

UTILITY FINANCIAL ANALYSIS

8.1 INTRODUCTION

This Chapter summarizes the revenue needs for the City's sewer collection system. The analysis includes input from the City of Oroville Sanitary Sewer Budget – 15 Year Projection For FY 2010 - 2011, sewer service rates adopted in August 2010, the CIP recommended in Chapter 7, and the O&M service level recommendations.

Revenue for the City's Sewer Collection System is primarily generated from two sources: monthly sewer service rates and development impact fees. Sewer service rates provide the source of funds for O&M, system rehabilitation, and system replacement. Sewer service rates are paid by existing users. Development impact fees are paid by new users and provide a source of funds for new capacity. Recommendations for future sewer service rates and development impact fees will be provided in this chapter.

This chapter culminates in a detailed 15-year cash flow analysis. A changing economy makes it increasingly difficult to project revenue and expenses. This financial planning effort is most accurate in the near term and should be updated every five years or when economic conditions change.

8.1.1 Capital Improvement Program (CIP)

The CIP in Chapter 7 recommends infrastructure improvements throughout the system. The modeling and land use analysis of this Master Plan identifies sewer pipe capacity needs throughout the system to meet the demands of connections in the City through build out of the 2030 General Plan. The improvement program identifies projects in three categories: Element 1: System Deficiency, Element 2: System Upgrade, and Element 3: System Expansion. The CIP is summarized in Table 8.1.

Table 8.1 CIP Sanitary Sewer Master Plan City of Oroville	
Element 1: System Deficiencies	\$8,488,000
Element 2: System Upgrades	\$3,705,000
Element 3: System Expansion	\$28,214,000
Total	\$40,407,000

System deficiencies are projects that are immediately necessary because the current infrastructure does not meet current demands and/or design standards. Improvements to address system deficiencies are to be funded primarily by existing system users. There are several instances within the CIP where improvements needed for an existing system deficiency include an increase in pipe size. The pipe must be increased in size to address the deficiency and increased even more to provide future capacity. In these instances, the cost associated with the additional space to provide future capacity is allocated to future users. For all of the Element 1 projects, including the TWSD East Interceptor, the existing users share is 33% of the total cost.

System upgrades are projects where an existing pipe is currently meeting demand but will need to be upsized in the future as new connections are made. System upgrades have a cost component passed through to existing users as existing users receive the benefit of a pipe replacement buying a longer life for the system. For the system upgrade projects, 83% of the cost is to be paid for by future users and 17% by existing users. As these projects will be driven by development, and there will not be an available impact fee reserve to pay for these projects upon identification of the need, the system upgrade projects will be initially funded by the developers of new projects wishing to connect to the collection system. The developers can then be reimbursed through the City from the adjacent developers and new users of the improvement with their impact funds, set up as a reimbursement agreement.

System expansions include projects where new pipe will be installed to meet growth needs. Improvements to provide future capacity must ultimately be funded by future users (i.e., project developers) using reimbursement agreements in a similar manner to the system upgrade projects.

Existing users contribute partially to the system upgrade projects and only slightly to certain system expansion projects, and only to the extent of the benefit they receive for the extension in useful life of the particular asset. These contributions will be funded from the capital reserve component of the monthly Sewer Service Rate charge.

8.1.2 Other Agency Obligations

The City relies on two additional agencies to provide a complete sewage collection and treatment system. The City sewage collection system discharges into the SC-OR interceptor system. The City sewage collection system also links to TWSD infrastructure for additional conveyance needs. The City has formal agreements with both agencies that include fiscal obligations. These obligations are passed through to the system users and are detailed in this analysis.

The City entered into a new Sewer Service Agreement (SSA) with TWSD on March 20, 2010. The SSA sets forth several expectations. First, the agreement dictates a pass-through fee for O&M of the East Interceptor. This pass through will be addressed in Section 8.3.4 – Operating Expenses.

Second, the SSA includes an obligation for the replacement of the TWSD East Interceptor. The CIP includes a project for the replacement of the TWSD East Interceptor with a total project cost estimate of \$2,940,000. TWSD also developed an estimate for the project, \$5,000,000, for use in the SSA and its planning efforts. The City's project estimate is based on local area cost data. The City is confident that, due to the current bidding climate and possible funding options for the TWSD East Interceptor, using the estimate from the CIP of \$2,940,000 will be adequate to allow the City to meet the obligations of the SSA. The SSA obligates the City for 75% of the project, \$2,205,000. The SSA states "by August 30, 2014, the District shall provide City with ... the total construction cost." An update to this revenue assessment may be warranted at that time, if the actual cost conditions for the East Interceptor vary significantly from the costs included in this analysis.

Further, TWSD has determined that the need to replace the TWSD East Interceptor is imminent. Therefore, the timing of the TWSD East Interceptor has been accelerated from a system upgrade project (Element 2) as determined by the capacity analysis and is now identified as a system deficiency and included in Element 1. Some of the following tables treat the TWSD Interceptor separately for information only. The SSA cost estimate is used to develop the pre-construction obligation to the City of \$378,375. This obligation is included in the revenue planning effort as an early project cost.

This analysis assumes the TWSD East Interceptor is financed over 20 years with a loan from the State Water Resources Control Board's Revolving Loan Program. The annual obligation of the State Revolving Fund (SRF) payment for the cost is included in the analysis along with the pre-construction obligation of \$378,375.

8.2 DEVELOPMENT IMPACT FEE

8.2.1 Impact Fee Methodology

Future users of the sewage collection system must pay a development impact fee to mitigate their impact to the sewage collection system. Development impact fees are defined in Section 66000(b) of the Government Code and are commonly referred to as the AB 1600 requirements. The primary requirements for the City to collect a fee as a condition of approval of a development project are described below.

The City must:

- Identify the public improvement purpose of the fee.
- Identify the need for mitigation of proposed development impact.
- Identify the relationship between the amount of the fee and the portion of the facilities attributable to the development. The fee should be reasonably related to the cost of service provided.

- Account for the fee in a separate fund in a manner to avoid comingling of the fees with other revenues and disclose information regarding the fund.
- Ensure that the fees do not include the costs attributable to existing deficiencies. However, the development fee can factor in the cost associated with an acceptable level of service.

Impact fees are typically developed using one of two primary methods: Incremental Cost Method or Equity Buy-In Method. The Incremental Cost Method assigns the incremental cost of system expansion needed to serve the new development and recovers it from new development. This method is most appropriate when a significant portion of the capacity required to serve the new customers must be provided by the construction of new facilities. The Equity Buy-In Method is based on the principle of achieving capital equity between new and existing customers. This method is most appropriate when the current system facilities adequately serve existing and future customers, where no significant system investment is required to meet desired levels of service for existing and future users.

Because the sewage collection improvements identified in the master plan will require construction of new capacity, the Incremental Cost Method is most appropriate.

The sewage collection service area is diverse and the topography and geology vary greatly. Although the cost of individual improvements throughout the service area will vary with the topography, geology, and length, the impact fee per service unit is equalized throughout the service area to maximize the spread of benefits.

The steps required to calculate the City's sewer impact fees are:

- Identify the number of future service units.
- Identify the improvements necessary to meet the needs of the service area.
- Identify the costs of such improvements.
- Allocate the identified improvements to existing and future users.
- Allocate the costs of improvements to existing and future users.
- Calculate impact fee per service unit.

The modeling and land use analysis address the first two bullets. The CIP identifies the cost of the improvements. It is within the modeling effort that the allocation of the improvement to existing and future users is calculated. It is calculated by assessing the flow contributed by the existing users within an improvement and then adding in the projected flow contributed by future users. For example, in the Grand Avenue Sewer, the flow from existing users is estimated to be 0.236 mgd or 40.1% of the pipe capacity; and future users will need space in the pipe for 0.353 mgd, or 59.9% of the pipe capacity. Table 8.2 shows the projects that have flow contributions from both existing and future users and, in several cases, from other users outside the City system. System expansion projects (Element 3)

that are not included in Table 8.2 are 100% future users. The TWSD East Interceptor has already been discussed. The Ruddy Creek Pump Station Upgrade is another project that, when needed for future development, will also provide benefit to users outside the City system.

