City of Pleasanton

Water and Wastewater Connection Fee Study October 17, 2024



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RAFTELIS

October 17, 2024

Tamara Baptista Deputy Director of Business Services, Operations Services Department City of Pleasanton P.O. Box 520 Pleasanton, CA 94566

Subject: Water and Wastewater Connection Fee Study

Dear Ms. Baptista,

Raftelis is pleased to provide this Water and Wastewater Connection Fee Study Report (Report) for the City of Pleasanton (City).

The major objectives of the study include the following:

- Review the current connection fee structure and propose updates to reflect the current state of the water and wastewater systems and future capital improvements as well as industry standards
- Provide subject matter expertise in the methodology used to calculate the proposed connection fee schedules
- Confirm that proposed connection charges are fair to both future users and existing users who have invested and reinvested in the water and wastewater systems

This Report summarizes the analyses, key assumptions, results, and proposed fees.

It has been a pleasure working with you, and we thank you and the City staff for their support during the study.

Sincerely,

C. Base

Brian Bass Project Manager

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Introduction

Connection fees are also commonly known as developer fees, development impact fees, capacity fees, tap fees, and system development charges, among others. This report uses the term *connection fees* reflecting the nomenclature used by the City. Connection fees are one-time capital charges assessed against new development to recover the proportional share of capital facility investment previously constructed by a utility (or to be constructed) to accommodate growth. Connection fees are codified in the California Government Code Sections 66000-60025. Connection 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. Variations of each are dictated by local community and system characteristics and policy objectives. Utilities have broad latitude in the method and approach used to calculate fees, provided the fees reflect the cost 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.

Background and Legal Framework

Background of the Study

The City revised its water connection fees in 1992, wastewater connection fees in 2008, and recycled water connection fees in 2015. The adopted connection fees have not consistently been adjusted annually for inflation. The City engaged Raftelis in 2024 to conduct a connection fee study to examine the existing approach against alternatives that may better reflect current community conditions, system characteristics, and policy objectives. Raftelis worked collaboratively with City staff throughout the study to calculate the proposed connection fees. This report documents the findings, analyses, and proposed changes to the City's water and wastewater connection fees. The updated connection 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 supporting modifications to the water and wastewater connection fees within the City's service area, including data sources, methodology, results, and comparisons.

Economic and Legal Framework

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 providing the same service level to new customers through repairs, expansions, and upgrades to the system.

The basic economic philosophy behind connection fees is that those who receive utility from the product should pay for service costs. To effect fair distribution of the system's value, 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 connection fee structure.

The philosophy that service should be paid for by those who receive utility service is often referred to as "growth-should-pay-for-growth." The principle 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-pays-for-growth' policy."

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

Legal Framework and California Requirements

In establishing connection fees, it is important to understand and comply with local laws and regulations governing establishing, calculating, and implementing connection fees. The following sections summarize Raftelis' understanding¹ of the regulations applicable to developing connection fees for the City.

Connection fees must be established based on a reasonable relationship to the costs and benefits of the development or expansion. Courts have long used a standard of reasonableness to evaluate the legality of development charges. The basic statutory standards governing connection fees are embodied by California Government Code Sections 66013, 66016, 66022, and 66023. Government Code Section 66013 contains requirements specific to determining utility development charges:

"Notwithstanding any other provision of law, when a local agency imposes fees for water connections or sewer connections, or imposes capacity charges, those fees or charges shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed, unless a question regarding the amount the fee or charge in excess of the estimated reasonable cost of providing the services or materials is submitted to, and approved by, a popular vote of two-thirds of those electors voting on the issue."

Section 66013 also includes the following general requirements:

- Local agencies must follow a process set forth in the law, making certain determinations regarding the purpose and use of the charge; they must establish a nexus, or relationship, between a development project and the improvement being financed with the charge.
- The capacity charge revenue must be segregated from the General Fund to avoid commingling of connection fees and the General Fund.

¹ Raftelis does not practice law, nor does it provide legal advice. Our discussion provides a general overview of Raftelis' understanding as utility rate and charges practitioners and is labeled "Legal Framework and California Requirements" for literary convenience only. The City should consult with its legal counsel for clarification and/or specific guidance.

