

EL TORO WATER DISTRICT

Water and Wastewater Facilities & Water Supply Capacity Fee Report

FINAL REPORT / DECEMBER 3, 2024







December 3, 2024

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

Subject: Water and Wastewater Facilities and Water Supply Capacity Fee Report - Final

Dear Mr. Cafferty:

Raftelis is pleased to provide this Water and Wastewater Facilities and Water Supply Capacity Fee report for El Toro Water District (District) to review and update, as needed, the District's capacity fees.

This report summarizes the methodology for updating the fee and presents the recommended capacity fees and impacts.

It has been a pleasure working with you, and we thank you and the District staff for the support provided during the course of this study.

Sincerely,

Sudhir Pardiwala, P.E.

Executive Vice President

Theresa Jurotich, P.E. (KS, WA), PMP

Manager

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El Toro Water District / Water and Wastewater Facilities and Water Supply Capacity Fee Report - Final

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1. Executive Summary

1.1. Study Background

The District last revised its water and wastewater facilities capacity fees in 2012 and created the Water Supply Charge component of the Water Capital Facilities Fee ("water supply capacity fee") in 2016. The District engaged Raftelis in 2024 to conduct a capacity fees study to review and update, as needed, the capacity fees for water and wastewater facilities and water supply. This report documents the resultant findings, analyses, and proposed changes to the District's capacity fees. The updated capacity fees documented in this report are in accordance with the rules and regulations of California State Government Code Section 66013. This report is the formal technical documentation in support of modifications to the capacity facility fees within the District's service area including data sources, methodology, results, and comparisons.

The major objectives of the study include the following:

- Updating the charges to reflect the current state of each system and capital improvements
- Ensuring charges are fair to both future users and to existing users who have invested, and reinvested, in each system

1.2. Capacity Fees

Capacity fees are also commonly known as developer fees, development impact fees, connection fees, and system development charges, among others. This report uses the term capacity fees reflecting the nomenclature most common in California. Capacity fees are one-time capital charges assessed against a new development to recover the proportional share of capital facility investment necessary to accommodate growth. Capacity fees are codified in the California Government Code Sections 66000-60025. Capacity fees must reflect the link between the fee imposed on, and the benefit received by, a new connection to the system. The fee charged may not exceed the reasonable share of costs associated with providing the service.

Broadly, utilities use one of three different methodologies to calculate capacity fees: Buy-In, Incremental, and Hybrid; with variations of each dictated by local community and system characteristics, as well as policy objectives. Utilities have broad latitude in the method and approach used to calculate fees provided the fees reflect the benefit and do not exceed the reasonable costs for providing service to the connection. These fees are designed to be proportional to the burden placed on the system by new connections.

1.3. Recommended Fees

1.3.1. Water Capacity Fees

Since the District has existing capacity in its water system, Raftelis recommends the buy-in approach for these two enterprises. Raftelis worked closely with District staff to determine the value of the existing system. Raftelis and the District agree that the valuation method should reflect the replacement cost less depreciation (RCLD) to value the system in today's dollars while acknowledging that the system's facilities, in whole, are not new and subject to depreciation. The value of the system, including reserves, is spread over the existing system utilization to determine the "equity" of existing users and derive the proposed buy-in portion of the capacity fees.

The RCLD value of the current water system backbone assets is calculated as \$58.7 million. Reserves¹ of \$11.9 million are added and outstanding debt principal of \$22.5 million is subtracted to yield a net system value of \$48.1 million.

The FY 2024 equivalent meters totaled 22,313. Dividing the net system value of \$48.1 million by the number of equivalent meters results in a capacity fee of \$2,154 for a 5/8" meter. Capacity ratios based on the AWWA listed safe operating capacities for different sized meters are used to determine the corresponding fee for other meter sizes.

Table 1-1 shows the schedule of proposed water capacity fees as well as the current schedule. For a new 5/8" meter, the water capacity fee will increase by \$11 per meter.