Table 8.2 Project Flow Split Sanitary Sewer Master Plan City of Oroville				
Project Number	Project Name	Percent Existing Customer (%)	Percent Future Customer (%)	Percent Other (%)
1A	Oroville Dam Blvd Relief Sewer	31.3%	68.7%	
1B	Stanford Avenue Sewer	56.6%	43.4%	
1C	Grace Baptist Church	56.1%	43.9%	
1D	Montgomery Street Sewer	37.2%	62.8%	
1E	Table Mountain Boulevard Sewer I	19.0%	81.0%	
1F	Table Mountain Boulevard Sewer II	16.4%	83.6%	
1I	TWSD East Interceptor	29.5%	46.2%	24.4%
2C	Grand Avenue Sewer	40.1%	59.9%	
2D	Downtown Sewer	28.8%	71.2%	
2E	Table Mountain Boulevard Sewer III	16.9%	83.1%	
2G	5th Avenue Sewer	0.1%	99.9%	
2H	Airport Pump Station Upgrade	3.5%	96.5%	
2I	Feather River Blvd Sewer	18.2%	81.8%	
3Q	Larkin Road Bypass Sewer	7.4%	92.6%	
3S ⁽²⁾	Ruddy Creek Pump Station Upgrade	0.7%	54.0%	45.2%
Notes:				
1. Other: TWSD				
2. Other: SCOR				

The improvement costs and allocation of the costs to new and existing users, grouped by Element, are shown in Table 8.3. The total cost of improvement shown in Table 8.3 excludes \$1,229,504 for the portion of the Ruddy Creek Pump Station Upgrade that is allocated to others. As previously noted, the TWSD East Interceptor total cost of \$2,940,000 is adjusted to show the 75% allocated by the SSA to the City of Oroville.

Table 8.3 CIP Allocation Sanitary Sewer Master Plan City of Oroville			
	Improvement Costs	Existing Users Allocation	Future Users Allocation
Element 1: System Deficiencies ⁽¹⁾	\$8,488,000	\$2,833,629	\$5,654,371
Element 2: System Upgrades	\$3,705,000	\$631,920	\$3,073,080
Element 3: System Expansion ⁽²⁾	\$26,984,496	\$42,544	\$26,941,953
Total	\$39,177,496	\$3,508,093	\$35,669,404
Notes:			
1. Includes Oroville share of TWSD East Interceptor: 75% of total project cost.			
2. Improvement Costs exclude \$1,229,504 for Ruddy Creek Pump Station Upgrades, which will be paid for by others.			

8.2.2 Existing Development Impact Fee Structure

The current cost for a new single-family residential unit, which is the same as the EDU, to connect to the City sewage collection system is currently \$1,123.50 as shown in Table 8.4. This amount excludes the SC-OR connection fee, which is currently \$6,638.00.

Table 8.4 Current Single Residential Unit Development Impact Fees Sanitary Sewer Master Plan City of Oroville	
Fee Description	Single Unit Residential
Connection Fee	\$696.00
Sewer Collection Fee	\$427.50
TOTAL CONNECTION CHARGE PER RESIDENTIAL EDU	\$1,123.50

The Connection Fee combined with the Sewer Collection Fee performs as the City's development impact fee.

8.2.3 Future Service Units

For future user improvement cost allocation to an EDU, the number of future service units must be identified. The number of future service units was determined to be 25,072 EDUs through the modeling and land use as described previously in Section 5.5.2.

8.2.4 Schedule Impacts

The identified improvements are necessary to meet the needs of future connections, which are driven by development. However, development has drastically declined in this current economic recession. The City provided growth projections that add 545 new units over the

next 20 years. This is a small fraction of the total built-out units remaining to be added to sewage collection system.

It is recommended that system expansions, Element 3 projects, be deferred until demands for such infrastructure warrant the improvements. Additionally, with this slow economy, it is recommended that system upgrades, Element 2 projects, be deferred until demands for such infrastructure warrant the improvements.

Element 1 projects, system deficiencies, should be scheduled as soon as possible. The TWSD SSA requires the upgrades to the East Interceptor commence immediately.

8.2.5 Funding Sources

Typical options for funding sources are shown in the following Table 8.5. The table shows the types of funding best suited to the project type.

Table 8.5 Funding Sources Sanitary Sewer Master Plan City of Oroville			
Project Type	Funding Sources		
	City of Oroville		Developer
	Cash	Borrow	
Element 1: System Deficiencies	Y	Y	N
Element 2: System Upgrades	N	Y	Y
Element 3: System Expansion	N	Y*	Y
Y – Funding Source is an option for this project type.			
N – Funding Source is not an option for this project type.			
Note. It is possible for the City to borrow funds for Element 3 projects, but this type of project should be the responsibility of a developer. However, there may be a unique situation where the City may want to be the project lead and then may opt to borrow funds.			

With the low number of projected new connections, it will be extremely difficult for the City to fund with reserves or cash balances, schedule, and construct system upgrades and expansions (Element 2 and 3 projects). It will also be challenging for the Development Impact Fund to participate as expected in the mitigation of system deficiency projects (Element 1) in the near term.

For Element 1 projects, the City could borrow internally from Sewer Service reserve funds. Although the City does have some capital reserves presently, the improvements identified in the CIP are large enough to warrant borrowing funds.

It is recommended that the City pursue a State Revolving Fund Loan for Element 1 projects. Interest rates are typically below 3 percent for these funds, and there are special funding programs available for disadvantaged communities that further reduce the cost of borrowing for eligible communities. It is assumed here that the interest rate will be 2.7% over 20 years. For every \$1,000 borrowed, the net cost of this financing over the loan term is \$307.31.

For any Element 2 project that cannot be deferred, the City is advised to seek developer participation first. If the project is required, and there is inadequate developer participation, then the City could review the possibility of borrowing to advance the project. The Sewer Service reserves funds, bonds, and the State Revolving Fund are all possible sources of funds.

For Element 3 projects, the City is advised to require developers to fund and construct all projects warranted by their development. This means that the developers will need to size and build collection pipes as identified in the CIP from top to bottom that effectively provide capacity in the system not only for the immediate development but also for future build out.

When developers construct projects that are in excess of their development's needs, it is typical for them to enter into a reimbursement agreement with the City. A reimbursement agreement specifies that the City will reimburse the developer for connections outside the developer's project that are made to the sewer system improvements funded by the developer. Often, only a portion of the City's development impact fee is returned to the developer because the connection only relies on a portion of the new improvements as well as existing system components. Further, in addition to the direct capital outlay for improvements, the developer may also be required to buy-in for existing system components. These reimbursement agreements transfer the risk of recovering the cost of the improvements to the developer. Calculating the actual reimbursement amounts is unique to every agreement and must be done after analyzing the capacity provided, the capacity available, and the capacity used from the point of connection through to the end point in the system. Time is an essential component of the agreement; the City should negotiate for a reasonable but not open-ended term.

8.2.6 Recommended Development Impact Fee

The recommended development impact fee per EDU is detailed in Table 8.6. The improvement cost per EDU represents the cost in 2010 dollars attributable to the impact or system demand of a single EDU. It is recommended that the City increase the development impact fee by 60 percent from \$1,123.50 to \$1,794.00. Further, it is recommended that the Connection Fee serve as the single development impact fee for the collection system and that the Sewer Collection Fee be eliminated. It is also recommended that the fees be annually increased by the Construction Cost Index to match inflation of construction costs. For this analysis, the inflation rate is assumed to be 3 percent.

Table 8.6 Recommended Development Impact Fee per EDU Sanitary Sewer Master Plan City of Oroville	
Future Users Allocation ⁽¹⁾	\$35,669,404
Future Service Units	25,072
Connection Type	per EDU
Sewer Improvements	\$1,372
Finance Cost (\$1,372 X .30731)	\$422
Development Impact Fee (per EDU)	\$1,794
<u>Note:</u> 1. See Table 8.3.	

8.3 SEWER SERVICE RATE

8.3.1 Number of Connections

According to the City, the current number of connections relying on the sewage collection system stands at 9,055 EDUs. It is difficult to project growth in this current economic climate. The City projects adding only 545 new EDUs over the next 20 years. The growth is very conservative; if growth comes back strong, adjustments to the analysis can be made.

8.3.2 Existing Rate Structure

The City recently adopted a rate schedule with increases programmed over the next three years in accordance with the requirements of Proposition 218. The adopted rate schedule is summarized in Table 8.7. This rate schedule was developed during the draft phases of this Sanitary Sewer Master Plan. Care was taken by City staff to include the capital components identified in the CIP. Additionally, City staff integrated components of the SSA with TWSD, which was adopted on March 20, 2010.

Table 8.7 Current Adopted Rate Schedule Sanitary Sewer Master Plan City of Oroville			
Fiscal Year	2010/11	2011/12	2012/13
Total Monthly Rate (per EDU)	\$12.24	\$13.82	\$15.73

8.3.3 Current and Future Capital Needs

The CIP identifies the costs for existing users for system deficiencies, system upgrades, and a small system expansion component. The CIP costs allocated to existing users is \$3,508,093 in December 2009 dollars. See Table 8.8 for a summary of the allocation.

