

EL TORO WATER DISTRICT

2024 Potable Water Commodity Rate and Recycled Water Rate Update

Draft Report / April 30, 2024





April 30, 2024

Dennis P. Cafferty, P.E.
General Manager
El Toro Water District
24251 Los Alisos Blvd.
Lake Forest, CA 92630

Subject: 2024 Potable Water Commodity Rate and Recycled Water Rate Update

Dear Mr. Cafferty:

El Toro Water District (ETWD or District) engaged Raftelis Consultants, Inc. (Raftelis) to pass through the significant increase in potable water costs as a result of the large increases in the Metropolitan Water District of Southern California's water rates. Additionally, recycled water sales have reduced significantly, leading to reduced revenues. The District wanted to ensure reasonable costs recovery and conduct a cost-of-service study to update its commodity rate component of the recycled water rates that comply with Proposition 218. As part of the Update, we reviewed purchased water costs to calculate the pass-through rates for potable water, and the latest operating budget for recycled water and calculated recycled water rates for the District in fiscal year (FY) 2024-25. The updated rates, scheduled to take effect on July 1, 2024, reflect projected changes in net revenue requirements for the water and recycled water enterprise and projected recycled water sales for FY 2024-25.

This Potable Water Commodity Rate and Recycled Water Rate Update Study Report summarizes the key findings and recommendations related to developing the respective rates.

It has been a pleasure working with you, and we want to thank you for your assistance during the Study.

Sincerely,

A blue ink signature of Sudhir Pardiwala.

Sudhir Pardiwala
Executive Vice President – Project Manager

A black ink signature of Nicki Bartak.

Nicki Bartak
Consultant – Analyst

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1. Background

In 2023, the District engaged Raftelis Consultants, Inc. (Raftelis) to conduct the Water, Recycled Water (RW), and Wastewater Rate Update Study (Study) to develop rates for all three enterprises that are equitable and in compliance with Proposition 218. Raftelis prepared rate proposals for Fiscal Year (FY) 2023-24 and the two following years (FY 2025 and FY 2026). However, the District's purchased water costs from Metropolitan Water District (MWD) increased significantly beyond what was assumed in the Study. The District engaged Raftelis to revise and update the potable water and recycled water rates for FY 24-25. The Commodity Rate and Recycled Water Rate Update Report ("Update") describes the methodology used to update the rates developed in the Study with new commodity purchasing costs. The 2023 Water, Recycled Water (RW), and Wastewater Rate Update Study provides more comprehensive detail on the development of the original rates and components.

The District's current potable water rate structure consists of the following components:

Water

- » Monthly Service Charges by meter size to recover a portion of operating costs
- » Variable Rates: Tiered Residential Rates and Uniform Commercial Rates, comprised of the following rate components:
 - » Water Supply Rate to pay for purchased water supply costs
 - » Delivery Rate to recover the remaining operating costs
 - » Revenue Offset to provide a rate incentive and affordability for essential water use in Tier 1
 - » Conservation and Recycled Water Program costs applied to inefficient and excessive water use to fund the District's conservation and supplemental water supply programs (e.g., Recycled Water expansion)
- » Capital Facility Charges by meter size to pay for capital replacement and refurbishment (R&R) of the existing water system and debt service associated with the capital construction

Recycled Water

- » Monthly service charge to cover a portion of the fixed costs of O&M
- » Variable rate: Uniform commodity rate
- » Capital Facility Charge to pay for R&R and debt service associated with the capital construction

Raftelis updated the variable Water Rate Component of both the Potable Water and Recycled Water rate. There are no changes to the proposed monthly service charges calculated in the study.

2. Pass-through Water Supply Cost

The District purchases water from the Municipal Water District of Orange County (MWDOC), a member agency of the Metropolitan Water District of Southern California (MWD). MWD rates are increasing in January 2025 at a rate higher than what was anticipated in the 2023 Rate Study. The MWD rate increases will be included in the blended rates charged to the District. A portion of the water purchased by the District is treated at the Baker Water Treatment Plant (Baker WTP). O&M costs at the Baker WTP also increased at a rate higher than what was anticipated in the 2023 Rate Study. Dividing the total costs in Table 2-1 (Line 7) by the projected water sales (Line 8) results in the unit rate shown in Line 9. See Appendix 1 for detailed breakdown of water supply costs. Table 2-2: Current and Projected Water Supply Unit Rate- and Table 2-3: Water Supply Cost Component of the Potable Water Rates (\$/ccf) show that projected water supply rates will increase by an average of \$0.26 per ccf. It should be noted that the updated rates become effective only in the first full billing period following July 1, and the District will have to use its reserves to offset the higher costs until the new rates are implemented.