Methodology Overview

A connection fee is a one-time charge paid by a newly connecting water or wastewater system customer for the cost of backbone facilities necessary to provide water system capacity to that new customer. New customers are directly impacted when the City requires them to mitigate the costs of backbone facilities. If the impacts are cumulative over time, then the impact is indirectly addressed by the payment of connection fees. Backbone facilities are built in advance with the capacity needed for new customers, and as customers connect and use this capacity, they are expected to pay their fair share of those costs. Revenues generated by this charge are used to pay for growth-related water and wastewater facilities. Backbone facilities refer to those components of the system that are necessary to provide service to all customers. Water backbone facilities include sources of supply, treatment, pumping, major water transmission lines, and daily storage; and wastewater backbone facilities include conveyance, pumping, and treatment.

A connection fee may be developed as a single charge for the entire backbone system or as individual charges for each backbone component. The City has historically calculated the capacity fee as a single charge, which is the most common approach across California. The City's water connection fees have historically been charged by meter size. The City's wastewater connection fees have historically been charged by a unit factor, which differs by customer class. Residential customers are charged per dwelling unit, while non-residential customers are charged per square foot with some exceptions, such as accessory dwelling units (ADUs), which are charged per square foot, and churches and hotels/motels, which are charged per seat and per room, respectively. Under specific conditions, the City Building Official has the discretion to adjust a connection fee based on historical water usage, among other factors.

Connection Fee Methodologies

The method for calculating connection 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 combines aspects of the buy-in and incremental approaches. It is appropriate where some remaining capacity is available in the existing system and new future facilities are required for development.

BUY-IN METHOD

The "Buy-In Method" is backward-looking and 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 deducting the value of depreciation or not. This net investment, or value of the system, is then divided by the current system capacity to determine the Buy-In cost per unit.

For example, if the existing system has 100 units of equivalent 3/4" meters and the new connector uses a 3/4" meter, then the new customer would pay 1/100 of the total value of the existing system. The new connector has "bought in" to the existing system by contributing this connection fee. The new user has effectively acquired a financial position on par with existing customers and will face future capital re-investment on an equal financial footing with those customers. This approach is suitable when: (1) an agency has built most or all of its facilities and only a small, or no, portion of future facilities are required for additional development, (2) an agency does not have a detailed adopted long-term capital improvement plan, or (3) an agency's "build-out" date is so far out in the future that it is

difficult to project growth and required facilities with precision accurately. Figure 1 shows the framework for calculating a Buy-In connection fee.



INCREMENTAL COST METHOD

The Incremental Cost Method is forward-looking and states that new development (new users) should pay for the additional capacity and expansions necessary to accommodate them. This method is typically used when specific capital improvements are needed to facilitate 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 water for 100 3/4" meter equivalent connection and a new connector uses one of those equivalent units, 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 facilities. This method is generally used when detailed future facilities have been identified to meet the capacity required to serve new customers and limited existing system capacity is available for development. While California Code 66013 (b)(3) does not define a specific period to include future projects, these periods can be as long as a master planning period. Figure 2 shows the framework for calculating an incremental cost connection fee.

Figure 2: Formula for Incremental-Cost Approach



HYBRID METHOD

The hybrid method is typically used where some capacity is available to serve new growth, but additional expansion is necessary to accommodate new development. Under the hybrid method, the connection fee is based on the existing capacity value and the costs of necessary expansions (i.e., the Buy-In component and the Incremental-cost component). Capital improvements that expand system capacity to serve future customers may be included proportionally to the percentage of the cost specifically required for expansion of the system versus the percentage of cost incurred in repair and replacement of existing capacity (and therefore benefitting existing users). Figure 3: Formula for Hybrid Approach summarizes the framework for calculating the Hybrid connection fee.

Figure 3: Formula for Hybrid Approach



RECOMMENDED METHODOLOGY

Since new capacity is currently being constructed to meet expansion needs, and the existing capacity is insufficient for new development, the City selected the Incremental approach, which is forward-looking.

System Value and Equivalent Units

This section details the calculation of the per-unit costs for the Incremental approach.

Water Connection Fee

SYSTEM VALUE

The cost basis for determining the Incremental, or expansion, system value was provided by City Staff. The \$22.3 million valuation includes all expansion-related capital expenses identified in the Water Distribution System Capacity Master Plan dated November 2023 and adopted by the City in May 2024. These expenses are the share of the City's water capital improvement plan that are allocated to future users. The growth-related expenses identified in the new water master plan are used for the water system value.

