



LAKE SHASTINA COMMUNITY SERVICES DISTRICT

AGENDA

Special Meeting

Thursday, April 4, 2019 - 3:00 p.m.

Administration Building

16320 Everhart Drive ▪ Weed, California 96094 ▪ (530) 938-3281

CALL TO ORDER:

LSCSD Board Roll Call: Directors: Beck _____ Cupp _____ MacIntosh _____ Mitchell _____ Thompson _____

PLEDGE OF ALLEGIANCE:

BOARD MEMBER COMMENTS:

PUBLIC COMMENTS:

This is an opportunity for members of the public to address the Board only on subject(s) of the special meeting. The Board reserves the right to reasonably limit the length of individual comments, and/or the total amount of time allotted to public comments.

DISCUSSION / ACTION ITEMS:

1. Review and consider options regarding 2019 Sewer Rate Study

ADJOURNMENT:

The next LSCSD Regular Board Meeting is scheduled to be held on April 17, 2019 at 1:00 p.m. at the Administration Building.

Wastewater Rate Study

Detailed Calculation Sheets

Client:

Lake Shastina CSD, CA

Year of Study

2019

Current Fiscal Year

2018/2019

By:

SHN

Wastewater Rate Study 2019
Lake Shastina CSD, CA
Summary of Revenue Requirements

Major Budget Item	Current Year FY 2018/2019	FY 2019/2020	FY 2020/2021	FY 2021/2022	FY 2022/2023	FY 2023/2024
O&M	\$ 479,478	\$ 493,862	\$ 508,678	\$ 523,939	\$ 539,657	\$ 555,846
Short Lived Asset Replacement	\$ -	\$ 37,538	\$ 37,538	\$ 37,538	\$ 37,538	\$ 37,538
Debt Service	\$ 61,032	\$ 61,032	\$ 86,395	\$ 216,562	\$ 216,562	\$ 216,562
Operating Reserve	\$ -	\$ 24,693	\$ 25,434	\$ 26,197	\$ 26,983	\$ 27,792
Capital Reserve	\$ -	\$ 229,724	\$ 199,549	\$ 76,069	\$ 78,351	\$ 80,701
Revenue Requirements	\$ 540,510	\$ 846,849	\$ 857,594	\$ 880,304	\$ 899,090	\$ 918,440