Meter	Ratio	Proposed	Current	Difference
5/8"	1.00	\$2,156	\$2,145	\$11
3/4"	1.00	\$2,156	\$2,145	\$11
1"	1.67	\$3,600	\$3,582	\$18
1.5"	4.06	\$8,751	\$8,708	\$43
2"	10.19	\$21,965	\$21,856	\$109

Table 1-1: Proposed and Existing Water Capacity Fees

1.3.2. Wastewater Capacity Fees

Since the District has existing capacity in its wastewater system, Raftelis recommends the buy-in approach for this enterprise. Raftelis worked closely with District staff to determine the value of the existing system. Raftelis and the District agree that the valuation method should reflect the replacement cost less depreciation (RCLD) to value the system in today's dollars while acknowledging that the system's facilities, in whole, are not new and subject to depreciation. The value of the system, including reserves, is spread over the existing system utilization to determine the "equity" of existing users and derive the proposed buy-in portion of the capacity fees.

The RCLD value of the current wastewater system backbone assets is calculated as \$32.7 million. Reserves² of \$11.9 million are added and outstanding debt principal of \$6.8 million is subtracted to yield a net system value of \$37.8 million.

The FY 2024 wastewater influent was 3.55 mgd, as provided by the District. This results in a unit fee of \$10.66/gpd.

Table 1-2 shows the schedule of proposed sewer capacity fees as well as the current schedule. The capacity fee is increasing \$1.35/gpd.

¹ Reserves represent cash on hand from current ratepayers for future re-investment of sewer system capital assets. The reserve balance captured in the capacity fee calculation omits cash for operations.

² Reserves represent cash on hand from current ratepayers for future re-investment of sewer system capital assets. The reserve balance captured in the capacity fee calculation omits cash for operations.

Table 1-2: Proposed and Existing Wastewater Capacity Fees

Proposed	Current	Difference
\$10.66	\$9.31	\$1.35

1.3.3. Water Supply Capacity Fees

The Water Supply Charge capacity fee was developed in 2016 to help fund water supply projects, such as water expansion projects, desalination projects, and conservation projects. The District is continuing to expand its distribution system to bring recycled water to more customers. As such, the updated water supply charge (recycled water capacity fee) is based on the incremental method. By increasing capacity in the recycled water system potable water is freed up for use by new customers.

The District provided the cost estimate for the expansion and the delivery capacity of the expansion. The cost estimate is from 2021. Raftelis used the Handy-Whitman Index to estimate costs in 2024 dollars. That cost divided by the capacity results in the updated recycled water capacity fee.

The estimated construction cost in 2024 dollars is \$25 million with a capacity of 524 acre-feet (AF). This results in a unit cost of \$47,782/AF.

Table 1-3 shows the proposed fee versus the current fee. The increase is due both to a higher capital cost than for the initial tertiary plant and less capacity than the production capacity of the plant.

Table 1-3: Proposed and Existing Recycled Water Capacity Fees

Proposed, \$/AFY	Current (\$/AFY)	Difference
\$47,782	\$8,900	\$38,882

2. Background

For publicly owned systems, most of the assets are typically paid for by the contributions of existing customers through rates, charges, securing debt, and taxes. In service areas that incorporate new customers, the infrastructure developed by previous customers is generally extended towards the service of new customers. Existing customers' investment in the existing system capacity allows newly connecting customers to take advantage of unused surplus capacity. To further economic equality among new and existing customers, new connectors will typically "Buy-In" to the existing and pre-funded facilities based on the existing assets, effectively putting them on par with existing customers. In other words, the new users are buying into the existing system based on the replacement costs of existing assets to continue to provide the same level of service to new customers through repairs, expansions, and upgrades to the system.

The basic economic philosophy behind capacity fees is that the costs of providing service should be paid for by those that receive utility from the product. To effect fair distribution of the value of the system, the charge should reflect a reasonable estimate of the cost of providing capacity to new users and not unduly burden existing users through a comparable rate increase. Accordingly, many utilities make this philosophy one of their primary guiding principles when developing their capacity fee structure.

