Attachment 5

2025 Water and Wastewater System Capacity Fees Report

April 2025 / FINAL

Contents

Tables

Abbreviations

AWWA	American Water Works Association
Carollo	Carollo Engineers
CIP	Capital Improvement Plan
City	City of Oceanside, California
EDU	Equivalent Dwelling Units
FY	Fiscal Year
ME	Meter Equivalent
RCNLD	Replacement Cost New Less Depreciation

SECTION 1 INTRODUCTION

System capacity fees, sometimes referred to as impact fees or system development charges, are one-time fees assessed on new system connections for water and/or wastewater service. As a utility builds its water and wastewater systems, it needs to estimate a certain level of capacity required to serve both base and peak demand periods. The capacity fee equates the reservation of system capacity to serve that new connection with the infrastructure and system costs to provide that capacity. The City of Oceanside (City) imposes system capacity fees for new connections to its Water and Wastewater systems.

Since the City's capacity fees were last evaluated in 2015, many changes and upgrades have been made to the systems. In 2024, the City retained Carollo Engineers, Inc. (Carollo) to perform a Water and Wastewater Systems Capacity Fee Study (Study) to update the system capacity fees for new and/or modified water and wastewater system connections. Carollo used industry-standard methods in the Study, detailed in the Methodology section of this report, to calculate its recommendation. This report presents the system capacity fee analysis and discusses the calculation methodology, assumptions, source data, and results. The proposed system capacity fees represent the proportionate share of existing infrastructure value and future capital costs needed to serve each new or upsized connection to the water system or wastewater system.

Funds collected through system capacity fees are restricted to be spent on capital projects, including those undertaken to rehabilitate and replace existing assets that have available capacity as well as projects undertaken specifically to add system capacity.

- ***Water System Capacity Fees*** recover the cost of facilities for the supply, transportation, treatment, purification, and distribution of water.
- ***Wastewater System Capacity Fees*** recover the cost of facilities for the collection, transportation, treatment, and disposal of wastewater.

Regular reassessments of the capacity fee basis, such as this Study, are recommended every several years in order to confirm system capacities, update growth projections, integrate updated asset registries and system valuations, and account for updated capital plans.

1.1 Current System Capacity Fees

The City currently imposes system capacity fees based on a hybrid calculation approach that accounts for the value of existing system assets as well as the anticipated cost of future assets. Using this approach, the current water system capacity fee is $5,680 per Meter Equivalent (ME) while the current wastewater system capacity fee is $7,794 per Equivalent Dwelling Unit (EDU). Both the water and wastewater system capacity fees are assessed based on the water meter size of each new connection with a 5/8" water meter being the base size (equal to 1 ME for water and 1 EDU for wastewater). Capacity factors for each meter size have been established to reflect the capacity reserved by each connection to the system and are consistent with industry standards. The fees have not been increased since their initial adoption in 2015.

1.2 Annual Inflation Adjustments

Carollo recommends that after adopting the fees proposed in this report, the City implement annual adjustments to the fees using the Engineering News Record Construction Cost Index (ENR CCI). Though the City has not previously included inflation adjustments to the capacity fees, it is common practice among other agencies including the San Diego County Water Authority. The inclusion of an annual adjustment mechanism in the fee ordinance will help fees keep pace with construction cost inflation and mitigate large future increases when the fees are periodically reevaluated through more comprehensive updates such as this Study.

Annual inflationary adjustments are appropriate regardless of the method used to develop the fee. As discussed in subsequent sections, the City's fees account for the value of both the existing system available for growth and future projects necessary to serve growth. Annual adjustments reflect that the cost to replace the existing system rises over time as construction becomes more expensive. Further, when the fees are calculated, the portion of the fee attributable to capital projects reflects the cost of those projects at the time of the calculation. Therefore, the inflation adjustment serves to cover the project costs at the time that they are actually incurred in nominal dollars.

1.3 Statutory Requirements

Capacity charges are subject to the requirements of Government Code Sections 54999.7 and 66013. Capacity charges are "charges for facilities in existence at the time the charge is imposed or charges for new facilities to be constructed in the future which are of benefit to the person or property being charged." Section 66013 provides that capacity charges "shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed." Section 54999.7 establishes a cost nexus requirement.