Wastewater Rate Study 2019
Lake Shastina CSD, CA
Operations and Maintenance

Item	Current Year FY 2018/2019	Annual inflation factor	FY 2019/2020	FY 2020/2021	FY 2021/2022	FY 2022/2023	FY 2023/2024
7001 Accounting Audit	\$ 2,800	3.0%	\$ 2,884	\$ 2,971	\$ 3,060	\$ 3,151	\$ 3,246
7002 Admin Overhead Allocation	\$ 135,925	3.0%	\$ 140,003	\$ 144,203	\$ 148,529	\$ 152,985	\$ 157,574
7026 Contract Services ¹	\$ 2,800	3.0%	\$ 2,884	\$ 2,971	\$ 3,060	\$ 3,151	\$ 3,246
7033 Licenses, Permits & Fees	\$ 8,000	3.0%	\$ 8,240	\$ 8,487	\$ 8,742	\$ 9,004	\$ 9,274
7034 Dues & Subscriptions	\$ 500	3.0%	\$ 515	\$ 530	\$ 546	\$ 563	\$ 580
7040 Insurance (property & liability)	\$ 13,261	3.0%	\$ 13,659	\$ 14,069	\$ 14,491	\$ 14,925	\$ 15,373
7041 Legal	\$ 1,000	3.0%	\$ 1,030	\$ 1,061	\$ 1,093	\$ 1,126	\$ 1,159
7050 Office Expenses	\$ 500	3.0%	\$ 515	\$ 530	\$ 546	\$ 563	\$ 580
7055 Safety Equipment	\$ 2,000	3.0%	\$ 2,060	\$ 2,122	\$ 2,185	\$ 2,251	\$ 2,319
7061 Rental Equipment	\$ 500	3.0%	\$ 515	\$ 530	\$ 546	\$ 563	\$ 580
7062 Repair & Maintenance	\$ 20,000	3.0%	\$ 20,600	\$ 21,218	\$ 21,855	\$ 22,510	\$ 23,185
7063 Fuel ¹	\$ 6,550	3.0%	\$ 6,747	\$ 6,949	\$ 7,157	\$ 7,372	\$ 7,593
7064 Materials, Supplies & Sml Tools ¹	\$ 5,200	3.0%	\$ 5,356	\$ 5,517	\$ 5,682	\$ 5,853	\$ 6,028
7065 Vehicle Repair/Maintenance	\$ 5,000	3.0%	\$ 5,150	\$ 5,305	\$ 5,464	\$ 5,628	\$ 5,796
7100 Lease/Rent Expense	\$ 1,775	3.0%	\$ 1,828	\$ 1,883	\$ 1,940	\$ 1,998	\$ 2,058
7105 Utilities	\$ 53,000	3.0%	\$ 54,590	\$ 56,228	\$ 57,915	\$ 59,652	\$ 61,442
7501 Payroll Expense	\$ 141,417	3.0%	\$ 145,660	\$ 150,029	\$ 154,530	\$ 159,166	\$ 163,941
7513 Payroll Taxes	\$ 3,209	3.0%	\$ 3,305	\$ 3,404	\$ 3,507	\$ 3,612	\$ 3,720
7514 Payroll Benefits	\$ 40,489	3.0%	\$ 41,704	\$ 42,955	\$ 44,243	\$ 45,571	\$ 46,938
7516 Pension/CalPERS	\$ 25,747	3.0%	\$ 26,519	\$ 27,315	\$ 28,134	\$ 28,978	\$ 29,848
7518 Workers Comp	\$ 12,105	3.0%	\$ 12,468	\$ 12,842	\$ 13,227	\$ 13,624	\$ 14,033
7530 Payroll Reimbursement (Sewer) ¹	\$ (8,400)	3.0%	\$ (8,652)	\$ (8,912)	\$ (9,179)	\$ (9,454)	\$ (9,738)
7550 Travel & Training	\$ 2,500	3.0%	\$ 2,575	\$ 2,652	\$ 2,732	\$ 2,814	\$ 2,898
7551 Meals	\$ 400	3.0%	\$ 412	\$ 424	\$ 437	\$ 450	\$ 464
7552 Employee Physical Exams/Shots	\$ 500	3.0%	\$ 515	\$ 530	\$ 546	\$ 563	\$ 580
7555 Personal Protective Equipment	\$ 1,500	3.0%	\$ 1,545	\$ 1,591	\$ 1,639	\$ 1,688	\$ 1,739
7556 Uniforms	\$ 1,200	3.0%	\$ 1,236	\$ 1,273	\$ 1,311	\$ 1,351	\$ 1,391
Subtotal O&M	\$ 479,478		\$ 493,862	\$ 508,678	\$ 523,939	\$ 539,657	\$ 555,846

Notes:

1. Includes Department 23

Wastewater Rate Study 2019
Lake Shastina CSD, CA
Replacement fund for Short-lived Assets

Method:

Place depreciation amount for existing short-lived assets (less than 15 year life).
 Use purchase price divided by expected life for depreciation amount for reserve.

