

Draft Sewer Rate Study

Lake Shastina Community Services District
16320 Everhart Drive
Weed, California



Prepared for:

Lake Shastina Community Services District



April 2019

517027.300



CONSULTING ENGINEERS & GEOLOGISTS, INC.

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Reference: 517027.300

April 12, 2019

Mr. Robert Moser
Interim General Manager/Public Works Supervisor
Lake Shastina Community Services District
16320 Everhart Drive
Weed, California 96094

Subject: Draft Sewer Rate Study

Dear Mr. Moser:

Please find enclosed the Draft Sewer Rate Study. We have developed a rate structure based upon the various assumptions related to operational costs, anticipated projects and related funding, reserve requirements, and the customer classes, as stated in the study document. We have also incorporated direction from the Board workshop.

Please review this Draft Sewer Rate Study and provide comments at your convenience. I would be happy to meet with you in person to discuss.

Respectfully submitted,

SHN Engineers & Geologists

A handwritten signature in blue ink that reads "Anders Rasmussen". The signature is written in a cursive, flowing style.

Anders H. Rasmussen, PE
Regional Principal/Senior Civil Engineer

AHR:ahr

Enclosures: Draft Sewer Rate Study

Reference: 517027.300

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Prepared for:

Lake Shastina Community Services District

Prepared by:



Engineers & Geologists

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April 2019

QA/QC: RFS

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Abbreviations and Acronyms

CIP	capital improvement plan
DFA	Division of Financial Assistance
EDU	equivalent dwelling unit
FY	fiscal year
LSCSD	Lake Shastina Community Services District
MHI	median household income
O&M	operations and maintenance
PER	Preliminary Engineering Report
SCWG	Small Community Wastewater Grant
SDC	system development charge
SHN	SHN Engineers & Geologists
SWRCB	State Water Resources Control Board
WWTF	wastewater treatment facility

1.0 Introduction

1.1 Background

The Lake Shastina Community Services District (LSCSD) serves the unincorporated community of Lake Shastina, which is located just north of the City of Weed, in the central portion of Siskiyou County, California. The LSCSD provides water, wastewater, fire, and police services to the Lake Shastina community. The LSCSD has not conducted a wastewater rate study since 2009 and is preparing for upgrades to the wastewater collection and treatment system. A sewer rate adjustment is needed to accommodate the increase in costs of the wastewater system.

A review of sewer connection fees is also needed, and this is addressed separately in Section 5. The remainder of Section 1 and all of Sections 2 through 4 are focused on rates.

A rate study was last conducted in 2009 by Schlumpberger Consulting Engineers.

1.2 Objectives

Several objectives should be considered in the development of a financial plan and in the design of rates. The major objectives of the study were:

- Ensure revenue sufficiency to meet the operation and maintenance (O&M) and capital needs of the LSCSD's community services.
- Plan for revenue stability to provide for adequate operating and capital reserves and the overall financial health of the LSCSD.
- Provide for fairness and equity in the development of a system of user charges.
- Minimize rate impacts to reduce financial hardship on user categories and individual members of those categories.
- Maintain simplicity for ease of administration and implementation, as well as customer understanding and acceptance.
- Growth pays a fair and equitable share to connect to the system.

Some of these objectives are interrelated. This being the case, judgment plays a role in the final design of rate structures and rates.

1.3 Legal Requirements: Proposition 218

Water and wastewater (sewer) rates imposed by local government agencies are subject to Proposition 218, which added Article 13D, Section 6, to the California Constitution, and which was passed by the voters of California in 1996. The main requirement is that rates and fees are reasonable and proportional to the cost of providing services. Additional requirements include the following:

- Revenues derived from rates shall not exceed the funds required to provide the property related service.
- Revenues derived from rates may not be used for any purpose other than that for which the rate was imposed.
- No charge may be imposed for a service unless that service was actually used by, or immediately available to, the owner of the property.

- Agencies must provide written notice of proposed changes to rates via mail to parcel owners at least 45 days prior to the public hearing, at which time the agency considers all written protests against the rate change.

1.4 Rate Making Methodology

The standard of practice for water and wastewater rate making methodology is, respectively, *Manual M1, Principles of Water Rates, Fees, and Charges*, by the American Water Works Association, and *Manual of Practice 27, Financing and Charges for Wastewater Systems*, by the Water Environment Federation. Both of these documents use the same general approach (see Figure 1):

- Determination of revenue requirements
- Cost of service analysis
- Rate design and calculations
- Rate adoption

The California State Water Resources Control Board (SWRCB), Division of Financial Assistance (DFA), also has a rate-making guideline, *Revenue Program Guidelines for the Small Community Wastewater Grant (SCWG) Program* which is Appendix C of the 2007 *Small Community Wastewater Grant Program Guidelines*.

Rate making is a trial and error process that includes weighing various factors, including whether to raise rates gradually over a period of years instead of all at once when significant increases are needed. In general, the approach used in this rate study is to determine the rates needed each fiscal year and let the agency determine if a stepped rate increase is a more appropriate approach.

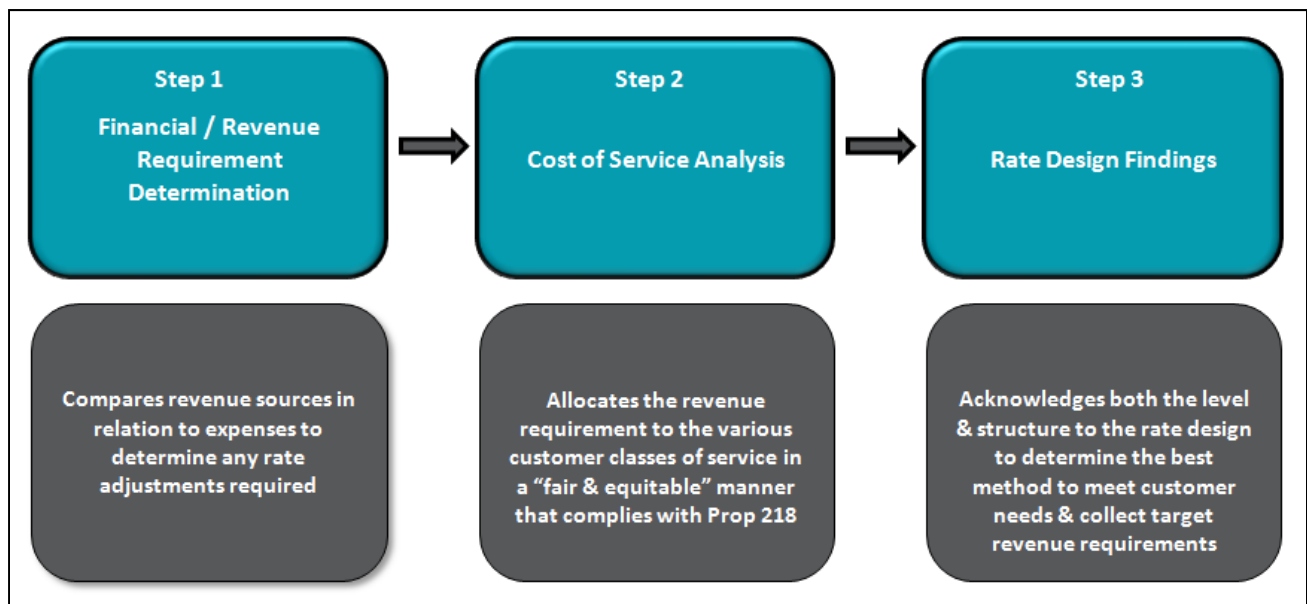


Figure 1. Steps used in developing wastewater rates.

2.0 Revenue Requirements

2.1 General

Revenue requirements for a wastewater utility are comprised of five general categories (see Figure 2):

- Operations and Maintenance (O&M)
- Replacement and Depreciation
- Debt Service
- Operating Reserve
- Capital Reserve

The following sections describe these categories in greater detail and include the numbers used for the LSCSD.

