



Stege Sanitary District Capacity Charge and SPASPA Impact Fee Study

Draft Report
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LIST OF ACRONYMS

BART – Bay Area Rapid Transit
 DU – dwelling unit
 EDU – equivalent dwelling unit
 FU – plumbing fixture unit
 LF – linear feet
 RCNLD – replacement cost new less depreciation
 SF – single family
 SPASPA – San Pablo Ave Specific Plan Area
 Stege SD – Stege Sanitary District

SECTION 1: INTRODUCTION AND EXECUTIVE SUMMARY

1.1 Background

The purpose of this report is to update the sewer capacity fee and impact fee charged by the Stege Sanitary District (Stege SD or District) to new development connecting to the sewer system. Capacity or impact fees are one-time hookup fees intended to recover the capital cost of facilities needed to serve new development. Capacity and impact fees do not collect revenues to cover the costs of maintenance, operations, or repairs. Instead, these on-going costs are recovered through District rates and charges billed annually to customers on the property tax roll. Stege SD currently has two capital facilities fees: a Districtwide capacity fee and an impact fee for new development in the San Pablo Avenue Specific Plan Area (SPASPA).

1.1.1 SPASPA Impact Fee

The San Pablo Avenue Specific Plan Area (SPASPA) is a development area within the City of El Cerrito along San Pablo Avenue spanning from the El Cerrito Plaza BART (Bay Area Rapid Transit) station to just north of the Del Norte BART station. The City of El Cerrito adopted the San Pablo Avenue Specific Plan in September 2014 and development is projected to include about 3,400 dwelling units, 162,000 square feet of commercial space, and 260 hotel rooms. Existing sewer pipelines located in the SPASPA and pipelines downstream of the SPASPA are insufficiently sized to serve the projected development and must be upsized. The cost of these localized improvements is recovered in the SPASPA impact fee. The impact fee is only charged to new development in the SPASPA. New development outside of the SPASPA is not charged the impact fee.

1.1.2 Districtwide Capacity Fee

All new development within Stege SD's service area pays the Districtwide capacity fee. The capacity fee is charged to both SPASPA and non-SPASPA development. The current Districtwide capacity fee recovers new development's proportional share of general District facilities (such as lift stations, the Administrative Building, cleaning equipment and vehicles, etc.). The pipelines in or downstream of the SPASPA that are scheduled to be upsized are excluded from the Districtwide capacity fee calculation.

1.2 Legal Requirements

California Government Code Sections 66013, 66016, and 66022 describe the legal requirements pertaining to establishing capacity fees and impact fees. Absent a 2/3 vote, fees must be proportional to the cost of providing facilities to serve new development. This Study is intended to provide support for the Stege Board of Directors to make the following findings set forth in the Mitigation Fee Act: (i) that there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed and (ii) that there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed.

1.3 Current and Proposed Fees

The current and proposed fees are provided in Table 1 and Table 2. Stege SD calculates its development fees on a fixture unit basis. The cost per fixture unit is proposed to decrease for both the SPASPA fee and the Districtwide fee. It is proposed that the updated Districtwide fee provide cost recovery for pipeline and manhole assets and exclude other assets such as the Administration Building and vehicles.

Stege SD’s current policy for the Districtwide fee is to charge each new single family residential dwelling for 26 fixture units and each multi-family dwelling unit for 17 fixture units. It is proposed that Stege SD charge each multi-family dwelling unit for 16 fixture units. The Districtwide single family fee will decrease from \$3,354 to \$2,446 and the multi-family fee will decrease from \$2,193 to \$1,505.

