May 1, 2026	Jul. 1, 2027	Jul. 1, 2028	Jul. 1, 2029	Jul. 1, 2030
Rate Revenue Increase ($)	$1,017,063	$0	$798,857	$878,743	$773,294
Rate Revenue Increase (%)	44.0%	0.0%	10.0%	10.0%	8.0%
Ending Reserve Balance	$6,935,088	$7,745,508	$9,088,705	$9,127,187	$8,516,465
Scenario 2: Phased-In Revenue Recovery					
Rates Effective:	Apr. 1, 2026	Jan. 1, 2027	Jan. 1, 2028	Jan. 1, 2029	Jan. 1, 2030
Rate Revenue Increase ($)	$531,647	$614,121	$483,109	$450,901	$495,992
Rate Revenue Increase (%)	23.0%	18.0%	12.0%	10.0%	10.0%
Ending Reserve Balance	$6,449,671	$6,699,504	$7,769,227	$7,584,132	$6,918,910

* Initial bill impacts will vary based on customer class and usage due to rate structure adjustments realigning rates with cost of service.

In future years, the City can re-evaluate its finances and revenue requirements and adjust rates as needed based on updated projections. However, while the City always has the flexibility to implement rate adjustments that are lower than adopted pursuant to Proposition 218, future rates cannot exceed adopted increases without going through the Proposition 218 process again. Rates adopted pursuant to Proposition 218 are essentially future rate caps.

5.5 Water Financial Plan Scenario 1: Immediate Revenue Increase

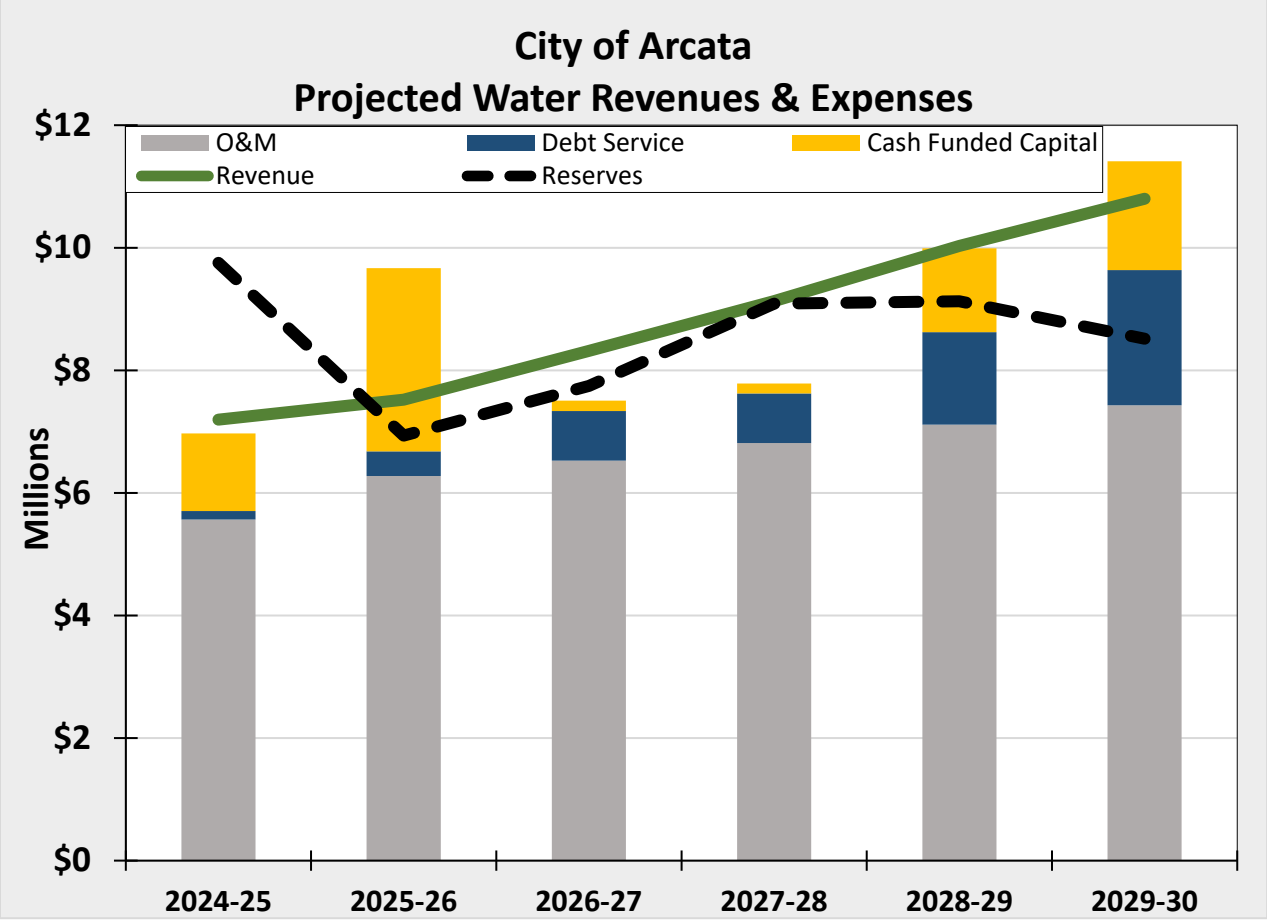
The following section presents a financial plan for the water enterprise for a scenario which immediately recovers the annual operating revenue requirements. A summary of the key elements of the five-year cash flow projection for this scenario is displayed in the following table.

Table 8. Water Scenario 1 Cash Flow Projection Summary

Scenario 1: Immediate Revenue Increase	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30
Ending Reserves	$6,935,088	$7,745,508	$9,088,705	$9,127,187	$8,516,465
Rate Revenue Increase	$1,017,063	$0	$798,857	$878,743	$773,294

The following figure shows cash flow projections incorporating the assumptions described above.

Figure 2: Water Scenario 1 Projected Cash Flow Graph



The rate projections shown on the following table are designed to fund the City's cost of providing service while maintaining balanced budgets and building prudent minimal levels of fund reserves each year.

Table 9. Projected Revenues & Expenses: Water Scenario 1

Fiscal Year	2025-26	2026-27	2027-28	2028-29	2029-30
Proposed Revenue Increase	*44.0%*	*0.0%*	*10.0%*	*10.0%*	*8.0%*
Beginning Reserve Balance	**$9,179,175**	**$6,935,088**	**$7,745,508**	**$9,088,705**	**$9,127,187**
REVENUES					
Rate Revenues					
Current Rate Revenue	$5,547,618	$7,988,570	$7,988,570	$8,787,426	$9,666,169
Revenue from Rate Increases	*2,440,952*	*0*	*798,857*	*878,743*	*773,294*
Timing adjustment [1]	*($1,423,889)*	-	-	-	-
Total Rate Revenues	$6,564,681	$7,988,570	$8,787,426	$9,666,169	$10,439,463
Non-Rate Revenues					
Connection Fees	$680,000	$100,000	$100,000	$100,000	$100,000
Other Revenues	93,800	89,950	85,965	81,841	77,572
Interest on Pooled Cash [2]	$183,584	$138,702	$154,910	$181,774	$182,544
Total Non-Rate Revenues	$957,384	$328,652	$340,875	$363,615	$360,116
Total Revenue	**$7,522,064**	**$8,317,221**	**$9,128,302**	**$10,029,784**	**$10,799,579**
EXPENDITURES					
Total O&M	$6,276,646	$6,525,387	$6,813,700	$7,115,048	$7,430,033
Existing Debt Service	139,089	138,562	138,551	139,028	138,666
New Debt Service	261,250	670,853	670,853	1,369,227	2,067,602
Interfund Loan	99,167	0	0	0	0
Rate Funded Capital	$2,990,000	$172,000	$162,000	$1,368,000	$1,774,000
Total Expenditures	**$9,766,152**	**$7,506,802**	**$7,785,104**	**$9,991,303**	**$11,410,301**
Net Revenue	**($2,244,087)**	**$810,420**	**$1,343,198**	**$38,481**	**($610,722)**
Ending Fund Balance	**$6,935,088**	**$7,745,508**	**$9,088,705**	**$9,127,187**	**$8,516,465**
Debt Service Coverage	*2.49*	*2.21*	*2.86*	*1.93*	*1.53*

1, Reflects rates effective February 1, 2026, and July 1 each year thereafter.
2, 2% earnings on fund balance.

5.6 Water Financial Plan Scenario 2: Phased-In Revenue Increase

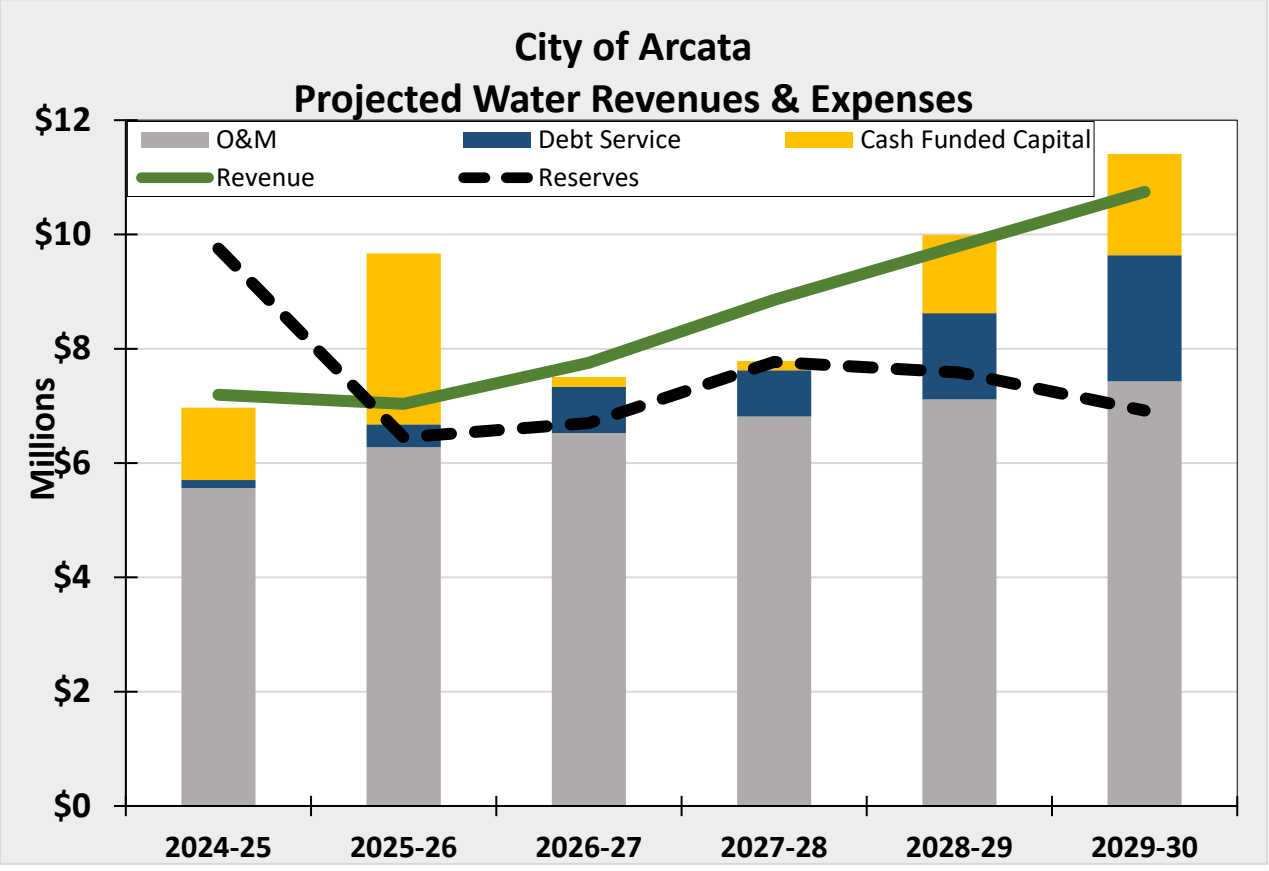
The following section presents a financial plan for the water enterprise for a scenario which includes a prolonged schedule for recovery of financial sustainability for the water enterprise than Scenario 1. A summary of the key elements of the long-term cash flow projections for this scenario is displayed in the following table.

Table 10. Water Scenario 2 Cash Flow Projection Summary

Scenario 2: Phased-In Revenue Recovery	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30
Ending Reserves	**$6,449,671**	**$6,699,504**	**$7,769,227**	**$7,584,132**	**$6,918,910**
Rate Revenue Increase	**$531,647**	**$614,121**	**$483,109**	**$450,901**	**$495,992**

The following figure shows cash flow projections incorporating the assumptions described above. The rate projections shown on the following table are designed to fund the City's cost of providing service.

Figure 3: Water Scenario 2 Projected Cash Flow Graph



Detailed, long-term, cash flow projections for this scenario are shown in the following table.

Table 11. Projected Revenues & Expenses: Water Scenario 2

Fiscal Year	2025-26	2026-27	2027-28	2028-29	2029-30
Proposed Revenue Increase	*23.0%*	*18.0%*	*12.0%*	*10.0%*	*10.0%*
Beginning Reserve Balance	**$9,179,175**	**$6,449,671**	**$6,699,504**	**$7,769,277**	**$7,584,132**
REVENUES					
Rate Revenues					
Current Rate Revenue	$5,547,618	$6,823,570	$8,051,812	$9,018,030	$9,919,833
Revenue from Rate Increases	1,275,952	1,228,243	966,217	901,803	991,983
Timing adjustment [1]	($744,305)	($614,121)	($483,109)	($450,901)	($495,992)
Total Rate Revenues	$6,079,264	$7,437,691	$8,534,921	$9,468,931	$10,415,824
Non-Rate Revenues					
Connection Fees	$680,000	$100,000	$100,000	$100,000	$100,000
Other Revenues	93,800	89,950	85,965	81,841	77,572
Interest on Pooled Cash [2]	$183,584	$128,993	$133,990	$155,386	$151,683
Total Non-Rate Revenues	$957,384	$318,943	$319,955	$337,227	$329,255
Total Revenue	**$7,036,648**	**$7,756,635**	**$8,854,876**	**$9,806,158**	**$10,745,080**
EXPENDITURES					
Total O&M	$6,276,646	$6,525,387	$6,813,700	$7,115,048	$7,430,033
Existing Debt Service	139,089	138,562	138,551	139,028	138,666
New Debt Service	261,250	670,853	670,853	1,369,227	2,067,602
Interfund Loan	99,167	0	0	0	0
Rate Funded Capital	$2,990,000	$172,000	$162,000	$1,368,000	$1,774,000
Total Expenditures	**$9,766,152**	**$7,506,802**	**$7,785,104**	**$9,991,303**	**$11,410,301**
Net Revenue	**($2,729,504)**	**$249,833**	**$1,069,772**	**($185,145)**	**($665,221)**
Ending Fund Balance	**$6,449,671**	**$6,699,504**	**$7,769,277**	**$7,584,132**	**$6,918,910**
Debt Service Coverage	*1.52*	*1.52*	*2.52*	*1.78*	*1.50*

1, Reflects rates effective February 1, 2026 and January 1 for each year thereafter.
2, 2% earnings on fund balance.

6 WATER COST OF SERVICE RATE DERIVATION

6.1 Cost of Service Analysis

There must be a cost-based nexus between the revenue requirement from the cash flow and the proposed rates. This section describes the steps BWA took to determine the rate revenue requirement need from each customer class that is proportional to their cost of service.

6.2 Cost Allocation Rate Revenue Requirements

Cost allocation categories are groupings of the water enterprise's non-rate revenues and expenses that are then allocated to the utility's functional components (capacity, all volume, as all other, described below). A functional component reflects a grouping of the utility's expenses whose magnitude is driven by the quantity of a specific unit-of-measure. For example, costs allocated to the all volume functional component are driven in part by the volume of water purchases cost component.

The functional components used in this study are as follows:

- **Capacity** – Fixed costs are recovered per meter. Fixed costs or costs related to system capacity were allocated to this category.
- **All Volume** – Costs reasonably recovered volumetrically were allocated to this category. Volumetric costs are recovered per unit of volume (HCF) based on all projected demand.
- **As All Other** – Items in this category do not impact the functional allocation because they are driven by the overall activity of the utility. This includes interest earnings on fund balances. Interest is allocated entirely to the "As All Other" functional component and does not impact the allocation.

To ensure the rates derived for the next five years are proportional to the costs, the amounts in the cost allocation categories are based on an average of the projected revenues and expenses for the next five years. For each cost allocation category, the expenses are reduced by non-rate revenues to determine the amount in each cost allocation category that needs to be funded by rates.

Related expenses and non-rate revenues were grouped into the following allocation categories before being allocated to each functional category:

- **Administration** – Expenses were allocated 40% to Capacity and 60% to All Volume to reflect that these costs are driven by the overall capacity of the system which is driven both by the projected volume of water sold and the standing capacity in the system.
- **Maintenance** – Expenses are related to maintaining and operating the water system. These costs are allocated 25% to Capacity and 75% to All Volume because these costs related to the overall capacity of the system which is driven both by the projected volume of water sold and the standing capacity in the system.
- **Utilities** – The allocation represents that most of these costs are variable and caused by pumping and treatment, but some of these costs are fixed. Utility expenses are allocated 10% to Capacity

and 90% to All Volume because these costs related primarily driven by the projected volume of water sold.

- **Water Purchases** – Expenses consist of imported water purchases. They are allocated 100% to All Volume to reflect that these costs are driven by the projected volume of water sold.
- **Water Treatment** – Expenses consist of the cost to treat water to potable standards. They are allocated 100% to All Volume to reflect that these costs are incurred to meet the volumetric needs of the City.
- **Interest** – Interest earned on fund balance is allocated entirely to the "As All Other" functional component and does not impact the allocation because interest is driven by the overall activity of the utility.
- **Debt Service** – Expenses are allocated 15% to Capacity and 85% to All Volume because these costs related to the overall capacity of the system both by the projected volume of water sold and the standing capacity in the system.
- **Capital** – Expenses are allocated 15% to Capacity and 85% to All Volume because these costs related to the overall capacity of the system both by the projected volume of water sold and the standing capacity in the system.

6.3 Functional Allocation

The following table shows a breakdown of the water utility's expenses and offsetting revenues and how they are allocated by function. The proportional allocation is then applied to the rate revenue requirement so that the rates are proportional to the cost of service provided.

Table 12. Functional Allocation

	5-Year Average					
Allocation Category	**Expenses**	**Less Non-Rate Revenue**	**Revenue Requirement**	**Capacity**	**All Volume**	**Total**
Administration	$4,258,016	$254,128	$4,003,888	40%	60%	100%
Maintenance	434,812	0	434,812	25%	75%	100%
Utilities	92,077	0	92,077	10%	90%	100%
Water Purchases	1,925,476	0	1,925,476	0%	100%	100%
Water Treatment	121,781	0	121,781	0%	100%	100%
Debt Service	1,103,134	0	1,103,134	15%	85%	100%
Capital	1,293,200	216,000	1,077,200	15%	85%	100%
Functional Allocation $				$2,046,516	$6,711,852	$8,758,368
Functional Allocation %				23.37%	76.63%	100.00%
Revenue Requirement				**$1,296,279**	**$4,251,339**	**$5,547,618**

6.4 Water Rate Structure Recommendations

Bartle Wells Associates reviewed the City's water rates and recommends charging outside city customers the same rates charged to inside city customers to improve compliance with the requirements of Proposition 218.

6.5 Rate Derivation

The allocated revenue requirements need to be recovered on a reasonable per unit basis to be proportional to the service provided.

Monthly Fixed Service Charge

This charge applies to all active services. It recovers the Capacity functional component revenue requirement on a per EDU basis. The unit costs per EDU varies by meter size. EDU ratios are based on the AWWA meter equivalent ratio for each meter size as described in Section 4.

Volumetric Charge

This charge applies to every unit of water sold. It recovers the All Volume functional component revenue requirement on a unit (hundred cubic feet, HCF) basis.

The following table shows the unit rate derivation of the fixed and volumetric charges.

Table 13. Unit Rate Derivation

Allocation Units	Capacity	All Volume
Unit of Measure	*EDU*	*HCF*
Allocation Units	104,820	590,000
Revenue Requirement	$1,296,279	$4,251,339
Unit Cost ($/Unit)	**$12.53**	**$7.18**

While the All Volume unit rate can be recovered on the basis of every HCF sold, the EDU rate must be calculated for each meter size. This is shown in the following table.

Table 14. Fixed Rate Derivation

Meter Size	AWWA Capacity Ratio	Monthly Fixed Charge
5/8"	1.00	**$12.53**
3/4"	1.00	**$12.53**
1"	1.67	**$20.93**
1 1/2"	3.33	**$41.73**
2"	5.33	**$66.80**
3"	10.00	**$125.33**
4"	16.67	**$208.92**
6"	33.33	**$417.72**
8"	53.33	**$668.37**
10"	76.67	**$960.88**

6.6 Recommended Water Rates

The recommended rates incorporate some modifications to the City's water rate structure designed to align rates with the current cost of providing service and reflect policy input provided by the City. Due to these modifications, impacts to water bills will vary based on customer class and water use when the first-year proposed rates are implemented.

