

CUPERTINO SANITARY DISTRICT

Connection and Capacity Fees Study



Prepared by
Cupertino Sanitary District
20863 Stevens Creek Boulevard, Suite 100
Cupertino, CA 95014

November 2018

BACKGROUND

The Cupertino Sanitary District (The District) first adopted Ordinance No. 18 establishing zones and setting new connection fees on June 5, 1963. This ordinance established three zones (1, 2, and 3) and connection fees were established for each zone based on front footage and acreage. For residential development, there was an additional dwelling fee in excess of one unit. A one-time connection fee based on front footage was for compensation to the District for costs to install sewer main along frontage of property; where properties are on each side of the street, costs are divided in half. A one-time connection fee based on acreage on the basis of square foot area was intended to compensate the District for purchased capacity for the proportionate share at the San Jose-Santa Clara Treatment Plan.

Ordinance No. 20, adopted on February 19, 1964, included townhomes and condominiums as multiple dwelling units.

Ordinance No. 31, adopted on July 19, 1967, added Zones 4 and 5; Zone 5 fees to be determined by District Board at the time of annexation.

Ordinance No. 53, adopted on April 27, 1977, increased the fees.

Ordinance No. 59, adopted on June 6, 1979, increased the fees and added the definition of hotels and motels and added a change in use fee per the City of San Jose Revenue Program Reporting Requirements.

Ordinance No. 113, adopted on November 18, 2015, increased the fees from 1979 by CPI increased amount.

When the first ordinance was adopted in 1963, majority of the area in the District was undeveloped. It was a very common practice in assessment district engineering to utilize area and frontage fee basis as a reasonable method to recover cost. This methodology has served very well over the years for the District capital cost recovery.

However, today, the majority of the area within the District service area is now developed and is trending towards further redevelopments. A different methodology for cost recovery should be implemented.

LEVYING CAPACITY FEES

When levying sewer capacity fee on a property, the utility agency must demonstrate that a reasonable relationship exists between the amount of the fee and the capacity being provided. For non-residential connections (commercial, industrial) this requires development of an estimate of the capacity that will be used by the new connection. Sewer system capacity is most commonly measured in terms of flow (in gallons per day) and strength (in BOD or biochemical oxygen demand, TSS or total suspended solids, and NH₃ or ammonia). The District calculates this estimated capacity using a worksheet with industry-standard per square foot flow metrics and strengths for each different commercial/industrial customer class.

CURRENT CONNECTION AND CAPACITY FEES

Currently, the District levies three fees for connection to the system. The first is based on frontage fee, which recovers the cost of connecting to District owned collection lines. The second is based on area fee, which is the treatment plant capacity fee that is a “buy-in” to the regional treatment plant (of which the District has a dedicated share). The third method is change-in-use fee. The Districts method of utilizing area and frontage fees has worked very well in the past, but now with the redevelopments and reconstruction, staff is recommending connection and capacity fees based on the “buy-in” at current replacement cost of the collection system and the treatment plant capacity of the San Jose-Santa Clara Regional Wastewater Facility (RWF). The connection fee unit cost is determined for the residential and commercial sectors following the principle of specific system and capacity of the collection system used by each sector. Similarly, the wastewater treatment unit cost is based on the current replacement cost of the RWF as published in the 2018 Revenue Program allocated to the treatment parameters and associated capacity.

The capital costs were developed to show the capacity for both the treatment and collection systems. Those unit costs are then multiplied by the projected flow and strength of wastewater

produced by a property, to arrive at recommended sewer connection and treatment plant capacity fees. See Appendixes for detailed calculations of the Capital Cost.

EXISTING AND PROPOSED CAPACITY/CONNECTION FEES

The method of allocating capital costs to reach respective users are developed as follows:

1) Connection Fees

The total cost of \$423,000,000 of the District capital replacement cost is as follows:

Types	Replacement Cost
Mains	\$195,155,800
Laterals	\$154,650,500
Manholes	\$48,461,000
San Jose Outfall	\$1,261,373
Santa Clara Outfall	\$23,391,388
Total Replacement Cost	\$422,920,061

This cost is allocated to each user based on flow. This \$423,000,000 cost is allocated based on flow and divided into two categories (valuation by dwelling unit/room charges [\$325,667,669] and by square foot charges [\$97,322,331]). Flows for each category were based on the 2018-19 Fiscal Year Tax Roll flow rates (or total annual volumes in HCF [hundred cubic feet]). See Appendix for detailed calculation worksheet.