**Table 1: Proposed Districtwide Capacity Fee
Stege Sanitary District
Capacity Charge and SPASPA Impact Fee Study**

	Current		Proposed	
COST PER FIXTURE UNIT				
Districtwide Fee	\$129.01		\$94.07	
SINGLE FAMILY DWELLING UNIT				
Districtwide Fee	\$3,354	26 FU	\$2,446	26 FU
MULTI-FAMILY DWELLING UNIT				
Districtwide Fee	\$2,193	17 FU	\$1,505	16 FU

FU – plumbing fixture units

Table 2 shows the total fees for new development in the SPASPA. New development outside of the SPASPA will pay the fees shown in Table 1 in addition to SPASPA impact fees. SPASPA residential fees are not based on a pre-set number of plumbing fixtures. Instead, the number of fixtures and SPASPA impact fees are calculated on the particulars of each new development.

**Table 2: Proposed Combined Districtwide Capacity Fee and SPASPA Impact Fee
 Stege Sanitary District
 Capacity Charge and SPASPA Impact Fee Study**

	Current		Proposed	
COST PER FIXTURE UNIT				
Districtwide Fee	\$129.01		\$94.07	
SPASPA Fee	<u>\$271.19</u>		<u>\$256.41</u>	
Total	\$400.20		\$350.48	
SINGLE FAMILY DWELLING UNIT				
Districtwide Fee	\$3,354	26 FU	\$2,446	26 FU
SPASPA Fee	<u>\$7,051</u>	26 FU [1]	<u>\$6,667</u>	26 FU [1]
Total (unrounded)	\$10,405		\$9,112	
MULTI-FAMILY DWELLING UNIT				
Districtwide Fee	\$2,193	17 FU	\$1,505	16 FU
SPASPA Fee	<u>\$4,610</u>	17 FU [1]	<u>\$4,103</u>	16 FU [1]
Total	\$6,803		\$5,608	

1 – Example fixture counts shown. Actual fees and fixture counts will be determined based on the permit conditions of each new development

SECTION 2: METHODOLOGY

2.1 Overview

This Study seeks to allocate to each new development project the costs attributable to the increased demand for sewer collection facilities that is reasonably related to the development project. This allocation does not include costs attributable to existing deficiencies in public facilities but includes the costs attributable to the increased demand for public facilities reasonably related to the development project in order to (1) refurbish existing facilities to maintain the existing level of service or (2) achieve an adopted level of service that is consistent with buildout projections.

2.2 Measurement of Level of Service

The Districtwide fee is for collection system facilities that are delivered on a systemwide basis for connections throughout the City of El Cerrito, the Richmond Annex, and the Kensington community. For example, continued renewal and reinvestment in a segment of pipeline provides upstream and downstream benefits as the system can operate more efficiently. For the Districtwide fee and SPASPA fees, this Study identifies the planned level of service for the type of facilities funded by the fee. The planned level of service is generally calculated by dividing:

(i) the value of existing facilities that are intended to provide the service throughout the study period (Districtwide fee) or (ii) the cost of new facilities (SPASPA)

by

The estimated number of plumbing fixture units through buildout.

Throughout this report, the “level of service” is measured as a cost (in dollars) per unit of capacity (i.e. per plumbing fixture unit).

2.3 Existing Facilities

The value of existing pipeline and manhole facilities was evaluated for the calculation of the Districtwide fee. Stege SD’s fixed asset list was reviewed and edited to remove donated facilities and assets that are scheduled to be replaced in the capital improvement plan. To calculate the value of existing facilities using the Replacement Cost New Less Depreciation (RCNLD) method, the book cost of facilities less depreciation was escalated to present worth using the Engineering News Record’s Construction Cost Index for San Francisco for December 2023.

2.4 Planned Facilities

The cost of new facilities in the SPASPA was determined using capital improvements described in the Sewer Capacity Charge for the San Pablo Avenue Specific Plan Area Memorandum (October 19, 2017) (CIP). The memorandum is a planning tool that identifies major capital projects and associated costs needed to serve the SPASPA area.

SECTION 3: CAPACITY THROUGH BUILDOUT

3.1 Fixture Unit Basis

The District currently assesses capacity and impact fees on a fixture unit basis. For the Districtwide fee, it is assumed that the typical new single family dwelling unit is a two bathroom home and has 26 plumbing fixture units as shown below.