Growth projections are an important part in determining any related increases in costs, such as O&M. Current growth assumptions, based on recent years, is 10 additional residential units per year, or approximately a one percent annual growth rate.

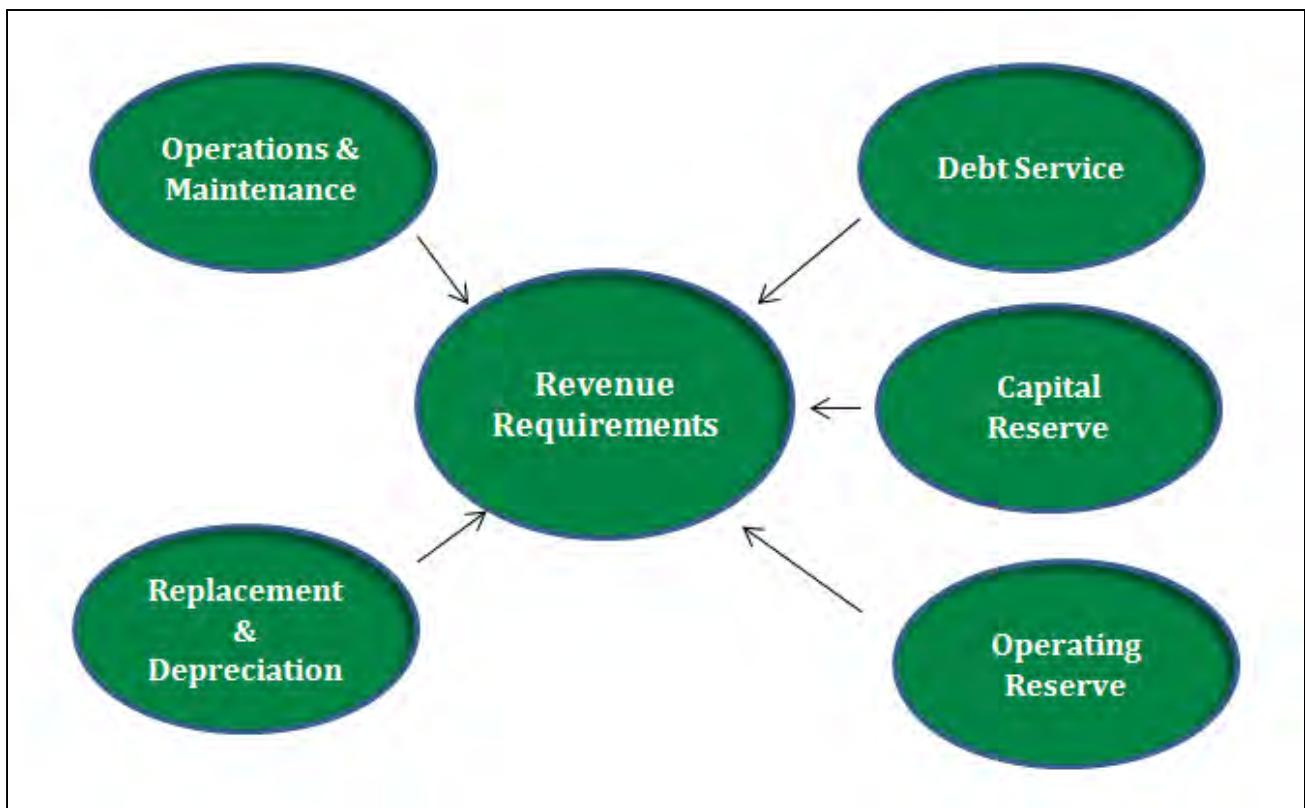


Figure 2. Components of revenue requirements for a wastewater utility.

2.2 Operations and Maintenance

The Operations and Maintenance (O&M) category consists of all the expenditures associated with the day-to-day operations of the collection, treatment, disinfection, and disposal of wastewater. These costs include staff salaries and wages, benefits, office costs, tools, other utility uses (power, telephone), supplies, training, vehicle fuel and maintenance, insurance, administrative expenses, equipment repair, etc. Each utility defines these costs in each fiscal year's budget.

For proposed wastewater rate adjustments to be properly analyzed, projections of the O&M budget for the next five years are required. O&M cost projections are based on three main factors:

- Inflation;
- Additional O&M costs due to growth; and
- Adjustments to O&M costs due to major capital improvements to the system, such as treatment facility upgrades.

Annual inflation for all O&M line items has been assumed to be three percent. Due to the low rate of growth within the LSCSD service area, additional O&M costs due to additional customers have been assumed to be negligible and not accounted for within this study. The proposed capital improvement projects are not expected to add significant additional O&M costs, which have therefore not been accounted for within this study.

Table 1 presents the LSCSD's O&M budget for the current fiscal year as well the projected budgets for the next five years.

2.3 Replacement and Depreciation

Replacement of short-lived assets is an important part of maintaining a wastewater utility. Short-lived assets include such items as pumps, motors, telemetry and electrical controls, vehicles, etc., generally equipment with useful lives of less than 15-20 years. Short-lived assets do not include expenses for major rehabilitation, capacity expansion, or other major upgrades, which are addressed under capital reserves.

The costs associated with replacement of short-lived assets are generally addressed in one of two ways for rate studies, either as a replacement reserve or as depreciation. While most accounting principles utilize depreciation, the SWRCB guidelines for small utilities recommends that replacement costs should be based, at a minimum, on a five-year planning cycle and that an annualized amount should be placed in the replacement account. The SWRCB guidelines further recommends that in lieu of the five-year replacement plan, a community may deposit an amount in the replacement fund equal to the sum of the straight-line depreciation of the short-lived asset.

Short-lived assets were taken from LSCSD's asset list and are shown in Table 2. Given the completeness of the records, we recommend the LSCSD set aside an amount equal to the straight-line depreciation of each short-lived asset, regardless of whether the asset is beyond its useful life. The annual depreciation amount is determined by dividing the sewer department's portion of the purchase price (or current replacement price, if significantly different) by the number of years of expected life. Table 2 shows the annual dollar amount required to be set aside based on a straight-line depreciation, and additional detail is provided in the Appendix.

2.4 Operating Reserve

Another reserve in addition to the replacement reserve is the operating reserve. This reserve fund is used to provide for ongoing operational costs when revenues do not match costs. This condition can occur under a variety of scenarios either from lower revenue or increased costs, or both, including the following:

- Late payment or non-payment of bills
- Unanticipated increases in electrical or chemical costs
- Unanticipated increases in labor costs
- Unanticipated compliance costs

Many utilities set aside a percentage of operational costs and put these funds into the operating reserve. Once the operating reserve fund is fully established, then adjustments can be made in the set aside amounts. Many wastewater utilities in California normally operate with reserves of between 10% and 50% of annual revenue requirements. We are recommending the Town annually set aside 5% of the Operations and Maintenance (O&M) portion of the revenue requirements for the next several years with a goal of reaching 50% of O&M, or whatever goal the LSCSD may set.

Table 3 presents the revenue requirements for the operating reserve for the next five fiscal years.

2.5 Capital Reserve

Capital improvement projects are those projects requiring significant funding and have significant longevity, such as wastewater treatment facility upgrades/expansions, pipeline repair/replacement, or manhole repair/replacement. Project funding can come from a variety of sources, including capital reserves, grants, and/or loans.

The capital reserves are those monies set aside by the utility to pay for capital projects. The up-front amount contributed to a project by the utility can vary significantly depending on a number of factors, including requirements from outside funding sources. For the LSCSD, we have assumed that 10% of the cost of upcoming projects is from capital reserves.

The starting point of determining the annual contributions to the capital reserve is the project schedule provided in the utility's Capital Improvements Plan (CIP). The LSCSD does not have a detailed CIP schedule. Based on the conceptual schedule for the proposed projects provided in the 2019 *Final Wastewater Facilities Preliminary Engineering Report* (PER) by SHN and discussion with LSCSD staff, a more defined CIP schedule has been developed and is presented in Table 4.