The following tables show a 5-year schedule of recommended water rates for each scenario.

Table 15. Scenario 1 Recommended Water Rates

	2025/26 *Current*	5/1/2026 *Proposed*	7/1/2027 *Proposed*	7/1/2028 *Proposed*	7/1/2029 *Proposed*	7/1/2030 *Proposed*
Volumetric Rates ($/HCF)						
All Usage	$7.15	$10.33	$10.33	$11.37	$12.50	$13.50
Fixed Charges ($/meter)						
Meter Size						
5/8" and 3/4"	$12.23	$18.05	$18.05	$19.85	$21.84	$23.58
1"	$20.43	$30.14	$30.14	$33.15	$36.47	$39.39
1 1/2"	$40.73	$60.10	$60.10	$66.11	$72.72	$78.53
2"	$65.19	$96.19	$96.19	$105.81	$116.39	$125.70
3"	$122.31	$180.47	$180.47	$198.52	$218.37	$235.84
4"	$203.89	$300.85	$300.85	$330.93	$364.02	$393.14
6"	$407.65	$601.51	$601.51	$661.66	$727.83	$786.05
8"	$652.27	$962.45	$962.45	$1,058.70	$1,164.57	$1,257.73
10"	$937.74	$1,383.67	$1,383.67	$1,522.04	$1,674.24	$1,808.18

Table 16. Scenario 2 Recommended Water Rates

	2025/26 *Current*	5/1/2026 *Proposed*	1/1/2027 *Proposed*	1/1/2028 *Proposed*	1/1/2029 *Proposed*	1/1/2030 *Proposed*
Volumetric Rates ($/HCF)						
All Usage	$7.15	$8.83	$10.42	$11.67	$12.83	$14.12
Fixed Charges ($/meter)						
Meter Size						
5/8" and 3/4"	$12.23	$15.42	$18.19	$20.37	$22.41	$24.65
1"	$20.43	$25.74	$30.38	$34.02	$37.42	$41.17
1 1/2"	$40.73	$51.33	$60.57	$67.84	$74.63	$82.09
2"	$65.19	$82.16	$96.95	$108.59	$119.45	$131.39
3"	$122.31	$154.15	$181.90	$203.73	$224.10	$246.51
4"	$203.89	$256.97	$303.23	$339.61	$373.58	$410.93
6"	$407.65	$513.79	$606.27	$679.03	$746.93	$821.62
8"	$652.27	$822.10	$970.07	$1,086.48	$1,195.13	$1,314.64
10"	$937.74	$1,181.89	$1,394.63	$1,561.98	$1,718.18	$1,890.00

6.7 Bill Impacts

The following tables show the impacts of the proposed water rates for each scenario on a range of single-family customers with different levels of consumption.

Table 17. Scenario 1 Bill Impacts

Rate Category	Existing Rates	Proposed Rates
All Usage	$7.15	$10.33
5/8" Monthly Fixed	$12.23	$18.05

Water Use	Existing Rates	Proposed Rates	Change ($)	Change (%)
2 HCF	$26.53	$38.71	$12.18	46%
5 HCF	$47.98	$69.70	$21.72	45%
10 HCF	$83.73	$121.35	$37.62	45%
20 HCF	$155.23	$224.65	$69.42	45%

Table 18. Scenario 2 Bill Impacts

Rate Category	Existing Rates	Proposed Rates
All Usage	$7.15	$8.83
5/8" Monthly Fixed	$12.23	$15.42

Water Use	Existing Rates	Proposed Rates	Change ($)	Change (%)
2 HCF	$26.53	$33.08	$6.55	25%
5 HCF	$47.98	$59.57	$11.59	24%
10 HCF	$83.73	$103.72	$19.99	24%
20 HCF	$155.23	$192.02	$36.79	24%

The following figures summarize the bill impacts presented in the previous tables.

Figure 4: Scenario 1 Bill Impacts

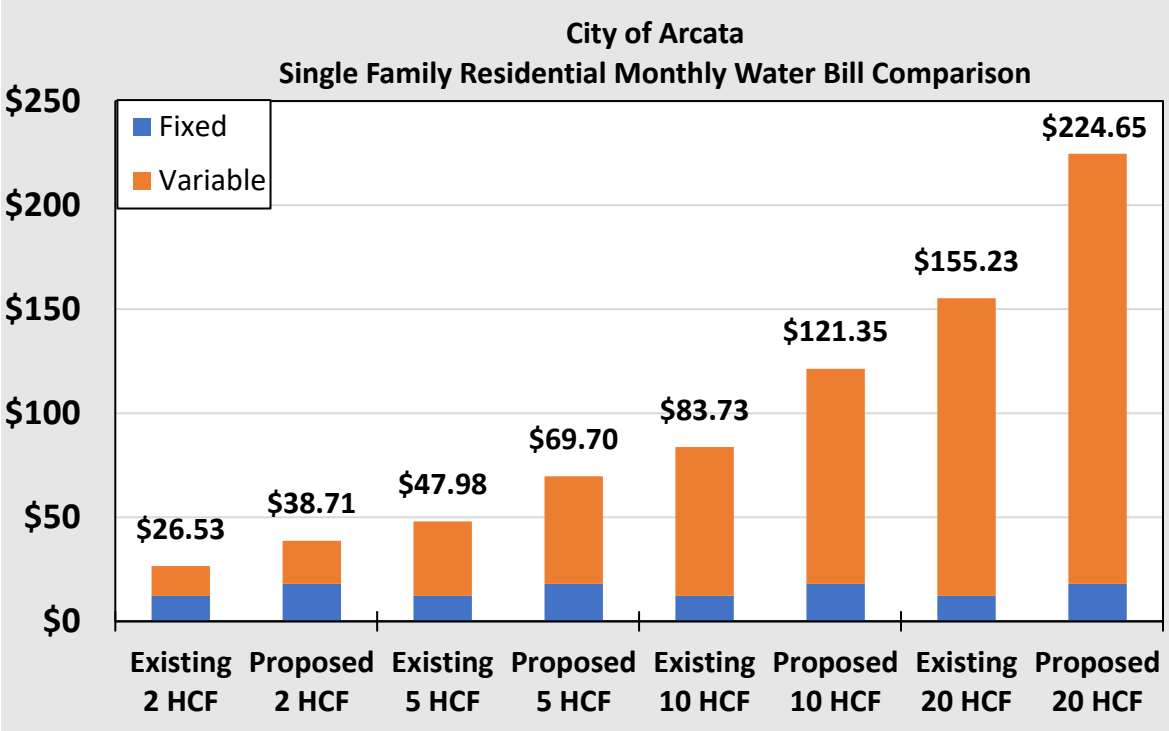
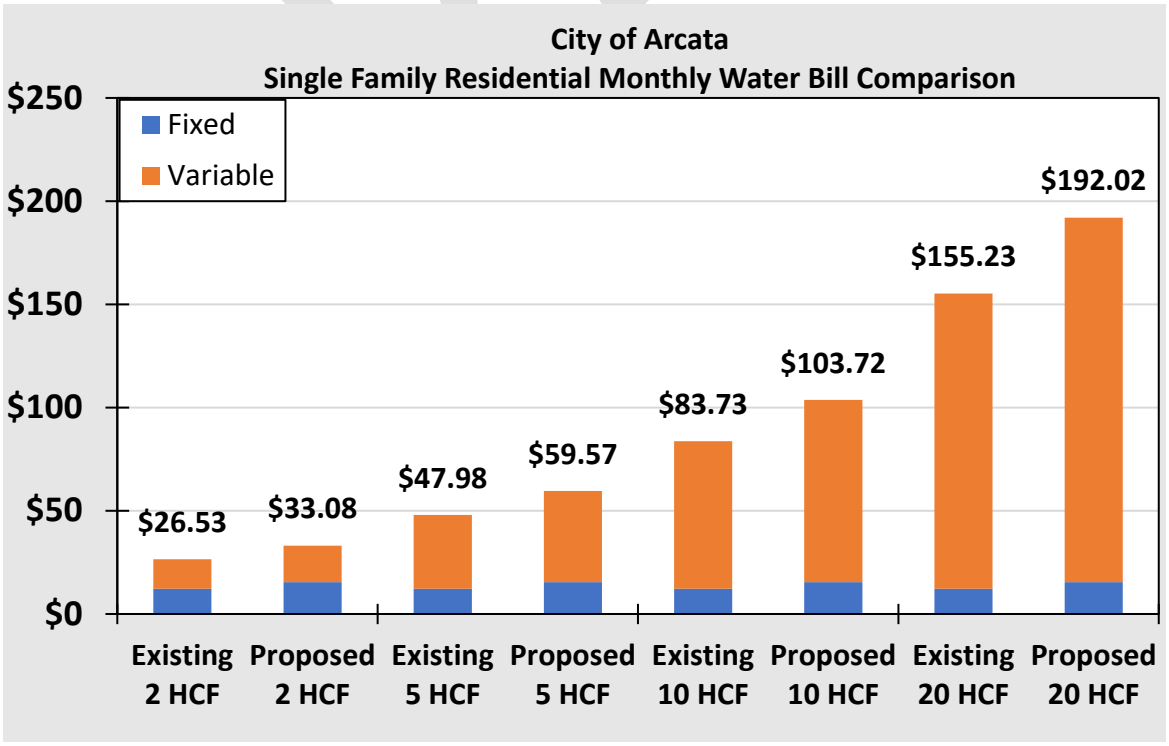


Figure 5: Scenario 2 Bill Impacts



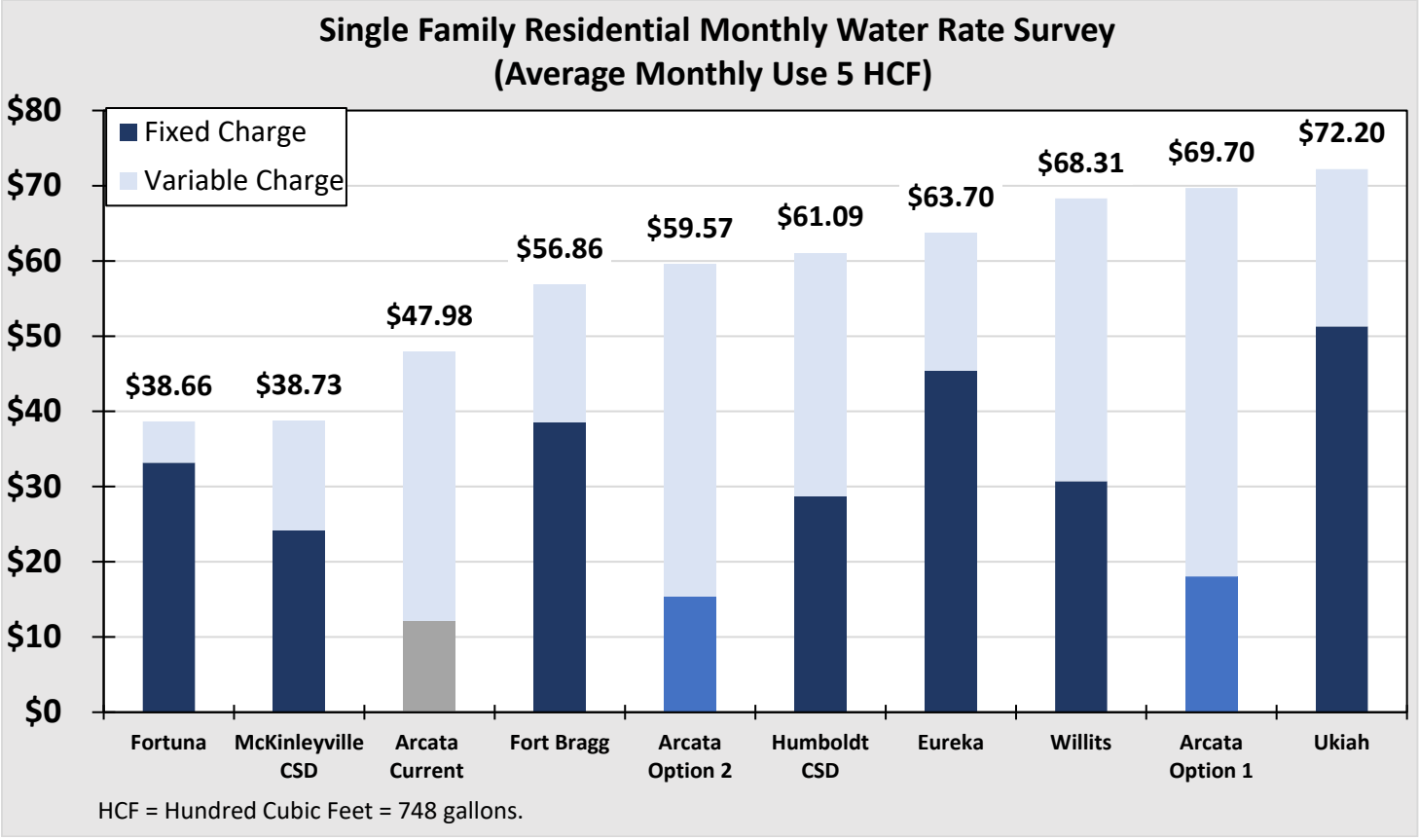
7 WATER SUMMARY AND RECOMMENDATIONS

7.1 Regional Water Rate Survey

BWA conducted a survey of current water rates for single-family residences including the City and other regional water systems. Unfortunately, due to time and cost restrictions, the survey is limited to only providing data in the form of the typical monthly billing amount of each water provider for a single-family residence. This limited comparison does not account for any of the differences that are highly likely to exist among the systems. The City of Arcata currently applies monthly water charges based on meter size and use. While other water agencies use similar metrics, each agency would have developed their own fixed and volumetric rates based on their own cost of service to account for the specific operating, treatment, and infrastructure needs of their water system. Nevertheless, regional surveys can still be used as an informational tool as long as agencies are mindful of the differences that exist in the development of an agency's water rates.

The following chart compares the monthly water bills for a typical single-family home to those of other regional agencies. The City's current water rates are at the lower end of the range compared to other regional agencies surveyed.

Figure 6: Regional Single Family Residential Water Rate Survey



HCF = Hundred Cubic Feet = 748 gallons.

While the proposed water rates developed in this study are higher than the existing rates, they are developed to reflect the current cost of service for the City's water system. It is also important to note that many of the agencies included in the survey are facing similar financial pressures and are either in the middle of multi-year rate increases or are anticipating raising rates in upcoming years.

7.2 Water Summary and Recommendations

The water enterprise is facing the need to increase rate revenues in order to 1) have revenues exceed expenses and not need financial support from the Wastewater Fund and 2) have revenues to fund capital and 3) qualify for financing and grants to reduce the burden on the City's rate payers.

BWA has the following recommendations for the water enterprise:

- The approved loan from the Wastewater Fund is not sufficient to fund the capital projects that are under way. BWA recommends implementing rate increases at the beginning of 2026 to support issuing bonds for $9.5 million to be used for refunding the wastewater enterprise and maintaining prudent reserves. Without securing additional financing, the water fund reserves are expected to drop to $500,000 which is imprudent and will have a significant impact on the ability of the enterprise to borrow funds in the future.
- The City should raise water rates in an amount large enough to pay for operating expenses, capital projects and to maintain prudent reserves.
- After the water enterprise's finances are stabilized, BWA recommends the City continue to adopt consistent, incremental increases to prevent the need for larger, one-time rate increases.
- When adopting new rates, BWA recommends the City adopt the recommended rate structure changes to bring the water enterprise's rates into greater compliance with Prop. 218.

8 WASTEWATER FINANCES & CASH FLOW PROJECTIONS

8.1 Wastewater Financial Overview

Bartle Wells Associates conducted an independent evaluation of the wastewater enterprise finances. Key observations include:

- The wastewater enterprise is in overall good financial health but will need rate increases to keep revenues in line with rising costs and to cash fund needed capital improvements.
- The City projects capital expenses of $51.4 million from FY 2025-26 through FY 2029-30.
- Projected grant funding for Capital projects from FY 2025-26 through FY 2029-30 is $26.5 million.

BWA developed long-term cash flow projections to determine the wastewater enterprise's annual revenue requirements and project required wastewater rate revenue increases. The financial projections incorporate the latest information available as well as reasonable and slightly conservative assumptions.

8.2 Wastewater Financial Plan Assumptions

Assumptions were developed based on input from City Staff, historical escalation factors, and conservative projections for future escalation factors to reasonably ensure that the maximum rates adopted by the City will provide sufficient revenues to support the City's water operations. Key information and assumptions include:

Reserves

- BWA recommends the City maintain prudent fund reserves. BWA recommends the wastewater enterprise maintain one year of operating expenses in reserves for cash flow and liquidity purposes in case of revenue loss/interruption, and to be able to cover costs during unforeseen emergencies. Fund reserves will fluctuate based on the timing of revenues and expenses, but the proposed rates are projected to provide the wastewater enterprise sufficient fund reserves. At a minimum, the wastewater enterprise should aim to hold at least three months of operating expenses in reserve.

Revenue Assumptions

- The wastewater enterprise is projected to begin FY 2025-26 with $14.5 million in reserves.
- BWA did not escalate revenues for miscellaneous non-rate wastewater revenues in its projections. Recommended rates are the maximum rates the City can adopt, which is why BWA uses conservative estimates when making revenue projections.
- As new construction can be unpredictable, BWA did not escalate revenues for growth, connection charges, or building permit revenue in its projections. Recommended rates are the maximum rates

the City can adopt, which is why BWA uses conservative estimates when making revenue projections.

- Interest income is estimated based on projected reserve levels. Future projections are estimated based on conservative interest earning estimate of 2.0%. Actual interest amounts will vary based on reserves and future interest earning rates.

- Projected grant funding for Capital projects from FY 2025-26 through FY 2029-30 is $26.5 million.

Expense Assumptions

- Operating and maintenance costs are based on the FY 2025-2026 budget and include updated estimates developed with the help of City Staff.
- General operating and capital cost inflation is projected to escalate at an annual rate of 4% in FY 2026-2027 and at an annual rate of 4% thereafter. This is a conservative estimate to account for future cost inflation and is based on recent and historic inflation.
- The Wastewater Enterprise will need to cash fund at least $16.9 million in capital spending in the next five years.
- The wastewater enterprise does not have any outstanding debt. Debt service projections are based on projected issuances of new debt. The financial plan assumes the issuance of $8 million in FY 2028-29 to fund critical wastewater treatment facility and system improvement projects.

8.3 Financial Plan Drivers

The City is anticipating a number of financial challenges that will require rate increases in upcoming years. Key drivers of future rate increases are:

Ongoing Cost Inflation

The City's wastewater enterprise faces ongoing operating cost inflation due to annual increases in a range of expenses including staffing, utilities, insurance, supplies, etc. On top of rate increases needed for other purposes, annual rate increases are needed to keep revenues aligned with cost inflation and prevent rates from falling behind the cost of providing service. Historically, inflation consistently hovered between 2% and 3%. Currently, inflation has mostly normalized after forty-year highs, but remains near 3%. Given the recent volatility, BWA designed the inflation projections to be slightly conservative to leave the City in a strong financial position while not driving excessive rate increases.

Capital Improvement Needs & Rehabilitation of Aging Infrastructure

The City takes a proactive approach to maintaining its wastewater system which requires a steady stream of repair, improvement, and replacement projects. Accounting for construction cost inflation, the City has identified approximately $51.4 million of capital improvement projects over the next 5 years.

There are two critical upcoming capital projects for the wastewater system. The first major project is the Arcata Wastewater Treatment Facility (AWTF) project. The AWTF is located in close proximity to the Humboldt Bay and is at increased risk for flooding events, sea level rise, and other environmental catastrophes such as severe storms, earthquakes, and tsunamis. The AWTF project includes major facility infrastructure upgrades and enhancements to the existing levee protecting the facility's structural and operational integrity. The second major upcoming capital project is the sewer inflow and infiltration (I&I) reduction project which aims to reduce sewer overflow events by identifying and replacing leaky, undersized, and unlined sewer pipes. This study assumes the City will finance the majority of project costs by issuing new debt. While the recommended rate increases ensure the City will meet its new debt servicing requirements, it is important to note that the additional debt servicing will impact the City's ability to use future wastewater revenues to fund other ongoing wastewater projects.

The following table shows the projected capital funding sources for the next five years.

