

CITY OF ANGELS CAMP

FOUNDED 1848 - EST 1912



2024 Water and Wastewater Rates Cost of Service Study

Draft
January 23, 2025



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1. EXECUTIVE SUMMARY

The City of Angels Camp (“the City”) provides water and wastewater services to a population of approximately 3,800 residents. The City retained Bartle Wells Associates (“BWA”) to develop a financial plan and cost of service study for the City’s water and wastewater enterprise funds to ensure their financial stability over the next five-year period. The rates developed in this study represent maximum annual rate increases. Actual annual rate increases implemented may be less than the proposed rates developed in this study, as approved by the City Council each year.

The proposed rates also outline passthrough fees for the City’s share of costs under its Joint Powers Agreement (JPA) with the Utica Water and Power Authority (UWPA) under an average water year (water year 2.5). In early 2024, the UWPA developed a financial model for their projected revenues and expenses over the next five and ten years. The purpose of this analysis was to develop sound budget projections that could be provided to the JPA member agencies to use as a planning tool for future contributions. A total of six funding scenarios were developed. All six scenarios assumed Water Year 2.5, which is based on the average water year UWPA has experienced over the past 10 years. After consideration of all member funding scenarios, the City selected into a five year funding agreement. The agreement assumes member contributions under a water year 2.5, contribution for FY 24/25 set at \$370,000, and 10% increases each year beginning in FY 25/26 and ending in FY 28/29. Should costs come in higher than projected, such as if the UWPA declare a water year 3, 4, 5, or 6, the City has the option to automatically pass through the additional cost through water rates under Government Code 53756.

Water Issues

The water system is a self-supporting enterprise that includes water supply, treatment, storage, and distribution facilities. Water supply is provided through a JPA between the City of Angels and Union Public Utility District (UPUD). The JPA, known as UWPA, has served the City and its partner agency since 1995.

Proposed water rate increases are needed to fund:

- Ongoing JPA Obligations - Member agency costs are increasing by 10% annually. BWA recommends that these costs are gradually phased in over the five year period.
- Ongoing cost inflation - Projected 5% annual operating costs increases.
- Capital Projects - near-term capital improvement program totaling ~\$15.6 million in water projects.

Wastewater Issues

The wastewater system is a self-supporting enterprise comprised of six pump stations, 4.5 miles of forced main lines, and 22.5 miles of gravity sewer lines.

Proposed wastewater rate increases are needed to fund:

- Debt Obligations - The wastewater enterprise needs to fund annual debt obligations of ~\$348,000.
- Ongoing cost inflation - Projected 5% annual operating costs increases.
- Capital Projects - near-term capital improvement program totaling ~\$7 million in wastewater projects. The projects aim to increase the safety and security of the system and to promote regulatory compliance.

Table 1 on the following page shows the current and proposed rates developed in this study.

Table 1. Current and Proposed Rates

Current & Proposed Water Rates

<u>Monthly Fixed Rates</u>		<u>Meter Charges</u>				
Effective Date	Current	6/21/2025	6/21/2026	6/21/2027	6/21/2028	6/21/2029
Proposed Maximum Increase (%)¹		3%	3%	3%	3%	3%
<u>Meter Size</u>						
5/8"	\$46.93	\$48.34	\$49.79	\$51.28	\$52.82	\$54.40
3/4"	\$70.40	\$72.51	\$74.69	\$76.92	\$79.23	\$81.60
1"	\$117.33	\$120.85	\$124.48	\$128.20	\$132.05	\$136.00
1 1/2"	\$234.65	\$241.70	\$248.95	\$256.40	\$264.10	\$272.00
2"	\$375.44	\$386.72	\$398.32	\$410.24	\$422.56	\$435.20
3"	\$703.95	\$725.10	\$746.85	\$769.20	\$792.30	\$816.00
4"	\$1,173.25	\$1,208.50	\$1,244.75	\$1,282.00	\$1,320.50	\$1,360.00
6"	\$2,346.51	\$2,417.00	\$2,489.50	\$2,564.00	\$2,641.00	\$2,720.00
Construction Meter	\$70.40	\$72.51	\$74.69	\$76.92	\$79.23	\$81.60
<u>Volumetric Rates</u>						
All use, \$ / hcf ²	\$1.69	\$1.74	\$1.79	\$1.84	\$1.90	\$1.96
<u>Monthly Fixed Rates</u>		<u>UWPA Fees (Water Year 2.5)</u>				
Proposed Maximum Increase (%)³		6.22%	6.22%	6.22%	6.22%	5.00%
<u>Meter Size</u>						
5/8"	\$13.91	\$14.78	\$15.70	\$16.67	\$17.71	\$18.60
3/4"	\$20.86	\$22.16	\$23.54	\$25.01	\$26.57	\$27.89
1"	\$34.77	\$36.94	\$39.24	\$41.68	\$44.28	\$46.49
1 1/2"	\$69.55	\$73.88	\$78.48	\$83.36	\$88.55	\$92.98
2"	\$111.27	\$118.20	\$125.56	\$133.38	\$141.68	\$148.76
3"	\$208.64	\$221.63	\$235.43	\$250.08	\$265.65	\$278.93
4"	\$347.73	\$369.39	\$392.38	\$416.81	\$442.75	\$464.89
6"	\$695.46	\$738.77	\$784.76	\$833.61	\$885.51	\$929.78
Construction Meter	\$20.86	\$22.16	\$23.54	\$25.01	\$26.57	\$27.89

Current & Proposed Wastewater Rates

<u>Monthly Fixed Rates</u>						
Effective Date	Current	6/21/2025	6/21/2026	6/21/2027	6/21/2028	6/21/2029
Proposed Maximum Increase (%)¹		2%	2%	2%	2%	2%
Residential Users	\$107.95	\$110.11	\$112.31	\$114.56	\$116.85	\$119.19
Non-Residential Minimum Charges ⁴	\$136.30	\$139.03	\$141.81	\$144.65	\$147.54	\$150.49
<u>Volumetric Rates</u>						
Non-Residential Users, \$ / hcf, winter use ⁵	Various	\$0.0212	\$0.0216	\$0.0220	\$0.0224	\$0.0228

¹ Represents maximum annual % increases, actual annual % increases implemented may be less than proposed as approved by City Council each year.

² HCF = hundred cubic feet or approximately 748 gallons.

³ Should UWPA declare a water year 3, 4, 5, or 6, the City may automatically recalculate rates for passthrough fees.

⁴ Mixed class users are subject to one minimum commercial charge per commercial account plus one residential charge per residential dwelling unit.

⁵ Winter use is calculated as the monthly use from January - April of the prior year divided by four.

2. BACKGROUND AND OBJECTIVES

2.1. Background

In 2023, 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 presents BWA's analysis of the operating and non-operating expenses of the City's water and wastewater enterprises. The goals of this study were to analyze the City's enterprise funds, 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.

2.2. Rate Study Objectives

Key goals and objectives of the financial plans and rate studies for the water and wastewater enterprises include developing rates that:

- Capture enough revenues to move forward with and complete capital projects that will provide City of Angels Camp 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 for City of Angels Camp 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.

3. LEGAL REQUIREMENTS

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 rates developed in this study were designed to comply with both constitutional mandates as well as various provisions of the California Water Code and Government Code that support and add further guidance for implementing these constitutional requirements. In accordance with the constitutional provisions, the proposed rates are designed to a) recover the City's cost of providing water and wastewater service; b) allocate costs in proportion to the cost for serving each customer class; 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 service charges such as water, sewer, 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 from this voting requirement rates for water, sewer, and garbage service.

