



Special Meeting **AGENDA**

Ukiah Valley Conference Center ♦ 200 S. School St. ♦ Ukiah, CA 95482

March 11, 2020 - 5:00 PM

JOINT MEETING WITH THE UKIAH VALLEY SANITATION DISTRICT

1. ROLL CALL AND PLEDGE OF ALLEGIANCE

2. AUDIENCE COMMENTS ON NON-AGENDA ITEMS

The City Council welcomes input from the audience. If there is a matter of business on the agenda that you are interested in, you may address the Council when this matter is considered. If you wish to speak on a matter that is not on this agenda, you may do so at this time. In order for everyone to be heard, please limit your comments to three (3) minutes per person and not more than ten (10) minutes per subject. The Brown Act regulations do not allow action to be taken on audience comments in which the subject is not listed on the agenda.

3. UNFINISHED BUSINESS

- 3.a. Presentation of and Preliminary Read, Review, and Discussion of Draft Administrative Report on Wastewater Rate Analysis for the City of Ukiah and the Ukiah Valley Sanitation District; and Consideration of Wastewater Rates for the City of Ukiah.

Recommended Action: 1. Receive Presentation and Conduct Preliminary Read, Review, and Discussion of Draft Administrative Report of Wastewater Rate Analysis.

Action item options:

1. Direct staff to initiate the Prop 218 process to adjust wastewater rates annually for a five-year period, effective July 1, 2020.

2. Do not initiate the Prop 218 process but provide additional direction to staff.

Attachments:

1. 2020 Joint Sewer Rate Study, Administrative Draft March 4 2020
2. Presentation - Wastewater Rate Study

4. ADJOURNMENT

Please be advised that the City needs to be notified 72 hours in advance of a meeting if any specific accommodations or interpreter services are needed in order for you to attend. The City complies with ADA requirements and will attempt to reasonably accommodate individuals with disabilities upon request. Materials related to an item on this Agenda submitted to the City Council after distribution of

the agenda packet are available for public inspection at the front counter at the Ukiah Civic Center, 300 Seminary Avenue, Ukiah, CA 95482, during normal business hours, Monday through Friday, 8:00 am to 5:00 pm.

I hereby certify under penalty of perjury under the laws of the State of California that the foregoing agenda was posted on the bulletin board at the main entrance of the City of Ukiah City Hall, located at 300 Seminary Avenue; and at the Ukiah Valley Conference Center in Ukiah, California, not less than 24 hours prior to the meeting set forth on this agenda.



AGENDA SUMMARY REPORT

SUBJECT: Presentation of and Preliminary Read, Review, and Discussion of Draft Administrative Report on Wastewater Rate Analysis for the City of Ukiah and the Ukiah Valley Sanitation District; and Consideration of Wastewater Rates for the City of Ukiah.

DEPARTMENT: Finance **PREPARED BY:** Dan Buffalo, Finance Director
PRESENTER: _____

ATTACHMENTS:

1. 2020 Joint Sewer Rate Study, Administrative Draft March 4 2020
2. Presentation - Wastewater Rate Study

Summary: The Ukiah City Council shall receive and consider the draft administrative report, titled 2020 Joint Sewer Rate Study, on wastewater rates and consider initiating the Prop 218 process to adjust City wastewater rates annually for a five-year period, effective July 1, 2020 and/or provide alternate direction to staff.

Background: The Ukiah City Council (Council) and Ukiah Valley Sanitation District Board (Board) jointly approved and engaged the Reed Group and Hildebrand Consulting (Consultants) to conduct an analysis of the wastewater revenue requirements for each agency, identifying and analyzing the fiscal resources necessary for each agency to maintain wastewater services, including operations, debt service, and capital improvements.

The process required significant effort, coordination, analysis, and planning by staff of both agencies and Consultants. Complexity of the customer data and the mechanics of the Operating Agreement between the two agencies created unique and significant challenges in developing the attached draft administrative report, 2020 Joint Sewer Rate Study (Attachment 1). The presentation for the meeting from the Consultants is also include for advance review (Attachment 2).

Discussion: The results of that analysis and subsequent recommendations are included in the attached 2020 Joint Sewer Rate Study. The Consultants will present the report and provide required context and annotations for consideration. Staff, in conjunction with Consultants, will provide additional annotations to complement the report to ensure the City Council is satisfied with the scope of information presented.