2) Capacity/Treatment Plant Fee

The District owns 7.85% of the San Jose-Santa Clara Regional Wastewater Facility. Based on the City of San Jose FY 2017-18 Revenue Program, the value of the treatment plant is \$1,590,395,000; the District share is \$126,896,008, which includes replacement allowance and current fiscal year improvements at the treatment plant. The total cost of \$127,225,279 was distributed using the City of San Jose Revenue/Load Program for FY 2018-19. The cost allocation is segregated as follows:

Type	Classification	Qty	COST ALLOCATION BASED ON:				Total
			MGD	BOD	SS	NH ₃	
1	Single Family	15639	23,355,869	8,324,019	6,733,494	4,849,379	43,262,761
2	Multi-Family	5524	8,249,749	2,940,206	2,378,401	1,712,895	15,281,251
3	Single Family (Outside)	127	189,667	67,597	54,681	39,380	351,325
101	Retail Professional Office	659	5,336,654	989,030	492,338	348,244	7,166,266
102	Domestic Laundry	6	37,793	8,082	4,794	1,121	51,790
103	Restaurant	182	4,290,266	7,645,242	2,770,618	254,511	14,960,638
104	Repair Shops & Service Stations	27	103,073	26,449	33,282	0	162,804
106	Total non-Industrial uses	22748	42,887,025	0	0	0	42,887,025
107	Hotel/Motel w/Food Service	4	210,936	150,355	145,951	43,797	551,038
108	Motel / Hotel	4	324,471	143,395	45,276	13,474	526,615
801	School	4	52,891	9,802	6,099	9,413	78,206
802	Convalescent Home	4	202,552	66,414	19,855	18,024	306,844
803	Multiple Occupancy Residential Units	32	533,105	721,994	287,101	86,970	1,629,169
	TOTAL COST ALLOCATION	44960	85,774,050	21,092,585	12,971,889	7,377,208	127,215,731

With cost allocation based on above information, each of the above costs were then distributed to each classification as follows:

Classification	Total Capital Cost	Units	Cost/Unit	Cost/Unit Fully Developed	SF	Cost/SF	Cost/SF Fully Developed
Single Family	67,137,043	15,772	\$4,256.72	\$2,711.29			\$2,711.29
Multi-Family	23,514,141	5,998	\$3,920.33	\$2,497.03			\$2,497.03
Retail Professional Office	12,492,513				8,916,180	\$1.40	\$0.89
Domestic Laundry	89,510				4,000	\$22.38	\$14.25
Restaurant	19,240,223				869,000	\$22.14	\$14.10
Full Service							\$15.51
Cafeteria (Office Complex)							\$15.51
Fast Food							\$12.08
Beverage							\$7.67
Repair Shop & Service Station	265,669				39,000	\$6.81	\$4.34
Hotel/Motel	1,611,920	772	\$2,087.98	\$1,329.92			\$1,329.92
Convalescent Home	2,669,990	391	\$6,828.62	\$4,349.44			\$4,349.44
TOTAL	126,896,007						

The backup calculations for the above table are included in the Appendices as well as calculation breakdown by dwelling units, number of rooms and/or by square foot methods.

District currently owns 17 pump stations. These asset valuations were calculated separately, totaling \$27,700,521 which includes 10,658 equivalent dwelling units. Staff is recommending that the District

adopt a separate pump station zone and this additional cost for pump station usage would be charged separately.

Table 1 shows the District’s current charges, proposed capacity and connection fees, and West Valley Sanitation District fees for comparison purposes for various classifications.

