# **OUTLINE OF SEWER FEES**

- Capacity Fee
   Capacity Fee
   \$3,417/EDU
   \$2,680/EDU

   [Provides funds to expand the public sewer system due to incremental increase in usage.]
   usage.]
- 2. **Processing Fee** varies varies [Assists in recovering government cost of administering reimbursement agreements. Dependent on terms of specific agreement.]
- 3. **Reimbursement Fee** varies varies [Assists private parties who have constructed public sewer facilities to recover equitable portions of the total cost. Dependent on terms of specific agreement and locale.]
- 4. Sewer Service Charge \$550.26/EDU \$543.17/EDU [Annual sewer service charges will be based on water meter usage as per records of the San Dieguito Water District (SDWD) and Olivenhain Municipal Water District (OMWD). The charges will be collected through the property tax bill. See pages 3-8 of this handout for more detailed description of CSD and ESD Sewer Service Charges and sample calculations.]

**All rates are subject to increase**. Please contact the Engineering Services Department for current fee verification.

### Addresses and telephone numbers:

Cardiff Sanitary Division / Encinitas Sanitary Division 505 South Vulcan Avenue Encinitas, CA 92024 (760) 633-2770

Leucadia Wastewater District (LWD) 1960 La Costa Avenue Carlsbad, CA 92009 (760) 753-0155

### CARDIFF SANITARY DIVISION & ENCINITAS SANITARY DIVISION SEWER SERVICE CHARGES

Sewer Service Charges are comprised of two components: a fixed charge (based on water meter size) and a usage charge (based on water consumption). Single Family residential fixed charges are based on 5/8" meter.

### \*<u>Residential Charges</u>

Water Consumption Periods to be used:

2 Lowest Bi-Monthly Periods of Water Consumption for Meter Readings Occurring Between Dec. – May for Most Recent Five-Year Period.

Formula For Determining Annual Sewer Service Charge:

Find the lowest meter readings (Dec.-May) for the most recent available 5-year period. Then find the second lowest meter readings (Dec.-May) for the same 5-year period. Take these two values and use them in the formula below.

Average Lowest Readings	+	Average 2 <sup>nd</sup> Lowest Readings	x 3 =	Total Annual HCF	x RTS =	Billable Annual HCF	x	HCF Rate	+	Fixed Meter Charge	=	Annual Sewer Service Charge
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Return to Sewer Percentages:

Single Family	=	85%
Multi-Family	=	85%
Mobile Homes	=	85%

### \*Non-Residential (Commercial) Charges

Water Consumption Periods to be Used:

Water Consumption for Meter Readings Occurring Between July-June of Preceding Year

Formula for Determining Annual Sewer Service Charge:

Total Meter	Х	RTS	Х	HCF Rate	+	Fixed Meter	=	Annual
Readings (July-						Charge		Sewer
June)								Service
								Charge

Return to Sewer Percentages:

### Non-Residential (Commercial) = 95%

See "Example Calculations" 1, 2, and 3 for a detailed explanation of the above formulas.

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# CSD & ESD PRORATED SEWER SERVICE CHARGES FOR NEW CUSTOMERS

### \*<u>Residential Charges</u>

Service Charge For a New Customer:

Service Charge	= (# EDU	x Median	х	Unit	+	Fixed	х	Prorated %
for a New		HCF		Cost		Meter		of Year
Residential						Charge)		
Customer								

### \*<u>Non-Residential (Commercial) Charges</u>

Service Charge For a New Customer = {(Median HCF x RTS)(Unit Cost) + Fixed Meter Charge} (Prorated % of Year)

Service Charge	= (Median	х	RTS	х	Unit	+	Fixed	Х	Prorated %
for a New	HCF				Cost		Meter		of Year
Commercial							Charge)		
Customer									

See "Example Calculations" 4 and 5 for a detailed explanation of the above formulas.

