P R E L I M I N A R Y D R A F T

Wastewater Utility Capacity Charges Study

Prepared for
City of San Leandro, California
March 2019

MUNICIPAL FINANCIAL SERVICES
2960 Valley Basin Avenue, Henderson, Nevada 89052-3814

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List of Abbreviations

BOD	Biochemical Oxygen Demand
City	City of San Leandro
CCI	Construction Cost Index
CIP	Capital Improvement Program
EDU	Equivalent Dwelling Unit
ENR	Engineering News Record
FY	Fiscal year (July 1 to June 30)
FY19	July 1, 2018 to June 30, 2019
gpd	Gallons per Day
HCF	Hundred Cubic Feet (equal to ~ 748.1 gallons)
NPDES	National Pollutant Discharge Elimination System
O&M	Operation and maintenance
R&R	Renewal and Replacement
SSC	Sewer Service Charge
SS	Suspended Solids

Executive Summary

In April 2018, the City of San Leandro (City) contracted with Municipal Financial Services to evaluate wastewater capacity charges and recommend a revised schedule of wastewater capacity charges.[1]

A capacity charge is a charge to pay for public agencies' facilities in existence at the time the charge is imposed or to pay for new facilities that will be constructed in the future that are of benefit to the person or property being charged (new development or increases to existing service capacity). The charge ensures that the "growth pays for growth" by allocating the cost of new facilities and the cost of unused capacity in existing facilities to new development while allocating the cost of repairing and refurbishing facilities used by current customers to rates.

Capacity charges may only be used for funding capital improvements. The City's main source of revenue, Sewer Service Charges, are from rate payers and may be used for capital or operating expenditures.

The City's current and recommended wastewater unit costs of capacity and capacity charges are shown in the table below.[2] Unit costs of capacity are used to calculate charges for any new connection or increase in capacity required for a current connection.

Current charges were developed in 2010 and have been escalated over time using an index based on construction costs.

Table ES-1. Current and Recommended Wastewater Unit Costs of Capacity

	Current	Recommended				
Item	FY19	FY20	FY21	FY22	FY23	FY24
Unit Costs of Capacity						
Flow, $/gallons per day	$20.51	$22.02	$23.14	$24.30	$25.51	$26.76
BOD, $/pounds per day	$838.61	$938	$986	$1,035	$1,087	$1,140
SS, $/pounds per day	$961.17	$993	$1,043	$1,096	$1,150	$1,207
Dollar Change						
Flow		$1.51	$1.12	$1.16	$1.21	$1.25
BOD		$99	$48	$49	$52	$53
SS		$32	$50	$53	$54	$57
Percent Change						
Flow		7%	5%	5%	5%	5%
BOD		12%	5%	5%	5%	5%
SS		3%	5%	5%	5%	5%

[1] The term "connection fee", as used by the City in the San Leandro Administrative Code, and "capacity charge", as defined in the Government Code and used in this study, are synonymous.

[2] BOD and SS are conventional (as opposed to toxic) pollutants that are removed from wastewater during the treatment process. BOD is an acronym for biochemical oxygen demand. SS is an acronym for suspended solids. BOD is measured using a laboratory test in which standardized procedures are used to determine the oxygen requirements of wastewater. The BOD test measures the oxygen required for the biochemical degradation of organic material. The test results represent the average BOD strength of wastewater discharged during a given period. SS is measured using a laboratory test in which standardized procedures are used to measures solids that either float on the surface of, or are in suspension in water, sewage or other liquids, and which are largely removable by laboratory filtration procedures.

Wastewater capacity charges based on the City's current and recommended unit costs of capacity are shown in the table below. Flow and BOD/SS strength from residential connections is considered uniform among all connections in two categories – Single Family and Multiple Family. Current Flow assignments for each category are changed to reflect reduction in indoor water use. Current BOD/SS strength assignments for each category are increased in inverse proportion to indoor water use so that there is no change in the mass of BOD/SS discharge to the sewer. Flow and BOD/SS strength from individual nonresidential connections vary among a wide range. Flows shown for nonresidential connections are provided only to facilitate comparison of capacity charges for different nonresidential loadings.

Table ES-2. Capacity Charges Based on Current and Recommended Unit Costs of Capacity

		(gal./day)	(milligrams/liter)				Difference	
		Flow	BOD	SS	Current	FY20	Dollars	Percent
Unit Costs of Capacity								
Flow, $/gallons per day					$20.51	$22.02	$1.51	7.4%
BOD, $/pounds per day					$838.61	$938.00	$99.39	11.9%
SS, $/pounds per day					$961.17	$993.00	$31.83	3.3%
Residential Capacity Charges								
Single Family	*current >*	189	195	195	$4,389	$3,920	-$469	-10.7%
	FY20 >	145	300	320				
Multiple Family	*current >*	158	193	193	$3,664	$3,270	-$394	-10.8%
	FY20 >	121	300	320				
Nonresidential Capacity Charges								
High Strength		3,000	1,000	600	$96,940	$104,440	$7,500	7.7%
Medium Strength		3,000	500	600	$86,450	$92,700	$6,250	7.2%
Low Strength		145	300	320	$3,650	$3,920	$270	7.4%

Section 1
Introduction

A capacity charge is a charge to pay for public agencies' facilities in existence at the time the charge is imposed or to pay for new facilities that will be constructed in the future that are of benefit to the person or property being charged (new development or increases to existing service capacity). The charge ensures that the "growth pays for growth" by allocating the cost of new facilities and the cost of unused capacity in existing facilities to new development while allocating the cost of repairing and refurbishing facilities used by current customers to rates.

In developing capacity charges, we have endeavored to satisfy the rational nexus criteria generally applied to these types of charges. A rational nexus-based facility reserve charge must:

- Be rationally based on public policy that demonstrates a nexus between new development and the need to expand or build facilities to accommodate it.
- Not exceed the new development's proportional share of the cost of facilities needed to serve that development, after crediting it for other contributions that it has already made or will make toward that cost.
- Not be arbitrary or discriminatory in its application to individuals or customer classes.

Capacity charges are intended to recover a portion of the City's Capital Improvement Program (CIP) cost, and utility rate payers' prior investment in capital facilities that support land development through utility system expansion. The Wastewater capacity charges developed in this study meet the regulatory requirements found in Government Code Section 66000 *et sequentia* regarding the establishment of capacity charges.

1.1 Capacity Charge Regulatory Requirements

Section 66013 of the State of California Government Code defines a Capacity Charge as a charge to pay for public agencies' facilities in existence at the time the charge is imposed or to pay for new facilities that will be constructed in the future that are of benefit to the person or property being charged (new development or increases to existing service capacity). The City currently uses the term "Connection Fee" to mean *capacity charges collected at the time of connection*.

Section 66013 of the State of California Government Code defines a connection fee (as opposed to a capacity charge) as a fee for the physical facilities necessary to make a water connection or a sewer connection, including, but not limited to, meters, meter boxes, and pipelines from the structure or project to a water distribution line or sewer main, and that does not exceed the estimated reasonable cost of labor and materials for installation of those facilities.

1.2 Current Wastewater Capacity Charges

Current wastewater capacity charges – listed as "connection fees" in the San Leandro Administrative Code, Title 6, Chapter 4, § 6.4.100 – are shown in the table below.