Table 5 also lists the anticipated project costs for the proposed capital improvements projects, which were provided in the 2019 PER, which listed a number of needed projects totaling approximately \$4.7 million. The project cost for pump station upgrades is based on the average project price for all pump station upgrades shown in the 2019 PER. The reader is directed to the 2019 PER for additional technical information about each proposed project.

For this study, the LSCSD contribution to each project was assumed as 10% of the project cost with the exception of the portable generators and pump station upgrades, which will be funded 100% with LSCSD funds. For each project, this 10% amount was divided between the number of years between the current fiscal year and the start of final design and/or construction, as applicable. The annual set-aside amounts for

each project between the next fiscal year and the start of each project, i.e. when the funds are needed, are presented in Table 5.

2.6 Debt Service

This item accounts for any debt payments made on outstanding loans that the LSCSD has under its wastewater department. This item also includes new debt payments for loans received for new capital projects. New loan payments are based on various factors, including project schedule, loan principal amounts, interest rates, and other loan terms. Project schedule is usually provided by an approved Capital Improvements Plan (CIP).

The LSCSD has current loan payments in the amount of \$61,032 annually for loans received on previous capital improvement projects. The schedule for loan payments for proposed projects are based on the schedule discussed in Section 2.5. Typically, payments begin after construction is completed.

It is anticipated that much of the funding for the proposed CIP projects will be in the form of loans, with a 10% LSCSD contribution taken from the Capital Reserve Fund. The following assumptions were made regarding debt service:

- Debt payments will begin the fiscal year after completion of construction.
- Loan amounts are assumed to be 90% of expected project costs as presented in Section 2.4.
- Loan terms are assumed to be at 6% for 30 years, based on the terms of existing loans and discussion with LSCSD staff.
- Loan covenants are assumed to require collection of 120% of payments in order to maintain a reserve.

Table 6 summarizes the debt service payments for the assumed scenario and loan terms for the next five fiscal years. Once project loan principal amounts are determined and loan terms finalized, rates should be reevaluated against the updated debt service payments and adjusted if necessary.

2.7 Summary of Revenue Requirements

A summary of the revenue requirements for each fiscal year over the next five years is presented in Table 7.

**Table 1. Operations and Maintenance Revenue Requirements
Lake Shastina CSD, CA
Sewer Rate Study 2019**

Items	Current Year FY 2018/2019	Annual Inflation Factor	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24
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 & Small 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
1. Includes Department 23							

**Table 2. Short-Lived Asset Replacement Revenue Requirements
Lake Shastina CSD, CA
Sewer Rate Study 2019**

Item	Percent Owned by Sewer Dept	Original Cost (Sewer Dept Portion)	Expected Life (yrs)	Annual Reserve Set Aside ²
Ford F-250 #1	50%	\$13,192	5	\$2,638
Ford F-150 #12	50%	\$9,542	5	\$1,908
Ford F250 4X4 Regular Cab #19	50%	\$12,333	5	\$2,467
Toyota Tacoma #300	50%	\$15,596	5	\$3,119
Dump Truck GMC #20	50%	\$19,960	10	\$1,996
Backhoe John Deer #31	50%	\$16,000	10	\$1,600
Loader Bobcat A300 #150	50%	\$37,448	10	\$3,745
Diesel Mower Grasshopper #49	50%	\$1	5	\$2,000
Sewer Camera System #65	100%	\$26,654	10	\$2,665
Utility Trailer #66	50%	\$912	10	\$91
Sewer Camera Trailer #67	100%	\$2,895	10	\$290
Generator (Kohler) and Trailer #68	50%	\$13,600	20	\$680
Jetter #70	100%	\$35,211	10	\$3,521
Generator (Shindaiwa) #72	50%	\$9,859	20	\$493
Asphalt Saw #81	50%	N/A	5	\$400
Starcraft Boat #88	100%	\$300	10	\$30
4" Trash Pump (Gorman Rupp) #90	50%	\$6,619	10	\$662
GPS #94	50%	\$3,415	10	\$342
Trash Pump (Hays) #96	50%	\$3,699	10	\$370
Plate Compactor #97	50%	N/A	5	\$400
Floating Aerator 5HP #103	100%	\$6,242	10	\$624
Floating Aerator 7.5HP #105	100%	\$8,361	10	\$836
Apex Evaporator #74	100%	\$27,800	10	\$2,780
Apex Evaporator #106	100%	\$29,824	10	\$2,982
Concrete Powergrit Chainsaw #107	50%	\$1,334	5	\$267
Demo Hammer & Bits #108	100%	\$1,050	5	\$210
Chainsaw #109	50%	\$247	5	\$49
Backpack Blower #110	50%	\$270	5	\$54
Cut Off Saw (Stihl) #111	50%	\$625	5	\$125
Gas Pressure Washer #112	50%	\$241	5	\$48
Walk Behind String Trimmer/Mower #113	50%	\$177	5	\$35
Kaufman Trailer #301	50%	\$2,665	10	\$267
800 Gallon Vac Tank #420	100%	\$19,692	20	\$985
Confined Space Rescue Hoist	50%	\$2,564	7	\$366
Jetter Nozzles	100%	\$3,270	10	\$327
			Replacement Set Aside =	\$39,372
<ol style="list-style-type: none"> 1. See Appendix for additional details. 2. Set aside value is original cost or current replacement cost (if significantly different) divided by the expected life. 				

**Table 3. Operating Reserve Revenue Requirements
Lake Shastina CSD, CA
Sewer Rate Study 2019**

Description	FY ⁵ 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24
O&M ¹ Budget ²	\$493,862	\$508,678	\$523,939	\$539,657	\$555,846
Percentage of O&M to be collected for Operating Reserve ³	5%	5%	5%	5%	5%
Operating Reserve Set-Aside Amount	\$24,693	\$25,434	\$26,197	\$26,983	\$27,792
<i>Operating Reserve Balance (percentage of respective year's O&M budget)⁴</i>	<i>\$24,693 (5%)</i>	<i>\$50,127 (10%)</i>	<i>\$76,324 (15%)</i>	<i>\$103,307 (19%)</i>	<i>\$131,099 (24%)</i>
<ol style="list-style-type: none"> 1. O&M: Operations and Maintenance. 2. From Table 1. 3. Percentage is suggested and can vary depending on how quickly the LSCSD wishes to achieve the desired reserve level, which typically varies from 10-50% for wastewater agencies. 4. Balance assumes no unforeseen circumstances requiring use of the reserves during the period shown. 5. FY: Fiscal Year. 					

Table 4. Five-Year Capital Improvements Plan¹
Lake Shastina CSD, CA
Sewer Rate Study 2019

Project ²	Project Cost ^{2,4}	FY ⁵ 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24
WWTF ³ Improvements	\$818,434		Design	Construction		
Tony Lema Diversion	\$353,238				Construction	
Lake Shore Forcemain & B-111 Upgrade	\$864,410	Design	Construction			
Purchase Portable Generators	\$85,490		Purchase			
Biannual Pump Station Upgrade	\$143,404	X		X		X

1. Schedule assumed based on when sufficient funding is available.
2. As defined in the 2019 *Final Wastewater Facilities Preliminary Engineering Report*.
3. WWTF: Wastewater Treatment Facility.
4. Project Cost has been inflated by 3% annual inflation rate from the year of study to the year of anticipated construction. See Appendix 1 for additional details.
5. FY: Fiscal Year.

**Table 5. Capital Reserve Fund Revenue Requirements
Lake Shastina CSD, CA
Sewer Rate Study 2019**

Project ¹	FY ⁴ 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24
WWTF ² Improvements	\$27,281	\$27,281	\$27,281	-	-
Tony Lema Diversion	\$11,775	\$11,775	\$11,775	-	-
Lake Shore Forcemain & B-111 Upgrade	\$41,962	\$41,962	-	-	-
Purchase Portable Generators ³	\$42,745	\$42,745	-	-	-
Biannual Pump Station Upgrade ³	\$71,702	\$73,853	\$76,069	\$78,351	\$80,701
Total Contribution	\$195,465	\$197,616	\$115,125	\$78,351	\$80,701

1. As defined in the 2019 *Final Wastewater Facilities Preliminary Engineering Report*.
2. WWTF: Wastewater Treatment Facility.
3. These Projects are assumed to be 100% funded by LSCSD.
4. FY: Fiscal Year.