Table 2-1: Water Supply Revenue Requirements

Line #	Water Supply Unit Rates Development	FY 2024 – Budgeted [A]	FY 2024 – Actual [B]	FY 2025 – Budgeted [C]
1	MWD Fixed Charges			
2	Capacity Reservation Charge	\$146,755	\$144,749	\$160,361
3	Readiness To Serve Charge	\$637,457	\$637,451	\$779,807
4	Total Treated Full Service Annual Cost	\$4,228,625	\$3,636,477	\$4,503,475
5	Baker Raw Water Cost	\$3,120,450	\$3,060,568	\$3,176,250
6	Baker WTP O&M Annual Cost	\$830,501	\$1,012,144	\$1,054,350
7	Regional Pipeline O&M Cost	\$33,384	\$40,438	\$41,725
8	Total Water Supply Cost	\$8,963,788	\$8,531,827	\$9,715,969
9	Projected Water Sales	2,918,520 ccf ¹	2,831,400 ccf	2,918,520 ccf ¹
10	Water Supply Unit Rate [7] / [8]	\$3.07 / ccf	\$3.16 / ccf	\$3.33 / ccf

Table 2-2: Current and Projected Water Supply Unit Rate

Fiscal Year (FY)	Water Supply Unit Rate \$ / hundred cubic feet (ccf)
FY 2023-24	\$3.07
FY 2024-25	\$3.33
Increase / Change	\$0.26/ ccf

¹ Excludes 300AF in non-billed water

Table 2-3: Water Supply Cost Component of the Potable Water Rates (\$/ccf)

Tiers	Descriptions	Current FY 2024	Proposed FY 2025
Tier 1 - Essential Use	MWDOC + Baker Blended	\$3.07	\$3.33
Tier 2 - Efficient Use	MWDOC + Baker Blended	\$3.07	\$3.33
Tier 3 - Inefficient Use	MWDOC + Baker Blended	\$3.07	\$3.33
Tier 4 - Excessive Use	MWDOC + Baker Blended	\$3.07	\$3.33
Uniform – CII Use	MWDOC + Baker Blended	\$3.07	\$3.33

Commodity Rate Derivation

After deriving the increase to the Potable Water Supply portion of the Commodity Rate, Raftelis added the other components of the water rate to derive the FY 25 potable water rate. The updates to the individual rate components are detailed in Table 2-5 below. Additional details on the calculation of the other rate components can be found in the 2023 Study Report.

Table 2-4: Current Commodity Rate Calculation – FY 2024

Water Usage Rates	Water Supply	Peak Delivery	RW	Conservation	Rev Offset	Current Rates
Tier 1 - Essential Use	\$3.07	\$0.05	\$0.00	\$0.00	-\$0.12	\$3.00
Tier 2 - Efficient Use	\$3.07	\$0.30	\$0.00	\$0.00	\$0.00	\$3.37
Tier 3 - Inefficient Use	\$3.07	\$0.30	\$2.33	\$0.99	\$0.00	\$6.70
Tier 4 - Excessive Use	\$3.07	\$0.55	\$4.05	\$0.99	\$0.00	\$8.67
Uniform - Commercial Use	\$3.07	\$0.10	\$0.32	\$0.10	-\$0.10	\$3.49

Table 2-5: Proposed Commodity Rate Calculation – FY 2025

Water Usage Rates	Water Supply	Peak Delivery	RW	Conservation	Rev Offset	Proposed Rates
Tier 1 - Essential Use	\$3.33	\$0.05	\$0.00	\$0.00	-\$0.12	\$3.26
Tier 2 - Efficient Use	\$3.33	\$0.30	\$0.00	\$0.00	\$0.00	\$3.63
Tier 3 - Inefficient Use	\$3.33	\$0.30	\$2.33	\$0.99	\$0.00	\$6.96
Tier 4 - Excessive Use	\$3.33	\$0.55	\$4.05	\$0.99	\$0.00	\$8.93
Uniform - Commercial Use	\$3.33	\$0.10	\$0.32	\$0.10	-\$0.10	\$3.75