Table 1-1. Current Wastewater Capacity Charges

Dwelling Units		
Single Family	$4,389	each
Multiple Family	$3,664	each
Accessory Dwelling Unit	$3,664	each
Converting and existing apartment building to condominium units	$179	per unit
Nonresidential Users		
Volume	$20.51	per gallons per day
BOD	$838.61	per pounds per day
SS	$961.17	per pounds per day

1.3 Capacity Charge Development Methodology

The revised capacity charges incorporate data including: 1) wastewater system design capacity; 2) valuation of existing assets; and 3) customer wastewater discharge characteristics.

Capacity charges are based on the premise that new development pay its proportional share of existing available capacity plus the costs for future system expansion. The capacity charges meet the rational nexus criteria generally applied to these types of charges.

The methodology used to develop the Capacity Charges consists of the following steps:

- Prepare an inventory of system assets and calculate the valuation for those assets.
- Determine the capacity of the current system.
- Estimate the amount of contributed capital. These contributions are subtracted from the value of the assets since the contribution is already included in the system inventory asset values.
- Calculate the unit cost of capital facilities.
- Prepare a schedule of capacity charges based upon the unit cost of capital facilities.

Section 2

Wastewater System Asset Valuation and Capacity

Capacity charges are defined as “a charge for public facilities in existence at the time a charge is imposed or charges for new public facilities to be acquired or constructed in the future that are of proportional benefit to the person or property being charged.” This section describes the development of valuations for existing facilities.

2.1 Asset Valuation

Wastewater system assets included in the capacity charge calculation are categorized as wastewater treatment plant and lift stations; collection system pipe; and the City’s share of EBDA (East Bay Dischargers Authority) facilities.[3]

The replacement value of the system excludes assets routinely purchased with operating revenues. These types of items include laboratory equipment, safety equipment, maintenance equipment, electronic equipment and vehicles.

The replacement value of the wastewater treatment plant and lift stations and the City’s share of EBDA facilities was estimated by escalating asset acquisition costs by the ratio of the value of the Engineering News Record 20-City Construction Cost Index (ENR 20-City CCI) currently compared to the time of acquisition of the asset. City staff provided an estimate of the replacement cost for collection system pipe.

[3] East Bay Dischargers Authority (EBDA) was formed on February 15, 1974, by a "Joint Exercise of Powers Agreement" entered into by the City of Hayward, City of San Leandro, Oro Loma Sanitary District, Union Sanitary District, and Castro Valley Sanitary District. EBDA operates under a Commission consisting of one representative appointed by each member agency.

Table 2-1 summarizes the wastewater system assets and their replacement value, by category, in 2018 dollars and shows the projection of replacement values for 2019 - 2023.

Table 2-1. Summary of Wastewater System Valuation

		Projected				
Asset Class	2018	2019	2020	2021	2022	2023
Asset Valuation [1, 2]						
Treatment Plant / Lift Stations	$114,063,000	$118,626,000	$123,371,000	$128,306,000	$133,438,000	$138,776,000
Collection Pipe	$178,464,000	$185,603,000	$193,027,000	$200,748,000	$208,778,000	$217,129,000
EBDA Facilities	$43,631,000	$45,376,000	$47,191,000	$49,079,000	$51,042,000	$53,084,000
Total Fixed Asset Valuation	$336,158,000	$349,605,000	$363,589,000	$378,133,000	$393,258,000	$408,989,000
Adjustments						
1. Contributed Capital [3]						
Less: Revenue from Capacity Charg	($4,012,000)	($4,012,000)	($4,012,000)	($4,012,000)	($4,012,000)	($4,012,000)
2. Debt Principal Outstanding						
Less: 2011 SRF Loan Agreement	($37,617,000)	($35,829,000)	($33,995,000)	($32,116,000)	($30,191,000)	($28,222,000)
3. Sewer System Expansion CIP						
Plus: Average Ending Balance	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000
Total Adjustments	($40,129,000)	($38,341,000)	($36,507,000)	($34,628,000)	($32,703,000)	($30,734,000)
Net Valuation	$296,029,000	$311,264,000	$327,082,000	$343,505,000	$360,555,000	$378,255,000

Notes:

1. Treatment plant, lift station and collection pipe asset data for 2018 is shown in Table A-1.
   Asset values for subsequent years are escalated as shown below:

	2019	*2020*	*2021*	*2022*	*2023*
	4%	4%	4%	4%	4%

2. EBDA facilities values are from the EBDA Statement of Net Position as of June 30, 2018 for Noncurrent Assets.

Noncurrent Assets Values		
Capital Assets		$27,947,158
Accumulated Depreciation		$32,576,546
Total EBDA Asset Value		$60,523,704
Escalation		
ENR 20 City CCI 1974	2020	
ENR 20 City CCI 2018	11062	
Escalation Factor	5.5	
Escalated EBDA Asset Value		$331,437,191
San Leandro Capacity Rights		
EBDA Member Agency	mgd	% of mgd
San Leandro	22.3	13.2%
Oro Loma/Castro Valley	69.2	40.9%
Hayward	35.0	20.7%
Union	42.9	25.3%
Total	169.4	100.0%
San Leandro Portion of EBDA Assets Values		
Escalated EBDA Asset Value		$331,437,191
San Leandro Percent		13.2%
San Leandro Portion		$43,630,752

The value of the wastewater system is allocated among flow, BOD and SS constituents to facilitate the development of capacity charge unit costs. The unit costs can be used to develop capacity charges for any new connection. The cost to construct the wastewater collection components of the wastewater system are proportionate to flow. The cost to construct the wastewater treatment components of the wastewater system are proportionate to flow, BOD and TSS. The allocation of the wastewater system valuation is shown in Table 2-2.

Table 2-2. Allocation of Wastewater System Valuation

		Projected				
Item	2018	2019	2020	2021	2022	2023
Net Valuation	$296,029,000	$311,264,000	$327,082,000	$343,505,000	$360,555,000	$378,255,000
Asset Allocation						
Allocation Percent						
Flow	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%
BOD	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%
SS	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%
Allocation $						
Flow	$222,021,750	$233,448,000	$245,311,500	$257,628,750	$270,416,250	$283,691,250
BOD	$37,003,625	$38,908,000	$40,885,250	$42,938,125	$45,069,375	$47,281,875
SS	$37,003,625	$38,908,000	$40,885,250	$42,938,125	$45,069,375	$47,281,875

2.2 System Capacity

Values for the capacity of the wastewater system are based on design flow and loadings associated with the average day maximum month. Values for flow, BOD and SS are shown below in Table 3-1.

Table 2-3. Wastewater System Capacity

Item	2018	2019	2020	2021	2022	2023
Design Capacity [1]						
Flow, gpd	10,600,000	10,600,000	10,600,000	10,600,000	10,600,000	10,600,000
BOD, lbs/day	41,471	41,471	41,471	41,471	41,471	41,471
SS, lbs/day	39,186	39,186	39,186	39,186	39,186	39,186

Notes:

1. The design capacities for flow, BOD and SS were obtained from Technical Memorandum No. 1 Flow and Loading Evalution dated February 2009. Values are Average Day Maximum Month (ADMM) from Table 1.12, Influent Flow and Loading Projections WPCP Rehabilitation Project.