Item	Percent Owned by Sewer Department	Installed Year	Original Cost ¹	Expected Life (yrs)	Remaining Life	Current Replacement Cost	Annual Reserve Set Aside ²
2005 Ford F-150 #12	50%	2005	\$ 11,716	5	0	\$ 15,000	\$ 3,000
2005 Ford F-150 #13	50%	2005	\$ 11,716	5	0	\$ 15,000	\$ 3,000
2005 Ford F-250 #15	50%	2005	\$ 12,840	5	0	\$ 20,000	\$ 4,000
2005 Ford F-250 #16	50%	2005	\$ 30,776	5	0	\$ 20,000	\$ 4,000
Ford F-250 #1	100%	2008	\$ 11,085	5	0	\$ 40,000	\$ 8,000
New Holland Mower #40	5%	2007	\$ 4,292	5	0	\$ 5,000	\$ 1,000
Plow	50%	2016	\$ 6,000	5	2		\$ 1,200
US Jetty Jetter #70	75%	2005	\$ 26,409	10	0	\$ 30,000	\$ 3,000
GPS #94	33%	2009	\$ 2,277	10	0		\$ 228
Confined Space Rescue Holst	50%	2012	\$ 2,564	7	0		\$ 366
Aerator 1	100%	2012	\$ 6,602	10	3		\$ 660
Aerator 2	100%	2014	\$ 10,139	10	5		\$ 1,014
Apex Evaporator	100%	2013	\$ 30,776	10	4		\$ 3,078
Jetter Nozzles	100%	2013	\$ 3,270	10	4		\$ 327
Concrete Powergrit Chainsaw	100%	2015	\$ 1,334	5	1		\$ 267
Demo Hammer & Bits #108	100%	2015	\$ 1,039	5	1		\$ 208
Sewer Camera	100%	2017	\$ 13,352	5	3		\$ 2,670
8 Computers at Public Works Yard ³	50%	2012	\$ 7,600	5	0		\$ 1,520

Replacement Set Aside = \$ 37,538

Notes:

1. Original cost and current replacement value is for the portion of the asset owned by the Sewer Department.
2. If asset is already past useful life, use current replacement value if significantly different than original purchase price.
3. Computers are combined into one line item, with an average installed year and average original cost.

Wastewater Rate Study 2019
Lake Shastina CSD, CA
Operating Reserve

- Notes:
1. Set goal of ultimate O&M reserve amount (typically ranges between 10-50% of O&M budget)
 2. Set goal of percent of O&M to place in reserve.
 3. Reserve balance assumes no unforeseen circumstances requiring use of reserves.
 4. Balance percentage is the percentage of the respective year's O&M budget.

O&M Reserve Goal:

50%

 Place in Reserve Annually:

5%

 Approx. no. of years to achieve goal: 10 years

	FY 2019/2020	FY 2020/2021	FY 2021/2022	FY 2022/2023	FY 2023/2024
O&M Budget	\$ 493,862	\$ 508,678	\$ 523,939	\$ 539,657	\$ 555,846
Annual Reserve Amount	\$ 24,693	\$ 25,434	\$ 26,197	\$ 26,983	\$ 27,792
Reserve Balance	\$ 24,693	\$ 50,127	\$ 76,324	\$ 103,307	\$ 131,099
Balance Percentage	5%	10%	15%	19%	24%

Wastewater Rate Study 2019
Lake Shastina CSD, CA
Capital Reserve

Capital Improvement Plan

Project List

Project ¹	Total Amount ²	Grant Percentage	Grant Amount	Loan Percentage	Loan Amount	Owner Cash Amount	Description
WWTF Improvements	\$ 794,597	0%	\$ -	90%	\$ 715,137	\$ 79,460	Sludge drying beds, new primary tank, Pond 5 lining, as identified in 2019 Prelim Engr Report (PER)
Tony Lema Diversion	\$ 323,262	0%	\$ -	90%	\$ 290,936	\$ 32,326	As identified in 2019 PER
Lake Shore Forcemain & B-111 Upgrade	\$ 864,410	0%	\$ -	90%	\$ 777,969	\$ 86,441	As identified in 2019 PER
Purchase Portable Generators	\$ 85,490	0%	\$ -	0%	\$ -	\$ 85,490	As identified in 2019 PER
Biannual Pump Station Upgrade	\$ 143,404	0%	\$ -	0%	\$ -	\$ 143,404	Avg pump station upgrade cost as shown 2019 PER