The substantive requirements of Article 13D, Section 6 require the City's water and wastewater 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 actually used by, or immediately available to, the owner of the property in question.

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 water and wastewater rates proposed in this rate study and is included in the Proposition 218 Notice.

3.2. Use of Generally Accepted Rate-Making Principles

The rates developed in this report use a straightforward methodology to establish an equitable system of fixed and variable charges that recover the cost of providing service and fairly apportion costs to each rate component. The rates were developed using generally accepted cost-based principles and methodologies for establishing water rates, charges, and fees contained and discussed in the AWWA M1 Manual. In developing water rates, it is important to know that there is no “one-size-fits-all” approach for establishing cost-based water rates, “the (M1 Manual) is aimed at outlining the basic elements involved in water rates and suggesting alternative rules of procedure for formulating rates, thus permitting the exercise of judgment and preference to meet local conditions and requirements.”¹

BWA uses a straightforward methodology to establish equitable charges that recover the cost of providing service and fairly apportion costs.

Key elements of this study include:

- 1) **Project Initiation and Data Collection** – Review financial policies; collect financial and other relevant data; and review rate structures;
- 2) **Demand Analysis** – Analyze past customer demands and customer characteristics to forecast future demands;
- 3) **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;
- 4) **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;
- 5) **Cost-of-Service Rate Design** – Develop rates that proportionately recover costs; and
- 6) **Prop 218 Process** – Ensure compliance with the substantive and procedural requirements of Proposition 218.

¹ AWWA Manual M1 Manual, Principles of Water Rates, Fees, and Charges, Sixth Edition, 2012, page 5.

4. WATER SYSTEM OVERVIEW

4.1. Water Supply

The City's water supply is provided through a Joint Powers Agreement (JPA) between the City of Angels and Union Public Utility District (UPUD). The JPA, known as Utica Water and Power Authority (UWPA), has served the City and its partner agency since 1995 when local officials purchased the 27-mile-long flumes, ditches, and two powerhouses from PG&E. The purchase, led by Calaveras County Water District (CCWD), was meant to secure the valuable 1914 water rights for the residents of Angels Camp. The original JPA included CCWD, the City, and UPUD. CCWD left the partnership in 2004 over concerns about the financial costs of participating in the partnership.

From 1995 to 2013 communities served by the UWPA received water from the North Fork Stanislaus River at little to no cost. The UWPA further elected to offset water costs by utilizing its hydro-power generation revenues in efforts to keep water costs low. While residents had enjoyed a low-cost water source for decades, the model built to sustain this commodity has now become outmoded. The system experienced unprecedented dry years between the years of 2012-2015. Less water results in less power generation resulting in less revenue available to offset low to no cost water to customers, and maintenance deferral has become less and less of an option for savings. The UWPA is further burdened by the impending FERC relicensing, which requires funding additional financial investments and reserves.

These financial challenges coupled with the changing energy markets have chipped away at what was once a low-cost water supply. Member agencies hold the responsibility to ensure the financial viability of the JPA.

4.2. City Water Distribution

The City acquired the water treatment plant in 1984 from PG&E. A 2.5 million gallon tank located at the plant is the only existing storage tank within the City water system. Water to the City is fed by the original PG&E transmission line and is assumed to be greater than 50 years old. City staff maintains 167,000 linear feet of pipelines with diameters ranging from 2-14". The system includes 300 hydrants, 30 air relieve valves, 14 blow-off valves, ten pressure reducing valves, and one surge valve. In certain locations, pipe is reasonably estimated to be greater than 50 years in use.

4.3. Current Water Rates

As shown in **Table 2**, the current rate structure includes a uniform volumetric rate based on usage, a monthly meter service charge, and a monthly UWPA passthrough fee.

Table 2. Current Water Rates

All water users	\$/hcf		
All use	\$1.69		
		UWPA Fee	
Meter Size	Meter Charge	(Water Year 2.5)	Total Monthly Fixed Charge
5/8"	\$46.93	\$13.91	\$60.84
3/4"	70.40	20.86	91.26
1"	117.33	34.77	152.10
1 1/2"	234.65	69.55	304.20
2"	375.44	111.27	486.71
3"	703.95	208.64	912.59
4"	1,173.25	347.73	1,520.98
6"	2,346.51	695.46	3,041.97
Construction meter	70.40	20.86	91.26

4.4. Water Enterprise Debt

The water enterprise does not have any outstanding debt service as of FY 2024/25.

4.5. Capital Improvement Plan

Table 3 shows the water enterprise near term capital improvement program. The Capital Improvement Plan (CIP) has identified project costs in the amount of \$15.67 million. The projects aim to increase the safety and security of the system and to promote regulatory compliance. In an effort to help keep water rates low for their customers, the City plans to use financial reserves to help fund proposed water projects.

Table 3. Water Enterprise Capital Improvement Plan

Project Name & Description	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	Totals
WTP 1 & 2							
Backwash Handling Improvements		\$3,330,000	\$3,330,000				\$6,660,000
Treated Water Transmission Main Replacement				2,180,000			2,180,000
WTM 1 & 2							
SR-49 Transmission Main Upgrade				1,015,000			1,015,000
Murphys Grade Rd Transmission Main Upgrade					2,300,000		2,300,000
WDP 1, 2, & 3							
Mark Twain Road Water System Improvements	680,000						680,000
Hillcrest, Gold Cliff, McCauley Ranch Rd Water System Improvements	590,000						590,000
Pressure Relief Valve Replacement	980,000						980,000
Automatic Meter Reading Project	152,000	152,000	152,000	152,000	152,000		760,000
Capital Projects						<u>500,000</u>	<u>500,000</u>
Total	\$2,402,000	\$3,482,000	\$3,482,000	\$3,347,000	\$2,452,000	\$500,000	\$15,665,000

4.6. Cash Flow Projection

The City is anticipating several manageable financial challenges that will require gradual rate increases in the upcoming years. Annual rate increases are needed to keep revenues in line with inflation and to prevent rates from falling behind the cost of providing water services.

BWA determined that the City needs to raise rate revenue (excluding the UWPA passthrough fees) by 3% per year to meet the goal of funding the City’s operating and capital needs. The UWPA passthrough fees are recommended to be gradually phased in and fully cover projected UWPA contributions.

Table 4 shows the water enterprise 10-year cash flow projection.