Table 6. Five-Year Debt Service Revenue Requirements^{1,2,3}
Lake Shastina CSD, CA
Sewer Rate Study 2019

Project Requiring Loan	Principal Amount Borrowed ⁶	Loan Terms ⁷ (Years, Rate)	Revenue Requirements for Debt Service ²				
			FY ⁸ 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24
Existing Loan(s)			\$61,032	\$61,032	\$61,032	\$61,032	\$61,032
WWTF ⁴ Improvements	\$736,590	30 years 6.000%	\$0	\$0	\$64,215	\$64,215	\$64,215
Tony Lema Diversion	\$317,914	30 years 6.000%	\$0	\$0	\$0	\$0	\$27,715
Lake Shore Forcemain & B-111 Upgrade	\$755,310	30 years 6.000%	\$0	\$65,847	\$65,847	\$65,847	\$65,847
Total Annual Loan Payments			\$0	\$0	\$0	\$44,341	\$44,341

1. Loan payments start the fiscal year after construction is completed.
2. Revenue Requirements includes collection of 120% of loan payments.
3. See Appendix 1 for further details.
4. WWTF: Wastewater Treatment Facility
5. Principal assumed as 90% of estimated project cost as presented in the 2019 *Final Wastewater Facilities Preliminary Engineering Report* adjusted for inflation based on the anticipated project schedule as shown in Table 5.
6. New loan terms assumed to be the same as current loan terms.
7. FY: Fiscal Year

**Table 7. Operations and Maintenance Revenue Requirements
Lake Shastina CSD, CA
Sewer Rate Study 2019**

Major Budget Item	Current Year FY ⁶ 2018/2019	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2022/23
O&M ¹	\$479,478	\$493,862	\$508,678	\$523,939	\$539,657	\$555,846
Short Lived Asset Replacement ²	-	\$39,372	\$39,372	\$39,372	\$39,372	\$39,372
Operating Reserve ⁴	-	\$24,693	\$25,434	\$26,197	\$26,983	\$27,792
Capital Reserve ⁵	-	\$195,465	\$197,616	\$115,125	\$78,351	\$80,701
Debt Service ³	\$61,032	\$61,032	\$126,879	\$191,094	\$191,094	\$218,809
Revenue Requirements	\$540,510	\$814,424	\$897,979	\$895,726	\$875,456	\$922,522
1. From Table 1. 2. From Table 2. 3. From Table 3. 4. From Table 4. 5. From Table 5. 6. FY: Fiscal Year.						

3.0 Cost of Service Allocation

3.1 General

The revenue requirements described in Section 2 must be allocated to the customers in a fair and equitable manner that is acceptable to the ratepayers.

3.2 Proposition 218 Requirements

Proposition 218 requires that the cost of service be allocated to classes in a fair and equitable manner, based on the cost of providing the service to each customer class. Further, one class of customers cannot be subsidized by overcharging another class or classes of customers.

3.3 Customer Classes

3.3.1 Existing Customer Classes

The LSCSD has three sewer customer classes: Residential, Commercial, and Standby. Being a residential community, the Lake Shastina community consists mostly of single-family residences. Residential accounts are per dwelling unit, which is either a single-family residence or an individual townhouse. Commercial accounts include any non-residential accounts. Standby accounts are those unimproved lots that are within the service area of the LSCSD. Current numbers of accounts in each customer class are shown in Table 8.

3.3.2 Cost Allocation Methodology

Wastewater conveyance and treatment costs are generally dependent on two main factors: (1) flow, and (2) strength. There are various methods of allocating costs that depend on a number of factors, including complexity of the treatment process, types of customers present, and utility preference. For the LSCSD, we propose a simple approach based on the following:

- Residential wastewater constitutes most of the flow in the system; and
- Commercial wastewater from the small number of commercial customers is generally of medium strength, that is, the same as residential strength.

As is currently done, residential customers will be charged a fixed rate while commercial customers, due to variable flows, will be charged a minimum fixed rate plus a variable rate based on flows in excess of the minimum. Standby account rates will remain unchanged. Additional discussion is presented in Section 4.

3.3.3 Proposed Customer Classes

Based on discussion with LSCSD staff, no change to the customer classes is proposed.

**Table 8. Operations and Maintenance Revenue Requirements
Lake Shastina CSD, CA
Sewer Rate Study 2019**

Customer Class ¹	Number of Accounts ²
Residential	1,086
Commercial	12
Standby	1,825
Total Accounts	2,923
1. See text for additional details.	
2. Current as of December 2018.	

4.0 Rate Structure Analysis

4.1 Current Rate Structure

The current sewer rate structure for the Lake Shastina CSD is based on the EDU method with the following rates and billing frequencies:

- Each residential account, whether a single-family residence or a townhome/apartment, is charged a fixed annual rate of \$442.80 billed quarterly.
- Each commercial account is charged a fixed annual base rate of \$442.80 billed monthly for up to 10,000 gallons of metered water usage per month with a surcharge of \$0.50 for each additional 10,000 gallons per month.
- Standby accounts are charged a fixed annual rate of \$36.00 billed semi-annually.

As stated in the previous section, residential accounts include all single-family and townhouse residences. Commercial accounts are all non-residential accounts. Standby accounts are those undeveloped lots that are required to connect to the sewer system upon development.

4.2 Method

There are a number of methods that are used to develop sewer rates for utilities. These methods include factors based on Equivalent Dwelling Units (EDUs), actual wastewater flow, actual potable water use, and/or actual wastewater strength. One EDU is equivalent to an average single-family residence. Other commonly used terms for EDUs include Housing Equivalents (HE), Dwelling Unit Equivalents (DUE), and Equivalent Residential Units (ERU). Some communities break down the rates between fixed costs and variable costs.

We recommend the LSCSD continue with the existing simple EDU-based method since it is fair and equitable in accordance to Proposition 218 requirements. The few commercial accounts in the LSCSD service area have in general the same wastewater strength as residential wastewater; there is therefore no need for a strength surcharge for commercial accounts. Each commercial account is considered one EDU, with an allowance to be billed for additional water usage above 10,000 gallons per month at an additional one EDU rate (see Appendix for additional details).

Growth in the LSCSD service area has been small and is expected to continue to remain small. However, a small projected growth in sewer connections (10 accounts per year, taking from the standby accounts) is assumed for the rate calculations.

4.5 Proposed Rate Structure

In developing the rate structure to meet the annual revenue requirements, it was apparent that while the LSCSD currently has sufficient rate revenue to meet current O&M and existing debt service revenue requirements, it does not have sufficient revenue to meet capital project and future debt service requirements. This would require a substantial immediate increase in rates. However, a gradual stepped increase over five years is proposed as directed by the LSCSD Board and Staff.

The proposed rate structure for the next five fiscal years and for each customer class is shown in Table 9. The rates are based on the EDU method as described in the previous sections and in the calculations shown in the Appendix. The rates shown in Table 9 show a gradual increase to meet the anticipated revenue requirements within five years.

The proposed rate increase does not include an increase in the standby fees, which would be subject to voter approval. Sewer rates can be adjusted by the LSCSD Board following Proposition 218 procedures, unless a majority of rate payers provide written protest.

4.6 Affordability

The recently completed (December 2018) *Medial Household Income Survey*, by the Rural Community Assistance Corporation (RCAC) determined that the median household income (MHI) for the LSCSD service area was \$50,693.50. Common guidelines for sewer rates indicate that these rates should not exceed about two percent of MHI, and California SWRCB guidelines often require a minimum rate of 1.5% of MHI to receive funding. One and half percent and 2% of the MHI are \$760.40 and \$1,013.87, respectively. As shown in Table 9, the LSCSD is able to meet revenue requirements at rates that are well below the 1.5% threshold. Discussions with the SWRCB have revealed that the LSCSD can still receive funding with rates below 1.5% of MHI as long as a rate study has been completed to show that the District can meet revenue requirements.