Table 8.8 Existing Users CIP Allocation Sanitary Sewer Master Plan City of Oroville	
Element 1: System Deficiencies	\$2,833,629
Element 2: System Upgrades	\$631,920
Element 3: System Expansion	\$42,544
Total	\$3,508,093
Note: Costs expressed in December 2009 dollars.	

Projects identified as system deficiencies that include the TWSD East Interceptor are necessary immediately. The system upgrade and system expansion projects should be deferred until improvements are necessary. CIP costs for projects that need to move forward are \$2,833,629 for existing users and \$5,654,371 for future users.

It is recommended that the City pursue a State Revolving Fund Loan for projects that cannot be deferred. It is recommended that the CIP costs allocated to both existing users and future users be financed simultaneously. This low interest rate loan program is specific to water and wastewater projects. In recent years, with incentive programs pushed down from the federal government, disadvantaged cities have qualified for zero interest loans.

For this analysis, it is assumed that the SRF interest rate is 2.7%. It is assumed that TWSD will finance the TWSD East Interceptor as a separate project. The loan will fund the remaining Element 1 projects. Further, it is assumed that it takes several years to ready the projects for construction and prepare the financing documentation and application. Once in construction, it is assumed that the projects will take two years to complete. Table 10.1 within the pro forma details the loan. The loan payment is estimated to be \$438,500. Existing users' share is \$137,770, and future users' share is \$300,730. Table 10.2 within the pro forma details how the TWSD East Interceptor could be financed with an SRF Loan and how that would impact the sewer system cash flow.

The City needs to include a component of the sewer service rate that will allow the City to replace, or if appropriate rehabilitate, aging system components. The existing sewer system includes nearly 348,500 linear feet of pipe. As this pipe ages, it will need to be replaced or rehabilitated. The expanded operating expenses already include an annual rehabilitation component for about 3,000 linear feet of pipe. This is not sufficient to maintain the system, and additional rehabilitation and replacement measures will be necessary as the system ages. A contribution of \$2.50 monthly per EDU will provide \$245,000 annually for future capital needs. The future capital funds should be set aside and accrue interest.

Table 8.9 summarizes the capital reserve and identified CIP revenue requirements on a monthly basis for the existing users.

Table 8.9 Current and Future Capital Needs Sanitary Sewer Master Plan City of Oroville	
	Monthly per EDU
Capital Reserves	\$2.50
Element 1 Projects ⁽¹⁾	\$1.41
TWSD East Interceptor	\$0.64
Element 2 Projects	\$0.42
Element 3 Projects	\$0.03
Total	\$5.00
<u>Note:</u>	
1 Without TWSD East Interceptor.	

Ultimately, the City should have the discretion to use the current and future capital revenue for projects that are necessary for the collective system. For example, when the Development Impact Funds are at a deficit, as discussed in 8.2.5, it may be beneficial to use capital reserve funds for the portion of Element 1 and Element 2 projects that are allocated to future users so that the portion of the project allocated to existing users can go forward. This use does serve to fulfill the goals of the capital reserve, since the City's existing users benefit from the new infrastructure and "re-set" the clock for future maintenance and rehabilitation needs. This internal borrowing can be formalized to document that the Development Impact Fund needs to replenish, with interest if desired, the capital reserves of the sewer service rate payers. With only limited revenue coming from development impact fees and an immediate need for the improvements, it appears that it will be necessary for the City to capture repayment for funding the system deficiency (Element 1) projects and the TWSD East Interceptor from the Sewer Service revenue.

8.3.4 Operating Expenses

The Sewer Service Rate for the City for FY 2011/2012 is \$13.82 per month per EDU. This rate funds O&M efforts for 66 miles of gravity sewers, 2.2 miles of force mains, 1,350 manholes, 7 lift stations, and rehabilitation. This rate was developed during the draft phases of this Sanitary Sewer Master Plan. The rate includes an average annual rehabilitation component of \$300,000. When this financial review process was initiated, Sewer Service Rates were \$9.79 per EDU per month (2009/10). This discussion originates with the \$9.79 rate and essentially validates the current rate and supports recommendations for additional incremental increases.

As part of the Master Plan preparation, Carollo retained John Larson, P.E. of Larson Consulting, a collection system operations and maintenance planning consultant. Larson Consulting provided a review of the City's current O&M service levels and recommended

adjustments and modifications based upon industry standards. The O&M service level review by Larson Consulting recommended increased inspection of existing pipe and increased rehabilitation as issues such as inflow and infiltration are discovered. Larson Consulting recommended increasing staffing levels by four additional positions to provide for this additional inspection. Two additional positions have been included in the analysis. The City will assess the full benefit of the new staffing levels after several years of operation with the two additional positions. If it is determined that further staff increases are necessary, additional increases to the staffing levels will be recommended at that time.

Starting with the O&M level of effort provided in 2009/10, Larson Consulting recommended that O&M efforts be expanded by an annual average amount of \$507,000 or \$5.02 monthly per EDU.

The TWSD SSA specifies minimum annual corrections to reduce inflow and infiltration in the City's collection system linked directly to the East Interceptor. The City can reduce overall system maintenance costs by directing annual maintenance to parts of the collection system that feed the East Interceptor to meet the obligations of the SSA, although both the levels recommended by John Larsen and the TWSD expectations are included at this time.

The TWSD SSA requires direct pass thru O&M cost \$1.18 per City EDU. Although the number of units subjected to the unit fee for O&M by TWSD is only a portion of the City system's users, the City aggregates the East Interceptor O&M expenses with the entire system's O&M. All system users contribute to the O&M equally, regardless of wastewater point of origin or route through the collection system.

Table 8.10 summarizes the revenue needs for the 2009/10 level of O&M, the O&M service level recommendations provided by Larson Consulting, the capital needs identified in the CIP including the TWSD East Interceptor, future replacement reserves, and O&M expectations of TWSD. This effectively is a 2009 snapshot view of the revenue needs per EDU prior to the increases recommended adopted in August 2010.

Table 8.10 Revenue Needs Summary Sanitary Sewer Master Plan City of Oroville	
	Revenue Needs per EDU
Existing Level of O&M ⁽¹⁾	\$9.79
O&M Service Level Recommended Increases ⁽²⁾	\$5.02
Current and Future Capital Needs ⁽³⁾	\$5.00
TWSD SSA O&M Pass Thru	\$1.18
Per EDU Revenue Needs	\$20.99
Notes:	
1. Baseline for analysis – Sewer Service Rate 2009/10.	
2. Per Larson Consulting, which includes some rehabilitation.	
3. See Table 8.11.	

8.3.5 Analysis of Existing and Future Service Fees

Table 8.11 identifies the proposed rate structure, through 2014/15. In Table 8.10, the revenue needs are shown as \$20.99, and here the resultant fee is phased in over time.

Table 8.11 Proposed Sewer Service Rate Structure, Years 2010/11 through 2014/15 Sanitary Sewer Master Plan City of Oroville					
Fiscal Year	2010/11⁽¹⁾	2011/12⁽¹⁾	2012/13⁽¹⁾	2013/14	2014/15
Total Monthly Rate (per EDU)	\$12.24	\$13.82	\$15.73	\$18.07	\$20.99
% Rate Increase	25%	13%	14%	15%	16%
<u>Note:</u> 1. These rates have been approved by the Council in compliance with Proposition 218 requirements.					

The analysis verifies that the rates developed in 2010 meet the annual revenue needs for the levels of service discussed herein. Additionally, the revenue is adequate to satisfy the immediate CIP demands. However, rates do need to be increased annually for two additional years to reach funding levels that provide revenue for ongoing O&M efforts and accrue reserves for infrastructure replacement. Additionally, beyond the five-year period shown in Table 8.11, it is recommended that rates be increased annually by the Consumer Price Index to match inflation of O&M expenses. For this analysis, the inflation rate is assumed to be 3 percent.

8.4 PRO FORMA SUMMARY

A pro forma relying on all the data available has been developed as the final step in the revenue analysis. The pro forma serves to validate the fee recommendations. The pro forma has been prepared for a 15-year period through FY 2024/25. The pro forma is built within a Microsoft Excel workbook, which the City may utilize to update for future financial planning. Table 8.12 details the pro forma layout.

Even with the recommended fee increase, the Development Impact Fund will still not be able to meet the short-term revenue needs necessary to address development's share of the system deficiencies and the TWSD agreement. This situation is largely the result of a substantial reduction in the proposed rate of development, due to recent economic concerns, compared to that considered when the 2030 General Plan was adopted. The fund will dip into a negative balance within five fiscal years.