Table 4. Water Cashflow Projections

Fiscal Year	Projected										
	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35
Beginning Fund Balance	\$7,559,047	\$5,710,330	\$6,109,148	\$6,482,412	\$3,746,948	\$1,832,102	\$1,850,225	\$1,847,020	\$1,820,035	\$1,767,973	\$1,686,724
% Rate Revenue Increase	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Growth - %	2.7%	1.7%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
REVENUES											
Water Rate Revenue											
Water Service Charges	\$1,926,235	\$2,017,261	\$2,077,778	\$2,140,112	\$2,204,315	\$2,270,445	\$2,338,558	\$2,408,715	\$2,480,976	\$2,555,405	\$2,632,068
UWPA Charges	418,456	451,952	480,086	509,971	541,717	568,803	597,243	627,105	658,460	691,383	725,953
Total Rate Revenues	2,344,691	2,469,213	2,557,865	2,650,083	2,746,032	2,839,248	2,935,801	3,035,820	3,139,437	3,246,789	3,358,020
Misc Operating Revenues											
Water Connection Fees	0	0	0	0	0	0	0	0	0	0	0
Misc. Revenue ¹	28,600	3,338,600	3,338,600	68,600	28,600	28,600	28,600	28,600	28,600	28,600	28,600
Interest	34,000	35,020	36,071	37,153	38,267	39,415	40,598	41,816	43,070	44,362	45,693
Total Misc Operating Revenues	62,600	3,373,620	3,374,671	105,753	66,867	68,015	69,198	70,416	71,670	72,962	74,293
Total Revenues	2,407,291	5,842,833	5,932,535	2,755,836	2,812,899	2,907,263	3,004,999	3,106,236	3,211,107	3,319,751	3,432,313
EXPENSES											
Operating Expenses											
Personnel Costs	642,162	674,270	707,983	743,382	780,551	819,579	860,558	903,586	948,765	996,203	1,046,013
Water UL	88,889	93,333	98,000	102,900	108,045	113,447	119,120	125,076	131,330	137,896	144,791
Utica Water and Power Contribution	370,000	407,000	447,700	492,470	541,717	568,803	597,243	627,105	658,460	691,383	725,953
Utilities	35,690	37,475	39,348	41,316	43,381	45,550	47,828	50,219	52,730	55,367	58,135
Repairs & Maintenance	60,500	63,525	66,701	70,036	73,538	77,215	81,076	85,130	89,386	93,855	98,548
Tools & Equipment	6,000	6,300	6,615	6,946	7,293	7,658	8,041	8,443	8,865	9,308	9,773
Professional Services	214,700	225,435	236,707	248,542	260,969	274,018	287,719	302,104	317,210	333,070	349,724
Materials & Supplies	91,357	95,925	100,721	105,757	111,045	116,597	122,427	128,548	134,976	141,724	148,811
Other Services & Charges	130,825	137,366	144,235	151,446	159,019	166,970	175,318	184,084	193,288	202,953	213,100
O&M Cost Allocations	150,000	157,500	165,375	173,644	182,326	191,442	201,014	211,065	221,618	232,699	244,334
Total Operating Expenses	1,790,122	1,898,128	2,013,385	2,136,439	2,267,884	2,381,279	2,500,343	2,625,360	2,756,628	2,894,459	3,039,182
Non Operating Expenses											
Vehicle Replacement Set Aside	63,886	63,886	63,886	7,861	7,861	7,861	7,861	7,861	6,541	6,541	6,541
Projected Loan Debt Service				0	0	0	0	0	0	0	0
Existing Debt Service	0	0	0	0	0	0	0	0	0	0	0
Capital Improvement Projects	2,402,000	3,482,000	3,482,000	3,347,000	2,452,000	500,000	500,000	500,000	500,000	500,000	500,000
Total Non Operating Expenses	2,465,886	3,545,886	3,545,886	3,354,861	2,459,861	507,861	507,861	507,861	506,541	506,541	506,541
Total Expenses	4,256,008	5,444,014	5,559,271	5,491,300	4,727,745	2,889,140	3,008,204	3,133,221	3,263,169	3,401,000	3,545,723
Net Revenues for Debt Service/Capital	617,169	3,944,704	3,919,150	619,397	545,015	525,984	504,656	480,876	454,479	425,292	393,131
Net Income	(1,848,717)	398,818	373,264	(2,735,464)	(1,914,846)	18,123	(3,205)	(26,985)	(52,062)	(81,249)	(113,410)
Ending Fund Balance	\$5,710,330	\$6,109,148	\$6,482,412	\$3,746,948	\$1,832,102	\$1,850,225	\$1,847,020	\$1,820,035	\$1,767,973	\$1,686,724	\$1,573,315
Total Unrestricted Fund Target (25% O&M)											
Target Met	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Debt Service Coverage (Minimum 1.20x)											
Target Met	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

1 - Connection Fees, Inspections, Water Meter Charge, Utility Processing Fee, Door Hanger Fee, Restoration Fee, Utility Late Fee, Other

4.7. Current Customer Base & Revenue Estimate

Table 5 shows the water enterprise’s current number of customers by meter size and projected rate revenue under current rates. The meter cost ratio is based on American Water Works Association (AWWA) standard ratios. Excluding UWPA passthrough fees, the water enterprise currently collects approximately 71% of rate revenue from fixed meter charges and 29% from volumetric charges. Total water usage amounted to 326,031 hundred cubic feet in FY 2023/24.

Table 5. Current Water Rate Revenue

Meter Size	Number of Customers	Monthly Meter Rate	Monthly Meter Revenue	Current Meter Cost Ratio	5/8" Meter Equivalent
5/8"	1,656	\$46.93	\$77,716.08	1	1,656
3/4"	36	70.40	2,534.40	1.5	54
1"	59	117.33	6,922.47	2.5	148
1 1/2"	21	234.65	4,927.65	5	105
2"	35	375.44	13,140.40	8	280
3"	8	703.95	5,631.60	15	120
4"	1	1,173.25	1,173.25	25	25
6"	1	2,346.51	2,346.51	50	50
Construction Meter	<u>3</u>	70.40	<u>211.20</u>	1.5	<u>5</u>
	1,820		\$114,603.56		2,442
Current Water Rate Revenue Estimate					
Total Annual Rate Revenue	\$1,926,235		100%		
Annual Meter Revenue	1,375,243		71%		
Annual Volumetric Rate Revenue	550,992		29%		
Total Use (HCF)	326,031				
\$/hcf	\$1.69				

4.8. Cost Allocation to Billing Components

In **Table 6**, BWA allocated FY 2023/24 costs (excluding UWPA costs) to billing components (meter versus usage). Costs are allocated more toward the fixed meter charges to represent that they are more recurrent regardless of water usage. BWA recommends collecting approximately 70% of rate revenue based on meter charges and 30% based on usage charges based on this analysis.

Table 6. Water Cost Allocation

	2023/24		Meter Charge		Usage Charge
Operating Expenses					
Personnel Costs	\$566,221	70%	\$397,793	30%	\$168,428
Water UL	98,943	70%	69,511	30%	29,432
Utilities	46,400	70%	32,598	30%	13,802
Repairs & Maintenance	76,500	70%	53,744	30%	22,756
Tools & Equipment	6,000	70%	4,215	30%	1,785
Professional Services	142,300	70%	99,971	30%	42,329
Materials & Supplies	77,139	70%	54,193	30%	22,946
Other Services & Charges	131,750	70%	92,560	30%	39,190
O&M Cost Allocations	<u>150,000</u>	70%	<u>105,381</u>	30%	<u>44,619</u>
Total Operating Expenses	1,295,253		909,967		385,286
Non Operating Expenses					
Vehicle Replacement Set Aside	63,886	70%	44,882	30%	19,004
Debt Service	37,234	70%	26,158	30%	11,076
Capital Improvement Projects	<u>2,165,000</u>	70%	<u>1,520,999</u>	30%	<u>644,001</u>
Total Non Operating Expenses	2,266,120		1,592,039		674,081
Total Expenses	3,561,373		2,502,006		1,059,367
Adjustments					
Less: Non Rate Revenue	62,600	70%	43,979	30%	18,621
Less: Use of Reserves	<u>1,541,251</u>	70%	<u>1,082,790</u>	30%	<u>458,461</u>
Total Adjustments	1,603,851		1,126,769		477,082
Angel's Camp Revenue Requirements	<u>\$1,957,522</u>	70%	<u>\$1,375,237</u>	30%	<u>\$582,285</u>

4.9. Current Meter Charges

Table 7 shows the development of the meter charges. The \$1,375,237 of costs allocated to meter charges in **Table 6** is divided by estimated 5/8" meter equivalents of 2,442 to get an annual charge of \$563.16, or \$46.93 per month. Customers with meters larger than the 5/8" base would pay proportionally more based on the capacity of the meter.