This report outlines the assumptions, inputs, methodology, results, and recommendations for updating the City of Oceanside's System Capacity Fees. This report should not be considered a legal opinion or guidance, but rather, a documentation of costs and assumptions that support the City's capacity fee as a reasonable recovery of costs from new or upsized connections for their share of system capacity.

1.4 Customer Base

The City currently serves approximately 45,000 residential, commercial, industrial, institutional, and private fire protection connections. Based on projections from the San Diego Association of Governments (SANDAG) modest growth at approximately 0.5 percent per year is expected for the both the water and wastewater systems.

SECTION 2 METHODOLOGY

Two general types of impact fees are used to recover system investments from new users: the System Buy-In approach and the Incremental Cost approach. Additionally, some utilities, including the City of Oceanside, elect to use a Hybrid approach that combines the buy-in and incremental approaches, where and if appropriate. While all are valid, the best approach is dictated by each system's specific characteristics.

2.1.1 Buy-In Approach

Utilities frequently construct infrastructure capacity to meet projected future demands, as incremental expansion can be infeasible or expensive. The Buy-In Approach intends to recover costs that have already been incurred by the City in order to serve future growth. Existing customers have paid for this system over time through user rates and fees (direct capital financing or previously retired debt). The Buy-In approach provides a mechanism to reimburse existing users for the carrying costs of constructing system capacity that is available for use by future users.

This method is most appropriate when existing capacity is sufficient to serve both existing and projected future connections, and capital investment projects for new capacity are minimal. Utilities that fit this profile typically have some "buffer capacity" on hand so new connections can benefit from existing capacity that has been built before the agency needs to plan further expansion.

For the Water system, the value of net assets is divided by the total number of MEs that are currently served to calculate the capacity fee per ME. For the Wastewater system, the value of net assets is divided by the total number of EDUs that are currently served to calculate the capacity fee per EDU.

$$System\ Capacity\ Fee\ = \frac{Existing\ System\ Value\ (RCNLD)}{Existing\ System\ Capacity\ (EDUs/MEs)}$$

2.1.2 Incremental Approach

In contrast with the "backward-looking" buy-in method that uses historical system investment and capacity, the incremental cost method is "forward-looking" and focuses on planned expansion and growth of the system. Where the buy-in method looks at the unit cost of existing system capacity, the incremental cost method reflects the marginal cost of adding capacity to a system that cannot serve forecasted demand with existing infrastructure.

Similar to the buy-in method, the incremental cost method calculation divides system value by the number of MEs or EDUs served by those assets. However, because it is critical for the value used in the numerator to represent the capacity in the denominator, the incremental cost method capacity fee divides the sum of expansion capital improvement plan (CIP) and available asset value by net future capacity available for new connections (future system capacity less existing demand).

$$System\ Capacity\ Fee\ = \frac{Capacity\ Related\ CIP + Existing\ Available\ Capacity}{Future\ System\ Capacity\ (EDUs/MEs) - Existing\ Demand\ (EDUs/MEs)}$$

2.1.3 Hybrid Approach

The Hybrid Approach is a combination of the Buy-In and Incremental Approaches and is most appropriately used when the existing system has some additional capacity but some additional projects are required to serve the expected future demands of additional connectors. Under the Hybrid Approach, the existing system value is added to the additional costs of capacity related to capital projects and divided by the totality of expected future customers, resulting in an equitable impact fee for each new customer connecting to the system.

$$System\ Capacity\ Fee\ = \frac{Capacity\ Related\ CIP + Existing\ System\ Value\ (RCNLD)}{Total\ Projected\ Capacity\ (EDUs/MEs)}$$

2.1.4 Recommended Approach

Based on the characteristics of the City's Water and Wastewater systems and discussion with City Staff, Carollo recommends that the Hybrid Approach be used for the calculation of both Water and Wastewater System Capacity fees. Both systems hold an available capacity that has been funded by existing users, which drives the need for a buy-in component. Additionally, both systems have moderate levels of capacity-related capital investment planned, which calls for an incremental component. Using the hybrid approach establishes a nexus between the value of the existing and future system, and between the benefits of capital investments to existing and future customers.

