

City of Crescent City, CA

Report

Comprehensive Sewer Utility Rate Study





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Section 1 – Executive Summary

1.1 Introduction

Willdan Financial Services (Willdan) is pleased to submit to the City of Crescent City (City) the Sewer Rate Study report (Report) for your consideration. Willdan has completed the study of the City's sewer rates and summarized the results of the investigations, analyses, and conclusions in this Report.

1.1.1 Sewer System Background

Crescent City is located on the coast 15 miles south of the Oregon border in Del Norte County, California. The City's sewer service area includes the city limits and the surrounding County Service Area (CSA). The CSA consists of two sub-areas: the Northcrest area which is north of the city and the Bertsch-Oceanview area to the east.

The City and CSA maintain separate sanitary sewer collection systems within the service area. Sewer flows generated within the CSA are collected and conveyed to the City's collection system. The City's system then conveys the combined City and County (CSA) - generated sewer flows to the Crescent City Wastewater Treatment Plant (CCWWTP) for treatment and disposal. Since the CSA is a separate entity from the City and maintains their own sewer collection infrastructure, the CSA bills customers within its service territory for sewer collection services provided to those customers. The City is not involved in developing or implementing the sewer collection rates and has no control or influence over the sewer collection rates set by the CSA. The City only bills CSA customers for the treatment services they provide to the CSA for wastewater conveyed to its treatment facility.

Raw wastewater from the City and CSA is conveyed to the CCWWTP through a 21-inch-diameter gravity line to the headworks structure. The headworks structure includes mechanically cleaned screens, a flow measuring Parshall Flume, and a wet well in which five pumps are available to lift the flow to the primary clarifiers. Primary treatment consists of two grit removal tanks followed by two rectangular primary clarifiers. Primary sludge is pumped to the gravity thickener. Floatable scum and grease are mechanically skimmed and pumped to the gravity thickener. Secondary treatment is provided by operating the Rotating Biological Contactors (RBC) and Membrane Bioreactor (MBR) in parallel.

The treated sewage is discharged from the CCWWTP through two ocean outfall lines that are interconnected at the discharge location. The older outfall includes an 18-inch-diameter pipeline from the CCWWTP to the shoreline and a 12-inch-diameter pipeline that runs from the shoreline at Battery Point, across a tidal sand bridge, then along the southern shoreline of Lighthouse Island. The pipe is sloped downward at a 45-degree angle and discharges into the bottom of a natural slot formed in the basalt, a 10-foot-deep surge channel on the south side of Lighthouse Island. The slot faces the direction of prevailing wave impact, which provides for intense wave activity that promotes dilution of effluent. The older outfall has an



approximate gravity capacity of 2 MGD and a capacity of 7 MGD when both effluent pumps are operating. The second 24-inch-diameter pipeline was constructed in 2005 to significantly increase effluent conveyance capacity. The newer outfall has a gravity flow capacity of 11 to 13 MGD depending on tide conditions.

1.1.2 Rate Study Background

The City has focused a significant amount of attention and effort on strategic planning measures in all areas of sewer utility operations to ensure that the sewer system is able to maintain critical utility infrastructure, provide a stable and well-functioning system that delivers uninterrupted service to its customers, and so that it remains prepared for the future. As part of its ongoing strategic planning efforts, the City commissioned Willdan to perform a sewer rate study to analyze the revenue sources and expenditures of the sewer utility system and provide recommendations for proposed rate and/or rate structure adjustments to meet the financial and administrative goals and objectives of the City. The primary objectives of the rate study include:

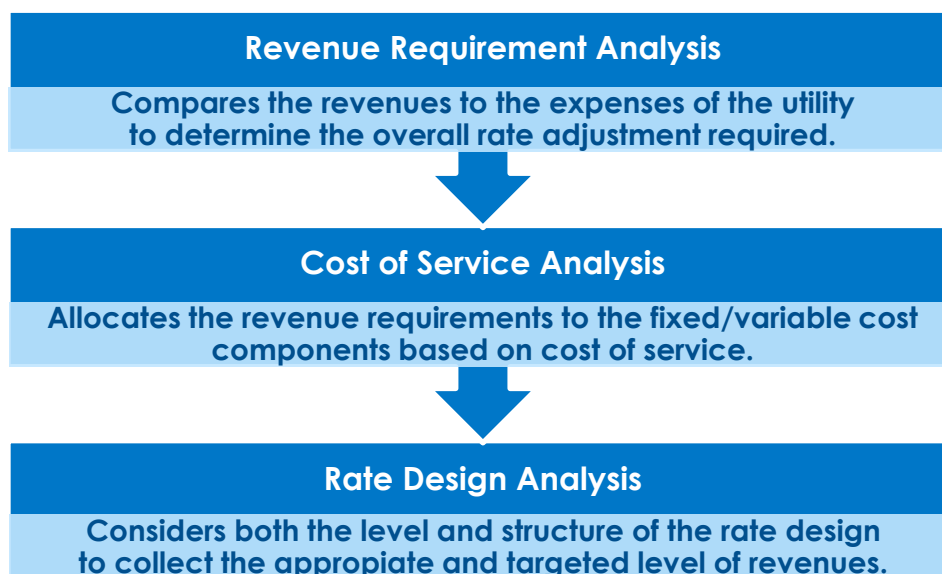
- Full recovery of costs related to utility operations (i.e., operating and maintenance costs, debt, and other expenditure requirements);
- Development of a cost-based rate structure;
- Consistency with Water Environment Federation ("WEF") guidelines;
- Equity among customer classes;
- Meeting substantive and procedural Proposition 218 requirements;
- Administrative efficiency (i.e., easy to understand and implement); and
- 5-Year capital funding plan.

1.2 Overview of the Rate Study Process

This study includes the development and presentation of a pro-forma sewer financial plan for a 5-year planning period, as well as the development of cost-based rates through a comprehensive cost-of-service and rate design analysis. Utility rates must be set at a level such that operating, maintenance, debt, and capital expenses are funded with the revenues received from customers. In addition, the revenues generated from sewer utility rates must only be used for these purposes and for the sewer system only. This is a significant point, as failure to achieve the revenues needed can lead to unacceptable service levels and inadequately maintained facilities. Therefore, a rate study typically consists of the following three interrelated analyses:



- I. **Financial Planning/Revenue Requirement Analysis:** Creates a five-year financial plan to support an orderly, efficient program of funding for on-going maintenance and operating costs, capital improvement and routine system component replacement activities, debt financing, and retirement of outstanding debt. In addition, the plan should fund and maintain appropriate reserve balances based on industry standards, as well as the City's fiscal policies and specific needs.
- II. **Cost-of-Service Analysis:** Identifies and apportions annual revenue requirements (i.e., expenditures) to operational and functional cost components based on the relative demand placed on the sewer utility system by various groups or classes of customers. The purpose of this analysis is to develop customer rates that generate revenues proportionate to their share of the utility's costs. This objective is consistent with industry standards as well as the requirements of Proposition 218 (Prop 218).
- III. **Rate Design:** Develops an equitable and proportionate fixed/variable schedule of rates for the City's customer base. The policy objectives are coordinated with Prop 218 requirements and cost-of-service objectives to achieve a balance between customer equity and financial stability goals. The balance of fixed and variable charges considers the need for a stable revenue source (the fixed charge) and accounts for customers placing higher costs on the system (through higher sewer use) by incurring a higher bill reflective of their impact on the system (the variable component).





This rate study utilizes generally accepted rate-making principles and standards established by industry experts such as the WEF in its "Financing and Charges for Sewer Systems, Manual of Practice No. 27". The principles established by these entities are used as guidelines in the development of the proposed sewer rates. A discussion of some of the key principles of ratemaking is presented in the following subsection of this Report.

1.3 Summary of Proposed Rates

The rate study methodology applied in the development of updated sewer rates, outlined in this Report, consisted of reviewing the historical operating results of the sewer utility system, analyzing the budget to identify the net revenue requirements to be recovered from user rate revenues, performing general cost-of-service allocations based on the rate components and functional cost categories, and adjusting the user rates based on the applicable costs and expenditures to be recovered. In addition, an analysis of the system's customers and their usage and demand characteristics was performed to identify the cost-of-service rate determinants since they form the basis for the recommended rates, which are the primary source for generating revenues. The allocated revenue requirements were utilized in conjunction with the rate determinants and rate structure to develop the proposed sewer rates.

The findings and conclusions of the rate analysis, as well as the resulting revised rate recommendations, were utilized to develop a projection of future operating results for a 5-year planning period from Fiscal Year (FY) 2027 (beginning July 1, 2026) through FY 2031 (ending June 30, 2031), herein referred to as the "Projection Period". The purpose of developing the 5-year projections is to demonstrate the financial capability of the sewer revenues to support system operations, maintenance, repayment of outstanding and/or anticipated debt and compliance with debt covenants, address policy goals such as accumulation and maintenance of designated reserves, and funding planned rehabilitation and repair of aging system components and minor and major capital improvement projects. The analyses, findings and accompanying recommendations are presented in the subsequent sections of the Report.

The sewer rate analysis described in the Report is performed based on the general guidelines of the defined objectives, as well as common industry standards for setting utility rates. The proposed sewer rates for assumed implementation effective July 1, 2026 (or other such date as determined by the City) for FY 2026/27 (FY 2027, herein referred to as the "Test Year") are provided in **Table 1**. The existing rates are provided in **Table 2**.



Table 1 – Proposed Monthly Sewer Rates

Description	Proposed Rate
Monthly Fixed Charge: Inside ^[1]	
Residential Flat Rate	\$ 98.06
Multi-Family	\$ 43.29
Light Commercial	\$ 43.29
Heavy Commercial	\$ 43.29
Combined Residential/Light Commercial (Mixed Use)	\$ 121.84
Combined Residential (2) / Light Commercial (Mixed Use)	\$ 267.14
Industrial Pretreatment	\$ 43.29
Volumetric Rates Per 100 Cubic Feet (CCF): Inside ^[2]	
Residential Flat Rate	\$ -
Multi-Family	\$ 10.17
Light Commercial	\$ 10.95
Heavy Commercial	\$ 23.39
Combined Residential/Light Commercial (Mixed Use)	\$ -
Combined Residential (2) / Light Commercial (Mixed Use)	\$ -
Industrial Pretreatment	\$ 4.62
Monthly Fixed Charge: Outside ^{[1] [3]}	
Residential Flat Rate	\$ 79.60
Multi-Family	\$ 43.29
Light Commercial	\$ 43.29
Heavy Commercial	\$ 43.29
Combined Residential/Light Commercial (Mixed Use)	\$ 75.56
Volumetric Rates Per 100 Cubic Feet (CCF): Outside ^{[2] [3]}	
Residential Flat Rate	\$ -
Multi-Family	\$ 7.00
Light Commercial	\$ 7.78
Heavy Commercial	\$ 20.22
Combined Residential/Light Commercial (Mixed Use)	\$ -
Notes:	
<p>[1] All "Residential" and "Mixed Use" customers only pay a monthly flat fee regardless of usage.</p> <p>[2] Under the existing rates, 500 cubic feet of usage is included in the monthly fixed charge. Therefore, customers who are billed for usage do not pay a volumetric rate per CCF until their usage exceeds 500 cubic feet. Under the proposed rates, usage is no longer included in the monthly fixed charge and customers will pay the volumetric rate per CCF for all usage.</p> <p>[3] County customers pay the City for treatment services only. Collection services are provided by and billed separately by the County.</p>	



Section 2 – Revenue Sufficiency Analysis

2.1 Financial Planning Principles

While the individual rates for a utility system vary based on a variety of factors, rates should be consistent with common rate-making principles within the utility industry. The guiding principle is that rates designed for any utility should provide a reasonable balance between key factors. In general, the utility rates should:

- Generate a stable revenue stream that, when combined with other sources of funds, is sufficient to meet the expenditure requirements and goals of the system.
- Be based upon the proportionate cost of providing the service and not exceed the cost of providing the service – in compliance with California Proposition 218.

2.2 Existing Rates

The City has established user rates for sewer service that are applied to retail customers of the system. The rates charged for sewer service are approved by the City Council and are not subject to administrative review or approval by any other local or state agency. The City has historically adjusted rates, as necessary, to provide for recovery of financial obligations including operating expenses, debt service, capital expenditures and any other expenses and transfers.