Table 7. Current Water Meter Cost Allocation

Meter Charge Allocation	\$1,375,237
5/8" AWWA Meter Equivalents	<u>2,442</u>
Annual \$ per 5/8" Meter Equivalent	\$563.16
Monthly \$/per 5/8" Meter Equivalent	\$46.93

Meter Size	AWWA Meter Ratio	Current	Proposed
5/8"	1	\$46.93	\$46.93
3/4"	1.5	70.40	70.40
1"	2.5	117.33	117.33
1 1/2"	5	234.65	234.65
2"	8	375.44	375.44
3"	15	703.95	703.95
4"	25	1,173.25	1,173.25
6"	50	2,346.51	2,346.50

4.10. Current and Projected UWPA Passthrough Fees

Table 8 shows the development of the UWPA passthrough fees under an average water year 2.5. Projected Utica Water and Power Contributions are divided by total meter equivalents to get a cost per 5/8" meter. Larger meters pay proportionally more based on their metered capacity. The fee is designed to cover the costs of the City's water supply based on projected annual contribution amounts. The projected costs utilized to develop these fees are based on Utica Water and Power projected contributions based on an average water year and do not account for additional wholesale cost increases beyond 10% per year.

BWA recommends implementing passthrough fees based on UWPA's average water year, water year 2.5. Should contribution amounts be less than average, such as in the case of a water year 1 or 2, the City is recommended to save any additional amount in a balancing account that can be used to offset fee increases in bad years (water years 4, 5 or 6). Any increases, such as in the case of a water year 3, 4, 5, or 6, may be passed through via Government Code 53756.

Table 8. UWPA Passthrough Fees Allocation

Water Year 2.5		2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Utica Water And Power Contribution		\$370,000	\$407,000	\$447,700	\$492,470	\$541,717	\$568,803
Growth		65	42	0	0	0	0
Projected 5/8" Meter Equivalents		2,507	2,549	2,549	2,549	2,549	2,549
Meter Size	AWWA Meter Ratio						
5/8"	1	\$13.91	\$14.78	\$15.70	\$16.67	\$17.71	\$18.60
3/4"	1.5	20.86	22.16	23.54	25.01	26.57	27.89
1"	2.5	34.77	36.94	39.24	41.68	44.28	46.49
1 1/2"	5	69.55	73.88	78.48	83.36	88.55	92.98
2"	8	111.28	118.20	125.56	133.38	141.68	148.76
3"	15	208.64	221.63	235.43	250.08	265.65	278.93
4"	25	347.74	369.39	392.38	416.81	442.75	464.89
6"	50	695.48	738.77	784.76	833.61	885.51	929.78
Construction Meter	1.5	20.86	22.16	23.54	25.01	26.57	27.89

4.11. Proposed City Water Rates

Table 9 shows the current and proposed water rates for the City. The proposed rates incorporate the cost allocation developed in **Table 6** and the annual projected costs over the next five-year period.

Table 9. Current and Proposed Water Rates

		Fiscal Year	2025/26	2026/27	2027/28	2028/29	2029/30
		Effective Date	6/21/2025	6/21/2026	6/21/2027	6/21/2028	6/21/2029
		Proposed Increase	3.0%	3.0%	3.0%	3.0%	3.0%
Monthly Use		Current Rate					
All use, \$/hcf		\$1.69	\$1.74	\$1.79	\$1.84	\$1.90	\$1.96
Meter Size	Meter Cost Ratio	Current Meter Rates					
5/8"	1	46.93	48.34	49.79	51.28	52.82	54.40
3/4"	1.5	70.40	72.51	74.69	76.92	79.23	81.60
1"	2.5	117.33	120.85	124.48	128.20	132.05	136.00
1 1/2"	5	234.65	241.70	248.95	256.40	264.10	272.00
2"	8	375.44	386.72	398.32	410.24	422.56	435.20
3"	15	703.95	725.10	746.85	769.20	792.30	816.00
4"	25	1,173.25	1,208.50	1,244.75	1,282.00	1,320.50	1,360.00
6"	50	2,346.51	2,417.00	2,489.50	2,564.00	2,641.00	2,720.00
Construction Meter	1.5	70.40	72.51	74.69	76.92	79.23	81.60

4.12. Proposed UWPA Passthrough Fees

Table 10 shows the current and proposed passthrough fees for annual UWPA contributions based on an average water year.

Table 10. Current and Proposed Passthrough Fees

Water Year 2.5 (Average Contribution)			2025/26	2026/27	2027/28	2028/29	2029/30
		Fiscal Year Effective Date	6/21/2025	6/21/2026	6/21/2027	6/21/2028	6/21/2029
		Proposed Increase	6.22%	6.22%	6.22%	6.22%	5.00%
Meter Size	Meter Cost Ratio	Current UWPA Passthrough Fee					
5/8"	1	\$13.91	\$14.78	\$15.70	\$16.67	\$17.71	\$18.60
3/4"	1.5	20.86	\$22.16	\$23.54	\$25.01	\$26.57	\$27.89
1"	2.5	34.77	\$36.94	\$39.24	\$41.68	\$44.28	\$46.49
1 1/2"	5	69.55	\$73.88	\$78.48	\$83.36	\$88.55	\$92.98
2"	8	111.27	\$118.20	\$125.56	\$133.38	\$141.68	\$148.76
3"	15	208.64	\$221.63	\$235.43	\$250.08	\$265.65	\$278.93
4"	25	347.73	\$369.39	\$392.38	\$416.81	\$442.75	\$464.89
6"	50	695.46	\$738.77	\$784.76	\$833.61	\$885.51	\$929.78
Construction Meter	1.5	20.86	\$22.16	\$23.54	\$25.01	\$26.57	\$27.89

4.13. Water Bill Impacts

Table 11 shows the bill impacts of the proposed water rates on a variety of usage levels for a typical residential user.