**Table 3: Fixture Units Per Typical 2 Bathroom House
Stege Sanitary District
Capacity Charge and SPASPA Impact Fee Study**

Fixture Type	Equivalent Fixture Count		Typical Residence # of Fixtures	=	# of Equivalent Fixture Units per Typical Dwelling
Bathtub or Bath/Shower	2	x	2	=	4
Bidet	2				
Clothes Washer, Domestic	3	x	1	=	3
Dishwasher, Domestic	2	x	1	=	2
Drinking Fountain (per head)	0.5				
Floor Drain	2				
Floor Sink	3				
Food waste grinder, Commercial	3				
Lavatory in sets of two or three	2				
Lavatory, single	1				
Shower multi-head each additional	1				
Shower single-head trap	2				
Sink	3	x	3	=	9
Sink, Mop	3				
Toilet	4	x	2	=	8
Urinal	2				
Water Closet	4				
Watercooler (per head)	0.5				
Other	1				
Total Equivalent Fixture Units					26

Per the District's Sewer Rate Study (March 2024), the average annual single family residential flow is 45,448 gallons or about 125 gallons per day. Divided by 26 fixture units, the average flow per fixture unit is about 5 gallons per day.

The majority of new dwelling units in the SPASPA are expected to be multi-family apartments, condominiums, and/or townhomes and will likely have one bathroom per dwelling unit. It is projected that the typical multi-family dwelling unit will have 16 plumbing fixtures based on the average number of fixture units for multi-family dwelling units that have been constructed in the SPASPA since 2018.

3.2 Capacity Through Buildout

The capacity through buildout is calculated in Table 4. The number of existing customers is taken from the Sewer Rate Study (March 2024). Each single family dwelling unit and commercial equivalent dwelling unit (EDU) represents 26 fixture units (i.e. the number of plumbing fixture units in a single family home). Each multi-family dwelling unit is assumed to have 16 fixture units. The SPASPA impact fee will be charged based on the permit of each new development such that not every multi-family dwelling will be charged for exactly 16 fixture units. However, for planning purposes, 16 fixture units and 26 fixture units are assumed per multi-family and single family dwelling unit, respectively.

The future development estimate shown in Table 4 is taken from the Sewer Capacity Charge for the San Pablo Avenue Specific Plan Area Memorandum (October 19, 2017) plus additional connections that were not originally envisioned in the 2017 memo. It is estimated that new SPASPA connections will make up 11% of the District's total connections at buildout.

**Table 4: Fixture Unit Count Through Buildout
Stege Sanitary District
Capacity Charge and SPASPA Impact Fee Study**

Customers	Count		Fixture Units per du/ 1,000 sq ft/ room	Total Equivalent Fixture Units	% of Build-out
Existing Customers					
SF Residential	11,384	Dwelling Units	26.0	295,972	
Multi-Family Residential	4,838	Dwelling Units	16.0	77,411	
Commercial	2,930	EDUs	26.0	<u>76,180</u>	
Total Existing in 2024				449,563	89%
SPA Customers					
Multi-Family Residential	3,371	Dwelling Units	16.0	53,936	
Commercial [1]	162,364	sq ft	NA	3,247	
Hotel [2]	260	rooms	10	2,600	
Net of SPA fixture units added since inception				<u>(4,595)</u>	
Total Future SPA Customers estimated left to connect from 2024 to Buildout				55,188	11%
Total Buildout				504,751	100%

SF – Single Family

1 - based on 100 gallons per day per 1,000 sq ft used by the Central Contra Costa Sanitary District; one FU = 5 gallons per day of flow

2 - based on one bath/shower, one sink, one toilet, plus 10% margin for other hotel facilities, rounded up

SECTION 4: COST OF CAPACITY

This section calculates the cost of capacity for the Districtwide facilities and SPASPA facilities. The value of the sewer infrastructure for the two fees is divided by the buildout capacity to calculate unit costs expressed as \$/fixture unit. The cost per fixture unit is then multiplied by the number of fixture units per new connection to calculate the total capacity fee or impact fee.