Recommended Action: 1. Receive Presentation and Conduct Preliminary Read, Review, and Discussion of Draft Administrative Report of Wastewater Rate Analysis.

Action item options:

1. Direct staff to initiate the Prop 218 process to adjust wastewater rates annually for a five-year period, effective July 1, 2020.
2. Do not initiate the Prop 218 process but provide additional direction to staff.

BUDGET AMENDMENT REQUIRED: None

CURRENT BUDGET AMOUNT: N/A

PROPOSED BUDGET AMOUNT: N/A

FINANCING SOURCE: N/A

PREVIOUS CONTRACT/PURCHASE ORDER NO.: N/A

COORDINATED WITH: Water Resource Department, Public Works Department, City Manager's Office,
Ukiah Valley Sanitation District

Approved: 
Sage Sangiacomo, City Manager



City of Ukiah

&

Ukiah Valley Sanitation District

2020 Joint Sewer Rate Study

Administrative Draft Report

March 4, 2020





March 4, 2020

Mr. David Redding
District Manager
Ukiah Valley Sanitation District
151 Laws Ave
Ukiah, CA 95482

Mr. Sage Sangiacomo
City Manager
City of Ukiah
300 Seminary Ave.
Ukiah, CA 95482

Re: **DRAFT** 2020 Joint Sewer Rate Study

Dear Mr. Buffalo and Mr. Redding,

Hildebrand Consulting and the Reed Group are pleased to present this **DRAFT** 2020 Joint Sewer Rate Study (Study) performed for the City of Ukiah (City) and Ukiah Valley Sanitation District (District). We appreciate the fine assistance provided by you and all of the members of the City and District staff who participated in the Study.

If you or others at the City or District have any questions, please do not hesitate to contact me at:

mhildebrand@hildco.com
(510) 316-0621

We appreciate the opportunity to be of service to the City and/or District and look forward to the possibility of doing so again in the near future.

Sincerely,

Mark Hildebrand
Hildebrand Consulting, LLC

Robert Reed
The Reed Group, Inc.

Enclosure

Executive Summary

Hildebrand Consulting, LLC and The Reed Group, Inc. (collectively “Consultant”) were retained by the City of Ukiah (City) and the Ukiah Valley Sanitation District (District) to conduct a Joint Sewer Rate Study (Study).

STUDY

The City and District recently entered into a new Operating Agreement¹ which specifies how sewer collection and treatment services will be provided within the respective service areas and how costs will be fairly shared and distributed. The purpose of this “joint” sewer rate study is to develop new (and separate) sewer rates schedules appropriate for both the City and the District, which will be based on a consistent methodology and approach and aligned with the new Operating Agreement.

SCOPE & METHODOLOGY

The scope of this Study was to prepare multi-year financial plans, develop a consistent cost-of-service analyses, review the existing rate structures, and propose 5-year rate schedules for both the City and District. This Study applied methodologies that are aligned with industry standard practices for rate setting as promulgated by the Water Environment Federation (WEF) and all applicable law, including California Constitution Article XIII D, Section 6(b), commonly known as Proposition 218.

¹ Operating Agreement for the Combined Sewer System Serving the Ukiah Valley Sanitation District and the City of Ukiah

OPERATING AGREEMENT BACKGROUND

The 2018 Operating Agreement between the City and the District includes a number of conditions that guide the approach to this Study. For example, the Operating Agreement specifies that budgeted operating costs are to be allocated to each party based on their proportionate use of the WWTP. For the purpose of performing this allocation of costs between the District and City, this Study defines an Equivalent Sewer Service Strength Unit (ESSSU) as the average winter water usage of a residential dwelling unit at residential strength. This term is not to be confused with the term “ESSU” (equivalent sewer service unit), which was established by the Operating Agreement for the purpose of defining the number Capacity Project units used by each utility.

FINANCIAL PLANS

Financial plans were developed for both utilities, which provide a finance strategy that will enable both utilities to meet revenue requirements and financial performance objectives throughout the planning period while striving to minimize rate increases. Sewer Utility Operating Budget and Funds

Revenue

Rate revenue is the revenue generated from customers for sewer service. The City collects all rate revenue from both City and District customers. Rate revenue received from District customers is allocated to the District and rate revenue received from City customers is allocated to the City. Rate revenue for both utilities is collected through a fixed “Base” charge and a variable “Usage” charge, although the rate structures between the City and the District are slightly different. This Study’s financial plans propose annual rate revenue adjustments that will meet the City and District’s respective revenue requirements.