Table 19. Capital Funding Sources

Capital Improvement Projects	2025-26	2026-27	2027-28	2028-29	2029-30
	Projected	*Projected*	*Projected*	*Projected*	*Projected*
Total Project Cost (Inflation $)	**$12,000,000**	**$5,902,000**	**$11,610,000**	**$9,436,000**	**$12,470,000**
Capital Funding	$12,000,000	$5,902,000	$11,610,000	$9,436,000	$12,470,000
Grants	$11,500,000	$5,000,000	$10,000,000	$0	$0
Use of New Debt Proceeds	0	0	0	4,000,000	4,000,000
Cash Funded	$500,000	$902,000	$1,610,000	$5,436,000	$8,470,000

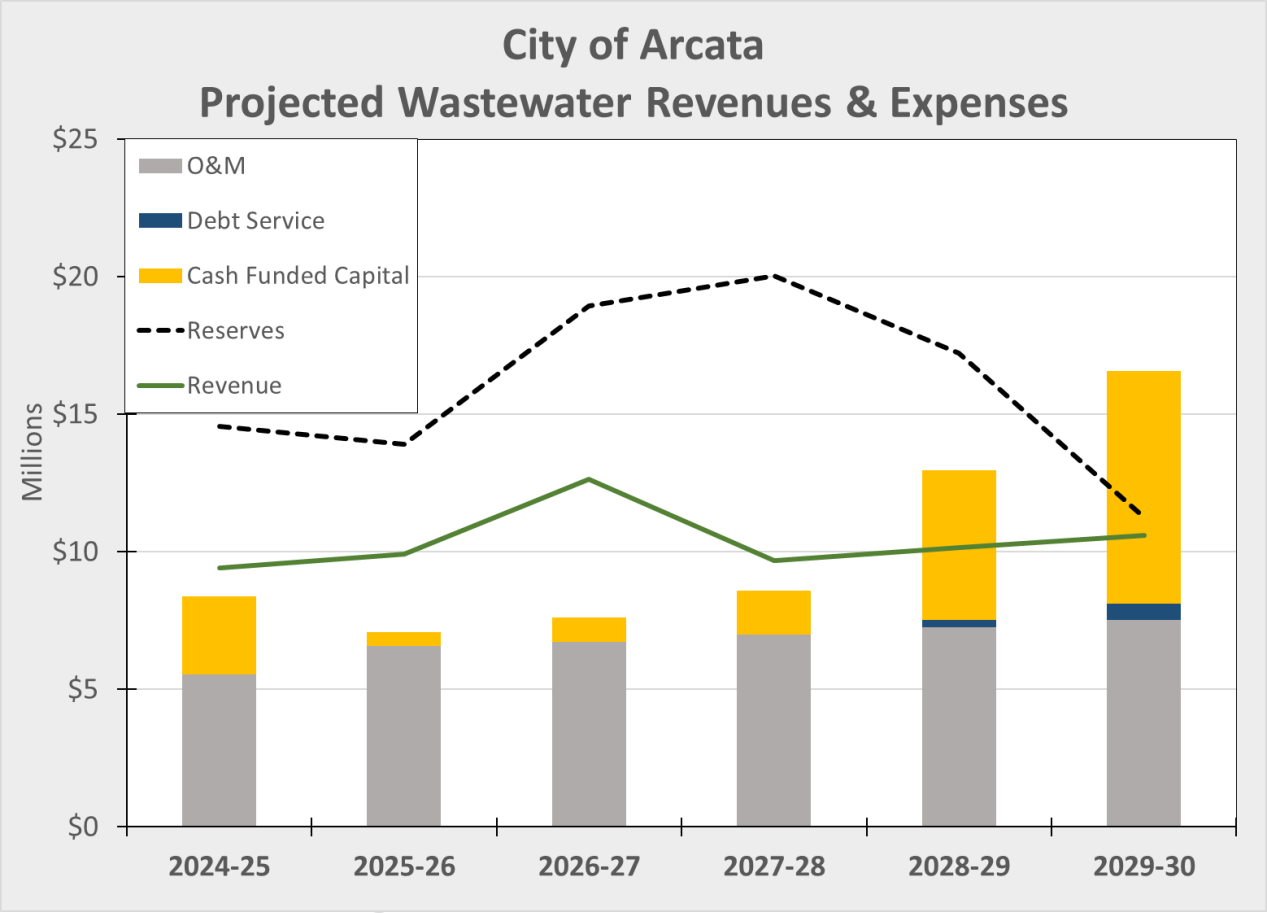
8.4 Wastewater Cash Flow Projections

Long-term cash flow projections were developed based on the assumptions and key drivers of future rate increases described above. The projections were used to determine the wastewater utility's annual revenue requirements and project required wastewater rate revenue increases. The long-term cash flow projections incorporate the latest information available from the City's budget, annual reports, capital spending projections, flow data, as well as a number of reasonable assumptions developed with input from the City. The overall rate revenue increases are designed to fund the City's cost of providing service, maintain roughly balanced budgets, maintain healthy debt service coverage, and maintain prudent reserves.

The projections indicate the need for rate increases. Actual impacts to customers wastewater bills will vary based on demand and wastewater strength, due to the outcome of the updated cost-of-service analysis. In future years, the City can re-evaluate its finances and revenue requirements and adjust rates as needed based on updated projections. However, while the City always has the flexibility to implement rate adjustments that are lower than adopted, pursuant to Proposition 218, future rates cannot exceed adopted increases without going through the Proposition 218 process again.

The following figure shows cash flow projections incorporating the assumptions described above.

Figure 7: Projected Wastewater Revenues & Expenses



The rate projections shown on the following table are designed to fund the City's cost of providing service while maintaining balanced budgets and building prudent minimal levels of fund reserves each year.

Table 20. Projected Wastewater Revenues & Expenses

Fiscal Year	2025-26	2026-27	2027-28	2028-29	2029-30
Proposed Rate Increase	*0.0%*	*0.0%*	*5.0%*	*5.0%*	*5.0%*
Beginning Fund Balance	**$14,554,148**	**$13,899,822**	**$13,925,486**	**$11,218,753**	**$9,133,986**
REVENUES					
Rate Revenues					
Current Wastewater Rates	$8,800,000	$8,800,000	$8,800,000	$9,240,000	$9,702,000
Proposed Rates	0	0	440,000	462,000	485,100
Total Rate Revenues	$8,800,000	$8,800,000	$9,240,000	$9,702,000	$10,187,100
Non-Rate Revenues					
Interest on Pooled Cash[2]	$291,083	$277,996	$378,510	$400,455	$344,426
Connection Fees	750,000	100,000	100,000	100,000	100,000
Water Loan Repayment	99,167	3,500,000	0	0	0
Other Revenues	($23,800)	($33,800)	($33,800)	($33,800)	($33,800)
Total Non-Rate Revenues	$1,116,450	$3,844,196	$444,710	$466,655	$410,626
Total Revenues	**$9,916,450**	**$12,644,196**	**$9,684,710**	**$10,168,655**	**$10,597,726**
EXPENDITURES					
Total O&M	$6,570,775	$6,716,532	$6,977,458	$7,248,550	$7,530,206
Loan to Water Fund	3,500,000	0	0	0	0
Existing Debt Service	0	0	0	0	0
New Debt Service	0	0	0	285,542	571,085
Rate Funded Capital	$500,000	$902,000	$1,610,000	$5,436,000	$8,470,000
Total Expenditures	**$10,570,775**	**$7,618,532**	**$8,587,458**	**$12,970,093**	**$16,571,291**
Net Revenue	**($654,325)**	**$5,025,664**	**$1,097,252**	**($2,801,438)**	**($5,973,565)**
Ending Fund Balance	**$13,899,822**	**$18,925,486**	**$20,022,738**	**$17,221,300**	**$11,247,736**
Debt Service Coverage	*N/A*	*N/A*	*N/A*	*10.23*	*5.37*

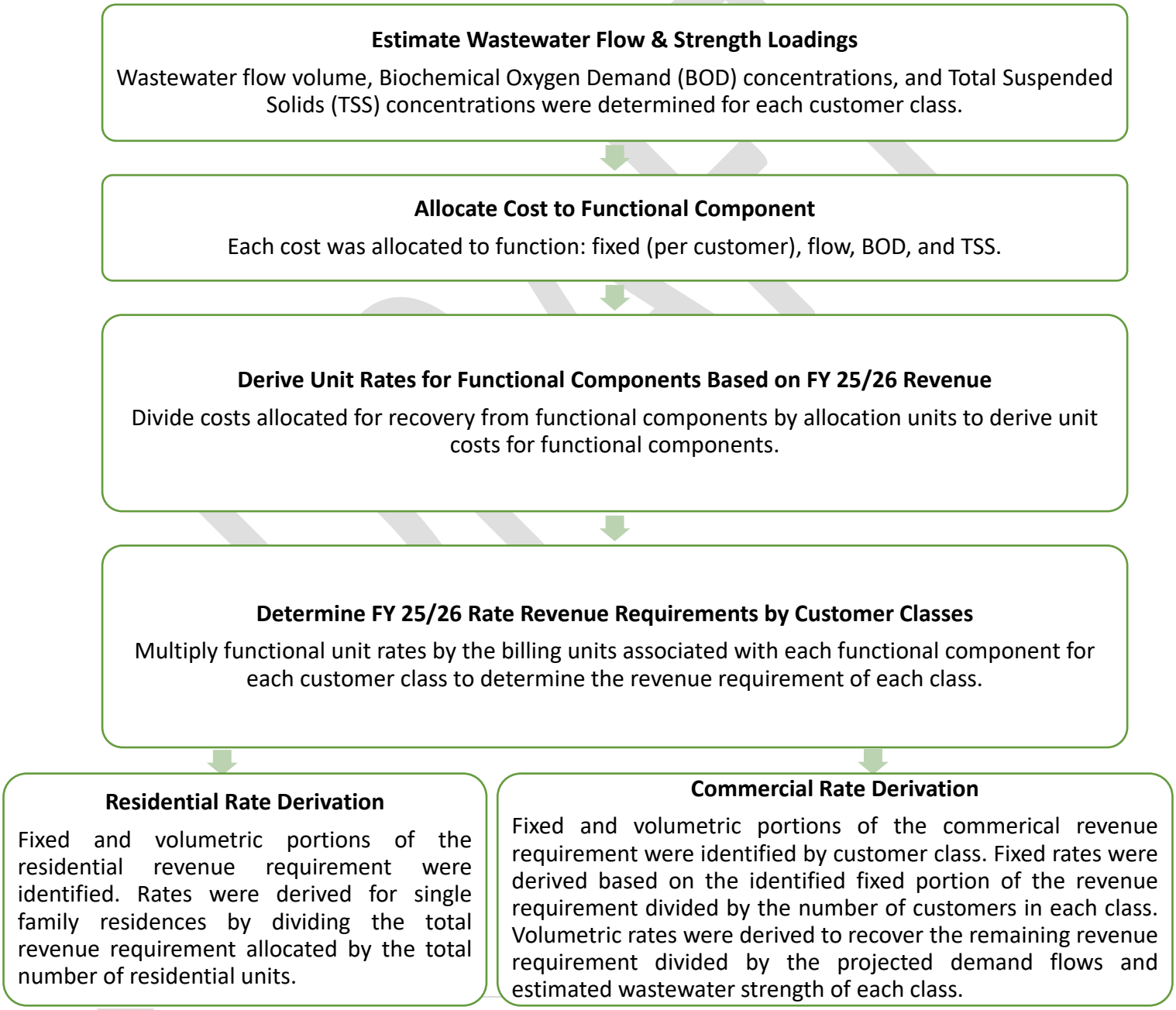
1, Reflects rates effective February 1, 2026, and July 1 each year thereafter.
2, 2% earnings on fund balance.

9 WASTEWATER COST OF SERVICE ANALYSIS AND RATE DERIVATION

9.1 Wastewater Cost of Service Rate Derivation Process

BWA derived updated wastewater rates that account for both a) the overall rate increases identified in the financial projections, and b) proposed rate structure modifications. The proposed rates are designed to equitably apportion and recover costs from the City's customer base. The basic methodology used to develop new rates includes the steps summarized in the figure below.

Figure 8: Wastewater Cost of Service Analysis and Rate Derivation Process



9.2 Customer Flows and Loadings

Estimated flows and loadings of each customer class are based on analysis of recent annual water consumption data by fiscal year and wastewater strength assignments for each customer class.

- Single Family Residential flows per unit are based on the average winter water use per unit. Residential wastewater strength concentrations are based on estimates previously published by the State Water Resources Control Board (SWRCB), adjusted for water conservation, City specific demands, and input from City Staff.
- Commercial flows are estimated based on projected water use. A return to sewer factor (RTS) is applied to adjust water use to estimated flows into the wastewater system. Wastewater strength assumptions for the customer classes are based on the type of customers grouped in each class.

The resulting flow and strength projections for all wastewater customer classes are shown on the following tables. These projections provide the basis for allocating costs and deriving equitable wastewater rates for each customer class.

Table 21. Wastewater Flows

						Projected Wastewater Flow		
Customer Class	**Accounts**	**Units**	**Est. Mo Flow[1]**	**Projected Water Use**	**Flow Factor[4]**	**HCF**	**MG[5]**	**GPD[6]**
			(hcf per EDU)[2]	*(hcf)[3]*	*(%)*			
Residential								
Single-Family	4,949	4,949	4.00	237,552	100%	237,552	178	486,853
Multi-Family	98	1,352	3.20	51,917	100%	51,917	39	106,401
Commercial								
Low	381			91,116	80%	72,893	55	149,390
Medium	136			84,100	80%	67,280	50	137,887
High	48			16,115	80%	12,892	10	26,422
Total	**5,612**					**442,533**	**331**	**906,954**

Table 22. Wastewater Strength Loadings

Customer Class	Projected Wastewater Flow GPD	Strength (mg/l)[1] BOD[2] (mg/l)	Strength (mg/l)[1] TSS[3] (mg/l)	Loadings (lbs) BOD (lbs)	Loadings (lbs) TSS (lbs)	Annual Bills (#)
Residential						
Single-Family	486,853	300	300	444,973	444,973	59,388
Multi-Family	106,401	300	300	97,248	97,248	16,224
Commercial						
Low	149,390	200	200	91,026	91,026	4,572
Medium	137,887	300	300	126,026	126,026	1,632
High	26,422	600	600	48,299	48,299	576
Total	**906,954**			**807,572**	**807,572**	**82,392**

[1] State Water Resource Control Board (SWRCB) Guidelines for Wastewater Agencies.
[2] "BOD" stands for biochemical oxygen demand.
[3] "TSS" stands for total suspended solids.

9.3 Cost of Service Analysis

There must be a cost-based nexus between the revenue requirement from the cash flow and the proposed rates. This section describes the steps BWA took to determine the rate revenue requirement need from each customer class that is proportional to their cost of service.

9.3.1 Cost Allocation Rate Revenue Requirements

Cost allocation categories are groupings of the wastewater enterprise's non-rate revenues and expenses that are then allocated to the utility's functional components (Fixed, Flow, BOD & TSS, described in the next section).

To ensure the rates derived for the next five years are proportional to the costs, the amounts in the allocation categories are based on an average of the projected revenues and expenses for the next five years. The expenses are reduced by non-rate revenues to determine the amount in each cost allocation category that needs to be funded by rates and then dividing each functional component's revenue requirements by the allocations units most reasonably related to each function.

Related expenses were grouped into the following cost allocation categories before being allocated to each functional category:

- **Collection** – Expenses in this category are related to the wastewater collection system. These costs are largely driven by the volume of wastewater flow.

- **Treatment** – Expenses in this category are related to wastewater treatment. These costs are largely driven by the volume and strength of wastewater flows.
- **Debt Service** – Expenses in this category reflect annual debt service payments. Expenses in this category are allocated to the flow and strength functional components based on the blend of capital collection and treatment projects.
- **Capital** – Expenses in this category reflect costs for capital projects. These costs are largely driven by the volume of wastewater flow and also impacted by the number of connections to the system. Expenses in this category are allocated to the fixed and flow and strength functional components based on the blend of capital collection and treatment projects.

9.3.2 Functional Allocation

The purpose of the functional allocation is to determine the portion of rate revenues needed to support each function of the wastewater system. A functional component reflects a grouping of the utility's expenses whose magnitude is driven by the quantity of a specific unit-of-measure. For example, costs allocated to the flow functional component are driven by the volume of wastewater flows.

The functional components used in this study are as follows:

- **Fixed** – Costs related to providing service to each customer were allocated to this functional component. These costs are related to the number of customers served by the City.
- **Flow** – Costs related to system flows were allocated to this functional component. These costs are related to the volume of wastewater flows.
- **BOD** – Costs related to treating biochemical oxygen demand are allocated to this functional component. These costs are allocated related to the pounds of BOD loadings treated**.**
- **TSS** – Costs related to treating total suspended solids are allocated to this functional component. These costs are allocated related to the pounds of TSS loadings treated.

Wastewater system costs net of non-rate revenues are assigned to each allocation category for rate revenue recovery via the functional cost components of fixed, flow, BOD, and TSS. While there is no single correct approach for cost allocation, BWA believes that costs should be allocated within a reasonable range that reflects both a) underlying cost causation, to the extent such causation can reasonably be determined or estimated, and b) the policy preferences of the agency in cases where a range of reasonable approaches can be justified. This process is intended to proportionately allocate costs to each functional component to determine the revenue requirement for each component. The allocations to each functional component were based on input from City staff.

The following table shows a breakdown of the wastewater utility's expenses and offsetting revenues i.e., the revenue recovery needed from rates for each cost category allocated by function. The proportional allocation is then applied to the rate revenue requirement so that the rates are

proportional to the cost of service provided. The result of this allocation is the percent of the revenue requirement associated with each functional allocation category.

Table 23. Rate Revenue Requirements by Functional Components

Wastewater Cost Component	5-Year Average	Fixed	Flow	BOD	TSS
Operating Costs					
Collection	$2,251,662	10%	85%	5%	5%
Treatment	4,757,043	10%	30%	30%	30%
Non-Operating Costs					
Debt Service	85,663	0%	33%	33%	33%
Cash-Funded Capital Spending	3,383,600	10%	85%	5%	5%
Sources					
Connection Fees	(230,000)	10%	85%	5%	5%
Use of Reserves	(661,282)	10%	85%	5%	5%
Functional Allocation $	$9,586,685	$950,102	$5,488,049	$1,692,866	$1,692,866
Functional Allocation %		7.44%	57.25%	17.66%	17.66%
Revenue Requirement	**$8,800,000**	**$654,402**	**$5,037,699**	**$1,553,949**	**$1,553,949**

Approximately $644,000 of the wastewater utility's costs are fixed expenses that do not vary with changes in customer flow and strength characteristics.

9.3.3 Functional Component Unit Costs

The table below calculates the unit rates for each cost component by function. The wastewater rate revenue requirements from the prior table for each functional component are divided by the units related to each function.

Table 24. Functional Component Unit Costs

Allocation Units	Flow	BOD	TSS	Fixed
	(hcf)	*(lbs)*	*(lbs)*	*(per bill)*
Demand Units	442,533	807,572	807,572	82,392
Revenue Requirement	$5,037,699	$1,553,949	$1,553,949	$654,402
Functional Unit Rates	**$11.38**	**$1.92**	**$1.92**	**$7.94**

9.3.4 Rate Revenue Requirements by Customer Class

The total revenue requirement for each customer class is calculated by multiplying the unit rate for each functional cost component by the units related to each function.

The table below details the units related to each function for each customer class.

Table 25. Functional Allocation Units by Class

Allocation Units	Flow	BOD	TSS	Annual Bills
	(hcf)	*(lbs)*	*(lbs)*	*(#)*
Residential				
Single-Family	237,552	444,973	444,973	59,388
Multi-Family	51,917	97,248	97,248	16,224
Commercial				
Low Strength	72,893	91,026	91,026	4,572
Medium Strength	67,280	126,026	126,026	1,632
High Strength	12,892	48,299	48,299	576

The table below details the total revenue requirements by functional cost component for each customer class.

Table 26. Total Functional Rate Revenue Requirements by Class

Revenue Requirements	Flow	BOD	TSS	Variable Revenue Requirement	Fixed Revenue Requirement	Total Revenue Requirement
	(hcf)	*(lbs)*	*(lbs)*			*($)*
Residential						
Single-Family	$2,704,237	$856,227	$856,227	$4,416,692	$471,692	$4,888,384
Multi-Family	$591,009	$187,128	$187,128	$965,264	$128,860	$1,094,124
Commercial						
Low Strength	$829,792	$175,155	$175,155	$1,180,102	$36,313	1,216,415
Medium Strength	$765,899	$242,502	$242,502	$1,250,903	$12,962	1,263,865
High Strength	$146,763	$92,937	$92,937	$332,637	$4,575	337,212

9.4 Rate Derivation

This section describes how rates for each customer sub-class are derived to reflect the proportional cost of providing wastewater service.

9.4.1 Current Residential Rates

Currently the residential rate class applies to only single-family residential customers which are charged a monthly fixed rate and a volumetric rate.