The philosophy that service should be paid for by those that receive utility from the product is often referred to as "growth-should-pay-for-growth." The principal is summarized in the American Water Works Association (AWWA) Manual M26: Water Rates and Related Charges:

"The purpose of designing customer-contributed-capital system charges is to prevent or reduce the inequity to existing customers that results when these customers must pay the increase in water rates that are needed to pay for added plant costs for new customers. Contributed capital reduces the need for new outside sources of capital, which ordinarily has been serviced from the revenue stream. Under a system of contributed capital, many water utilities are able to finance required facilities by use of a 'growth-paysfor-growth' policy."

This principle, in general, applies to water, wastewater, and storm drainage systems. In the excerpt above, customer-contributed-capital system charges are equivalent to capacity fees.

Values shown in report tables and figures are rounded to the digit shown. Therefore, any manual reproduction of the calculations shown may not match the precise results displayed in the report.

3. Methodology Overview

A capacity fee is a one-time charge paid by a new water or sewer system customer for the cost of backbone facilities and incremental expansion necessary to provide system capacity to that new customer. However, it is also assessed to existing customers requiring increased system capacity. Revenues generated by this charge are used to pay for growth-related facilities. Backbone facilities refers to those components of the system that are necessary to provide service to all customers.

A capacity fee may be developed as a single charge for the entire backbone system or as individual charges for each backbone component. The District has historically calculated the capacity fee as a single charge, which is the most common approach across California.

The District's water capacity fee has historically been calculated by equivalent meter. The District's wastewater capacity fee has historically been calculated on a gallon per day of wastewater flow. The District's water supply capacity fee (called the Supply Charge Component) has been charged on a \$/AF basis.

3.1. Capacity Fee Methodologies

The method for calculating capacity fees generally utilizes one of the following three approaches: Buy-In , Incremental, or Hybrid. The Buy-In approach is designed to recover the historical costs of plant investment in proportion to the amount of built capacity, some of which is available for new growth. The Incremental approach is designed to recover the costs of future growth-related projects and the additional capacity those projects will yield. The Hybrid approach is appropriate where some remaining capacity is available in the existing system and where new, future facilities are required for development. The Hybrid approach, therefore, can be described as the sum of the Buy-In plus the Incremental.

3.1.1. Buy-In Method

The Buy-In Method is based on the premise that new customers are entitled to service at the same cost as existing customers. Under this approach, new customers pay only an amount equal to the current system value, either using the original cost or replacement cost as the valuation basis and either netting the value of depreciation or not. This net investment, or value of the system, is then divided by the current capacity utilization on the system by existing users to determine the Buy-In cost per unit.

For example, if the existing system has 100 equivalent dwelling units and the new connector uses an equivalent unit, then the new customer would pay 1/100 of the total value of the existing system. By contributing this capacity fee, the new connector has "bought in" to the existing system. The new user has effectively acquired a financial position on par with existing customers and will face future capital reinvestment on equal financial footing with those customers. This approach is suitable when: (1) an agency has built most or all of their facilities and only a small, or no, portion of future facilities are required for build-out development or (2) an agency does not have a growth-related capital improvement plan. Figure 3-1 shows the framework for calculating an Equity Buy-In capacity fee.

Figure 3-1: Formula for Equity Buy-In Approach



3.1.2. Incremental Cost Method

The Incremental-Cost Method states that new development (new users) should pay for the additional capacity and expansions necessary to accommodate them. This method is typically used when there are specific capital improvements needed to furnish growth for new development. Under the Incremental-Cost Method, growth-related capital improvements are allocated to new development based on their estimated usage or capacity requirements, irrespective of the value of past investments made by existing customers.

For instance, if it costs X dollars (\$X) to provide sewer collection and treatment for 100 additional equivalent dwelling units and a new connector uses one of those equivalents, then the new user would pay \$X/100 to connect to the system. In other words, new customers pay the incremental cost of capacity based on the estimated cost of the new facility projects. This method is generally used when detailed facilities are identified for the capacity required to serve new customers and little to no existing system capacity is available for development. While California Code 66013 (b)(3) does not define a specific period over which to include future projects, these periods can be as long as a master planning period. Figure 3-2 shows the framework for calculating an incremental cost capacity fee.