Operating and Maintenance Expenses

The combined operating and maintenance expenses include all ongoing collection, treatment, disposal, and administrative expenses. The ratio of ESSSUs between the City and the District are used to establish each utility's proportionate use of both the collection system and the WWTP for the purpose of allocating most annual budgeted operating costs. Most expenses are split based on the current ESSSU allocation (50.16% District : 49.84% City), while billing expenses are split based on the proportion of accounts (43.65% District : 52.35% City), and debt expenses are split as dictated by the Operating Agreement in FY 2019/20 (48.0% District : 52.0%) and based on the findings of this Study thereafter.

Debt Service

Section II.D.2. of the Operating Agreement describes the prescribed methodology for allocating the debt service costs associated with the 2006 Bond. As detailed in the full report, this Study calculated a debt service allocation of 53.99% for the District and 46.01% for the City.

The City and District currently share responsibility for repayment of a 2006 Revenue Bond. The allocation of the costs associated with the 2006 Bond is described in Section 2.4. A pivotal topic for these financial plans is the possibility of refinancing the 2006 Bond, which has the potential of significantly reducing debt service obligations for both utilities. Based on projected debt service schedules provided by the City's and District's respective financial advisors, the District's annual debt service would decrease by approximately \$520 thousand and the City's annual debt service would decrease by over \$144 thousand².

² The change in the debt service for both entities is affected by the change in the allocation methodology. In addition, the District plans to use cash reserves to pay down \$2.5 million in outstanding principal and

In the event that the bond is not refinanced, the rate revenue increases would need to be materially larger than those recommended in this Study in order to meet the financial obligations associated with the existing 2006 Bond.

Capital Improvement Program

For purposes of this Study, all planned capital projects were identified as either a shared cost (subject to the allocation based on relative ESSUs) or a City-only expense.

PROPOSED RATE REVENUE INCREASES

Based upon the financial data, assumptions, and reserve targets, this Study proposes a 5-year schedule of rate adjustments as detailed in the two tables below for the District and for the City.

Recommended District Sewer Rate Revenue Increases

Rate Adjustment Date	Proposed Rate Revenue Increase
July 1, 2020	0.0%
July 1, 2021	1.0%
July 1, 2022	1.0%
July 1, 2023	1.0%
July 1, 2024	1.0%

Recommended City Sewer Rate Revenue Increases

Rate Adjustment Date	Proposed Rate Revenue Increase
July 1, 2020	5.0%
July 1, 2021	2.0%
July 1, 2022	2.0%
July 1, 2023	1.0%
July 1, 2024	1.0%

the City will fund part of its Settlement Agreement costs with bond proceeds as well as defer some of the debt service that was previously due in FY 2019/20.

The above rate increases are directly contingent and dependent on the refinancing of the 2006 Bond, consistent with the anticipated terms and debt repayment schedules provided by the City and District's financial advisors.

COST OF SERVICE

A cost-of-service analysis evaluates the cost of providing sewer service and proportionately allocates those costs to customer classes and rate structure components to ensure the proposed rate structure is (1) aligned with the costs of providing sewer service (2) equitable among all ratepayers, and (3) complies with Proposition 218. This Study employed well-established industry practices as recognized by the WEF, AWWA, and other accepted industry standards. After analyzing sewer system use characteristics for all customers within both service areas, unit costs are applied to the equivalent sewer service flow units³ (ESSFUs), annual sewer flows, BOD loadings and SS loadings associated with each customer class to arrive at the allocation of total costs to each customer class. The table below presents the allocation of costs to each user class.

