



Recycled Water Cost of Service Rate Study

For Fiscal Years

2024-2029

Prepared by:
Finance Division

Chad Brantley, CPA
Director of Finance and Technology Services

Agnes Boros, CPA
Finance Manager

Table of Contents

Contents

BACKGROUND..... 2

PURPOSE 2

OVERVIEW..... 2

COST OF SERVICE AND RATE STUDY RESULTS 3

 Recycled Water System Usage and Customer Base 3

 Recycled Water System Expenses..... 3

 IEUA Volumetric Costs 4

 IEUA Fixed Charges 5

 CVWD Operation & Maintenance Costs 5

 Recycled Water System Rates Calculation..... 7

 Fixed Costs 7

 Variable Costs..... 8

 Recycled Water System Revenues..... 10

APPENDIX A – METER SIZES AND CAPACITIES 11

APPENDIX B – RATE DETAIL..... 12

APPENDIX C – PROJECTED CASH RESERVE BALANCES 13

BACKGROUND

The Cucamonga Valley Water District (the “District” or “CVWD”) is an independent special district that operates under the authority of Division 12 of the California Water Code. The District was incorporated on March 25, 1955, and is governed by a five-member, elected Board of Directors. The District provides water, wastewater, and recycled water services to a population of approximately 190,000 within its 46 square mile service area, which is located in the western area of San Bernardino County, California. The District encompasses the majority of the community of Rancho Cucamonga and portions of the cities of Fontana, Ontario, Upland, and some of the unincorporated areas of San Bernardino County.

The District’s recycled water system consists of 7.2 miles of distribution lines, 134 meters of various sizes, and the service lines associated with the meters. The District operates on a fiscal year basis, which starts July 1 continuing through June 30 of the following year.

PURPOSE

The purpose of this report is to summarize findings resulting from the Recycled Water Cost of Service Rate Study performed by the Finance Division of CVWD. As part of this rate study, CVWD first projected revenues and expenses, then developed rates that meet the net revenue requirements. This report summarizes the results of this cost of service and rate study and recommends new recycled water rates.

OVERVIEW

CVWD purchases recycled water from the Inland Empire Utilities Agency (IEUA). Recycled water is treated wastewater that is used for non-drinking purposes such as landscape irrigation and industrial processes. Using recycled water allows CVWD to reduce reliance on imported water. Recycled water costs less for its customers and helps to save potable (drinking) water for home and business uses. Combined with water conservation, recycled water provides a reliable water source to customers during times of drought. Recycled water is reliable, sustainable, and is a renewable resource.

To protect the public's health and safety, the Regional Water Quality Control Board and state and local health departments strictly monitor recycled water. These agencies set precautionary requirements to protect workers and the public. Pipeline systems and valves are color coded purple and cross connections with domestic water supply systems are prevented through strict State specifications.

COST OF SERVICE AND RATE STUDY RESULTS

Recycled Water System Usage and Customer Base

In Fiscal Year (FY) 2022, the District delivered approximately 1,154 acre feet (AF) to approximately 142 customers. The District charged a rate of \$1.94 per hundred cubic feet (HCF) during Fiscal Year 2023.

The following table shows historical and projected recycled water usage and customer base from FY2020 through FY2029:

Table 1
Recycled Water Consumption & Customer Count
Fiscal Years

	Historical			Projected						
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Water Sales (AF)	1,038	1,222	1,154	1,070	1,100	1,120	1,140	1,160	1,180	1,200
Customers	135	139	142	143	144	145	146	147	148	149

The projections shown above in Table 1 are based on conservative estimates that consider the state-wide directive to eliminate the use of ornamental turf for street medians and commercial frontage areas. Many of the utility customers for recycled water currently irrigate at least some ornamental turf which may be converted to drought tolerant plants and trees.

Recycled Water System Expenses

In order to provide recycled water, the District incurs costs to purchase the recycled water as well as pay for Operating and Maintenance (O&M) costs. O&M costs are related to customer service, meter reading, billing, inspection, distribution, and maintenance.

IEUA implemented a change to the fee structure in FY2023 with the introduction of the Fixed Cost Recovery charge that is separated out from the volumetric charge. IEUA will continue to impose a volumetric charge for purchasing recycled water for direct use by irrigation and industrial customers.