Project Schedule

Project	FY 2019/2020	FY 2020/2021	FY 2021/2022	FY 2022/2023	FY 2023/2024
WWTF Improvements	Design	Construction			
Tony Lema Diversion	Construction				
Lake Shore Forcemain & B-111 Upgrade	Design	Construction			
Purchase Portable Generators		Purchase			
Biannual Pump Station Upgrade	X		X		X

Contributions to Capital Reserve³

Project	FY 2019/2020	FY 2020/2021	FY 2021/2022	FY 2022/2023	FY 2023/2024
WWTF Improvements	\$ 39,730	\$ 39,730	\$ -	\$ -	\$ -
Tony Lema Diversion	\$ 32,326	\$ -	\$ -	\$ -	\$ -
Lake Shore Forcemain & B-111 Upgrade	\$ 43,221	\$ 43,221	\$ -	\$ -	\$ -
Purchase Portable Generators	\$ 42,745	\$ 42,745	\$ -	\$ -	\$ -
Biannual Pump Station Upgrade	\$ 71,702	\$ 73,853	\$ 76,069	\$ 78,351	\$ 80,701
Total Contribution	229,724	199,549	76,069	78,351	80,701

See Note 4

Notes:

1. Projects with potential need for outside funding (loans/grants) are listed first
2. Inflation Adjustment to Capital Project Costs as follows (except pump station upgrades, see Note 3)

Project	From Planning Document		Anticipated Construction Year of Project	Assumed Annual Inflation Rate	Anticipated Project Cost
	Amount	Year of Study			
WWTF Improvements	\$ 771,453	2019	2020	3%	\$ 794,597
Tony Lema Diversion	\$ 313,847	2019	2020	3%	\$ 323,262
Lake Shore Forcemain & B-111 Upgrade	\$ 814,789	2019	2021	3%	\$ 864,410
Purchase Portable Generators	\$ 83,000	2019	2020	3%	\$ 85,490

3. Unless noted otherwise, contribution to capital reserve is the "owner cash amount" divided by the number of years before funds are needed
4. Pump Station upgrade assumed as average cost shown in 2019 PER; setaside amount increases 3% annually for inflation

Wastewater Rate Study 2019
Lake Shastina CSD, CA
Debt Service

Existing Annual Loan Payments: \$ 61,032

Future Projects Potentially Requiring Loans

Project 1: WWTF Improvements
 Project 2: Tony Lema Diversion
 Project 3: Lake Shore Forcemain & B-111 Upgrade

Notes: 1. Grant/Loan/Owner Contribution split assumptions for each project are shown on the Capital Reserve sheet.
 2. Payments start the fiscal year after construction is complete.
 3. Assume loan covenant requires collection of 120% of payment in order to have a reserve.
 4. See Capital Reserve sheet for anticipated construction schedule.
 5. Loan 1 is for Project 1, Loan 2 for Project 2, etc.

Loan Terms

	Loan 1	Loan 2	Loan 3	Comments
Total Loan Amount:	\$ 715,137	\$ 290,936	\$ 777,969	
Loan Length (yrs):	30	30	30	
Interest Rate:	6.000%	6.000%	6.000%	
Annual Payment:	\$ 51,954	\$ 21,136	\$ 56,519	Excludes fees, Principal & Interest only
120% Collected:	\$ 62,345	\$ 25,363	\$ 67,822	See note 3 above
Begin Payments:	FY 2021/2022	FY 2020/2021	FY 2021/2022	

Loan	Payments				
	FY 2019/2020	FY 2020/2021	FY 2021/2022	FY 2022/2023	FY 2023/2024
Existing Loan(s)	\$ 61,032	\$ 61,032	\$ 61,032	\$ 61,032	\$ 61,032
Loan 1	\$ -	\$ -	\$ 62,345	\$ 62,345	\$ 62,345
Loan 2	\$ -	\$ 25,363	\$ 25,363	\$ 25,363	\$ 25,363
Loan 3	\$ -	\$ -	\$ 67,822	\$ 67,822	\$ 67,822
Total Loan Annual Loan Payments	\$ 61,032	\$ 86,395	\$ 216,562	\$ 216,562	\$ 216,562