³ A measure of sewer utility service based on the estimated volume of wastewater from an average residential dwelling

Allocation of Costs to Users (District and City)

					Service Charge Costs				
No. of ESSFUs	Water Usage (hcf)	BOD Strength (mg/l)	SS Strength (mg/l)	Customer Class	Fixed Costs	Variable Costs (1) Flow BOD SS			Allocation of Total Costs
District									
				Residential	\$550.360/ ESSFU	\$1.33/ hcf	\$1.03/ lb	\$1.060/ lb	
2,291	185,741	175	175	Single Family	\$1,260,886	\$246,855	\$208,759	\$215,566	\$1,932,065
1,289	68,511	175	175	Multi-Family	\$709,420	\$91,053	\$77,001	\$79,512	\$956,987
620	49,141	175	175	Mobile Homes	\$341,226	\$65,310	\$55,231	\$57,032	\$518,799
				Commercial					
1,410	89,401	175	175	Low Strength	\$776,270	\$118,816	\$100,480	\$103,756	\$1,099,321
433	28,149	200	200	Moderate Strength	\$238,366	\$37,410	\$36,157	\$37,335	\$349,268
52	6,015	500	500	Medium Strength	\$28,549	\$7,994	\$19,316	\$19,945	\$75,804
205	13,983	800	600	High Strength	\$112,861	\$18,583	\$71,843	\$55,639	\$258,926
6,301	440,941			Totals:	\$3,467,577	\$586,022	\$568,786	\$568,786	\$5,191,171
City									
				Residential	\$591.79/ ESSFU	\$1.31/ hcf	\$1.02/ lb	\$1.06/ lb	
2,724	184,342	175	175	Single Family	\$1,612,041	\$242,068	\$204,794	\$212,441	\$2,271,343
1,455	83,060	175	175	Multi-Family	\$861,057	\$109,070	\$92,275	\$95,721	\$1,158,122
248	17,452	175	175	Mobile Homes	\$146,764	\$22,917	\$19,388	\$20,112	\$209,182
				Commercial					
1,464	99,345	175	175	Low Strength	\$866,213	\$130,454	\$110,367	\$114,488	\$1,221,521
104	7,122	200	200	Moderate Strength	\$61,482	\$9,352	\$9,042	\$9,380	\$89,257
51	3,464	500	500	Medium Strength	\$30,064	\$4,549	\$10,995	\$11,406	\$57,014
217	14,800	800	600	High Strength	\$128,622	\$19,434	\$75,163	\$58,477	\$281,697
6,263	409,585			Totals:	\$3,706,243	\$537,844	\$522,025	\$522,025	\$5,288,135
Total Fixed:					\$7,173,820	Total Variable Costs:		\$3,305,486	
					68.5%			31.5%	

Footnotes:

(1) Unit costs at the top of each column are multiplied by the wastewater flow, the BOD loading, or the SS loading for each customer class from Table 7.

RATE STRUCTURE RECOMMENDATIONS

The City and District currently have very similar rate structures with only a few minor differences. With the concurrence of both District and City staff, this Study recommends that the rate *structures* be modified to be identical (although the rates themselves will be different to reflect the different financial needs and objectives of each respective agency). The changes are not expected to be material for either party and having identical rate structures will help the parties coordinate business and rate decisions in the future.

All customers pay a fixed monthly Service Charge and a Usage Charge. Residential customers will pay a Service Charge for each dwelling unit while Commercial customers

will pay a Service Charge for each ESSFU. The Usage Charge for all customers is determined by multiplying the account's winter water usage by the respective Usage Charge for the customer classification (which accounts for sewer strength).

The tables below presents the proposed Service Charges and Usage Rates for the next 5 years.

District 5-Year Sewer Rate Schedule

	July 1, 2020	July 1, 2021	July 1, 2022	July 1, 2023	July 1, 2024
Monthly Service Charge*:	\$45.86	\$46.32	\$46.78	\$47.25	\$47.72
Consumption Rate (per HCF):					
Residential:	\$3.61	\$3.65	\$3.69	\$3.73	\$3.77
Commercial 1:	\$3.61	\$3.65	\$3.69	\$3.73	\$3.77
Commercial 2:	\$3.94	\$3.98	\$4.02	\$4.06	\$4.10
Commercial 3:	\$7.86	\$7.93	\$8.01	\$8.09	\$8.17
Commercial 4:	\$10.45	\$10.55	\$10.66	\$10.77	\$10.88

* Service Charge is per dwelling unit for residential and per ESSFU for commercial accounts (with a minimum charge of 1 ESSFU).

