CENTRAL CONTRA COSTA SANITARY DISTRICT

Report Regarding the Capacity Fee Update
March 27, 2018

INTRODUCTION

Central Contra Costa Sanitary District (Central San) charges a Capacity Fee when properties are first connected to our public sewer or when there is an expansion or change of use for non-residential properties. Each year this fee is updated based on changes to the value of our assets and the number of Central San's customers. This memo summarizes the basis for the Capacity Fee and presents the calculations for the updated fee.

BACKGROUND

The total value of Central San's existing assets (approximately $1.9 billion) is much greater than the value of any future facilities expansion needed to accommodate future customers. While Central San's Fiscal Year (FY) 2017-18 proposed Capital Improvement Plan lists over $800 million in projects over the next 10 years, most of these projects are for renovation, regulatory compliance, replacement or upgrading of facilities to maintain capacity for both current and prospective customers. Central San believes that our facilities generally have adequate capacity to serve both existing and future customers.

The Water Environment Federation's (WEF) *Manual of Practice 27, Financing and Charges for Wastewater Systems* defines several methods for calculating System Development Charges such as Central San's Capacity Fee. Central San uses the Equity Buy-in method and has used this methodology since 2001. Under this approach, new customers are charged at the same equity position as existing customers which is appropriate based on the level of assets, expansion, and capacity described above.

California Senate Bill 1760, enacted in September 1998, defines Capacity Charges for water and sewer agencies in Section 66013 of the California Government Code. The equity buy-in method defined by WEF and used by Central San conforms to the requirements contained in Section 66013.

Central San's Capacity Fee methodology and calculations were reviewed by Black & Veatch in the fall of 2017. Their March 2, 2018, report titled *Wastewater Capacity Fee Review Study* made the following findings:

- The equity-buy-in methodology used by Central San is appropriate.
- Central San's use of Replacement Cost Less Depreciation (RCLD) is appropriate.
- The exclusion of contributed assets from the calculation is appropriate to avoid double recovery of assets.
- The use of different service zones for gravity and pumped zones is appropriate.

CALCULATION APPROACH

The Capacity Fee is adjusted each year to reflect the changes in the value of Central San's assets. It is calculated using the equity buy-in approach which divides the value of Central San's assets by the current number of Residential Unit Equivalents (RUEs) to determine the fee. The calculated value of Central San's assets is determined as follows:

- Land: The current value of investments in real property is estimated based on the opportunity value of like cash investments deposited in Central San's temporary investments at the time of each purchase and held at interest to the present, rather than by attempting to determine actual market value.

- Facilities: The current value of investments in physical facilities is estimated by escalating each year's facilities expenditures based on the change in the *Engineering News Record* Construction Cost Index for the San Francisco Bay Area (ENR CCI-SF) and then applying straight-line depreciation using the life cycles in Table 3 with no salvage value.

  Note that a category for "Mains (Renovation Program)" is included in the current value of facilities for determination of Capacity Fees. This category accounts for Central San's significant investment since 1988 in life-cycle replacement and renovation of sewers 10-inches in diameter and smaller. This work renews capacity in these smaller sewers for the benefit of both existing and new connectors and reduces future maintenance costs.

- Fund Balances: Prior fiscal year ending balances for the Sewer Construction, Running Expense, Debt Service and Self Insurance Funds are used. The Sewer Construction Fund Balance is reduced by the principal value of Central San's outstanding debt.

Contributed assets are generally not included in the calculation in order to avoid double recovery of costs, as described in *Manual of Practice 27*.

After estimating the current value for an asset category, the component of the Capacity Fee attributable to that category is calculated by dividing current value by the current number of customers as shown below. The number of customers is determined by calculating the number of RUEs.

$$\text{Equity Buy-in Fee} = \frac{\text{Value of Assets}}{\text{Number of Customers (RUEs)}}$$

RECOMMENDED CAPACITY FEE

Staff recommends that the Board adopt Capacity Fees for FY 2018-19 by applying the valuation approach and facilities life cycles described above. The updated fees are:

Fee Category	Current	Proposed	% Change
Gravity Service	$6,300 per RUE	$6,700 per RUE	6.3%
Pumping Service	$7,939 per RUE	$8,336 per RUE	5.0%

The recommended fee calculation approach is a rational, practical, equitable and defensible method to determine the financial burden of new connections. A breakdown of the proposed Capacity Fees by asset category is presented in Table 1. Table 2 shows a comparison of the proposed Capacity Fees to the fees charged by neighboring agencies. The service life assumptions for each asset category are included in Table 3.