Figure 3-2: Formula for Incremental Cost Method



3.1.3. Hybrid Method

The Hybrid Method is typically used where some capacity is available to serve new growth, but additional expansion is still necessary to accommodate new development. Under the hybrid method, the capacity fee is based on the sum of the existing capacity value and the costs of necessary expansions (i.e., the Buy-In component and the Incremental-cost component) without duplicating costs of facilities in the new and existing systems.

Capital improvements that are required to serve existing users and expand system capacity to serve future customers may be included proportionally to the percentage of the cost specifically required for expansion of the system. Figure 3-3 summarizes the framework for calculating the Hybrid capacity fee.

Figure 3-3: Formula for Hybrid Approach



3.1.4. Recommended Methodology

Since the District has some remaining water and wastewater capacity available for new customers, Raftelis recommends using the Buy-in approach for these two enterprises

Since the District is expanding the recycled water delivery capacity to bring the recycled water to more customers, Raftelis recommends using the Incremental approach for the water supply capacity charge.

3.2. Asset Valuation Options

Four principal methods are used to estimate the value of existing facilities: original cost, replacement cost, original cost less depreciation, and replacement cost less depreciation.

3.2.1. Original Cost

The principal advantages of original cost valuation are relative simplicity and stability since the recorded costs of fixed assets are held constant. The major criticism levied against the original cost method is that it disregards changes in the time value of money, and future capital costs, which are attributable to inflation and other factors. As evidenced by history, prices tend to increase rather than to remain constant or decrease. This situation may be exacerbated since most water and sewer systems are developed over time on a piecemeal basis as demanded by the customer base and service area growth. Consequently, each asset addition is paid for with dollars of different purchasing power. When these outlays are added together to obtain a plant value, the result can be misleading. Additionally, original cost does not account for the depreciation of facilities and other assets as they age, which may not be representative of the state of the systems. We discuss depreciation in further detail below.

3.2.2. Replacement Cost

Changes in the value of the dollar over time, represented by cost inflation, are recognized by the replacement cost valuation. The replacement cost represents the cost of duplicating the existing water and sewer facilities (or duplicating their functions) in current dollars. Unlike the original cost approach, the replacement cost approach recognizes price level changes that have occurred since plant construction and subsequent investments. The most accurate replacement cost valuation requires a physical inventory and appraisal of plant components in terms of their replacement costs at the time of valuation. However, with original cost records available, a reasonable approximation of replacement cost plant value can be easily derived by trending historical original costs. This approach employs the use of cost indices to express actual capital investment by the utility in current dollars. An obvious advantage of the replacement cost approach is that it accounts for changes in the value of money over time. However, just like original cost it does not account for the depreciation of facilities and other system assets.

3.2.3. Original Cost Less Depreciation

The current value of sewer facilities is materially affected by the effects of age. All assets have estimated useful lives, which vary by type. For example, pumps may have a 20-year life, buildings 50 years, and pipelines 40-80 years depending on the material of construction. Each year an asset is revalued by the fraction of its useful life relative to its original cost. This is referred to as straight line or linear depreciation. At the end of an asset's useful life, it is worth zero dollars on paper, though it may still be in service. Depreciation accounts for estimated devaluation in system assets caused by wear and tear, decay, inadequacy, and obsolescence. To provide appropriate recognition of the effects of depreciation on existing water and sewer systems, the original cost valuation can be expressed as net of depreciation to yield the original cost less depreciation. Accumulated depreciation is computed for each asset and reduces the valuation based on age or condition, from the respective total original cost.

3.2.4. Replacement Cost Less Depreciation (RCLD)

The RCLD is identical to the original cost less depreciation valuation method, with the exception that asset cost and asset depreciation is expressed in today's dollars rather than the value of the dollar when the asset was placed in service. Original cost and depreciation are inflated using historical indices to reflect today's dollars. Replacement cost depreciation is then subtracted from the replacement cost of the asset to yield replacement cost less depreciation. RCLD allows for an accounting of system assets in present value while also accounting for proportional devaluation via depreciation. To reiterate from Section 3.2.2, replacement cost is the common nomenclature; however, in the context of this study it is not a process to appraise or receive bids on replacing each existing asset or facility; it is instead a method of approximating the replacement cost of existing facilities based on historical construction cost increases.