2.3 Customer Wastewater Discharge Characteristics

Customer characteristics for Flow, BOD and SS were evaluated to ensure that those characteristics approximately represent the volume of wastewater and pounds of conventional pollutants (BOD and SS) entering the City's Wastewater Treatment Plant and represent the approximate amount of volume and pounds of BOD and SS generated by each customer or customer class connected to the City's wastewater system. Updates to discharge characteristics for the Residential classes are summarized below.

Residential. Flow for Residential Single Family accounts is decreased from 189 gpd to 145 gpd. Flow for Residential Multiple Family accounts is decreased from 158 gpd to 121 gpd. BOD and TSS concentrations are increased so that the pounds of BOD and TSS discharged by these accounts is increased.

Nonresidential. Nonresidential users are assessed capacity charges based on the estimated average day of their peak month discharge according to the current unit cost schedule.

Section 3

Wastewater Capacity Unit Costs and Capacity Charges

Capacity charges are developed based on unit costs for flow, BOD and SS. The unit costs for each component are the value of the system allocated to each component divided by the capacity in the system for each component.

3.1 Development of Unit Costs for Flow, BOD and SS

The unit costs for each capacity charge component are the value of the system allocated to each component divided by the capacity in the system for each component. Allocation of wastewater system valuation to each component and determination of the wastewater capacity were described in Section 2. The development of unit costs for flow, BOD and SS based on those values are shown in the table below.

Table 3-1. Development of Unit Costs for Flow, BOD and SS

		Projected				
Item	2018	2019	2020	2021	2022	2023
Net System Valuation						
Flow	$222,021,750	$233,448,000	$245,311,500	$257,628,750	$270,416,250	$283,691,250
BOD	37,003,625	38,908,000	40,885,250	42,938,125	45,069,375	47,281,875
TSS	37,003,625	38,908,000	40,885,250	42,938,125	45,069,375	47,281,875
Total	$296,029,000	$311,264,000	$327,082,000	$343,505,000	$360,555,000	$378,255,000
System Capacity						
Flow, gpd	10,600,000	10,600,000	10,600,000	10,600,000	10,600,000	10,600,000
BOD, lbs/day	41,471	41,471	41,471	41,471	41,471	41,471
SS, lbs/day	39,186	39,186	39,186	39,186	39,186	39,186
Unit Costs of Capacity						
Flow, $/gallon	$20.95	$22.02	$23.14	$24.30	$25.51	$26.76
BOD, $/pound (rounded to $1)	$892	$938	$986	$1,035	$1,087	$1,140
SS, $/pound (rounded to $1)	$944	$993	$1,043	$1,096	$1,150	$1,207

Using the unit costs for flow, BOD and SS, the capacity charge for any new connection may be calculated.

3.2 Development of Residential Capacity Charges

The capacity charge for any new connection is the unit cost of capacity for each component times the amount of capacity of each component associated with the new connection. The calculation of capacity charges for each residential customer class is shown in the table below. The capacity charges for commercial are based on arbitrary flow values and are useful only for comparison between commercial Groups. They are not representative of flows for every individual new commercial connection. Flows for every individual new commercial connection are determined by the City at the time of application for a new connection.

Table 3-2. Residential Capacity Charges

Item	Current FY19	Recommended FY20	FY21	FY22	FY23	FY24
Unit Costs of Capacity						
Flow, $/gallon	$20.51	$22.02	$23.14	$24.30	$25.51	$26.76
BOD, $/pound	$838.61	$938	$986	$1,035	$1,087	$1,140
SS, $/pound	$961.17	$993	$1,043	$1,096	$1,150	$1,207
Single Family [1]						
Loads						
Flow	189 gpd	145 gpd	145 gpd	145 gpd	145 gpd	145 gpd
BOD, mg/L	195 mg/l	300 mg/l	300 mg/l	300 mg/l	300 mg/l	300 mg/l
SS, mg/L	195 mg/l	320 mg/l	320 mg/l	320 mg/l	320 mg/l	320 mg/l
BOD, pounds/day	0.307 lbs	0.363 lbs	0.363 lbs	0.363 lbs	0.363 lbs	0.363 lbs
SS, pounds/day	0.307 lbs	0.387 lbs	0.387 lbs	0.387 lbs	0.387 lbs	0.387 lbs
Charges						
Flow	$3,876.39	$3,192.90	$3,355.30	$3,523.50	$3,698.95	$3,880.20
BOD	$257.45	$340.49	$357.92	$375.71	$394.58	$413.82
SS	$295.08	$384.29	$403.64	$424.15	$445.05	$467.11
Total	$4,428.92	$3,917.69	$4,116.86	$4,323.36	$4,538.58	$4,761.13
Total (rounded to $10)	$4,430	$3,920	$4,120	$4,320	$4,540	$4,760
Adopted, FY19	$4,389					
Multiple Family [1]						
Loads						
Flow	158 gpd	121 gpd	121 gpd	121 gpd	121 gpd	121 gpd
BOD, mg/L	193 mg/l	300 mg/l	300 mg/l	300 mg/l	300 mg/l	300 mg/l
SS, mg/L	193 mg/l	320 mg/l	320 mg/l	320 mg/l	320 mg/l	320 mg/l
BOD, pounds/day	0.254 lbs	0.303 lbs	0.303 lbs	0.303 lbs	0.303 lbs	0.303 lbs
SS, pounds/day	0.254 lbs	0.323 lbs	0.323 lbs	0.323 lbs	0.323 lbs	0.323 lbs
Charges						
Flow	$3,240.58	$2,664.42	$2,799.94	$2,940.30	$3,086.71	$3,237.96
BOD	$213.01	$284.21	$298.76	$313.61	$329.36	$345.42
SS	$244.14	$320.74	$336.89	$354.01	$371.45	$389.86
Total	$3,697.72	$3,269.37	$3,435.59	$3,607.91	$3,787.52	$3,973.24
Total (rounded to $10)	$3,700	$3,270	$3,440	$3,610	$3,790	$3,970
Adopted, FY19	$3,664					

Notes:

1. Projected flow, BOD and SS values are the same as those used for these customer classes in the development of rates. Current single family and multiple family charges adopted by the City are slightly different those projected.

3.3 Development of Nonresidential Capacity Charges

The capacity charge for any new connection is the unit cost of capacity for each component times the amount of capacity of each component associated with the new connection. Capacity requirements for nonresidential connections shown in the table below are not representative of flows for every new connection. Flows for new nonresidential connections are determined by the City at the time of application for a new connection.