Wastewater Rate Study 2019
Lake Shastina CSD, CA
Customer Classes and EDU Summary

General notes:

1. The customer classes shown below are those currently used and are not proposed to change.
2. Assumed growth rate over the next five years is as follows:
 Residential:

10

 accounts/year
 Commercial:

0

 accounts/year
3. 1 EDU per account is assumed for rate analysis. See Rate Model and report text for additional discussion.
4. All new residential accounts are assumed to come out of standby accounts.

Customer Class	Number of Accounts/EDUs					
	Current Year FY 2018/2019	FY 2019/2020	FY 2020/2021	FY 2021/2022	FY 2022/2023	FY 2023/2024
Residential	1086	1096	1106	1116	1126	1136
Commercial	12	12	12	12	12	12
Standby	1825	1815	1805	1795	1785	1775
<i>Total accounts</i>	<i>2923</i>	<i>2923</i>	<i>2923</i>	<i>2923</i>	<i>2923</i>	<i>2923</i>

Wastewater Rate Study 2019
Lake Shastina CSD, CA
Rate Model

Rate Model Basis

1. This rate model is based on the Equivalent Dwelling Unit (EDU) method, which converts each account into a number of EDUs based on flow and strength.
2. General basis is that residential customers pay a fixed fee while non-residential customers pay a minimum fixed fee plus adjustments for additional flow and/or strength as discussed further herein.
3. The customer classes used for this study are shown below along with typical values for flow and strength.
4. Wastewater strength is measured by biological oxygen demand (BOD) and total suspended solids (TSS).
5. Based on the types of commercial facilities that are in the LSCSD, BOD and TSS strengths are assumed the same as residential.

Customer Class	Flow ³ gal/month	BOD mg/L	TSS mg/L	EDUs per account
Residential ¹	6000	250	250	1
Commercial ²	variable ⁴	250	250	1+ ⁵

Notes:

1. All residential units in the LSCSD service area are either Single Family Residential units or townhouse-type units with individual service accounts.
2. All commercial user accounts in the LSCSD service area are assumed to be medium strength, i.e. similar to residential strength.
3. Monthly flow is based on 200 gallons/day per residential unit.
4. Commercial flows are highly variable.
5. Commercial customers will be assumed to be a minimum of 1 EDU with additional variable charges based on flow in 1 EDU increments.

Additional special considerations

LSCSD charges a standby fee for unimproved lots. These have been in place prior to 1996 when Proposition 218 went into effect, but have never been increased since changes are subject to voter approval under Proposition 218. See report text for additional information.

Wastewater Rate Study 2019
Lake Shastina CSD, CA
Rate Analysis

Rate Analysis Assumptions:

1. Fixed base rate of 1 EDU is applied per account.
2. Water usage for 1 EDU is defined on the Rate Model sheet.
3. Variable rate based on flow applies only to commercial accounts with water usage in excess of 1 EDU.
4. Due to the number and type of commercial accounts, variable charges are expected to be minimal and are assumed zero for this rate analysis.

	Annual Sewer Rates ^{1,2}					
	Current Year FY 2018/2019	FY 2019/2020	FY 2020/2021	FY 2021/2022	FY 2022/2023	FY 2023/2024
Base Annual Rate per EDU	\$ 442.80	\$ 705.40	\$ 709.00	\$ 723.20	\$ 733.60	\$ 744.40
Percent increase		59.3%	0.5%	2.0%	1.4%	1.5%

Customer Class	Annual Base Charge Per Account					
Residential	\$ 442.80	\$ 705.40	\$ 709.00	\$ 723.20	\$ 733.60	\$ 744.40
Commercial	\$ 442.80	\$ 705.40	\$ 709.00	\$ 723.20	\$ 733.60	\$ 744.40
Standby	\$ 36.00	\$ 36.00	\$ 36.00	\$ 36.00	\$ 36.00	\$ 36.00