Monthly Fixed Service Charge

This charge applies to all active services for single-family residences. It recovers the rate revenue requirement on a per customer basis.

Volumetric Charges

These charges apply to every unit of monthly water use. There are no use charges for the first four HCF of water use. After the first four units of use per month, the City adjusts for potential irrigation by establishing a monthly sewer cap for each customer. The cap reflects residential sewer flow charges based on water consumption during the winter months (February-April), the period when single family residential customers typically do not have high outdoor water use. The amount a customer is billed in each of the following summer months (June-September), the period when outdoor water use is likely, is based on their usage *up to* their cap to reflect the lesser of their winter use or actual water use. Essentially, the cap adjusts for irrigation use by setting the maximum units of use that a single-family residence will be charged during the period when outdoor water use is likely. There is no irrigation adjustment made to non-summer months (October-January).

9.4.2 Residential Rate Structure Recommendations

BWA reviewed the City's residential wastewater rates and water demands and has the following recommendations to improve proportionality:

1. Remove all volumetric charges for single-family wastewater customers; and
2. Establish a fixed monthly rate for all single-family wastewater customers
3. Establish a multi-family class with a fixed monthly rate for all residential wastewater customers with more than one dwelling unit on a per dwelling unit basis; and
4. Charge any outside city customers the same rates charged to inside city customers.

9.4.3 Residential Rate Derivation

The total revenue requirements for single-family and multi-family customer classes were calculated above. The monthly rates are derived by dividing the revenue requirements by the number of dwelling unit bills (dwelling units x 12 months). The following table details the calculation for residential wastewater rates.

Table 27. Residential Rate Derivation

Residential Rate Derivation	Revenue Requirement	Annual Bills	Reallocated FY 2024/25 Rate
	($)	*(#)*	*($ per bill)*
Single-Family	$4,888,384	59,388	$82.31
Multi-Family	$1,094,124	16,224	$67.44

9.4.4 Current Commercial Rates

Customers in this class are grouped into three different subclasses based on their strength and flow characteristics.

Monthly Fixed Service Charge

This charge applies to all active commercial customers. It recovers the revenue requirement on a per customer basis.

Volumetric Charges

These charges apply to every unit of monthly water use. There are no use charges for the first four HCF of water use. After the first four units of use per month, customers are charged a quantity rate per HCF based on estimated wastewater discharge characteristics.

9.4.5 Commercial Rate Structure Recommendations

BWA reviewed the City's commercial wastewater rates and has the following recommendations to improve compliance with the requirements of Proposition 218:

1. Set a minimum monthly fixed service charge for each customer subclass based on the minimum fixed costs of each subclass.
2. Charge any outside city customers the same rates charged to inside city customers.

9.4.6 Customer Class Rate Derivation

The total revenue requirement for this class is calculated above. The fixed revenue recovery was set to reflect the fixed costs identified for each customer subclass.

The remaining portion of the revenue requirement was allocated proportionally, based on the wastewater system allocation to flow, BOD and TSS. The volumetric unit cost per HCF is calculated based on strength estimates and the flow, BOD and TSS unit costs for each commercial customer sub-class. Volumetric costs are adjusted by the estimated return to sewer factor for each sub-class, this adjustment is necessary to account for the estimated sewer discharge of commercial customers based on year-round water use data, which includes some water use that does not enter the sewer system.

The following table displays the derivation of commercial wastewater rates.

Table 28. Commercial Rate Derivation

Commercial Class Rate Units	Variable Revenue Requirement	Units	Unit Rate	Minimum Charge Monthly Charge per Connection
	($)	*(HCF)*	*($ per unit)*	*(Up to 4 HCF)*
Low Strength	$1,180,102	91,116	$12.95	$51.81
Medium Strength	1,250,903	84,100	14.87	59.50
High Strength	332,637	16,115	20.64	82.56

Commercial Fixed Rate Derivation	Minimum Charge Monthly Charge per Connection	Fixed Unit Cost	Total Monthly Fixed Charge
	(per monthly bill)	*(per monthly bill)*	*(per monthly bill)*
Low Strength	$51.81	$7.94	$59.75
Medium Strength	$59.50	$7.94	$67.44
High Strength	$82.56	$7.94	$90.51

Volumetric Rev Requirements	Minimum Charge per Bill	Annual Bills	Revenue From Minimum Charge	Remaining Variable Revenue Requirement	Demand >4 HCF	Variable Rate
	(Up to 4 HCF)	*(#)*			*(HCF)*	*(per HCF >4)*
Low Strength	$51.81	4,572	$236,860.44	$943,241.09	79,199	**$11.91**
Medium Strength	$59.50	1,632	$97,097.61	$1,153,805.11	79,060	**$14.59**
High Strength	$82.56	576	$47,556.93	$285,080.10	14,087	**$20.24**

9.5 Recommended Wastewater Rates

The recommended rates incorporate some modifications to the City's wastewater rate structure designed to align rates with the current cost of providing service and reflect policy input provided by the City. Due to these modifications, impacts to wastewater bills will vary based on customer class and water use when the first-year proposed rates are implemented.

The following table shows a 5-year schedule of recommended wastewater rates.

Table 29. Proposed Wastewater Rates

Wastewater User	2025/26	7/1/2026	7/1/2027	7/1/2028	7/1/2029	7/1/2030
	Current	*Proposed*	*Proposed*	*Proposed*	*Proposed*	*Proposed*
Residential - Fixed Monthly Rate per Unit						
Single Family	$77.61	$82.31	$82.31	$86.43	$90.75	$95.29
Multi-Family	n/a	67.44	67.44	70.81	74.35	78.07
Residential - Volumetric Rates per Hundred Cubic Feet (HCF) of Water Use Greater Than 4 HCF						
Single Family	$11.34	$0.00	$0.00	$0.00	$0.00	$0.00
Commercial - Volumetric Rates per Hundred Cubic Feet (HCF) of Water Use Greater Than 4 HCF						
Low Strength	$9.88	$11.91	$11.91	$12.51	$13.13	$13.79
Medium Strength	12.01	14.59	14.59	15.32	16.09	16.89
High Strength	20.14	20.24	20.24	21.25	22.31	23.43
Commercial - Minimum Monthly Fixed Rate per Connection						
Low Strength	$81.05	$47.64	$47.64	$50.02	$52.52	$55.15
Medium Strength	81.05	58.38	58.38	61.29	64.36	67.58
High Strength	81.05	80.95	80.95	84.99	89.24	93.71

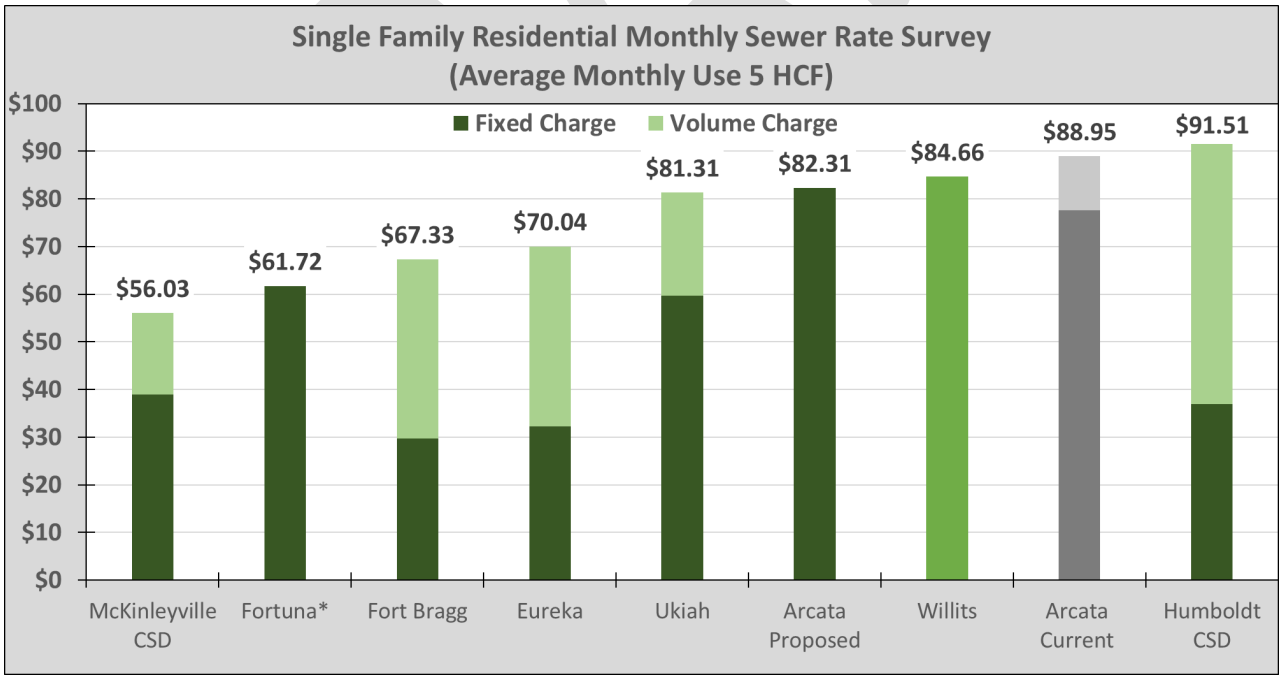
10 WASTEWATER SUMMARY AND RECOMMENDATIONS

10.1 Regional Wastewater Rate Survey

BWA conducted a survey of current wastewater rates for single-family residences including the City and other regional wastewater systems. Unfortunately, due to time and cost restrictions, the survey is limited to only providing data in the form of the typical monthly billing amount of each wastewater provider for a single-family residence. This limited comparison does not account for any of the differences that are highly likely to exist among the systems. The City of Arcata currently applies monthly wastewater charges based on customer and flow and strength characteristics. While other wastewater agencies use similar metrics, each agency would have developed their own fixed and volumetric rates based on their own cost of service to account for the specific operating, treatment, and infrastructure needs of their wastewater system. Nevertheless, regional surveys can still be used as an informational tool as long as agencies are mindful of the differences that exist in the development of an agency's wastewater rates.

The following chart compares the monthly wastewater bills for a typical single-family home to those of other regional agencies.

Figure 9: Regional Single Family Residential Wastewater Rate Survey



While the proposed wastewater rates developed in this study are higher than the existing rates, they are developed to reflect the current cost of service for the City's wastewater system. It is also important to note that many of the agencies included in the survey are facing similar financial

pressures and are either in the middle of multi-year rate increases or are anticipating raising rates in upcoming years.

10.2 Wastewater Summary and Recommendations

The wastewater enterprise is facing the need to increase rate revenues in order to 1) have revenues exceed expenses and 2) have revenues to fund capital and 3) qualify for financing and grants to reduce the burden on the City's rate payers.

BWA has the following recommendations for the wastewater enterprise:

- Modify the wastewater rate structure to improve proportionality and administrative efficiency.
- The City should raise wastewater rates in an amount large enough to pay for operating expenses, capital projects and to maintain prudent reserves.
- After the wastewater enterprise's finances are stabilized, BWA recommends the City continue to adopt consistent, incremental increases to prevent the need for larger, one-time rate increases.
- When adopting new rates, BWA recommends the City adopt the recommended rate structure changes to bring the wastewater enterprise's rates into greater compliance with Prop. 218.

11 CONCLUSION & RECOMMENDATIONS

In conclusion, the City's water and wastewater utilities will need rate increases in upcoming years to provide adequate funding for high-priority capital improvement needs and keep rates aligned with escalating costs of operations. The proposed 5-year schedule of rates are designed to recover the costs of providing service while supporting roughly balanced budgets in future years.

Many other regional agencies are facing similar financial challenges with cost inflation and the need to increase investment in aging infrastructure and are also anticipating rate increases in upcoming years.

General rate recommendations for the utilities include:

- BWA recommends the City adopt the proposed rates as soon as possible.
- The City should update the water and wastewater financial projections within the next five years to evaluate funding needs and rate increases in subsequent years.
- After the proposed rates are implemented, the City should continue to adopt annual rate increases to keep revenues in line with the cost of providing service and minimize the need for larger, periodic rate spikes.

APPENDIX A

Water and Wastewater Rate Study Tables

City of Arcata
Water COS Rate Study Draft (No Phase-In)
09.24.25

Preliminary Draft Tables

BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

Table 1
City of Arcata
Water COS Rate Study Draft 09.24.25

Historical Rates

Volume Charges ($/hcf)	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
All Usage	$6.74	$6.84	$6.94	$7.05	$7.15	$7.15
Monthly Fixed Charges ($/meter) [1]						
Meter Size						
5/8" and 3/4"	$11.52	$11.70	$11.87	$12.05	$12.23	$12.23
1"	19.24	19.53	19.83	20.12	20.43	20.43
1 1/2"	38.37	38.95	39.53	40.13	40.73	40.73
2"	61.42	62.34	63.28	64.23	65.19	65.19
3"	115.24	116.97	118.72	120.50	122.31	122.31
4"	192.10	194.98	197.91	200.87	203.89	203.89
6"	384.08	389.85	395.69	401.63	407.65	407.65
8"	614.56	623.78	633.13	642.63	652.27	652.27
10"	883.52	896.77	910.22	923.88	937.74	937.74

1, Fixed monthly charges for customers located outside of city limits subject to 1.5x cost factor.

Table 2
City of Arcata
Water COS Rate Study Draft 09.24.25

Customer Characteristics

Meter Size	Total Meters	AWWA Capacity Factor	Equivalent Demand Units (EDUs)	Annual EDUs
5/8"	5,540	1.00	5,540	66,480
3/4"	429	1.00	429	5,148
1"	359	1.67	600	7,194
1 1/2"	71	3.33	236	2,837
2"	192	5.33	1,023	12,280
3"	31	10.00	310	3,720
4"	8	16.67	133	1,600
6"	10	33.33	333	4,000
8"	1	53.33	53	640
10"	1	76.67	77	920
Totals	**6,642**		**8,735**	**104,820**

Table 3
City of Arcata
Water COS Rate Study Draft 09.24.25

Demand

Annual Consumption	**2022-2023**	**2023-2024**	**2024-2025**	**2025-2026**[1]
	Actual	*Actual*	*Estimated*	*Projected*
Total Water Use (hcf)	620,540	596,621	606,996	590,000

1, Projected based on average annual consumption history.

Table 4
City of Arcata
Water COS Rate Study Draft 09.24.25

O&M Expense Projections

Escalation Factor	Allocation Category	Factor	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
No Escalation		None				0.0%	0.0%	0.0%	0.0%
General		General				4.0%	4.0%	4.0%	4.0%
Water Purchases		Water				5.5%	5.5%	5.5%	5.5%
Personnel		Personnel				3.5%	3.5%	3.5%	3.5%
			Actual	*Estimated*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
63 - Water System Maintenance									
Regular Salaries	Administration	General	$427,420	$515,635	$529,163	$550,330	$572,343	$595,236	$619,046
Overtime Wages	Administration	General	6,728	9,403	10,000	10,400	10,816	11,249	11,699
Part-time & Temporary Salaries	Administration	General	17,540	17,959	25,000	26,000	27,040	28,122	29,246
Other Employee Benefits	Administration	General	440,908	307,085	350,000	364,000	378,560	393,702	409,450
Training & Conferences	Administration	General	6,402	3,968	9,000	9,360	9,734	10,124	10,529
Clothing & Personal Expenses	Administration	General	1,950	603	2,000	2,080	2,163	2,250	2,340
Memberships & Dues	Administration	General	1,041	4,806	20,000	20,800	21,632	22,497	23,397
Other Professional Services	Maintenance	General	15,781	6,938	20,000	20,800	21,632	22,497	23,397
Insurance	Administration	General	192,661	251,078	305,000	317,200	329,888	343,084	356,807
Janitorial & Household Supplies	Administration	General	403	311	700	728	757	787	819
Cement Gravel Sand & Asphalt	Maintenance	General	40,951	25,882	80,000	55,000	57,200	59,488	61,868
Pipes Valves & Fittings	Maintenance	General	143,377	108,317	95,000	98,800	102,752	106,862	111,137
Other Department Supplies	Administration	General	7,514	7,423	9,000	9,360	9,734	10,124	10,529
Small Tools	Maintenance	General	5,976	7,400	7,500	7,800	8,112	8,436	8,774
Equipment Maintenance	Maintenance	General	19,459	(432)	20,000	20,800	21,632	22,497	23,397
Central Garage Charges	Administration	General	109,436	146,136	125,897	130,933	136,170	141,617	147,282
Equipment Rental	Maintenance	General	780	0	1,000	1,040	1,082	1,125	1,170
IT Services & Maintenance	Administration	General	22,432	13,649	21,622	22,487	23,386	24,322	25,295
Overhead	Administration	General	243,492	255,970	265,200	275,808	286,840	298,314	310,246
Tech Subscription Interest	Administration	General	248	0	0	0	0	0	0
AmortizeTech Subscript Lial	Administration	General	($1,173)	$0	$0	$0	$0	$0	$0
Subtotal			**$1,703,328**	**$1,682,132**	**$1,896,082**	**$1,943,725**	**$2,021,474**	**$2,102,333**	**$2,186,427**

Table 4
City of Arcata
Water COS Rate Study Draft 09.24.25

O&M Expense Projections

Escalation Factor	Allocation Category	Factor	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
No Escalation		None				0.0%	0.0%	0.0%	0.0%
General		General				4.0%	4.0%	4.0%	4.0%
Water Purchases		Water				5.5%	5.5%	5.5%	5.5%
Personnel		Personnel				3.5%	3.5%	3.5%	3.5%
			Actual	*Estimated*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
64 - Water Treatment & Distribution									
Regular Salaries	Administration	General	$517,466	$581,448	$617,154	$641,840	$667,514	$694,214	$721,983
Overtime Wages	Administration	General	9,084	13,569	15,000	15,600	16,224	16,873	17,548
Part-time & Temporary Salaries	Administration	General	27,592	22,058	26,000	27,040	28,122	29,246	30,416
Other Employee Benefits	Administration	General	322,620	344,133	400,000	416,000	432,640	449,946	467,943
Utilities	Utilities	General	85,338	82,742	85,000	88,400	91,936	95,613	99,438
Training & Conferences	Administration	General	8,418	12,545	10,470	10,889	11,324	11,777	12,248
Clothing & Personal Expenses	Administration	General	8,594	7,855	9,650	10,036	10,437	10,855	11,289
Memberships & Dues	Administration	General	11,022	11,919	16,740	17,410	18,106	18,830	19,583
Lab Testing & Analysis	Water Treatment	General	4,390	2,627	6,000	6,240	6,490	6,749	7,019
Other Professional Services	Water Treatment	General	139,544	33,261	73,770	76,721	79,790	82,981	86,300
Other Planning Services	Water Treatment	General	0	0	0	0	0	0	0
Taxes & Other Fees	Administration	General	26,404	32,658	33,750	35,100	36,504	37,964	39,483
Insurance	Administration	General	169,724	218,836	270,000	280,800	292,032	303,713	315,862
Haz Mat Response Team	Water Treatment	General	2,350	2,709	3,400	3,536	3,677	3,825	3,978
Postage	Administration	General	15,343	20,869	21,000	21,840	22,714	23,622	24,567
Photocopy	Administration	General	0	0	50	52	54	56	58
Office Supplies	Administration	General	1,359	1,606	2,000	2,080	2,163	2,250	2,340
Bank Service Charges	Administration	General	61,894	63,048	68,000	70,720	73,549	76,491	79,550
Chemicals & Lab Supplies	Water Treatment	General	7,340	21,315	25,000	26,000	27,040	28,122	29,246
Janitorial & Household Supplies	Administration	General	1,021	1,052	1,000	1,040	1,082	1,125	1,170
Purchase Of Water	Water Purchases	Water	1,580,080	1,604,848	1,725,000	1,819,875	1,919,968	2,025,566	2,136,973
Other Department Supplies	Administration	General	5,610	4,074	6,000	6,240	6,490	6,749	7,019
Small Tools	Water Treatment	General	5,996	3,711	4,000	4,160	4,326	4,499	4,679
Fuels & Lubricants	Water Treatment	General	0	0	250	260	270	281	292
Equipment Maintenance	Maintenance	General	62,223	45,867	75,000	78,000	81,120	84,365	87,739
Building/Grounds Maintenance	Maintenance	General	67,460	80,667	125,000	130,000	135,200	140,608	146,232
Central Garage Charges	Administration	General	38,276	28,622	69,262	72,032	74,914	77,910	81,027
IT Services & Maintenance	Administration	General	31,759	43,355	73,268	76,199	79,247	82,417	85,713
Overhead	Administration	General	$568,152	$597,270	$618,800	$643,552	$669,294	$696,066	$723,908
Subtotal			**$3,779,059**	**$3,882,663**	**$4,380,564**	**$4,581,662**	**$4,792,226**	**$5,012,715**	**$5,243,607**
Total Water Expenses			**$5,482,387**	**$5,564,794**	**$6,276,646**	**$6,525,387**	**$6,813,700**	**$7,115,048**	**$7,430,033**

Table 5
City of Arcata
Water COS Rate Study Draft 09.24.25

Non-Rate Revenue Projections

Escalation Factor	Allocation Category	Factor	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
No Escalation		None				0.0%	0.0%	0.0%	0.0%
General		General				3.5%	3.5%	3.5%	3.5%
Interest Rate		Interest				2.0%	2.0%	2.0%	2.0%
Fund 661 - Water Enterprise									
			Actual	*Estimated*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Investment Earnings[1]	Interest	Interest	$474,907	$339,035	$183,584	$138,702	$154,910	$181,774	$182,544
Water Service - Jacoby Creek	Administration	None	3,839	2,009	3,800	3,800	3,800	3,800	3,800
Non Payment Penalty	Administration	None	58,060	68,234	65,000	65,000	65,000	65,000	65,000
Change of Service Charges	Administration	None	61,303	63,253	65,000	65,000	65,000	65,000	65,000
Connection Fees	Capital	None	177,238	150,765	680,000	100,000	100,000	100,000	100,000
Double-check Valve	Administration	None	36,496	42,574	35,000	35,000	35,000	35,000	35,000
Private Fire Protection	Administration	None	31,048	31,916	35,000	35,000	35,000	35,000	35,000
Reimbursement Revenue	Administration	None	719	0	0	0	0	0	0
Operating Transfers	Administration	General	($100,000)	$969,750	($110,000)	($113,850)	($117,835)	($121,959)	($126,228)
Total NonRate Water Revenues			**$743,610**	**$1,667,536**	**$957,384**	**$328,652**	**$340,875**	**$363,615**	**$360,116**

1, Projected based on 2% earnings on fund balance.