Table 11 of the Pro Forma aggregates the data and illustrates that, when combined, the Development Impact Fee and the Sewer Service Fee effectively meet the level of service specified, and together the two funds can meet the obligations of capital projects needed immediately. It will be necessary for the Development Impact Fund to borrow from the Sewer Service fund reserves to meet the obligations of future users, which will be repaid as

new development connects to the system. The City can formally document such borrowing to ensure that future users of the system repay existing users. Even if repayment takes many years the funds should, as development does occur, ultimately be available to replace aging infrastructure.

Table 8.12 Pro Forma Layout Sanitary Sewer Master Plan City of Oroville		
Table Name	Table Inputs	Table Outputs
Table 1 Number of EDU's	Projected new connections	Total annual connections
Table 2 Sewer Service Revenue	New Connections –Table 1 Sewer Service Fee	Annual Revenue from Sewer Service Rates
Table 3 Sewer Service Operating Expense	Staff Salaries and Benefits – Table 4 Services and Supplies Cost Allocation to General Fund	Annual Operating Expense
Table 4 Salaries and Benefits	Salary and benefit	Annual Salaries and Benefit expenses
Table 5 Other Agency Obligations	SCOR Charge TWSD SSA and fees	Pass thru to other agencies
Table 6 Capital Expenditures - Allocated to New Users and to Existing Users	Recommendations for equipment and annual rehabilitation Capital Projects	Annual Capital Expenditures
Table 7 Sewer Service Summary	Initial Fund Balance Outputs from Tables 2 ,3 ,5, 6 and 10.1	Annual Deficit/Reserve Sewer Service Fund Balance
Table 8 Development Impact Revenue	New connections – Table 1 Development Impact Fee	Annual Revenue from Development Impact Fees
Table 9 Development Impact Summary	Initial Fund Balance Outputs from Tables 6, 8, and 10.1	Annual Deficit/Reserve Development Impact Fund Balance
Table 10.1 Element 1 – SRF Schedule	Capital Costs SRF assumed interest rate Assumed initial project outlays	Loan Draw and Payment Schedule
Table 10.2 TSWD East Interceptor – Obligation Schedule	TWSD Capital Costs and Schedule TWSD Reserve Fund Inputs Development Impact Fund Obligations	Project Draw and Obligation Schedule
Table 11 Cumulative Sewer Fund	Sewer Service Fund Balance Development Impact Fund Balance	Net balance of two sewer system funds

City of Oroville Sewer Fund

Table 1: Number of Equivalent Dwelling Units

	Projected 2010/11	Projected 2011/12	Projected 2012/13	Projected 2013/14	Projected 2014/15	Projected 2015/16	Projected 2016/17	Projected 2017/18	Projected 2018/19	Projected 2019/20
Current # of Connections	8,182 ⁽¹⁾	8,206	8,231	8,256	8,281	8,322	8,364	8,406	8,448	8,490
Projected Growth ⁽¹⁾	0.20% ⁽²⁾	0.29%	0.30%	0.30%	0.30%	0.50%	0.50%	0.50%	0.50%	0.50%
New Connections	24	24	25	25	25	41	42	42	42	42

(1) From 2009/10 7869 EDUs, 16 EDUs added for new connections, 122 EDUs were added for existing connections, non growth induced, and 179 EDUs were added for the Jail also are existing connections, non growth induced.

(2) Actual growth rate based on 16 new connections, corrections for existing connections are not included.

City of Oroville Sewer Fund**Table 1: Number of Equivalent Dwelling Units**

	Projected 2020/21	Projected 2021/22	Projected 2022/23	Projected 2023/24	Projected 2024/25
Current # of Connections	8,532	8,575	8,618	8,661	8,704
Projected Growth ⁽¹⁾	0.50%	0.50%	0.50%	0.50%	0.50%
New Connections	42	43	43	43	43

(1) From 2009/10 7869 EDUs, 16 EDUs added for new connections, 122 EDUs were added for existing connections, non growth induced, and 179 EDUs were added for the Jail also are existing connections, non growth induced.

(2) Actual growth rate based on 16 new connections, corrections for existing connections are not included.

City of Oroville Sewer Fund
Table 2: Sewer Service Revenue

	Projected 2010/11	Projected 2011/12	Projected 2012/13	Projected 2013/14	Projected 2014/15	Projected 2015/16	Projected 2016/17	Projected 2017/18	Projected 2018/19	Projected 2019/20
Number of Connections (EDU)	8,182	8,206	8,231	8,256	8,281	8,322	8,364	8,406	8,448	8,490
Number of SCOR EDUs	8,996	9,023	9,055	9,086	9,118	9,164	9,209	9,256	9,302	9,348
Fixed rate monthly payments										
City Sewer Service Rate per EDU per month	\$ 11.06	\$ 12.61	\$ 14.50	\$ 16.82	\$ 19.68	\$ 20.27	\$ 20.88	\$ 21.51	\$ 22.16	\$ 22.82
Sewer Service Charge for TWSD Obligation per EDU per month	\$ 1.18	\$ 1.21	\$ 1.22	\$ 1.24	\$ 1.31	\$ 1.37	\$ 1.44	\$ 1.51	\$ 1.59	\$ 1.67
Total Monthly Rate per EDU	\$ 12.24	\$ 13.82	\$ 15.72	\$ 18.06	\$ 20.99	\$ 21.64	\$ 22.32	\$ 23.02	\$ 23.75	\$ 24.49
Percentage increase in Sewer Service Rates	25.0%	12.9%	13.7%	14.9%	16.2%	3.0%	3.0%	3.0%	3.0%	3.0%
SCOR Sewer Service Rate per EDU per month	\$ 8.60	\$ 8.60	\$ 8.86	\$ 9.12	\$ 9.40	\$ 9.68	\$ 9.97	\$ 10.27	\$ 10.58	\$ 10.89
Annual City Sewer Service Revenue	\$ 1,201,599	\$ 1,360,883	\$ 1,552,696	\$ 1,789,240	\$ 2,086,045	\$ 2,161,387	\$ 2,240,339	\$ 2,322,328	\$ 2,407,406	\$ 2,494,605
Annual SCOR Sewer Service Revenue	\$ 928,387	\$ 931,172	\$ 962,464	\$ 994,808	\$ 1,028,239	\$ 1,064,381	\$ 1,101,794	\$ 1,140,522	\$ 1,180,612	\$ 1,222,110
New Connection Revenue for O&M Functions (Table 8)	\$ 8,184	\$ 8,424	\$ 9,050	\$ 9,325	\$ 9,600	\$ 16,236	\$ 17,136	\$ 17,640	\$ 18,186	\$ 18,732
Adjustments In/Out and Interest	\$ 20,578	\$ 15,910	\$ 14,298	\$ 13,985	\$ 15,823	\$ 19,043	\$ 22,673	\$ 24,182	\$ 28,564	\$ 33,375
Total Estimated Service Fee Revenues	\$2,158,748	\$2,316,389	\$2,538,508	\$2,807,359	\$3,139,707	\$3,261,047	\$3,381,942	\$3,504,673	\$3,634,767	\$3,768,822

City of Oroville Sewer Fund
Table 2: Sewer Service Revenue

	Projected 2020/21	Projected 2021/22	Projected 2022/23	Projected 2023/24	Projected 2024/25
Number of Connections (EDU)	8,532	8,575	8,618	8,661	8,704
Number of SCOR EDUs	9,395	9,442	9,489	9,537	9,585
Fixed rate monthly payments					
City Sewer Service Rate per EDU per month	\$ 23.50	\$ 24.21	\$ 24.94	\$ 25.69	\$ 26.46
Sewer Service Charge for TWSD Obligation per EDU per month	\$ 1.75	\$ 1.83	\$ 1.92	\$ 2.02	\$ 2.12
Total Monthly Rate per EDU	\$ 25.25	\$ 26.04	\$ 26.86	\$ 27.71	\$ 28.58
Percentage increase in Sewer Service Rates	3.0%	3.0%	3.0%	3.0%	3.0%
SCOR Sewer Service Rate per EDU per month	\$ 11.22	\$ 11.56	\$ 11.90	\$ 12.26	\$ 12.63
Annual City Sewer Service Revenue	\$ 2,584,991	\$ 2,679,958	\$ 2,778,252	\$ 2,879,932	\$ 2,985,124
Annual SCOR Sewer Service Revenue	\$ 1,265,067	\$ 1,309,534	\$ 1,355,564	\$ 1,403,213	\$ 1,452,703
New Connection Revenue for O&M Functions (Table 8)	\$ 19,278	\$ 20,339	\$ 20,941	\$ 21,586	\$ 22,231
Adjustments In/Out and Interest	\$ 38,615	\$ 40,305	\$ 46,445	\$ 53,101	\$ 60,288
Total Estimated Service Fee Revenues	\$3,907,951	\$4,050,136	\$4,201,202	\$4,357,832	\$4,520,346