The Study followed the calculation steps described below, and further detailed later in the report, to determine the recommended capacity fees for the water and wastewater systems:

1. Calculate the value of the existing systems, including infrastructure, cash balances, and adjustments based on asset and financial records provided by the City.
2. Identify the portion of each system's CIP planned to benefit future users.
3. Determine the existing system capacity served based on connected MEs (water) and EDUs (wastewater) and project to 2035 capacity based on SANDAG growth.
4. Divide the sum of existing system value and capital benefiting future users by the projected 2035 system capacity.

SECTION 3 VALUE OF EXISTING SYSTEMS

Both the Buy-In Approach and Hybrid Approach require that new users buy into the Water or Wastewater system. Ratepayer equity is comprised of two components: Net Capital Asset Equity and Reserves.

3.1 Net Capital Asset Equity

Net capital asset equity represents the current value of the physical wastewater or water systems funded by existing ratepayers, less accumulated depreciation and outstanding debt principal, and adjusted to remove the value funded with non-ratepayer revenues. This approach accounts for the fact that system assets have been in service and no longer have a full useful life. The terms related to the calculation of net capital asset equity are defined as shown below.

- **Acquisition Cost** – The original cost paid at the time of construction or capitalization for each asset or system.
- **Depreciation** – The loss in value of each asset or system as the useful life of that asset is exhausted.
- **Net Book Value** – The remaining value of each asset or system in original dollars calculated by subtracting Depreciation from Acquisition Cost.
- **Replacement Cost New** – The current value of the existing water or wastewater assets or systems. Replacement Cost New can be determined by escalating the original acquisition cost for each asset to current dollars. For purposes of The Study, construction costs are escalated to current dollars using the ENR CCI for December 2024.
- **Replacement Cost New Less Depreciation (RCNLD)** – The remaining value of each asset or system in current dollars. RCNLD is determined by subtracting Depreciation (adjusted to current dollars using ENR CCI) from Replacement Cost New. Alternatively, RCNLD can be calculated by escalating the Net Book Value to current dollars using the ENR CCI[1].
- **Construction Work-In-Progress** – Capital projects currently under construction, not captured in the Existing Plant-In-Service asset records.
- **Capital Costs Not Funded by Existing Ratepayers** – Assets or capital projects funded by outside sources of non-ratepayer revenue such as grants or direct developer funding. The Net Capital Asset Equity calculation subtracts these amounts to reflect that the existing ratepayers were not responsible for funding these assets.
- **Outstanding Debt Principal** – Outstanding debt principal represents amortized capital project costs not yet funded by existing ratepayers. Asset equity is reduced by this amount. As debt is retired, through the use of either user rates or capacity charge revenues, the retired debt principal becomes part of the asset equity.

Throughout the remainder of this report the value of the physical system will be referred to as Replacement Cost New Less Depreciation (RCNLD).

[1] The asset records provided by the City include the Net Book Value of each asset. Therefore, the Study determined RCNLD by applying the ENR CCI to the Net Book Value.

3.1.1 Valuation of Physical Assets

The RCNLD represents the current value of each system's physical assets. The RCNLD for each system was calculated based on the City Finance Department's Fixed Asset Schedule (physical asset records). The analysis includes an adjustment to the net book value of water pipelines and sewer lines to account for assets that are nearing full depreciation from an accounting perspective but will remain in service beyond the useful life indicated in the accounting records. To account for this residual value, the assumed useful life of water pipelines and sewer lines was increased by 20 percent and the depreciation, net book value, and RCNLD were adjusted accordingly. This assumption was further confirmed by an analysis that applied planning level cost estimates to GIS records of pipeline length and diameter; the results of which support the evaluated RCNLD with the net book value adjustment.

Tables 1 and 2 show the components and values of the Water and Wastewater systems respectively.