Table 6
City of Arcata
Water COS Rate Study Draft 09.24.25

Capital Improvement Plan

Capital Improvement Projects (Current $)	**2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**
	Actual	*Estimated*	*Budgeted*	*Projected*	*Projected*	*Projected*	*Projected*
Citywide Steel waterline replacement	$0	$0	$10,089,000	$0	$0	$7,500,000	$7,500,000
Plunkett Waterline Improvements	0	0	1,441,000	0	0	0	0
Water Meters & Registers	0	0	0	0	0	0	0
Tank 4 Rehabilitation	0	0	210,000	400,000	0	0	0
Tank 1D in Zone 1	0	0	0	0	0	2,500,000	2,500,000
Tank Rehab	0	0	0	0	0	0	0
Alliance Intertie Electrical System Replacement	0	0	200,000	0	0	0	0
Booster Pump Station	0	0	0	0	0	0	0
Ongoing Capital Maintenance	0	0	150,000	150,000	150,000	150,000	150,000
Other	$40,777	$1,266,134	$0	$0	$0	$0	$0
Total Project Cost (Current $)	**$40,777**	**$1,266,134**	**$12,090,000**	**$550,000**	**$150,000**	**$10,150,000**	**$10,150,000**

Capital Improvement Projects (Inflation $)	**2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**
	Actual	*Estimated*	*Budgeted*	*Projected*	*Projected*	*Projected*	*Projected*
Citywide Steel waterline replacement	$0	$0	$10,089,000	$0	$0	$8,400,000	$8,700,000
Plunkett Waterline Improvements	0	0	1,441,000	0	0	0	0
Water Meters & Registers	0	0	0	0	0	0	0
Tank 4 Rehabilitation	0	0	210,000	416,000	0	0	0
Tank 1D in Zone 1	0	0	0	0	0	2,800,000	2,900,000
Tank Rehab	0	0	0	0	0	0	0
Alliance Intertie Electrical System Replacement	0	0	200,000	0	0	0	0
Booster Pump Station	0	0	0	0	0	0	0
Ongoing Capital Maintenance	0	0	150,000	156,000	162,000	168,000	174,000
Other	$40,777	$1,266,134	$0	$0	$0	$0	$0
Total Project Cost (Inflation $)	**$40,777**	**$1,266,134**	**$12,090,000**	**$572,000**	**$162,000**	**$11,368,000**	**$11,774,000**

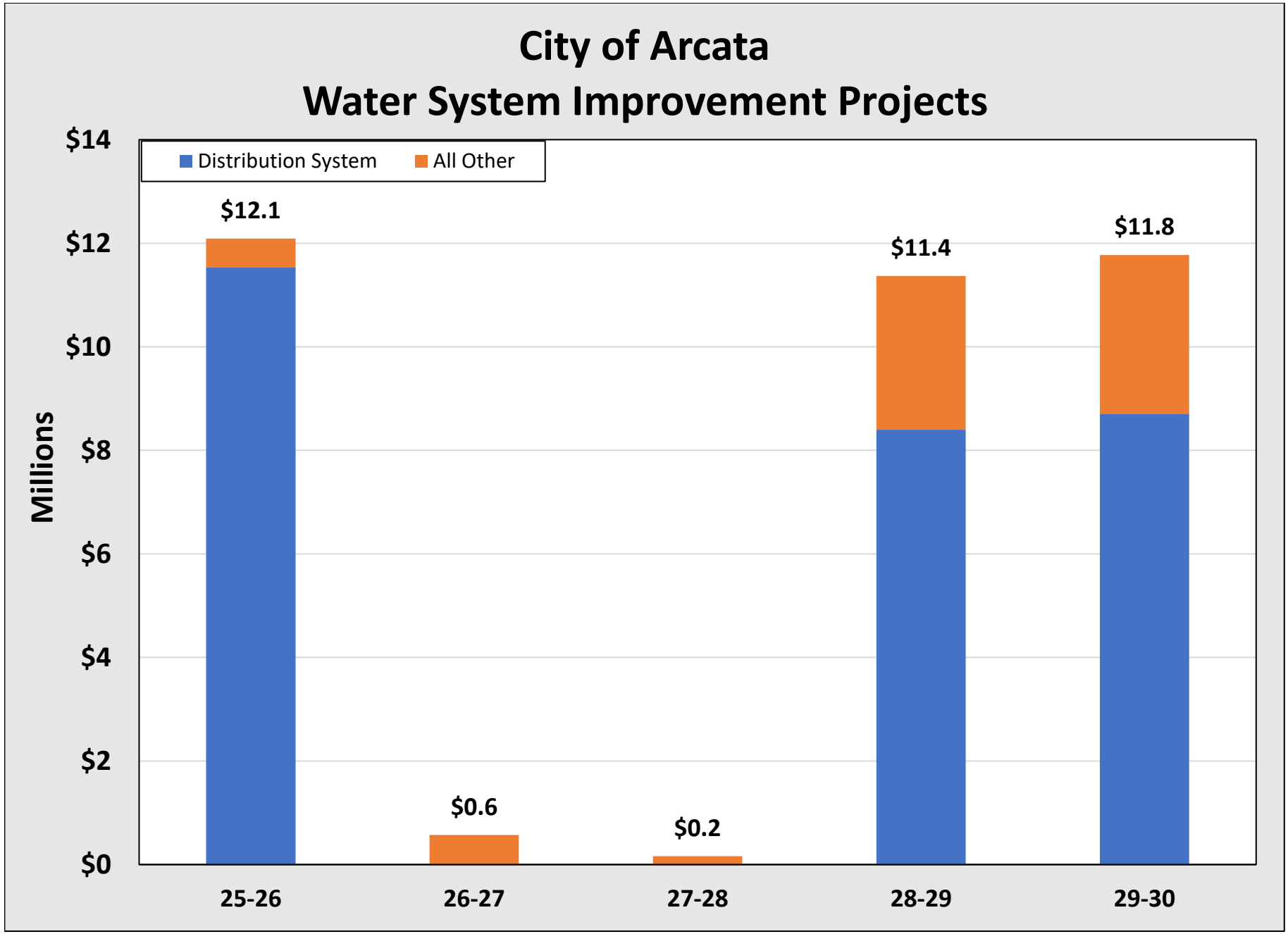

City of Arcata
Water System Improvement Projects
Distribution System
All Other
Millions
$14
$12
$10
$8
$6
$4
$2
$0
$12.1
$0.6
$0.2
$11.4
$11.8
25-26
26-27
27-28
28-29
29-30

Table 7
City of Arcata
Water COS Rate Study Draft 09.24.25

Capital Funding Sources

Capital Improvement Projects	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
	Actual	*Estimated*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Total Project Cost (Inflation $)	$40,777	$1,266,134	$12,090,000	$572,000	$162,000	$11,368,000	$11,774,000
Capital Funding	$40,777	$1,266,134	$12,090,000	$572,000	$162,000	$11,368,000	$11,774,000
Grants	$0	$0	$0	$0	$0	$0	$0
Use of New Debt Proceeds	**0**	**0**	**9,100,000**	**400,000**	**0**	**10,000,000**	**10,000,000**
Cash Funded	$40,777	$1,266,134	$2,990,000	$172,000	$162,000	$1,368,000	$1,774,000

Debt Service

Total Debt Service	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
	Actual	*Estimated*	*Budgeted*	*Projected*	*Projected*	*Projected*	*Projected*
2015 Bond	$138,356	$138,804	$139,089	$138,562	$138,551	$139,028	$138,666
Interfund Loan[1]	0	0	99,167	0	0	0	0
New Debt[2]	$0	$0	$261,250	$670,853	$670,853	$1,369,227	$2,067,602
Total Debt Service	**$138,356**	**$138,804**	**$499,506**	**$809,415**	**$809,404**	**$1,508,255**	**$2,206,268**

Proposed Borrowing					
Net Proceeds Needed	$9,500,000			$20,000,000	
Repayment Term (yrs)	30			30	
Interest Rate	5.50%			5.50%	
Issuance Costs	$250,000			$300,000	
Total Debt Issue Size	$9,750,000			$20,300,000	
Prorated Debt Service Payment - Current Yr. Only	$261,250			$698,375	
Annual Debt Service Payment (rounded)	$670,853			$1,396,749	
Total Proposed Annual Water Debt Service	**$261,250**	**$670,853**	**$670,853**	**$1,369,227**	**$2,067,602**

1 - Interfund loan provided for Steel Water Line Replacement Project from Fund 662 Wastewater.

2 - Includes interfund loan refinancing.

Table 8
City of Arcata
Water COS Rate Study Draft 09.24.25

Cash Flow

Fiscal Year	2025-26	2026-27	2027-28	2028-29	2029-30
Proposed Revenue Increase	*44.0%*	*0.0%*	*10.0%*	*10.0%*	*8.0%*
Growth	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Beginning Reserve Balance	**$9,179,175**	**$6,935,088**	**$7,745,508**	**$9,088,705**	**$9,127,187**
REVENUES					
Rate Revenues					
Current Rate Revenue	$5,547,618	$7,988,570	$7,988,570	$8,787,426	$9,666,169
Revenue from Rate Increases	*2,440,952*	*0*	*798,857*	*878,743*	*773,294*
Timing adjustment [1]	*($1,423,889)*				
Total Rate Revenues	$6,564,681	$7,988,570	$8,787,426	$9,666,169	$10,439,463
Non-Rate Revenues					
Connection Fees	$680,000	$100,000	$100,000	$100,000	$100,000
Other Revenues	93,800	89,950	85,965	81,841	77,572
Interest on Pooled Cash [2]	$183,584	$138,702	$154,910	$181,774	$182,544
Total Non-Rate Revenues	$957,384	$328,652	$340,875	$363,615	$360,116
Total Revenue	**$7,522,064**	**$8,317,221**	**$9,128,302**	**$10,029,784**	**$10,799,579**
EXPENDITURES					
Total O&M	$6,276,646	$6,525,387	$6,813,700	$7,115,048	$7,430,033
Existing Debt Service	139,089	138,562	138,551	139,028	138,666
New Debt Service	261,250	670,853	670,853	1,369,227	2,067,602
Interfund Loan	99,167	0	0	0	0
Rate Funded Capital	$2,990,000	$172,000	$162,000	$1,368,000	$1,774,000
Total Expenditures	**$9,766,152**	**$7,506,802**	**$7,785,104**	**$9,991,303**	**$11,410,301**
Net Revenue	**($2,244,087)**	**$810,420**	**$1,343,198**	**$38,481**	**($610,722)**
Ending Fund Balance	**$6,935,088**	**$7,745,508**	**$9,088,705**	**$9,127,187**	**$8,516,465**
Debt Service Coverage	*2.49*	*2.21*	*2.86*	*1.93*	*1.53*

1, Reflects rates effective February 1, 2026, and July 1 each year thereafter.

2, 2% earnings on fund balance.

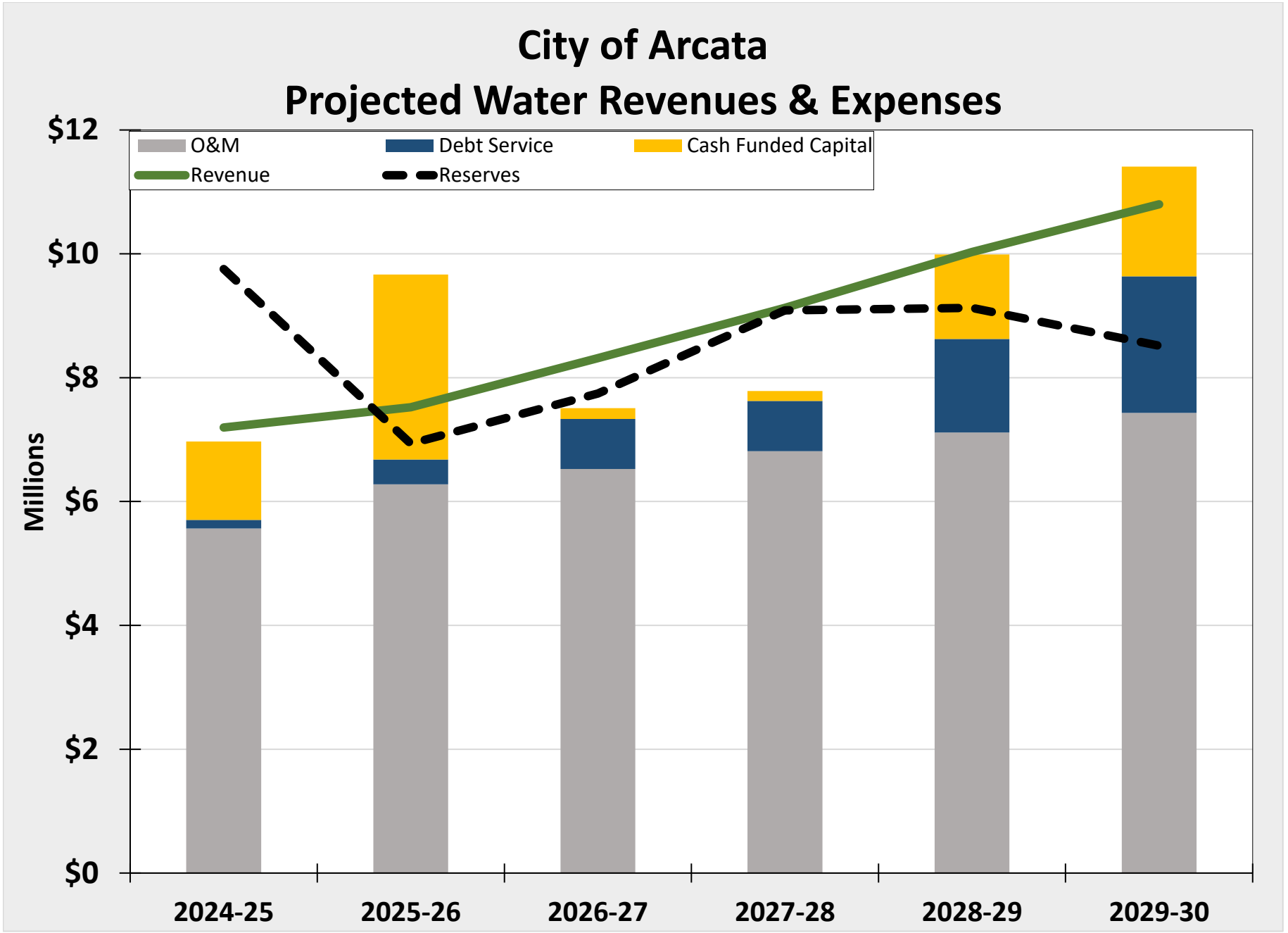

City of Arcata
Projected Water Revenues & Expenses
O&M
Debt Service
Cash Funded Capital
Revenue
Reserves
Millions
$12
$10
$8
$6
$4
$2
$0
2024-25
2025-26
2026-27
2027-28
2028-29
2029-30

Table 9
City of Arcata
Water COS Rate Study Draft 09.24.25

Functional Allocation

Allocation Category	5-Year Average Expenses	Less Non-Rate Revenue	Revenue Requirement	Capacity	All Volume	As All Other	Total
Administration	$4,258,016	$85,826	$4,172,190	40%	60%		100%
Maintenance	434,812	0	434,812	25%	75%		100%
Utilities	92,077	0	92,077	10%	90%		100%
Water Purchases	1,925,476	0	1,925,476	0%	100%		100%
Water Treatment	121,781	0	121,781	0%	100%		100%
Interest	0	168,303	(168,303)	0%	0%	100%	100%
Debt Service	1,103,134	0	1,103,134	15%	85%		100%
Capital	1,293,200	216,000	1,077,200	15%	85%		100%
Functional Allocation $				$2,113,837	$6,812,834	n/a	$8,926,671
Functional Allocation %				23.68%	76.32%	n/a	100.00%
Revenue Requirement				**$1,313,677**	**$4,233,941**		**$5,547,618**

Table 10
City of Arcata
Water COS Rate Study Draft 09.24.25

Rate Derivation

Allocation Units	**Capacity**	**All Volume**
Unit of Measure	*EDU*	*CCF*
Allocation Units	104,820	590,000
Revenue Requirement	$1,313,677	$4,233,941
Unit Cost ($/Unit)	**$12.53**	**$7.18**

Meter Size	**AWWA Capacity Ratio**	**Monthly Fixed Charge**
5/8"	1.00	**$12.53**
3/4"	1.00	**$12.53**
1"	1.67	**$20.93**
1 1/2"	3.33	**$41.73**
2"	5.33	**$66.80**
3"	10.00	**$125.33**
4"	16.67	**$208.92**
6"	33.33	**$417.72**
8"	53.33	**$668.37**
10"	76.67	**$960.88**

Table 11
City of Arcata
Water COS Rate Study Draft 09.24.25

Proposed Rates

Volumetric Rates ($/hcf)	2025/26	2/1/2026	7/1/2027	7/1/2028	7/1/2029	7/1/2030
	Current	*Proposed*	*Proposed*	*Proposed*	*Proposed*	*Proposed*
All Usage	$7.15	$10.33	$10.33	$11.37	$12.50	$13.50

Monthly Fixed Charges	2025/26	2/1/2026	7/1/2027	7/1/2028	7/1/2029	7/1/2030
	Current	*Proposed*	*Proposed*	*Proposed*	*Proposed*	*Proposed*
Meter Size						
5/8" and 3/4"	$12.23	$18.05	$18.05	$19.85	$21.84	$23.58
1"	$20.43	$30.14	$30.14	$33.15	$36.47	$39.39
1 1/2"	$40.73	$60.10	$60.10	$66.11	$72.72	$78.53
2"	$65.19	$96.19	$96.19	$105.81	$116.39	$125.70
3"	$122.31	$180.47	$180.47	$198.52	$218.37	$235.84
4"	$203.89	$300.85	$300.85	$330.93	$364.02	$393.14
6"	$407.65	$601.51	$601.51	$661.66	$727.83	$786.05
8"	$652.27	$962.45	$962.45	$1,058.70	$1,164.57	$1,257.73
10"	$937.74	$1,383.67	$1,383.67	$1,522.04	$1,674.24	$1,808.18

City of Arcata
Water COS Rate Study
(Phased-In)
Draft 09.24.25

Preliminary Draft Tables

BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

Table 1
City of Arcata
Water COS Rate Study (Phased-In) - Draft 09.24.25

Historical Rates

Volume Charges ($/hcf)	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
All Usage	$6.74	$6.84	$6.94	$7.05	$7.15	$7.15
Monthly Fixed Charges ($/meter) [1]						
Meter Size						
5/8" and 3/4"	$11.52	$11.70	$11.87	$12.05	$12.23	$12.23
1"	19.24	19.53	19.83	20.12	20.43	20.43
1 1/2"	38.37	38.95	39.53	40.13	40.73	40.73
2"	61.42	62.34	63.28	64.23	65.19	65.19
3"	115.24	116.97	118.72	120.50	122.31	122.31
4"	192.10	194.98	197.91	200.87	203.89	203.89
6"	384.08	389.85	395.69	401.63	407.65	407.65
8"	614.56	623.78	633.13	642.63	652.27	652.27
10"	883.52	896.77	910.22	923.88	937.74	937.74

1, Fixed monthly charges for customers located outside of city limits subject to 1.5x cost factor.