3.2.5. Recommended Asset Valuation Method

Raftelis recommends using the RCLD method to account for today's replacement cost for system improvements while acknowledging the remaining useful life of the system facilities. This valuation approach ensures that future users' investment represents a fair share of the system in both the accounting sense and the level of service these future users are purchasing. This method is widely used in the utility industry to determine capacity fees.

4. Water Capacity Fee Development and Proposed Fees

4.1. Buy-In System Value

The cost basis for determining the Buy-In capacity fee is RCLD, which estimates the replacement cost reflecting the remaining depreciable life of the facility. Backbone system assets data is current as of June 30, 2024 (end of FY 2024). The RCLD is based on the original asset cost adjusted to current costs based on a ratio of the Handy Whitman Index of Public Utility Construction for the Pacific Region (CA, OR, WA), January 2024 to the index for the construction year. The total backbone system RCLD is estimated to be \$58.7 million. A summary of asset value is shown in Appendix A.

The RCLD backbone system value is adjusted to reflect the equity or debt-free investment position of the current customers. Since new customers, through payment of the general water service rates, would be covering the capital carrying costs of the existing plant in service, the outstanding principal on debt is subtracted from the RCLD. The outstanding principal balance of \$22.5 million at the end of FY 2024 is adjusted for cash on hand in the form of capital reserves, contributed by existing ratepayers. Cash available at the end of FY 2024 is estimated to be \$11.9 million.

The adjusted backbone system value is \$48.1 million, as shown in Table 4-1.

Table 4-1: Buy-In Component System Value

Water Capacity Facilities Fee Calculation				
Buy-In Component	RCLD			
Utility Fixed Assets ¹				
Equipment	\$21,051,702			
Collection & Impound Reservoirs	\$31,504,384			
Structures & Improvements	\$6,171,248			
Total Value of Fixed Assets	\$58,727,335			
Less Debt Principal	\$22,535,548			
Plus: Reserve Funds ²	\$11,904,211			
Total Value of Eligible Assets	\$48,095,998			

¹ From Table A-1.

4.2. Equivalent Meters

The second step in calculating the capacity fee is to determine the current demands from existing water connections. Dividing the system value by the capacity utilized by existing customers provides a unit cost for the capacity fee. For water systems, capacity is usually expressed in equivalent meters. Table 4-2 shows the number of meters and equivalent meters from the FY 2024 water rate study. The hydraulic ratio in Table 4-2 is based on the demands of the various meter sizes.

² Email from CFO Sharma on 8/02/2024

Table 4-2: Equivalent Meters

	Meter Size	Number of Meters	Hydraulic Ratio	Equivalent Meter
1	5/8"	2,380	1.00	2,380
2	3/4"	4,854	1.00	4,854
	1"	452	1.67	755
	1.5"	702	4.06	2,850
3	2"	1,126	10.19	11,474
4	Total	9,514		22,313

4.3. Capacity Fee Calculation - Water

The final step in determining the capacity fee is to divide the adjusted water system value (Table 4-1) by the number of equivalent meters (Table 4-2) to obtain the \$/EMU unit cost. Table 4-3 restates the adjusted backbone system value and equivalent meters and calculates a Buy-In component unit charge.

Table 4-3: Buy-In Component Unit Charge

Water Capacity Facilities Fee Calculation	
Total Value of Eligible Assets	\$48,095,998
Equivalent Meter Units ("EMU")	22,313
Buy-In Cost Per Equivalent Meter Unit	\$2,156

Table 4-4 presents the proposed water capacity fee schedule for the different meter sizes The fee for customers other than 5/8" or 3/4" meters are equal to the unit charge in Table 4-3 multiplied by the ratio in Table 4-2. The fee for 5/8" or 3/4" meters would increase by \$11 per meter.