City of Oroville Sewer Fund
Table 3: Sewer Service Operating Expenses

	Projected 2010/11	Projected 2011/12	Projected 2012/13	Projected 2013/14	Projected 2014/15	Projected 2015/16	Projected 2016/17	Projected 2017/18	Projected 2018/19	Projected 2019/20
Sewer Operations-Staffing Salaries & Benefits ⁽¹⁾	\$380,333	\$393,644	\$407,422	\$421,682	\$436,441	\$451,716	\$467,526	\$483,889	\$500,826	\$518,354
Services and Supplies	\$200,024	\$216,325	\$222,815	\$229,499	\$234,089	\$238,771	\$243,546	\$248,417	\$253,386	\$258,453
Services - Root Control	\$110,000	\$113,300	\$116,699	\$120,200	\$123,806	\$127,520	\$131,346	\$135,286	\$139,345	\$143,525
Cost Allocation to General Fund	\$297,133	\$307,533	\$318,296	\$329,437	\$340,967	\$352,901	\$365,252	\$378,036	\$391,268	\$404,962
Total Estimated Operating Expenses	\$987,490	\$1,030,802	\$1,065,232	\$1,100,818	\$1,135,303	\$1,170,908	\$1,207,671	\$1,245,629	\$1,284,824	\$1,325,295

(1) Table 4 provides detail

City of Oroville Sewer Fund
Table 3: Sewer Service Operating Expenses

	Projected 2020/21	Projected 2021/22	Projected 2022/23	Projected 2023/24	Projected 2024/25
Sewer Operations-Staffing Salaries & Benefits ⁽¹⁾	\$536,497	\$555,274	\$574,709	\$594,824	\$615,643
Services and Supplies	\$263,622	\$268,895	\$274,273	\$279,758	\$285,353
Services - Root Control	\$147,831	\$152,266	\$156,834	\$161,539	\$166,385
Cost Allocation to General Fund	\$419,136	\$433,805	\$448,989	\$464,703	\$480,968
Total Estimated Operating Expenses	\$1,367,086	\$1,410,240	\$1,454,804	\$1,500,824	\$1,548,349

(1) Table 4 provides detail

City of Oroville Sewer Fund
Table 4 : Salaries and Benefits

		Projected 2010/11	Projected 2011/12	Projected 2012/13	Projected 2013/14	Projected 2014/15	Projected 2015/16	Projected 2016/17	Projected 2017/18	Projected 2018/19
Sewer Operations-Staffing Salaries & Benefits ⁽¹⁾										
	# PY									
GIS Engr Asst (35%)	0.35	\$ 31,511	\$ 32,613	\$ 33,755	\$ 34,936	\$ 36,159	\$ 37,425	\$ 38,734	\$ 40,090	\$ 41,493
Sr. Civil Engineer (50%)	0.50	\$ 40,992	\$ 42,427	\$ 43,912	\$ 45,449	\$ 47,039	\$ 48,686	\$ 50,390	\$ 52,153	\$ 53,979
Pub Works Op I (100%) ⁽²⁾	1.00	\$ 59,560	\$ 61,645	\$ 63,802	\$ 66,035	\$ 68,346	\$ 70,739	\$ 73,214	\$ 75,777	\$ 78,429
Pub Works Op II (100%)	1.00	\$ 68,463	\$ 70,859	\$ 73,339	\$ 75,906	\$ 78,563	\$ 81,313	\$ 84,159	\$ 87,104	\$ 90,153
Pub Works Op II (100%) ⁽²⁾	1.00	\$ 59,364	\$ 61,442	\$ 63,592	\$ 65,818	\$ 68,122	\$ 70,506	\$ 72,974	\$ 75,528	\$ 78,171
Pub Works Op III (100%)	1.00	\$ 71,483	\$ 73,985	\$ 76,574	\$ 79,254	\$ 82,028	\$ 84,899	\$ 87,871	\$ 90,946	\$ 94,129
Pub Works Op III (10%)	0.10	\$ 7,114	\$ 7,363	\$ 7,621	\$ 7,887	\$ 8,163	\$ 8,449	\$ 8,745	\$ 9,051	\$ 9,368
Signal Tech/Electrician (33.3%)	0.33	\$ 28,501	\$ 29,499	\$ 30,531	\$ 31,600	\$ 32,706	\$ 33,850	\$ 35,035	\$ 36,261	\$ 37,530
Temp Op 1 (PIC)		\$ 13,345	\$ 13,812	\$ 14,296	\$ 14,796	\$ 15,314	\$ 15,850	\$ 16,405	\$ 16,979	\$ 17,573
Total Staff Salaries and Benefits	5.28	\$ 380,333	\$ 393,644	\$ 407,422	\$ 421,682	\$ 436,441	\$ 451,716	\$ 467,526	\$ 483,889	\$ 500,826

(1) Salaries escalated annually by 3.5%

(2) New Hires 2010/11 recommended by SSMP

City of Oroville Sewer Fund
Table 4 : Salaries and Benefits

	Projected 2019/20	Projected 2020/21	Projected 2021/22	Projected 2022/23	Projected 2023/24	Projected 2024/25
Sewer Operations-Staffing Salaries & Benefits ⁽¹⁾						
GIS Engr Asst (35%)	\$ 42,946	\$ 44,449	\$ 46,004	\$ 47,615	\$ 49,281	\$ 51,006
Sr. Civil Engineer (50%)	\$ 55,868	\$ 57,823	\$ 59,847	\$ 61,942	\$ 64,110	\$ 66,354
Pub Works Op I (100%) ⁽²⁾	\$ 81,174	\$ 84,015	\$ 86,956	\$ 89,999	\$ 93,149	\$ 96,409
Pub Works Op II (100%)	\$ 93,308	\$ 96,574	\$ 99,954	\$ 103,452	\$ 107,073	\$ 110,821
Pub Works Op II (100%) ⁽²⁾	\$ 80,907	\$ 83,739	\$ 86,670	\$ 89,703	\$ 92,843	\$ 96,092
Pub Works Op III (100%)	\$ 97,424	\$ 100,834	\$ 104,363	\$ 108,016	\$ 111,796	\$ 115,709
Pub Works Op III (10%)	\$ 9,696	\$ 10,035	\$ 10,386	\$ 10,750	\$ 11,126	\$ 11,515
Signal Tech/Electrician (33.3%)	\$ 38,844	\$ 40,203	\$ 41,611	\$ 43,067	\$ 44,574	\$ 46,134
Temp Op 1 (PIC)	\$ 18,188	\$ 18,825	\$ 19,484	\$ 20,166	\$ 20,871	\$ 21,602
Total Staff Salaries and Benefits	\$ 518,354	\$ 536,497	\$ 555,274	\$ 574,709	\$ 594,824	\$ 615,643

(1) Salaries escalated annually by 3.5%

(2) New Hires 2010/11 recommended by SSMP

City of Oroville Sewer Fund
Table 5: Other Agency Obligations

	Projected 2010/11	Projected 2011/12	Projected 2012/13	Projected 2013/14	Projected 2014/15	Projected 2015/16	Projected 2016/17	Projected 2017/18	Projected 2018/19
SCOR Sewer Service Charge	\$928,387	\$931,172	\$962,464	\$994,808	\$1,028,239	\$1,064,381	\$1,101,794	\$1,140,522	\$1,180,612
TWSD EDU	1,117	1,122	1,127	1,132	1,137	1,142	1,147	1,152	1,157
per EDU monthly fee O&M	\$3.11	\$3.11	\$3.11	\$3.11	\$3.27	\$3.27	\$3.27	\$3.27	\$3.43
per EDU monthly fee reserve fund for project costs	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$4.75
TWSD O&M Obligation	\$41,686	\$41,873	\$42,060	\$42,246	\$44,616	\$44,812	\$45,008	\$45,204	\$47,622
TWSD Reserve Fund Obligation ⁽¹⁾	\$67,020	\$67,320	\$67,620	\$67,920	\$68,220	\$68,520	\$68,820	\$69,120	\$65,949
Total Estimated Obligations to Other Agencies	\$1,037,093	\$1,040,365	\$1,072,144	\$1,104,974	\$1,141,075	\$1,177,713	\$1,215,622	\$1,254,846	\$1,294,183

(1) TWSD will use reserve funds toward City's obligations for the East Interceptor Project.