TABLE 1	Current CUSD Fee	Connection Fee		Capacity/Treatment Plant Fee		TOTAL FEE	
		Proposed CUSD Fee	West Valley SD Fee	Proposed CUSD Fee	West Valley SD Fee	CUSD Proposed Fee	West Valley SD Fee
Residential	-		-		-	-	-
Single-Family Residence *	\$650.00	\$11,034.00	\$10,786.00	\$2,711.46	\$1,642.00	\$13,745.46	\$12,428.00
Townhouse/Condominium	\$400.00	\$9,847.00	\$10,786.00	\$2,496.82	\$1,642.00	\$12,343.82	\$12,428.00
Multiple Dwelling	\$400.00	\$8,173.33	\$8,351.00	\$2,008.49	\$1,271.00	\$10,181.83	\$9,622.00
Example Commercial Connections	-		-		-		
Office: (1,800 sq. ft.)	\$569.52	\$2,286.00	\$5,010.00	\$1,605.10	\$1,948.00	\$3,891.10	\$6,958.00
Fast Food Restaurant (1,000 sq. ft.)	\$2,034.00	\$8,350.00	\$17,892.00	\$14,100.00	\$10,657.00	\$22,450.00	\$28,549.00
Full-Service Restaurant (2,300 sq. ft.)	\$5,405.92	\$44,827.00	\$47,554.00	\$35,673.00	\$28,324.00	\$80,500.00	\$75,878.00
Cafeteria (1,000 sq. ft.)	\$1,604.60	\$15,340.00	\$20,675.65	\$15,510.00	\$28,657.00	\$30,850.00	\$49,332.65
Non-Food Service (1,500 sq. ft.)	\$3,051.00	\$14,625.00	\$14,973.00	\$11,505.00	\$8,350.00	\$26,130.00	\$23,323.00
Convalescent Home (20 Beds)	\$17,628.00	\$32,400.00	\$51,689.00	\$43,490.45	\$21,426.00	\$75,890.45	\$73,115.00
Gas Station (4,000 sq. ft., 4 pair pumps)	\$4,520.00	\$22,360.00	\$15,904.00	\$17,350.32	\$6,584.00	\$39,710.32	\$22,488.00
Laundromat (10 machines)	\$8,542.80	\$39,940.00	\$99,402.00	\$28,509.55	\$39,020.00	\$68,449.55	\$138,422.00
Market – Grocery (15,000 sq. ft.)	\$6,441.00	\$32,550.00	\$56,659.00	\$13,375.80	\$33,747.00	\$45,925.80	\$90,406.00
Small Retail Store (1,300 sq. ft.)	\$223.74	\$1,651.00	\$1,887.00	\$1,051.59	\$734.00	\$2,702.59	\$2,621.00
Hotel/Motel with Dining (50 rooms)	\$37,968.00	\$177,200.00	\$119,282.00	\$66,464.97	\$46,379.00	\$243,664.97	\$165,661.00
Hospital (85 beds)	\$25,990.00	\$370,090.00	\$388,661.00	\$369,668.79	\$161,107.00	\$739,758.79	\$549,768.00

*Current Method Area and Frontage Method for residential

Assume 80 x 120 Lot Frontage Fee \$2,488

Area Fee \$3,345

Total Residential Lot \$5,833

PROPOSED CAPACITY/CONNECTION FEES

Staff recommends District review and adopt a new fee structure as shown below:

CUPERTINO SANITARY DISTRICT - PROPOSED FEES					
Classification	Connection Fee	Capacity/ Treatment Plant Fee	Total Fee	Additional Fee in Pump Station Zones	Unit
Single-Family Residence	\$11,034.00	\$2,711.46	\$13,745.46	\$2,500.00	Per Unit
Townhouse/Condominium	\$9,847.00	\$2,496.82	\$12,343.82	\$2,245.07	Per Unit
Multiple Dwelling	\$8,173.33	\$2,008.49	\$10,181.83	\$1,851.85	Per Unit
Hotel/Motel	\$3,544.00	\$1,329.30	\$4,873.30	\$886.35	Per Room
Hospital	\$4,354.00	\$4,349.04	\$8,703.04	\$1,582.89	Per Bed
Convalescent Home	\$1,620.00	\$2,174.52	\$3,794.52	\$690.14	Per Bed
Office	\$1.27	\$0.89	\$2.16	\$0.39	Square Feet
Commercial Retail Store (Greater than 5,000 SF)	\$1.27	\$0.81	\$2.08	\$0.38	Square Feet
Commercial Retail Store (less than 5,000 SF)	\$1.52	\$0.97	\$2.49	\$0.45	Square Feet
Commercial Market – Grocery	\$2.17	\$0.89	\$3.06	\$0.56	Square Feet
Commercial Gas Station with Car Washer	\$5.59	\$4.34	\$9.93	\$1.81	Square Feet
Commercial School/Day Center Centers	\$17.00	\$0.97	\$17.97	\$3.27	Square Feet
Commercial Laundromat	\$19.97	\$7.13	\$27.10	\$4.93	Square Feet
Full Service Restaurant	\$19.49	\$15.51	\$35.00	\$6.37	Square Feet
Cafeteria (in Office Complex)	\$15.34	\$15.51	\$30.85	\$5.61	Square Feet
Fast Food Restaurant & Food Service in Grocery Store	\$8.35	\$14.10	\$22.45	\$4.08	Square Feet
Non-Food Service	\$9.75	\$7.67	\$17.42	\$3.17	Square Feet