# CSD & ESD RATE SCHEDULE FOR ANNUAL SEWER SERVICE CHARGE

# **Usage Charge**

Users/Class	Sub	Unit Cost		Maximum Usa	age (HCF)	Median Annual HCF		
	v	(per				(No consump	(ion history)	
	y	CSD	ESD	CSD	ESD	CSD	ESD	
Group I Residential								
Single Family Residential	SF	\$4.75	\$4.73	300	300	\$109.13	\$98.13	
Multi-Family Residential	MF	\$4.75	\$4.73	300/unit	300/unit	\$109.13/unit	\$98.13/unit	
Trailer Park	TP	\$4.75	\$4.73	300/unit	300/unit	\$109.13/unit	\$98.13/unit	
Group II Commercial								
Softwater Service	SW	\$4.98	\$4.81	N/A	N/A			
Car Wash	CW	\$4.98	\$4.81	N/A	N/A	1,520	1,520	
Office Building	OF	\$4.98	\$4.81	N/A	N/A	200	200	
Fire Station	FS	\$4.98	\$4.81	N/A	N/A	110	110	
Professional Building	PB	\$4.98	\$4.81	N/A	N/A	160	160	
Veterinary Clinic	VC	\$4.98	\$4.81	N/A	N/A			
Athletic Gymnasium	G	\$4.98	\$4.81	N/A	N/A	1,340	1,340	
Launuromat Datail Store (Shop		\$4.98 ¢4.00	\$4.81 ¢4.01	N/A	N/A	990	990	
Warehouse	DR3	\$4.90 \$1.00	\$4.01 ¢1 01	N/A	N/A	1.050	1.050	
Hospital Convalescent Home	исн	\$4.90 \$1.00	\$4.01	N/A	N/A	3 240	3 240	
Park	PR	\$4.90	\$4.01	N/A		510	510	
Church	MO	\$4.98	\$4.81	N/A	N/A	440	440	
Membership Organization	MO	\$4.98	\$4.81	N/A	N/A	240	240	
Social Services	SS	\$4.98	\$4.81	N/A	N/A	160	160	
Group III Commercial								
Hotels-Motels								
(without restaurant)	HM	\$6.55	\$5.49	N/A	N/A	890	890	
Repair & Service Station	RSS	\$6.55	\$5.49	N/A	N/A	70	70	
Shopping Center	SC	\$6.55	\$5.49	N/A	N/A	1,030	1,030	
Kennel	K	\$6.55	\$5.49	N/A	N/A	900	900	
Coffee Shop	CS	\$6.55	\$5.49	N/A	N/A			
Amusement Park	AP	\$6.55 ¢4 EE	\$5.49	N/A	N/A			
		\$0.55 ¢4 EE	\$5.49	N/A	N/A	320	320	
Manufacturing		\$0.00 ¢4 EE	\$5.49 \$5.40	N/A	N/A	100	190	
		\$0.00 \$6.55	\$0.49 \$5.40	N/A	N/A	160	160	
	LI	<del>ф</del> 0.55	\$J.47	N/A	N/A			
Group IV Commercial								
Hotels-Motels								
(with restaurant)	HM	\$9.86	\$6.83	N/A	N/A	3,130	3,130	
Bakery (wholesale)								
Food Processor	BW	\$9.86	\$6.83	N/A	N/A			
Supermarket	SM	\$9.86	\$6.83	N/A	N/A	1,030	1,030	
Mortuary	MT	\$9.86	\$6.83	N/A	N/A	300	300	
Restaurant	R	\$9.86	\$6.83	N/A	N/A	600	600	

### Fixed Meter Charge

Meter Size	Annual Charge		Meter Size	Annual Charge		
	CSD	ESD		CSD	ESD	
5/8″	\$41.08	\$32.07	1-1/2″	\$205.38	\$160.34	
3/4 "	\$61.61	\$48.10	2″	\$328.60	\$256.54	
1″	\$102.69	\$80.17	3″	\$616.13	\$481.01	