4.1 Background

The Stege Sanitary District provides the collection, transmission, and conveyance of sewage from homes, businesses, and other customer laterals to the trunklines of the East Bay Municipal Utility District (EBMUD). Stege SD also provides sewer pipeline cleaning and spill response for its customers. The current Districtwide capacity fee is \$129.01 per fixture unit based on the level of service needed for the collection and conveyance per 5 gallons of flow. The current SPASPA impact fee is \$271.19 per fixture unit based on the level of service needed to convey 5 gallons of flow through SPASPA area pipelines before connecting with Districtwide facilities.

4.2 SPASPA Planned Facilities Component

The San Pablo Avenue Specific Plan Area Memorandum (October 19, 2017) developed a construction cost estimate for the SPASPA improvements. The current pipelines in the SPASPA and downstream of the SPASPA are insufficient to convey the flow of the proposed development. \$14.9 million in retrofits are needed to upsize 22,592 linear feet (LF) of existing lines. Stege SD staff reviewed construction pricing trends and determined that this cost estimate is reasonable based on current conditions.

Since 2017, another development has connected in the SPASPA that was not originally anticipated in the SPASPA memo. In addition to the 22,592 LF identified in 2017, the 11795 San Pablo Ave, Wall Ave Multi-family Development will require the upsizing of 570 LF at a cost of about \$339,000. Deducted from these costs is about \$1.1 million in impact fees already paid. The total cost of SPASPA capacity is \$14.15 million and is divided by the fixture unit count from Table 4 net of fixture units already paid. The proposed cost per fixture unit is about \$256.

Table 5: SPASPA Impact Fee Calculation
Stege Sanitary District
Capacity Charge and SPASPA Impact Fee Study

Asset	Cost
SPASPA Improvement Cost [1]	\$14,900,000
11795 San Pablo Ave, Wall Ave Multi-family Development	\$339,264
Net of SPASPA fees already paid	<u>(\$1,088,534)</u>
Total Cost	\$14,150,730
SPASPA Fixture Units	59,783
Less SPASPA Fixture Units Already Paid	<u>(4,595)</u>
Total Fixture Units	55,188
Cost per Fixture Unit	\$256.41
Cost per Single Family Unit (26 Fixture Units)	\$6,667
Cost per Multi-Family Unit (16 Fixture Units)	\$4,103
Current Cost per Fixture Unit	\$271.19

1 - Based on 22,595 LF of pipeline at \$425/LF

4.3 Districtwide Existing Facilities Component

The Stege SD Districtwide fee is proposed to be updated to reflect the status of existing facilities and up-to-date costs to provide service to new connections. Capacity fee funds will be used to upgrade and improve pipelines and manholes to ensure that wastewater discharge is collected and conveyed to EBMUD in a manner compliant with environmental regulations. As described above, the SPASPA fee recovers the cost of upsizing existing District pipelines serving the SPASPA. Because the cost of these pipelines is accounted for in the SPASPA fee, they must be deducted from the Districtwide fee to avoid double charging for the same facilities. It is estimated that the SPASPA pipelines make up about 3% of the District total, see Table 6.

**Table 6: Adjustment % for Pipelines
Stege Sanitary District
Capacity Charge and SPASPA Impact Fee Study**

Category	Linear Feet	
Districtwide Pipelines [1]	775,191	A
Less Planned SPASPA Improvements [2]	<u>(23,162)</u>	
Net pipelines	752,029	B
Net pipelines as % of total existing	97.0%	B/A

1 - Sewer model inventory file

2 - Deduction for pipelines that are included in the SPASPA impact fee

Table 7 calculates the Districtwide capacity fee. As described, the Districtwide fee is based on the value of existing facilities at their current value. Current facilities are described in Stege SD’s fixed asset list. The original cost of assets less accumulated depreciation (i.e. book value) was escalated to current dollars based on the Engineering News Record’s Construction Cost Index for San Francisco. The value of pipelines was reduced by 3% to account for the SPASPA lines being replaced. The value of existing Districtwide pipeline and manhole facilities is about \$48.6 million. This amount divided by the buildout fixture units calculated in Table 4 results in a fee of about \$96 per fixture unit.