The District has annual debt service payments related to the recycled water utility fund. A low interest rate loan was received through IEUA from the State of California Revolving Fund for the purpose of constructing recycled water infrastructure. The District's potable water utility fund provided initial funding and start-up costs to pay for capital assets of the recycled water fund through an inter-fund loan. The recycled water utility fund has reimbursed the potable water utility fund in full. In recent years the decline in sales resulted in a deficit for the recycled water

Cucamonga Valley Water District

Recycled Water Cost of Service and Rate Study FY2024-2029

fund. Prudent financial planning requires that the recycled water fund build and maintain various minimum financial reserves to ensure ongoing operations. Since the potable water fund has been repaid for the initial startup costs, the recycled water fund will begin to set aside financial reserves with the goal of meeting minimum financial reserve levels (see CVWD Administrative Policy No. 1.3 – Reserve and Financial Benchmark).

The following table shows recycled water expenses budgeted for 2023, estimated actual for 2023, and projected amounts for FY2024 through FY2029:

Table 2
Recycled Water Expenses
Fiscal Years

Operating Expenses	Budgeted	Est. Actual	Projected					
	2023	2023	2024	2025	2026	2027	2028	2029
Source of Supply-IEUA								
Volumetric Pass-Through	\$ 595,093	\$ 567,094	\$ 576,300	\$ 534,750	\$ 570,960	\$ 609,280	\$ 650,980	\$ 694,950
IEUA Fixed Cost Recovery								
Charge Pass-Through	-	45,289	108,849	228,396	239,816	251,807	264,397	277,617
Transmission/Distribution	132,388	128,270	139,742	148,125	155,531	163,307	171,471	180,045
Customer Accounts	117,220	85,265	93,036	98,618	103,548	108,727	114,163	119,870
General and Administration	155,950	156,398	157,751	167,818	172,891	183,288	188,624	196,725
Total Operating Expenses	1,000,651	982,316	1,075,678	1,177,707	1,242,746	1,316,409	1,389,635	1,469,207
Non-Operating Expenses								
Debt Principal and Interest	34,793	34,793	129,745	134,793	134,794	134,793	134,793	34,793
Capital and Liquidity Reserves	-	-	55,300	46,300	54,300	56,300	64,300	169,000
Capital Investment/Reserve	125,000	-	50,000	50,000	50,000	50,000	50,000	50,000
Total Non-Operating Expenses	159,793	34,793	235,045	231,093	239,094	241,093	249,093	253,793
Total Expenses	\$ 1,160,444	\$ 1,017,109	\$ 1,310,723	\$ 1,408,800	\$ 1,481,840	\$ 1,557,502	\$ 1,638,728	\$ 1,723,000

The projections shown above in Table 2 are based on the inflation factors listed in Table 5 of this report. These factors are applied at the detail account level, not directly to the total amounts shown in this table.

IEUA Volumetric Costs

The Source of Supply-IEUA Volumetric Pass-Through line item in Table 2 represents the cost of the recycled water that is purchased from IEUA fiscal year. IEUA sets their recycled water rates on a fiscal year basis and charges the District by the acre foot. The cost per acre foot used in the calculation for fiscal years 2024 and 2025 have been adopted by IEUA and will be effective July 1, 2023 and July 1, 2024 respectively. Due to this cost being determined by IEUA, CVWD will treat this cost as a pass-through rate. For the years 2026 through 2029 no estimates of the cost have been provided by the IEUA. As such, this study recommends that CVWD adopt pass-through authorization under Government Code section 53756, in order to pass through the actual rate upon adoption by IEUA. CVWD will notify customers of the rate increase at least 30 in advance of its implementation.