3. Recycled Water Revenue Requirements and Proposed Rates

3.1. Recycled Water System

In FY 2015, the District completed the expansion of its recycled water system, including water recycling plant (WRP) upgrades to tertiary treatment processes and recycled water distribution system pipeline expansion. In FY 2019, the District completed the Phase II expansion of the Recycled Water Distribution System. With the Recycled Water Expansion Project's completion, all recycled water customers (existing and converted customers) are now supplied with high quality tertiary recycled water. The following sources financed the recycled water expansion capital cost for both phases: State Revolving Fund (SRF) Loan, grants, and the restricted reserve (revenues from Tier 3 and Tier 4 potable usage dedicated to recycled water expansion) and recycled water charges from recycled water customers.

3.2. Projected Recycled Water Sales

The District has completed the Phase II Recycled Water Retrofit Project and anticipates serving 277 Recycled Water accounts in FY 2025. The projected recycled water sales for FY 2025 are estimated at 1,150 AF, which is consistent with FY 2024 sales. However, FY 2024 sales were 335 AF (22.6% decline) lower than anticipated, due to higher levels of precipitation and intentional conservation by one of the largest users.

3.3. Revenue Requirement and Proposed Rates

The District provided the total O&M expenses for FY 2024-25 as shown below in Table 3-1.

Table 3-1: Recycled Water O&M Expenses for FY 2024-25

Description	FY 2025
Labor	
Salary	\$914,600
Benefits	\$343,136
Labor Total	\$1,257,736
Electrical Power	\$215,730
Other O&M	\$408,490
General & Administration	\$165,505
TOTAL O&M	\$2,047,462

Table 3-2: summarizes the recycled water revenue requirements from rates for FY 2025. Recycled water O&M expenses and supply (Line 5) and other revenue requirements including debt service, capital spending, and revenue offsets due to delayed implementation of new rates (Line 11) will be partially offset by restricted reserve funding (Line 13-14), capital charges (Line 15), MWD LRP Rebates (Line 7), and several other sources of revenues (Lines 16-19). The remaining revenue requirement to be recovered from recycled water rates is shown in Line 28. Additional details on line item calculations can be found in the Appendices and are noted in the Reference column as applicable.

Recycled water is supplemented with potable water when adequate recycled water is insufficient to meet demand. Therefore, the meter service charges and capital facility charges for potable and recycled water are the same.

As noted for potable water above, Raftelis only updated the volumetric component of the rate. Monthly service charges are consistent with what is presented in the 2023 Rate Study and will be adjusted by 3.9% from FY 24 rates based on the “CPI for Urban Wage and Clerical Workers (CPI-W)” for the Los Angeles-Long Beach-Anaheim area published by the Bureau of Labor Statistics.

Table 3-2: Recycled Water Revenue Requirement from Rates

Line No	Recycled Water Rev Requirements	FY 2025	Reference
1	RW O&M Expenses		
2	General & Administrative	\$165,505	
3	Operations & Maintenance	\$408,490	
4	Other Operating Expenses	\$1,473,466	
5	Subtotal RW O&M Expenses	\$2,047,462	Appendix 3
6	Other Rev Requirements		
7	Additional Revenue Required due to Late Implementation (Implementation Offset)	\$17,272	Appendix 2 Table 2-A, 2-B, 2-C
8	RW Capital Spending	\$224,000	
9	Restricted Reserve Conservation Funding	\$200,000	
10	Debt Service	\$2,078,750	
11	Subtotal Other Rev Requirements	\$2,520,022	
12	Less (-) Other Revenues		
13	Restricted Reserves Funding of Debt Service	\$1,026,664	
14	Restricted Reserve Revenue	\$826,917	
15	Recycled Water Meter Capital Charge Funding of Debt	\$227,377	Appendix 2 Table 2-C
16	MWD LRP Rebate	\$264,825	Appendix 2 Table 2-D
17	MNWD Payment for RW Service to Golf Course	\$11,000	
18	Misc. Revenue	\$0	
19	Property Taxes	\$105,664	
20	Subtotal Less (-) Other Revenues	\$2,462,447	
21	Less (-) Operating Reserve Funding	\$0	
28	Total Revenue Requirements from RW Rates	\$2,105,037	

It should be noted that the District is planning restricted reserve funding of over \$1.85 million to keep the recycled water rates at a competitive level compared to potable water rates.