Table 3-3. Nonresidential Capacity Charges

	Current	Recommended Unit Costs				
Item	FY19	FY20	FY21	FY22	FY23	FY24
Unit Costs of Capacity						
Flow, $/gallon	$20.51	$22.02	$23.14	$24.30	$25.51	$26.76
BOD, $/pound	$838.61	$938	$986	$1,035	$1,087	$1,140
SS, $/pound	$961.17	$993	$1,043	$1,096	$1,150	$1,207
High Strength						
Loads						
Flow	3000 gpd	3000 gpd	3000 gpd	3000 gpd	3000 gpd	3000 gpd
BOD, mg/L	1000 mg/l	1000 mg/l	1000 mg/l	1000 mg/l	1000 mg/l	1000 mg/l
SS, mg/L	600 mg/l	600 mg/l	600 mg/l	600 mg/l	600 mg/l	600 mg/l
BOD, pounds/day	25.020 lbs	25.020 lbs	25.020 lbs	25.020 lbs	25.020 lbs	25.020 lbs
SS, pounds/day	15.012 lbs	15.012 lbs	15.012 lbs	15.012 lbs	15.012 lbs	15.012 lbs
Charges						
Flow	$61,530.00	$66,060.00	$69,420.00	$72,900.00	$76,530.00	$80,280.00
BOD	$20,982.02	$23,468.76	$24,669.72	$25,895.70	$27,196.74	$28,522.80
SS	$14,429.08	$14,906.92	$15,657.52	$16,453.15	$17,263.80	$18,119.48
Total	$96,941.11	$104,435.68	$109,747.24	$115,248.85	$120,990.54	$126,922.28
Total (rounded to $10)	$96,940	$104,440	$109,750	$115,250	$120,990	$126,920
Medium Strength						
Loads						
Flow	3000 gpd	3000 gpd	3000 gpd	3000 gpd	3000 gpd	3000 gpd
BOD, mg/L	500 mg/l	500 mg/l	500 mg/l	500 mg/l	500 mg/l	500 mg/l
SS, mg/L	600 mg/l	600 mg/l	600 mg/l	600 mg/l	600 mg/l	600 mg/l
BOD, pounds/day	12.510 lbs	12.510 lbs	12.510 lbs	12.510 lbs	12.510 lbs	12.510 lbs
SS, pounds/day	15.012 lbs	15.012 lbs	15.012 lbs	15.012 lbs	15.012 lbs	15.012 lbs
Charges						
Flow	$61,530.00	$66,060.00	$69,420.00	$72,900.00	$76,530.00	$80,280.00
BOD	$10,491.01	$11,734.38	$12,334.86	$12,947.85	$13,598.37	$14,261.40
SS	$14,429.08	$14,906.92	$15,657.52	$16,453.15	$17,263.80	$18,119.48
Total	$86,450.10	$92,701.30	$97,412.38	$102,301.00	$107,392.17	$112,660.88
Total (rounded to $10)	$86,450	$92,700	$97,410	$102,300	$107,390	$112,660
Low Strength						
Loads						
Flow	145 gpd	145 gpd	145 gpd	145 gpd	145 gpd	145 gpd
BOD, mg/L	300 mg/l	300 mg/l	300 mg/l	300 mg/l	300 mg/l	300 mg/l
SS, mg/L	320 mg/l	320 mg/l	320 mg/l	320 mg/l	320 mg/l	320 mg/l
BOD, pounds/day	0.363 lbs	0.363 lbs	0.363 lbs	0.363 lbs	0.363 lbs	0.363 lbs
SS, pounds/day	0.387 lbs	0.387 lbs	0.387 lbs	0.387 lbs	0.387 lbs	0.387 lbs
Charges						
Flow	$2,973.95	$3,192.90	$3,355.30	$3,523.50	$3,698.95	$3,880.20
BOD	$304.42	$340.49	$357.92	$375.71	$394.58	$413.82
SS	$371.97	$384.29	$403.64	$424.15	$445.05	$467.11
Total	$3,650.34	$3,917.69	$4,116.86	$4,323.36	$4,538.58	$4,761.13
Total (rounded to $10)	$3,650	$3,920	$4,120	$4,320	$4,540	$4,760

3.4 Single Family Capacity Charge Survey

The City's current and recommended capacity charges for new Single Family connections were compared to the capacity charges for other nearby agencies. Figure 3-1 shows the results of the survey.

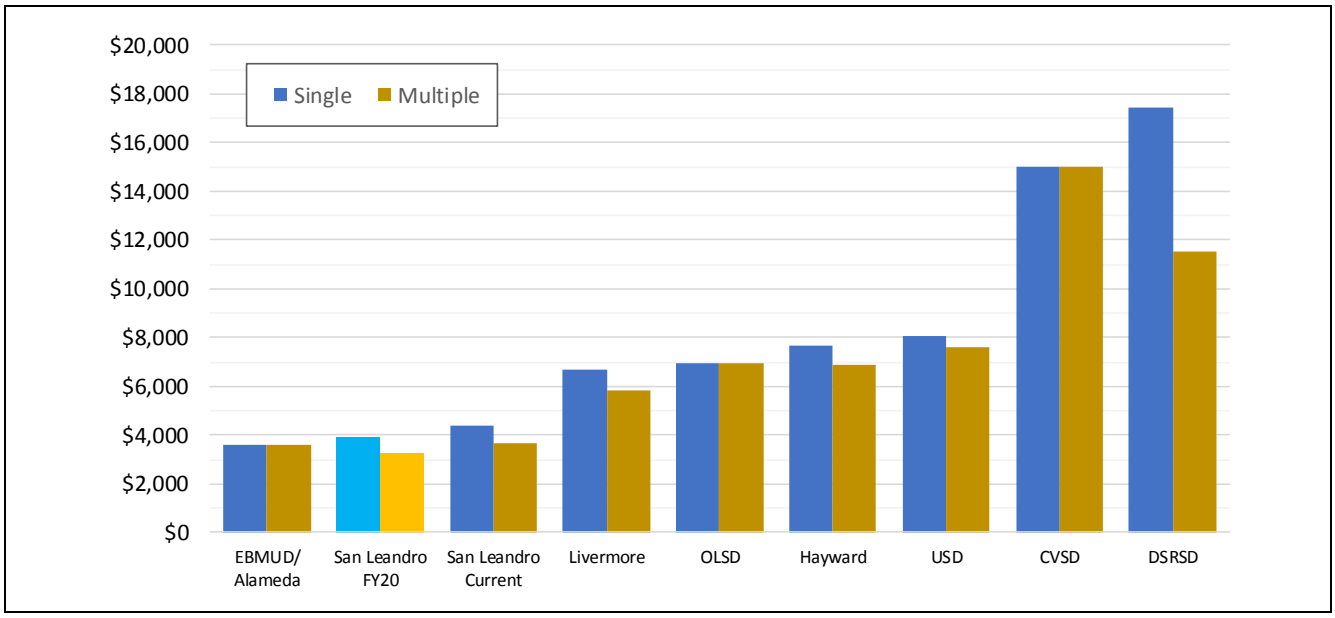

Figure 3-1. Single Family Capacity Charge Survey

Section 4

Limitations

This document was prepared solely for City of San Leandro in accordance with professional standards at the time the services were performed and in accordance with the contract between City of San Leandro and Municipal Financial Services dated April 30, 2018. This document is governed by the specific scope of work authorized by City of San Leandro; it is not intended to be relied upon by any other party. We have relied on information or instructions provided by City of San Leandro and, unless otherwise expressly indicated, have made no independent investigation as to the validity, completeness, or accuracy of such information.