City of Oroville Sewer Fund
Table 5: Other Agency Obligations

	Projected 2019/20	Projected 2020/21	Projected 2021/22	Projected 2022/23	Projected 2023/24	Projected 2024/25
SCOR Sewer Service Charge	\$1,222,110	\$1,265,067	\$1,309,534	\$1,355,564	\$1,403,213	\$1,452,726
TWSD EDU	1,162	1,167	1,172	1,177	1,182	1,187
per EDU monthly fee O&M	\$3.43	\$3.43	\$3.43	\$3.60	\$3.60	\$3.60
per EDU monthly fee reserve fund for project costs	\$4.75	\$4.75	\$4.75	\$4.51	\$4.51	\$4.51
TWSD O&M Obligation	\$47,828	\$48,034	\$48,240	\$50,846	\$51,062	\$51,278
TWSD Reserve Fund Obligation ⁽¹⁾	\$66,234	\$66,519	\$66,804	\$63,699	\$63,970	\$64,240
Total Estimated Obligations to Other Agencies	\$1,336,172	\$1,379,620	\$1,424,578	\$1,470,110	\$1,518,244	\$1,568,244

(1) TWSD will use reserve funds toward City's obligations for the East Interceptor Project.

City of Oroville Sewer Fund
Table 6 : Capital Expenditures

	Estimated 2009/10	Projected 2010/11	Projected 2011/12	Projected 2012/13	Projected 2013/14	Projected 2014/15	Projected 2015/16	Projected 2016/17	Projected 2017/18	Projected 2018/19
Capital Expenditures Allocated to Sewer Service (Existing Users)										
Equipment Purchases	\$185,747	\$220,000	\$0	\$0	\$0	\$0	\$0	\$250,000	\$0	\$0
Rehabilitation/Replacement - Mains ⁽¹⁾	\$104,000	\$375,000	\$380,000	\$387,600	\$395,352	\$403,259	\$411,324	\$419,551	\$427,942	\$436,501
Element 1 Projects System Deficiencies ⁽²⁾	\$0	\$125,655	\$554,976	\$942,413	\$471,206	\$0	\$0	\$0	\$0	\$0
Element 1 Project TWSD East Interceptor Only ⁽³⁾	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Element 2 Projects System Upgrades (deferred)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Element 3 Projects System Expansion (deferred)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Capital Expenditures - Existing (to Table 7)	\$289,747	\$720,655	\$934,976	\$1,330,013	\$866,558	\$403,259	\$411,324	\$669,551	\$427,942	\$436,501
Capital Expenditures Allocated to Impact Fees (New Users)										
Element 1 Projects System Deficiencies ⁽²⁾	\$0	\$274,283	\$1,211,418	\$2,057,126	\$1,028,563	0	\$0	\$0	\$0	\$0
Element 1 Project TWSD East Interceptor Only ⁽³⁾	\$0	\$45,480	\$198,555	\$23,711	\$42,500	\$42,500	\$42,500	\$42,500	\$42,500	\$42,500
Element 2 Projects System Upgrades (deferred)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Element 3 Projects System Expansion (deferred)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Capital Expenditures - New (to Table 9)	\$0	\$319,763	\$1,409,973	\$2,080,837	\$1,071,063	\$42,500	\$42,500	\$42,500	\$42,500	\$42,500

(1) Portions of Rehabilitation/Replacement - Mains shall be scheduled in areas that enable the City to address the TWSD Service Agreement

(2) Assumes Design in 2011, 50% of Construction in summer of 2012 and 50% of Construction in 2013 which results in Project Costs spread: 6%-2010/11, 26.5% 2011/12, 45%-2012/13, 22.5% 2013/14. Project costs escalated 3% annually to project mid point.

(3) TWSD will use the reserve funds to pay down the City's obligation for the East Interceptor Project. Remaining Obligation to be met with Development Impact Fees.

City of Oroville Sewer Fund
Table 6 : Capital Expenditures

	Projected 2019/20	Projected 2020/21	Projected 2021/22	Projected 2022/23	Projected 2023/24	Projected 2024/25
Capital Expenditures Allocated to Sewer Service (Existing Users)						
Equipment Purchases	\$0	\$400,000	\$0	\$0	\$0	\$0
Rehabilitation/Replacement - Mains ⁽¹⁾	\$445,231	\$454,135	\$463,218	\$472,482	\$481,932	\$491,571
Element 1 Projects System Deficiencies ⁽²⁾	\$0	\$0	\$0	\$0	\$0	\$0
Element 1 Project TWSD East Interceptor Only ⁽³⁾	\$0	\$0	\$0	\$0	\$0	\$0
Element 2 Projects System Upgrades (deferred)	\$0	\$0	\$0	\$0	\$0	\$0
Element 3 Projects System Expansion (deferred)	\$0	\$0	\$0	\$0	\$0	\$0
Total Capital Expenditures - Existing (to Table 7)	\$445,231	\$854,135	\$463,218	\$472,482	\$481,932	\$491,571
Capital Expenditures Allocated to Impact Fees (New Users)						
Element 1 Projects System Deficiencies ⁽²⁾	\$0	\$0	\$0	\$0	\$0	\$0
Element 1 Project TWSD East Interceptor Only ⁽³⁾	\$42,500	\$42,500	\$42,500	\$42,500	\$42,500	\$42,500
Element 2 Projects System Upgrades (deferred)	\$0	\$0	\$0	\$0	\$0	\$0
Element 3 Projects System Expansion (deferred)	\$0	\$0	\$0	\$0	\$0	\$0
Total Capital Expenditures - New (to Table 9)	\$42,500	\$42,500	\$42,500	\$42,500	\$42,500	\$42,500

(1) Portions of Rehabilitation/Replacement - Mains shall be scheduled in areas that enable the City to address the TWSD Service Agreement

(2) Assumes Design in 2011, 50% of Construction in summer of 2012 and Construction in 2013 which results in Project Costs spread: 6%-2010/11, 45%-2012/13, 22.5% 2013/14. Project costs escalated 3% annually to pr

(3) TWSD will use the reserve funds to pay down the City's obligation for the East Interceptor Project. Remaining Obligation to be met with Development Impact Fees.

City of Oroville Sewer Fund
Table 7: Sewer Service Summary

	Estimated 2009/10	Projected 2010/11	Projected 2011/12	Projected 2012/13	Projected 2013/14	Projected 2014/15	Projected 2015/16	Projected 2016/17	Projected 2017/18	Projected 2018/19
Beginning Reserves (Fund Balance)	\$2,768,496	\$2,057,774	\$1,590,966	\$1,429,804	\$1,398,535	\$1,582,350	\$1,904,293	\$2,267,268	\$2,418,239	\$2,856,367
Revenue										
Monthly Service Rate Revenue (Table 2)	\$1,797,892	\$2,158,748	\$2,316,389	\$2,538,508	\$2,807,359	\$3,139,707	\$3,261,047	\$3,381,942	\$3,504,673	\$3,634,767
SRF Loan Funds (Table 10.1) ⁽¹⁾	\$0	\$119,682	\$528,594	\$897,612	\$448,806	\$0	\$0	\$0	\$0	\$0
Total Sewer Service Revenue	\$1,797,892	\$2,278,430	\$2,844,983	\$3,436,120	\$3,256,165	\$3,139,707	\$3,261,047	\$3,381,942	\$3,504,673	\$3,634,767
Expenses										
Operating Expenses (Table 3)	\$1,400,709	\$987,490	\$1,030,802	\$1,065,232	\$1,100,818	\$1,135,303	\$1,170,908	\$1,207,671	\$1,245,629	\$1,284,824
Other Agency Obligations (Table 5)	\$818,158	\$1,037,093	\$1,040,365	\$1,072,144	\$1,104,974	\$1,141,075	\$1,177,713	\$1,215,622	\$1,254,846	\$1,294,183
Capital Expenditures (Table 6)	\$289,747	\$720,655	\$934,976	\$1,330,013	\$866,558	\$403,259	\$411,324	\$669,551	\$427,942	\$436,501
SRF Loan Payments (Table 10.1) ⁽¹⁾	\$0	\$0	\$0	\$0	\$0	\$138,128	\$138,128	\$138,128	\$138,128	\$138,128
Total Sewer Service Expenses	\$2,508,614	\$2,745,238	\$3,006,144	\$3,467,389	\$3,072,350	\$2,817,764	\$2,898,073	\$3,230,971	\$3,066,545	\$3,153,634
Annual Revenue Deficit/Surplus (-/+)	(\$710,722)	(\$466,809)	(\$161,161)	(\$31,269)	\$183,815	\$321,943	\$362,975	\$150,971	\$438,128	\$481,133
Ending Reserves (Fund Balance) ⁽²⁾	\$2,057,774	\$1,590,966	\$1,429,804	\$1,398,535	\$1,582,350	\$1,904,293	\$2,267,268	\$2,418,239	\$2,856,367	\$3,337,500

(1) Loan funded project is split 31.5% for existing users and 68.5% for future users.

(2) Fund Balance must maintain a restricted reserve equal to one annual SRF loan payment.