The existing inside and outside City sewer rates consist of 1) monthly fixed charges that apply to residential and mixed use customers regardless of their usage, 2) monthly fixed charges that apply to multi-family and non-residential customers by account, which include 500 cubic feet of usage, and 2) a volumetric rate component per 100 cubic feet that recovers the costs of collection and treatment of wastewater by customer type. The volumetric rate component only applies to multi-family and non-residential customers. Customers that pay a volumetric rate do not currently pay the volumetric rate per 100 cubic feet until their monthly usage exceeds 500 cubic feet. The existing rates apply to City and CSA customers. CSA (outside City) customers rates do not include sewer collection and conveyance costs since the CSA provides sewer collection services and bills customers separately for these services. The existing rates for sewer services are provided in **Table 2**.



Table 2 – Existing Monthly Sewer Rates

Description	Existing Rate
Monthly Fixed Charge: Inside ^[1]	
Residential Flat Rate	\$ 72.21
Multi-Family	\$ 41.90
Light Commercial	\$ 44.75
Heavy Commercial	\$ 70.10
Combined Residential/Light Commercial (Mixed Use)	\$ 116.96
Combined Residential (2) / Light Commercial (Mixed Use)	\$ 189.17
Industrial Pretreatment	\$ 72.21
Volumetric Rates Per 100 Cubic Feet (CCF): Inside ^[2]	
Residential Flat Rate	\$ -
Multi-Family	\$ 8.38
Light Commercial	\$ 8.95
Heavy Commercial	\$ 14.02
Combined Residential/Light Commercial (Mixed Use)	\$ -
Combined Residential (2) / Light Commercial (Mixed Use)	\$ -
Industrial Pretreatment	\$ 2.00
Monthly Fixed Charge: Outside ^{[1] [3]}	
Residential Flat Rate	\$ 63.14
Multi-Family	\$ 36.75
Light Commercial	\$ 39.60
Heavy Commercial	\$ 64.90
Combined Residential/Light Commercial (Mixed Use)	\$ 102.74
Volumetric Rates Per 100 Cubic Feet (CCF): Outside ^{[2] [3]}	
Residential Flat Rate	\$ -
Multi-Family	\$ 7.35
Light Commercial	\$ 7.92
Heavy Commercial	\$ 12.98
Combined Residential/Light Commercial (Mixed Use)	\$ -
Notes:	
[1] All "Residential" and "Mixed Use" customers only pay a monthly flat fee regardless of usage.	
[2] Under the existing rates, 500 cubic feet of usage is included in the monthly fixed charge. Therefore, customers who are billed for usage do not pay a volumetric rate per CCF until their usage exceeds 500 cubic feet. Under the proposed rates, usage is no longer included in the monthly fixed charge and customers will pay the volumetric rate per CCF for all usage.	
[3] County customers pay the City for treatment services only. Collection services are provided by and billed separately by the County.	



2.3 Revenue Sufficiency Process

In evaluating whether the existing rates will generate sufficient revenue to meet the expenditure requirements of the sewer system, the annual expenditures required for the sewer utility system (herein referred to as the "Revenue Requirements") were developed. The Revenue Sufficiency Analysis compares the forecasted revenues for the sewer utility system under existing rates (including customer growth) to the projected Revenue Requirements.

2.3.1 Budget

The Revenue Sufficiency analysis performed as part of this study and summarized in this report utilizes the City's adopted budget for FY 2025/26 (the "Budget" for FY ending June 30, 2026) as one variable to determine the gross Revenue Requirement to be recovered from user rates over the Projection Period. The Budget, as prepared by the City, is provided on a line-item basis, and is used for projecting the budgeted financial needs for the Test Year and the remainder of the Projection Period. In developing the rate analysis, certain adjustments are made such that expenditures are categorized into either Operating and Maintenance (O&M) expenses or non-operating expenses. In addition, only recurring costs included in the current Budget were included as part of the Revenue Sufficiency Analysis for the entirety of the Projection Period. One-time costs were identified and evaluated in discussions with City Staff and removed from future years if appropriate. Recurring annual costs were escalated using suitable indexes or escalation factors, again in discussion with City Staff. The O&M expenses are primarily those ongoing costs for labor, materials, chemicals, electricity, supplies, services, etc., required to manage and operate the utility system on a day-to-day basis while maintaining a dependable level of service. The O&M requirements are generally a function of a budgetary process and are directly related to the level of service provided to customers of the utility system. The non-operating expenses include such items as capital outlay and any other expenses & transfers.

The Budget also identifies estimated revenues derived from sources other than sewer user rates. Such other revenue sources include interest earnings on investments, and various other miscellaneous service charges. The revenues generated from the other sources are applied to the gross Revenue Requirement to reduce the amount of revenue required from user rates. The result is the net Revenue Requirement.

2.3.2 Capital Improvement Plan (CIP)

The City provided a list of anticipated capital projects to be undertaken over the Projection Period. These are also included in the development of the gross Revenue Requirement. The capital projects provided by and identified by the City in the CIP are required to modernize and upgrade the system to maintain uninterrupted service to customers by investing in improvements, repairs, or replacements of aging system components as they wear over time. The City also provided cost estimates for the identified capital projects by the fiscal year in which they are estimated to be undertaken. The funding for these capital projects



was then used in the analysis, along with O&M and non-operating expenses, to determine the gross Revenue Requirement for the sewer system. The capital projects included in the CIP (represented in \$1,000s), along with their assumed funding sources by fiscal year, for the Projection Period are provided in **Table 3**.

Table 3 – Sewer CIP (\$1,000s)

Description	Funding Source	Projected for Fiscal Year Ending June 30					
		2026	2027	2028	2029	2030	2031
Sewer Capital Projects							
Influent Spiral Lift (Install)	Cash	\$ 50	\$ -	\$ -	\$ -	\$ -	\$ -
Influent Gate (Complete)	Cash	35	-	-	-	-	-
Primary Influent Valves	Cash	120	-	-	-	-	-
Rbc Gearbox Replace	Cash	62	65	68	72	75	-
Influent Pump Rebuild	Cash	-	151	159	167	-	-
Gas Flare Replace / Relocate (May Change)	Cash	-	79	-	-	-	-
Primary Buildings Replace	Cash	-	28	189	-	-	-
Wooden Walkway	Cash	-	-	53	-	-	-
Truck (At Wwtp)	Cash	-	36	-	-	-	-
Rbc Media Replace	Cash	-	-	239	251	-	-
Chemical Pumps	Cash	-	56	-	-	-	-
Mbr Diffusers	Cash	-	-	-	58	61	-
Lift Station Rehab (Williams, Harbor)	Cash	-	-	-	46	49	-
Collection System Repairs	Cash	225	263	276	289	304	-
City Equipment Purchases	Cash	16	79	83	87	91	-
Future R&R and Improvement Projects	Cash	-	-	-	-	-	993
Digester Optimization	Grants	-	-	-	1,811	1,901	-
Gravity Thickener rehabilitation & Distribution Box: Jacobs 22 #20	Grants	-	-	560	427	225	-
Biological Survey And Toxicity Study (Required By NPDES)	Cash	-	32	-	-	-	-
Sewer Lines Camera Inspection	Cash	-	-	386	-	-	-
Total Sewer Capital Projects		\$ 508	\$ 788	\$ 2,012	\$ 3,208	\$ 2,706	\$ 993

2.3.3 Debt Service

The City currently has one outstanding debt issue associated with the sewer utility system, with an annual payment of approximately \$1.7M, as shown in **Table 4**. A minimum debt service coverage ratio of net revenue of at least 1.20 times the annual debt service payment is typically required to be maintained on an annual basis. In simple terms, this means the utility typically must have \$1.20 in net operating revenues for every \$1.00 in debt service they are committed to paying on outstanding debt. The debt service coverage is calculated by dividing net operating revenues (revenue less operations and maintenance expenses) by annual debt service. Based on discussions with City staff, there are no future debt issuances anticipated to take place over the Projection Period. The annual debt payments over the Projection Period, which are included in the development of the gross Revenue Requirement, are provided in **Table 4**.

Table 4 – Annual Debt Service Payments

Description	Projected for Fiscal Year Ending June 30				
	2027	2028	2029	2030	2031
Annual Debt Service					
SRF Loan Agreement	\$ 1,697,663	\$ 1,697,663	\$ 1,697,663	\$ 1,697,663	\$ 1,697,663
Total Annual Debt Service	\$ 1,697,663	\$ 1,697,663	\$ 1,697,663	\$ 1,697,663	\$ 1,697,663



2.3.4 Gross and Net Revenue Requirement

The proposed sewer rates developed in the Report are designed for assumed implementation for FY 2026/27 (the Test Year as previously defined). The projected Test Year gross and net Revenue Requirement is estimated by utilizing the Budget, actual debt service requirements as provided in the applicable debt service schedules, capital project cost estimates and assumed funding sources for capital projects as provided by the City, along with anticipated transfers to reserves for funding capital projects. The Test Year Revenue Requirement that is used for developing the user rates proposed herein is detailed in **Appendix A** at the end of this report and summarized in **Table 5**.

Table 5 – Test Year Revenue Requirements – FY 2027

Description	Sewer	Total
Total O&M	\$ 4,993,325	\$ 4,993,325
Debt Service	1,697,663	1,697,663
Net Transfers Out/(In)	(121,974)	(121,974)
Transfers to Operating & Capital Reserves	147,767	147,767
Gross Revenue Requirement	\$ 6,716,781	\$ 6,716,781
Less Other Revenues	(669,015)	(669,015)
Net Revenue Requirement	\$ 6,047,766	\$ 6,047,766

The projected Revenue Requirements for the sewer system over the entire Projection Period are provided in **Table 6**.

Table 6 – Sewer Revenue Requirements for the Projection Period

Description	Projected for Fiscal Year Ending June 30				
	2027	2028	2029	2030	2031
Total O&M	\$ 4,993,325	\$ 5,212,395	\$ 5,441,813	\$ 5,682,084	\$ 5,933,778
Debt Service	1,697,663	1,697,663	1,697,663	1,697,663	1,697,663
Net Transfers Out/(In)	(121,974)	(119,811)	(117,583)	(115,288)	(112,924)
Transfers to Operating & Capital Reserves	147,767	711,194	953,284	1,144,695	1,309,314
Gross Revenue Requirement	\$ 6,716,781	\$ 7,501,441	\$ 7,975,177	\$ 8,409,154	\$ 8,827,831
Less Other Revenues	(669,015)	(679,017)	(689,393)	(700,162)	(711,339)
Net Revenue Requirement	\$ 6,047,766	\$ 6,822,424	\$ 7,285,784	\$ 7,708,992	\$ 8,116,492



2.4 Customer Data

The rate study is heavily reliant upon a detailed historical analysis of system customers and their accompanying usage and demand characteristics. Data reflecting the existing utility customer base and metered/billable flows provide the determinants utilized in the cost-of-service analysis, and ultimately in calculating the monthly sewer user rates and charges, which become the foundation for projecting future revenues generated by the sewer system.

It is important to note that the customer analysis focuses primarily on the customer classifications that will be subject to and impacted by the user rates and charges to be developed in the Report. This consists of the general service (retail) customers that currently pay for utility service pursuant to the existing user rates and charges as previously detailed. For the purposes of the rate study, it is these customers and their accompanying usage characteristics that will generate revenues based upon the proposed user rates and charges.

2.4.1 Customer Billing Analysis

For the rate study, detailed historical monthly billing information was provided for each customer. This data offered a breakdown of customers by location (inside vs outside City), customer class, usage characteristics, and billed charges. The historical billing data was queried from the City's electronic billing records. An analysis of the billing data was conducted to obtain an understanding of existing customers, customer classes, demand and usage characteristics, and metered usage per customer class. In accordance with the data, as well as discussions with the City staff, the utility system provides service to various identifiable retail customer classes consisting of:

- Single-Family Residential
- Multi-Family Residential
- Mixed Use
- Commercial/Non-Residential, and
- Industrial Pretreatment.

Each of these customer classes embodies certain common characteristics in their utility use and service demand profiles that provide the basis for establishing an equitable allocation of system costs. The billing data was utilized to identify the number of customer accounts and dwelling units within each class, the metered/billable usage profiles, and sewer strength characteristics.

The historical customer data was also utilized, along with other City planning data and discussions with City staff, to establish growth trends for each customer classification. The growth trends were then used to project the average number of customers within each class for the Test Year plus the remaining years of the Projection Period.



2.5 Financial Projections Under Existing Rates

The projected customers and accompanying billable flows were applied to the existing rates to develop a projection of user revenues that would be generated under existing rates. The revenues were then compared to the projected revenue requirements/expenditures to determine if revenue adjustments would be needed to meet the calculated Revenue Requirements shown in **Tables 5** and **6**.