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Appendix A: Asset Valuation Tables

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Table A-1
Fund 593 Wastewater System Assets

Asset Number and Description [1]		Date	Acquisition Cost	Asset Class	Year Acquired	Valuation Year = 2018 ENR CCI Index [2] in Year Acquired	Escalation Factor [2], Current 11062	Total Escalated Acquisition Cost
Treatment Plant and Lift Stations								
000761	HORIZONTAL BANDSAW	01/01/1997	$2,608	P-TOOL	1997	5825	1.9	$4,953
000762	PRESS, DRILL	01/01/1996	$4,040	P-TOOL	1996	5620	2.0	$7,953
000763	HYDRAULIC SHOP PRESS	01/01/1982	$2,562	P-TOOL	1982	3825	2.9	$7,411
000765	PRESSURE WASHER	01/01/1997	$2,511	P-TOOL	1997	5825	1.9	$4,769
000766	PORTABLE GENERATOR - 60 KW	01/01/1996	$14,260	P-TOOL	1996	5620	2.0	$28,069
000767	PORTABLE PUMP	01/01/1999	$50,000	P-TOOL	1999	6060	1.8	$91,269
000776	POLYMER FEED SYSTEM	01/01/1993	$22,029	P-TOOL	1993	5210	2.1	$46,772
000777	PLANT EMERGENCY GENERATOR	01/01/1992	$100,016	P-TOOL	1992	4985	2.2	$221,938
000778	PORTABLE GENERATOR - 125 KW	01/01/1991	$21,286	P-TOOL	1991	4835	2.3	$48,700
000784	MOTOR CONTROL CENTER - C	01/01/1986	$26,251	P-TOOL	1986	4295	2.6	$67,610
000847	LABORATORY OVEN - STERILIZING	01/01/1995	$3,884	P-ENGI	1995	5471	2.0	$7,853
000851	TURBIDIMETER	01/01/1996	$2,641	P-ENGI	1996	5620	2.0	$5,199
000854	EXPANDABLE ION ANALYZER	01/01/1993	$2,745	P-ENGI	1993	5210	2.1	$5,828
000856	AMBI-HI-LOW CHAMBER	01/01/1994	$3,276	P-ENGI	1994	5408	2.0	$6,701
000857	REFRIGERATED INCUBATOR - BOD	01/01/1994	$3,276	P-ENGI	1994	5408	2.0	$6,701
000863	MICROSCOPE, LABORATORY	01/01/1996	$2,924	P-ENGI	1996	5620	2.0	$5,756
000869	PURIFIED HEPA FILTERED ENCLOSURE	01/01/1999	$9,800	P-ENGI	1999	6060	1.8	$17,889
000870	REACH-IN INCUBATOR - COLIFORM	01/01/1993	$5,755	P-ENGI	1993	5210	2.1	$12,220
000883	MOTOR CONTROL CENTER - J	01/01/1989	$12,739	P-TOOL	1989	4615	2.4	$30,534
000884	MOTOR CONTROL CENTER - J1	01/01/1983	$140,946	P-TOOL	1983	4066	2.7	$383,454
000890	TRANSFORMER	01/01/1987	$3,503	P-TOOL	1987	4406	2.5	$8,794
000962	WPCP~ PRIMARY DIGESTER #1	01/01/1939	$24,114	P-bldg	1939	236	46.9	$1,130,276
000963	WPCP ~ SECONDARY DIGESTER #2, W/CONTROL	01/01/1939	$39,408	P-bldg	1939	236	46.9	$1,847,139
000964	WPCP~ SECONDARY DIGESTER #3	01/01/1948	$42,592	P-bldg	1948	461	24.0	$1,022,007
000965	WPCP~ AERATION TANKS	01/01/1968	$327,741	P-bldg	1968	1155	9.6	$3,138,885
000966	WPCP~ BIO FILTER LIFT STATION	01/01/1968	$58,355	P-bldg	1968	1155	9.6	$558,890
000967	WPCP~ CONTROL BUILDING	01/01/1968	$122,795	P-bldg	1968	1155	9.6	$1,176,053
000968	WPCP~ POWER GENERATION STATION	01/01/1979	$18,721	P-bldg	1979	3003	3.7	$68,959
000969	WPCP~ SLUDGE CONTROL BUILDING	01/01/1948	$12,762	P-bldg	1948	461	24.0	$306,219
000970	WPCP~ HEADWORKS/PUMPING PLANT	01/01/1939	$31,710	P-bldg	1939	236	46.9	$1,486,317
000971	WPCP ~ PLANT MAINTENANCE BUILDING	01/01/1967	$10,508	P-bldg	1967	1074	10.3	$108,229
000972	WPCP~ EQUIPMENT STORAGE BUILDING	01/01/1979	$18,075	P-bldg	1979	3003	3.7	$66,581
000973	WPCP~ STORAGE SHED	01/01/1987	$20,902	P-bldg	1987	4406	2.5	$52,478