The 1992 water master plan had specific costs applicable to N. Pleasanton District 2B; thus, a separate connection fee was calculated for those customers. A future review of the water connection fees will use a hybrid approach and reevaluate the backbone water costs applicable to N. Pleasanton District 2B customers. Therefore, the City's existing water connection fees for N. Pleasanton District 2B customers should be used until this future analysis using the hybrid approach has been completed.

EQUIVALENT UNITS

To determine the Incremental component, the second step is to determine the capacity that can be served by the expansion improvements above. The expansion CIP projects are estimated to add approximately 6.06 million gallons per day (MGD) per the East Pleasanton Specific Plan and Tri-Valley Municipal and Industrial Water Demand Study. The single-family residential (SFR) equivalent capacity demand is calculated by taking the gallon per day (GPD) demand for a typical single-family home and multiplying it by the SFR maximum day peaking factor to obtain the GPD maximum day demand². This value is used to divide the GPD additional capacity to calculate the additional SFR equivalent units served by expansion projects. This calculation is detailed in Table 1.

² SFR demand and peaking factors were identified in the Water Distribution System Capacity Master Plan, November 2023.

Line No.	Description	Derivation	Values
	Future Water System Capacity		
1	Future Capacity (MGD)	-	6.06
2	Future Capacity (GPD)	Line 1 x 1,000,000	6,060,000
	SFR Equivalent Capacity Demand		
3	GPD Demand	-	390
4	Max Day Peaking Factor	-	1.9
5	GPD Max Day Demand	Line 3 x Line 4	741
6	SFR Equivalent Units Served	Line 2 / Line 5	8,178

Table 1: Projected Water SFR Equivalents

INCREMENTAL UNIT COST

The Incremental unit cost for an SFR equivalent is the quotient of the Incremental system valuation divided by the additional SFR equivalent units served by expansion projects. The Incremental unit cost component is \$2,721.29 per SFR equivalent unit. Table 2 shows the unit cost calculation.

Table 2: Water Incremental Unit Cost Calculation

Line No.	Fee Calculation	Derivation	Values
1	Expansion CIP	-	\$22,255,100
2	SFR Equivalent Units Served	Table 1	8,178
3	SFR Equivalent Unit Fee	Line 1 / Line 2	\$2,721.29

Wastewater Connection Fee

SYSTEM VALUE

The cost basis for determining the Incremental, or expansion, system value was provided by City Staff. The \$5.0 million valuation includes expansion projects related to upsizing pipes in the system, as shown in Table 3 below.

Table 3: Wastewater Incremental System Value

Line No.	System Valuation	Derivation	Values	
1	Project 3: Upsize Pipes downstream of Stoneridge Mall	-	\$3,000,000	
2	Project 4: Upsize Pipes on Kamp and Stoneridge Drive	-	\$2,019,000	
3	Total Expansion CIP	Line 1 + Line 2	\$5,019,000	

EQUIVALENT UNITS

To determine the Incremental capacity fee, the next step is to determine the demands that can be served by the expansion improvements above. The SFR equivalent capacity demand for wastewater is calculated by multiplying the SFR demand based on billed water consumption times a return to sewer factor to estimate the amount of water usage entering the wastewater system. The return to sewer factor calculation is outlined in Table 4. The City provided the estimated billed water consumption in hundred cubic feet (HCF) and the number of wastewater accounts for previous financial planning work. Table S1101 (2022: ACS 1-Year Estimates) from the U.S. Census Bureau is used for the average family size. The flow per day is based on California Water Code Section 10608.20 (b) (2) (A). The SFR equivalent capacity demand calculation is outlined in Table 5.

Line No.	Description	Derivation	Values
1	Estimated billed water consumption for SFR (HCF)	-	3,012,950
	Estimated wastewater flow for SFR		
2	Wastewater Accounts	-	19,235
3	Household density	-	3.4
4	Flow per day (GPD)	-	55
5	Estimated wastewater flow (HCF)	Line 2 x Line 3 x Line 4 x 365 / 748	1,755,194
6	Return to Sewer Factor	Line 1 / Line 5	0.58

Table 5: Wastewater SFR Equivalent Capacity Demand

Line No.	Description	Derivation	Values
	SFR Equivalent Capacity Demand		
1	GPD Flow	-	390
2	Return to Sewer Factor	Table 4	0.58
3	Estimated GPD Demand	Line 1 x Line 2	227

The demands that the expansion improvements can serve are calculated by dividing the future capacity by the SFR equivalent capacity demand. The expansion CIP projects are estimated to add 2.05 MGD. This calculation is detailed in Table 6.