Based on this comparison, it is projected that under the existing rates, the sewer system would not meet its collective projected operating and maintenance (O&M) financial obligations, debt service payments and coverage requirements, costs of capital projects, and transfers to maintain cash reserves.

Therefore, revenue increases are required and recommended to generate additional cash to fund projected costs of operations, meet debt service requirements, capital projects, and maintain adequate operating and capital cash reserves. In addition, best practice is to maintain at least 180 days of operating cash reserves to help fund ongoing operations in the event of periodic fluctuations in cash flow, and to address unexpected needs that may require cash funding. The City also maintains a separate capital reserve to fund infrastructure needs and capital improvements. The cash-flow statement outlining the projected operating results under existing rates is summarized in **Table 7**. The proposed rates and projected financial results are addressed in the subsequent sections of this Report.



Table 7 – Sewer System Projected Operating Results - Existing Rates (\$1,000s)

Description	Projected for Fiscal Year Ending June 30				
	Existing 2027	2028	2029	2030	2031
Revenues:					
Sewer Sales	\$ 4,670	\$ 4,683	\$ 4,696	\$ 4,709	\$ 4,722
Other Revenues	669	679	689	700	711
Total Revenues	\$ 5,339	\$ 5,362	\$ 5,385	\$ 5,410	\$ 5,434
O&M Expenses	(4,993)	(5,212)	(5,442)	(5,682)	(5,934)
Net Income Available For Debt Service	\$ 346	\$ 150	\$ (57)	\$ (272)	\$ (500)
Debt Service:					
Existing	\$ 1,698	\$ 1,698	\$ 1,698	\$ 1,698	\$ 1,698
Future	-	-	-	-	-
Total Debt Service	\$ 1,698	\$ 1,698	\$ 1,698	\$ 1,698	\$ 1,698
Debt Service Coverage Ratio	0.20	0.09	-	-	-
Balance After Debt	\$ (1,352)	\$ (1,548)	\$ (1,754)	\$ (1,970)	\$ (2,198)
Other Expenditures & Transfers:					
Capital Outlay	\$ -	\$ -	\$ -	\$ -	\$ -
Transfers In	\$ 194	\$ 194	\$ 194	\$ 194	\$ 194
Transfers Out	\$ (72)	\$ (74)	\$ (76)	\$ (79)	\$ (81)
Total Other Expenditures & Transfers	\$ 122	\$ 120	\$ 118	\$ 115	\$ 113
Net Results	\$ (1,230)	\$ (1,428)	\$ (1,637)	\$ (1,855)	\$ (2,085)
Fund Balance Activity:					
O&M Fund Balance (413)					
Beginning Fund Balance	\$ 3,691	\$ 2,399	\$ 0	\$ (1,637)	\$ (3,492)
Deposit/(Withdrawal) from Operations	(1,230)	(1,428)	(1,637)	(1,855)	(2,085)
Transfer from/(to) Capital Fund	(62)	(971)	-	-	-
Ending Fund Balance	\$ 2,399	\$ 0	\$ (1,637)	\$ (3,492)	\$ (5,577)
Days Cash on Hand	175	0	(110)	(224)	(343)
Capital Reserve (913)					
Beginning Fund Balance	\$ 725	\$ 0	\$ (481)	\$ (1,451)	\$ (2,031)
Transfer from/(to) O&M Fund	62	971	-	-	-
Capital Projects From Capital Improvement Plan	(788)	(1,452)	(970)	(580)	(993)
Ending Fund Balance	0	(481)	(1,451)	(2,031)	(3,024)
Total Ending Fund Balance	\$ 2,399	\$ (481)	\$ (3,088)	\$ (5,523)	\$ (8,601)



Section 3 – Cost-of-Service (COS) Analysis

3.1 General

The costs incurred by a sewer utility system are generally driven by specific service requirements imposed on the system by its customers. For sewer systems, the primary service requirements that drive costs typically include annual sewer volumes, sewer treatment strength, such as Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS), and the number and types of customers served.

There are several different options that can be used to perform a COS analysis, and the allocation methodology depends upon the operating profile of the utility and the basis applied. The sewer cost-of-service analysis detailed in **Section 3.2** involves an examination of the number and type of customers served in accordance with the California State Water Resources Control Board (SWRCB) *Revenue Program Guidelines for Wastewater Agencies*.

3.2 Sewer Cost-of-Service

The COS analysis utilizes the Revenue Requirements for the Test Year as the cost basis. The Test Year Revenue Requirements are functionally unbundled, classified and allocated to customer classes to determine the cost-of-service by class. As stated in **Section 3.1**, the sewer COS analysis involves an examination of sewer volumes, strength factors (i.e., BOD and TSS), and the number and type of customers served in accordance with the California State Water Resources Control Board (SWRCB) *Revenue Program Guidelines for Wastewater Agencies*. More detail relating to the sewer COS approach can be found in **Appendix B**.

3.2.1 Functional Unbundling of Revenue Requirements

The sewer system costs are unbundled into Collection, Treatment, Customer and Administration functions. A brief description of each component is as follows:

- **Collection** – costs associated with lines and facilities that transport wastewater from customer properties to treatment facilities;
- **Treatment** – costs associated with treating wastewater for disposal reclamation and/or discharge;
- **Customer** – costs associated with billing, and providing other services to customers (e.g., printing, delivering and collecting utility bills, recordkeeping, etc.).
- **Administration** – various overhead and other non-operating costs

The allocation of the functionally unbundled revenue requirements for the Test Year is summarized in **Table 8**.



Table 8 - Functional Unbundled Cost Allocations

Description	Test Year
Total O&M	\$ 4,993,325
Existing Debt Service	\$ 1,697,663
Future Debt Service	-
Other Expenditures & Transfers	25,793
O&M Revenue Requirement	\$ 6,716,781
Less Other Revenues	(669,015)
Total Revenue Requirement	\$ 6,047,766
Functional Unbundled Revenue Requirement	
Treatment	\$ 2,395,435
Collection	804,006
Administration	1,775,392
Customer Service	18,492
Transfers Out	72,100
CIP	787,500
Existing Debt	1,697,663
New Debt	-
Non-Rate Revenue	(669,015)
Transfer In	(194,074)
Fund Balance ^[1]	(639,733)
Total	\$ 6,047,766
Notes:	
[1] Represents a transfer from reserves to provide funding for capital outlay and CIP costs.	

3.2.2 Classification of Revenue Requirements

The functionally unbundled revenue requirements for the sewer system are classified into fixed and volumetric customer components based on a methodology consistent with the WEF Manual of Practice No. 27. It is anticipated that the allocation percentages will not change materially during the Projection Period. However, it is important to note that COS analysis is based on the data at a specific point in time (i.e., the most recent fiscal year). To the extent that weather conditions, economic conditions and customer usage characteristics change during the Projection Period, the cost allocators can be impacted. The system-wide costs by service characteristics are shown in **Table 9**.



Table 9 - Classification of Unbundled Revenue Requirements

Component	Volume	Capacity	Strength - BOD	Strength - TSS	Customer	Administration	Total
Treatment	\$ -	\$ -	\$ 1,197,874	\$ 1,197,561	\$ -	\$ -	\$ 2,395,435
Collection	402,003	402,003	-	-	-	-	804,006
Administration	-	-	-	-	-	1,775,392	1,775,392
Customer Service	-	-	-	-	18,492	-	18,492
Transfers Out	-	-	-	-	-	72,100	72,100
CIP	23,625	23,625	370,125	370,125	-	-	787,500
Existing Debt	-	-	460,236	460,236	-	777,191	1,697,663
New Debt	-	-	-	0	-	-	-
Non-Rate Rev & Fund Balance	(84,714)	(84,714)	(403,687)	(403,625)	(3,681)	(522,400)	(1,502,822)
Total	\$ 340,914	\$ 340,914	\$ 1,624,548	\$ 1,624,297	\$ 14,811	\$ 2,102,282	\$ 6,047,766

3.2.3 Allocation to Customer Classes and Unit Cost Development

The functionalized and classified Revenue Requirements are allocated to customer classes utilizing a unit cost approach as follows:

- **Collection** – Based on relative percentage of annual sewer usage;
- **Treatment** – Based on relative percentage of sewer strength discharge (BOD and TSS);
- **Customer** – Based on relative percentage of customers by customer class.

The units of service for each component of cost by customer class (if applicable) are provided in **Table 10**. The units of service consist of the number of customers, annual flows in 100 cubic feet, and sewer strength discharge. Customers are based on the number of customers as provided in the customer data. Collection is the total annual sewer flows projected for the Test Year. BOD and TSS reflect the strength per pound of the sewer discharge collected by the City from each customer class based on standards for wastewater discharge included in the SWRCB Guidelines or based on City samples from sewer for customers whose discharge is monitored.



Table 10 – Units of Service

Description	Total Customers	CCF Flow	BOD Factor ^[1]	BOD Pounds	TSS Factor ^[1]	TSS Pounds
Inside City:						
Residential						
Residential ^[2]	1,138	73,507.95	225	103,177	225	103,177
Multi-Family	89	68,611.92	225	96,305	225	96,305
Mixed Use						
Combined Residential (2) / Light Commercial	1	264.00	225	371	225	371
Combined Residential/Light Commercial	5	463.20	225	650	225	650
Non-Residential						
Light Commercial	245	33,307.56	250	51,946	250	51,946
Heavy Commercial	34	11,569.56	650	46,914	650	46,914
Sub-Total Inside City	1,512	187,724.19		299,363		299,363
Outside City:						
Residential						
Residential ^[2]	2,448	152,404.16	225	213,918	225	213,918
Multi-Family	26	65,332.80	225	91,703	225	91,703
Mixed Use						
Combined Residential/Light Commercial	2	110.64	225	155	225	155
Non-Residential						
Light Commercial	81	15,639.48	250	24,391	250	24,391
Heavy Commercial	5	3,522.66	650	14,284	650	14,284
Sub-Total Outside City	2,562	237,009.74		344,451		344,451
Monitored:						
Industrial Pretreatment	1	26,926.08	47	7,895	46	7,727
Sub-Total Monitored	1	26,926.08		7,895		7,727
Total	4,075	451,660.01		651,708		651,540

Notes:

[1] Average strength factors for BOD and TSS are based on the State Water Resources Control Board Revenue Program Guidelines, Appendix G. For the "Monitored" customer class, sewer sample results gathered and provided by the City were utilized to determine BOD and TSS Strength Factors.

[2] Annual sewer flows for single family residential customers were calculated by taking the average winter consumption for the lowest three months of water consumption data provided to determine the factor of winter average usage compared to the total annual average monthly water usage. This factor was then applied to the projected monthly average "Test Year" water consumption to determine the "Test Year" annual sewer flows.

The Revenue Requirement for each cost component is divided by its respective unit of service to calculate a unit cost. The unit cost for each cost component is demonstrated in **Table 11**.



Table 11 – Cost Per Unit

Description	Volume	Capacity	Strength - BOD	Strength - TSS	Customer	Administration	Total
Total Revenue Requirement	\$ 340,914	\$ 340,914	\$ 1,624,548	\$ 1,624,297	\$ 14,811	\$ 2,102,282	\$ 6,047,766
Total Units of Service	214,650	214,650	651,708	651,540	4,075	4,075	
Unit Type	CCF ^[1]	CCF ^[1]	Pounds	Pounds	Customers /Monthly	Customers /Monthly	
Cost per Unit	\$ 1.59	\$ 1.59	\$ 2.49	\$ 2.49	\$ 0.30	\$ 42.99	
per Unit Type	CCF	CCF	per Pound	per Pound	Customer per Month	Customer per Month	

Notes:

[1] Since the CSA directly provides sewer collection and conveyance services to outside city customers, their collection costs are handled by the county through their annual CSA tax payment and the County is paid directly for these costs. Therefore, these units are excluded when developing the "Cost Per Unit", so that the "Cost Per Unit" only reflects the collection costs attributable to providing sewer collection and conveyance services to inside city customers. The City is not involved in, nor does the City have any control over the sewer collection rates set by the CSA. The City only bills CSA customers for the treatment services they provide to the CSA.

The allocation of the Revenue Requirement to each customer class is based on the unit costs for each component multiplied by the units of service for each customer class. The total costs to be recovered from each customer class by rate component is shown in **Table 12**.