Customer Class	Annual Rate Revenue by Class					
Residential	\$ 480,881	\$ 773,118	\$ 784,154	\$ 807,091	\$ 826,034	\$ 845,638
Commercial	\$ 5,314	\$ 8,465	\$ 8,508	\$ 8,678	\$ 8,803	\$ 8,933
Standby	\$ 65,700	\$ 65,340	\$ 64,980	\$ 64,620	\$ 64,260	\$ 63,900
Total Annual Revenue^{3,4}	\$ 551,894	\$ 846,923	\$ 857,642	\$ 880,390	\$ 899,097	\$ 918,471

Revenue Requirements⁵	\$ 540,510	\$ 846,849	\$ 857,594	\$ 880,304	\$ 899,090	\$ 918,440
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Notes:

1. Residential accounts are billed quarterly, commercial accounts are billed monthly, standby accounts are billed semi-annually.
2. Rates shown are those required to balance the full revenue requirements. Alternative rate increases can be used to reduce the impact in any given year while still reaching long-term goals; however, certain minimum conditions may apply based on grant/loan requirements. See report text for further discussion.
3. The State has provided definitive determination that standby charges can be relied upon to meet revenue requirements. Standby charges cannot be increased except through a vote of taxpayers per Proposition 218 requirements. See report text for discussion.
4. This assumes 100% payment (i.e. no nonpayments) and does not include late fees.
5. See Revenue Requirements sheet for detailed breakdown by category.

Wastewater Rate Study 2019
Lake Shastina CSD, CA
Rate Analysis - Alternative Rate Increase

Rate Analysis Alternative Assumptions:

1. See Rate Analysis Sheet for additional assumptions.
2. The proposed rate increases spread the required increases evenly over 5 years.
3. In order to prevent deficits in the initial years, revenue requirements should be adjusted in the annual budget to match anticipated revenue.
4. Revenue requirements shown below are without adjustments and based on the assumptions stated on other pages.

	Annual Sewer Rates ^{1,2}					
	Current Year FY 2018/2019	FY 2019/2020	FY 2020/2021	FY 2021/2022	FY 2022/2023	FY 2023/2024
Base Annual Rate per EDU	\$ 442.80	\$ 491.51	\$ 545.57	\$ 605.59	\$ 672.20	\$ 744.40
Percent Increase		11.0%	11.0%	11.0%	11.0%	10.7%

Customer Class	Annual Base Charge Per Account					
Residential	\$ 442.80	\$ 491.51	\$ 545.57	\$ 605.59	\$ 672.20	\$ 744.40
Commercial	\$ 442.80	\$ 491.51	\$ 545.57	\$ 605.59	\$ 672.20	\$ 744.40
Standby	\$ 36.00	\$ 36.00	\$ 36.00	\$ 36.00	\$ 36.00	\$ 36.00

Customer Class	Annual Rate Revenue by Class					
Residential	\$ 480,881	\$ 538,693	\$ 603,405	\$ 675,835	\$ 756,899	\$ 845,638
Commercial	\$ 5,314	\$ 5,898	\$ 6,547	\$ 7,267	\$ 8,066	\$ 8,933
Standby	\$ 65,700	\$ 65,340	\$ 64,980	\$ 64,620	\$ 64,260	\$ 63,900
Total Annual Revenue^{3,4}	\$ 551,894	\$ 609,931	\$ 674,932	\$ 747,722	\$ 829,225	\$ 918,471

Revenue Requirements⁵	\$ 540,510	\$ 846,849	\$ 857,594	\$ 880,304	\$ 899,090	\$ 918,440
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Notes:

1. Residential accounts are billed quarterly, commercial accounts are billed monthly, standby accounts are billed semi-annually.
2. Rates shown are those required to balance the full revenue requirements. Alternative rate increases can be used to reduce the impact in any given year while still reaching long-term goals; however, certain minimum conditions may apply based on grant/loan requirements. See report text for further discussion.
3. The State has provided definitive determination that standby charges can be relied upon to meet revenue requirements. Standby charges cannot be increased except through a vote of taxpayers per Proposition 218 requirements. See report text for discussion.
4. This assumes 100% payment (i.e. no nonpayments) and does not include late fees.
5. See Revenue Requirements sheet for detailed breakdown by category.