City 5-Year Sewer Rate Schedule

	July 1, 2020	July 1, 2021	July 1, 2022	July 1, 2023	July 1, 2024
Monthly Service Charge*:	\$49.32	\$50.31	\$51.32	\$51.83	\$52.35
Consumption Rate (per HCF):					
Residential:	\$3.58	\$3.65	\$3.72	\$3.76	\$3.80
Commercial 1:	\$3.58	\$3.65	\$3.72	\$3.76	\$3.80
Commercial 2:	\$3.90	\$3.98	\$4.06	\$4.10	\$4.14
Commercial 3:	\$7.78	\$7.94	\$8.10	\$8.18	\$8.26
Commercial 4:	\$10.34	\$10.55	\$10.76	\$10.87	\$10.98

* Service Charge is per dwelling unit for residential and per ESSFU for commercial accounts (with a minimum charge of 1 ESSFU).

CONCLUSION

This Study used methodologies that are aligned with industry standard practices for rate setting as promulgated by WEF, AWWA and all applicable laws, including

California's Proposition 218. The proposed annual adjustments to the rates proportionately assign costs to each customer class and customer based on service demands and will allow the City and District to continue to provide reliable and affordable sewer service to customers.

DRAFT

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Schedule 1 – Detailed Allocation of Operational Expenses between District and City

Schedule 2 – City Cash Flow Pro Forma

Schedule 3 – District Cash Flow Pro Forma

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List of Acronyms

AWWA	American Water Works Association
CIP	capital improvement program
DCR	debt service coverage ratio
ENR	<i>Engineering News Record</i> (periodical)
ESSFU	Equivalent sewer service flow unit, a measure of sewer utility service based on the estimated volume of wastewater from an average residential dwelling
ESSSU	Equivalent sewer service strength unit, a measure of sewer utility service based on the estimated volume and strength of wastewater from an average residential dwelling
ESSU	Capacity Project equivalent sewer service unit, as defined and applied by the Operating Agreement between the City and District in order to assign capacity to a connection or reserved for a connection
FY	fiscal year (which ends on June 30)
hcf	hundred cubic feet (i.e. 748 gallons)
MG	million gallons
WEF	Water Environment Federation
WWTP	Wastewater treatment plant

Section 1. INTRODUCTION

Hildebrand Consulting, LLC and The Reed Group, Inc. (collectively “Consultant”) were retained by the City of Ukiah (City) and the Ukiah Valley Sanitation District (District) to conduct a Joint Sewer Rate Study (Study). This report describes in detail the assumptions, procedures, and results of the Study, including conclusions and recommendations.

1.1 SEWER UTILITY BACKGROUNDS

Within the Ukiah Valley there are three agencies that provide wastewater treatment services: (1) City of Ukiah, (2) Ukiah Valley Sanitation District, and (3) Calpella County Water District. The City owns the collection system within a portion of its jurisdictional boundaries and a wastewater treatment plant (WWTP). The District owns the collection system within its jurisdictional boundaries, a part of which is within the City’s boundaries, (known as the “overlap area”). The District and City have entered into various agreements and amendments for the sharing of costs associated with the operation, maintenance, and rehabilitation of the sewer collection system and the WWTP, as well as administrative costs such as utility billing. At present the District does not have operations staff of its own; it therefore contracts with the City of Ukiah for the provision of wastewater services. The City has its own staff, equipment and facilities for management and operations of wastewater services within the City’s jurisdiction.

Calpella County Water District owns and operates its collection system and treatment plant and is not included as part of this Study.

1.2 RATE STUDY BACKGROUND

The City and District recently entered into a new Operating Agreement⁴ which specifies how sewer collection and treatment services will be provided within the respective service areas and how costs will be fairly shared and distributed. The purpose of this “joint” sewer rate study is to develop new (and separate) sewer rates schedules appropriate for both the City and the District, which will be based on a consistent methodology and approach and aligned with the new Operating Agreement. The Study has been performed with equal input from both the City and District, including direction from the City and District staff, financial advisors, and lawyers provided during joint meetings and group conference calls.