Table 1 RCNLD of Existing Water System Physical Assets ($ Thousands)

Asset Category	Original Cost	Accumulated Depreciation	Net Book Value	Replacement Cost New	Trended Depreciation	RCNLD
Land	$16,401	$0	$16,401	$44,315	$0	44,315
Desalter	28,045	6,712	21,334	40,753	9,939	30,814
Reservoirs	32,127	24,807	7,320	120,828	101,656	19,172
Weese/Gopher	16,554	8,244	8,310	35,393	22,111	13,282
Pump Stations/PRS	9,068	5,023	4,045	23,400	17,463	5,937
Buildings and Structures	17,363	7,372	9,991	36,272	18,998	17,274
Pipelines	234,281	107,801	126,479	921,499	442,420	479,079
Pure Water/SLR	109,352	3,761	105,591	116,087	4,136	111,951
Small/Mobile Equipment	893	847	46	2,267	2,213	54
Hydrants	5,466	4,810	656	22,926	20,175	2,751
Office Equipment/Software	2,207	1,689	518	3,065	2,433	632
SCADA	8,321	5,433	2,888	11,366	7,873	3,494
TOTAL	**$480,078**	**$176,499**	**$303,580**	**$1,378,172**	**$649,416**	**$728,756**

Notes:
(1) Line or column totals may not tie due to rounding.

Table 2 RCNLD of Existing Wastewater System Physical Assets ($ Thousands)

Asset Category	Original Cost	Accumulated Depreciation	Net Book Value	Replacement Cost New	Trended Depreciation	RCNLD
Land	$9,342	$0	$9,342	$38,911	$0	38,911
Buildings and Structures	1,032	379	653	1,326	614	711
Small/Mobile Equipment	982	732	249	1,770	1,519	251
Office Equipment/Software	1,743	1,225	518	2,341	1,709	632
SCADA	6,965	4,378	2,586	9,332	6,203	3,129
SLR	103,946	47,072	56,873	218,029	114,555	103,474
Lift Stations	25,490	17,212	8,278	80,325	64,296	16,029
La Salina	30,079	17,764	12,316	77,057	48,711	28,346
Sewer Lines	240,123	153,848	86,275	896,431	627,960	268,471
Outfall	5,204	1,457	3,747	8,002	2,241	5,762
Manholes	23,793	20,938	2,855	99,798	87,822	11,976
TOTAL	**$448,698**	**$265,007**	**$183,692**	**$1,433,321**	**$955,630**	**$477,691**

Notes:
(1) Line or column totals may not tie due to rounding.

3.1.2 Asset Equity Adjustments

3.1.2.1 Outstanding Debt Principal

As noted, the outstanding debt principal for each system is subtracted from the asset equity. This adjustment is to reflect that the value of the assets included in the RCNLD that have been funded with debt are still being amortized, and that future debt service will be paid with rate revenues. The water system currently has three outstanding debt obligations, the 2020A Bonds, 2021A Bonds, and a Water Infrastructure Finance and Innovation Act (WIFIA) federal loan. The total outstanding principal of the water debt obligations as of 2025 is $85.8 million. The wastewater system has one debt obligation, the 2013A Bond, with a current outstanding principal of $2.8 million. Table 3 shows the outstanding debt obligations for the water and wastewater systems.

Table 3 Outstanding Debt Principal (as of fiscal year 2025) ($ Thousands)

Debt Service Description	Outstanding Principal
WATER	
2020A Bond	$23,550
2021A Bond	7,680
WIFIA Loan	54,523
WATER OUTSTANDING PRINCIPAL	**$85,753**
WASTEWATER	
2013A Bond	$2,755
WASTEWATER OUTSTANDING PRINCIPAL	**$2,755**

Notes:
(1) Line or column totals may not tie due to rounding.

3.1.2.2 Excluded Assets

After the previous integrated master planning effort in 2014, the City began a Fire Flow Upsizing program that is replacing 4-inch and 6-inch water pipelines with 8-inch pipelines. This implies that all 4-inch and 6-inch pipelines are effectively obsolete, and 8-inch pipelines are operating at full capacity. As such, all existing water pipelines 8-inch and below are excluded from the calculation, lowering the RCNLD of the water system by $178 million. This adjustment is also assumed to account for developer funded pipelines as in those pipelines are typically of small diameter. The City's asset registry does not have records for all developer-funded pipelines.