Table 7: Districtwide Capacity Charge Calculation
Stege Sanitary District
Capacity Charge and SPASPA Impact Fee Study

Asset	Replacement Cost New Less Depreciation
Pipelines	\$11,218,593
Standard Pipeline Replacements & Rehab	<u>\$37,305,763</u>
Total	\$48,524,356
Adjustment	97.0%
Adjusted Value	\$47,074,493
Adjusted Pipelines	\$47,074,493
Manholes	\$362,099
Pump Stations	<u>\$46,202</u>
Total Existing Facilities Component	\$47,482,795
Buildout Fixture Units	504,751
Cost per Fixture Unit	\$94.07
Cost per Single Family Unit (26 Fixture Units)	\$2,446
Cost per Multi-Family Unit (16 Fixture Units)	\$1,505
Current Cost per Fixture Unit	\$129.01

SECTION 5: FEE COMPARISON

5.1 Proposed Fees

Table 8 and Table 9 compare the Districtwide and SPASPA current and proposed fees. The cost per fixture unit is proposed to decrease for both the SPASPA and the Districtwide fee. The prior study assumed that each single family residential dwelling unit would have an average of 26 fixture units and each multi-family dwelling unit would have an average of 17 fixture units. This study assumes each multi-family dwelling unit will have 16 fixture units per dwelling. For SPASPA dwelling units, the actual SPASPA fee charged to each connection will be determined based on the fixture unit count of each development. 16 fixture units per multi-family dwelling was used for planning purposes to estimate the District’s buildout capacity.

Most new connections are expected to be multi-family dwelling units located in the SPASPA. Both the SPASPA and the Districtwide portions of the total fee for multi-family dwellings are proposed to decrease reflecting the downward adjustment to the fixture unit costs and the reduction in multi-family fixture units from 17 to 16. Unlike the SPASPA fee, the Districtwide fee is not assessed individually for each new connection. Instead, each new single family connection is proposed to be charged for 26 fixture units and each new multi-family connection is proposed to be charged for 16 fixture units.¹

**Table 8: Proposed Districtwide Capacity Fee
Stege Sanitary District
Capacity Charge and SPASPA Impact Fee Study**

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Districtwide Fee	\$129.01		\$94.07	
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Districtwide Fee	\$3,354	26 FU	\$2,446	26 FU
MULTI-FAMILY DWELLING UNIT				
Districtwide Fee	\$2,193	17 FU	\$1,505	16 FU

¹ The number of single family dwelling fixture units was based on home sales data since 2013. The number of multi-family dwelling fixture units was based on the average number of fixture units per dwelling for construction in the SPASPA since 2018.

Table 9: Proposed Combined Districtwide Capacity Fee and SPASPA Impact Fee Stege Sanitary District Capacity Charge and SPASPA Impact Fee Study

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Districtwide Fee	\$129.01		\$94.07	
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Total	\$6,803		\$5,608	

1 - Example fixture counts shown. Actual fees and fixture counts will be determined based on the permit conditions of each new development

5.2 Annual Review

It is recommended that the Districtwide fee be reviewed annually and potentially be updated based on the change in the Engineering News Record’s Construction Cost Index over the prior year. Suggested language for implementing this policy is:

Each year, commencing on (m/d/y) and continuing thereafter on each (m/d) , the capacity fee shall be adjusted by an increment based on the change in the Engineering News Record Construction Cost Index for San Francisco over the prior year.

However, the Board of Directors may at its option determine, by resolution adopted prior thereto, that such adjustment shall not be effective for the next succeeding year, or may determine other amounts as appropriate.

The capacity fee should also be reviewed in detail when updated information, such as a revised master plan or capital improvement program, is obtained, but not less than every five years.