1.3 SCOPE & OBJECTIVES OF STUDY

The scope of this Study was to prepare multi-year financial plans, develop a consistent cost-of-service analyses, review the existing rate structures, and propose 5-year rate schedules for both the City and District. The primary objectives of this Study were to:

- i. Establish a transparent and repeatable methodology for allocating operating and capital costs between the City and the District;
- ii. Develop multi-year financial management plans for both the City and District that integrate operational and capital project funding needs;
- iii. Identify future annual rate adjustments to sewer rates to help ensure adequate revenues to meet the respective utilities’ ongoing service and financial obligations;

⁴ Operating Agreement for the Combined Sewer System Serving the Ukiah Valley Sanitation District and the City of Ukiah

- iv. Determine the cost of providing sewer service to customers using industry-accepted methodologies; and
- v. Recommend specific modifications to the existing rate structures in order to ensure that the proposed rates equitably recover the cost of providing service and comporting with industry standards and California’s legal requirements.

1.4 STUDY METHODOLOGY

This Study applied methodologies that are aligned with industry standard practices for rate setting as promulgated by the Water Environment Federation (WEF) and all applicable law, including California Constitution Article XIII D, Section 6(b), commonly known as Proposition 218.

The Study began with reviewing billing data of all customers (both City and District) to identify the number of customers, water use, and estimated sewage volume and strength in both service areas (see Section 2). This data was used to calculate the respective number of “equivalent sewer service strength units” (ESSSUs)⁵ in both the City and District in order to allocate operating, debt and capital costs to each entity in accordance with the Operating Agreement (see Section 2).

The next step was to develop multi-year financial management plans (for both the City and the District) that determined the level of annual rate revenue required to cover estimated annual operating expenses, debt service (including coverage targets), and capital cost requirements while maintaining adequate reserves. The financial planning models were customized to reflect the financial dynamics of both utilities.

The respective revenue requirements calculated in the financial plans for fiscal year 2020/21 (FY 2020/21) were then used to perform detailed cost-of-service analyses. The cost-of-service analyses and rate structure designs were conducted based upon

⁵ Not to be confused with “ESSU” as defined in the Operating Agreement, as explained in Section 2.1.

principles outlined by the WEF, legal requirements (Proposition 218 and relevant court decisions) and other generally accepted industry practices to develop rates that reflect the cost of providing service.

Recommendations for the financial plans and updated rate structures were presented to the City Council and District Board on February X, 2020 and a Public Hearing to adopt the rates has been scheduled for April X, 2020.

1.5 REPORT ORGANIZATION

Section 2 addresses the relevant content of the Operating Agreement, including how operational expenses, debt service, and capital improvement costs are assigned to each the District and City, as well as how the Agreement's requirements have been interpreted by this Study. Section 3 presents the assumptions, methodology, and findings of the respective financial plans, including proposed debt strategies and rate revenue increases for both utilities. Section 4 describes the proportionate allocation of costs to specific customer classes (using an identical cost-of-service methodology for both utilities). Section 5 describes the proposed rate design structure and includes the proposed rate schedules for both utilities for a 5-year planning period. While the rate structures are identical for both utilities, there are differences in the actual rates due to differences in each utility's finances and customer profiles.

Section 2. OPERATING AGREEMENT BACKGROUND

The 2018 Operating Agreement between the City and the District includes a number of conditions that guide the approach to this Study. The pertinent conditions are described below, including a description of how those conditions have been interpreted for the purposes of this Study.

2.1 EQUIVALENT SEWER SERVICE UNITS

The City operates the combined sewer system as one system with the combined treatment and collection costs apportioned between the City and the District. Section II.D.1.a.(1) of the Operating Agreement specifies that budgeted operating costs are to be allocated to each party based on their proportionate use of the WWTP, as measured by water consumption and relative strength of sewage discharged to the WWTP by the customers of each utility. For the purpose of performing this allocation of costs between the District and City, this Study defines an Equivalent Sewer Service Strength Unit (ESSSU) as the average winter water usage of a residential dwelling unit at residential strength. This term is not to be confused with the term “ESSU” (equivalent sewer service unit), which was established by the Operating Agreement for the purpose of defining the number Capacity Project units used by each utility. Section II.E.2 of the Operating Agreement specifies how ESSU values are calculated based on factors such as the number of bedrooms, which is not the case for the determination of ESSSUs for rate setting purposes.

This Study allocates one (1) ESSSU to each residential dwelling unit, including single family homes, multifamily dwellings, and mobile home dwellings. These data were extracted from the City’s sewer billing data for FY 2019/20. A summary of all residential dwelling units by utility can be found in **Table 1**.