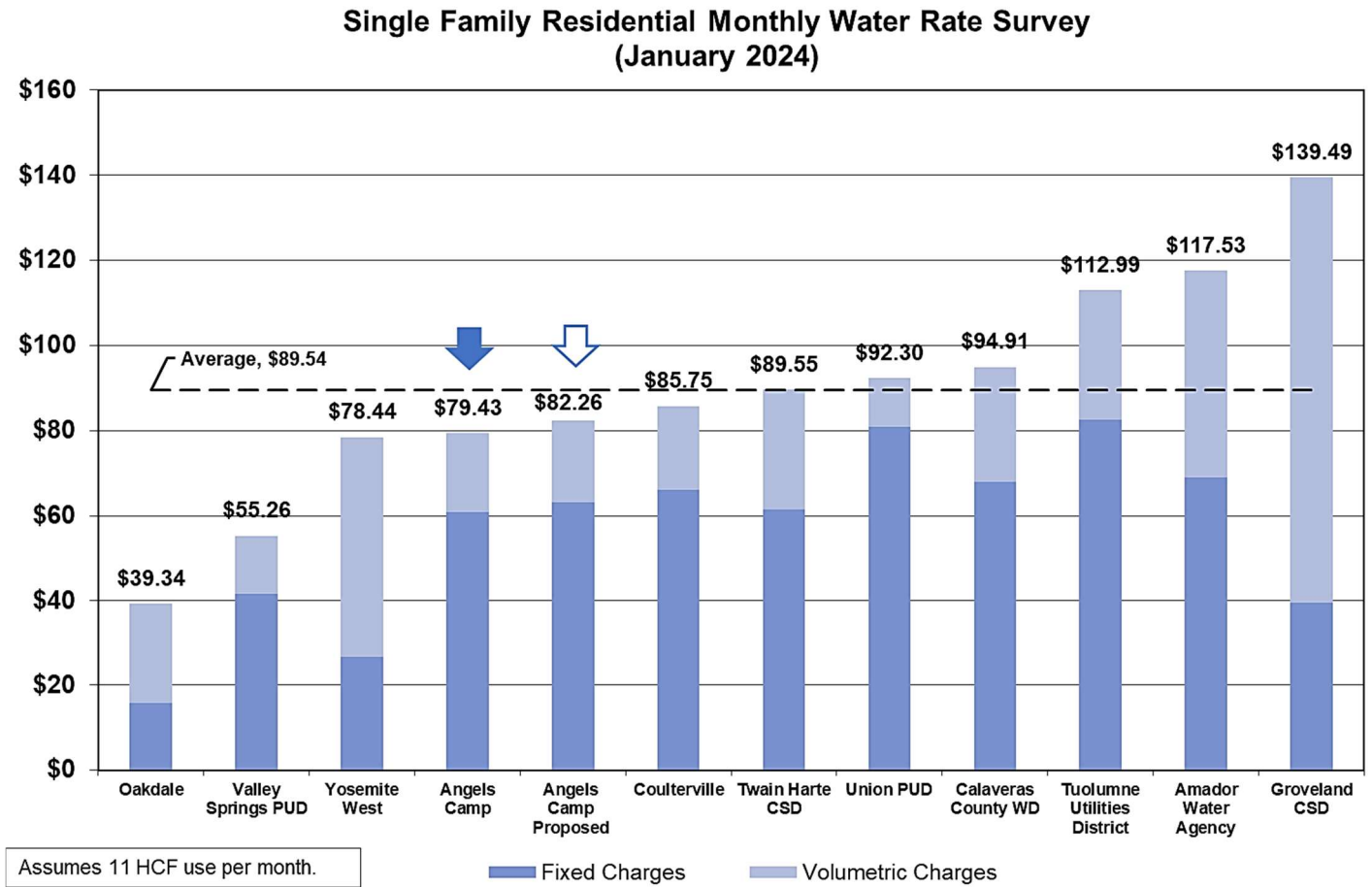
Table 11. Water Bill Impacts

Single Family Residential - 5/8" Meter							
Monthly Use	hcf	Current Billing	Projected 2025/26	Projected 2026/27	Projected 2027/28	Projected 2028/29	Projected 2029/30
Low	7	\$72.67	\$75.30	\$78.02	\$80.83	\$83.83	\$86.72
Average	11	79.43	82.26	85.18	88.19	91.43	94.56
Moderate	15	86.19	89.22	92.34	95.55	99.03	102.40
High	40	128.44	132.72	137.09	141.55	146.53	151.40

4.14. Regional Water Rate Survey

Figure 1 compares the water bills for a typical single family home to those of other regional agencies.

Figure 1: Regional Water Rate Survey



5. WASTEWATER SYSTEM OVERVIEW

5.1. Wastewater Treatment and Collection

The existing wastewater system is comprised of six lift stations, 4.5 miles of forced main lines, and 22.5 miles of gravity sewer lines. The system is comprised of three district sub-systems: Altaville, Downtown, and Angel Oaks/Greenhorn.

The Water Treatment Plant consists of headworks, an equalization basin, three sequencing batch reactors, an intermediate storage basin, four filters ultraviolet disinfection facilities, a diversion storage basin, two aerobic digesters, belt filter press, eight sludge drying beds, and a storage reservoir. Recycled water is used for irrigation of a 136-acre sprayfield adjacent to Holman Reservoir and the 110-acre Golf Course at Greenhorn Creek.

5.2. Current Wastewater Rates

Table 12 shows the City’s current wastewater rates. Current residential rates are based on dwelling units and commercial rates are based on connections per commercial establishment. Current wastewater rates for Other Institutions are per gallon of winter use, and per gallon of use for Six Mile Village (Outside Agency). BWA recommends updating the City’s current rate structure to include fixed charges for all user groups receiving wastewater services from the City.

Table 12. Current Wastewater Rates

<u>Residential</u>	<u>\$ / Dwelling Unit / Month</u>
Single Family	\$107.95
Mobile Home	107.95
Multi-Family	107.95
<u>Commercial & Industrial</u>	<u>\$ / Establishment / Month</u>
Commercial & Industrial	136.30
<u>Other Institutional</u>	<u>\$ / gallon , winter use</u>
Other Institutional	0.0208
<u>Six Mile Village (Outside Agency)</u>	<u>\$ / gallon</u>
Domestic-Strength	0.0144

5.3. Wastewater Enterprise Debt

Table 13 shows the wastewater enterprise’s current debt obligation schedules.

Table 13. Current Wastewater Enterprise Debt Schedules

2017 USDA Refinancing Loan Agreement (Wastewater)			
Repayment Date	Loan	Interest	Total Repayment
Sept. 1, 2017	\$119,510.00	\$35,877.95	\$155,387.95
Mar. 1, 2018	\$119,511.00	\$53,565.53	\$173,076.53
Sept. 1, 2018	\$113,769.00	\$51,934.21	\$165,703.21
Mar. 1, 2019	\$113,768.00	\$50,381.26	\$164,149.26
Sept. 1, 2019	\$114,970.00	\$48,828.33	\$163,798.33
Mar. 1, 2020	\$114,970.00	\$47,258.99	\$162,228.99
Sept. 1, 2020	\$118,722.00	\$45,689.65	\$164,411.65
Mar. 1, 2021	\$118,722.00	\$44,069.09	\$162,791.09
Sept. 1, 2021	\$122,469.00	\$42,448.54	\$164,917.54
Mar. 1, 2022	\$122,470.00	\$40,776.84	\$163,246.84
Sept. 1, 2022	\$126,213.00	\$39,105.12	\$165,318.12
Mar. 1, 2023	\$126,214.00	\$37,382.31	\$163,596.31
Sept. 1, 2023	\$129,953.00	\$35,659.49	\$165,612.49
Mar. 1, 2024	\$129,954.00	\$33,885.63	\$163,839.63
Sept. 1, 2024	\$133,690.00	\$32,111.76	\$165,801.76
Mar. 1, 2025	\$133,689.00	\$30,286.89	\$163,975.89
Sept. 1, 2025	\$137,420.00	\$28,462.04	\$165,882.04
Mar. 1, 2026	\$137,421.00	\$26,586.26	\$164,007.26
Sept. 1, 2026	\$141,147.00	\$24,710.46	\$165,857.46
Mar. 1, 2027	\$141,148.00	\$22,783.80	\$163,931.80
Sept. 1, 2027	\$144,870.00	\$20,857.13	\$165,727.13
Mar. 1, 2028	\$144,870.00	\$18,879.66	\$163,749.66
Sept. 1, 2028	\$148,587.00	\$16,902.18	\$165,489.18
Mar. 1, 2029	\$148,589.00	\$14,873.97	\$163,462.97
Sept. 1, 2029	\$152,301.00	\$12,845.73	\$165,146.73
Mar. 1, 2030	\$152,301.00	\$10,766.82	\$163,067.82
Sept. 1, 2030	\$156,009.00	\$8,687.91	\$164,696.91
Mar. 1, 2031	\$156,009.00	\$6,558.39	\$162,567.39
Sept. 1, 2031	\$162,230.00	\$4,428.87	\$166,658.87
Mar. 1, 2032	\$162,229.00	\$2,214.43	\$164,443.43
TOTALS:	\$4,043,725.00	\$888,819.24	\$4,932,544.24