Table 12 – Cost of Service by Customer Class and Cost Component

Customer Class	Volume	Capacity	Strength - BOD	Strength - TSS	Customer	Administration	Total
Inside City:							
Residential							
Residential	\$ 116,747	\$ 116,747	\$ 257,196	\$ 257,222	\$ 4,136	\$ 587,091	\$ 1,339,141
Multi-Family	\$ 108,971	\$ 108,971	\$ 240,065	\$ 240,090	\$ 323	\$ 45,915	\$ 744,336
Mixed Use							
Combined Residential (2) / Light Commercial	\$ 419	\$ 419	\$ 924	\$ 924	\$ 4	\$ 516	\$ 3,206
Combined Residential/Light Commercial	\$ 736	\$ 736	\$ 1,621	\$ 1,621	\$ 18	\$ 2,579	\$ 7,311
Non-Residential							
Light Commercial	\$ 52,900	\$ 52,900	\$ 129,488	\$ 129,501	\$ 891	\$ 126,395	\$ 492,075
Heavy Commercial	\$ 18,375	\$ 18,375	\$ 116,944	\$ 116,956	\$ 124	\$ 17,541	\$ 288,314
Sub-Total Inside City	\$ 298,149	\$ 298,149	\$ 746,237	\$ 746,314	\$ 5,496	\$ 780,037	\$ 2,874,382
Outside City: ^[1]							
Residential							
Residential	\$ -	\$ -	\$ 533,244	\$ 533,300	\$ 8,898	\$ 1,262,917	\$ 2,338,359
Multi-Family	\$ -	\$ -	\$ 228,592	\$ 228,616	\$ 95	\$ 13,413	\$ 470,715
Mixed Use							
Combined Residential/Light Commercial	\$ -	\$ -	\$ 387	\$ 387	\$ 7	\$ 1,032	\$ 1,813
Non-Residential							
Light Commercial	\$ -	\$ -	\$ 60,801	\$ 60,807	\$ 294	\$ 41,788	\$ 163,690
Heavy Commercial	\$ -	\$ -	\$ 35,607	\$ 35,610	\$ 18	\$ 2,579	\$ 73,815
Sub-Total Outside City	\$ -	\$ -	\$ 858,631	\$ 858,720	\$ 9,312	\$ 1,321,729	\$ 3,048,392
Monitored:							
Industrial Pretreatment	\$ 42,765	\$ 42,765	\$ 19,680	\$ 19,263	\$ 4	\$ 516	\$ 124,992
Sub-Total Monitored	\$ 42,765	\$ 42,765	\$ 19,680	\$ 19,263	\$ 4	\$ 516	\$ 124,992
Total	\$ 340,914	\$ 340,914	\$ 1,624,548	\$ 1,624,297	\$ 14,811	\$ 2,102,282	\$ 6,047,766

Notes:

[1] Since the CSA directly provides sewer collection and conveyance services to outside city customers, their collection costs are handled by the county through their annual CSA tax payment and the County is paid directly for these costs. Therefore, sewer collection costs are excluded from being recovered from the "Outside City" customer classes since the City does not provide sewer collection services to CSA customers.



3.2.4 Cost-of-Service and Revenue Check

Once the unit costs are developed and the costs associated with each customer class based on the units of service are determined in **Section 3.2.3**, rates can be developed to ensure that each customer class is generating sufficient revenues to cover their allocated cost of service. The proposed rate structure for the sewer rates is as follows:

- **Single-Family Residential Customers** – For single-family residential customers, the proposed rates will consist of only a flat fixed charge per single-family residential customer, regardless of usage. Using a flat fixed charge for single-family residential customers is an accepted and predominant industry practice since wastewater is typically not metered, as is the case with the City, and wastewater discharge and demand is relatively uniform among the single-family residential class. Unlike a volumetric rate per 100 cubic feet, a flat rate also addresses single-family residential customers potentially being overcharged for water usage that is not returned to the sewer system, such as seasonal irrigation.
- **Multi-Family Residential Customers** – For multi-family residential customers, the proposed rates will consist of a fixed charge and a volumetric rate per 100 cubic feet that applies to all sewer discharge.
- **Mixed Use Customers** – For mixed use customers, the proposed rates will consist of only a flat fixed charge per mixed use customer, regardless of usage. Since water usage data is not available to demonstrate residential vs. commercial usage among the mixed-uses, it was determined to apply a flat fixed rate rather than trying to determine residential vs. commercial usage to calculate a volumetric rate per 100 cubic feet for each customer type within the mixed-use classification.
- **Non-Residential Customers** – For non-residential customers, the proposed rates will consist of a fixed charge and a volumetric rate per 100 cubic feet that applies to all sewer discharge based on each customer class's respective sewer strength discharge (i.e., light strength and high strength).
- **Industrial Pretreatment Customers** – For industrial pretreatment customers, the proposed rates will consist of a fixed charge and a volumetric rate per 100 cubic feet that applies to all sewer discharge.

The revenues generated by customer class vs the cost allocated to each customer class are provided in **Table 13**.



Table 13 – Proposed Rate Revenues vs COS

Description	Monthly Customers	Proposed Monthly Fixed Fee	Total Fixed Fee Revenue	Billable Annual Volume (CCF)	Proposed Volumetric Rate	Total Volumetric Rate Revenues	Total Calculated Revenues	Total COS
	[A]	[B]	[C]=[A]*[B]*12	[D]	[E]	[F]=[D]*[E]	[G]=[C]+[F]	[H]
Inside City:								
Residential								
Residential	1,138	\$ 98.06	\$ 1,339,141	N/A	N/A	N/A	\$ 1,339,141	\$ 1,339,141
Multi-Family	89	\$ 43.29	\$ 46,238	68,612	\$ 10.17	\$ 698,098	\$ 744,336	\$ 744,336
Mixed Use								
Combined Residential (2) / Light Commercial	1	\$ 267.14	\$ 3,206	N/A	N/A	N/A	\$ 3,206	\$ 3,206
Combined Residential/Light Commercial	5	\$ 121.84	\$ 7,311	N/A	N/A	N/A	\$ 7,311	\$ 7,311
Non-Residential								
Light Commercial	245	\$ 43.29	\$ 127,285	33,308	\$ 10.95	\$ 364,790	\$ 492,075	\$ 492,075
Heavy Commercial	34	\$ 43.29	\$ 17,664	11,570	\$ 23.39	\$ 270,650	\$ 288,314	\$ 288,314
Sub-Total Inside City	1,512		\$ 1,540,845	113,489		\$1,333,537	\$ 2,874,382	\$ 2,874,382
Outside City:								
Residential								
Residential	2,448	\$ 79.60	\$ 2,338,359	N/A	N/A	N/A	\$ 2,338,359	\$ 2,338,359
Multi-Family	26	\$ 43.29	\$ 13,508	65,333	\$ 7.00	\$ 457,207	\$ 470,715	\$ 470,715
Mixed Use								
Combined Residential/Light Commercial	2	\$ 75.56	\$ 1,813	N/A	N/A	N/A	\$ 1,813	\$ 1,813
Non-Residential								
Light Commercial	81	\$ 43.29	\$ 42,082	15,639	\$ 7.78	\$ 121,608	\$ 163,690	\$ 163,690
Heavy Commercial	5	\$ 43.29	\$ 2,598	3,523	\$ 20.22	\$ 71,217	\$ 73,815	\$ 73,815
Sub-Total Outside City	2,562		\$ 2,398,360	84,495		\$ 650,032	\$ 3,048,392	\$ 3,048,392
Monitored:								
Industrial Pretreatment	1	\$ 43.29	\$ 520	26,926	\$ 4.62	\$ 124,472	\$ 124,992	\$ 124,992
Sub-Total Monitored	1		\$ 520	26,926		\$ 124,472	\$ 124,992	\$ 124,992
Total	4,075		\$ 3,939,724	224,910		\$ 2,108,042	\$ 6,047,766	\$ 6,047,766



Section 4 – Proposed Test Year Rates

4.1 General

The methodology used to calculate the recommended sewer rates proposed herein involves applying the projected customer units of service to the user rates developed in the preceding COS and rate analysis to calculate the estimated revenues that would be generated. Then, these projected revenues are compared to the estimated Test Year Revenue Requirements, and the sewer rates are adjusted on a percentage basis as necessary until the revenues generated are sufficient to meet the revenue needs of the sewer utility system.

When reviewing potential rate structure options in conjunction with the need for additional revenues, it was determined that revenue adjustments are needed, and the existing rate structure needs to be adjusted based on the COS analysis. The proposed sewer rates for the Test Year are provided again in **Table 14**.

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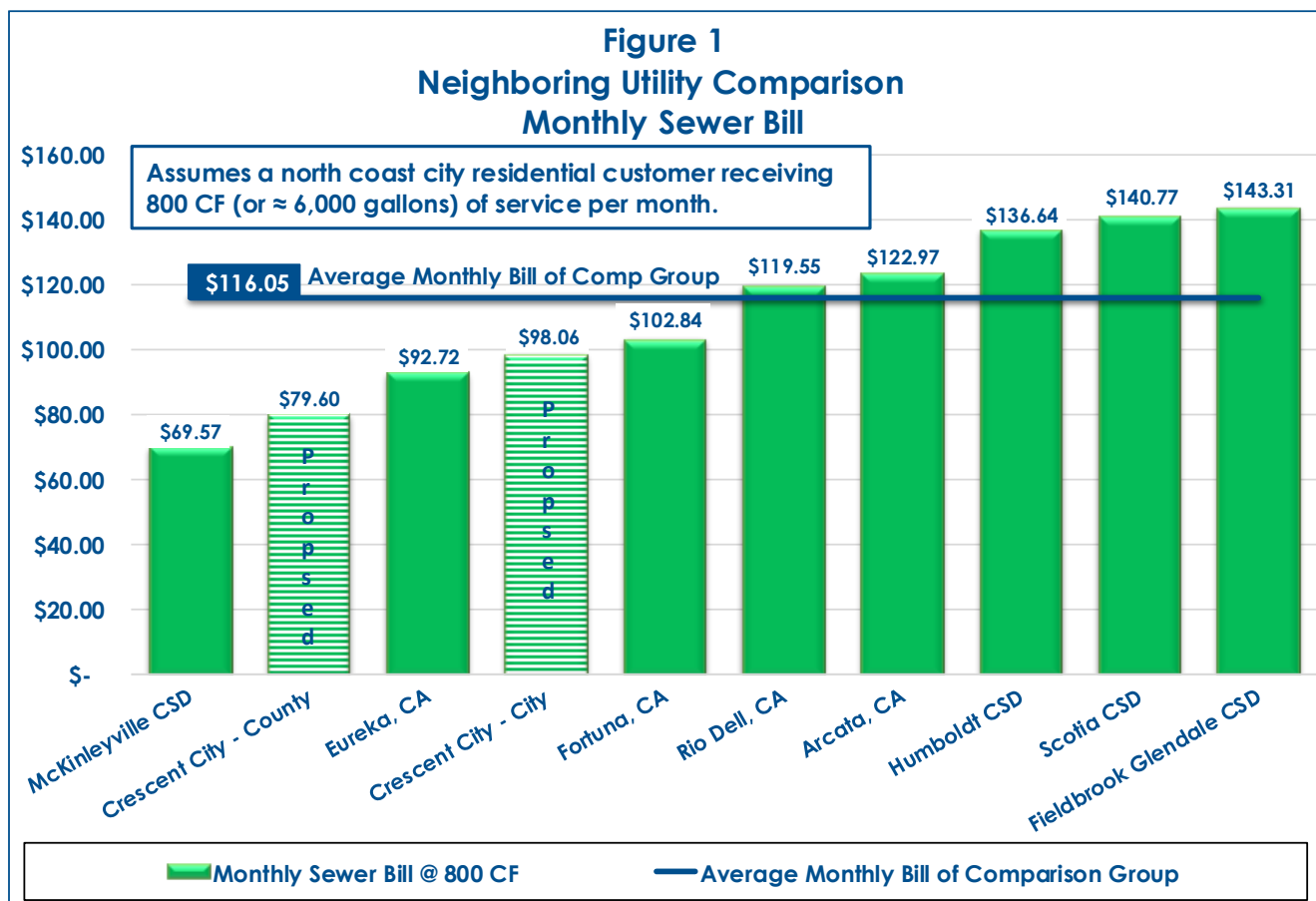
Table 14 – Proposed Monthly Sewer Rates

Description	Proposed Rate
Monthly Fixed Charge: Inside ^[1]	
Residential Flat Rate	\$ 98.06
Multi-Family	\$ 43.29
Light Commercial	\$ 43.29
Heavy Commercial	\$ 43.29
Combined Residential/Light Commercial (Mixed Use)	\$ 121.84
Combined Residential (2) / Light Commercial (Mixed Use)	\$ 267.14
Industrial Pretreatment	\$ 43.29
Volumetric Rates Per 100 Cubic Feet (CCF): Inside ^[2]	
Residential Flat Rate	\$ -
Multi-Family	\$ 10.17
Light Commercial	\$ 10.95
Heavy Commercial	\$ 23.39
Combined Residential/Light Commercial (Mixed Use)	\$ -
Combined Residential (2) / Light Commercial (Mixed Use)	\$ -
Industrial Pretreatment	\$ 4.62
Monthly Fixed Charge: Outside ^{[1] [3]}	
Residential Flat Rate	\$ 79.60
Multi-Family	\$ 43.29
Light Commercial	\$ 43.29
Heavy Commercial	\$ 43.29
Combined Residential/Light Commercial (Mixed Use)	\$ 75.56
Volumetric Rates Per 100 Cubic Feet (CCF): Outside ^{[2] [3]}	
Residential Flat Rate	\$ -
Multi-Family	\$ 7.00
Light Commercial	\$ 7.78
Heavy Commercial	\$ 20.22
Combined Residential/Light Commercial (Mixed Use)	\$ -
Notes:	
[1] All "Residential" and "Mixed Use" customers only pay a monthly flat fee regardless of usage.	
[2] Under the existing rates, 500 cubic feet of usage is included in the monthly fixed charge. Therefore, customers who are billed for usage do not pay a volumetric rate per CCF until their usage exceeds 500 cubic feet. Under the proposed rates, usage is no longer included in the monthly fixed charge and customers will pay the volumetric rate per CCF for all usage.	
[3] County customers pay the City for treatment services only. Collection services are provided by and billed separately by the County.	