City of Oroville Sewer Fund
Table 7: Sewer Service Summary

	Projected 2019/20	Projected 2020/21	Projected 2021/22	Projected 2022/23	Projected 2023/24	Projected 2024/25
Beginning Reserves (Fund Balance)	\$3,337,500	\$3,861,497	\$4,030,480	\$4,644,451	\$5,310,130	\$6,028,834
Revenue						
Monthly Service Rate Revenue (Table 2)	\$3,768,822	\$3,907,951	\$4,050,136	\$4,201,202	\$4,357,832	\$4,520,346
SRF Loan Funds (Table 10.1) ⁽¹⁾	\$0	\$0	\$0	\$0	\$0	\$0
Total Sewer Service Revenue	\$3,768,822	\$3,907,951	\$4,050,136	\$4,201,202	\$4,357,832	\$4,520,346
Expenses						
Operating Expenses (Table 3)	\$1,325,295	\$1,367,086	\$1,410,240	\$1,454,804	\$1,500,824	\$1,548,349
Other Agency Obligations (Table 5)	\$1,336,172	\$1,379,620	\$1,424,578	\$1,470,110	\$1,518,244	\$1,568,244
Capital Expenditures (Table 6)	\$445,231	\$854,135	\$463,218	\$472,482	\$481,932	\$491,571
SRF Loan Payments (Table 10.1) ⁽¹⁾	\$138,128	\$138,128	\$138,128	\$138,128	\$138,128	\$138,128
Total Sewer Service Expenses	\$3,244,825	\$3,738,969	\$3,436,164	\$3,535,523	\$3,639,128	\$3,746,291
Annual Revenue Deficit/Surplus (-/+)	\$523,997	\$168,982	\$613,972	\$665,679	\$718,704	\$774,055
Ending Reserves (Fund Balance) ⁽²⁾	\$3,861,497	\$4,030,480	\$4,644,451	\$5,310,130	\$6,028,834	\$6,802,889

(1) Loan funded project is split 31.5% for existing users and 68.5% for future users.

(2) Fund Balance must maintain a restricted reserve equal to one annual SRF loan payment.

City of Oroville Sewer Fund
Table 8: Development Impact Revenue

	Projected 2010/11	Projected 2011/12	Projected 2012/13	Projected 2013/14	Projected 2014/15	Projected 2015/16	Projected 2016/17	Projected 2017/18	Projected 2018/19	Projected 2019/20
New connections / year	24	24	25	25	25	41	42	42	42	42
Percentage increase in Connection Charge										
(1) for inflation	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
(2) to fund improvements			23%							
City of Oroville Connection Fees										
Connection Fee	\$717	\$1,157	\$1,794	\$1,848	\$1,903	\$1,960	\$2,019	\$2,080	\$2,142	\$2,206
Tapping Fee	\$341	\$351	\$362	\$373	\$384	\$396	\$408	\$420	\$433	\$446
Sewer Collection Fee	\$440	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total City Connection Fees (SFR or EDU)	\$1,498	\$1,508	\$2,156	\$2,221	\$2,287	\$2,356	\$2,427	\$2,500	\$2,575	\$2,652
Revenue for Capital Improvement Program	\$27,768	\$27,768	\$44,850	\$46,200	\$47,575	\$80,360	\$84,798	\$87,360	\$89,964	\$92,652
Revenue for Operations and Maintenance ⁽¹⁾	\$8,184	\$8,424	\$9,050	\$9,325	\$9,600	\$16,236	\$17,136	\$17,640	\$18,186	\$18,732
Cash inflows	\$35,952	\$36,192	\$53,900	\$55,525	\$57,175	\$96,596	\$101,934	\$105,000	\$108,150	\$111,384

Footnotes

(1) Tapping Fee (new connection related service)

**City of Oroville Sewer Fund
Table 8: Development Impact Revenue**

	Projected 2020/21	Projected 2021/22	Projected 2022/23	Projected 2023/24	Projected 2024/25
New connections / year	42	43	43	43	43
Percentage increase in Connection Charge					
(1) for inflation	3%	3%	3%	3%	3%
(2) to fund improvements					
City of Oroville Connection Fees					
Connection Fee	\$2,272	\$2,340	\$2,410	\$2,482	\$2,556
Tapping Fee	\$459	\$473	\$487	\$502	\$517
Sewer Collection Fee	\$0	\$0	\$0	\$0	\$0
Total City Connection Fees (SFR or EDU)	\$2,731	\$2,813	\$2,897	\$2,984	\$3,073
Revenue for Capital Improvement Program	\$95,424	\$100,620	\$103,630	\$106,726	\$109,908
Revenue for Operations and Maintenance ⁽¹⁾	\$19,278	\$20,339	\$20,941	\$21,586	\$22,231
Cash inflows	\$114,702	\$120,959	\$124,571	\$128,312	\$132,139

Footnotes

(1) Tapping Fee (new connection related service)

City of Oroville Sewer Fund
Table 9: Development Impact Summary

	Estimated 2009/10	Projected 2010/11	Projected 2011/12	Projected 2012/13	Projected 2013/14	Projected 2014/15	Projected 2015/16	Projected 2016/17	Projected 2017/18	Projected 2018/19
Beginning Reserves (Fund Balance)	\$684,657	\$702,633	\$670,898	\$438,173	\$354,136	\$305,248	\$94,951	(\$167,562)	(\$425,636)	(\$681,149)
Connection Fee Revenue (Table 8)	\$17,976	\$27,768	\$27,768	\$44,850	\$46,200	\$47,575	\$80,360	\$84,798	\$87,360	\$89,964
SRF Loan Funds (Table 10.1) ⁽¹⁾	0.685	\$0	\$260,260	\$1,149,481	\$1,951,949	\$975,975	\$0	\$0	\$0	\$0
Sum of Revenue	\$17,976	\$288,028	\$1,177,249	\$1,996,799	\$1,022,175	\$47,575	\$80,360	\$84,798	\$87,360	\$89,964
Capital Expenditures (Table 6)	\$0	\$319,763	\$1,409,973	\$2,080,837	\$1,071,063	(\$42,500)	\$42,500	\$42,500	\$42,500	\$42,500
SRF Loan Payments (Table 10.1) ⁽¹⁾	0.685	\$0	\$0	\$0	\$0	\$300,373	\$300,373	\$300,373	\$300,373	\$300,373
Sum of Expenses	\$0	\$319,763	\$1,409,973	\$2,080,837	\$1,071,063	\$257,873	\$342,873	\$342,873	\$342,873	\$342,873
Annual Revenue Deficit/Surplus (-/+)	\$17,976	(\$31,735)	(\$232,724)	(\$84,037)	(\$48,888)	(\$210,298)	(\$262,513)	(\$258,075)	(\$255,513)	(\$252,909)
Ending Reserves (Fund Balance)	\$702,633	\$670,898	\$438,173	\$354,136	\$305,248	\$94,951	(\$167,562)	(\$425,636)	(\$681,149)	(\$934,057)

(1) Loan funded project is split 31.5% for existing users and 68.5% for future users.

City of Oroville Sewer Fund
Table 9: Development Impact Summary

	Projected 2019/20	Projected 2020/21	Projected 2021/22	Projected 2022/23	Projected 2023/24	Projected 2024/25
Beginning Reserves (Fund Balance)	(\$934,057)	(\$1,184,278)	(\$1,431,726)	(\$1,673,979)	(\$1,913,221)	(\$2,149,368)
Connection Fee Revenue (Table 8)	\$92,652	\$95,424	\$100,620	\$103,630	\$106,726	\$109,908
SRF Loan Funds (Table 10.1) ⁽¹⁾	\$0	\$0	\$0	\$0	\$0	\$0
Sum of Revenue	\$92,652	\$95,424	\$100,620	\$103,630	\$106,726	\$109,908
Capital Expenditures (Table 6)	\$42,500	\$42,500	\$42,500	\$42,500	\$42,500	\$42,500
SRF Loan Payments (Table 10.1) ⁽¹⁾	\$300,373	\$300,373	\$300,373	\$300,373	\$300,373	\$300,373
Sum of Expenses	\$342,873	\$342,873	\$342,873	\$342,873	\$342,873	\$342,873
Annual Revenue Deficit/Surplus (-/+)	(\$250,221)	(\$247,449)	(\$242,253)	(\$239,243)	(\$236,147)	(\$232,965)
Ending Reserves (Fund Balance)	(\$1,184,278)	(\$1,431,726)	(\$1,673,979)	(\$1,913,221)	(\$2,149,368)	(\$2,382,332)

(1) Loan funded project is split 31.5% for existing users and 68.5% for future users.