State Department of Water Resources (Wastewater)			
Fiscal Year Ended June 30,	Principal	Interest	Total Repayment
2018	\$13,858	\$2,071	\$15,929
2019	\$13,996	\$1,933	\$15,929
2020	\$14,136	\$1,793	\$15,929
2021	\$14,278	\$1,651	\$15,929
2022	\$14,420	\$1,509	\$15,929
2023 - 2027	\$74,294	\$5,351	\$79,645
2028 - 2031	<u>\$62,155</u>	<u>\$1,561</u>	<u>\$63,716</u>
Totals	\$207,137	\$15,869	\$223,006

5.4. Capital Improvement Plan

As shown on **Table 14**, the near term CIP has identified capital project costs in the amount of \$7.00 million. The projects aim to increase the safety and security of the system and to promote regulatory compliance. The City estimates the wastewater enterprise will obtain a \$567,000 loan in FY 2026/27 to fund the projected capital program.

Table 14. Wastewater Enterprise Capital Improvement Plan

<u>Project Name & Description</u>	<u>2024/25</u>	<u>2025/26</u>	<u>2026/27</u>	<u>2027/28</u>	<u>2028/29</u>	<u>2029/30</u>	<u>Totals</u>
WWTP 1							
Emergency Storage Basin Improvements				\$275,000	\$275,000		\$550,000
WWTP 2							
Grit Removal Systems		350,000	350,000				\$700,000
WWCS 1 & 2							
Booster Way Sewerline	1,950,000	950,000					\$2,900,000
WWCS 3							
Main Street Sewer Replacement			700,000				\$700,000
WWCS 4							
Murphys Grade Rd Sewer Rehabilitation				380,000	380,000		\$760,000
I & I Projects				300,000			\$300,000
Capital Projects	<u>95,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,000,000</u>	\$1,095,000
Total Sewer CIP	\$2,045,000	\$1,300,000	\$1,050,000	\$955,000	\$655,000	\$1,000,000	\$7,005,000

5.5. Cash Flow Projection

Table 15 shows the wastewater enterprise 10-year cash flow projection. BWA determined that the City needs to raise rate revenues by 2% per year for the next 5 years to meet the goal of funding the City’s operating and capital needs.

Table 15. Wastewater Cash Flow Projections

Fiscal Year	Projected										
	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2032/34	2032/35
Beginning Fund Balance	\$5,830,442	\$5,280,531	\$5,531,513	\$6,534,449	\$7,104,499	\$7,953,053	\$8,431,815	\$8,751,536	\$8,914,773	\$9,236,990	\$9,373,603
% Rate Revenue Increase	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Growth - %	3.1%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REVENUES											
Operating Revenue											
Sewer Service Fee - O&M	\$3,587,146	\$3,728,996	\$3,803,575	\$3,879,647	\$3,957,240	\$4,036,385	\$4,036,385	\$4,036,385	\$4,036,385	\$4,036,385	\$4,036,385
Sewer Connection Fee	0	0	0	0	0	0	0	0	0	0	0
Misc. Revenue	0	0	0	0	0	0	0	0	0	0	0
Interest Earnings	<u>122,400</u>	<u>126,072</u>	<u>129,854</u>	<u>133,750</u>	<u>137,762</u>	<u>141,895</u>	<u>146,152</u>	<u>150,537</u>	<u>155,053</u>	<u>159,704</u>	<u>164,495</u>
Total Operating Revenues	3,709,546	3,855,068	3,933,430	4,013,397	4,095,002	4,178,280	4,182,537	4,186,921	4,191,437	4,196,089	4,200,880
Non Operating Revenues											
Projected Loan (6%, 20 Years)	0	0	<u>566,500</u>	0	0	0	0	0	0	0	0
Total Non Operating Revenues	0	0	566,500	0	0	0	0	0	0	0	0
Total Revenues	3,709,546	3,855,068	4,499,930	4,013,397	4,095,002	4,178,280	4,182,537	4,186,921	4,191,437	4,196,089	4,200,880
EXPENSES											
Operating Expenses											
Personnel Costs	611,316	641,882	673,976	707,675	743,059	780,212	819,222	860,184	903,193	948,352	995,770
Sewer UL	62,721	65,857	69,150	72,607	76,237	80,049	84,052	88,254	92,667	97,300	102,165
Utilities	226,417	237,738	249,625	262,106	275,211	288,972	303,420	318,591	334,521	351,247	368,809
Repairs & Maintenance	178,625	187,556	196,934	206,781	217,120	227,976	239,375	251,343	263,910	277,106	290,961
Tools & Equipment	10,000	10,500	11,025	11,576	12,155	12,763	13,401	14,071	14,775	15,513	16,289
Professional Services	173,805	182,495	191,620	201,201	211,261	221,824	232,915	244,561	256,789	269,629	283,110
Materials & Supplies	139,236	146,198	153,507	161,183	169,242	177,704	186,589	195,919	205,715	216,000	226,800
Other Services & Charges	188,200	197,610	207,491	217,865	228,758	240,196	252,206	264,816	278,057	291,960	306,558
O&M Cost Allocations	<u>200,000</u>	<u>210,000</u>	<u>220,500</u>	<u>231,525</u>	<u>243,101</u>	<u>255,256</u>	<u>268,019</u>	<u>281,420</u>	<u>295,491</u>	<u>310,266</u>	<u>325,779</u>
Total Operating Expenses	1,790,320	1,879,836	1,973,828	2,072,519	2,176,145	2,284,952	2,399,200	2,519,160	2,645,118	2,777,374	2,916,242
Non Operating Expenses											
Vehicle Replacement	78,431	78,431	78,431	21,406	21,406	21,406	21,406	21,406	17,086	17,086	17,086
Projected Loan Debt Service			49,016	49,016	49,016	49,016	49,016	49,016	49,016	49,016	49,016
Existing Debt Service	345,707	345,818	345,718	345,406	344,881	344,144	343,193	331,102	0	0	0
Capital	<u>2,045,000</u>	<u>1,300,000</u>	<u>1,050,000</u>	<u>955,000</u>	<u>655,000</u>	<u>1,000,000</u>	<u>1,050,000</u>	<u>1,103,000</u>	<u>1,158,000</u>	<u>1,216,000</u>	<u>1,277,000</u>
Total Non Operating Expenses	2,469,138	1,724,249	1,523,166	1,370,828	1,070,303	1,414,566	1,463,616	1,504,525	1,224,102	1,282,102	1,343,102
Total Expenses	4,259,458	3,604,085	3,496,993	3,443,347	3,246,448	3,699,518	3,862,815	4,023,684	3,869,220	4,059,476	4,259,345
Net Revenues for Debt Service / Capital	1,919,226	1,975,232	2,526,102	1,940,878	1,918,857	1,893,328	1,783,337	1,667,761	1,546,320	1,418,715	1,284,638
Net Income	(549,911)	250,982	1,002,936	570,050	848,554	478,762	319,721	163,237	322,217	136,613	(58,465)
Ending Fund Balance	\$5,280,531	\$5,531,513	\$6,534,449	\$7,104,499	\$7,953,053	\$8,431,815	\$8,751,536	\$8,914,773	\$9,236,990	\$9,373,603	\$9,315,138
Total Unrestricted Fund Target (25% O&M)	447,580	469,959	493,457	518,130	544,036	571,238	599,800	629,790	661,279	694,343	729,061
Target Met	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Debt Service Coverage (Min. 1.3x)	5.6	5.7	6.4	4.9	4.9	4.8	4.5	4.4	31.5	28.9	26.2
Target Met	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