This cost of purchasing recycled water is one of the most significant operating expenses of the recycled water utility. The following table shows the historical, adopted and cost per acre foot of recycled water, showing future years as TBD (to-be-determined). Note that rates will decrease commencing fiscal year 2023 as a result of IEUA’s new Fixed Cost Recovery Charge:

Cucamonga Valley Water District
Recycled Water Cost of Service and Rate Study FY2024-2029

Table 3
Cost to Purchase Recycled Water from IEUA - Volumetric Rates
Fiscal Years

	Historical			Adopted			Future			
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Cost per AF	\$ 490	\$ 505	\$ 520	\$ 516	\$ 510	\$ 465	TBD	TBD	TBD	TBD
Year over year % increase	2%	3%	3%	-1%	-1%	-9%				

IEUA Fixed Charges

In FY2023 IEUA created a Fixed Cost Recovery charge that converted revenues away from the volumetric recycled water charge. The IEUA Fixed Cost Recovery charge is determined annually by IEUA and it is divided among the member agencies based on their recycled water allocation ratio. The recycled water allocation includes direct use of recycled water and groundwater recharge. The portion of the Fixed Cost Recovery charge that is attributable to recycled water direct use allocated to CVWD, is listed as a new Source of Supply expense line item. This cost will be established as a new pass-through charge to CVWD customers, based on proportional meter size. Due to the complexity of the calculation, this amount will be recalculated each year based on prior year’s direct use and groundwater recharge allocated to CVWD and the current number and types of recycled water meters in service at the time. The portion of the Fixed Cost Recovery charge that is attributable to groundwater recharge will not be included in the calculation of the recycled water meter pass-through rate. The Recycled Water direct use share percentage is included in the calculation in Table 4. Table 4 below shows the current approved IEUA Fixed Cost Recovery charges and its allocation to the CVWD recycled water customers.

Table 4
Cost to Purchase Recycled Water from IEUA - Fixed Cost Recovery Charge
Fiscal Years

	Adopted			Future			
	2023	2024	2025	2026	2027	2028	2029
IEUA-Fixed Cost Recovery	\$1,106,000	\$2,362,600	\$4,957,400	TBD	TBD	TBD	TBD
Year over year % increase		114%	110%				
CVWD's Regional Share	\$245,049	\$523,465	\$1,098,378				
Prior Year Direct Use (AF)	1,154	1,100					
Prior Year Groundwater Recharge (AF)	5,090	4,190					
Direct Use Share %	18%	21%					
IEUA-Fixed Cost - Direct Use Share							
Pass-Through ¹	\$45,289 ²	\$108,849 ³	TBD ⁴	TBD	TBD	TBD	TBD

¹ CVWD Pass-Through will start in FY2024

² FY2023 Fixed Cost was imposed by IEUA but was not recovered with a CVWD pass-through rate

³ FY2024 will be the first year that CVWD will recover the direct use portion of the Fixed Cost rate imposed by IEUA

⁴ FY2025 Direct Use Share cannot be calculated because IEUA allocates the share of Fixed Costs based on prior year usage.

CVWD Operation & Maintenance Costs

The Operating Expenses other than Source of Supply in Table 2 consist of various costs associated with the maintenance and administration of the system as well as its operations. The

Cucamonga Valley Water District

Recycled Water Cost of Service and Rate Study FY2024-2029

transmission and distribution line item represents expenses that relate to maintenance of the recycled water pipelines. These transmission and distribution expense projections are based on historical cost data associated with maintaining pipelines. The customer accounts line item represents expenses related to billing, payment processing and customer service functions. These customer account expense projections are based on a prorated share of District costs associated with billing and customer service. The general and administrative line item is for salaries and benefits of District staff who monitor, inspect, and maintain the operation of the recycled water system. These general and administrative account expense projections are based on historical data. Table 5 lists the various inflationary assumptions for the major cost drivers based on analysis of historic cost increases.

Table 5
Recycled Water Inflationary Assumptions
Fiscal Years

Escalation factors	2024	2025	2026	2027	2028	2029
General Inflation	5.0%	4.0%	3.0%	3.0%	3.0%	3.0%
Wages	6.0%	6.0%	5.0%	5.0%	5.0%	5.0%
Benefits	6.0%	6.0%	5.0%	5.0%	5.0%	5.0%
Utilities (excl. Electricity)	5.0%	4.0%	3.0%	3.0%	3.0%	3.0%
Electricity	10.0%	8.0%	6.0%	6.0%	6.0%	6.0%
Capital	5.0%	4.0%	3.0%	3.0%	3.0%	3.0%

Recycled Water System Rates Calculation

The District utilizes the cost of service approach to setting rates. This cost of service approach includes the cost of providing recycled water only to those customers receiving that service. Conservative and prudent management practices require that the recycled water system generate revenues that will cover the cost of service. There are two primary components to the cost of service: fixed costs and variable costs. District management believes that fixed costs should be covered by fixed rates and variable costs should be covered by variable rates.