**Table 9. Proposed Annual¹ Sewer Rates Per Account by Customer Class
Lake Shastina CSD, CA
Sewer Rate Study 2019**

Customer Class	Current FY ² 2018/2019	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24
Residential	\$442.80	\$513.60	\$576.00	\$627.84	\$684.00	\$745.20
Commercial	\$442.80	\$513.60	\$576.00	\$627.84	\$684.00	\$745.20
Standby	\$36.00	\$36.00	\$36.00	\$36.00	\$36.00	\$36.00
<i>Percent Increase in rate over previous year</i>	<i>N/A</i>	<i>15.99%</i>	<i>12.15%</i>	<i>9.00%</i>	<i>8.95%</i>	<i>8.95%</i>
<p>1. Residential Accounts are billed quarterly, Commercial Accounts billed monthly, and Standby Accounts billed semi-annually.</p> <p>2. Commercial Accounts will be billed this rate based on a maximum of 10,000 gallons of metered potable water use per month. If additional water is used in a given month, the account will be billed at the same incremental rate for each 10,000 gallons of water use. For example, if a commercial account uses 15,000 in a given month, it will be billed \$42.80 (\$513.60/year divided by 12 months) for the first 10,000 gallons and an additional \$42.80 for the additional water usage.</p> <p>3. FY: Fiscal Year</p>						

**Table 10. Annual Rate Revenue¹ by Customer Class and Comparison with Revenue Requirements
Lake Shastina CSD, CA
Sewer Rate Study 2019**

Customer Class	Current FY ² 2018/2019	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24
Residential	\$480,881	\$562,906	\$637,056	\$700,669	\$770,184	\$846,547
Commercial	\$5,314	\$6,163	\$6,912	\$7,534	\$8,208	\$8,942
Standby	\$65,700	\$65,340	\$64,980	\$64,620	\$64,260	\$63,900
Total Annual Revenue	\$551,894	\$634,409	\$708,948	\$772,824	\$842,652	\$919,390
<i>Revenue Requirements³</i>	<i>\$540,510</i>	<i>\$814,424</i>	<i>\$897,979</i>	<i>\$895,726</i>	<i>\$875,456</i>	<i>\$922,522</i>
<i>O&M⁴ Plus Debt Service Requirements Only^{3,54}</i>	<i>\$540,510</i>	<i>\$554,894</i>	<i>\$635,557</i>			
<ol style="list-style-type: none"> 1. Based on the number of accounts shown in Table 8, taking into account the growth stated in the text, and the rates shown in Table 9. Assumes 100% payment (i.e., no nonpayments), and does not include income from late fees. 2. FY: Fiscal Year 3. From Table 6 4. O&M: Operations and Maintenance 5. This line demonstrates that while a gradual rate increase over a five year period does not immediately meet all revenue requirements, the increase in rates does allow the LSCSD to meet the main obligations of O&M plus debt service over the first two years. 						

5.0 Connection Fees

Connection fees are those fees paid when an undeveloped property gets developed and a connection to the sewer system is made. These fees are governed by California Government Code Section 66012-66014. The connection fee is comprised of three components: (1) Installation cost of the service connection, (2) Reimbursement System Development Charge (SDC), and (3) Improvement SDC. Descriptions of each component are provided in the following paragraphs. Table 11 shows the calculated values for each component. Additional detail is provided in the Appendix.

5.1 Service Connection Installation

When a parcel is developed, the local water and sewer utility generally installs the service connection from the main pipe in the adjacent street to the property line within the public right-of-way. The developer of the parcel reimburses the utility for the cost of installing the service connection.

Detailed labor and material costs for this effort by LSCSD staff was estimated in the 2009 Rate Study. Based on the 2009 study along with adjustments for inflation and discussion with LSCSD staff on actual recent connection costs, a cost of \$3,300 per connection has been estimated for this study.

5.2 Reimbursement System Development Charge

The Reimbursement System Development Charge (SDC) is defined as buying into an equity position in a utility. This reimburses existing rate payers for the cost of the available capacity in the existing system, which was paid for by the existing rate payers. For the LSCSD system, the simplest and most appropriate way to calculate the reimbursement SDC is to divide the value of the entire utility by the number of users which yields a dollar per connection. In general, the LSCSD sewer system, especially the collection system, has been built to accommodate the development of all standby accounts.

The LSCSD maintains a Fix Asset Summary which shows the current value of fixed assets, including the sewer system. As of June 30, 2018, the sewer system value was \$6,776,754. Dividing that value by a total of 2,923 connections (1,098 existing connections plus 1,825 standby accounts) gives a value per connection (or EDU) of \$2,318. See the Appendix for additional detail.

5.3 Improvement System Development Charge

The Improvement SDC is the share of future connections for near-term proposed project costs that will benefit those future users. The projects are identified in the 2019 *Final Wastewater Facilities Preliminary Engineering Report* (PER) by SHN and shown in earlier in Table 4. See section 2.5 for additional information about these projects. Most of the projects are anticipated to benefit all users, both existing and future. Some projects will benefit only future users. The Improvement SDC is calculated as individual capital project costs (from the PER) divided by the number of users benefitting from the project (future only or existing plus future) then summing the allocation for each project to calculate the overall Improvement SDC. The Improvement SDC has been determined to be \$1,638 per connection. See the Appendix for additional detail.

5.4 Recommended Connection Fee

The calculated connection fee is the sum of the values for the service connection installation, reimbursement SDC, and improvement SDC as described in the previous sections and is shown in Table 11. The calculated value is \$7,256 per connection (or EDU). The current connection fee is \$7,248.50 per EDU.

Since the two values are similar, we recommend keeping the connection fee at \$7,248.50 but increasing the rate by 3% annually to account for inflation.

**Table 11. Sewer Connection Fees¹
Lake Shastina CSD, CA
Sewer Rate Study**

Component ¹	Number of Accounts ²
Service Connection Installation	\$3,300
Reimbursement SDC ²	\$2,318
Improvement SDC	\$1,638
Total Connection Fee	\$7,256³
<ol style="list-style-type: none"> 1. See text and Appendix for additional details. 2. SDC: System Development Charge 3. This value is close to the current fee of \$7,248.50; therefore, no change to the current rate is recommended, with the exception of 3% annual increases. See text for additional detail. 	

Rate Calculations **1**

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	\$ -	\$ 39,372	\$ 39,372	\$ 39,372	\$ 39,372	\$ 39,372
Debt Service	\$ 61,032	\$ 61,032	\$ 126,879	\$ 191,094	\$ 191,094	\$ 218,809
Operating Reserve	\$ -	\$ 24,693	\$ 25,434	\$ 26,197	\$ 26,983	\$ 27,792
Capital Reserve	\$ -	\$ 195,465	\$ 197,616	\$ 115,125	\$ 78,351	\$ 80,701
Revenue Requirements	\$ 540,510	\$ 814,424	\$ 897,979	\$ 895,726	\$ 875,456	\$ 922,522

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 & Smal 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 20-year life).

Use purchase price divided by expected life for depreciation amount for reserve.