4.2 Rate Comparison with Other Utilities

To provide the City with additional insight and context regarding the proposed rate levels, the analysis includes a comparison of proposed inside City and outside City (County) user rates relative to the user rates imposed by other sewer utility systems located in the same region. A summary analysis is provided comparing the cost of monthly sewer service for both inside City and outside City (County) single-family residential customers calculated under the proposed rates of the City with those of the other utilities. The City's proposed outside City (County) single-family rates only reflect the costs of providing sewer treatment services since sewer collection services are provided by and billed separately by the CSA and are not reflected herein. The rates utilized for the other neighboring utilities shown in **Figure 1** were in effect as of August 2025 and are exclusive of local taxes, outside surcharges, franchise fees, regulatory fees, or other rate adjustments. A summary comparison with other utilities for a single-family residential customer receiving 800 cubic feet of service per monthly billing is illustrated in **Figure 1**.





It should be noted that when making comparisons of sewer service with other sewer providers, several factors affect the level of rates and charges. Such factors may include:

- Terms of wholesale service agreements;
- Time since last rate update for comparison providers;
- Level of treatment and effluent disposal methods of sewer service;
- Anticipated capital improvement programs and capital financing methods;
- Plant capacity utilization, age of facilities, and assistance in construction by federal or state grants, connection fees, developer contributions, etc.;
- General Fund and/or administrative fee transfers made by other systems which may account for differences in the level of rates charged; and
- Bond covenants and funding requirements of the rates.

For the utilities included in the rate comparison, no analysis has been carried out with consideration of the above-mentioned factors as they relate to the reported sewer rates currently being charged.

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Section 5 – Projected Operating Results

5.1 General

As a conclusion to the study, a pro-forma operating statement is developed for the sewer system. The statement summarizes the projected financial results based on the system's revenues, expenses and other Revenue Requirements anticipated in future years.

The individual operating statements cover the 5-fiscal year Projection Period through June 30, 2031, and are prepared on a cash-flow basis. In addition, the pro-forma statement includes the applicable annual percentage rate adjustments necessary to meet the projected Revenue Requirements. The following discussions describe the development of the major components of the projected operating results.

5.2 Projected User Rate Revenues

The user rate and charge revenues are estimated by applying the existing and proposed rates to the projected customer units of service. The resulting revenues are then compared to the projected Revenue Requirements (i.e., O&M expenses, debt service, capital outlay, CIP, transfers, etc.) in each fiscal year to determine if the revenues are sufficient to satisfy the expenditure needs of the system. To the extent that there are revenue shortfalls in any given year of the Projection Period, the sewer rates developed from the COS and Rate analysis outlined previously in **Section 3** of this Report are adjusted on a percentage basis, as necessary, to generate the required level of revenues. The projected sewer user rate revenues are provided in **Table 15**.



Table 15 – Projected User Rate Revenues

System	Existing	Proposed	Projected for Fiscal Year Ending June 30			
	2027	2027	2028	2029	2030	2031
Inside City:						
Residential						
Residential	\$ 1,033,806	\$ 1,339,141	\$ 1,514,476	\$ 1,621,376	\$ 1,720,965	\$ 1,816,384
Multi-Family	\$ 574,519	\$ 744,336	\$ 837,378	\$ 891,807	\$ 940,856	\$ 987,901
Mixed Use						
Combined Residential (2) / Light Commercial	\$ 3,735	\$ 3,206	\$ 3,606	\$ 3,841	\$ 4,052	\$ 4,255
Combined Residential/Light Commercial	\$ 5,643	\$ 7,311	\$ 8,224	\$ 8,759	\$ 9,241	\$ 9,703
Non-Residential						
Light Commercial	\$ 379,848	\$ 492,075	\$ 553,586	\$ 589,569	\$ 621,994	\$ 653,092
Heavy Commercial	\$ 222,551	\$ 288,314	\$ 324,352	\$ 345,435	\$ 364,435	\$ 382,657
Sub-Total Inside City	\$ 2,220,101	\$ 2,874,382	\$ 3,241,622	\$ 3,460,787	\$ 3,661,543	\$ 3,853,992
Outside City:						
Residential						
Residential	\$ 1,805,384	\$ 2,338,359	\$ 2,641,400	\$ 2,824,535	\$ 2,991,959	\$ 3,154,235
Multi-Family	\$ 363,362	\$ 470,715	\$ 529,555	\$ 563,975	\$ 594,995	\$ 624,744
Mixed Use						
Combined Residential/Light Commercial	\$ 1,400	\$ 1,813	\$ 2,040	\$ 2,173	\$ 2,292	\$ 2,407
Non-Residential						
Light Commercial	\$ 126,368	\$ 163,690	\$ 184,151	\$ 196,121	\$ 206,908	\$ 217,253
Heavy Commercial	\$ 56,980	\$ 73,815	\$ 83,041	\$ 88,438	\$ 93,303	\$ 97,969
Sub-Total Outside City	\$ 2,353,495	\$ 3,048,392	\$ 3,440,187	\$ 3,675,242	\$ 3,889,457	\$ 4,096,608
Monitored:						
Industrial Pretreatment	\$ 96,458	\$ 124,992	\$ 140,615	\$ 149,755	\$ 157,992	\$ 165,892
Sub-Total Monitored	\$ 96,458	\$ 124,992	\$ 140,615	\$ 149,755	\$ 157,992	\$ 165,892
Total	\$ 4,670,054	\$ 6,047,766	\$ 6,822,424	\$ 7,285,784	\$ 7,708,992	\$ 8,116,492

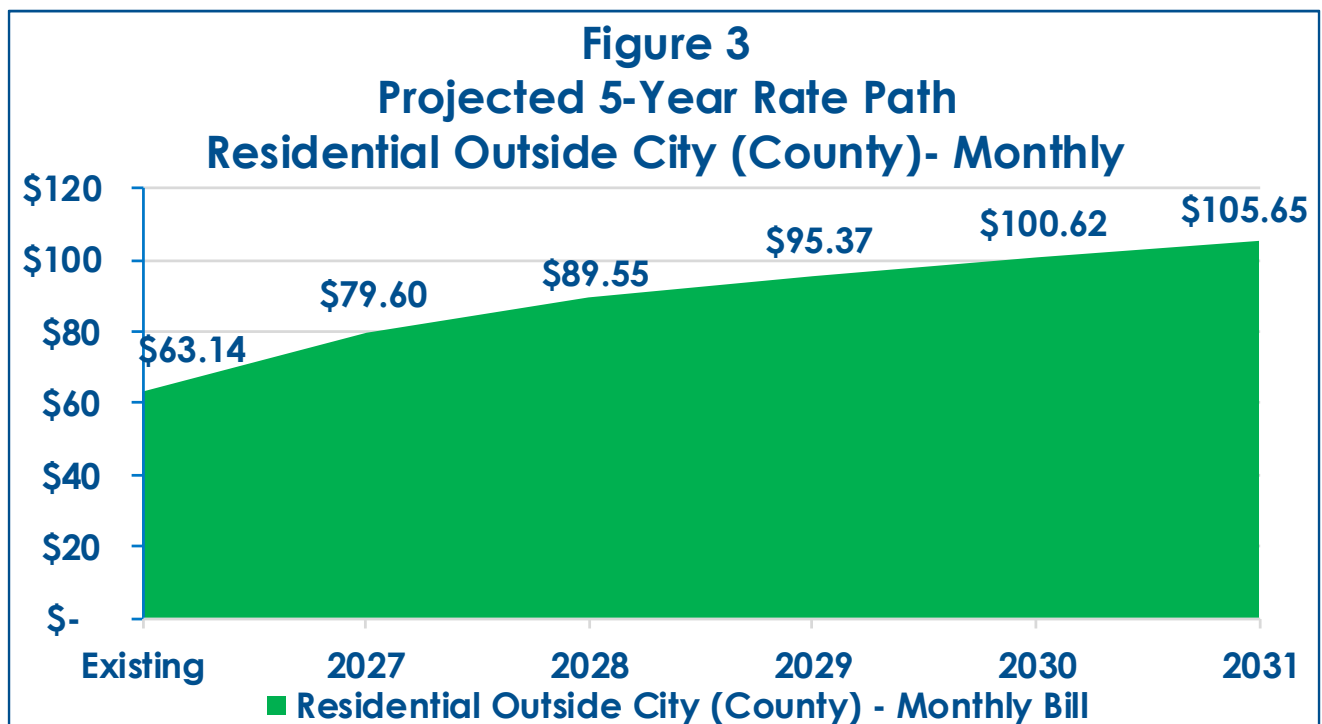
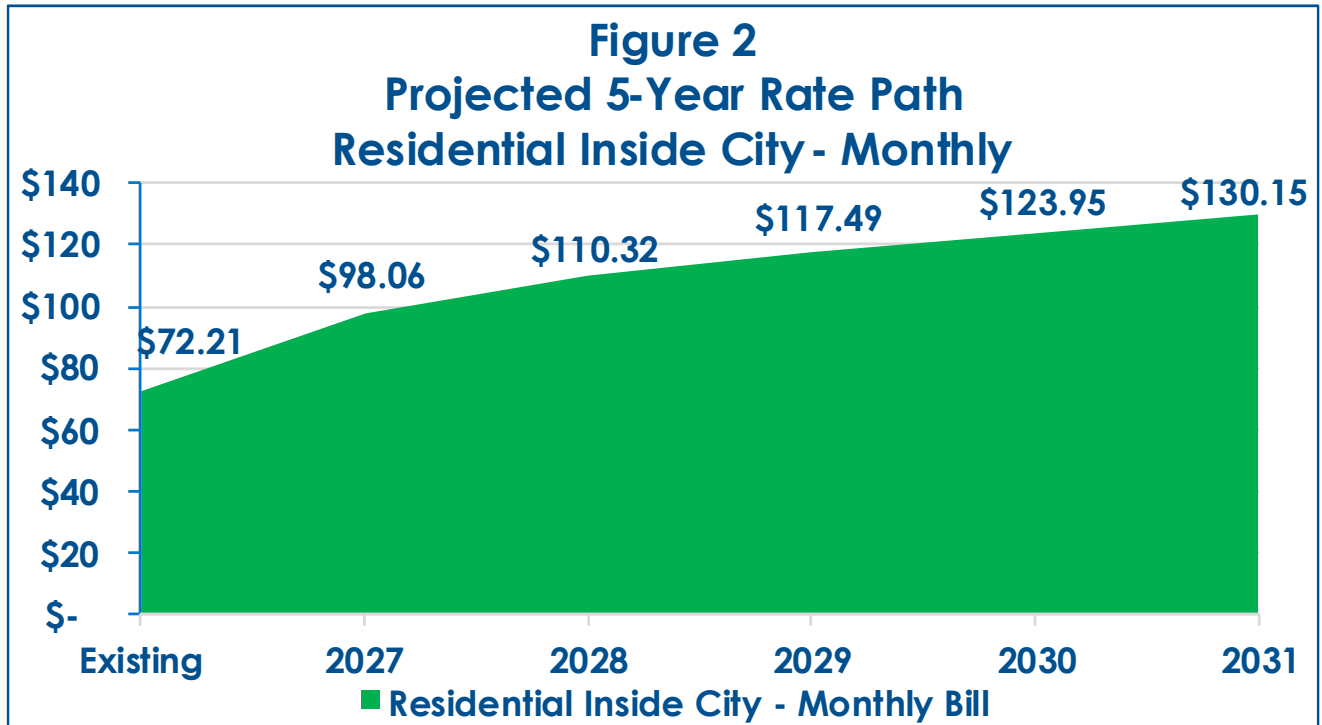
The projected revenues include the annual sewer rate adjustments anticipated for the remaining years of the Projection Period beyond the Test Year. The proposed user rates, from which the projected operating results are developed for the entire 5-fiscal year Projection Period are provided in **Table 16**. The rates identified in the proceeding table reflect the cost of providing service to individual customer classes based on the types of customers being served, metered/billable flows, and strength characteristics.