Management also believes that rate changes to either fixed or variable charges should be smoothed over several years to avoid large fluctuations in the rates for any given year. This smoothing of rates benefits recycled water rate payers by making bills more predictable. The District uses Operating Reserve revenues to smooth rates.

Fixed Costs

The fixed costs of the recycled water system include the debt service payments and contributions to the fund reserves. The fixed rates that should cover these costs are the flat meter charges. Flat meter charges are calculated based on a ratio that is determined by the meters hydraulic capacity. Larger meters have higher flow capacity ratio and the monthly charge for the meter is increased by the same ratio. The American Water Works Association (AWWA) developed the standard meter ratios. See the table in appendix A for the meter sizes and flow capacity ratios.

The following table shows the projected fixed customer service costs, debt service costs, reserve funding, and the projected fixed meter charges.

Table 6
Recycled Water - Projected Fixed Costs
Fiscal Years

	Budgeted	Est. Actual	Projected					
	2023	2023	2024	2025	2026	2027	2028	2029
Customer accounts	\$ 117,220	\$ 85,265	\$ 93,036	\$ 98,618	\$ 103,548	\$ 108,727	\$ 114,163	\$ 119,870
Debt Service (Principal+Interest)	34,793	34,793	129,745	134,793	134,794	134,793	134,793	34,793
Operating and Capital Reserves	10,788	51,576	55,300	46,300	54,300	56,300	64,300	169,000
Less:								
CVWD Meter Charges Revenue	162,801	171,634	63,471	65,912	68,442	71,065	73,784	76,602
Net Cost (Surplus)	\$ -	\$ -	\$ 214,610	\$ 213,799	\$ 224,200	\$ 228,755	\$ 239,472	\$ 247,061

As shown in Table 6, there is a drop in Meter Charge revenues in FY2024. This change is due to the introduction of the new IEUA Fixed Cost Recovery charge. In the first year of this rate series, starting October 1, 2023, CVWD’s Meter Charge is reduced by this new pass-through charge. In future years, starting July 1st of each fiscal year from FY2025 through FY2029, CVWD’s Meter Charge will be adjusted 3% annually, while the IEUA Fixed Cost Recovery will be determined by IEUA and will be passed through to CVWD customers (see table 4). Annual adjustments of 3% were determined to be necessary in order to cover operating expenses and provide minimal funding to the Capital Reserve and Operating Reserve of the recycled water fund. Funding these reserves in small increments spread out over the 5-year timeframe of this study will smooth out

Cucamonga Valley Water District

Recycled Water Cost of Service and Rate Study FY2024-2029

the year-to-year impact of rate adjustments to the rate payers. The difference between the total meter charges and the fixed costs must be provided by the commodity charges (see Tables 7A & 7B). The proposed combined CVWD Meter Charge and IEUA Fixed Cost Recovery charge as of October 1, 2023, will be equal to the current CVWD Meter Charge effective July 1, 2023. For more detail on the meter rates for each meter size, see Appendix B.

Variable Costs

The variable costs of the recycled water system include the cost of purchasing wholesale recycled water from IEUA, other operating costs (e.g. inspection, operations and maintenance, and other related costs), and capital replacement costs. The recycled water commodity charge is designed to recover these variable costs of providing service only to those customers receiving that service.

The following table shows the projected net revenue requirement consisting of variable costs and the remaining fixed costs of the recycled water system and the related consumption. This is then used to calculate the necessary commodity charges in each fiscal year.