Similar to the water pipelines, the City will begin the programmatic replacement of all 4-inch and 6-inch sewer lines with 8-inch. All 4-inch and 6-inch sewer lines are considered to be obsolete and are therefore excluded from the calculation, lowering the RCLND of the sewer system by $0.86 million.

3.1.2.3 Prior Grant Funding

The City continually seeks grant funding to help pay for capital projects and lessen the burden on rate and fee payers. Notably the City received substantial grant funding as it expanded the recycled water system and constructed the Pure Water Oceanside facilities over the last five years. Based on the City's financial model as of the completion of this analysis, the City received $25.5 million in grants for the aforementioned water projects. The wastewater fund has also received a $5 million grant for the upcoming food waste projects that is already accounted for in the fund balance. However, since that project is not included in the capacity fee calculation, the asset equity will be reduced accordingly.

Table 4 summarizes the asset equity adjustments for the water and wastewater systems.

Table 4 Summary of Asset Equity Adjustments ($ Thousands)

Adjustment	Water	Wastewater
Outstanding Debt Principal	$85,753	$2,755
Excluded Assets	177,605	855
Grant Funding	25,450	5,000
TOTAL Asset Equity Adjustments	**$288,808**	**$8,610**

Notes:
(1) Line or column totals may not tie due to rounding.

SECTION 4 RESERVES

Reserves and funds contributed by existing ratepayers are also included when calculating ratepayer equity. These funds are defined as shown below.

- **Operating Fund** – Funds available to the City to pay for ongoing operating expenses (Water Fund 711 and Wastewater Fund 721). Each of the operating funds contains a restricted reserve (45 days of operating expenses for Water and 60 days of operating expenses for Wastewater) as well as unrestricted funds that can be used to cover any of each respective utility's costs. These funds are contributed by existing ratepayers through their rates and are therefore included in the calculation of ratepayer equity.
- **Fixed Asset Replacement (FAR) Fund** – Funds available for rehabilitation and replacement of capital assets (Water Fund 712 and Wastewater Fund 722). There are no minimum balance requirements for the FAR funds. These funds are contributed by existing ratepayers through their rates and are therefore included in the calculation of ratepayer equity.
- **Expansion Fund** – Funds available to help fund the growth-related capital improvement projects of the City collected through capacity fees. There are no minimum balance requirements for the expansion funds. These funds have not been contributed by existing rate payers, they are excluded from the calculation of ratepayer equity.
- **Debt Service Fund** – Funds held by the City to be used to pay off debt obligations (Water Fund 717 and Wastewater Fund 727). There are no minimum balance requirements for the debt service reserve funds under the City's current debt obligations. These funds are contributed by existing ratepayers through their rates and are therefore included in the calculation of ratepayer equity.

Table 5 summarizes the current reserve fund balances for the water and wastewater funds. The total cash and investments are sourced from the City's fiscal year (FY) 2023/24 Annual Comprehensive Financial Report (ACFR) and adjusted to remove the amount in the expansion funds as of 6/30/2024 per the City's records.

Table 5 Reserve Summary ($ Thousands)

Reserve Component	Water	Wastewater
Cash and Investments (ACFR)	$97,478	$140,399
LESS: Expansion Funds	(15,954)	(17,418)
Cash and Investments from Existing Users Rates	**$81,524**	**$122,981**

Notes:
(1) Line or column totals may not tie due to rounding.

SECTION 5 WATER CAPACITY FEES

As discussed previously, the recommended hybrid capacity fee approach adds the value of the existing system (as developed in Sections 3 and 4) to the capacity CIP costs and divides by the total number of future MEs to determine the capacity fee. The Study evaluated capital costs and MEs through 2035 to correspond to the City's detailed capital plan which extends ten years.