5.6. Cost Allocation

Table 16 shows the projected wastewater flows and loadings of the City’s wastewater customers by equivalent dwelling units (EDUs). BWA estimates total flows to the wastewater system of 435,155 gallons per day or 212,327 hundred cubic feet (hcf) annually. Total annual estimated projected biochemical oxygen demand (BOD) amounts to 265,148 pounds and total estimated suspended solids (SS) amounts to 265,148 pounds.

Table 16. Flows and Loadings

	# of Sewer EDUs	Est. Mo Flow (hcf) Per EDU ¹	Projected Wastewater Flow			Strength (mg/l)		Loadings (lbs)	
			hcf	mg	gpd	BOD	SS	BOD	SS
Total Residential	1,942	7	161,681	121	331,358	200	200	201,903	201,903
Total Commercial & Industrial	<u>221</u>	Varies ²	<u>50,646</u>	<u>38</u>	<u>103,797</u>	200	200	<u>63,245</u>	<u>63,245</u>
Total	2,163		212,327	159	435,155			265,148	265,148

¹ Based on analysis of City of Angel's Camp water use billing records from 2019-2024.

² A typical commercial account uses approximately 9 hcf per account per month.

Table 17 shows an allocation of the various cost categories of the wastewater enterprise in FY 2023/24. BWA recommends recovering 75% of wastewater costs based on flow and 25% based on strength components. Excluding the additional revenue generated from minimum charges, rate revenue requirement in FY 2023/24 is \$3,303,690, with a cost of \$11.67 per hcf of flow, \$1.56 per pound of BOD and \$1.56 per pound of SS.

Table 17. Wastewater Cost Allocation

Costs Allocated to All Customers	2023/24	Allocation %			Allocation \$			Projected Loadings (lbs)		
		Flow	BOD	SS	Flow	BOD	SS	Flow (hcf)	BOD	SS
								237,078	414,470	374,999
Operating Cost Component										
Personnel Costs	\$461,953	75.0%	12.5%	12.5%	\$346,465	\$57,744	\$57,744	\$1.46	\$0.14	\$0.15
Sewer UL	66,836	75.0%	12.5%	12.5%	50,127	8,355	8,355	0.21	0.02	0.02
Utilities	302,000	75.0%	12.5%	12.5%	226,500	37,750	37,750	0.96	0.09	0.10
Repairs & Maintenance	150,500	75.0%	12.5%	12.5%	112,875	18,813	18,813	0.48	0.05	0.05
Tools & Equipment	11,000	75.0%	12.5%	12.5%	8,250	1,375	1,375	0.03	0.00	0.00
Professional Services	174,200	75.0%	12.5%	12.5%	130,650	21,775	21,775	0.55	0.05	0.06
Materials & Supplies	154,379	75.0%	12.5%	12.5%	115,784	19,297	19,297	0.49	0.05	0.05
Other Services & Charges	190,600	75.0%	12.5%	12.5%	142,950	23,825	23,825	0.60	0.06	0.06
O&M Cost Allocations	<u>150,000</u>	75.0%	12.5%	12.5%	<u>112,500</u>	<u>18,750</u>	<u>18,750</u>	<u>0.47</u>	<u>0.05</u>	<u>0.05</u>
Total Operating Expenses	1,661,468				1,246,101	207,684	207,684	5.26	0.50	0.55
Capital Cost Component										
Vehicle Replacement	78,431	75.0%	12.5%	12.5%	58,823	9,804	9,804	0.25	0.02	0.03
Existing Debt Service	345,381	75.0%	12.5%	12.5%	259,036	43,173	43,173	1.09	0.10	0.12
Capital	<u>2,595,000</u>	75.0%	12.5%	12.5%	<u>1,946,250</u>	<u>324,375</u>	<u>324,375</u>	<u>8.21</u>	<u>0.78</u>	<u>0.87</u>
Total Capital Expenses	3,018,812				2,264,109	377,352	377,352	9.55	0.91	1.01
Total Expenses	4,680,280				3,510,210	585,035	585,035	14.81	1.41	1.56
Adjustments										
Less: Non-Rate Operating Revenue	(120,000)	75.0%	12.5%	12.5%	(90,000)	(15,000)	(15,000)	(0.38)	(0.04)	(0.04)
Less: Minimum Charges	(177,085)	75.0%	12.5%	12.5%	(132,814)	(22,136)	(22,136)	(0.63)	(0.08)	(0.08)
Less: Use of Reserves	<u>(1,079,505)</u>	75.0%	12.5%	12.5%	<u>(809,628)</u>	<u>(134,938)</u>	<u>(134,938)</u>	<u>(3.42)</u>	<u>(0.33)</u>	<u>(0.36)</u>
Total adjustments	(1,376,590)				(1,032,442)	(172,074)	(172,074)	(4.86)	(0.65)	(0.65)
Revenue Requirement	\$3,303,690				\$2,477,768	\$412,961	\$412,961	\$11.67	\$1.56	\$1.56

Table 18 shows the calculation of costs for each customer class.

BWA divided the total costs allocated to residential users by total residential dwelling units to derive a rate of \$107.95 per month per residential dwelling unit.

For all non-residential users, BWA divided total costs allocated to Commercial and Industrial customers to determine a rate of \$0.0208 per gallon of estimated winter use flow. Winter use is calculated as the monthly use from January – April of the prior year divided by four. BWA recommends establishing minimum charges per account per month based on typical use for commercial accounts, approximately 9 hcf per month. The minimum charge is recommended for non-residential accounts because the costs of operating the wastewater system are largely fixed regardless of customer usage. The minimum charge ensures that customers are paying to maintain their share of the system capacity. Mixed use customer minimum charges are recommended to be one commercial account minimum charge plus one residential charge per dwelling unit.