Table 7A
Commodity Charge Revenue Requirement Calculation
Fiscal Years

	Budgeted	Est. Actual	Projected					
	2023	2023	2024	2025	2026	2027	2028	2029
IEUA Volumetric Charge ¹	\$ 595,093	\$ 612,383	N/A	N/A	N/A	N/A	N/A	N/A
Transmission/Distribution	132,388	128,270	\$ 139,742	\$ 148,125	\$ 155,531	\$ 163,307	\$ 171,471	\$ 180,045
General and Administration	155,950	156,398	157,751	167,818	172,891	183,288	188,624	196,725
Fixed Cost Difference (Table 6)	-	-	214,610	213,799	224,200	228,755	239,472	247,061
Capital Project Funding	125,000	-	50,000	50,000	50,000	50,000	50,000	50,000
Less:								
Developer Fees	95,000	27,233	153,878	153,878	153,878	153,878	153,878	153,878
Construction Water Charges	4,128	24,523	10,846	11,108	11,500	11,892	12,284	12,676
Recycled Water Services	500	218	300	300	300	300	300	300
Net Allocation to Operating Reserve	(\$20,767)	(83,664)	(11,471)	(11,344)	(11,552)	(12,434)	(12,350)	(12,350)
Revenue Requirement	929,570	928,742	408,550	425,800	448,496	471,714	495,455	519,327
Units of Water Consumption (HCF)	479,160	478,733	492,228	500,940	509,652	518,364	527,076	535,788
Recycled Water Commodity Charge (per HCF)	\$1.94	\$1.94	\$0.83	\$0.85	\$0.88	\$0.91	\$0.94	\$0.97

¹ Pass-Through from FY2024 to FY2029 is not applicable to the CVWD Recycled Water Commodity Charge because the IEUA volumetric cost is recovered through the IEUA Commodity Charge as shown in Table 7B below.

Cucamonga Valley Water District
Recycled Water Cost of Service and Rate Study FY2024-2029

Table 7B
IEUA Commodity Charge Calculation
Fiscal Years

	Budgeted	Est. Actual	Projected					
	2023	2023	2024	2025	2026	2027	2028	2029
Units of Water Consumption (HCF)	479,160	478,733	492,228	500,940	509,652	518,364	527,076	535,788
Units of Water Consumption (AF) ¹	1,100	1,099	1,130	1,150	1,170	1,190	1,210	1,230
IEUA Volumetric Pass-Through Unit Cost (per AF)	\$ 516	\$ 516	\$ 510	\$ 465	TBD	TBD	TBD	TBD
IEUA Volumetric Pass-Through Total Cost	N/A	N/A	\$ 576,300	\$ 534,750	TBD	TBD	TBD	TBD
Recycled Water Commodity Charge per HCF (Unit Cost per HCF)	N/A	N/A	\$1.17	\$1.07	TBD	TBD	TBD	TBD

¹ 1 AF = 435.6 HCF

As shown in Table 7A and 7B, the direct cost of purchasing recycled water from IEUA will be separated out from CVWD’s commodity charge starting October 1, 2023. At the time of the rate study, IEUA had only adopted rates for FY2024 and FY2025. To eliminate the uncertainty of estimating future rates, this portion of the commodity charge will be a Pass-Through Rate. This IEUA pass-through rate will be effective July 1st of each fiscal year from FY2025 through FY2029. The combined CVWD & IEUA pass-through Commodity Rate proposed for October 1, 2023, will be equal to the current CVWD Commodity Rate effective July 1, 2023. Recycled water customers will be notified of future rate changes no later than 30 days before those rates become effective. For the proposed annual Commodity Rate charges, see Appendix B.

The introduction of the IEUA Pass-Through Commodity rate will reduce the commodity charges recovered by the District. These charges must meet the annual projected revenue requirements. Despite the historically high inflation estimates (see Table 5) the District is only increasing this rate by 3% per year during the 5-year period from FY2025 – FY2029. The allocation of Operating Reserves will be utilized to stabilize rates over the 5-year period. The remaining fixed costs that are not covered by fixed monthly meter charges are included (see Table 6). The capital investment will be used to fund major repairs or replacements of the recycled water system without the need to drastically raise rates in future years. If the excess operating income is generated or if capital improvement funds are not needed, they will be allocated to reserves.