Attached Supporting Documents:

1. *Table 1 – Capacity Fees Calculation*
2. *Table 2 – Comparison of Capacity Fees*
3. *Table 3 – Average Useful Service Life*

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Table 1 - Capacity Fees Calculation - FY 2018-19
(Buy-in to all assets. Values through 06/30/2017)

Asset Category	Asset Value[1]	Value per RUE[2] ($/RUE)	FY 2017-18 Value per RUE	Change ($)	Change (%)
Land	$50,891,879	$301	$292	$9	3.1%
Facilities					
Treatment Plant/Outfall (45% @ 100 yrs + 20% @ 75 yrs + 35% @ 30 yrs)	$354,243,285	$2,095	$1,998	$97	4.9%
Recycled Water Facilities (75% @ 50 yrs + 25% @ 30 yrs)	$18,621,970	$110	$106	$4	3.8%
Collection System					
Trunks and Interceptors (30% @ 150 yrs + 70% @ 100 yrs)	$338,991,159	$2,005	$1,893	$112	5.9%
Contributed Mains (100% @ 75 yrs)	$658,442,000		*not included*		
District Renovated Mains (100% @ 100 yrs)	$212,349,324	$1,256	$1,167	$89	7.6%
Pumping Stations (45% @ 100 yrs + 20% @ 75 yrs + 35% @ 30 yrs)	$81,061,594	$1,636 [3]	$1,639	($3)	-0.2%
General Improvements (Buildings, Equipment, etc.) (50% @ 50 yrs + 35% @ 25 yrs + 15% @ 10 yrs)	$66,786,528	$395	$383	$12	3.1%
Major Repairs (100% @ 10 yrs)	$11,586,433	$69	$64	$5	7.8%
Sewer Construction Fund Balance (net of outstanding debt)	$35,405,400	$209	$170	$39	22.9%
Running Expense Fund & Debt Service Fund Balances	$38,115,613	$225	$196	$29	14.8%
Self Insurance Fund Balance	$5,858,682	$35	$31	$4	12.9%
TOTAL VALUE:	$1,872,353,868				
Capacity Fee - Gravity Service	$1,132,850,273	**$6,700**	**$6,300**	$400	6.3%
Capacity Fee - Pumped Service	$1,213,911,868	**$8,336** [4]	**$7,939**	$397	5.0%

169,113 Total Residential Unit Equivalents (RUEs)
49,196 Pumped Zone RUEs

Notes:
1. Original cost escalated to current dollars less depreciation except land which is original cost escalated by opportunity cost
2. Asset value divided by total RUEs unless otherwise noted
3. Pumped component equals asset value divided by pumped zone RUEs
4. Gravity Service Capacity Fee plus pumped component

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Table 2 – Comparison of Capacity Fees

AGENCY	CAPACITY FEE
Dublin San Ramon Services District	$17,470
Mt View Sanitary District	$9,371
Proposed CCCSD Pumped Zone	**$8,336**
Current CCCSD Pumped Zone	**$7,939**
Antioch (Delta Diablo Sanitation District for Treatment)	$7,836
Proposed CCCSD Gravity Zone	**$6,700**
Current CCCSD Gravity Zone	**$6,300**
Concord	$5,043
West County Wastewater District	$5,744
Pittsburg (Delta Diablo Sanitation District for Treatment)	$4,358
Bay Point (Delta Diablo Sanitation District for Treatment)	$3,940

Based on publicly available data as of March 27, 2018

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Table 3 - Average Useful Service Life

Gravity Sewers	
Interceptors	150 years
Trunks	100 years
Mains (Renovated by District)	100 years
Treatment Plant & Pumping Station Facilities	
Tanks/Foundations	100 years
Buildings	75 years
Mechanical, Electrical & Control Equipment	30 years
Recycled Water Facilities	
Pipelines	50 years
Mechanical, Electrical & Control Equipment	30 years
General Improvements	
Buildings	50 years
Mechanical/Electrical Equipment and Furnishings	25 years
Vehicles and other Equipment	10 years
Major Repairs/Replacements	10 years