Table 2
City of Arcata
Water COS Rate Study (Phased-In) - Draft 09.24.25

Customer Characteristics

Meter Size	Total Meters	AWWA Capacity Factor	Equivalent Demand Units (EDUs)	Annual EDUs
5/8"	5,540	1.00	5,540	66,480
3/4"	429	1.00	429	5,148
1"	359	1.67	600	7,194
1 1/2"	71	3.33	236	2,837
2"	192	5.33	1,023	12,280
3"	31	10.00	310	3,720
4"	8	16.67	133	1,600
6"	10	33.33	333	4,000
8"	1	53.33	53	640
10"	1	76.67	77	920
Totals	**6,642**		**8,735**	**104,820**

Table 3
City of Arcata
Water COS Rate Study (Phased-In) - Draft 09.24.25

Demand

Annual Consumption	2022-2023	2023-2024	2024-2025	2025-2026[1]
	Actual	*Actual*	*Actual*	*Projected*
Total Water Use (hcf)	620,540	596,621	606,996	590,000

1, Projected based on average annual consumption history.

Table 4
City of Arcata
Water COS Rate Study (Phased-In) - Draft 09.24.25

O&M Expense Projections

Escalation Factor	Allocation Category	Factor	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
No Escalation		None				0.0%	0.0%	0.0%	0.0%
General		General				4.0%	4.0%	4.0%	4.0%
Water Purchases		Water				5.5%	5.5%	5.5%	5.5%
Personnel		Personnel				3.5%	3.5%	3.5%	3.5%
			Actual	*Estimated*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
63 - Water System Maintenance									
Regular Salaries	Administration	General	$427,420	$515,635	$529,163	$550,330	$572,343	$595,236	$619,046
Overtime Wages	Administration	General	6,728	9,403	10,000	10,400	10,816	11,249	11,699
Part-time & Temporary Salaries	Administration	General	17,540	17,959	25,000	26,000	27,040	28,122	29,246
Other Employee Benefits	Administration	General	440,908	307,085	350,000	364,000	378,560	393,702	409,450
Training & Conferences	Administration	General	6,402	3,968	9,000	9,360	9,734	10,124	10,529
Clothing & Personal Expenses	Administration	General	1,950	603	2,000	2,080	2,163	2,250	2,340
Memberships & Dues	Administration	General	1,041	4,806	20,000	20,800	21,632	22,497	23,397
Other Professional Services	Maintenance	General	15,781	6,938	20,000	20,800	21,632	22,497	23,397
Insurance	Administration	General	192,661	251,078	305,000	317,200	329,888	343,084	356,807
Janitorial & Household Supplies	Administration	General	403	311	700	728	757	787	819
Cement Gravel Sand & Asphalt	Maintenance	General	40,951	25,882	80,000	55,000	57,200	59,488	61,868
Pipes Valves & Fittings	Maintenance	General	143,377	108,317	95,000	98,800	102,752	106,862	111,137
Other Department Supplies	Administration	General	7,514	7,423	9,000	9,360	9,734	10,124	10,529
Small Tools	Maintenance	General	5,976	7,400	7,500	7,800	8,112	8,436	8,774
Equipment Maintenance	Maintenance	General	19,459	(432)	20,000	20,800	21,632	22,497	23,397
Central Garage Charges	Administration	General	109,436	146,136	125,897	130,933	136,170	141,617	147,282
Equipment Rental	Maintenance	General	780	0	1,000	1,040	1,082	1,125	1,170
IT Services & Maintenance	Administration	General	22,432	13,649	21,622	22,487	23,386	24,322	25,295
Overhead	Administration	General	243,492	255,970	265,200	275,808	286,840	298,314	310,246
Tech Subscription Interest	Administration	General	248	0	0	0	0	0	0
AmortizeTech Subscript Lial	Administration	General	($1,173)	$0	$0	$0	$0	$0	$0
Subtotal			**$1,703,328**	**$1,682,132**	**$1,896,082**	**$1,943,725**	**$2,021,474**	**$2,102,333**	**$2,186,427**

Table 4
City of Arcata
Water COS Rate Study (Phased-In) - Draft 09.24.25

O&M Expense Projections

Escalation Factor	Allocation Category	Factor	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
No Escalation		None				0.0%	0.0%	0.0%	0.0%
General		General				4.0%	4.0%	4.0%	4.0%
Water Purchases		Water				5.5%	5.5%	5.5%	5.5%
Personnel		Personnel				3.5%	3.5%	3.5%	3.5%
			Actual	*Estimated*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
64 - Water Treatment & Distribution									
Regular Salaries	Administration	General	$517,466	$581,448	$617,154	$641,840	$667,514	$694,214	$721,983
Overtime Wages	Administration	General	9,084	13,569	15,000	15,600	16,224	16,873	17,548
Part-time & Temporary Salaries	Administration	General	27,592	22,058	26,000	27,040	28,122	29,246	30,416
Other Employee Benefits	Administration	General	322,620	344,133	400,000	416,000	432,640	449,946	467,943
Utilities	Utilities	General	85,338	82,742	85,000	88,400	91,936	95,613	99,438
Training & Conferences	Administration	General	8,418	12,545	10,470	10,889	11,324	11,777	12,248
Clothing & Personal Expenses	Administration	General	8,594	7,855	9,650	10,036	10,437	10,855	11,289
Memberships & Dues	Administration	General	11,022	11,919	16,740	17,410	18,106	18,830	19,583
Lab Testing & Analysis	Water Treatmen	General	4,390	2,627	6,000	6,240	6,490	6,749	7,019
Other Professional Services	Water Treatmen	General	139,544	33,261	73,770	76,721	79,790	82,981	86,300
Other Planning Services	Water Treatmen	General	0	0	0	0	0	0	0
Taxes & Other Fees	Administration	General	26,404	32,658	33,750	35,100	36,504	37,964	39,483
Insurance	Administration	General	169,724	218,836	270,000	280,800	292,032	303,713	315,862
Haz Mat Response Team	Water Treatmen	General	2,350	2,709	3,400	3,536	3,677	3,825	3,978
Postage	Administration	General	15,343	20,869	21,000	21,840	22,714	23,622	24,567
Photocopy	Administration	General	0	0	50	52	54	56	58
Office Supplies	Administration	General	1,359	1,606	2,000	2,080	2,163	2,250	2,340
Bank Service Charges	Administration	General	61,894	63,048	68,000	70,720	73,549	76,491	79,550
Chemicals & Lab Supplies	Water Treatmen	General	7,340	21,315	25,000	26,000	27,040	28,122	29,246
Janitorial & Household Supplies	Administration	General	1,021	1,052	1,000	1,040	1,082	1,125	1,170
Purchase Of Water	Water Purchases	Water	1,580,080	1,604,848	1,725,000	1,819,875	1,919,968	2,025,566	2,136,973
Other Department Supplies	Administration	General	5,610	4,074	6,000	6,240	6,490	6,749	7,019
Small Tools	Water Treatmen	General	5,996	3,711	4,000	4,160	4,326	4,499	4,679
Fuels & Lubricants	Water Treatmen	General	0	0	250	260	270	281	292
Equipment Maintenance	Maintenance	General	62,223	45,867	75,000	78,000	81,120	84,365	87,739
Building/Grounds Maintenance	Maintenance	General	67,460	80,667	125,000	130,000	135,200	140,608	146,232
Central Garage Charges	Administration	General	38,276	28,622	69,262	72,032	74,914	77,910	81,027
IT Services & Maintenance	Administration	General	31,759	43,355	73,268	76,199	79,247	82,417	85,713
Overhead	Administration	General	$568,152	$597,270	$618,800	$643,552	$669,294	$696,066	$723,908
Subtotal			**$3,779,059**	**$3,882,663**	**$4,380,564**	**$4,581,662**	**$4,792,226**	**$5,012,715**	**$5,243,607**
Total Water Expenses			**$5,482,387**	**$5,564,794**	**$6,276,646**	**$6,525,387**	**$6,813,700**	**$7,115,048**	**$7,430,033**

Table 5
City of Arcata
Water COS Rate Study (Phased-In) - Draft 09.24.25

Non-Rate Revenue Projections

Escalation Factor	Allocation Category	Factor	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
No Escalation		None				0.0%	0.0%	0.0%	0.0%
General		General				3.5%	3.5%	3.5%	3.5%
Interest Rate		Interest				2.0%	2.0%	2.0%	2.0%
Fund 661 - Water Enterprise									
			Actual	*Estimated*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Investment Earnings[1]	Interest	Interest	$474,907	$339,035	$183,584	$128,993	$133,990	$155,386	$151,683
Water Service - Jacoby Creek	Administration	None	3,839	2,009	3,800	3,800	3,800	3,800	3,800
Non Payment Penalty	Administration	None	58,060	68,234	65,000	65,000	65,000	65,000	65,000
Change of Service Charges	Administration	None	61,303	63,253	65,000	65,000	65,000	65,000	65,000
Connection Fees	Capital	None	177,238	150,765	680,000	100,000	100,000	100,000	100,000
Double-check Valve	Administration	None	36,496	42,574	35,000	35,000	35,000	35,000	35,000
Private Fire Protection	Administration	None	31,048	31,916	35,000	35,000	35,000	35,000	35,000
Reimbursement Revenue	Administration	None	719	0	0	0	0	0	0
Operating Transfers	Administration	General	($100,000)	$969,750	($110,000)	($113,850)	($117,835)	($121,959)	($126,228)
Total NonRate Water Revenues			**$743,610**	**$1,667,536**	**$957,384**	**$318,943**	**$319,955**	**$337,227**	**$329,255**

1, Projected based on 2% earnings on fund balance.

Table 6
City of Arcata
Water COS Rate Study (Phased-In) - Draft 09.24.25

Capital Improvement Plan

Capital Improvement Projects (Current $)	**2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**
	Actual	*Estimated*	*Budgeted*	*Projected*	*Projected*	*Projected*	*Projected*
Citywide Steel waterline replacement	$0	$0	$10,089,000	$0	$0	$7,500,000	$7,500,000
Plunkett Waterline Improvements	0	0	1,441,000	0	0	0	0
Water Meters & Registers	0	0	0	0	0	0	0
Tank 4 Rehabilitation	0	0	210,000	400,000	0	0	0
Tank 1D in Zone 1	0	0	0	0	0	2,500,000	2,500,000
Tank Rehab	0	0	0	0	0	0	0
Alliance Intertie Electrical System Replacement	0	0	200,000	0	0	0	0
Booster Pump Station	0	0	0	0	0	0	0
Ongoing Capital Maintenance	0	0	150,000	150,000	150,000	150,000	150,000
Other	$40,777	$1,266,134	$0	$0	$0	$0	$0
Total Project Cost (Current $)	**$40,777**	**$1,266,134**	**$12,090,000**	**$550,000**	**$150,000**	**$10,150,000**	**$10,150,000**
Capital Improvement Projects (Inflation $)	**2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**
	Actual	*Estimated*	*Budgeted*	*Projected*	*Projected*	*Projected*	*Projected*
Citywide Steel waterline replacement	$0	$0	$10,089,000	$0	$0	$8,400,000	$8,700,000
Plunkett Waterline Improvements	0	0	1,441,000	0	0	0	0
Water Meters & Registers	0	0	0	0	0	0	0
Tank 4 Rehabilitation	0	0	210,000	416,000	0	0	0
Tank 1D in Zone 1	0	0	0	0	0	2,800,000	2,900,000
Tank Rehab	0	0	0	0	0	0	0
Alliance Intertie Electrical System Replacement	0	0	200,000	0	0	0	0
Booster Pump Station	0	0	0	0	0	0	0
Ongoing Capital Maintenance	0	0	150,000	156,000	162,000	168,000	174,000
Other	$40,777	$1,266,134	$0	$0	$0	$0	$0
Total Project Cost (Inflation $)	**$40,777**	**$1,266,134**	**$12,090,000**	**$572,000**	**$162,000**	**$11,368,000**	**$11,774,000**

City of Arcata
Water System Improvement Projects

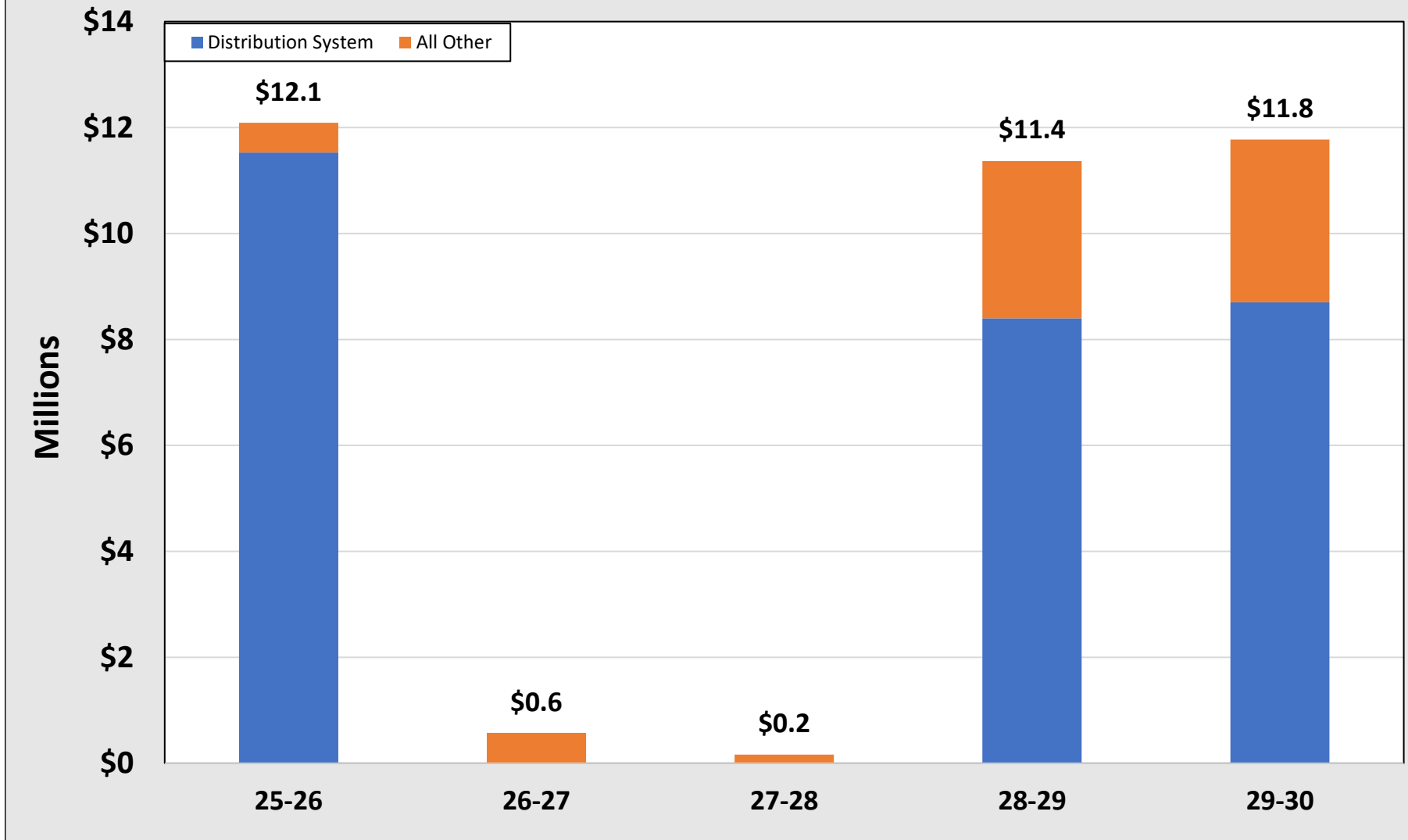


Table 7
City of Arcata
Water COS Rate Study (Phased-In) - Draft 09.24.25

Capital Funding Sources

Capital Improvement Projects	**2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**
	Actual	*Estimated*	*Budgeted*	*Projected*	*Projected*	*Projected*	*Projected*
Total Project Cost (Inflation $)	$40,777	$1,266,134	$12,090,000	$572,000	$162,000	$11,368,000	$11,774,000
Capital Funding	$40,777	$1,266,134	$12,090,000	$572,000	$162,000	$11,368,000	$11,774,000
Grants	$0	$0	$0	$0	$0	$0	$0
Use of New Debt Proceeds	**0**	**0**	**9,100,000**	**400,000**	**0**	**10,000,000**	**10,000,000**
Cash Funded	$40,777	$1,266,134	$2,990,000	$172,000	$162,000	$1,368,000	$1,774,000

Debt Service

Total Debt Service	**2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**
	Actual	*Estimated*	*Budgeted*	*Projected*	*Projected*	*Projected*	*Projected*
2015 Bond	$138,356	$138,804	$139,089	$138,562	$138,551	$139,028	$138,666
Interfund Loan[1]	0	0	99,167	0	0	0	0
New Debt[2]	$0	$0	$261,250	$670,853	$670,853	$1,369,227	$2,067,602
Total Debt Service	**$138,356**	**$138,804**	**$499,506**	**$809,415**	**$809,404**	**$1,508,255**	**$2,206,268**

Proposed Borrowing						
Net Proceeds Needed	$9,500,000			$20,000,000		
Repayment Term (yrs)	30			30		
Interest Rate	5.50%			5.50%		
Issuance Costs	$250,000			$300,000		
Total Debt Issue Size	$9,750,000			$20,300,000		
Prorated Debt Service Payment - Current Yr. Only	$261,250			$698,375		
Annual Debt Service Payment (rounded)	$670,853			$1,396,749		
Total Proposed Annual Water Debt Service	**$261,250**	**$670,853**	**$670,853**	**$1,369,227**	**$2,067,602**	

1 - Interfund loan provided for Steel Water Line Replacement Project from Fund 662 Wastewater.

2 - Includes interfund loan refinancing.