ESSSU values are assigned to commercial (i.e. non-residential) accounts by comparing the winter water use and sewer strength of each commercial account to an average residential dwelling. The average quantity of water used by residential dwelling customers was calculated based on water usage records from the City's water utility, Millview County Water District, Willow County Water District, and Regina Water Company during the winter months of January, February, and March. The average monthly winter usage across all residential dwelling units in the winter of 2019 was determined to be 5.68 hundred cubic feet (hcf).

As detailed in Section 4, the commercial strength classifications include low, moderate, medium, and high and were assigned based on the existing commercial classifications of each commercial account. As required by the Operating Agreement, and consistent with common industry practice, each strength classification is assigned a numerical factor designed to fairly capture the relative strength of the discharge of each respective class. The calculations regarding the application of the strength factors are detailed in Section 4.

The ESSSU assignment for each commercial account is calculated by comparing the account's winter water usage to the average water usage by residential dwellings, and then multiplied by the numerical strength factor assigned to the commercial classification. For example, a commercial medium strength commercial account with month winter water usage of 11.36 hcf would be assigned 3.17 ESSSUs ($11.36 \text{ hcf} \div 5.68 \text{ hcf} \times 1.586^6$).

See **Table 1** for a summary of all ESSSUs by customer class and by utility.

⁶ Medium Strength Commercial has a strength factor of 1.586, see Section 4.5.

Table 1. Summary of Accounts, Dwelling Units and ESSUs by Utility

	Accounts	Dwelling Units	ESSUs Count	%
DISTRICT				
Single Family	2,291	2,291	2,291	17.6%
Multifamily	162	1,289	1,289	9.9%
Mobile Home	11	620	620	4.8%
Commercial Low Strength	267	(na)	1,410	10.8%
Commercial Moderate Strength	18	(na)	453	3.5%
Commercial Medium Strength	5	(na)	82	0.6%
Commercial High Strength	21	(na)	399	3.1%
Total:	2,775	4,200	6,544	50.16%
CITY				
Single Family	2,724	2,724	2,724	20.9%
Multifamily	247	1,455	1,455	11.2%
Mobile Home	7	248	248	1.9%
Commercial Low Strength	545	(na)	1,464	11.2%
Commercial Moderate Strength	14	(na)	109	0.8%
Commercial Medium Strength	9	(na)	81	0.6%
Commercial High Strength	36	(na)	423	3.2%
Total:	3,582	4,427	6,503	49.84%

2.2 ALLOCATION OF OPERATING COSTS

The ratio of ESSUs shown in Table 1 are used to establish each utility's proportionate use of both the collection system and the WWTP for the purpose of allocating annual budgeted operating costs. The exception to this rule are costs related to billing and collection of revenue (which are allocated based on the relative number of accounts in each utility) and costs that are specified to be borne entirely by one utility or the other⁷.

⁷ The only costs that were borne entirely by one utility or the other were specific legal fees and costs associated with the Settlement Agreement. Numerous sources of non-rate revenue were allocated

As part of this Study, Consultant reviewed the detailed operating budgets with both City and District staff to ascertain the appropriate allocation methodology of each budgetary line-item. The allocation of annual operating costs are detailed in Schedule 1 (at the end of this report), which shows that most revenues and some expenses are designated as either for the District or for the City. Most expenses are split based on the current ESSSU allocation (50.16% District : 49.84% City, see Table 1), while billing expenses are split based on the proportion of accounts (43.65% District : 52.35% City), and debt expenses are split as dictated by the Operating Agreement in FY 2019/20 (48.0% District : 52.0%) and based on the findings of this Study thereafter (see Section 2.4).

2.3 ALLOCATION OF CAPITAL COSTS

Section II.D.3.a. of the Operating Agreement states that capital improvement costs that benefit both the District and the City are subject to cost allocation using the allocation methodology (as described in the previous paragraph). The Operating Agreement describes a number of principals for identifying and negotiating capital improvement costs, which are beyond the scope of this report. It is anticipated that the allocation of capital costs will be a process that will be repeated annually between the City and the District. For purposes of this Study, all planned capital projects were identified as either a shared cost (subject to the allocation based on relative ESSSUs) or a City-only expenditure. No projects were identified as District-only. These projects have been summarized in Table 5.