Item	Percent Owned by Sewer Department	Installed Year	Original Total Purchase Price	Sewer Department Portion ¹	Expected Life (yrs)	Remaining Life	Current Replacement Cost ²	Annual Reserve Set Aside ²
Ford F-250 #1	50%	2008	\$ 26,384	\$ 13,192	5	0		\$ 2,638
Ford F-150 #12	50%	2005	\$ 19,083	\$ 9,542	5	0		\$ 1,908
Ford F250 4X4 Regular Cab #19	50%	2015	\$ 24,666	\$ 12,333	5	1		\$ 2,467
Toyota Tacoma #300	50%	2019	\$ 31,192	\$ 15,596	5	5		\$ 3,119
Dump Truck GMC #20	50%	1994	\$ 39,919	\$ 19,960	10	0		\$ 1,996
Backhoe John Deer #31	50%	1993	\$ 32,000	\$ 16,000	10	0		\$ 1,600
Loader Bobcat A300 #150	50%	2019	\$ 74,896	\$ 37,448	10	10		\$ 3,745
Diesel Mower Grasshopper #49	50%	2018	\$ 1	\$ 1	5	4	\$ 10,000	\$ 2,000
Sewer Camera System #65	100%	2009	\$ 26,654	\$ 26,654	10	0		\$ 2,665
Utility Trailer #66	50%	1998	\$ 1,823	\$ 912	10	0		\$ 91
Sewer Camera Trailer #67	100%	2009	\$ 2,895	\$ 2,895	10	0		\$ 290
Generator (Kohler) and Trailer #68	50%	1999	\$ 27,200	\$ 13,600	20			\$ 680
Jetter #70	100%	2004	\$ 35,211	\$ 35,211	10	0		\$ 3,521
Generator (Shindaiwa) #72	50%	2008	\$ 19,717	\$ 9,859	20			\$ 493
Asphalt Saw #81	50%	unknown	unknown	unknown	5	?	\$ 2,000	\$ 400
Starcraft Boat #88	100%	2011	\$ 300	\$ 300	10	2		\$ 30
4" Trash Pump (Gorman Rupp) #90	50%	2013	\$ 13,238	\$ 6,619	10	4		\$ 662
GPS #94	50%	2009	\$ 6,830	\$ 3,415	10	0		\$ 342
Trash Pump (Hays) #96	50%	2008	\$ 7,397	\$ 3,699	10	0		\$ 370
Plate Compactor #97	50%	unknown	unknown	unknown	5	?	\$ 2,000	\$ 400
Floating Aerator 5HP #103	100%	2012	\$ 6,242	\$ 6,242	10	3		\$ 624
Floating Aerator 7.5HP #105	100%	2014	\$ 8,361	\$ 8,361	10	5		\$ 836
Apex Evaporator #74	100%	2008	\$ 27,800	\$ 27,800	10	0		\$ 2,780
Apex Evaporator #106	100%	2013	\$ 29,824	\$ 29,824	10	4		\$ 2,982
Concrete Powergrit Chainsaw #107	50%	2015	\$ 2,668	\$ 1,334	5	1		\$ 267
Demo Hammer & Bits #108	100%	2015	\$ 1,050	\$ 1,050	5	1		\$ 210
Chainsaw #109	50%	2018	\$ 494	\$ 247	5	4		\$ 49
Backpack Blower #110	50%	2018	\$ 539	\$ 270	5	4		\$ 54
Cut Off Saw (Stihl) #111	50%	2018	\$ 1,250	\$ 625	5	4		\$ 125
Gas Pressure Washer #112	50%	2018	\$ 482	\$ 241	5	4		\$ 48
Walk Behind String Trimmer/Mower #113	50%	2018	\$ 354	\$ 177	5	4		\$ 35
Kaufman Trailer #301	50%	2019	\$ 5,330	\$ 2,665	10	10		\$ 267
800 Gallon Vac Tank #420	100%	2018	\$ 19,692	\$ 19,692	20	19		\$ 985
Confined Space Rescue Hoist	50%	2012		\$ 2,564	7	0		\$ 366
Jetter Nozzles	100%	2013		\$ 3,270	10	4		\$ 327

Replacement Set Aside = \$ 39,372

Notes:

1. Sewer Department Portion is the total purchase price multiplied by the sewer dept percentage.

2. Current replacement value is listed and applied toward set aside amount if significantly different than original purchase price.

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
<i>Reserve Balance</i>	<i>\$ 24,693</i>	<i>\$ 50,127</i>	<i>\$ 76,324</i>	<i>\$ 103,307</i>	<i>\$ 131,099</i>
<i>Balance Percentage</i>	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	\$ 818,434	0%	\$ -	90%	\$ 736,590	\$ 81,844	Sludge drying beds, new primary tank, Pond 5 lining, as identified in 2019 Prelim Engr Report (PER)
Tony Lema Diversion	\$ 353,238	0%	\$ -	90%	\$ 317,914	\$ 35,324	As identified in 2019 PER
Lake Shore Forcemain & B-111 Upgrade	\$ 839,233	0%	\$ -	90%	\$ 755,310	\$ 83,923	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	\$ 27,281	\$ 27,281	\$ 27,281	\$ -	\$ -
Tony Lema Diversion	\$ 11,775	\$ 11,775	\$ 11,775	\$ -	\$ -
Lake Shore Forcemain & B-111 Upgrade	\$ 41,962	\$ 41,962	\$ -	\$ -	\$ -
Purchase Portable Generators	\$ 42,745	\$ 42,745	\$ -	\$ -	\$ -
Biannual Pump Station Upgrade	\$ 71,702	\$ 73,853	\$ 76,069	\$ 78,351	\$ 80,701
Total Contribution	195,465	197,616	115,125	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 4)

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	2021	3%	\$ 818,434
Tony Lema Diversion	\$ 313,847	2019	2023	3%	\$ 353,238
Lake Shore Forcemain & B-111 Upgrade	\$ 814,789	2019	2020	3%	\$ 839,233
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:	\$ 736,590	\$ 317,914	\$ 755,310	
Loan Length (yrs):	30	30	30	
Interest Rate:	6.000%	6.000%	6.000%	
Annual Payment:	\$ 53,512	\$ 23,096	\$ 54,872	Excludes fees, Principal & Interest only
120% Collected:	\$ 64,215	\$ 27,715	\$ 65,847	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	\$ -	\$ -	\$ 64,215	\$ 64,215	\$ 64,215
Loan 2	\$ -	\$ -	\$ -	\$ -	\$ 27,715
Loan 3	\$ -	\$ 65,847	\$ 65,847	\$ 65,847	\$ 65,847
Total Loan Annual Loan Payments	\$ 61,032	\$ 126,879	\$ 191,094	\$ 191,094	\$ 218,809

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 yerars 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	Flow³ gal/month	BOD mg/L	TSS mg/L	EDUs per account
Residential ¹	10,000	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. LSCSD has used a base of 10,000 gal/month for commercial accounts; this is assumed the same for Residential.
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	\$ 676.20	\$ 745.20	\$ 745.20	\$ 745.20	\$ 745.20
Percent increase		52.7%	10.2%	0.0%	0.0%	0.0%

Customer Class	Annual Base Charge Per Account					
Residential	\$ 442.80	\$ 676.20	\$ 745.20	\$ 745.20	\$ 745.20	\$ 745.20
Commercial	\$ 442.80	\$ 676.20	\$ 745.20	\$ 745.20	\$ 745.20	\$ 745.20
Standby	\$ 36.00	\$ 36.00	\$ 36.00	\$ 36.00	\$ 36.00	\$ 36.00

Customer Class	Annual Rate Revenue by Class					
Residential	\$ 480,881	\$ 741,115	\$ 824,191	\$ 831,643	\$ 839,095	\$ 846,547
Commercial	\$ 5,314	\$ 8,114	\$ 8,942	\$ 8,942	\$ 8,942	\$ 8,942
Standby	\$ 65,700	\$ 65,340	\$ 64,980	\$ 64,620	\$ 64,260	\$ 63,900
Total Annual Revenue^{3,4}	\$ 551,894	\$ 814,570	\$ 898,114	\$ 905,206	\$ 912,298	\$ 919,390

Revenue Requirements ⁵	\$ 540,510	\$ 814,424	\$ 897,979	\$ 895,726	\$ 875,456	\$ 922,522
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Notes:

1. Residential accounts are billed quarterly, commercial accounts are billed monthly, standby accounts are billed semi-annually; annual rates shown are rounded to be divisible by 4 and 12 to accommodate the billing frequency.
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 over 5 years.
3. In order to prevent deficits in the initial years, revenue requirements should be adjusted in the actual annual budget to match anticipated revenue, mostly through reduced reserves.
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	\$ 513.60	\$ 576.00	\$ 627.84	\$ 684.00	\$ 745.20
Percent increase		15.99%	12.15%	9.00%	8.95%	8.95%