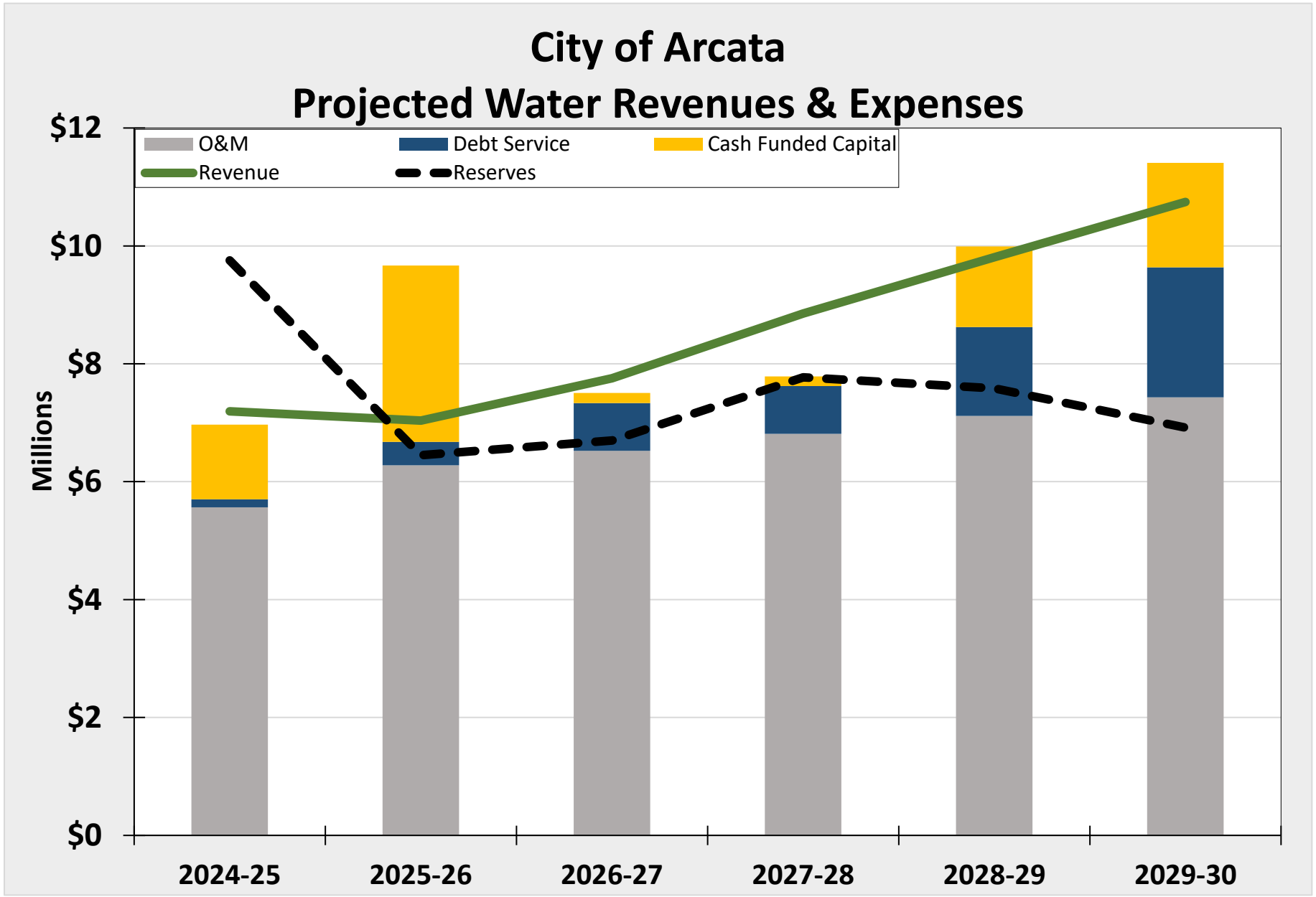
Table 8
City of Arcata
Water COS Rate Study (Phased-In) - Draft 09.24.25

Cash Flow

Fiscal Year	2025-26	2026-27	2027-28	2028-29	2029-30
Proposed Revenue Increase	*23.0%*	*18.0%*	*12.0%*	*10.0%*	*10.0%*
Growth	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Beginning Reserve Balance	**$9,179,175**	**$6,449,671**	**$6,699,504**	**$7,769,277**	**$7,584,132**
REVENUES					
Rate Revenues					
Current Rate Revenue	$5,547,618	$6,823,570	$8,051,812	$9,018,030	$9,919,833
Revenue from Rate Increases	*1,275,952*	*1,228,243*	*966,217*	*901,803*	*991,983*
Timing adjustment [1]	*($744,305)*	*($614,121)*	*($483,109)*	*($450,901)*	*($495,992)*
Total Rate Revenues	$6,079,264	$7,437,691	$8,534,921	$9,468,931	$10,415,824
Non-Rate Revenues					
Connection Fees	$680,000	$100,000	$100,000	$100,000	$100,000
Other Revenues	93,800	89,950	85,965	81,841	77,572
Interest on Pooled Cash [2]	$183,584	$128,993	$133,990	$155,386	$151,683
Total Non-Rate Revenues	$957,384	$318,943	$319,955	$337,227	$329,255
Total Revenue	**$7,036,648**	**$7,756,635**	**$8,854,876**	**$9,806,158**	**$10,745,080**
EXPENDITURES					
Total O&M	$6,276,646	$6,525,387	$6,813,700	$7,115,048	$7,430,033
Existing Debt Service	139,089	138,562	138,551	139,028	138,666
New Debt Service	261,250	670,853	670,853	1,369,227	2,067,602
Interfund Loan	99,167	0	0	0	0
Rate Funded Capital	$2,990,000	$172,000	$162,000	$1,368,000	$1,774,000
Total Expenditures	**$9,766,152**	**$7,506,802**	**$7,785,104**	**$9,991,303**	**$11,410,301**
Net Revenue	**($2,729,504)**	**$249,833**	**$1,069,772**	**($185,145)**	**($665,221)**
Ending Fund Balance	**$6,449,671**	**$6,699,504**	**$7,769,277**	**$7,584,132**	**$6,918,910**
Debt Service Coverage	*1.52*	*1.52*	*2.52*	*1.78*	*1.50*

1, Reflects rates effective February 1, 2026, and January 1 each year thereafter.

2, 2% earnings on fund balance.


City of Arcata
Projected Water Revenues & Expenses
O&M
Debt Service
Cash Funded Capital
Revenue
Reserves
Millions
$12
$10
$8
$6
$4
$2
$0
2024-25
2025-26
2026-27
2027-28
2028-29
2029-30

City of Arcata

Wastewater Rate Study - DRAFT 1.10.26

Preliminary Draft Tables

BARTLE WELLS ASSOCIATES

INDEPENDENT PUBLIC FINANCE ADVISORS

Table 9
City of Arcata
Water COS Rate Study (Phased-In) - Draft 09.24.25

Functional Allocation

Allocation Category	5-Year Average Expenses	Less Non-Rate Revenue	Revenue Requirement	Capacity	All Volume	As All Other	Total
Administration	$4,258,016	$85,826	$4,172,190	40%	60%		100%
Maintenance	434,812	0	434,812	25%	75%		100%
Utilities	92,077	0	92,077	10%	90%		100%
Water Purchases	1,925,476	0	1,925,476	0%	100%		100%
Water Treatment	121,781	0	121,781	0%	100%		100%
Interest	0	150,727	(150,727)	0%	0%	100%	100%
Debt Service	1,103,134	0	1,103,134	15%	85%		100%
Capital	1,293,200	216,000	1,077,200	15%	85%		100%
Functional Allocation $				$2,113,837	$6,812,834	n/a	$8,926,671
Functional Allocation %				23.68%	76.32%	n/a	100.00%
Revenue Requirement				**$1,313,677**	**$4,233,941**		**$5,547,618**

Table 10
City of Arcata
Water COS Rate Study (Phased-In) - Draft 09.24.25

Rate Derivation

Allocation Units	**Capacity**	**All Volume**
Unit of Measure	*EDU*	*CCF*
Allocation Units	104,820	590,000
Revenue Requirement	$1,313,677	$4,233,941
Unit Cost ($/Unit)	**$12.53**	**$7.18**

Meter Size	**AWWA Capacity Ratio**	**Monthly Fixed Charge**
5/8"	1.00	**$12.53**
3/4"	1.00	**$12.53**
1"	1.67	**$20.93**
1 1/2"	3.33	**$41.73**
2"	5.33	**$66.80**
3"	10.00	**$125.33**
4"	16.67	**$208.92**
6"	33.33	**$417.72**
8"	53.33	**$668.37**
10"	76.67	**$960.88**

Table 11
City of Arcata
Water COS Rate Study (Phased-In) - Draft 09.24.25

Proposed Rates

Volumetric Rates ($/hcf)	2025/26	2/1/2026	1/1/2027	1/1/2028	1/1/2029	1/1/2030
	Current	*Proposed*	*Proposed*	*Proposed*	*Proposed*	*Proposed*
All Usage	$7.15	$8.83	$10.42	$11.67	$12.83	$14.12

Monthly Fixed Charges	2025/26	2/1/2026	1/1/2027	1/1/2028	1/1/2029	1/1/2030
	Current	*Proposed*	*Proposed*	*Proposed*	*Proposed*	*Proposed*
Meter Size						
5/8" and 3/4"	$12.23	$15.42	$18.19	$20.37	$22.41	$24.65
1"	$20.43	$25.74	$30.38	$34.02	$37.42	$41.17
1 1/2"	$40.73	$51.33	$60.57	$67.84	$74.63	$82.09
2"	$65.19	$82.16	$96.95	$108.59	$119.45	$131.39
3"	$122.31	$154.15	$181.90	$203.73	$224.10	$246.51
4"	$203.89	$256.97	$303.23	$339.61	$373.58	$410.93
6"	$407.65	$513.79	$606.27	$679.03	$746.93	$821.62
8"	$652.27	$822.10	$970.07	$1,086.48	$1,195.13	$1,314.64
10"	$937.74	$1,181.89	$1,394.63	$1,561.98	$1,718.18	$1,890.00

Table 1
City of Arcata
Wastewater Rate Study - DRAFT 1.10.26

Current Rates

Fixed Monthly Base Rate ($/account)		2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Residential		$54.99	$60.49	$66.54	$71.86	$77.61	$77.61
Commercial		$57.43	$63.17	$69.49	$75.05	$81.05	$81.05
Volume Rates ($/hcf)	**Units[1]**						
Residential	4+ hcf	$8.04	$8.44	$9.73	$10.50	$11.34	$11.34
Commercial							
Low Strength	4+ hcf	$7.00	$7.70	$8.47	$9.15	$9.88	$9.88
Medium Strength	4+ hcf	$8.51	$9.36	$10.30	$11.12	$12.01	$12.01
High Strength	4+ hcf	$14.27	$15.70	$17.27	$18.65	$20.14	$20.14

1, One hudred cubic feet (HCF) = 748 gallons

Table 2
City of Arcata
Wastewater Rate Study - DRAFT 1.10.26

O&M Expense Projections

Escalation Factor	Allocation Category	Factor	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
No Escalation		None				0.0%	0.0%	0.0%	0.0%
General		General				4.0%	4.0%	4.0%	4.0%
Personnel		Personnel				3.5%	3.5%	3.5%	3.5%
65 - Wastewater Collection									
			Actual	*Estimated*	*Budget*	*Projected*	*Projected*	*Projected*	*Projected*
Regular Salaries	Collection	Personnel	$418,037	$481,388	$506,123	$523,837	$542,172	$561,148	$580,788
Overtime Wages	Collection	Personnel	6,525	14,161	13,500	13,973	14,462	14,968	15,492
Part-time & Temporary Salaries	Collection	Personnel	27,902	29,556	45,089	46,667	48,300	49,991	51,741
Other Employee Benefits	Collection	General	469,715	311,320	345,000	358,800	373,152	388,078	403,601
Training & Conferences	Collection	General	11,910	6,121	12,000	12,480	12,979	13,498	14,038
Clothing & Personal Expenses	Collection	General	2,011	2,489	6,000	6,240	6,490	6,749	7,019
Memberships & Dues	Collection	General	3,509	1,549	6,000	6,240	6,490	6,749	7,019
Other Technical Services	Collection	General	4,961	11,841	14,000	14,560	15,142	15,748	16,378
Other Professional Services	Collection	General	15,821	16,222	25,000	26,000	27,040	28,122	29,246
Insurance	Collection	General	183,487	236,580	303,000	315,120	327,725	340,834	354,467
Property Liability Expense	Collection	General	0	5,031	5,000	5,200	5,408	5,624	5,849
Cement Gravel Sand & Asphalt	Collection	General	24,860	16,012	25,000	26,000	27,040	28,122	29,246
Pipes Valves & Fittings	Collection	General	3,957	5,274	8,000	8,320	8,653	8,999	9,359
Other Department Supplies	Collection	General	4,600	9,612	10,000	10,400	10,816	11,249	11,699
Small Tools	Collection	General	2,333	1,996	4,500	4,680	4,867	5,062	5,264
Equipment Maintenance	Collection	General	21,559	27,665	35,000	36,400	37,856	39,370	40,945
Central Garage Charges	Collection	General	268,688	327,130	273,700	284,648	296,034	307,875	320,190
Equipment Rental	Collection	General	1,670	0	3,000	3,120	3,245	3,375	3,510
IT Services & Maintenance	Collection	General	19,696	36,034	60,202	62,610	65,114	67,719	70,428
Overhead	Collection	General	$364,040	$377,850	$384,090	$399,454	$415,432	$432,049	$449,331
Subtotal			**$1,855,282**	**$1,917,829**	**$2,084,204**	**$2,164,749**	**$2,248,416**	**$2,335,328**	**$2,425,611**

Table 2
City of Arcata
Wastewater Rate Study - DRAFT 1.10.26

O&M Expense Projections

Escalation Factor	Allocation Category	Factor	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
No Escalation		None				0.0%	0.0%	0.0%	0.0%
General		General				4.0%	4.0%	4.0%	4.0%
Personnel		Personnel				3.5%	3.5%	3.5%	3.5%
67 - Wastewater Treatment									
Regular Salaries	Treatment	Personnel	$676,432	$768,516	$805,051	$833,228	$862,391	$892,574	$923,815
Overtime Wages	Treatment	Personnel	9,228	13,250	15,000	15,525	16,068	16,631	17,213
Part-time & Temporary Salaries	Treatment	Personnel	102,046	92,465	110,000	113,850	117,835	121,959	126,228
Other Employee Benefits	Treatment	General	426,642	483,363	510,000	530,400	551,616	573,681	596,628
Utilities	Treatment	General	516,916	569,352	789,928	821,525	854,386	888,562	924,104
Training & Conferences	Treatment	General	13,081	15,039	18,000	18,720	19,469	20,248	21,057
Clothing & Personal Expenses	Treatment	General	13,516	11,491	14,995	15,595	16,219	16,867	17,542
Memberships & Dues	Treatment	General	17,072	18,039	20,000	20,800	21,632	22,497	23,397
Other Technical Services	Treatment	General	12,382	15,000	30,000	15,600	16,224	16,873	17,548
Engineering Services	Treatment	General	65,757	66,246	80,000	83,200	86,528	89,989	93,589
Lab Testing & Analysis	Treatment	General	105,715	104,368	119,538	124,320	129,292	134,464	139,843
Compost/Brush Chipping	Treatment	General	85,000	80,000	5,000	5,200	5,408	5,624	5,849
Other Professional Services	Treatment	General	72,870	99,680	175,000	182,000	189,280	196,851	204,725
Legal Consultations	Treatment	General	561	0	2,000	2,080	2,163	2,250	2,340
Other Consulting Services	Treatment	General	0	0	100,000	10,000	10,400	10,816	11,249
Taxes & Other Fees	Treatment	General	46,510	42,298	46,606	48,470	50,409	52,425	54,522
Insurance	Treatment	General	160,550	207,007	260,000	270,400	281,216	292,465	304,163
Insurance Deductibles	Treatment	General	0	6,188	0	0	0	0	0
Haz Mat Response Team	Treatment	General	2,400	2,400	2,400	2,496	2,596	2,700	2,808
Postage	Treatment	General	27,955	27,993	27,500	28,600	29,744	30,934	32,171
Photocopy	Treatment	General	2	0	100	104	108	112	117
Office Supplies	Treatment	General	2,276	2,922	3,000	3,120	3,245	3,375	3,510
Bank Service Charges	Treatment	General	63,589	63,740	68,000	70,720	73,549	76,491	79,550
Chemicals & Lab Supplies	Treatment	General	96,211	60,026	108,189	112,517	117,017	121,698	126,566
Janitorial & Household Supplie	Treatment	General	1,694	1,661	2,600	2,704	2,812	2,925	3,042
Other Department Supplies	Treatment	General	12,544	21,943	25,000	26,000	27,040	28,122	29,246
Small Tools	Treatment	General	13,939	4,690	5,000	5,200	5,408	5,624	5,849
Fuels & Lubricants	Treatment	General	1,796	0	500	520	541	562	585
Equipment Maintenance	Treatment	General	120,168	138,308	150,000	156,000	162,240	168,730	175,479
Building/Grounds Maintenance	Treatment	General	48,449	43,154	175,000	182,000	189,280	196,851	204,725
Central Garage Charges	Treatment	General	89,308	66,888	144,947	150,745	156,775	163,046	169,567
Equipment Rental	Treatment	General	1,229	0	2,000	2,080	2,163	2,250	2,340
IT Services & Maintenance	Treatment	General	32,712	78,229	144,497	150,277	156,288	162,539	169,041
Overhead	Treatment	General	493,052	516,810	526,720	547,789	569,700	592,488	616,188
Subtotal			**$3,331,599**	**$3,621,066**	**$4,486,571**	**$4,551,784**	**$4,729,042**	**$4,913,222**	**$5,104,595**
Total Wastewater Expenses			**$5,186,881**	**$5,538,896**	**$6,570,775**	**$6,716,532**	**$6,977,458**	**$7,248,550**	**$7,530,206**

Table 3
City of Arcata
Wastewater Rate Study - DRAFT 1.10.26

NonRate Revenue Projections

Escalation Factor	Allocation Category	Factor	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
No Escalation		None			0%	0%	0%	0%	0%
General		General			0%	3%	3%	3%	3%
Interest		Interest			2%	2%	2%	2%	2%
Growth		Growth			0%	0%	0%	0%	0%
Fund 662 - Wastewater Enterprise									
			Actual	*Estimated*	*Budgeted*	*Projected*	*Projected*	*Projected*	*Projected*
Investment Earnings	Administration	Interest	$328,685	$326,823	$291,083	$277,996	$378,510	$400,455	$344,426
Non Payment Penalty	Administration	None	60,601	83,541	50,000	50,000	50,000	50,000	50,000
Sewer Repair Fee	Capital	None	11,870	1,150	0	0	0	0	0
Connection Fees	Capital	None	190,726	233,112	750,000	100,000	100,000	100,000	100,000
FOG Pollution Prevention	Treatment	None	9,170	8,772	11,500	11,500	11,500	11,500	11,500
Pretreatment Permit Fee	Treatment	None	3,641	3,683	3,500	3,500	3,500	3,500	3,500
Other Sewer Revenue	Administration	None	132	60	200	200	200	200	200
Reimbursement Revenue	Capital	None	122,116	3,721	5,000	5,000	5,000	5,000	5,000
Donations	Administration	None	9,935	9,860	23,000	13,000	13,000	13,000	13,000
Interpretive Center Sales	Administration	None	17,473	19,724	18,000	18,000	18,000	18,000	18,000
Operating Transfers	Administration	None	(149,294)	(78,750)	(135,000)	(135,000)	(135,000)	(135,000)	(135,000)
Total NonRate Wastewater Revenues			**$605,055**	**$611,697**	**$1,017,283**	**$344,196**	**$444,710**	**$466,655**	**$410,626**

Table 4
City of Arcata
Wastewater Rate Study - DRAFT 1.10.26

Capital Improvement Plan

Capital Improvement Projects (Current $)	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	Totals
	Actual	*Estimated*	*Budgeted*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	
Pump Upgrades	$0	$0	$500,000	$500,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$500,000
Manhole Rehab/Sewer Collection System	0	0	0	175,000	0	175,000	0	175,000	0	175,000	0	175,000	0	875,000
Sewer Inflow & Infiltration Reduction (I&I)	0	0	0	5,000,000	10,000,000	0	0	0	5,000,000	10,000,000	0	0	15,000,000	45,000,000
WWTP Reconfiguration	26,188,243	17,391,383	11,500,000	0	0	0	0	0	0	0	0	0	0	0
Levee Project to protect WWTP	0	0	0	0	0	7,500,000	10,000,000	0	0	0	0	0	0	17,500,000
WWTP Reconfiguration Future Upgrades	0	0	0	0	750,000	750,000	750,000	750,000	500,000	0	0	0	0	3,500,000
WWTP Reconfiguration Construction	0	0	0	0	0	0	0	0	0	0	3,000,000	3,000,000	0	6,000,000
Other	$62,708	$464,932	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Project Cost (Current $)	**$26,250,951**	**$17,856,315**	**$12,000,000**	**$5,675,000**	**$10,750,000**	**$8,425,000**	**$10,750,000**	**$925,000**	**$5,500,000**	**$10,175,000**	**$3,000,000**	**$3,175,000**	**$15,000,000**	**$73,375,000**

Capital Improvement Projects (Inflation $)	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	Totals
	Actual	*Estimated*	*Budgeted*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	
Pump Upgrades	$0	$0	$500,000	$520,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$520,000
Manhole Rehab/Sewer Collection System	0	0	0	182,000	0	196,000	0	210,000	0	224,000	0	238,000	0	1,050,000
Sewer Inflow & Infiltration Reduction (I&I)	0	0	0	5,200,000	10,800,000	0	0	0	6,200,000	12,800,000	0	0	21,000,000	56,000,000
WWTP Reconfiguration	26,188,243	17,391,383	11,500,000	0	0	0	0	0	0	0	0	0	0	0
Levee Project to protect WWTP	0	0	0	0	0	8,400,000	11,600,000	0	0	0	0	0	0	20,000,000
WWTP Reconfiguration Future Upgrades	0	0	0	0	810,000	840,000	870,000	900,000	620,000	0	0	0	0	4,040,000
WWTP Reconfiguration Construction	0	0	0	0	0	0	0	0	0	0	3,960,000	4,080,000	0	8,040,000
Other	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Project Cost (Inflation $)	**$26,188,243**	**$17,391,383**	**$12,000,000**	**$5,902,000**	**$11,610,000**	**$9,436,000**	**$12,470,000**	**$1,110,000**	**$6,820,000**	**$13,024,000**	**$3,960,000**	**$4,318,000**	**$21,000,000**	**$89,650,000**