Table 4-4: Proposed Capacity Fee

Meter	Ratio	Proposed	Current	Difference
5/8"	1.00	\$2,156	\$2,145	\$11
3/4"	1.00	\$2,156	\$2,145	\$11
1"	1.67	\$3,600	\$3,582	\$18
1.5"	4.06	\$8,751	\$8,708	\$43
2"	10.19	\$21,965	\$21,856	\$109

5. Wastewater Capacity Fee Development and Proposed Fees

5.1. Buy-In System Value

The cost basis for determining the Buy-In capacity fee is RCLD, which estimates the replacement cost reflecting the remaining depreciable life of the facility. Backbone system assets data is current as of June 30, 2024 (end of FY 2024). The RCLD is based on the original asset cost adjusted to current costs based on a ratio of the Handy Whitman Index of Public Utility Construction for the Pacific Region (CA, OR, WA), January 2024 to the index for the construction year. The total backbone system RCLD is estimated to be \$32.7 million. See Appendix A for the summary asset listing.

The RCLD backbone system value is adjusted to reflect the equity or debt-free investment position of the current customers. Since new customers, through payment of the general sewer service rates, would be covering the capital carrying costs of the existing plant in service, the outstanding principal on debt is subtracted from the RCLD. The outstanding principal balance of \$6.8 million at the end of FY 2024 is adjusted for cash on hand in the form of capital reserves, contributed by existing ratepayers. Cash available at the end of FY 2024 is estimated to be \$11.9 million.

The adjusted backbone system value is \$32.7 million, as shown in Table 4-1.

Table 5-1: Buy-In Component System Value

Wastewater Capacity Facilities Fee Calculation			
Buy-In Component	RCLD		
Utility Fixed Assets ¹			
Equipment	\$21,950,660		
Collection & Impound Reservoirs	\$1,792,576		
Structures & Improvements	\$8,965,217		
Total Value of Fixed Assets	\$32,708,453		
Less Outstanding Debt Principal	\$6,780,125		
Plus: Reserve Funds ²	\$11,904,211		
Total Value of Eligible Assets	\$37,832,539		

¹ From Table A- 2.

5.2. Capacity Fee Calculation - Wastewater

The second step in calculating the capacity fee is to determine the current demands from existing wastewater connections. Dividing the value of the system by the capacity utilized by existing customers provides a unit cost for the capacity fee. For wastewater systems, capacity is usually expressed in millions of gallons per day of collected and treated wastewater. The average annual wastewater system flow, as provided by the District, is 3.55 mgd.

² Email from CFO Sharma on 8/02/2024

The adjusted wastewater system value is divided by the average wastewater flows to determine a \$/gpd unit cost. Table 5-2 shows the wastewater capacity fee calculation. The updated charge of \$10.66/gpd is \$1.35/gpd more than the current charge of \$9.31/gpd.

Table 5-2: Wastewater Capacity Facilities Fee Calculation

Wastewater Capacity Facilities Fee Calculation	
Total Value of Eligible Assets	\$37,832,539
Average Wastewater System Flows (MGD) ¹	3.55
Buy-In Cost Per GPD	\$10.66

¹ Email from GM Cafferty 9/12/2024

6. Water Supply Capacity Fee Development

The District can increase water supply availability by expanding the recycled water system. By converting more users to recycled water and releasing potable water supplies, the District provides water supply to new customers. Since the supply will be increased only through the Phase 3 expansion of the recycled water system, the capacity fee for water supply is based on an incremental method.

6.1. Incremental Component

The incremental component is based on the estimated capital cost of the Phase 3 expansion. The District provided a cost estimate of \$18 million in 2021 dollars. Using the Handy Whitman Index to escalate that price to 2024 dollars, Raftelis has estimated capital cost to be \$25.0 million. The planned capacity is 524 AF. This results in a unit cost for the incremental component of \$47,782/AF.

6.2. Proposed Water Supply Capacity Fee

Table 6-1 shows the calculation of the capacity fee.