000974	WPCP~ CENTRIFUGE BUILDING	01/01/1972	$27,899	P-bldg	1972	1753	6.3	$176,048
000975	WPCP ~ PRIMARY DIGESTER #4	01/01/1975	$280,507	P-bldg	1975	2212	5.0	$1,402,766
000976	WPCP ~ FLAMMABLE STORAGE BUILDING	01/01/1979	$64,784	P-bldg	1979	3003	3.7	$238,638
000977	WPCP~ PRIMARY CLARIFIER #1	01/01/1939	$21,954	P-bldg	1939	236	46.9	$1,029,032
000978	WPCP~ PRIMARY CLARIFIER #2	01/01/1948	$40,593	P-bldg	1948	461	24.0	$974,033
000979	WPCP~ SECONDARY CLARIFIER #3	01/01/1959	$168,564	P-bldg	1959	797	13.9	$2,339,553
000980	WPCP~ SECONDARY CLARIFIER #4	01/01/1974	$198,966	P-bldg	1974	2020	5.5	$1,089,568
000981	WPCP~ CHLORINE CONTACT TANK	01/01/1958	$37,619	P-bldg	1958	759	14.6	$548,269
000982	WPCP~ FIXED FILM REACTOR	01/01/1948	$119,959	P-bldg	1948	461	24.0	$2,878,462
000983	WPCP~ CHLORINE HANDLING, FACILITIE	01/01/1991	$73,121	P-bldg	1991	4835	2.3	$167,291
000984	WPCP~ SLUDGE REAERATION TANK	01/01/1967	$81,702	P-bldg	1967	1074	10.3	$841,503
000985	WPCP ~ SLUDGE CONDITIONING, TANK	01/01/1959	$69,432	P-bldg	1959	797	13.9	$963,670
000986	WPCP~ SLUDGE THICKENER	01/01/1967	$68,074	P-bldg	1967	1074	10.3	$701,139
000987	WPCP~ PRIMARY SETTLING BASINS	01/01/1939	$33,300	P-bldg	1939	236	46.9	$1,560,843
000988	WPCP~ POLYMER BUILDING	01/01/1992	$10,439	P-bldg	1992	4985	2.2	$23,165
000989	WPCP ~ SIEVE DRUM CONCENTRATOR	01/01/1993	$154,037	P-bldg	1993	5210	2.1	$327,051
000990	WPCP ~ STORAGE GARAGE	01/01/1991	$143,790	P-bldg	1991	4835	2.3	$328,973
000991	WPCP ~ REDWOOD & MUSHROOM, COMPOST	01/01/1991	$40,153	P-bldg	1991	4835	2.3	$91,865
000992	WPCP ~ SLUDGE DRYING BEDS	01/01/1948	$247,321	P-bldg	1948	461	24.0	$5,934,532
000993	WPCP~ MIX LIQUOR PIT	01/01/1990	$105,955	P-bldg	1990	4732	2.3	$247,687
002159	NEPTUNE LIFT STATION	01/01/1960	$95,375	P-bldg	1960	824	13.4	$1,280,370
002161	LIFT STATION - BERMUDA AVENUE	01/01/1963	$147,024	P-bldg	1963	901	12.3	$1,805,053
002163	LIFT STATION- MERCED STREET	01/01/1986	$306,856	P-bldg	1986	4295	2.6	$790,312
002164	SAN RAFAEL LIFT STATION	01/01/1952	$24,008	P-bldg	1952	569	19.4	$466,735
002165	MEMORIAL HOSPITAL LIFT STATION	01/01/1962	$32,592	P-bldg	1962	872	12.7	$413,446
002166	SYLVAN CIRCLE LIFT STATION	01/01/1966	$11,955	P-bldg	1966	1019	10.9	$129,781
002167	LIFT STATION - TEAGARDEN	01/01/1969	$13,022	P-bldg	1969	1269	8.7	$113,511
002168	CATALINA LIFT STATION	01/01/1979	$31,355	P-bldg	1979	3003	3.7	$115,498
002172	DOUBLE WALL STEEL GAS TANK - DIESEL	01/01/1998	$66,241	P-TOOL	1998	5920	1.9	$123,776
002173	ELECTRIC PORTABLE PUMP - TRAILER MOUNTED	01/01/1993	$22,029	P-TOOL	1993	5210	2.1	$46,772
002174	PORTABLE PUMP - TRAILER MOUNTED	01/01/1985	$19,907	P-TOOL	1985	4195	2.6	$52,494
002176	AERATION TANK PIPING	01/01/1968	$44,842	P-TOOL	1968	1155	9.6	$429,467
002178	DOUBLE WALL GAS TANK	01/01/1996	$8,081	P-TOOL	1996	5620	2.0	$15,906
002179	MOTOR CONTROL CENTER - E1	01/01/1988	$29,781	P-TOOL	1988	4519	2.4	$72,899
002181	HEAT EXCHANGER	01/01/1976	$6,434	P-TOOL	1976	2401	4.6	$29,643
002184	AIR COMPRESSOR - MAINTENANCE SHOP	01/01/1995	$6,442	P-TOOL	1995	5471	2.0	$13,026