Customer Class	Annual Base Charge Per Account					
Residential	\$ 442.80	\$ 513.60	\$ 576.00	\$ 627.84	\$ 684.00	\$ 745.20
Commercial	\$ 442.80	\$ 513.60	\$ 576.00	\$ 627.84	\$ 684.00	\$ 745.20
Standby	\$ 36.00	\$ 36.00	\$ 36.00	\$ 36.00	\$ 36.00	\$ 36.00

Customer Class	Annual Rate Revenue by Class					
Residential	\$ 480,881	\$ 562,906	\$ 637,056	\$ 700,669	\$ 770,184	\$ 846,547
Commercial	\$ 5,314	\$ 6,163	\$ 6,912	\$ 7,534	\$ 8,208	\$ 8,942
Standby	\$ 65,700	\$ 65,340	\$ 64,980	\$ 64,620	\$ 64,260	\$ 63,900
Total Annual Revenue^{3,4}	\$ 551,894	\$ 634,409	\$ 708,948	\$ 772,824	\$ 842,652	\$ 919,390

Revenue Requirements ⁵	\$ 540,510	\$ 814,424	\$ 897,979	\$ 895,726	\$ 875,456	\$ 922,522
O&M Plus Debt Service Requirements ⁶	\$ 540,510	\$ 554,894	\$ 635,557			

Notes:

1. Residential accounts are billed quarterly, commercial accounts are billed monthly, standby accounts are billed semi-annually; annual rates shown are rounded to be divisible by 4 and 12 to accommodate the billing frequency.
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.
6. For reference, O&M plus Debt Service for the first two fiscal years is shown to demonstrate that the alternative rate adjustments will still meet minimum requirements.

**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. Reimbursement 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	\$ 3,300
Reimbursement SDC	\$ 2,318
Improvement SDC	\$ 1,638
Total Connection Fee	\$ 7,256

Notes:

1. Current Connection fee is \$7,248.50; it is recommended that the Connection Fee remain the same since the calculated amount is very similar.
2. It is recommended that the Connection Fee be increased by 3% annually to account for inflation.

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 = **\$ 3,300**

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

The reimbursement, also known as equity, SDC is a buy-in position for new connections into the existing system. It reimburses the existing users, who have paid for the existing system; funds are used for future capital improvements. In general, the LSCSD sewer system was constructed for the buildout condition that was envisioned to be connected to the sewer system. Therefore, the reimbursement SDC can be defined as follows:

$$\text{Reimbursement SDC} = \text{Total value of system divided by the system capacity}$$

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

Notes:

1. System capacity can be defined by the number of existing connections and future connections.
2. Future connections are defined as those currently paying the standby charge.
3. The LSCSD has indicated that there are a number of parcels (470) that are not paying standby charge but that could be connected to the existing system; however, these are not included in the system capacity since these parcels were not originally envisioned as part of the sewer system.
4. Existing and future connections are assumed to be 1 EDU each.

System capacity = 2,923 connections (or EDUs)

Equity SDC = \$ 2,318 per EDU

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 =	1825	Standby accounts
Total connections =	2923	

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		\$ 49.74
Pump Station B-101	\$ 186,428	X		\$ 63.78
Pump Station B-102	\$ 192,651	X		\$ 65.91
Pump Station B-103	\$ 63,601	X		\$ 21.76
Pump Station B-104	\$ 186,173	X		\$ 63.69
Pump Station B-105	\$ 79,819	X		\$ 27.31
Pump Station B-106	\$ 169,702	X		\$ 58.06
Pump Station B-107	\$ 186,519	X		\$ 63.81
Pump Station B-108	\$ 187,461	X		\$ 64.13
Pump Station B-109	\$ 192,588	X		\$ 65.89
Pump Station B-110	\$ 182,745	X		\$ 62.52
Pump Station B-111	\$ 172,541	X		\$ 59.03
Pump Station B-112	\$ 172,541	X		\$ 59.03
Pump Station B-113	\$ 59,697	X		\$ 20.42
Pump Station B-114	\$ 66,699	X		\$ 22.82
Pump Station B-115	\$ 165,928	X		\$ 56.77
Pump Station B-116	\$ 70,985	X		\$ 24.28
Pump Station B-117	\$ 171,812	X		\$ 58.78
Pump Station B-118	\$ 194,341	X		\$ 66.49
Pump Station B-120	\$ 49,597	X		\$ 16.97
Lake Shore Drive Bypass	\$ 642,248	X		\$ 219.72
Tony Lema Drive Diversion	\$ 313,847	X		\$ 107.37
Pond 5 Lining	\$ 273,240		X	\$ 149.72
WWTF Improvements (excl. Pond 5 lining)	\$ 498,213	X		\$ 170.45
Total Improvement SDC⁴				\$ 1,638

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.