Table 16 – Proposed Monthly Sewer Rates

Description	Existing Rates	Projected for Fiscal Year Ending June 30				
		2027	2028	2029	2030	2031
Monthly Fixed Charge: Inside ^[1]						
Residential Flat Rate	\$ 72.21	\$ 98.06	\$ 110.32	\$ 117.49	\$ 123.95	\$ 130.15
Multi-Family	\$ 41.90	\$ 43.29	\$ 48.71	\$ 51.87	\$ 54.73	\$ 57.46
Light Commercial	\$ 44.75	\$ 43.29	\$ 48.71	\$ 51.87	\$ 54.73	\$ 57.46
Heavy Commercial	\$ 70.10	\$ 43.29	\$ 48.71	\$ 51.87	\$ 54.73	\$ 57.46
Combined Residential/Light Commercial (Mixed Use)	\$ 116.96	\$ 121.84	\$ 137.07	\$ 145.98	\$ 154.01	\$ 161.71
Combined Residential (2) / Light Commercial (Mixed Use)	\$ 189.17	\$ 267.14	\$ 300.53	\$ 320.06	\$ 337.66	\$ 354.55
Industrial Pretreatment	\$ 72.21	\$ 43.29	\$ 48.71	\$ 51.87	\$ 54.73	\$ 57.46
Volumetric Rates Per 100 Cubic Feet (CCF): Inside ^[2]						
Residential Flat Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Multi-Family	\$ 8.38	\$ 10.17	\$ 11.45	\$ 12.19	\$ 12.86	\$ 13.50
Light Commercial	\$ 8.95	\$ 10.95	\$ 12.32	\$ 13.12	\$ 13.84	\$ 14.54
Heavy Commercial	\$ 14.02	\$ 23.39	\$ 26.32	\$ 28.03	\$ 29.57	\$ 31.05
Combined Residential/Light Commercial (Mixed Use)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Combined Residential (2) / Light Commercial (Mixed Use)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Industrial Pretreatment	\$ 2.00	\$ 4.62	\$ 5.20	\$ 5.54	\$ 5.84	\$ 6.14
Monthly Fixed Charge: Outside ^{[1] [3]}						
Residential Flat Rate	\$ 63.14	\$ 79.60	\$ 89.55	\$ 95.37	\$ 100.62	\$ 105.65
Multi-Family	\$ 36.75	\$ 43.29	\$ 48.71	\$ 51.87	\$ 54.73	\$ 57.46
Light Commercial	\$ 39.60	\$ 43.29	\$ 48.71	\$ 51.87	\$ 54.73	\$ 57.46
Heavy Commercial	\$ 64.90	\$ 43.29	\$ 48.71	\$ 51.87	\$ 54.73	\$ 57.46
Combined Residential/Light Commercial (Mixed Use)	\$ 102.74	\$ 75.56	\$ 85.00	\$ 90.53	\$ 95.50	\$ 100.28
Volumetric Rates Per 100 Cubic Feet (CCF): Outside ^{[2] [3]}						
Residential Flat Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Multi-Family	\$ 7.35	\$ 7.00	\$ 7.87	\$ 8.38	\$ 8.85	\$ 9.29
Light Commercial	\$ 7.92	\$ 7.78	\$ 8.75	\$ 9.32	\$ 9.83	\$ 10.32
Heavy Commercial	\$ 12.98	\$ 20.22	\$ 22.74	\$ 24.22	\$ 25.55	\$ 26.83
Combined Residential/Light Commercial (Mixed Use)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Notes:						
[1] All "Residential" and "Mixed Use" customers only pay a monthly flat fee regardless of usage.						
[2] Under the existing rates, 500 cubic feet of usage is included in the monthly fixed charge. Therefore, customers who are billed for usage do not pay a volumetric rate per CCF until their usage exceeds 500 cubic feet. Under the proposed rates, usage is no longer included in the monthly fixed charge and customers will pay the volumetric rate per CCF for all usage.						
[3] County customers pay the City for treatment services only. Collection services are provided by and billed separately by the County.						

The projected user rates provided herein for the periods beyond the Test Year are intended for strategic planning purposes, and to provide the City with the estimated future rates that may be needed to satisfy the projected cash flow requirements. The rates are developed in accordance with the assumed customer, flow, expenditure, and revenue estimates projected in this rate study. It is important to note that, since it is necessary to utilize numerous assumptions to develop the projected operating results, to the extent that actual customers, flows and/or system expenditures differ from those assumed herein, additional rate adjustments may be required. For informative purposes, the monthly bill for both inside city and outside city (county) residential customers based on the projected rates for each fiscal year of the Projection Period is included herein. As explained in previous sections of the Report, outside city (county) customer bills only reflect the City's costs of providing sewer treatment services since sewer collection services are provided by and billed separately by the CSA, which is a separate entity from the City. An illustration of the projected bill path for both an inside city and outside city (county) residential customer are provided in **Figures 2** and **3**, respectively.





5.3 Debt Service Coverage

The sewer operating statement also includes a calculation of the annual debt service coverage. Debt service coverage is generally viewed as an indicator of the financial strength of the utility. The debt service coverage ratio is broadly calculated by dividing the net revenues by the annual debt service requirement. For the purposes of the debt service coverage calculation developed herein, the net revenues consist of the total operating revenues (user rate revenues plus other revenues) less O&M expenses. It is important to note that the coverage results are provided for informative purposes only and are not intended as a legally supportable calculation for representation to bondholders. The debt service coverage for the sewer system over the projection period is provided in **Table 17**.

Table 17 –Sewer Utility System Projected Debt Service Coverage Ratio

Fiscal Year	Sewer Utility Projected
2027	1.02
2028	1.35
2027	1.49
2030	1.61
2031	1.70

5.4 Summary of Projected Operating Results

The cash-flow statement outlining the projected operating results is summarized in **Table 18** for the sewer system. The results demonstrate that the proposed rates and charges along with the other system revenues are anticipated to be sufficient to satisfy the projected Revenue Requirements and capital needs of the utility system. To see the full cash-flow statement for the Projection Period, please refer to **Appendix C**.



Table 18 – Sewer System Projected Operating Results - Proposed Rates (\$1,000s)

Description	Projected for Fiscal Year Ending June 30				
	Proposed 2027	2028	2029	2030	2031
Revenues:					
Sewer Sales	\$ 6,048	\$ 6,822	\$ 7,286	\$ 7,709	\$ 8,116
Other Revenues	669	679	689	700	711
Total Revenues	\$ 6,717	\$ 7,501	\$ 7,975	\$ 8,409	\$ 8,828
O&M Expenses	(4,993)	(5,212)	(5,442)	(5,682)	(5,934)
Net Income Available For Debt Service	\$ 1,723	\$ 2,289	\$ 2,533	\$ 2,727	\$ 2,894
Debt Service:					
Existing	\$ 1,698	\$ 1,698	\$ 1,698	\$ 1,698	\$ 1,698
Future	-	-	-	-	-
Total Debt Service	\$ 1,698	\$ 1,698	\$ 1,698	\$ 1,698	\$ 1,698
Debt Service Coverage Ratio	1.02	1.35	1.49	1.61	1.70
Balance After Debt	\$ 26	\$ 591	\$ 836	\$ 1,029	\$ 1,196
Other Expenditures & Transfers:					
Capital Outlay	\$ -	\$ -	\$ -	\$ -	\$ -
Transfers In	\$ 194	\$ 194	\$ 194	\$ 194	\$ 194
Transfers Out	\$ (72)	\$ (74)	\$ (76)	\$ (79)	\$ (81)
Total Other Expenditures & Transfers	\$ 122	\$ 120	\$ 118	\$ 115	\$ 113
Net Results	\$ 148	\$ 711	\$ 953	\$ 1,145	\$ 1,309
Fund Balance Activity:					
O&M Fund Balance (413)					
Beginning Fund Balance	\$ 2,359	\$ 2,462	\$ 2,570	\$ 2,684	\$ 2,802
Deposit/(Withdrawal) from Operations	148	711	953	1,145	1,309
Transfer from/(to) Capital Fund	(45)	(603)	(840)	(1,026)	(1,185)
Ending Fund Balance	\$ 2,462	\$ 2,570	\$ 2,684	\$ 2,802	\$ 2,926
Days Cash on Hand	180	180	180	180	180
Capital Reserve (913)					
Beginning Fund Balance	\$ 2,057	\$ 1,314	\$ 466	\$ 336	\$ 782
Transfer from/(to) O&M Fund	45	603	840	1,026	1,185
Capital Projects From Capital Improvement Plan	(788)	(1,452)	(970)	(580)	(993)
Ending Fund Balance	1,314	466	336	782	974
Total Ending Fund Balance	\$ 3,777	\$ 3,036	\$ 3,019	\$ 3,584	\$ 3,900



Section 6 – Conclusions and Recommendations

6.1 Disclaimers

6.1.1 General Disclaimer

In the development of the proposed user rates and charges, certain historical reviews and analyses have been performed, together with the application of assumptions based on prudent financial, operational, and ratemaking relationships. The cost criteria and customer usage characteristics associated with general ratemaking procedures are representative of averages and are not intended as indicators of any individual customer.

In the preparation of the rate study, certain assumptions have been made with respect to conditions that may occur in the future. While it is believed that these assumptions are reasonable for the purpose of this update, they are dependent upon future events and actual conditions may differ from those assumed. In addition, the study has used and relied upon certain information that was provided by other parties not associated with Willdan. Such information includes, among other things, the City's audited financial statements, annual operating budgets, periodic reports, and other information and data provided by the City, its independent auditors, and other sources. While the sources are believed to be reliable, there has been no independent verification of the information, and no assurances are offered with respect thereto. To the extent that future conditions differ from those assumed herein or provided by others, the actual results may vary from those projected.

6.1.2 Municipal Advisory Disclaimer

Unless the City of Crescent City, California (the "City") has a written engagement from Willdan Financial Services ("Willdan") for municipal advisory services, Willdan is not advising or recommending any action be taken by the recipient of this information with respect to any prospective, new, or existing municipal financial products or issuance of municipal securities (including with respect to the structure, timing, terms and other similar matters concerning such financial products or issues). The City shall discuss any such information and material contained in Willdan's work product with all internal and/or external advisors and experts, including its own municipal advisor, that it deems appropriate before acting on the information and material.

For the avoidance of doubt and without limiting the foregoing, in connection with any revenue projections, cash-flow analyses, feasibility studies and/or other analyses Willdan may provide the City with respect to financial, economic or other matters relating to a prospective, new or existing issuance of municipal securities of the City, (A) any such projections, studies and analyses shall be based upon assumptions, opinions or views (including, without limitation, any assumptions related to revenue growth) established by the City, in conjunction with such of its municipal, financial, legal and other advisers as it deems appropriate; and (B) under no circumstances shall Willdan be asked to provide, nor shall it



provide, any advice or recommendations or subjective assumptions, opinions or views with respect to the actual or proposed structure, terms, timing, pricing or other similar matters with respect to any municipal financial products or municipal securities issuances, including any revisions or amendments thereto.