Table 3-3 derives the revenue required from the recycled water commodity rate (Line 3) by subtracting the Monthly Service Charge Revenue (Line 2) from the Total Revenue Requirements (Line 1). The unit recycled water commodity rate is calculated using the net revenue requirements from recycled water commodity rates (Line 3) divided by projected recycled water sales (Line 4). The recycled water commodity rate for FY 2025 is \$3.27 / ccf or \$1,424 / AF, which is 90% of the Tier 2 potable water commodity rate for FY 2025 and provides an economic incentive for irrigation customers to convert to recycled water.

Table 3-3: FY 2025 Cost of Service Recycled Water Commodity Rate Calculation

Line #	Description	FY 2025	Reference
1	Total Revenue Requirements from Recycled Water Rates	\$2,105,037	
2	Less (-) Monthly Service Charges	\$466,963	Appendix 2 Table 2-B
3	Net Revenue Requirements from Recycled Water Usage Rate	\$1,638,074	
4	Projected Recycled Water Sales (ccf)	500,940	
5	Unit Recycled Water Usage Rate (\$/ccf)	\$3.27	
6	Unit Recycled Water Usage Rate (\$/AF)	\$1,424.41	
7	% of Tier 2 Potable Rate	90.1%	

APPENDIX

APPENDIX 1: PASS-THROUGH WATER SUPPLY COST

Source: Purchased Water_2425_Raftelis.xlsx

		2023/24 Budget		2023/24 Projected Actual		2024/25 Budget	
		Jul 2023	Jan 2024	Jul 2023	Jan 2024	Jul 2024	Jan 2025
1	Total Period Demand (AF)	4,000	3,000	4,159	2,341	4,000	3,000
2	Total Annual Demand (AF)		7,000		6,500		7,000
3	MWD Period Demand (AF)	2,225	1,225	2,414	572	2,225	1,225
4	MWD Annual Demand (AF)		3,450		2,986		3,450
5	MWD Untreated Commodity Rates						
6	System Access Rate	368.00	389.00	368.00	389.00	389.00	463.00
7	System Power Rate	166.00	182.00	166.00	182.00	182.00	159.00
8	MWD Tier 1 Rate	321.00	332.00	321.00	332.00	332.00	290.00
9	Subtotal Untreated Full Service	855.00	903.00	855.00	903.00	903.00	912.00
10	Treatment Surcharge	354.00	353.00	354.00	353.00	353.00	483.00
11	Total Treated Full Service Rate	1,209.00	1,256.00	1,209.00	1,256.00	1,256.00	1,395.00
12	Total Treated Full Service Annual Cost	2,690,025	1,538,600	2,918,333	718,144	2,794,600	1,708,875
13	MWD Fixed Charges						
14	Capacity Reservation Charge	71,358	75,397	71,358	73,391	73,391	86,970
15	Readiness To Serve Charge	299,564	337,893	299,998	337,453	390,157	389,650
16	Total MWD Fixed Charges		784,212		782,200		940,169
17	Total MWD Cost		5,012,837		4,418,677		5,443,644
18	Total MWD Unit Cost (\$/AF)		1,453		1,480		1,578
19	Baker Water Treatment Plant						
20	Period Demand MWDOC (AF)	1,775	1,775	1,405	1,769	1,525	1,525
21	Period Demand Irvine Lake (AF)			341	0	250	250
22	Annual Demand (AF)		3,550		3,514		3,550
23	Baker Raw Water Cost	1,517,625	1,602,825	1,463,397	1,597,171	1,580,250	1,596,000
24	Baker O&M Unit Cost (per AF)	225	225	288	288	297	297
25	Baker O&M Annual Cost	398,559	398,559	502,747	509,397	527,175	527,175
26	Total Period Baker Water Treatment Plant Cost	1,916,184	2,001,384	1,966,144	2,106,568	2,107,425	2,123,175
27	Total Annual Baker Water Treatment Plant Cost		3,917,567		4,072,712		4,230,600
28	Baker Water Treatment Plant Unit Cost(\$/AF)		1,104		1,159		1,192
29	Regional Pipeline Operations & Maintenance						
30	SCP Surcharge	8.38	8.38	8.14	8.14	8.38	8.38
31	SAC Surcharge	1.02	1.02	1.09	1.09	1.12	1.12
32	SCWD/JRWSS Operations & Maintenance				8,000		8,000
33	Total Regional Pipeline Operations & Maintenance	16,692	16,692	16,112	24,325	16,863	24,863
34	Total Purchased Water Cost						
35	MWD Treated Water Cost		5,012,837		4,418,677		5,443,644
36	Baker Raw Water Cost		3,120,450		3,060,568		3,176,250
37	Baker O&M Cost		797,117		1,012,144		1,054,350
38	Regional Pipeline O&M Cost		33,384		40,438		41,725
39	Total Purchased Water Cost		8,963,788		8,531,827		9,715,969
40	Percent Increase Budget to Budget per Unit						8.39%
41	Overall Imported Water Effective Rate						
42	Fiscal Year Cost per Acre Foot Purchased		1,281		1,313		1,388
43	Fiscal Year Cost per CCF Purchased		2.9397		3.01		3.1864
44	Fiscal Year Rate per CCF Sold		3.07		3.16		3.33