5.1 System Capacity – MEs

The current and projected capacity of the water system in MEs has been evaluated based on customer data provided by the City and SANDAG population projections. The current number of water MEs is 71,011 based on customer data provided by the City and the capacity ratios used to calculate the current capacity fees for each meter size. To estimate the capacity in 2035 the number of accounts was escalated at 5.20 percent based on SANDAG's population growth estimates. The City indicated that over the last several years, very few 5/8-inch meters have been added, and that trend is expected to continue. Therefore, in the projected number of accounts by meter size, the number of 5/8-inch meters was held flat through 2035. The growth that would otherwise be projected for 5/8-inch meter connection was added to the number of expected 3/4-inch meters. Based on the growth projections as described, the capacity of the system in 2035 is estimated at 75,681 MEs.

5.2 Existing Water System Value

The existing system is valued using RCNLD and asset equity adjustments as discussed in Section 3. Table 6 summarizes the value of the existing water system.

Table 6 Existing Water System Value Summary ($ Thousands)

System Component	System Value	Notes
Fixed Assets (RCNLD)	$728,756	*Section 3, Table 1*
Cash and Investments from Existing Users Rates	81,524	*Section 3, Table 5*
Less: Debt Service Principal	(85,753)	*Section 3, Table 3*
Less: Contributed Assets	(177,605)	*Section 3, Table 4*
Less: Prior Grant Receipts	(25,450)	*Section 3, Table 4*
Total Existing System Value	**$521,472**	

Notes:
(1) Line or column totals may not tie due to rounding.

5.2.1 Future System Value

The future system value is the incremental component of the hybrid calculation. It is based on the cost of capital improvements for additional capacity in present-day dollars. Only the portion of project costs related to adding system capacity are included in this calculation.

The City provided the most recent Capital Improvement Plans (CIPs) for both the Water and Wastewater systems. The Water CIP projects that are included in the calculation of the capacity fee include the following:

- **Pipeline Replacements** – These projects include upgrades of the City's transmission and distribution system. As the City replaces pipelines, they are being sized to meet future demands. As such, a portion of the costs based on expected growth are allocated to future users.
- **Recycled Water** – These projects include expansion of the City's recycled water system. Expansion of recycled water use provides supply resiliency for existing users as well as additional capacity for future users by freeing potable supplies as customers convert to recycled water. As such, a portion of the costs based on expected growth are allocated to future users.
- **Supply and Treatment** – These projects include upgrades to the City's supply and treatment facilities. These upgrades are planned and sized based on future conditions and the City Council's goal of reaching 50-percent local supply by 2030, inclusive of future demands. The specific projects include well expansion and brine minimization, desalter improvements, Pure Water Phase 2 and 3, and other smaller projects. A portion of the costs based on expected growth are allocated to future users.
- **Other Rehabilitation Projects** – These projects include rehabilitation and replacement projects for existing assets and facilities such as water meters, valve and hydrant replacement, structural analysis and repairs of reservoirs, and other projects. These projects do not provide capacity for future users and therefore the costs are not included in the capacity fee calculation.

Table 7 below summarizes the water CIP projects by project type.

Table 7 Water System CIP Summary ($ Thousands)

Project Type	Total	Existing Users		Future Users	
Pipeline Replacements	**$44,518**	94.8%	$42,203	5.2%	$2,315
Recycled Water	**87,850**	94.8%	83,283	5.2%	4,567
Supply and Treatment	**57,123**	94.8%	54,153	5.2%	2,970
Other Rehabilitation Projects	**19,135**	100.0%	19,135	0.0%	0
Total Water Projects	**$208,627**	**95.3%**	**$198,775**	**4.7%**	**$9,852**

Notes:
(1) Line or column totals may not tie due to rounding.

For the capacity fee calculation, the value of the future users' share of CIP projects is offset by the expected grant receipts for future projects that can be attributed to future users. As of the completion of the fee analysis, the City projected $6.0 million in additional grant awards for water projects with $0.31 million of that amount applicable to future users' costs.