Table 6-1: Recycled Water Capacity Fee

Recycled Capacity Facilities Fee Calculation	า
Recycled Water Phase 3 Expansion	\$25,037,722
Capacity, AFY	524
Unit fee, \$/AFY	\$47,782

APPENDIX A:

Backbone Water and Wastewater System Asset Listings

Table A-1: Water Enterprise Assets

Water Enterprise	Original Cost	Accmltd. Depr.	Repl. Cost.	RCLD
Equipment				
17310 - 1422 Source of Supply Equipment - Water	\$254,041	\$230,031	\$844,669	\$69,282
17310 - 1426 Mains - Water	\$1,323,857	\$1,063,697	\$27,890,932	\$1,046,718
17310 - 1430 Treatment Equipment - Water	\$3,401,775	\$1,733,672	\$21,082,517	\$2,252,255
17320 - 1428 Pumping Equipment - Water	\$4,978,154	\$3,587,623	\$17,431,102	\$1,861,198
17320 - 1472 Struct & Improv - Pump-Water	\$1,606,417	\$790,335	\$6,798,792	\$1,856,341
17330 - 1432 Reservoirs & Tanks - Water	\$1,789,632	\$1,270,171	\$10,906,668	\$1,864,764
17330 - 1434 Trans. Dist. Mains - Water	\$9,779,262	\$6,075,115	\$74,428,423	\$11,547,973
17330 - 1436 Fire Mains - Water	\$93,637	\$67,381	\$656,513	\$123,061
17330 - 1438 Services - Water	\$616,666	\$438,568	\$4,100,379	\$13,232
17330 - 1440 Meters - Water	\$178,147	\$85,026	\$1,073,988	\$39,520
17330 - 1442 Hydrants	\$703,004	\$527,969	\$3,607,280	\$147,470
17420 - 1454 Communication Equipment - Water	\$114,557	\$114,557	\$347,947	\$0
17400 - 1444 Office Furniture - Op Support (1/3)	\$140,302	\$102,177	\$282,072	\$61,628
17400 - 1445 Office Furniture - Admin (1/3)	\$112,743	\$110,512	\$446,203	\$3,718
17400 - 1446 Office Equipment - Op Support (1/3)	\$158,800	\$160,335	\$282,727	\$0
17400 - 1447 Office Equipment - Administration (1/3)	\$525,838	\$515,839	\$1,566,052	\$10,984
17400 - 1450 Stores Equipment (1/3)	\$59,277	\$55,622	\$215,891	\$5,611
15400 - 1457 Power Operated Equipment (1/3)	\$422,074	\$346,159	\$1,142,333	\$118,431
17400 - 1458 Tools, Shop & Garage Equipment (1/3)	\$175,406	\$167,816	\$683,960	\$7,546
17420 - 1456 Communication Equipment - Op Support (1/3)	\$255,350	\$234,840	\$617,452	\$21,971
Total Equipment	\$26,688,936	\$17,677,443	\$174,405,903	\$21,051,702
Collection & Impound Reservoirs				
17310 - 1420 Collection & Imp. Res Water	\$5,813,295	\$2,228,848	\$60,894,464	\$31,504,384
Total Collection & Impound Reservoirs	\$5,813,295	\$2,228,848	\$60,894,464	\$31,504,384
Structure & Improvements				
17310 - 1470 Structure & Improvements - Water	\$565,533	\$352,173	\$2,179,793	\$816,347
17310 - 1471 Structure & Improve-source of Supply (SAN)	\$6,665,357	\$5,662,210	\$32,182,099	\$4,691,367
17430 - 1476 Structure & Improvements - Operations (1/3)	\$1,333,907	\$1,147,893	\$5,414,069	\$437,935
17430 - 1477 Structure & Improvements - Administration (1/3)	\$553,663		. , ,	\$225,599
Total Structure & Improvements	\$9,118,460		. , ,	\$6,171,248
Total Water Assets	\$41,620,690	\$27,420,038	\$277,089,969	\$58,727,335