APPENDIX 2: RECYCLED WATER REVENUE TABLES

Source: Recycled Water_Raftelis_v2.xlsx

Table 2-A: Commodity Rates - Recycled Water

		2023-24		2024-25	
		Rate	Revenue	Rate	Revenue
Distribution	900	3.03	1,187,881	3.27	1,281,971
Golf	250	3.03	329,967	3.27	356,103
Total	1,150		1,517,848		1,638,074
Revenue Increase					120,226
Implementation Offset					(12,022.56)
Current Fiscal Year Revenue					1,626,051

Table 2-B: Fixed Meter Rates - Recycled Water

		2023-24		2024-25	
		Rate	Revenue	Rate	Revenue
Rate Increase				3.9%	
1.5	29	71.27	24,802	74.05	25,769
2	247	137.76	408,321	143.13	424,237
10	1	1,360.00	16,320	1,413.04	16,956
	277		449,443		466,963
Revenue Increase					17,521
Implementation Offset					(1,460)
Current Fiscal Year Revenue					465,503

Table 2-C: Capital Revenue - Recycled Water

		2023-24		2024-25	
		Rate	Revenue	Rate	Revenue
Rate Increase					
1.5	29	27.76	9,660	34.70	12,076
2	247	55.52	164,561	69.40	205,702
10	1	640.00	7,680	800.00	9,600
	277		181,902		227,377
Revenue Increase					45,475
Implementation Offset					(3,790)
Current Fiscal Year Revenue					223,588

Table 2-D: LRP Rebate

	22-23 Usage	24-25 Budget	Rebate	Rebate Budget
Phase I	654.4	723.0	250	180,750
Phase II	160.2	177.0	475	84,075
Golf Course	250.2	250.0		
	1,064.8	1,150.0		264,825

APPENDIX 3: RECYCLED WATER O&M BREAKOUT

Source: Recycled Water_Raftelis_v2.xlsx

	24/25 Fiscal Year (No Labor)
	Recycled Water
Administration	37,583
Finance	41,294
Human Resources	6,367
Technology	48,289
Public Relations	20,192
Customer Service	10,178
Engineering	1,603
Operations Support	16,270
Fleet Services	31,196
Water Supply & Treatment	-
Water Storage Operations	-
Water Pumping Operations	-
Water Transmission & Distribution	-
Sewer Pumping Operations	-
Sewer Collections	-
Wastewater Treatment	-
Recycled Transmission & Distribution	32,194
Tertiary Treatment	516,560
Other Operating Expenses	28,000
Totals	789,726
Labor	1,257,736
Total O&M	2,047,462