LSCSD Budget

FY 2018/19

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**LAKE SHASTINA COMMUNITY SERVICES DISTRICT
2018-2019**

BUDGET APPROVED: 6/20/2018

	GENERAL	SEWER	WATER	POLICE	COPS GRANT	FIRE	TOTAL All Funds
REVENUES							
4001.1 - Assmt/Revenue - Residential		476,669	342,792	136,730		49,720	1,005,910
4001.2 - Assmt/Revenue - Standby		65,844	103,440	284,020		64,525	517,829
4001.3 - Assmt/Revenue - Commercial		4,939	14,256	3,410		1,060	23,665
4003.0 - Late Payment Revenue		2,800	9,000	10,000		2,500	24,300
4055.0 - Misc. Operational Income	500						500
4056.0 - Misc. Non-Op. Income				3,200			3,200
4070.0 - Antenna Lease Revenue	23,156						23,156
4075.0 - Water Capacity Expansion Fee			960				960
4076.0 - Fire Suppression Expansion Fee						316	316
5004.0 - Sewer Hook Up Fee		21,746					21,746
5005.0 - Sewer Payment Contracts		252					252
5006.0 - Water Hookup Fee			795				795
5040.0 - Gain on Sale of Equipment		2,500	2,500				5,000
5050.0 - Transfer Fees	4,000						4,000
5054.0 - Animal Control Fee - Other				300			300
5055.0 - Animal License Fee				4,800			4,800
5056.0 - Warrant				1,500		5,000	6,500
5062.0 - Donations				500		5,000	5,500
5075.0 - Grant Revenue					100,000		100,000
5080.0 - Interest earned - Ops	200						200
5081.0 - Interest Earned - Rsv (Savings)	2,000	3,400	13,500	3,000		1,100	23,000
Dept. 22 - Medical Clinic - General Fund Sub Dept.							-
4053.0 - Medical Clinic Revenue	60,264						60,264
4054.0 - Loan Principle Revenue			39,250				39,250
5081.0 - Interest Earned - Rsv (Savings)			4,750				4,750
Dept. 23 - Green Waste Site - Sewer Fund Sub Dept.							-
4055.0 - Misc. Operational Income		3,000					3,000
Dept. 45 - Mutual Aid Strike Team - Fire Sub Dept.							-
4080.0 - Strike Team Revenues						150,000	150,000
TOTAL INCOME 2017-2018 projected	90,120	581,150	531,243	447,460	100,000	279,221	2,029,193
EXPENSES							
7001.0 - Accounting Audit		2,800	2,800	2,800		2,800	11,200
7002.0 - Admin Overhead Allocation	(388,357)	135,925	174,760	46,603		31,069	-
7005.0 - Depreciation							-
7010.0 - Capital Improvement/Reserve Exp.	6,000	334,500	545,500	25,800			911,800
7026.0 - Contract Services	25,000	20,000	16,100	6,000		2,000	69,100
7032.0 - Filing Fees	150						150
7033.0 - Licenses, Permits & Fees	3,000	8,000	6,000	4,000	450	450	21,900
7034.0 - Dues & Subscriptions	6,100	500	1,300	3,000		925	11,825
7035.0 - Advertising	250			100			350
7040.0 - Insurance (property & liability)	500	13,261	16,242	3,000		5,687	38,690
7041.0 - Legal	25,000	1,000	5,000	1,000		1,000	33,000
7041.001 - Special Legal - Moller	-						-
7050.1 - Office Exp Supplies	5,000	400	650	1,000	300	650	8,000
7050.2 - Office Exp Postage	6,000	100	800	400		100	7,400
7050.4 - Office Exp Maintenance	7,750			2,200			9,950
7051.0 - Public Safety Supplies						2,000	2,000
7051.1 - Mandatory Safety Equipment						12,000	12,000
7055.0 - Safety Equipment		2,000	2,000				4,000
7061.0 - Rental equipment		500					500
7062.0 - Repair & Maintenance	3,500	20,000	45,000	1,300	300	2,000	72,100
7063.0 - Fuel		6,500	6,500	8,000	2,500	5,000	28,500
7064.0 - Materials, Supplies & Small Tools	500	5,000	8,000	4,000	500	2,500	20,500
7065.0 - Vehicle Repair/Maintenance		5,000	5,000	6,500	500	20,000	37,000
7067.0 - Vehicle Replacement							-
7075.0 - VFA Grant Equipment							-
7080.0 - Interest Expense (Sewer Pond Loan)		21,128					21,128
7085.0 - Municipal Finance (Principle)		39,898					39,898
7100.0 - Lease/Rent Expense		1,775	1,775				3,550
7101.0 - Property Taxes	140						140
7105.0 - Utilities - CSD	1,000			600		850	2,450
7105.1 - Utilities - Telephone	2,300	490	2,900	4,500	650	2,000	12,840
7105.2 - Utilities - Electric	5,500	52,000	97,000	2,860		3,300	160,660
7105.3 - Utilities - Waste		510	510	480		480	1,980
7105.4 - Utilities - Propane	500			1,000		1,000	2,500
7105.6 - Utilities - Internet	1,550			1,800		300	3,650
7204.0 - Events	500			500		500	1,500
7245.0 - Election	1,500						1,500
7501.0 - Payroll Expense	254,137	141,417	122,412	231,243	64,667	33,120	846,996
7513.0 - Payroll Taxes	6,289	3,209	2,778	19,426	5,381	2,824	39,907
7514.0 - Payroll Benefits	66,011	40,489	35,048	54,772	20,563	20,563	237,447
7516.1 - Pension (EJ)				11,284	2,676		13,959
7516.2 - Pension (CalPERS)	20,114	10,834	9,378				40,325
7516.5 - CalPERS UAL Expense	32,662	14,913	12,910				60,485
7518.0 - Workers Comp	21,931	12,105	10,478	17,143	5,561	9,298	76,518
7530.0 - Payroll Reimbursement (Sewer)		(9,400)		1,200		500	(7,700)
7530.1 - Payroll Reimbursement (Admin)	(87,922)						(87,922)
7530.3 - P/R Reimbursement Maintenance	7,000						7,000
7549.0 - Volunteer FF Stipend						14,000	14,000
7550.0 - Travel & Training	1,500	2,500	2,500	5,000	4,000	2,000	17,500
7551.0 - Meals	750	400	350	1,500	500	1,500	5,000
7552.0 - Employee Physical Exams/Shots		500		500	300	600	1,900
7555.0 - Personal Protective Equipment (PPE)		1,500	1,500		500		3,500
7556.0 - Uniforms		1,200	1,200	2,500	500	1,000	6,400
Dept. 22 - Medical Clinic - General Fund Sub Dept.							-
7026.0 - Contract Services	3,000						3,000
7040.0 - Insurance (Property/Liability)-Med Clinic	650						650
7062.0 - Repair & Maintenance (Med Clinic)	3,000						3,000
7080.0 - Interest Expense (Med Bldg)	4,750						4,750
7084.0 - Loan Principle Expense	39,250						39,250
7530.0 - Payroll Reimbursement (Med Clinic)	2,500						2,500
Medical Clinic Reserves	7,114						7,114
Dept. 23 - Green Waste Site - Sewer Fund Sub Dept.							-
7026.0 - Contract Services		800					800
7063.0 - Fuel		50					50
7064.0 - Materials, Supplies & Small Tools		200					200
7530.0 - Payroll Reimbursement (GWS)		1,000					1,000
Dept. 45 - Mutual Aid Strike Team - Fire Sub Dept.							-
7063.0 - Fuel						1,200	1,200
7065.0 - Vehicle Repair/Maintenance							-
7501.0 - Payroll Expense						94,584	94,584
7513.0 - Payroll Taxes						8,104	8,104
7518.0 - Workers Comp						8,134	8,134
COPS Grant Shortfall (to Dept 25 Police)				9,849	(9,849)		-
TOTAL EXPENSE 2017-2018 projected	96,120	893,003	1,136,391	481,859	100,000	294,038	3,001,411
Reimbursement for Cap. Exp. from Reserves	6,000	334,500	545,500	25,800			911,800
Net Expense	90,120	558,503	590,891	456,059	100,000	294,038	2,089,611
Sewer Pond principle applied to Liability paydown		39,898					39,898
NET PROFIT (LOSS) 2017-2018 projected	0	62,544	(59,648)	(8,599)	-	(14,817)	(20,521)

**LAKE SHASTINA COMMUNITY SERVICES DISTRICT
2018-2019**

Notes:

Administrative Overhead Allocation Calculation for this budget period: Sewer 35%, Water 45%, Police 12%, Fire 8%.
Worker's Comp includes the Board coverage.
2017-2018 Audit - L Bain CPA \$11,200

Payroll for 2018-2019 includes:

- Anticipated current staffing level Step increases
- 3% COLA for Teamsters Union member employees
- CalPERS ER costs increase 0.474% for Classic members and 0.309% for PEPRA members per Actuarial
- Workers Comp EMOD rates remain level with GSRMA
- Public Works Payroll expenses charge directly to Sewer or Water per CPA

Capital Improvements/Expenditures:

As of
5/31/2018

<u>General Fund:</u>	<u>Current Balance in LAIF Reserves:</u>	\$	159,017
Capital Improvements from Reserves-	\$ 6,000		
	New desktop computers/monitors - 2 new (estimate including installation)	\$	6,000
<hr/>			
<u>Sewer Department:</u>	<u>Current Balance in LAIF Reserves:</u>	\$	295,947
Capital Improvements from Reserves-	\$ 334,500		
	Sewer Lift Station B-108 Refit/Refurbishment	\$	40,000
	Sewer Lift Station B-104 Refit/Refurbishment	\$	40,000
	New PW Vehicle (shared w/Water Dept.)	\$	18,500
	Vac Tank	\$	25,000
	Sludge Drying Beds	\$	100,000
	Headworks Containment	\$	50,000
	Trash Pump	\$	15,000
	Security Fencing at Sewer Ponds (2 yr project?)	\$	20,000
	Bobcat (used)	\$	17,500
	Implements for Bobcat	\$	8,500
<hr/>			
<u>Water Department:</u>	<u>Current Balance in LAIF Reserves:</u>	\$	979,958
Capital Improvements from Reserves-	\$ 545,500		
	Hydrant Replacement (4 per year)	\$	20,000
	Meter Replacement (150 per year)	\$	21,000
	New PW Vehicle (shared w/Sewer Dept.)	\$	18,500
	Water Rate Study - to complete immediately	\$	45,000
	B56 Stonecrest Refurbish	\$	25,000
	Well #9 Rehab	\$	140,000
	Bobcat (used)	\$	17,500
	Implements for Bobcat	\$	8,500
	New Well (estimate only)	\$	250,000
<hr/>			
<u>Police Department:</u>	<u>Current Balance in LAIF Reserves:</u>	\$	337,273
Capital Improvements from Reserves-	\$ 25,800		
	Building Improvements	\$	7,500
	Replacement vehicles	\$	15,000
	New desktop computer/monitors & installation	\$	3,300
	New DOJ compliant Server		TBD
<hr/>			
<u>Fire Department:</u>	<u>Current Balance in LAIF Reserves:</u>	\$	85,509
Capital Improvements from Reserves-	\$ -		
	None at this time	\$	-



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