Table A-1
Fund 593 Wastewater System Assets

Asset Number	Description [1]	Date	Acquisition Cost	Asset Class	Year Acquired	Valuation Year = 2018: ENR CCI Index [2] in Year Acquired	Escalation Factor [2], Current 11062	Total Escalated Acquisition Cost
002187	CLARIFIER MECHANISM	01/01/1981	$110,661	P-TOOL	1981	3535	3.1	$346,283
002188	CLARIFIER MECHANISM	01/01/1981	$201,650	P-TOOL	1981	3535	3.1	$631,009
002189	CLARIFIER MECHANISM	01/01/1987	$159,253	P-TOOL	1987	4406	2.5	$399,824
002190	CLARIFIER MECHANISM	01/01/1993	$115,696	P-TOOL	1993	5210	2.1	$245,645
002191	AIR GAP TANK	01/01/1986	$10,119	P-TOOL	1986	4295	2.6	$26,062
002192	PRESSURIZATION TANK	01/01/1987	$9,762	P-TOOL	1987	4406	2.5	$24,510
002195	MOTOR CONTROL CENTER - N	01/01/1988	$4,477	P-TOOL	1988	4519	2.4	$10,958
002206	WASTE GAS BURNER	01/01/1987	$123,184	P-TOOL	1987	4406	2.5	$309,270
002207	RAS PUMP W/MOTOR	01/01/1990	$13,160	P-TOOL	1990	4732	2.3	$30,763
002208	RAS PUMP W/MOTOR	01/01/1990	$13,160	P-TOOL	1990	4732	2.3	$30,763
002209	WAS PUMP W/MOTOR	01/01/1990	$15,216	P-TOOL	1990	4732	2.3	$35,570
002210	WAS PUMP W/MOTOR	01/01/1990	$15,216	P-TOOL	1990	4732	2.3	$35,570
002213	PUMP W/MOTOR	01/01/1988	$11,381	P-TOOL	1988	4519	2.4	$27,860
002214	PUMP W/MOTOR	01/01/1988	$11,381	P-TOOL	1988	4519	2.4	$27,860
002215	PUMP W/MOTOR	01/01/1990	$12,337	P-TOOL	1990	4732	2.3	$28,841
002217	MIX PIT PIPING/VALVES	01/01/1990	$26,073	P-TOOL	1990	4732	2.3	$60,950
002224	ROTATING DRUM THICKENER	01/01/1993	$51,107	P-TOOL	1993	5210	2.1	$108,510
002226	RAS PUMP W/MOTOR	01/01/1990	$13,160	P-TOOL	1990	4732	2.3	$30,763
002227	RAS PUMP W/MOTOR	01/01/1990	$13,160	P-TOOL	1990	4732	2.3	$30,763
002228	WAS PUMP W/MOTOR	01/01/1990	$12,337	P-TOOL	1990	4732	2.3	$28,841
002229	WAS PUMP W/MOTOR	01/01/1990	$12,337	P-TOOL	1990	4732	2.3	$28,841
002230	PROCESS PIPING	01/01/1990	$15,545	P-TOOL	1990	4732	2.3	$36,339
002239	BLOWER	01/01/1993	$26,435	P-TOOL	1993	5210	2.1	$56,126
002240	BLOWER	01/01/1993	$26,435	P-TOOL	1993	5210	2.1	$56,126
002251	MOTOR CONTROL CENTER	01/01/1990	$9,870	P-TOOL	1990	4732	2.3	$23,073
002266	PUMP W/MOTOR	01/01/1993	$6,873	P-TOOL	1993	5210	2.1	$14,593
002267	PUMP W/MOTOR	01/01/1993	$6,873	P-TOOL	1993	5210	2.1	$14,593
002268	PUMP W/MOTOR	01/01/1993	$6,873	P-TOOL	1993	5210	2.1	$14,593
002269	PUMP W/MOTOR	01/01/1993	$6,873	P-TOOL	1993	5210	2.1	$14,593
002270	PUMP W/MOTOR	01/01/1990	$12,337	P-TOOL	1990	4732	2.3	$28,841
002271	PUMP W/MOTOR	01/01/1993	$13,217	P-TOOL	1993	5210	2.1	$28,063
002272	PUMP W/MOTOR	01/01/1993	$13,217	P-TOOL	1993	5210	2.1	$28,063
002273	PUMP W/MOTOR	01/01/1993	$13,217	P-TOOL	1993	5210	2.1	$28,063
002274	PUMP W/MOTOR	01/01/1993	$13,217	P-TOOL	1993	5210	2.1	$28,063
002275	PUMP W/MOTOR	01/01/1993	$13,217	P-TOOL	1993	5210	2.1	$28,063
002276	PROCESS PIPING	01/01/1993	$256,858	P-TOOL	1993	5210	2.1	$545,359
002277	PUMP W/MOTOR	01/01/1993	$16,742	P-TOOL	1993	5210	2.1	$35,547
002278	PUMP W/MOTOR	01/01/1993	$16,742	P-TOOL	1993	5210	2.1	$35,547
002279	PUMP W/MOTOR	01/01/1993	$13,217	P-TOOL	1993	5210	2.1	$28,063
002280	PUMP W/MOTOR	01/01/1993	$13,217	P-TOOL	1993	5210	2.1	$28,063
002282	PROCESS PIPING	01/01/1990	$23,852	P-TOOL	1990	4732	2.3	$55,759
002283	MOTOR CONTROL CENTER	01/01/1990	$16,450	P-TOOL	1990	4732	2.3	$38,454
002285	RECLAIMED WATER STORAGE	01/01/1993	$53,751	P-TOOL	1993	5210	2.1	$114,123
002286	PROCESS PIPING	01/01/1988	$71,398	P-TOOL	1988	4519	2.4	$174,773
002290	PROCESS PIPING	01/01/1990	$9,047	P-TOOL	1990	4732	2.3	$21,150
002291	PUMP W/MOTOR	01/01/1993	$13,217	P-TOOL	1993	5210	2.1	$28,063
002292	PUMP W/MOTOR	01/01/1993	$13,217	P-TOOL	1993	5210	2.1	$28,063
002293	PUMP W/MOTOR	01/01/1993	$13,217	P-TOOL	1993	5210	2.1	$28,063
002294	PROCESS PIPING	01/01/1993	$31,369	P-TOOL	1993	5210	2.1	$66,603
002400	ONE (1) WALLACE AND TIERNAN WALL MOUNTED	01/08/2001	$7,747	P-ODEQ	2001	6342	1.7	$13,512
002401	ONE (1) WALLACE AND TIERNAN WALL MOUNTED	01/08/2001	$7,747	P-ODEQ	2001	6342	1.7	$13,512
002402	ONE (1) WALLACE AND TIERNAN WALL MOUNTED	01/08/2001	$7,747	P-ODEQ	2001	6342	1.7	$13,512
002403	ONE (1) PUMP CLARIFIER #3	11/22/2002	$6,259	P-UTIL	2002	6538	1.7	$10,590
002431	GENERATOR, MOUNTED ON TRAILER - 25 KW	10/18/1999	$17,623	P-ODEQ	1999	6060	1.8	$32,169
002434	PUMP MOTOR FOR WPCP	10/16/2001	$6,392	P-ODEQ	2001	6342	1.7	$11,150
002483	BURNER, WASTE GAS BURNER	12/26/2000	$7,145	P-ODEQ	2000	6221	1.8	$12,706
002486	ONE (1) TOSHIBA MAGNETIC FLOWMETER	06/25/2002	$3,678	P-ODEQ	2002	6538	1.7	$6,222
002487	ONE (1) MAGNETIC FLOWMETER	11/08/2002	$3,743	P-UTIL	2002	6538	1.7	$6,332
002489	ONE (1) PUMP LOCATED @ WPCP	10/22/2002	$3,333	P-UTIL	2002	6538	1.7	$5,639
002490	ONE (1) PUMP LOCATED @ WPCP	10/22/2002	$3,333	P-UTIL	2002	6538	1.7	$5,639
002493	ONE (1) FLYGHT PUMP/MERCED LIFT STATION	10/02/2002	$5,325	P-ODEQ	2002	6538	1.7	$9,009
002539	FUEL TANK, PORTABLE ABOVE-GROUND TANK	12/10/1999	$2,754	P-ODEQ	1999	6060	1.8	$5,027
002609	ONE (1) VOGELSANG PD PUMP, V136-105Q W/1	06/25/2002	$10,625	P-ODEQ	2002	6538	1.7	$17,977
002611	ONE (1) DYNABLEND UNIT FOR AUTO PLY SYST	11/22/2002	$9,807	P-UTIL	2002	6538	1.7	$16,593
002616	LATHE, JET PRECISION - PLANT	06/29/2003	$12,232	p-odeq	2003	6694	1.7	$20,214
002617	MILL PACKAGE	06/29/2003	$6,387	p-odeq	2003	6694	1.7	$10,554
002618	MECHANICAL SEAL, FLOWSERVE	06/29/2003	$4,385	P-UTIL	2003	6694	1.7	$7,245
002620	VALVE~	08/25/2003	$8,972	P-UTIL	2003	6694	1.7	$14,826
002693	STORM DRAIN - WICKS PUMP ST. - LAND #194	06/27/2003	$479,506	P-STOR	2003	6694	1.7	$792,384
002703	RODDER~	03/18/2004	$63,597	P-PWKS	2004	7115	1.6	$98,874