Table 6: Wastewater Projected SFR Equivalents

Line No.	Description	Derivation	Values
	Future Wastewater System Capacity		
1	Future Capacity (MGD) - Project 3	-	1.6
2	Future Capacity (MGD) - Project 4	-	0.45
3	Future Capacity (MGD) - Total	Line 1+ Line 2	2.05
4	Future Capacity (GPD)	Line 3 x 1,000,000	2,050,000
5	SFR Equivalent Capacity Demand Estimated GPD Demand	Table 5	227
6	SFR Equivalent Units Served	Line 4 / Line 5	9,023

INCREMENTAL UNIT COST

The Incremental unit cost for an SRF equivalent is the quotient of the Incremental system valuation divided by the additional SFR equivalent units served by expansion projects. The Incremental unit cost component is \$556.24 per SFR equivalent. Table 7 shows the unit cost calculation.

Table 7: Wastewater Incremental Unit Cost Calculation

Line No.	Fee Calculation	Derivation	Values
1	Total Expansion CIP	Table 3	\$5,019,000
2	SFR Equivalent Units Served	Table 6	9,023
3	SFR Equivalent Unit Fee	Line 1 / Line 2	\$556.24

Proposed Connection Fees

Water Connection Fee

Table 8 compares the proposed fee calculated under this approach by meter size to the existing capacity fee. Fees are levied per meter size. Meter size is a common approach for assessing water connection fees. This approach is popular because it is easy to administer and explain to customers. Using the meter size approach, connection fees are increased based on the size or capacity of the meter. The projected water connection fees shown in Table 8 below are calculated for each meter size using the meter capacity ratio normalized to the 5/8" meter size. For example, if a 1-inch meter has 2.5 times the flow capacity of a 5/8-inch meter, the connection fee will be 2.5 times higher. The City of Pleasanton currently installs meters from three manufacturers – Diehl, Sensus, and Kamstrup. New meters installed in the future will be either Sensus, Kamstrup, Master Meter, Metron Farnier, or Metron Spectrum. These meters have different meter capacities for each meter size. Table 8 shows the meter capacities, resulting meter ratios, and proposed rates by meter size for each manufacturer. Table 9 shows the proposed water connection fees for N. Pleasanton Improvement District 2B are the same as the existing fees.

 Table 8: Proposed Water Incremental Unit Charge Connection Fee and Existing Connection Fee