5.3 Water System Capacity Fee Calculation

The water system capacity fee per ME is calculated by dividing the total water system value (existing system value and capacity related CIP) by the projected number of MEs in 2035. Table 8 summarizes the water capacity fee calculation. The calculated Water system capacity for 2025 is $7,016 per ME.

Table 8 Water System Capacity Fee Calculation

Cost Component	Value
Available Existing System Value ($ Thousands)	$521,472
Planned Capital Projects ($ Thousands)	9,852
Less: Grants	(313)
Total Water System Value ($ Thousands)	**$531,011**
2035 Water System Capacity (EDU)	75,681
Cost per Gallon per Day ($/EDU)	**$7,016**

Notes:
(1) Line or column totals may not tie due to rounding.

5.3.1 Proposed Water Capacity Fee by Meter Size and Type

The proposed water capacity fee is multiplied by the respective capacity ratios determined by the American Water Works Association (AWWA) Operating Capacity for each meter size. This results in a 23.53 percent increase across all meter connections for residential and non-residential customers.

Table 9 Proposed Water System Capacity Fees by Meter Size and Type

Meter Size and Type	Capacity Ratio	Current Fee	Proposed Fee
Single Family Residential			
5/8"	1.0	$5,680	$7,016
3/4"	1.5	8,520	10,525
1"	2.5	14,200	17,541
1-1/2"	5.0	28,400	35,082
2"	8.0	45,440	56,132
Multi-Family Residential and Non-Residential			
5/8"	1.0	$5,680	$7,016
3/4"	1.5	8,520	10,525
1"	2.5	14,200	17,541
1-1/2"	5.0	28,400	35,082
2"	8.0	45,440	56,132
3"	15	85,200	105,247
4"	25	142,000	175,412
6"	50	284,000	350,824
8"	80	454,400	561,318

Notes:
(1) Fees may not tie due to rounding.

SECTION 6 WASTEWATER CAPACITY FEES

6.1 System Capacity –EDUs

The current number of wastewater EDUs is based on the customer data provided by the City, and the capacity ratios used to calculate the current capacity fees for each meter size. For wastewater fees, all single family residences are assigned 1 EDU. Multifamily and Commercial EDUs are calculated based on water meter size and the ME ratios discussed previously. The existing system capacity of the wastewater system is 59,017 EDUs. Applying the 5.2 percent SANDAG growth estimate, the projected number EDUs for 2035 is 62,118.

6.2 Wastewater System Value

6.2.1 Existing System Value

The existing system is valued using RCNLD and asset equity adjustments as discussed in Section 3. Table 10 summarizes the value of the existing wastewater system.

Table 10 Existing Wastewater System Value Summary (in Thousands)

System Component	System Value	Notes
Fixed Assets (RCNLD)	$477,691	*Section 3, Table 2*
Cash and Investments from Existing Users Rates	122,981	*Section 3, Table 5*
Less: Debt Service Principal	(2,755)	*Section 3, Table 3*
Less: Contributed Assets	(855)	*Section 3, Table 4*
Less: Prior Grant Receipts	(5,000)	*Section 3, Table 4*
Total Existing System Value	**$592,062**	

Notes:
(1) Line or column totals may not tie due to rounding.

6.2.2 Future System Value

The future system value is the incremental component of the hybrid calculation. It is based on the cost of capital improvements for additional capacity in present-day dollars. Only the portion of project costs related to adding system capacity are included in this calculation.

The Wastewater CIP projects that are included in the calculation of the capacity fee include the following:

- **Pipeline Replacements** – These projects include upgrades of the City's wastewater collection and transport system, including gravity lines and force mains. As the City replaces pipelines, they are being sized to meet future wastewater flows. As such, a portion of the costs are allocated to future users based on expected growth.