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Asset Number	Description [1]	Date	Acquisition Cost	Asset Class	Year Acquired	Valuation Year = 2018: ENR CCI Index [2] in Year Acquired	Escalation Factor [2], Current 11062	Total Escalated Acquisition Cost
002763	NEPTUNE LIFT STATION REHABILITATION	06/29/2004	$469,286	p-bldg	2004	7115	1.6	$729,600
002845	VORTEX PIT PUMP	01/07/2005	$26,840	p-util	2005	7446	1.5	$39,873
002847	PUMP VORTEX PIT	01/24/2005	$26,840	p-util	2005	7446	1.5	$39,873
002850	VALVE~	04/07/2005	$8,817	P-UTIL	2005	7446	1.5	$13,098
002923	LIFT PUMP~	05/04/2006	$37,715	P-UTIL	2006	7751	1.4	$53,822
002927	MECHANICAL SEAL	02/23/2006	$8,189	p-tool	2006	7751	1.4	$11,686
002930	CHOPPER PUMP	07/01/2005	$26,840	p-util	2005	7446	1.5	$39,873
002951	VAUGHAN CHOPPER PUMP	06/30/2006	$18,372	p-util	2006	7751	1.4	$26,219
003099	WELDING FUME EXTRACTOR, PART NO. LIN	06/29/2007	$6,275	P-ENGI	2007	7967	1.4	$8,712
003141	FORKLIFT (USED)	12/11/2007	$15,153	P-PWKS	2007	7967	1.4	$21,039
003142	DIGESTER BOILER #4	02/19/2008	$135,486	P-UTIL	2008	8310	1.3	$180,352
003197	AERATION TANK "B' UPGRADE	06/30/2008	$962,703	P-UTIL	2008	8310	1.3	$1,281,502
003251	PIPE INSPECTION SYSTEM	03/16/2009	$8,448	P-UTIL	2009	8570	1.3	$10,905
003261	3C LIFT GATE	10/31/2008	$20,665	P-TOOL	2008	8310	1.3	$27,508
003290	STANDBY PUMP -WICKS/NEPTUNE LIFT STATION	06/29/2009	$7,422	p-tool	2009	8570	1.3	$9,580
003291	STANDY PUMP - MERCED LIFT STATION	06/29/2009	$7,422	p-tool	2009	8570	1.3	$9,580
003292	ABRASIVE BLASTING SYSTEM	06/29/2009	$7,344	p-tool	2009	8570	1.3	$9,479
003294	TRAILER - ENCLOSED WITH TONGUE BOX	06/29/2009	$6,174	p-pwks	2009	8570	1.3	$7,969
003296	ALIGNMENT SYSTEM - FIXTURLASER EXPRESS	06/29/2009	$21,621	p-tool	2009	8570	1.3	$27,907
003311	PUMP - FLYGT 3102 - LS STANDBY	08/18/2009	$6,135	P-HEQU	2009	8570	1.3	$7,919
003312	PUMP - FLYGT 3153 - LS STANDBY	08/18/2009	$11,963	P-HEQU	2009	8570	1.3	$15,441
003313	SLUDGE TRUCK ROLL OFF CONTAINTER	09/11/2009	$6,409	P-ODEQ	2009	8570	1.3	$8,273
003351	HVAC SYSTEM - COLLECTIONS BUILDING	03/10/2010	$15,188	P-UTIL	2010	8804	1.3	$19,083
003353	AIR COMPRESSOR	08/12/2009	$11,798	P-UTIL	2009	8570	1.3	$15,228
003356	LAND - SEWER EASEMENTS (9)	06/17/2010	$5,000	P-LAND	2010	8804	1.3	$6,282
003359	LAND - SEWER EASEMENTS (2)	06/29/2010	$1,500	p-land	2010	8804	1.3	$1,885
003377	METAL CANOPY BUILDING	02/21/2011	$24,376	P-BLDG	2011	9070	1.2	$29,730
003381	LAND - 2550 DAVIS STREET	10/06/2010	$1,650,000	p-land	2010	8804	1.3	$2,073,118
003391	RECIRCULATING PUMP - DIGESTER #4	01/28/2011	$6,875	P-UTIL	2011	9070	1.2	$8,385
003394	WPCP - ROTARY DRUM THICKNER SYSTEM	06/29/2011	$1,672,481	p-util	2011	9070	1.2	$2,039,806
003425	CHLORINE CONTACT TANK MECHANICAL	07/29/2011	$6,932	P-UTIL	2011	9070	1.2	$8,454
003474	SUBMERSIBLE PUMP - SAN RAFAEL LIFT STATION	05/02/2012	$4,375	P-UTIL	2012	9338	1.2	$5,182
003475	SUBMERSIBLE PUMP - WASINGTON LIFT STATION	05/02/2012	$7,482	P-UTIL	2012	9338	1.2	$8,863
003547	REFRIGERATOR SAMPLER 120 VAC, 60 HZ (2)	06/21/2012	$11,695	P-UTIL	2012	9338	1.2	$13,853
003623	SPIRAL SLUDGE HEAT EXCHANGER	06/18/2013	$31,464	P-UTIL	2013	9543	1.2	$36,470
003648	BLUE DOLPHIN LIFT STATION	06/28/2013	$226,561	P-BLDG	2013	9543	1.2	$262,610
003649	WICKS SANITARY LIFT STATION	06/28/2013	$867,617	p-bldg	2013	9543	1.2	$1,005,669
003655	METERING PUMPS AND ACCESSORIES (3 SETS)	08/19/2013	$24,032	P-UTIL	2013	9543	1.2	$27,856
003719	SPARE DEZURIK PEC AND APCO 250 VALVES	07/01/2013	$5,443	P-UTIL	2013	9543	1.2	$6,309
003756	610 GAL VERTICAL TANKS FOR WPCP (2)	03/11/2014	$22,646	P-TOOL	2014	9806	1.1	$25,545
003792	STERLIMATIC STEAM PRESSURE STERILIZER	06/30/2014	$10,773	P-UTIL	2014	9806	1.1	$12,152
003793	KJELTEC 8200 AMMONIA DITILLATION UNIT	06/30/2014	$11,514	P-UTIL	2014	9806	1.1	$12,988
003991	PREMIER TRAILER MOUNTED PORTABLE TRASH PUMP	10/07/2015	$42,078	P-HEQU	2015	10036	1.1	$46,381
003992	2015 POLARIS GEM ELECTRIC VEHICLE - MODEL E	09/02/2015	$15,158	P-PWKS	2015	10036	1.1	$16,708
003993	DIGESTER RECIRCULATION PUMP AND MOTOR	01/20/2016	$88,985	P-UTIL	2016	10331	1.1	$95,276
003994	HIGH EFFICIENCY TURBO COMPRESSOR	08/05/2015	$87,921	P-UTIL	2015	10036	1.1	$96,912
004253	HOTSY PRESSURE WASHER MODEL #1455N	10/19/2016	$8,552	P-HEQU	2016	10331	1.1	$9,157
004254	WATSON MARLOW 530 UN/REM PERISTALTIC TUBING PUM	05/10/2017	$8,486	P-MAIN	2017	10676	1.0	$8,793
004255	PREMIER CORNEL PORTABLE TRASH PUMP	06/21/2017	$34,279	P-HEQU	2017	10676	1.0	$35,518
004256	WATER POLLUTION CONTROL PLANT EXPANSION	07/01/2016	$56,341,472	P-BLDG	2016	10331	1.1	$60,324,725
004257	CCTV SEWER TRUCK EQUIPMENT	07/01/2016	$218,914	P-HEQU	2016	10331	1.1	$234,391
Total Treatment Plant and Lift Stations			$69,708,226					$114,062,679

Collection System	*miles*	*Linear Feet*	*$/LF*	*Replacement Cost*
Collection system pipe	130	686,400	$260	$178,464,000
Total Treatment Plant, Lift Stations and Collection Pipe				$292,526,679

Notes:

1. Asset data was provided by the City. The data excludes the following collection system pipe assets.
   Collection system pipe values are based on replacement costs as shown in the body of the table.

002220	GROUP OF UNDERGROUND PIPING	01/01/1948	$136,780
002221	GROUP OF UNDERGROUND PIPING	01/01/1968	$517,091
002222	GROUP OF UNDERGROUND PIPING	01/01/1991	$296,116
002764	ESTUDILLO SANITARY SEWER EXTENSION	06/29/2004	$292,277
003196	PIPING MODERNIZATION	06/30/2008	$431,444
003650	SEWER LINE REPLACEMENTS	06/28/2013	$1,719,629
003804	PREDA ST/SL CREEK SEWER REPLACEMENT	06/29/2014	$701,060

2. Escalated costs are the acquisition costs escalated using the Construction Cost Index values for 20-cities published by the Engineering News Record.

Table A-2
Fund 593 Developer Constributions (Connection Fees)

Year	Amount
1995	$29,980
1996	$26,197
1997	$13,439
1998	$143,702
1999	$269,896
2000	$49,729
2001	$191,203
2002	$347,274
2003	$198,756
2004	$94,302
2005	$48,237
2006	$335,374
2007	$54,857
2008	$157,980
2009	$204,238
2010	$52,004
2011	$34,304
2012	$238,319
2013	$234,389
2014	$104,089
2015	$590,778
2016	$117,885
2017	$370,885
2018	$104,523
Total	$4,012,339

Source: City of San Leandro Eden finance system, 593-3310