Ultrasonic					
Proposed Fees –	Meter	Meter	\$/Meter	Existing	Difference
Diehl/Sensus Meters	Capacity	Ratio	Size	\$/Meter Size	
5/8 Inch - Dieni	22	0.9	\$2,394.74	\$1,200.00	\$1,194.74
5/8 inch - Sensus	25	1.0	\$2,721.29	\$1,200.00	\$1,521.29
3/4 inch - Diehl	32	1.3	\$3,483.25	\$1,800.00	\$1,683.25
3/4 inch - Sensus	35	1.4	\$3,809.81	\$1,800.00	\$2,009.81
1 inch - Diehl	55	2.2	\$5,986.84	\$3,000.00	\$2,986.84
1 inch - Sensus	55	2.2	\$5,986.84	\$3,000.00	\$2,986.84
1-1/2 inch - Diehl	100	4.0	\$10,885.17	\$6,000.00	\$4,885.17
1-1/2 inch - Sensus	160	6.4	\$17,416.27	\$6,000.00	\$11,416.27
2 inch - Sensus	160	6.4	\$17,416.27	\$19,200.00	-\$1,783.73
2 inch - Diehl	170	6.8	\$18,504.79	\$19,200.00	-\$695.21
3 inch - Sensus	500	20.0	\$54,425.84	\$21,000.00	\$33,425.84
4 inch - Sensus	1000	40.0	\$108,851.68	\$60,000.00	\$48,851.68
6 inch - Sensus	2000	80.0	\$217,703.35	\$120,000.00	\$97,703.35
8 inch - Sensus	2700	108.0	\$293,899.53	\$210,000.00	\$83,899.53
10 inch - Sensus	4000	160.0	\$435,406.71	\$330,000.00	\$105,406.71
Proposed Fees -	Meter	Meter	\$/Meter	Existing	Difference
Kamstrup Meters	Capacity	Ratio	Size	\$/Meter Size	(\$)
5/8 inch	25	1.0	\$2,721.29	\$1,200.00	\$1,521.29
3/4 inch	35	1.4	\$3,809.81	\$1,800.00	\$2,009.81
1 inch	55	2.2	\$5,986.84	\$3,000.00	\$2,986.84
1-1/2 inch	120				
	120	4.8	\$13,062.20	\$6,000.00	\$7,062.20
2 inch	160	4.8 6.4	\$13,062.20 \$17,416.27	\$6,000.00 \$19,200.00	\$7,062.20 -\$1,783.73
2 inch 3 inch	160 350	4.8 6.4 14.0	\$13,062.20 \$17,416.27 \$38,098.09	\$6,000.00 \$19,200.00 \$21,000.00	\$7,062.20 -\$1,783.73 \$17,098.09
2 inch 3 inch 4 inch	160 350 700	4.8 6.4 14.0 28.0	\$13,062.20 \$17,416.27 \$38,098.09 \$76,196.17	\$6,000.00 \$19,200.00 \$21,000.00 \$60,000.00	\$7,062.20 -\$1,783.73 \$17,098.09 \$16,196.17
2 inch 3 inch 4 inch 6 inch	160 350 700 1600	4.8 6.4 14.0 28.0 64.0	\$13,062.20 \$17,416.27 \$38,098.09 \$76,196.17 \$174,162.68	\$6,000.00 \$19,200.00 \$21,000.00 \$60,000.00 \$120,000.00	\$7,062.20 -\$1,783.73 \$17,098.09 \$16,196.17 \$54,162.68
2 inch 3 inch 4 inch 6 inch 8 inch	160 350 700 1600 2800	4.8 6.4 14.0 28.0 64.0 112.0	\$13,062.20 \$17,416.27 \$38,098.09 \$76,196.17 \$174,162.68 \$304,784.70	\$6,000.00 \$19,200.00 \$21,000.00 \$60,000.00 \$120,000.00 \$210,000.00	\$7,062.20 -\$1,783.73 \$17,098.09 \$16,196.17 \$54,162.68 \$94,784.70
2 inch 3 inch 4 inch 6 inch 8 inch 10 inch	160 350 700 1600 2800 4500	4.8 6.4 14.0 28.0 64.0 112.0 180.0	\$13,062.20 \$17,416.27 \$38,098.09 \$76,196.17 \$174,162.68 \$304,784.70 \$489,832.55	\$6,000.00 \$19,200.00 \$21,000.00 \$60,000.00 \$120,000.00 \$210,000.00 \$330,000.00	\$7,062.20 -\$1,783.73 \$17,098.09 \$16,196.17 \$54,162.68 \$94,784.70 \$159,832.55
2 inch 3 inch 4 inch 6 inch 8 inch 10 inch 12 inch	160 350 700 1600 2800 4500 5500	4.8 6.4 14.0 28.0 64.0 112.0 180.0 220.0	\$13,062.20 \$17,416.27 \$38,098.09 \$76,196.17 \$174,162.68 \$304,784.70 \$489,832.55 \$598,684.22	\$6,000.00 \$19,200.00 \$21,000.00 \$60,000.00 \$120,000.00 \$210,000.00 \$330,000.00	\$7,062.20 -\$1,783.73 \$17,098.09 \$16,196.17 \$54,162.68 \$94,784.70 \$159,832.55
2 inch 3 inch 4 inch 6 inch 8 inch 10 inch 12 inch Proposed Fees -	120 160 350 700 1600 2800 4500 5500 Meter	4.8 6.4 14.0 28.0 64.0 112.0 180.0 220.0 Meter	\$13,062.20 \$17,416.27 \$38,098.09 \$76,196.17 \$174,162.68 \$304,784.70 \$489,832.55 \$598,684.22 \$/Meter	\$6,000.00 \$19,200.00 \$21,000.00 \$60,000.00 \$120,000.00 \$210,000.00 \$330,000.00 Existing	\$7,062.20 -\$1,783.73 \$17,098.09 \$16,196.17 \$54,162.68 \$94,784.70 \$159,832.55 Difference
2 inch 3 inch 4 inch 6 inch 8 inch 10 inch 12 inch Proposed Fees - Metron Spectrum	120 160 350 700 1600 2800 4500 5500 Meter Capacity	4.8 6.4 14.0 28.0 64.0 112.0 180.0 220.0 Meter Ratio	\$13,062.20 \$17,416.27 \$38,098.09 \$76,196.17 \$174,162.68 \$304,784.70 \$489,832.55 \$598,684.22 \$/Meter Size	\$6,000.00 \$19,200.00 \$21,000.00 \$120,000.00 \$210,000.00 \$330,000.00 Existing \$/Meter Size	\$7,062.20 -\$1,783.73 \$17,098.09 \$16,196.17 \$54,162.68 \$94,784.70 \$159,832.55 Difference (\$)