Recycled Water System Revenues

The District charges recycled water customer’s two types of fees for service. The meter service charge is a flat fee on each monthly bill and is based upon the size of the meter. The volumetric charge is based upon the water consumption and measured in hundreds of cubic feet (HCF).

Based on the number of customers and their water usage in Table 1 and charges in Tables 6 and 7, the District is able to calculate projected total revenues for the Water Sales and the Meter Charges during each fiscal year. The Developer Fees are based on the assumption that the District will add one new 2” meter to the recycled water system each year.

IEUA Volumetric and Fixed Cost recovery charges are pass-through charges, meaning that only the cost billed by IEUA to the District will be charged to CVWD customers.

The following table shows recycled water revenues budgeted for FY2023, estimated actual for FY2023, and projected from FY2024 through FY2029:

Table 8
Recycled Water Revenues
Fiscal Years

Revenue	Budgeted	Est. Actual	Projected					
	2023	2023	2024	2025	2026	2027	2028	2029
CVWD Recycled Water Sales	\$ 929,570	\$ 904,218	\$ 397,703	\$ 414,691	\$ 436,994	\$ 459,819	\$ 483,168	\$ 507,038
IEUA Pass-through Volumetric Charge Revenue*	-	-	576,300	534,750	TBD	TBD	TBD	TBD
CVWD Meter Charges	162,801	171,634	63,471	65,912	68,442	71,065	73,784	76,602
IEUA Pass-Through Fixed Cost Charge Revenue*	-	-	108,849	TBD	TBD	TBD	TBD	TBD
Construction Water Charges	4,128	24,523	10,846	11,108	11,500	11,892	12,284	12,676
Developer Fees	95,000	27,233	153,878	153,878	153,878	153,878	153,878	153,878
Recycled Water Services	500	218	300	300	300	300	300	300
Total Revenues	\$1,191,999	\$1,127,826	\$1,311,347	\$1,180,639	\$ 671,114	\$ 696,954	\$ 723,413	\$ 750,494

*IEUA Pass-Through: Revenues = Expenses

APPENDIX A – METER SIZES AND CAPACITIES

The following table shows the American Water Works Association standard meter ratios that are derived from the safe maximum flow for each meter size:

Table A
American Water Works Association Standard Meter Ratios

Meter Size	Safe Maximum Operating Capacity (gpm)	AWWA Meter Ratio
3/4 inch	30	1.00
1 inch	50	1.67
1 1/2 inch	100	3.33
2 inch	160	5.33
3 inch	300	10.00
4 inch	500	16.67
6 inch	1,000	33.33
8 inch	1,600	53.33
10 inch	2,400	80.00

Note: According to American Water Works Association Manual of Water Supply Practices M1, customer-related costs for meters and services may be properly distributed among customer classes by recognizing factors that are generally responsible for those costs being incurred. One method for distributing meter service costs to customer classes is in proportion to the investment in meters and services installed, based on the number of equivalent meters. Distribution of customer costs by equivalent meter and service ratios recognizes that meter and service costs vary, depending on considerations such as size and capacity of the meter.

APPENDIX B – RATE DETAIL

The following table shows historical, current and proposed recycled water meter rates and commodity charges from FY2021 through FY2029:

Table B
Recycled Water Meter Charges and Commodity Rates
Rate Effective Date

Meter Size	Historical			Current	Proposed					
	7/1/2020	7/1/2021	7/1/2022	7/1/2023	10/1/2023	7/1/2024	7/1/2025	7/1/2026	7/1/2027	7/1/2028
Monthly CVWD Meter Rates:										
1" Meter	\$ 30.55	\$ 31.47	\$ 32.41	\$ 33.38	\$ 13.66	\$ 14.07	\$ 14.50	\$ 14.93	\$ 15.38	\$ 15.84
1.5" Meter	60.92	62.74	64.63	66.57	27.13	27.94	28.78	29.65	30.54	31.45
2" Meter	97.50	100.43	103.44	106.54	43.44	44.75	46.09	47.47	48.89	50.36
3" Meter	182.93	188.42	194.07	199.90	61.86	63.71	65.63	67.59	69.62	71.71
4" Meter	304.95	314.10	323.53	333.23	84.78	87.32	89.94	92.64	95.42	98.28
6" Meter	609.72	628.01	646.85	666.26	114.12	117.55	121.07	124.70	128.45	132.30
8" Meter	975.59	1,004.86	1,035.01	1,066.06	119.55	123.13	126.83	130.63	134.55	138.59
10" Meter	1,463.48	1,507.39	1,552.61	1,599.19	416.05	428.53	441.38	454.62	468.26	482.31
Monthly IEUA Fixed Charge Pass-Through Rates:										
1" Meter	\$ -	\$ -	\$ -	\$ -	\$ 19.72	TBD	TBD	TBD	TBD	TBD
1.5" Meter	-	-	-	-	39.44	TBD	TBD	TBD	TBD	TBD
2" Meter	-	-	-	-	63.10	TBD	TBD	TBD	TBD	TBD
3" Meter	-	-	-	-	138.03	TBD	TBD	TBD	TBD	TBD
4" Meter	-	-	-	-	248.46	TBD	TBD	TBD	TBD	TBD
6" Meter	-	-	-	-	552.13	TBD	TBD	TBD	TBD	TBD
8" Meter	-	-	-	-	946.51	TBD	TBD	TBD	TBD	TBD
10" Meter	-	-	-	-	1,183.14	TBD	TBD	TBD	TBD	TBD
Commodity Rate per HCF										
CVWD Rate per HCF	\$ 1.83	\$ 1.88	\$ 1.94	\$ 2.00	\$ 0.83	\$ 0.85	\$ 0.88	\$ 0.91	\$ 0.94	\$ 0.97
IEUA Pass-Through Rate	-	-	-	-	1.17	1.07	TBD	TBD	TBD	TBD
Combined Volumetric Rate per HCF	\$ 1.83	\$ 1.88	\$ 1.94	\$ 2.00	\$ 2.00	\$ 1.92	TBD	TBD	TBD	TBD

APPENDIX C – PROJECTED CASH RESERVE BALANCES

The following table shows projected recycled water utility fund cash reserve balances from FY2023 through FY2029:

Table C
Projected Cash Reserve Balances
Fiscal Years

	2023	2024	2025	2026	2027	2028	2029
Beginning Cash Reserves							
Development Fees*	\$ 582,994	\$ 610,227	\$ 764,105	\$ 917,983	\$ 1,071,861	\$ 1,225,739	\$ 1,379,617
Capital Project Reserve	-	-	-	-	30,000	60,000	80,000
Operating Reserve	-	-	-	1,358	3,746	8,624	31,025
Unreserved Fund Balance	(217,531)	(52,131)	(23,216)	-	-	-	-
Total Beginning Balance	365,463	558,096	740,889	919,341	1,105,607	1,294,363	1,490,642
Cash Sources (Uses)							
Operating Revenues	1,100,592	1,157,469	1,255,157	1,328,012	1,404,163	1,484,912	1,569,183
Operating Expenses	(982,316)	(1,075,678)	(1,177,707)	(1,242,746)	(1,316,409)	(1,389,635)	(1,469,207)
Debt Principal+Interest	(34,793)	(34,793)	(34,793)	(34,794)	(34,793)	(34,793)	(34,793)
Development Fees	27,233	153,878	153,878	153,878	153,878	153,878	153,878
Capital Improvements	-	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)
Net Investment in Capital Assets	81,917	31,917	31,917	31,916	31,917	31,917	31,917
Net Sources (Uses)	192,633	182,793	178,452	186,266	188,756	196,279	200,978
Ending Cash Reserves							
Development Fees*	610,227	764,105	917,983	1,071,861	1,225,739	1,379,617	1,533,495
Capital Project Reserve	-	-	-	30,000	60,000	80,000	80,000
Operating Reserve	-	-	1,358	3,746	8,624	31,025	78,125
Unreserved Fund Balance	(52,131)	(23,216)	-	-	-	-	-
Total Ending Cash Balance	\$ 558,096	\$ 740,889	\$ 919,341	\$ 1,105,607	\$ 1,294,363	\$ 1,490,642	\$ 1,691,620

*Development Fee Reserves are restricted in accordance with law.