City of Oroville Sewer Fund

Element 1 System Deficiencies

Table 10.1: Schedule of Projected SRF Disbursements and Loan Payments

Projected Loan Terms

Total Project Cost:	\$6,665,640
Ineligible Construction Costs:	\$333,282
Eligible Project Costs:	\$6,332,358
Term:	20
Interest Rate:	2.70%
Reserve Fund Deposit	\$438,500

Projected Payment Schedule

Year	Beginning Balance ¹	Payment	Principal	Interest ²	Remaining Balance
2010/11	\$0	\$0	(\$379,941)	\$10,000	\$389,941
2011/12	\$389,941	\$0	(\$1,678,075)	\$56,000	\$2,124,016
2012/13	\$2,124,016	\$0	(\$2,849,561)	\$134,000	\$5,107,577
2013/14	\$5,107,577	\$0	(\$1,424,781)	\$176,000	\$6,708,358
2014/15	\$6,708,358	\$438,500	\$257,400	\$181,100	\$6,450,958
2015/16	\$6,450,958	\$438,500	\$264,300	\$174,200	\$6,186,658
2016/17	\$6,186,658	\$438,500	\$271,500	\$167,000	\$5,915,158
2017/18	\$5,915,158	\$438,500	\$278,800	\$159,700	\$5,636,358
2018/19	\$5,636,358	\$438,500	\$286,300	\$152,200	\$5,350,058
2019/20	\$5,350,058	\$438,500	\$294,000	\$144,500	\$5,056,058
2020/21	\$5,056,058	\$438,500	\$302,000	\$136,500	\$4,754,058
2021/22	\$4,754,058	\$438,500	\$310,100	\$128,400	\$4,443,958
2022/23	\$4,443,958	\$438,500	\$318,500	\$120,000	\$4,125,458
2023/24	\$4,125,458	\$438,500	\$327,100	\$111,400	\$3,798,358
2024/25	\$3,798,358	\$438,500	\$335,900	\$102,600	\$3,462,458
2025/26	\$3,462,458	\$438,500	\$345,000	\$93,500	\$3,117,458
2026/27	\$3,117,458	\$438,500	\$354,300	\$84,200	\$2,763,158
2027/28	\$2,763,158	\$438,500	\$363,900	\$74,600	\$2,399,258
2028/29	\$2,399,258	\$438,500	\$373,700	\$64,800	\$2,025,558
2029/2030	\$2,025,558	\$438,500	\$383,800	\$54,700	\$1,641,758
2030/2031	\$1,641,758	\$438,500	\$394,200	\$44,300	\$1,247,558
2031/2032	\$1,247,558	\$438,500	\$404,800	\$33,700	\$842,758
2032/2033	\$842,758	\$438,500	\$415,700	\$22,800	\$427,058
2033/2034	\$427,058	\$438,500	\$427,000	\$11,500	\$58

[1] - Assumes SRF loan disbursed 6%-2010/11, 26.5% 2011/12, 45%-2012/13, 22.5% 2013/14.

[2] - Interest starts accruing upon first disbursement; however, payments are not due until 12 months following final loan disbursement.

[3] - Loan funded project is split 31.5% for existing users and 68.5% for future users.

City of Oroville Sewer Fund
Element 1 System Deficiencies
Table 10.2: Schedule of TWSD East Trunk Obligations

<u>Projected Loan Terms</u>		TWSD Share	Oroville Share
Total Project Cost:	\$2,940,000	\$735,000	\$2,205,000
2010/2011 Obligations	\$150,000	\$37,500	\$112,500
2011/2012 Obligations	\$354,500	\$88,625	\$265,875
Construction Contingency	\$121,775	\$30,444	\$91,331
Project Costs Financed:	\$2,313,725	\$578,431	\$1,735,294
Term:	20		
Interest Rate:	2.70%		
Annual Loan Pmt	\$151,200	\$37,800	\$113,400

Projected Payment Schedule

Year	Project Costs	Reserve Funds (Service Fees)	Additional Funds (Impact Fees)	Annual Balance	Cumulative Balance
2009/10	\$0	\$0	\$0	\$0	\$0
2010/11	(\$112,500)	\$67,020	\$45,480	\$0	\$0
2011/12	(\$265,875)	\$67,320	\$198,555	\$0	\$0
2012/13	(\$91,331)	\$67,620	\$23,711	(\$0)	(\$0)
2013/14	\$0	\$67,920	\$42,500	\$110,420	\$110,420
2014/15	(\$113,400)	\$68,220	\$42,500	(\$2,680)	\$107,740
2015/16	(\$113,400)	\$68,520	\$42,500	(\$2,380)	\$105,360
2016/17	(\$113,400)	\$68,820	\$42,500	(\$2,080)	\$103,280
2017/18	(\$113,400)	\$69,120	\$42,500	(\$1,780)	\$101,500
2018/19	(\$113,400)	\$65,949	\$42,500	(\$4,951)	\$96,549
2019/20	(\$113,400)	\$66,234	\$42,500	(\$4,666)	\$91,883
2020/21	(\$113,400)	\$66,519	\$42,500	(\$4,381)	\$87,502
2021/22	(\$113,400)	\$66,804	\$42,500	(\$4,096)	\$83,406
2022/23	(\$113,400)	\$63,699	\$42,500	(\$7,201)	\$76,205
2023/24	(\$113,400)	\$63,970	\$42,500	(\$6,930)	\$69,275
2024/25	(\$113,400)	\$64,240	\$42,500	(\$6,660)	\$62,615
2025/26	(\$113,400)	\$64,240	\$42,500	(\$6,660)	\$55,956
2026/27	(\$113,400)	\$64,240	\$42,500	(\$6,660)	\$49,296
2027/28	(\$113,400)	\$64,240	\$42,500	(\$6,660)	\$42,637
2028/29	(\$113,400)	\$64,240	\$42,500	(\$6,660)	\$35,977
2029/2030	(\$113,400)	\$64,240	\$42,500	(\$6,660)	\$29,317
2030/2031	(\$113,400)	\$64,240	\$42,500	(\$6,660)	\$22,658
2031/2032	(\$113,400)	\$64,240	\$42,500	(\$6,660)	\$15,998
2032/2033	(\$113,400)	\$64,240	\$42,500	(\$6,660)	\$9,339
2033/2034	(\$113,400)	\$64,240	\$42,500	(\$6,660)	\$2,679
	(\$2,737,706)	\$1,580,139	\$1,160,246		
		58%	42%		

City of Oroville Sewer Fund
Table 11: Cumulative Sewer Fund

	Estimated 2009/10	Projected 2010/11	Projected 2011/12	Projected 2012/13	Projected 2013/14	Projected 2014/15	Projected 2015/16	Projected 2016/17	Projected 2017/18	Projected 2018/19
Sewer Service Fund Balance	\$2,057,774	\$1,590,966	\$1,429,804	\$1,398,535	\$1,582,350	\$1,904,293	\$2,267,268	\$2,418,239	\$2,856,367	\$3,337,500
Development Impact Fund Balance	\$702,633	\$670,898	\$438,173	\$354,136	\$305,248	\$94,951	(\$167,562)	(\$425,636)	(\$681,149)	(\$934,057)
Combined Fund Balance (Reserves)	\$2,760,407	\$2,261,863	\$1,867,978	\$1,752,672	\$1,887,598	\$1,999,244	\$2,099,706	\$1,992,603	\$2,175,218	\$2,403,443

(1) To achieve the short term goals of eliminating system deficiencies while simultaneously preparing for future capacity demands, Sewer Service funds must be internally loaned to assist the Development Impact Fund meet its obligations.

(2) Reserve Funds must not drop below the amount required by the SRF Policy, without consulting with the SRF Loan Program Manager, assuming an SRF Loan is used to fund the scheduled projects.

City of Oroville Sewer Fund
Table 11: Cumulative Sewer Fund

	Projected 2019/20	Projected 2020/21	Projected 2021/22	Projected 2022/23	Projected 2023/24	Projected 2024/25
Sewer Service Fund Balance	\$3,861,497	\$4,030,480	\$4,644,451	\$5,310,130	\$6,028,834	\$6,802,889
Development Impact Fund Balance	(\$1,184,278)	(\$1,431,726)	(\$1,673,979)	(\$1,913,221)	(\$2,149,368)	(\$2,382,332)
Combined Fund Balance (Reserves)	\$2,677,220	\$2,598,753	\$2,970,473	\$3,396,909	\$3,879,466	\$4,420,556

(1) To achieve the short term goals of eliminating system deficiencies while simultaneously preparing for future capacity demands, Sewer Service funds must be internally loaned to assist the Development Impact Fund meet its obligations.

(2) Reserve Funds must not drop below the amount required by the SRF Policy, without consulting with the SRF Loan Program Manager, assuming an SRF Loan is used to fund the scheduled projects.