6.2 Conclusions

As previously addressed, the purpose of this study is to provide a review of the City's existing utility rates to determine if rate adjustments are necessary to meet the budgeted and/or projected financial needs in future years. This Report is the result of the collaborative efforts of representatives from both the City and Willdan. City staff were diligent and cooperative in their efforts to ensure the availability and quality of source data on financial and operating matters. Based on the reviews, analyses and assumptions discussed herein, it is concluded that:

1. The proposed user rates and charges are anticipated to generate sufficient revenues to meet the Revenue Requirements of the system based upon the projected expenditures, capital project timing and costs, transfers, and billable customer units estimated for the Test Year. The proposed rates are based on an assumed implementation date of July 1, 2026. To the extent that the implementation date varies from the assumed implementation date, additional rate adjustments and/or appropriations from existing reserves may be necessary.
2. The estimated revenues and resulting rate adjustments for the remaining years of the Projection Period beyond the Test Year are developed based on the customer growth assumptions generated from the historical analyses and discussions with City staff.
3. Customer growth for the sewer system is projected based on historical customer data as provided by the City as well as discussions with the City staff regarding development activity and anticipated construction. If it turns out that the customer growth assumptions are not realized, the resulting revenues could be different than projected.
4. Future capital improvement projects are assumed to occur as reported by the City in its CIP. To the extent that the timing of such projects may change from that estimated herein, the cost of such projects and resulting impact on future rates and charges may vary from those indicated.



-
5. The proposed rates and rate structure are consistent with industry standards for rate-setting practices, comply with Proposition 218 and conform to the City's financial policies with respect to:
 - a. Equitably recovering costs;
 - b. Being based upon the proportionate cost of providing services; and
 - c. Generating sufficient revenue to recover system Revenue Requirements, meet debt service coverage requirements, fund capital needs, and meet reserve requirements.

6.3 Recommendations

Based on the reviews, analyses and assumptions addressed herein, as well as the resulting conclusions provided above, it is respectfully recommended that the City:

1. Adopt the proposed sewer rates.
2. Enact the proposed rates to become effective as of July 1, 2026 (or other such date as determined by the City). Based on the timing of the project and the required public hearing procedures and noticing requirements, it is expected that the proposed rates will become effective on the recommended date.
3. Readdress the COS analysis portion of this study every three to five years to ensure costs are recovered consistently with COS principles and customer characteristics.

We appreciate the opportunity to be of service to the City in this engagement. In addition, we would like to thank City staff for the valuable assistance provided during the completion of the rate study.

Respectfully Yours,

WILLDAN FINANCIAL SERVICES

City of Crescent City, CA

Comprehensive Sewer Utility Rate Study

Appendices

A	Revenue Requirement for User Rates
B	Sewer Cost-of-Service Analysis
C	5-Year Financial Projections



City of Crescent City, CA

Comprehensive Sewer Utility Rate Study

Appendix A

Revenue Requirement for
User Rates



APPENDIX - A
CITY OF CRESCENT CITY, CA
DEVELOPMENT OF RATE REVENUE REQUIREMENTS - SEWER

Line	Description	[A]	[B]	[C]=[A]*[B]
		Test Year Rate Revenue Requirement		
		FY 2027	% to Sewer	Sewer
1	Total Operating Revenues	\$ 6,716,781		\$ 6,716,781
	Less:			
	Other Revenues			
2	Interest Income	\$ 100,000	100%	\$ 100,000
3	Other Revenue: NSF	800	100%	800
4	Other Revenue: Late Fee	22,000	100%	22,000
5	Other Revenue: Account Setup	5,000	100%	5,000
6	Sewer Connections	200,000	100%	200,000
7	Lab Test Revenue	62,400	100%	62,400
8	CSA Sewer Lift Station Revenue	278,815	100%	278,815
9	Total Other Revenues	\$ 669,015		\$ 669,015
10	Total Rate Revenue Requirement	\$ 6,047,766	100%	\$ 6,047,766

City of Crescent City, CA

Comprehensive Sewer Utility Rate Study

Appendix B

Sewer Cost-of-Service Analysis



APPENDIX - B

CITY OF CRESCENT CITY, CA

ALLOCATION OF TEST YEAR COSTS TO SEWER FUNCTION

Test Year Revenue Requirement		
Line	Expense Group	FY 2027
1	Collection	\$ 804,006
2	Treatment	2,395,435
3	Administration	1,775,392
4	Customer Service	18,492
5	Transfers	72,100
6	Existing Debt	1,697,663
7	New Debt	-
8	CIP	787,500
9	Total	\$ 7,550,588

APPENDIX - B

CITY OF CRESCENT CITY, CA

SEWER CUSTOMER & STENGTH CHARACTERISTICS BY CUSTOMER CLASS - TEST YEAR FY 2027

Line	Description	Total Customers	CCF Flow	BOD Factor ^[1]	BOD Pounds	TSS Factor ^[1]	TSS Pounds
Inside City:							
Residential							
1	Residential ^[2]	1,138	73,507.95	225	103,177	225	103,177
2	Multi-Family	89	68,611.92	225	96,305	225	96,305
Mixed Use							
3	Combined Residential (2) / Light Commercial	1	264.00	225	371	225	371
4	Combined Residential/Light Commercial	5	463.20	225	650	225	650
Non-Residential							
5	Light Commercial	245	33,307.56	250	51,946	250	51,946
6	Heavy Commercial	34	11,569.56	650	46,914	650	46,914
7	Sub-Total Inside City	1,512	187,724.19		299,363		299,363
Outside City:							
Residential							
8	Residential ^[2]	2,448	152,404.16	225	213,918	225	213,918
9	Multi-Family	26	65,332.80	225	91,703	225	91,703
Mixed Use							
10	Combined Residential/Light Commercial	2	110.64	225	155	225	155
Non-Residential							
11	Light Commercial	81	15,639.48	250	24,391	250	24,391
12	Heavy Commercial	5	3,522.66	650	14,284	650	14,284
13	Sub-Total Outside City	2,562	237,009.74		344,451		344,451
Monitored:							
14	Industrial Pretreatment	1	26,926.08	47	7,895	46	7,727
15	Sub-Total Monitored	1	26,926.08		7,895		7,727
16	Total	4,075	451,660.01		651,708		651,540

Notes:

- [1] Average strength factors for BOD and TSS are based on the State Water Resources Control Board Revenue Program Guidelines, Appendix G. For the "Monitored" customer class, sewer sample results gathered and provided by the City were utilized to determine BOD and TSS Strength Factors.
- [2] Annual sewer flows for single family residential customers were calculated by taking the average winter consumption for the lowest three months of water consumption data provided to determine the factor of winter average usage compared to the total annual average monthly water usage. This factor was then applied to the projected monthly average "Test Year" water consumption to determine the "Test Year" annual sewer flows.

APPENDIX - B
CITY OF CRESCENT CITY, CA
ALLOCATION OF SEWER COSTS - TEST YEAR FY 2027

Line	Description	Test Year Sewer Costs	Volume	Capacity	Strength - BOD	Strength - TSS	Customer	Administration	Total (Check)
Allocation Factors:									
1	Treatment		0.00%	0.00%	50.01%	49.99%	0.00%	0.00%	100.00%
2	Collection		50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	100.00%
3	Administration		0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
4	Customer Service		0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%
5	Transfers Out		0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
6	CIP		3.00%	3.00%	47.00%	47.00%	0.00%	0.00%	100.00%
7	Existing Debt		0.00%	0.00%	27.11%	27.11%	0.00%	45.78%	100.00%
8	New Debt		0.00%	0.00%	27.11%	27.11%	0.00%	45.78%	100.00%
Allocation of Costs:									
9	Treatment	\$ 2,395,435	\$ -	\$ -	\$ 1,197,874	\$ 1,197,561	\$ -	\$ -	\$ 2,395,435
10	Collection	804,006	402,003	402,003	-	-	-	-	804,006
11	Administration	1,775,392	-	-	-	-	-	1,775,392	1,775,392
12	Customer Service	18,492	-	-	-	-	18,492	-	18,492
13	Transfers Out	72,100	-	-	-	-	-	72,100	72,100
14	CIP	787,500	23,625	23,625	370,125	370,125	-	-	787,500
15	Existing Debt	1,697,663	-	-	460,236	460,236	-	777,191	1,697,663
16	New Debt	-	-	-	-	-	-	-	-
17	Non-Rate Rev & Fund Balance	(1,502,822)	(84,714)	(84,714)	(403,687)	(403,625)	(3,681)	(522,400)	(1,502,822)
18	Total	\$ 6,047,766	\$ 340,914	\$ 340,914	\$ 1,624,548	\$ 1,624,297	\$ 14,811	\$ 2,102,282	\$ 6,047,766
Total Units of Service									
			214,650	214,650	651,708	651,540	4,075	4,075	
Units									
			CCF ^[1]	CCF ^[1]	Pounds	Pounds	Customers /Monthly	Customers /Monthly	
Cost Per Unit									
			\$ 1.59	\$ 1.59	\$ 2.49	\$ 2.49	\$ 0.30	\$ 42.99	
Notes:									
[1] Since the CSA directly provides sewer collection and conveyance services to outside city customers, their collection costs are handled by the county through their annual CSA tax payment and the County is paid directly for these costs. Therefore, these units are excluded when developing the "Cost Per Unit", so that the "Cost Per Unit" only reflects the collection costs attributable to providing sewer collection and conveyance services to inside city customers. The City is not involved in, nor does the City have any control over the sewer collection rates set by the CSA. The City only bills CSA customers for the treatment services they provide to the CSA.									

APPENDIX - B

CITY OF CRESCENT CITY, CA

SEWER COST OF SERVICE BY COST COMPONENT AND CUSTOMER CLASS - TEST YEAR FY 2027

Line	Description	[A]	[B]	[C]	[D]	[E]	[F]	[G]
		Volume	Capacity	Strength - BOD	Strength - TSS	Customer	Administration	Total
Inside City:								
Residential								
1	Residential	\$ 116,747	\$ 116,747	\$ 257,196	\$ 257,222	\$ 4,136	\$ 587,091	\$ 1,339,141
2	Multi-Family	108,971	108,971	240,065	240,090	323	45,915	744,336
Mixed Use								
3	Combined Residential (2) / Light Commercial	419	419	924	924	4	516	3,206
4	Combined Residential/Light Commercial	736	736	1,621	1,621	18	2,579	7,311
Non-Residential								
5	Light Commercial	52,900	52,900	129,488	129,501	891	126,395	492,075
6	Heavy Commercial	18,375	18,375	116,944	116,956	124	17,541	288,314
7	Sub-Total Inside City	\$ 298,149	\$ 298,149	\$ 746,237	\$ 746,314	\$ 5,496	\$ 780,037	\$ 2,874,382
Outside City:								
Residential								
8	Residential	\$ -	\$ -	\$ 533,244	\$ 533,300	\$ 8,898	\$ 1,262,917	\$ 2,338,359
9	Multi-Family	-	-	228,592	228,616	95	13,413	470,715
Mixed Use								
10	Combined Residential/Light Commercial	-	-	387	387	7	1,032	1,813
Non-Residential								
11	Light Commercial	-	-	60,801	60,807	294	41,788	163,690
12	Heavy Commercial	-	-	35,607	35,610	18	2,579	73,815
13	Sub-Total Outside City	\$ -	\$ -	\$ 858,631	\$ 858,720	\$ 9,312	\$ 1,321,729	\$ 3,048,392
Monitored:								
14	Industrial Pretreatment	42,765	42,765	19,680	19,263	4	516	124,992
15	Sub-Total Monitored	\$ 42,765	\$ 42,765	\$ 19,680	\$ 19,263	\$ 4	\$ 516	\$ 124,992
16	Total	\$ 340,914	\$ 340,914	\$ 1,624,548	\$ 1,624,297	\$ 14,811	\$ 2,102,282	\$ 6,047,766