Table 18. Wastewater Rate Calculation

	# of Sewer EDUs	Est. Mo Flow (hcf) Per EDU	Projected Wastewater Flow			Loadings (lbs)		FY 2023/24 Unit Rate Per Class			FY 2023/24 Cost Recovery			FY 2023/24 Recalculated
			hcf	mg	gpd	BOD	SS	\$/hcf	\$/lb BOD	\$/lb SS	\$/hcf	\$/lb BOD	\$/lb SS	
Total Residential	1,942	7	161,681	121	331,358	201,903	201,903	\$11.67	\$1.56	\$1.56	\$1,886,750	\$314,458	\$314,458	\$107.95
Total Commerical & Industrial	<u>221</u>	Varies ¹	<u>50,646</u>	<u>38</u>	<u>103,797</u>	<u>63,245</u>	<u>63,245</u>	\$11.67	\$1.56	\$1.56	<u>\$591,018</u>	<u>\$98,503</u>	<u>\$98,503</u>	\$0.0208 ²
Totals	2,163		212,327	159	435,155	265,148	265,148				\$2,477,768	\$412,961	\$412,961	\$3,303,690

¹ A typical commercial account uses approximately 9 hcf per account per month.

² Users subject to minimum charges per account per month, based on typical monthly use for commercial users (~9 hcf).

5.7. Proposed Wastewater Rates & Bill Impacts

Table 19 shows the proposed wastewater rates. The first year of the proposed rates includes a one-time update to the rate structure, where all residential users are billed per dwelling unit, and all non-residential users are charged based on their winter usage, with a minimum charge per account. The wastewater utility will also require 2% annual rate increases to keep revenues in line with inflation and prevent rates from falling behind the cost of providing services.

The proposed rates represent the maximum annual increases. Actual annual increases implemented may be less than proposed, as approved by the City Council each year. BWA recommends that the City continue to perform regular rate studies to ensure future wastewater rates are aligned with the cost of service.

Table 19. Proposed Wastewater Rates

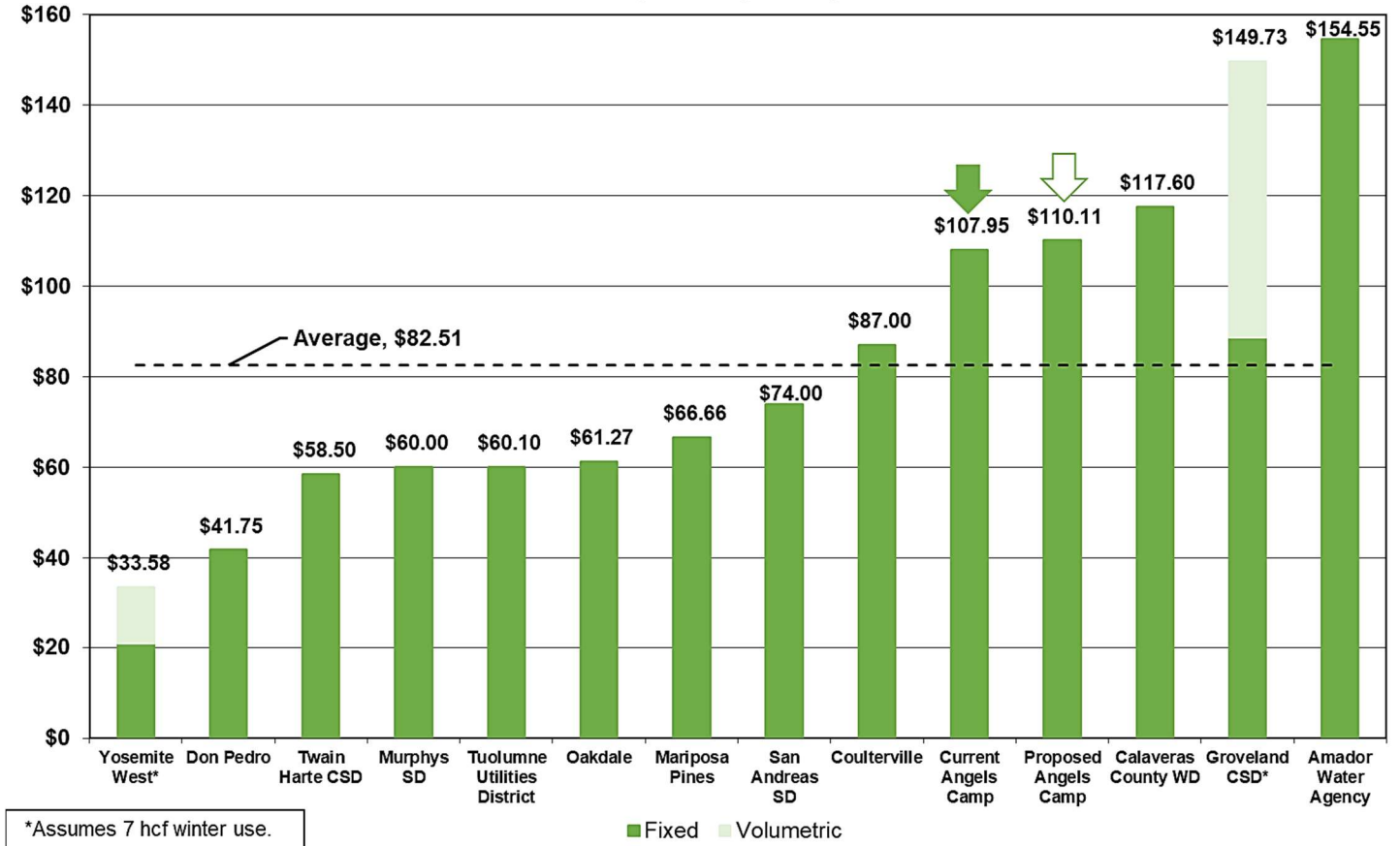
		Fiscal Year	2025/26	2026/27	2027/28	2028/29	2029/30
		Effective Date	6/21/2025	6/21/2026	6/21/2027	6/21/2028	6/21/2029
		Proposed Increase	2.0%	2.0%	2.0%	2.0%	2.0%
User Class	Current Rates	Proposed Monthly Fixed Rate					
Residential							
Single Family, Mobile Home, Multi-Family	\$/month \$107.95	\$110.11	\$112.31	\$114.56	\$116.85	\$119.19	
Six Mile Village - Residential	\$/gallon 0.0144	110.11	112.31	114.56	116.85	119.19	
Non - Residential ¹		Proposed Volumetric Rate (\$ / gallon, winter use)					
Commercial & Industrial	\$/ Establishment 136.30	0.0212	0.0216	0.0220	0.0224	0.0228	
Other Institutional	\$/ gallon,winter use 0.0208	0.0212	0.0216	0.0220	0.0224	0.0228	
Six Mile Village - Non Residential	\$/gallon 0.0144	0.0212	0.0216	0.0220	0.0224	0.0228	
¹ Minimum Wastewater Charges (\$/ month)		139.03	141.81	144.65	147.54	150.49	

5.8. Regional Wastewater Rate Survey

Figure 2 compares the wastewater bills for a typical single family home to those of other regional agencies.

Figure 2: Regional Wastewater Rate Survey

Single Family Residential Monthly Wastewater Rate Survey (January 2024)



6. LOW INCOME DISCOUNT

To help offset the impact of rate increases for low-income customers, the City has established a low-income discount program utilizing non-rate sources of revenue (late payment fees), estimated at approximately \$20,000 per year for water and \$20,000 per year for wastewater. The applicant may only apply for their permanent residence, must be the bill payer of record, and must provide a copy of a current PG&E bill showing participation in the PG&E CARE Program or required documentation verifying a household income at or below 200% of the federal poverty guidelines.

Once applicants are approved by City staff, they would receive the following credits (as funds are available):

- Water only customers: \$2.68 per monthly billing period
- Wastewater only customers: \$2.68 per monthly billing period
- Water & Wastewater customers: \$5.36 per monthly billing period