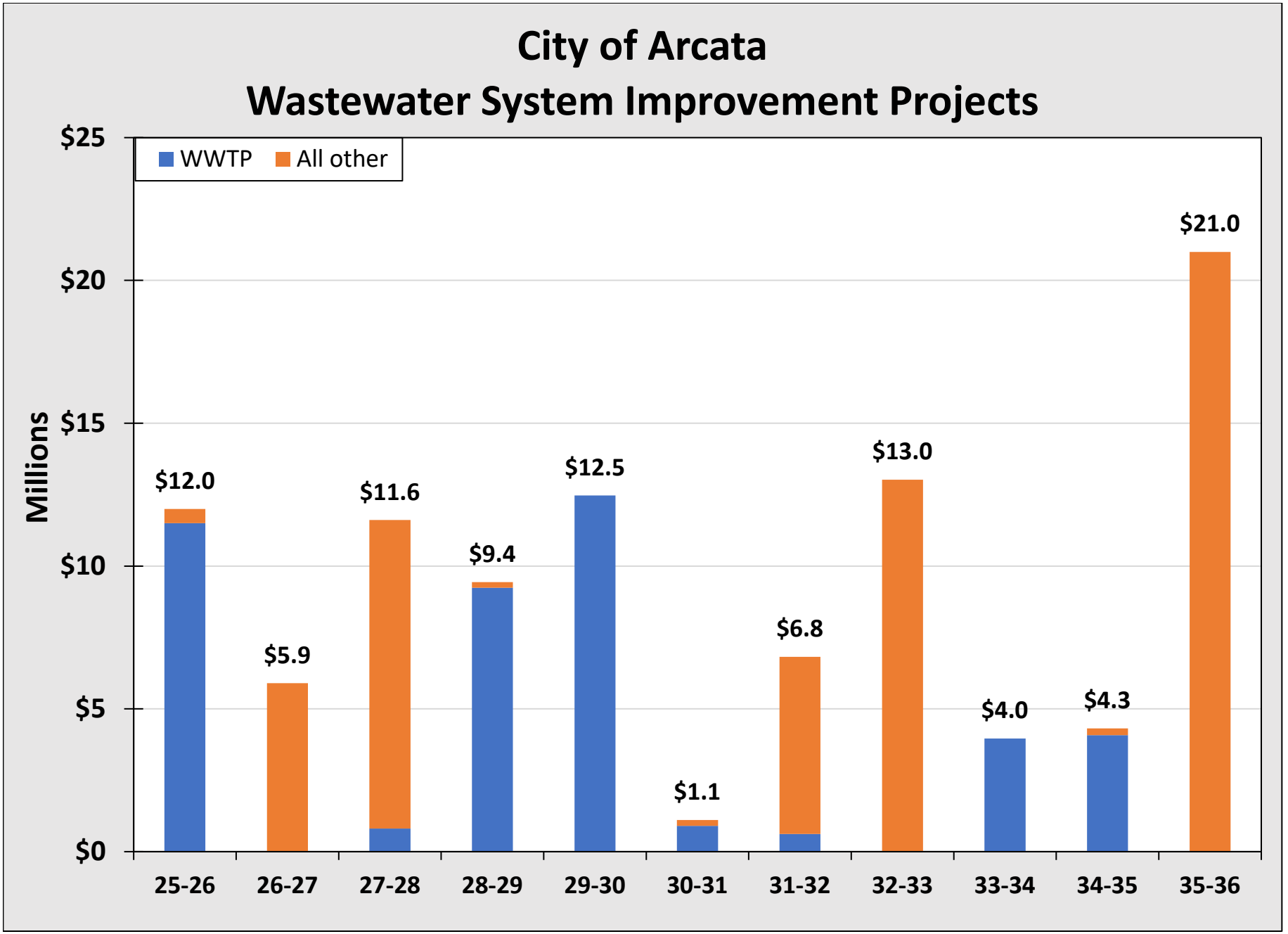

City of Arcata
Wastewater System Improvement Projects
WWTP
All other
Millions
$25
$20
$15
$10
$5
$0
$12.0
$5.9
$11.6
$9.4
$12.5
$1.1
$6.8
$13.0
$4.0
$4.3
$21.0
25-26
26-27
27-28
28-29
29-30
30-31
31-32
32-33
33-34
34-35
35-36

Table 5
City of Arcata
Wastewater Rate Study - DRAFT 1.10.26

Capital Funding Sources

Capital Improvement Project (CIP) Funding	**2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**2030-31**	**2031-32**	**2032-33**	**2033-34**	**2034-35**	**2035-36**
	Actual	*Estimated*	*Budgeted*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Total Projected CIP Costs	$26,188,243	$17,391,383	$12,000,000	$5,902,000	$11,610,000	$9,436,000	$12,470,000	$1,110,000	$6,820,000	$13,024,000	$3,960,000	$4,318,000	$21,000,000
Capital Funding													
Grants	$26,188,243	$13,638,137	$11,500,000	$5,000,000	$10,000,000	$0	$0	$0	$0	$0	$0	$0	$0
Use of New Debt Proceeds	0	0	0	0	0	4,000,000	4,000,000		6,000,000	13,000,000	3,000,000		20,000,000
Cash Funded	$0	$3,753,246	$500,000	$902,000	$1,610,000	$5,436,000	$8,470,000	$1,110,000	$820,000	$24,000	$960,000	$4,318,000	$1,000,000

Debt Service

Total Debt Service	**2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**2030-31**	**2031-32**	**2032-33**	**2033-34**	**2034-35**	**2035-36**
	Actual	*Actual*	*Budgeted*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
New Debt	0	0	0	0	0	285,542	571,085	571,085	1,339,985	2,108,885	2,108,885	2,108,885	2,808,980
Total Debt Service	**$0**	**$0**	**$0**	**$0**	**$0**	**$285,542**	**$571,085**	**$571,085**	**$1,339,985**	**$2,108,885**	**$2,108,885**	**$2,108,885**	**$2,808,980**
New Debt Assumptions													
Net Proceeds Needed						$8,000,000			$22,000,000				$20,000,000
Repayment Term (yrs)						30			30				30
Interest Rate						5.50%			5.50%				5.50%
Month of Issue						1			1				1
Issuance Costs						$300,000			$350,000				$350,000
Total Debt Issue Size						$8,300,000			$22,350,000				$20,350,000
Prorated Debt Service Payment - Current Yr. Only						$285,542			$768,900				$700,095
Annual Debt Service Payment (rounded)						$571,085			$1,537,800				$1,400,190
Total Proposed Annual Wastewater Debt Service	**$0**	**$0**	**$0**	**$285,542**	**$571,085**	**$571,085**	**$1,339,985**	**$2,108,885**	**$2,108,885**	**$2,108,885**	**$2,808,980**		

Table 6
City of Arcata
Wastewater Rate Study - DRAFT 1.10.26

Cash Flow

Fiscal Year	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36
Proposed Rate Increase	*0.0%*	*0.0%*	*5.0%*	*5.0%*	*5.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*
Beginning Fund Balance	**$14,554,148**	**$13,899,822**	**$18,925,486**	**$20,022,738**	**$17,221,300**	**$11,247,736**	**$12,629,552**	**$13,679,850**	**$14,903,102**	**$15,344,981**	**$12,573,399**
REVENUES											
Rate Revenues											
Current Rate Revenue	$8,800,000	$8,800,000	$8,800,000	$9,240,000	$9,702,000	$10,187,100	$10,594,584	$11,018,367	$11,459,102	$11,917,466	$12,394,165
Proposed Rates	$0	$0	$440,000	$462,000	$485,100	$407,484	$423,783	$440,735	$458,364	$476,699	$495,767
Total Rate Revenues	$8,800,000	$8,800,000	$9,240,000	$9,702,000	$10,187,100	$10,594,584	$11,018,367	$11,459,102	$11,917,466	$12,394,165	$12,889,931
Non-Rate Revenues											
Interest Reserves[2]	$291,083	$277,996	$378,510	$400,455	$344,426	$224,955	$252,591	$273,597	$298,062	$306,900	$251,468
Connection Fees	750,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Water Loan Repayment	99,167	3,500,000	0	0	0	0	0	0	0	0	0
Other Revenues	($23,800)	($33,800)	($33,800)	($33,800)	($33,800)	($33,800)	($33,800)	($33,800)	($33,800)	($33,800)	($33,800)
Total Non-Rate Revenues	$1,116,450	$3,844,196	$444,710	$466,655	$410,626	$291,155	$318,791	$339,797	$364,262	$373,100	$317,668
Total Revenues	**$9,916,450**	**$12,644,196**	**$9,684,710**	**$10,168,655**	**$10,597,726**	**$10,885,739**	**$11,337,158**	**$11,798,899**	**$12,281,728**	**$12,767,264**	**$13,207,599**
EXPENDITURES											
Total O&M	$6,570,775	$6,716,532	$6,977,458	$7,248,550	$7,530,206	$7,822,838	$8,126,875	$8,442,763	$8,770,964	$9,111,961	$9,466,254
Loan to Water Fund	3,500,000	0	0	0	0	0	0	0	0	0	0
Existing Debt Service	0	0	0	0	0	0	0	0	0	0	0
New Debt Service	0	0	0	285,542	571,085	571,085	1,339,985	2,108,885	2,108,885	2,108,885	2,808,980
Rate Funded Capital	$500,000	$902,000	$1,610,000	$5,436,000	$8,470,000	$1,110,000	$820,000	$24,000	$960,000	$4,318,000	$1,000,000
Total Expenditures	$10,570,775	$7,618,532	$8,587,458	$12,970,093	$16,571,291	$9,503,923	$10,286,860	$10,575,648	$11,839,849	$15,538,846	$13,275,234
Net Revenue	**($654,325)**	**$5,025,664**	**$1,097,252**	**($2,801,438)**	**($5,973,565)**	**$1,381,816**	**$1,050,299**	**$1,223,251**	**$441,879**	**($2,771,582)**	**($67,634)**
Ending Fund Balance	**$13,899,822**	**$18,925,486**	**$20,022,738**	**$17,221,300**	**$11,247,736**	**$12,629,552**	**$13,679,850**	**$14,903,102**	**$15,344,981**	**$12,573,399**	**$12,505,764**
Debt Service Coverage	*N/A*	*N/A*	*N/A*	*10.23*	*5.37*	*5.36*	*2.40*	*1.59*	*1.66*	*1.73*	*1.33*

1, Reflects rates effective February 1, 2026, and July 1 each year thereafter.

2, 2% earnings on beginning fund balance

City of Arcata
Projected Wastewater Revenues & Expenses

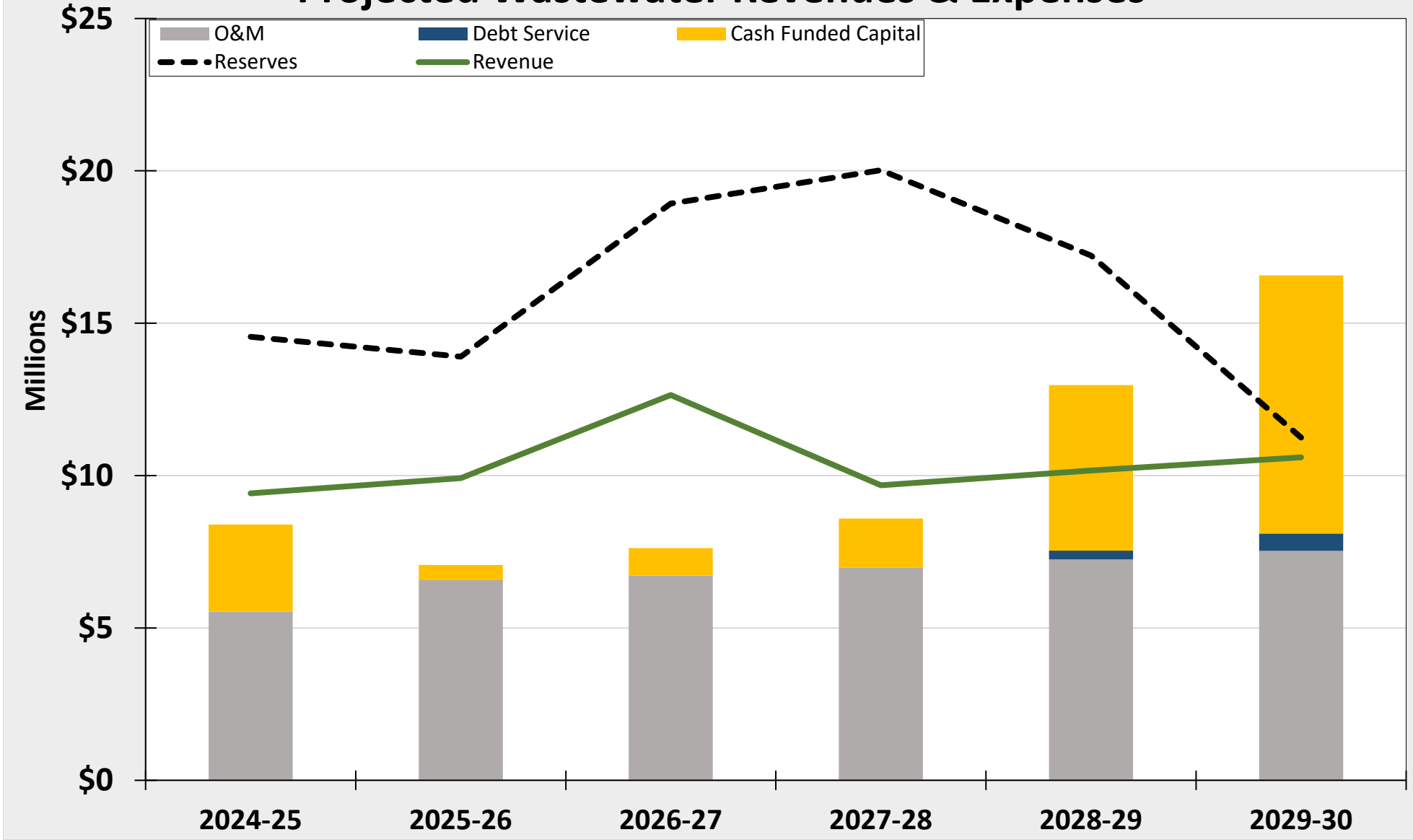


Table 7
City of Arcata
Wastewater Rate Study - DRAFT 1.10.26

Functional Allocation

Wastewater Budget	5-Year Average	Fixed	Flow	BOD	TSS
Operating Costs					
Collection	$2,251,662	10%	85%	5%	5%
Treatment	4,757,043	10%	30%	30%	30%
Non-Operating Costs					
Debt Service	85,663	0%	33%	33%	33%
Cash-Funded Capital Spending	3,383,600	10%	85%	5%	5%
Sources					
Connection Fees	(230,000)	10%	85%	5%	5%
Use of Reserves	(661,282)	10%	85%	5%	5%
Functional Allocation $	$9,586,685	$950,102	$5,488,049	$1,692,866	$1,692,866
Functional Allocation %		**7.44%**	**57.25%**	**17.66%**	**17.66%**
Revenue Requirement	**$8,800,000**	**$654,402**	**$5,037,699**	**$1,553,949**	**$1,553,949**

Table 8
City of Arcata
Wastewater Rate Study - DRAFT 1.10.26

Flows and Loadings

Customer Class	Accounts	Units	Est. Mo Flow[1]	Projected Water Use	Flow Factor[4]	*Projected Wastewater Flow* HCF	MG[5]	GPD[6]	*Strength (mg/l)*[7] BOD[8]	TSS[9]	*Loadings (lbs)* BOD	TSS	Annual Bills
			(hcf per EDU)[2]	*(hcf)*[3]	*(%)*				*(mg/l)*	*(mg/l)*	*(lbs)*	*(lbs)*	*(#)*
Residential													
Single-Family	4,949	4,949	4.00	237,552	100%	237,552	178	486,853	300	300	444,973	444,973	59,388
Multi-Family	98	1,352	3.20	51,917	100%	51,917	39	106,401	300	300	97,248	97,248	16,224
Commercial													
Low	381			91,116	80%	72,893	55	149,390	200	200	91,026	91,026	4,572
Medium	136			84,100	80%	67,280	50	137,887	300	300	126,026	126,026	1,632
High	48			16,115	80%	12,892	10	26,422	600	600	48,299	48,299	576
Total	**5,612**					**442,533**	**331**	**906,954**			**807,572**	**807,572**	**82,392**

[1] Residential flow is based on the City's billing data

[2] "EDU" stands for equivalent dwelling unit.

[3] "HCF" stands for hundred cubic feet.

[4] Flow factor based on estimated flow returning to sewer.

[5] "MG" stands for 1,000,000 gallons.

[6] "GPD" stands for gallons per day.

[7] State Water Resource Control Board (SWRCB) Guidelines for Wastewater Agencies.

[8] "BOD" stands for biochemical oxygen demand.

[9] "TSS" stands for total suspended solids.

Table 9
City of Arcata
Wastewater Rate Study - DRAFT 1.10.26

Revenue Requirement by Class

Unit Cost	Flow	BOD	TSS	Fixed
	(hcf)	*(lbs)*	*(lbs)*	*(per bill)*
Demand Units	442,533	807,572	807,572	82,392
Revenue Requirement	$5,037,699	$1,553,949	$1,553,949	$654,402
Unit Rate	**$11.38**	**$1.92**	**$1.92**	$7.94

Allocation Units	Flow	BOD	TSS	Annual Bills
	(hcf)	*(lbs)*	*(lbs)*	*(#)*
Residential				
Single-Family	237,552	444,973	444,973	59,388
Multi-Family	51,917	97,248	97,248	16,224
Commercial				
Low Strength	72,893	91,026	91,026	4,572
Medium Strength	67,280	126,026	126,026	1,632
High Strength	12,892	48,299	48,299	576

Revenue Requirements	Flow	BOD	TSS	Variable Revenue Requirement	Fixed Revenue Requirement	Total Revenue Requirement
	(hcf)	*(lbs)*	*(lbs)*			*($)*
Residential						
Single-Family	$2,704,237	$856,227	$856,227	$4,416,692	$471,692	$4,888,384
Multi-Family	$591,009	$187,128	$187,128	$965,264	$128,860	$1,094,124
Commercial						
Low Strength	$829,792	$175,155	$175,155	$1,180,102	$36,313	1,216,415
Medium Strength	$765,899	$242,502	$242,502	$1,250,903	$12,962	1,263,865
High Strength	$146,763	$92,937	$92,937	$332,637	$4,575	337,212

Table 10
City of Arcata
Wastewater Rate Study - DRAFT 1.10.26

Residential Rate Derivation

Residential Rate Derivation	Revenue Requirement	Annual Bills	Reallocated FY 2024/25 Rate
	($)	*(#)*	*($ per bill)*
Single-Family	$4,888,384	59,388	$82.31
Multi-Family	$1,094,124	16,224	$67.44

Table 11
City of Arcata
Wastewater Rate Study - DRAFT 1.10.26

Commercial Rate Derivation

Commercial Class Rate Units	Variable Revenue Requirement	Units	Unit Rate	Minimum Charge Monthly Charge per Connection
	($)	*(HCF)*	*($ per unit)*	*(Up to 4 HCF)*
Low Strength	$1,180,102	91,116	$12.95	$51.81
Medium Strength	1,250,903	84,100	14.87	59.50
High Strength	332,637	16,115	20.64	82.56

Commercial Fixed Rate Derivation	Fixed Monthly Charge per Connection	Fixed Unit Cost	Total Monthly Fixed Charge
	(per monthly bill)	*(per monthly bill)*	*(per monthly bill)*
Low Strength	$51.81	$7.94	**$59.75**
Medium Strength	$59.50	$7.94	**$67.44**
High Strength	$82.56	$7.94	**$90.51**

Volumetric Rev Requirements	Fixed Charge	Annual Bills	Revenue From Fixed Charge	Remaining Variable Revenue Requirement	Demand >4 HCF	Variable Rate
	(Up to 4 HCF)	*(#)*			*(HCF)*	*(per HCF >4)*
Low Strength	$51.81	4,572	$236,860.44	$943,241.09	79,199	**$11.91**
Medium Strength	$59.50	1,632	$97,097.61	$1,153,805.11	79,060	**$14.59**
High Strength	$82.56	576	$47,556.93	$285,080.10	14,087	**$20.24**

Table 12
City of Arcata
Wastewater Rate Study - DRAFT 1.10.26

Proposed Rates

Wastewater User	2025/26	7/1/2026	7/1/2027	7/1/2028	7/1/2029	7/1/2030
	Current	*Proposed*	*Proposed*	*Proposed*	*Proposed*	*Proposed*
Residential - Fixed Monthly Rates per Dwelling Unit						
Single-Family	$77.61	$82.31	$82.31	$86.43	$90.75	$95.29
Multi-Family	n/a	67.44	67.44	70.81	74.35	78.07
Residential - Volumetric Rates per Hundred Cubic Feet (hcf) of Water Use Greater Than 4 HCF						
Single-Family	$11.34	$0.00	$0.00	$0.00	$0.00	$0.00
Commercial - Volumetric Rates per Hundred Cubic Feet (hcf) of Water Use Greater Than 4 HCF						
Low Strength	$9.88	$11.91	$11.91	$12.51	$13.13	$13.79
Medium Strength	12.01	14.59	14.59	15.32	16.09	16.89
High Strength	20.14	20.24	20.24	21.25	22.31	23.43
Commercial - Monthly Fixed Rate per Connection						
Low Strength	$81.05	$47.64	$47.64	$50.02	$52.52	$55.15
Medium Strength	81.05	58.38	58.38	61.29	64.36	67.58
High Strength	81.05	80.95	80.95	84.99	89.24	93.71