- **Lift Stations** – These projects include upgrades to the City's wastewater lift station infrastructure. Additionally, the City is currently undertaking a project to consolidate wastewater treatment at the San Luis Rey (SLR) treatment plan and decommission La Salina, which will involve the construction of a large lift station to redirect wastewater to SLR. These projects are sized based on future wastewater flows and, therefore, a portion of the costs are allocated to future users based on expected growth.
- **Treatment Plants** – These projects include upgrades and rehabilitation of to the City's treatment plants. The SLR plan has available capacity to serve future users and a share of the costs for projects at SLR are therefore allocated to future users based on expected growth. La Salina costs are not allocated to future users as the City plans to decommission that plant.
- **Other Projects** – The CIP also includes other projects for rehabilitation and replacement or new initiatives such as food waste processing. The land outfall rehabilitation project and master plan project will benefit future users and therefore a portion of the costs are allocated to future users based on expected growth. Other minor rehabilitation projects that do not provide capacity for future users and the food waste to energy projects are not included in the capacity fee calculation.

Table 11 below summarizes the wastewater CIP projects.

Table 11 Wastewater System Existing and Future Capacity ($ Thousands)

Project Type	Total	Existing Users		Future Users	
Pipeline Replacements	$115,673	96.5%	$111,590	3.5%	$4,083
Lift Stations	167,038	94.8%	158,354	5.2%	8,685
Treatment Plants	59,949	95.4%	57,208	4.6%	2,741
Other Projects	71,678	97.7%	69,996	2.3%	1,682
Total Wastewater Projects	**$414,339**	**95.9%**	**$397,148**	**4.1%**	**$17,191**

Notes:
(1) Line or column totals may not tie due to rounding.

6.3 Wastewater System Capacity Fee Calculation

The wastewater system capacity fee per EDU is calculated by dividing the total water system value (existing assets and capacity related CIP) by the projected number of EDUs in 2035. Table 12 summarizes the wastewater capacity fee calculation.

Table 12 Wastewater System Capacity Fee Calculation

Cost Component	Value
Available Existing System Value ($ Thousands)	$592,062
Planned Capital Projects ($ Thousands)	17,191
Less: Grants ($ Thousands)	(523)
Total Wastewater System Value ($ Thousands)	**$608,730**
2035 Water System Capacity (EDU)	62,118
Cost per Gallon per Day ($/EDU)	**$9,800**

Notes:
(1) Line or column totals may not tie due to rounding.

6.3.1 Proposed Wastewater Capacity Fee by Meter Size and Type

The proposed wastewater capacity fee is multiplied by the respective capacity ratios determined by the AWWA Operating Capacity for each meter size. This results in a 25.73 percent increase across all meter connections for residential and non-residential customers.

Table 13 Proposed Wastewater System Capacity Fees by Meter Size and Type

Meter Size and Type	Capacity Ratio	Current Fee	Proposed Fee
Single Family Residential			
Regardless of meter size	1.0	$7,794	$9,800
Multi-Family Residential and Non-Residential			
5/8"	1.0	$7,794	$9,800
3/4"	1.5	11,691	14,699
1"	2.5	19,486	24,499
1-1/2"	5.0	38,971	48,998
2"	8.0	62,354	78,397
3"	15	116,914	146,994
4"	25	194,856	244,990
6"	50	389,712	489,980
8"	80	623,591	783,967

Notes:
(1) Fees may not tie due to rounding.

6.4 Capacity Fees for Special Users

The City imposes additional wastewater capacity fees on special users for wastewater flow based on the excess flow and loadings characteristics specific to each account. Water usage and wastewater strength are reviewed to determine the actual flow and loading (BOD, TSS, and ammonia) for each potential special user account after each user has paid the initial capacity fee. If a user is classified as a special user, additional capacity fees are assessed based on the actual flow, loadings, and the unit cost for each component. It is recommended that each of the unit costs be increased by 25.73 percent to be commensurate with proposed capacity fees. Table 14 compares the existing and proposed unit costs for the additional capacity charges for special users.

Table 14 Additional Capacity Fees for Special Users

Meter Size and Type	Existing	Proposed
Per meter equivalent (customer costs)	$143.78	$180.78
Per unit (748 gallons) of wastewater discharged	60.90	76.57
Per pound of biological oxygen demand (BOD) discharged	8.30	10.45
Per pound of total suspended solids (TSS) discharged	4.44	5.58
Per pound of ammonia discharged	5.59	7.03