\* Multi-Family = Fixed Meter Charge x 2

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## CITY OF ENCINITAS ENGINEERING DESIGN MANUAL - 2009

## SAMPLE CALCULATIONS

#### Example 1

The San Dieguito Water District (SDWD) is providing an existing customer in the Cardiff Sanitary Division (CSD) with water to a Single Family Residence (Group I Residential):

The customer is billed every two months by the SDWD. His or her water usage consists of the following:

	Dec/Jan	Feb/Mar	Apr/May	Lowest	2 <sup>nd</sup> Lowest
Year 1	22	38	62	22	38
Year 2	24	25	54	24	25
Year 3	27	21	28	21	27
Year 4	16	28	41	16	28
Year 5	18	11	21	11	18
			Avg. Low/2 <sup>nd</sup> Low	18.8	27.2

The average lowest two periods of water consumption for readings between December and May in Years 1 through 5 are 18.8 and 27.2 HCF. This accounts for four months of water usage. The total, 18.8 + 27.2 = 46.0 HCF, is multiplied by three,  $46.0 \times 3 = 138.00$  HCF, to give an estimate for 12 months. This estimate is then multiplied by the "Return to Sewer %" (see Table 3). In this case, it is 85%. It is assumed that 85% represents projected inside (or indoor) usage and that the remaining 15% of the customer's water is not entering the sewer system. The result is 117.3 HCF. This value is then multiplied by the "CSD Unit Cost" (see Table 4) of \$4.75. The fixed meter charge (\$41.08) is then added to \$557.18 for a total charge of \$598.26. The annual sewer service charge for this customer is under the maximum annual HCF of 300 (see Table 4), so the fee charged is \$598.26.

Sewer Service Charge = (18.8 + 25.2) (3) (0.85) (\$4.75) + \$41.08 = **\$598.26** 

#### Example 2

The Olivenhain Municipal Water District (OMWD) is providing an existing customer in the Cardiff Sanitary Division (CSD) with water to a Single Family Residence (Group I Residential):

The customer is billed every month by the OMWD. His or her water usage consists of the following:

	December	January	February	March	April	May
Year 1	36	32	21	34	29	26
Year 2	69	83	65	31	60	110
Year 3	60	79	30	20	55	91
Year 4	41	17	53	100	98	138
Year 5	69	37	94	33	64	138

These numbers are condensed into three water usage periods:

	Dec/Jan	Feb/Mar	Apr/May	Lowest	2 <sup>nd</sup> Lowest
Year 1	68	55	55	55	55
Year 2	152	96	170	96	152
Year 3	139	50	146	50	139
Year 4	58	153	236	58	153
Year 5	106	127	202	106	127
			Avg. Low/2 <sup>nd</sup> Low	73	125.2

The average lowest two periods of water consumption for readings between December and May in Years 1 through 5 are 73 and 125.2 HCF. This accounts for four months of water usage. The total, 73 + 125.2 = 198.2 HCF, is multiplied by three,  $198.2 \times 3 = 594.6$  HCF, to give an estimate for 12 months. This estimate is then multiplied by the "Return to Sewer %" (see Table 3). In this case, it is 85%. It is assumed that 85% represents projected inside (or indoor) usage and that the remaining 15% of the customer's water is not entering the sewer system. The result is 505.4 HCF. This value is greater than the Single Family maximum usage of 300 HCF. In this case, the maximum usage of 300 HCF is multiplied by the "CSD Unit Cost" (see Table 4) of \$4.75. The fixed meter charge (\$41.08) is then added to \$1,425.00 for a total charge of \$1,466.08.