Positive Displacement

Proposed Fees - Master Meter (BLMJ)	Meter Capacity	Meter Ratio	\$/Meter Size	Existing \$/Meter Size	Difference (\$)
5/8 inch	20	0.8	\$2,177.03	\$1,200.00	\$977.03
3/4 inch	30	1.2	\$3,265.55	\$1,800.00	\$1,465.55
1 inch	50	2.0	\$5,442.58	\$3,000.00	\$2,442.58
Proposed Fees - Metron Farnier	Meter Capacity	Meter Ratio	\$/Meter Size	Existing \$/Meter Size	Difference (\$)
5/8 inch	20	0.8	\$2,177.03	\$1,200.00	\$977.03
3/4 inch	30	1.2	\$3,265.55	\$1,800.00	\$1,465.55
1 inch	70	2.8	\$7.619.62	\$3.000.00	\$4.619.62

Proposed Fees – Sensus Meters	Proposed \$/Meter Size	Existing \$/Meter Size	Difference (\$)
5/8 inch	\$460.00	\$460.00	\$0
3/4 inch	\$690.00	\$690.00	\$0
1 inch	\$1,150.00	\$1,150.00	\$0
1-1/2 inch	\$2,300.00	\$2,300.00	\$0
2 inch	\$7,360.00	\$7,360.00	\$0
3 inch	\$8,050.00	\$8,050.00	\$0
4 inch	\$23,000.00	\$23,000.00	\$0
6 inch	\$46,000.00	\$46,000.00	\$0
8 inch	\$80,500.00	\$80,500.00	\$0
10 inch	\$126,500.00	\$126,500.00	\$0
Proposed Fees –	Proposed	Existing	Difference
Kamstrup Meters	\$/Meter Size	\$/Meter Size	(\$)
1-1/2 inch	\$2,300.00	\$2,300.00	\$0
2 inch	\$7,360.00	\$7,360.00	\$0
3 inch	\$8,050.00	\$8,050.00	\$0
4 inch	\$23,000.00	\$23,000.00	\$0
6 inch	\$46,000.00	\$46,000.00	\$0
8 inch	\$80,500.00	\$80,500.00	\$0
10 inch	\$126,500.00	\$126,500.00	\$0

Table 9: Proposed and Existing N. Pleasanton Improvement District 2B Water Connection Fees

Wastewater Connection Fee

Table 10 compares the proposed fees by factor calculated under this approach to the existing capacity fee. Fees are assessed per SFR equivalent dwelling units (EDU), and EDU factor ratios are based on those previously developed by the City. The EDU factor ratios also match the connection fee factor ratios used by the Dublin San Ramon Services District (DSRSD). This agency processes and treats all sewage from the City. The Projected connection fees shown in Table 10 below are calculated for each customer class using their respective SFR EDU factor ratio.

Table 10: Proposed Wastewater Incremental Unit Charge Connection Fee and Existing Connection Fee