Table A-2: Wastewater Enterprise Assets

Wastewater Enterprise	Original Cost	Accmltd. Depr.	Repl. Cost.	RCLD
Equipment				
17340 - 1424 Effluent Disp Equip- Waste Water	\$799,849	\$760,542	\$3,968,065	\$70,465
17340 - 1427 Mains - Waste Water	\$4,917,623	\$4,089,964	\$24,304,065	\$7,388,982
17340 - 1431 Treatment Equipment - Waste Water	\$14,095,185	\$11,371,684	\$42,864,179	\$4,878,466
17350 - 1429 Pumping Equipment - Waste Water	\$11,699,321	\$9,384,261	\$36,523,528	\$3,647,280
17360 - 1435 Trans. Dist. Mains - Waste Water	\$4,617,945	\$3,218,530	\$42,485,387	\$5,372,842
17360 - 1439 Services - Waste Water	\$413,756	\$317,434	\$4,721,985	\$282,562
17360 - 1441 Meters - Waste Water	\$26,963	\$6,522	\$44,856	\$33,951
17400 - 1444 Office Furniture - Op Support	\$5,531	\$5,531	\$21,780	\$0
17400 - 1446 Office Equipment - Op Support	\$22,323	\$11,161	\$26,464	\$13,232
17400 - 1447 Office Equipment - Administration	\$18,204	\$17,236	\$72,324	\$1,347
17400 - 1452 Laboratory Equipment - Waste Water	\$191,496	\$174,511	\$717,345	\$21,760
17400 - 1458 Tools, Shop & Garage Equipment	\$18,813		\$86,743	\$0
17420 - 1455 Communication Equipment - Waste Water	\$65,120	\$57,061	\$129,093	\$9,886
17420 - 1456 Communication Equipment - Op Support	\$29,568	\$29,568	\$117,456	\$0
17400 - 1444 Office Furniture - Op Support (1/3)	\$140,302	\$102,177	\$282,072	\$61,628
17400 - 1445 Office Furniture - Admin (1/3)	\$112,743	\$110,512	\$446,203	\$3,718
17400 - 1446 Office Equipment - Op Support (1/3)	\$158,800	\$160,335	\$282,727	\$0
17400 - 1447 Office Equipment - Administration (1/3)	\$525,838	\$515,839	\$1,566,052	\$10,984
17400 - 1450 Stores Equipment (1/3)	\$59,277	\$55,622	\$215,891	\$5,611
15400 - 1457 Power Operated Equipment (1/3)	\$422,074	\$346,159	\$1,142,333	\$118,431
17400 - 1458 Tools, Shop & Garage Equipment (1/3)	\$175,406	\$167,816	\$683,960	\$7,546
17420 - 1456 Communication Equipment - Op Support (1/3)	\$255,350	\$234,840	\$617,452	\$21,971
Total Equipment	\$38,771,487	\$31,156,119	\$161,319,963	\$21,950,660
Collection & Impound Reservoirs				
17340 - 1421 Collection & Imp. Res Waste Water	\$430,411	\$430,411	\$3,228,835	\$1,792,576
Total Collection & Impound Reservoirs	\$430,411	\$430,411	\$3,228,835	\$1,792,576
Structure & Improvements				
17340 - 1473 Structure & Improvements - Waste Water	\$309,520		\$797,753	\$330,122
17340 - 1475 Structure & Improvements - Plant	\$19,865,509		\$84,303,094	\$7,630,761
17350 - 1474 Structure & Improvements - Pump-Sewer	\$1,411,719	\$1,180,853	\$6,195,390	\$326,198
17430 - 1476 Structure & Improvements - Operations	\$7,099	\$4,117	\$15,913	\$6,684
17430 - 1477 Structure & Improvements - Administration	\$6,655		\$9,656	
17430 - 1476 Structure & Improvements - Operations (1/3)	\$1,333,907	\$1,147,893	\$5,414,069	\$437,935
17430 - 1477 Structure & Improvements - Administration (1/3)	\$553,663	\$351,471	\$2,013,641	\$225,599
Total Structure & Improvements	\$23,488,071	\$20,998,971	\$98,749,517	\$8,965,217
Total Wastewater Assets	\$62,689,970	\$52,585,501	\$263,298,314	\$32,708,453