Sewer Service Charge = ((300) (\$4.75)) + \$41.08 = \$1,466.08

## CITY OF ENCINITAS ENGINEERING DESIGN MANUAL - 2009

### Example 3

The San Dieguito Water District (SDWD) is providing an existing customer in the Encinitas Sanitary Division (ESD) with water to a restaurant (Group IV Commercial) with a 1" water meter:

The customer is billed every two months by the SDWD, with water usage consisting of the following:

May/Jun	Jul/Aug	Sep/Oct	Nov/Dec	Jan/Feb	Mar/Apr	Total
86	81	110	90	79	88	531

The total for the entire year is 86.00 + 81.00 + 110.00 + 90.00 + 79.00 + 88.00 = 534.00 HCF. This total is then multiplied by the "Return to Sewer %" (see Table 3). In this case, it is 95%. It is assumed that 95% represents projected inside (or indoor) usage and that the remaining 5% of the customer's water is not entering the sewer system. The result is 507.3 HCF. This value is then multiplied by the "ESD Unit Cost" (see Table 4) of \$6.83 for a total of \$3,464.86. The fixed meter charge for a 1" meter (\$80.17) is then added to \$3,464.38 for a total charge of \$3,3545.03 (there is no maximum).

Sewer Service Charge = { (86 + 81 + 110 + 90 + 79 + 88) (0.95) (\$6.83) } + \$80.17 = \$3,545.03

#### Example 4

Calculation of prorated annual sewer service charge for a new Single Family Residence with an accessory unit (Group I Residential) sanitary sewer customer in the Cardiff Sanitary Division (CSD) with a 5/8" water meter:

Taking into account that the fiscal year starts July 1, new customers to the CSD are given a four-month free proration grace period. For example, if a customer connects to the CSD in the month of September, the final four months of the fiscal year (June, May, April and March) are free. The customer is only charged for the remainder of the fiscal year. This includes the months of February, January, December, November, October and September (6 months).

A new single family residence with an accessory unit in the CSD is assigned 1.8 EDU's (Equivalent Dwelling Units) (see Table 2). The EDU count is then multiplied (see Table 3 for formula) by the "Median Annual HCF for New Connections" (see Table 4). In this case, the result is  $1.8 \times 109.13$  HCF = 196.43 HCF. This HCF value is then multiplied by the "Unit Cost" (see Table 4), 196.43 HCF x \$4.75 = \$933.04. The fixed meter charge (\$41.08 x 2) is then added to the usage charge for a total of \$1,015.20. This result is then multiplied by the fraction of prorated months,  $$1,015.20 \times 6/12 = $507.60$ .

Prorated Annual Sewer Service Charge for a New Customer = [(1.8 EDU x 109.13 HCF x \$4.75) + \$82.16] x (6 months/12 months) = **\$507.60** 

### Example 5

Calculation of prorated annual sewer service charge for a new restaurant (Group IV Commercial) sanitary sewer customer in the Encinitas Sanitary Division (ESD) with a 1-1/2" water meter:

Taking into account that the fiscal year starts July 1, new customers to the ESD are given a four-month free proration grace period. For example, if a customer connects to the ESD in the month of July, the final four months of the fiscal year (June, May, April and March) are free. The customer is only charged for the remainder of the fiscal year. This includes the months of February, January, December, November, October, September, August and July (8 months).

The "Median Annual HCF for New Connections" (see Table 5) of 600 HCF is multiplied by the "Return to Sewer %" (see Table 3). In this case, it is 95%. It is assumed that 95% represents projected inside (or indoor) usage and that the remaining 5% of the customer's water is not entering the sewer system. The result is 600 HCF x 0.95 = 570 HCF. The resulting value is then multiplied by the "Unit Cost" (see Table 4), 570 HCF x \$6.83 = \$3,893.10. The fixed meter charge (\$160.34) is then added to the usage charge for a total of \$4,053.44. This result is then multiplied by the fraction of prorated months, \$4,053.44 x 8/12 = \$2,702.29.

Prorated Annual Sewer Service Charge for a New Customer =

[(600 HCF x 0.95 x \$6.83) + \$160.34] (8 months/12 months) = **\$2,702.29**