APPENDIX - B
CITY OF CRESCENT CITY, CA
SEWER RATE CALCULATION - TEST YEAR FY 2027

Line	Customer Class	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
		Fixed Rate Costs	Monthly Customers	Proposed Monthly Fixed Fee	Existing Monthly Fixed Fee	Monthly Fixed Fee Difference	Volumetric Rate Costs	Billable Annual Volume (CCF)	Proposed Volumetric Rate	Existing Volumetric Rate	Volumetric Rate Difference
Inside City:											
Residential											
1	Residential	\$ 1,339,141	1,138	\$ 98.06	\$ 72.21	\$ 25.85	N/A	N/A	N/A	N/A	N/A
2	Multi-Family	\$ 46,238	89	\$ 43.29	\$ 41.90	\$ 1.39	\$ 698,098	68,612	\$ 10.17	\$ 8.38	\$ 1.79
Mixed Use											
3	Combined Residential (2) / Light Commercial	\$ 3,206	1	\$ 267.14	\$ 189.17	\$ 77.97	N/A	N/A	N/A	N/A	N/A
4	Combined Residential/Light Commercial	\$ 7,311	5	\$ 121.84	\$ 116.96	\$ 4.88	N/A	N/A	N/A	N/A	N/A
Non-Residential											
5	Light Commercial	\$ 127,285	245	\$ 43.29	\$ 44.75	\$ (1.46)	\$ 364,790	33,308	\$ 10.95	\$ 8.95	\$ 2.00
6	Heavy Commercial	\$ 17,664	34	\$ 43.29	\$ 70.10	\$ (26.81)	\$ 270,650	11,570	\$ 23.39	\$ 14.02	\$ 9.37
7	Sub-Total Inside City	\$ 1,540,845	1,512				\$ 1,333,537	113,489			
Outside City:											
Residential											
8	Residential	\$ 2,338,359	2,448	\$ 79.60	\$ 63.14	\$ 16.46	N/A	N/A	N/A	N/A	N/A
9	Multi-Family	\$ 13,508	26	\$ 43.29	\$ 36.75	\$ 6.54	\$ 457,207	65,333	\$ 7.00	\$ 7.35	\$ (0.35)
Mixed Use											
10	Combined Residential/Light Commercial	\$ 1,813	2	\$ 75.56	\$ 102.74	\$ (27.18)	N/A	N/A	N/A	N/A	N/A
Non-Residential											
11	Light Commercial	\$ 42,082	81	\$ 43.29	\$ 39.60	\$ 3.69	\$ 121,608	15,639	\$ 7.78	\$ 7.92	\$ (0.14)
12	Heavy Commercial	\$ 2,598	5	\$ 43.29	\$ 64.90	\$ (21.61)	\$ 71,217	3,523	\$ 20.22	\$ 12.98	\$ 7.24
13	Sub-Total Outside City	\$ 2,398,360	2,562				\$ 650,032	84,495			
Monitored:											
14	Industrial Pretreatment	\$ 520	1	\$ 43.29	\$ 72.21	\$ (28.92)	\$ 124,472	26,926	\$ 4.62	\$ 2.00	\$ 2.62
15	Sub-Total Monitored	\$ 520	1				\$ 124,472	26,926			
16	Total	\$ 3,939,724	4,075				\$ 2,108,042	224,910			

APPENDIX - B

CITY OF CRESCENT CITY, CA

SEWER REVENUE VS COST OF SERVICE BY CUSTOMER CLASS CHECK - TEST YEAR FY 2027

Line	Customer Class	[A]	[B]	[C]=[A]*[B]*12	[D]	[E]	[F]=[D]*[E]	[G]=[C]+[F]	[H]	[I]=[H]-[G]
		Monthly Customers	Proposed Monthly Fixed Fee	Total Fixed Fee Revenue	Billable Annual Volume (CCF)	Proposed Volumetric Rate	Total Volumetric Revenues	Total Calculated Revenues	Total COS	Difference Calc vs COS
Inside City:										
Residential										
1	Residential	1,138	\$ 98.06	\$ 1,339,141	N/A	N/A	N/A	\$ 1,339,141	\$ 1,339,141	\$ -
2	Multi-Family	89	\$ 43.29	\$ 46,238	68,612	\$ 10.17	\$ 698,098	\$ 744,336	744,336	\$ -
Mixed Use										
3	Combined Residential (2) / Light Commercial	1	\$ 267.14	\$ 3,206	N/A	N/A	N/A	\$ 3,206	3,206	\$ -
4	Combined Residential/Light Commercial	5	\$ 121.84	\$ 7,311	N/A	N/A	N/A	\$ 7,311	7,311	\$ -
Non-Residential										
5	Light Commercial	245	\$ 43.29	\$ 127,285	33,308	\$ 10.95	\$ 364,790	\$ 492,075	492,075	\$ -
6	Heavy Commercial	34	\$ 43.29	\$ 17,664	11,570	\$ 23.39	\$ 270,650	\$ 288,314	288,314	\$ -
7	Sub-Total Inside City	1,512		\$ 1,540,845	113,489		\$ 1,333,537	\$ 2,874,382	\$ 2,874,382	\$ -
Outside City:										
Residential										
8	Residential	2,448	\$ 79.60	\$ 2,338,359	N/A	N/A	N/A	\$ 2,338,359	2,338,359	\$ -
9	Multi-Family	26	\$ 43.29	\$ 13,508	65,333	\$ 7.00	\$ 457,207	\$ 470,715	470,715	\$ -
Mixed Use										
10	Combined Residential/Light Commercial	2	\$ 75.56	\$ 1,813	N/A	N/A	N/A	\$ 1,813	1,813	\$ -
Non-Residential										
11	Light Commercial	81	\$ 43.29	\$ 42,082	15,639	\$ 7.78	\$ 121,608	\$ 163,690	163,690	\$ -
12	Heavy Commercial	5	\$ 43.29	\$ 2,598	3,523	\$ 20.22	\$ 71,217	\$ 73,815	73,815	\$ -
13	Sub-Total Outside City	2,562		\$ 2,398,360	84,495		\$ 650,032	\$ 3,048,392	\$ 3,048,392	\$ -
Monitored:										
14	Industrial Pretreatment	1	\$ 43.29	\$ 520	26,926	\$ 4.62	\$ 124,472	\$ 124,992	124,992	\$ -
15	Sub-Total Monitored	1		\$ 520	26,926		\$ 124,472	\$ 124,992	\$ 124,992	\$ -
16	Total	4,075		\$ 3,939,724	224,910		\$ 2,108,042	\$ 6,047,766	\$ 6,047,766	\$ -

City of Crescent City, CA

Comprehensive Sewer Utility Rate Study

Appendix C	5-Year Financial Projections
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CITY OF CRESCENT CITY, CA
SEWER SYSTEM
PROJECTED OPERATING RESULTS - SEWER

APPENDIX - C

Line	Description	Existing 2027	Proposed 2027	Projected for Fiscal Year Ending June 30			
				2028	2029	2030	2031
REVENUES							
Operating Revenues							
1	Sewer Service Charges	\$ 4,670,054	\$ 6,047,766	\$ 6,822,424	\$ 7,285,784	\$ 7,708,992	\$ 8,116,492
Other Operating Revenues							
2	Connection Fees	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
3	Miscellaneous Revenues	369,015	369,015	379,017	389,393	400,162	411,339
Other Non-Operating Revenues							
4	Interest	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
5	Total Revenues	\$ 5,339,069	\$ 6,716,781	\$ 7,501,441	\$ 7,975,177	\$ 8,409,154	\$ 8,827,831
Current Expenses							
6	Administration	\$ 140,983	\$ 140,983	\$ 146,634	\$ 152,521	\$ 158,652	\$ 165,040
7	Internal Service Support - Dept 110, 113 & 114	152,805	152,805	158,897	165,250	171,866	178,755
8	Econ Dev / Comm Supp / Grants	70,079	70,079	72,901	75,840	78,902	82,094
9	Finance	505,426	505,426	524,829	545,011	566,001	587,839
10	City Attorney	77,228	77,228	80,254	83,404	86,684	90,098
11	Sewer Lab	525,595	525,595	545,393	565,974	587,366	609,607
12	WWTP Operations	2,430,828	2,430,828	2,553,327	2,682,358	2,818,290	2,961,517
13	City Collection Systems Ops	522,800	522,800	542,013	561,966	582,690	604,213
14	County Collection Systems-All	281,206	281,206	291,294	301,759	312,620	323,893
15	WWTP Maintenance	286,375	286,375	296,853	307,730	319,013	330,722
16	Total Current Expenses	\$ 4,993,325	\$ 4,993,325	\$ 5,212,395	\$ 5,441,813	\$ 5,682,084	\$ 5,933,778
17	Income Available for Debt Service	\$ 345,744	\$ 1,723,456	\$ 2,289,046	\$ 2,533,364	\$ 2,727,070	\$ 2,894,053
DEBT SERVICE							
Parity Indebtedness							
18	SRF Loan Agreement	\$ 1,697,663	\$ 1,697,663	\$ 1,697,663	\$ 1,697,663	\$ 1,697,663	\$ 1,697,663
19	Total Parity Indebtedness	\$ 1,697,663	\$ 1,697,663	\$ 1,697,663	\$ 1,697,663	\$ 1,697,663	\$ 1,697,663
New Debt							
20	Sewer System Improvements - SRF Loan	-	-	-	-	-	-
21	Sewer System Improvements - Installment Debt	-	-	-	-	-	-
22	Sewer System Improvements - Revenue Bond	-	-	-	-	-	-
23	Total New Debt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	Total Indebtedness	\$ 1,697,663	\$ 1,697,663	\$ 1,697,663	\$ 1,697,663	\$ 1,697,663	\$ 1,697,663
25	Net Results of Operations	\$ (1,351,919)	\$ 25,793	\$ 591,383	\$ 835,701	\$ 1,029,407	\$ 1,196,390

CITY OF CRESCENT CITY, CA
SEWER SYSTEM
PROJECTED OPERATING RESULTS - SEWER

APPENDIX - C

Line	Description	Existing 2027	Proposed 2027	Projected for Fiscal Year Ending June 30			
				2028	2029	2030	2031
DEBT SERVICE COVERAGE							
<u>Income Available for Debt Service</u>							
	From Operations	\$ 345,744	\$ 1,723,456	\$ 2,289,046	\$ 2,533,364	\$ 2,727,070	\$ 2,894,053
	Total Income Available for Debt Service	\$ 345,744	\$ 1,723,456	\$ 2,289,046	\$ 2,533,364	\$ 2,727,070	\$ 2,894,053
<u>Debt Service Coverage - Total Indebtedness</u>							
	Calculated	0.20	1.02	1.35	1.49	1.61	1.70
	Targeted	1.50	1.50	1.50	1.50	1.50	1.50
26	Capital Outlay	-	-	-	-	-	-
27	Transfers In	194,074	194,074	194,074	194,074	194,074	194,074
28	Transfers Out	(72,100)	(72,100)	(74,263)	(76,491)	(78,786)	(81,150)
29	Net Results	\$ (1,229,945)	\$ 147,767	\$ 711,194	\$ 953,284	\$ 1,144,695	\$ 1,309,314
<u>RESERVE FUND BALANCE ACTIVITY</u>							
<u>O&M Fund Balance (413)</u>							
30	Beginning Fund Balance	\$ 2,359,275	\$ 2,359,275	\$ 2,462,462	\$ 2,570,496	\$ 2,683,634	\$ 2,802,124
31	Deposit/(Withdrawal) from Operations	(1,229,945)	147,767	711,194	953,284	1,144,695	1,309,314
32	Transfer from/(to) Capital Fund	1,333,131	(44,581)	(603,160)	(840,147)	(1,026,206)	(1,185,191)
33	Ending Fund Balance	\$ 2,462,462	\$ 2,462,462	\$ 2,570,496	\$ 2,683,634	\$ 2,802,124	\$ 2,926,247
34	Targeted Fund Balance	\$ 2,462,462	\$ 2,462,462	\$ 2,570,496	\$ 2,683,634	\$ 2,802,124	\$ 2,926,247
35	Variance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
36	Days Cash on Hand	180	180	180	180	180	180
37	Targeted Days Cash on Hand	180	180	180	180	180	180
<u>Capital Reserve (913)</u>							
38	Beginning Fund Balance	\$ 2,057,291	\$ 2,057,291	\$ 1,314,372	\$ 465,540	\$ 335,597	\$ 782,006
39	Transfer from/(to) O&M Fund	(1,333,131)	44,581	603,160	840,147	1,026,206	1,185,191
40	Cash Funded Capital Projects From CIP	(787,500)	(787,500)	(1,451,993)	(970,090)	(579,796)	(992,947)
41	Ending Fund Balance	\$ (63,340)	\$ 1,314,372	\$ 465,540	\$ 335,597	\$ 782,006	\$ 974,250
42	Total Fund Balance	\$ 2,399,122	\$ 3,776,834	\$ 3,036,036	\$ 3,019,231	\$ 3,584,129	\$ 3,900,497



27368 Via Industria, Suite 200
Temecula, CA 92590
800.755.6864 | Fax: 888.326.6864
www.willdan.com