Wastewater Rate Study 2019
Lake Shastina CSD, CA
Rate Analysis - Alternative #2 Rate Increase

Rate Analysis Alternative Assumptions:

1. See Rate Analysis Sheet for additional assumptions.
2. The proposed rate increases spread the required increases evenly over 5 years.
3. In order to prevent deficits in the initial years, revenue requirements should be adjusted in the annual budget to match anticipated revenue.
4. Revenue requirements shown below are without adjustments and based on the assumptions stated on other pages.

	Annual Sewer Rates ^{1,2}					
	Current Year FY 2018/2019	FY 2019/2020	FY 2020/2021	FY 2021/2022	FY 2022/2023	FY 2023/2024
Base Annual Rate per EDU	\$ 442.80	\$ 513.65	\$ 595.83	\$ 641.71	\$ 691.12	\$ 744.40
Percent Increase		16.0%	16.0%	7.7%	7.7%	7.7%

Customer Class	Annual Base Charge Per Account					
Residential	\$ 442.80	\$ 513.65	\$ 595.83	\$ 641.71	\$ 691.12	\$ 744.40
Commercial	\$ 442.80	\$ 513.65	\$ 595.83	\$ 641.71	\$ 691.12	\$ 744.40
Standby	\$ 36.00	\$ 36.00	\$ 36.00	\$ 36.00	\$ 36.00	\$ 36.00

Customer Class	Annual Rate Revenue by Class					
Residential	\$ 480,881	\$ 562,958	\$ 658,990	\$ 716,149	\$ 778,204	\$ 845,638
Commercial	\$ 5,314	\$ 6,164	\$ 7,150	\$ 7,701	\$ 8,293	\$ 8,933
Standby	\$ 65,700	\$ 65,340	\$ 64,980	\$ 64,620	\$ 64,260	\$ 63,900
Total Annual Revenue^{3,4}	\$ 551,894	\$ 634,462	\$ 731,120	\$ 788,470	\$ 850,757	\$ 918,471

Revenue Requirements⁵	\$ 540,510	\$ 846,849	\$ 857,594	\$ 880,304	\$ 899,090	\$ 918,440
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Notes:

1. Residential accounts are billed quarterly, commercial accounts are billed monthly, standby accounts are billed semi-annually.
2. Rates shown are those required to balance the full revenue requirements. Alternative rate increases can be used to reduce the impact in any given year while still reaching long-term goals; however, certain minimum conditions may apply based on grant/loan requirements. See report text for further discussion.
3. The State has provided definitive determination that standby charges can be relied upon to meet revenue requirements. Standby charges cannot be increased except through a vote of taxpayers per Proposition 218 requirements. See report text for discussion.
4. This assumes 100% payment (i.e. no nonpayments) and does not include late fees.
5. See Revenue Requirements sheet for detailed breakdown by category.

Wastewater Rate Study 2019
Lake Shastina CSD, CA
Connection Fee Summary

Connection Fees are based on three components:

1. Installation of the service connection by LSCSD staff.
2. Equity System Development Charge (SDC).
3. Improvement System Development Charge (SDC).

The connection fee basis is per Equivalent Dwelling Unit (EDU)

See attached sheets for details of how each component is determined.

Component	Amount Per EDU
Service Connection Installation	\$ 3,600
Equity SDC	\$ 1,997
Improvement SDC	\$ 1,492
Total Connection Fee	\$ 7,089

Wastewater Rate Study 2019
Lake Shastina CSD, CA
Service Connection

This sheet details the cost of installation of the service connection.