Proposed Fees	EDU Ratio	Factor	Proposed Fee	Existing Fee	Difference (\$)
Residential					
Single Family Dwelling Unit	1.00	per house/unit	\$556.24	\$500.00	\$56.24
Auxiliary (Secondary) Dwelling Unit	0.004	per square foot	\$2.22	\$2.00	\$0.22
Townhome, Townhouse, Duet, Duplex	1.00	per unit	\$556.24	\$500.00	\$56.24
Condominium	0.75	per unit	\$417.18	\$375.00	\$42.18
Apartment, Mobile Home	0.66	per unit	\$367.12	\$330.00	\$37.12
Regular (low)					
Auditoriums	0.0091	per seat	\$5.06	\$4.55	\$0.51
Auto body shops/Auto dealers	0.0005	per square foot	\$0.28	\$0.25	\$0.03
Banks, Financial Offices	0.0003	per square foot	\$0.16	\$0.14	\$0.02
Barber shops / Beauty shops	0.0014	per square foot	\$0.76	\$0.68	\$0.08
Bars, Cocktail lounges, taverns (w/o dining)	0.0016	per square foot	\$0.89	\$0.80	\$0.09
Bowling alleys	0.0014	per square foot	\$0.78	\$0.70	\$0.08
Car washes	0.0077	per square foot	\$4.29	\$3.86	\$0.43
Churches	0.0227	per seat	\$12.64	\$11.36	\$1.28
Delicatessen	0.0032	per square foot	\$1.79	\$1.61	\$0.18
Dental Clinic	0.0041	per square foot	\$2.28	\$2.05	\$0.23
Dry Cleaners	0.0020	per square foot	\$1.13	\$1.02	\$0.11
Gas Stations	0.0021	per square foot	\$1.19	\$1.07	\$0.12
General Retail/ Commercial	0.0002	per square foot	\$0.12	\$0.11	\$0.01
Gyms, Health Clubs	0.0019	per square foot	\$1.06	\$0.95	\$0.11
Hospital	1.1364	per bed	\$632.09	\$568.18	\$63.91
Hotels, Motels (no dining facilities)	0.5909	per room	\$328.68	\$295.45	\$33.23
Institutional (Resident)	0.4545	per bed	\$252.83	\$227.27	\$25.56
Laundries, coin-operated	0.5909	per machine	\$328.68	\$295.45	\$33.23
Laundries, full service (commercial)	0.0045	per square foot	\$2.53	\$2.27	\$0.26
Market - Dry Goods	0.0009	per square foot	\$0.48	\$0.43	\$0.05
Medical Clinic	0.0017	per square foot	\$0.93	\$0.84	\$0.09
Medical/ Dental Complex	0.0010	per square foot	\$0.56	\$0.50	\$0.06
Office Buildings	0.0002	per square foot	\$0.12	\$0.11	\$0.01
Parks/ Rec					
Country Club	0.3182	per person	\$176.98	\$159.09	\$17.89
Picnic Park	0.0455	per person	\$25.29	\$22.73	\$2.56
Pool	0.0455	per person	\$25.29	\$22.73	\$2.56
Tennis Courts, w/ toilet & shower	0.4545	per court	\$252.83	\$227.27	\$25.56
Plant Nursery	0.0004	per square foot	\$0.20	\$0.18	\$0.02
Printers	0.0006	per square foot	\$0.36	\$0.32	\$0.04
Public Agencies	0.0002	per square foot	\$0.12	\$0.11	\$0.01
Recreational vehicle R.V. Park	0.5454	per RV	\$303.39	\$272.72	\$30.67
Schools (excluding cafeteria)					
W/o showers	0.0682	per student	\$37.92	\$34.09	\$3.83
With showers	0.0909	per student	\$50.56	\$45.45	\$5.11
Theaters	0.0091	per seat	\$5.06	\$4.55	\$0.51
Veterinary Hospital	0.0015	per square foot	\$0.86	\$0.77	\$0.09
Warehouse/distribution	0.0001	per square foot	\$0.08	\$0.07	\$0.01
Regular (medium)					

Proposed Fees	EDU Ratio	Factor	Proposed Fee	Existing Fee	Difference (\$)
Banquet Facilities - intermittent use	0.0012	per square foot	\$0.68	\$0.61	\$0.07
Business with cafeteria	0.0027	per square foot	\$1.51	\$1.36	\$0.15
Cafeteria	0.0025	per square foot	\$1.37	\$1.23	\$0.14
Hotels/Motels with dining facilities	0.0027	per square foot	\$1.51	\$1.36	\$0.15
Restaurant, Fast Food	0.0027	per square foot	\$1.51	\$1.36	\$0.15
Restaurant, Full Service	0.0025	per square foot	\$1.37	\$1.23	\$0.14
School with cafeteria	0.0027	per square foot	\$1.51	\$1.36	\$0.15
Regular (high)					
Bakeries/ Donut Shops/ Ice Cream Shops	0.0028	per square foot	\$1.57	\$1.41	\$0.16
Car washes w/ steam cleaning	0.0018	per square foot	\$1.01	\$0.91	\$0.10
Markets with garbage disposals	0.0077	per square foot	\$4.29	\$3.86	\$0.43
Mortuaries	0.0009	per square foot	\$0.48	\$0.43	\$0.05
Industrial (other)					
Wastewater Flow		Gallons per day	\$2.45	\$2.27	\$0.18