The basis for this cost is as follows:

1. Service connection from the sewer main to the property line is installed by CSD staff.
2. Developer reimburses CSD for this cost through the connection fee.
3. Installation cost is an average cost per connection, based on a 1 EDU per connection assumption.
4. Based on costs shown in the 2009 Sewer Rate Study and input from CSD staff.

Service connection Installation average cost = **\$ 3,600**

Wastewater Rate Study 2019
Lake Shastina CSD, CA
Equity System Development Charge

The equity SDC is a buy-in position for new connections into the existing system.
In general, the LSCSD sewer system was constructed for the buildout condition.
Therefore, the equity SDC can be defined as follows:

Equity SDC = Total value of system divided by the system capacity

Total value of sewer system = \$ 6,776,754 From Fixed Asset Summary provided by LSCSD, as of 6/30/18

System capacity can be defined by the number of existing connections and future connections.
Future connections are defined as those currently paying the standby charge plus an additional 470
connections that are not paying standby charge but that could be connected to the existing system.
Existing and future connections are assumed to be 1 EDU each.

System capacity = 3,393 connections (or EDUs)

Equity SDC = \$ 1,997 per EDU

6171.907104

Wastewater Rate Study 2019
Lake Shastina CSD, CA
Improvements System Development Charge

The improvement SDC is an allocation of cost of proposed future improvements to new connections.
 Future system improvements vary in how much is attributable to new connections, i.e. growth.
 System improvement costs are distributed to either all connections (existing and future) or just future connections.
 Existing and future connections are assumed to be 1 EDU each.

Existing connections =	1098	Residential and commercial accounts
Future connections =	2295	Standby accounts plus additional 470 that could be sewerer
Total connections =	3393	

Improvement Project	Estimated Cost ¹	Applies to all users	Applies to future users	Cost per connection ^{2,3}
Pump Station B-100	\$ 145,389	X		\$ 42.85
Pump Station B-101	\$ 186,428	X		\$ 54.94
Pump Station B-102	\$ 192,651	X		\$ 56.78
Pump Station B-103	\$ 63,601	X		\$ 18.74
Pump Station B-104	\$ 186,173	X		\$ 54.87
Pump Station B-105	\$ 79,819	X		\$ 23.52
Pump Station B-106	\$ 169,702	X		\$ 50.02
Pump Station B-107	\$ 186,519	X		\$ 54.97
Pump Station B-108	\$ 187,461	X		\$ 55.25
Pump Station B-109	\$ 192,588	X		\$ 56.76
Pump Station B-110	\$ 182,745	X		\$ 53.86
Pump Station B-111	\$ 172,541	X		\$ 50.85
Pump Station B-112	\$ 172,541	X		\$ 50.85
Pump Station B-113	\$ 59,697	X		\$ 17.59
Pump Station B-114	\$ 66,699	X		\$ 19.66
Pump Station B-115	\$ 165,928	X		\$ 48.90
Pump Station B-116	\$ 70,985	X		\$ 20.92
Pump Station B-117	\$ 171,812	X		\$ 50.64
Pump Station B-118	\$ 194,341	X		\$ 57.28
Pump Station B-120	\$ 49,597	X		\$ 14.62
Lake Shore Drive Bypass	\$ 642,248		X	\$ 279.85
Tony Lema Drive Diversion	\$ 313,847	X		\$ 92.50
Pond 5 Lining	\$ 273,240		X	\$ 119.06
WWTF Improvements (excl. Pond 5 lining)	\$ 498,213	X		\$ 146.84
Total Improvement SDC⁴				\$ 1,492

Notes:

1. Estimated project costs from the 2019 Preliminary Engineering Report.
2. Cost per connection is determined as the estimated project cost divided by either all or future users, as applicable.
3. Costs attributed to existing users are covered by rates.
4. Rounded to nearest dollar.