2.4 ALLOCATION OF DEBT

Section II.D.2. of the Operating Agreement describes the prescribed methodology for allocating the debt service costs associated with the existing 2006 Bond. In FY 2018/19

directly to one utility of the other, such as miscellaneous fees, property tax revenue, and interest earnings.

and FY 2019/20 the debt service on the 2006 Bond was split 52.0% City, 48.0% District. Beginning in FY 2020/21 25.8414% of the existing debt (the “Capacity” portion) is to be allocated 65% to the District and 35% to the City. The remaining 74.1586% (the “Upgrade/Rehabilitation” portion) is to be allocated based on each utility’s proportionate share of winter water usage and relative strength of sewage discharge to the WWTP (i.e. based on the relative number of ESSUs). With the current ESSU ratio of 50.16% : 49.84% (see Table 1), the resultant debt service allocation is 53.99% for the District and 46.01% for the City.

The City and District plan to each issue new debt in a coordinated manner in FY 2019/20 to refinance the 2006 Bond to take advantage of attractive interest rates. At that point, each entity will be responsible for its own debt service obligations. Estimated debt service schedules for the new debt have been incorporated in the financial plans as provided by the District’s and City’s respective financial advisors.

The only other new debt considered for this Study is the City’s financing of its Settlement Agreement costs. The repayment of that obligation will be borne entirely by the City.

Section 3. FINANCIAL PLANS

This section presents the financial plans developed for both utilities, including a description of the source data and financial assumptions. This section concludes with 5-year plans for sewer rate adjustments. Schedules 1 through 3 (attached at the end of this report) include detailed data supporting the financial plans discussed herein.

This Study's 10-year financial plans were developed through interactive work sessions with City and District staff. As a result of this process, the Study has produced robust financial plans that will help enable both utilities to meet revenue requirements and financial performance objectives throughout the planning period while striving to minimize rate increases. Financial performance objectives include covering all anticipated operating, maintenance, debt service, and capital program costs; maintaining prudent financial reserves; and meeting debt service coverage ratio obligations.

3.1 FINANCIAL DATA & ASSUMPTIONS

The City and District provided budgeted operating costs for the current fiscal year, a multi-year capital improvement program (CIP), and outstanding debt service obligations. City and District staff also assisted in confirming other assumptions and policies, such as operating and capital reserve targets, debt service coverage targets, escalation rates for operating costs, and plans for refinancing existing debt (all of which are described in the following subsections).

3.2 SEWER UTILITY OPERATING BUDGET AND FUNDS

This Study considered the operating budgets for both the City and the District since all costs associated with sewer operations are subject to cost allocation. The allocation of each utility's operating budget is described below and detailed in **Schedule 1**.

3.2.1 DISTRICT OPERATING EXPENSES AND REVENUES

The District provided its *budgeted* expenditures for FY 2019/20, which were used as the starting point for forecasting District costs over the 10-year planning period. While some costs are split between the District and the City entirely based on the ESSSU allocation methodology, other costs are borne entirely by the District (largely legal fees), and yet other costs are partially directly borne by the District and the remaining balance is split with the City based on the ESSSU methodology.

The District provided its *actual* revenues for FY 2018/19, which were used as the starting point for forecasting District costs over the 10-year planning period. All revenues received directly by the District (as opposed to District rate revenue first collected by the City) are kept by the District (not shared). These revenues include property taxes, interest earnings, and other revenue.

3.2.2 CITY OPERATING EXPENSES AND REVENUES

The City's sewer utility is comprised of nine funds that are used to manage the sewer utility's use of funds in a transparent manner. The following describes the purpose of each fund and how this Study's financial plan model reflected the use of those funds.

Fund 840 – The **City Sewer Operating Fund** is the primary operating fund of the City's sewer utility and tracks most operating and maintenance expenditures that are shared by the City and the District. Fund 840 also collects all revenue (including rate revenue) that is designated for the City.

Fund 940 – The **District Sewer Operating Fund** is used to track rate revenue and operating costs that are designated for the District only.

Fund 841 – The **Sewer Debt Service Fund** is used to track all existing debt (both City and District) and is used as a "clearing fund" to allocate those costs, as appropriate, to either Fund 840 or Fund 940.

Fund 842 – The **City Sewer Rate Stabilization Fund** holds reserves, including reserves that are conditions for debt.

Fund 942 – The **District Sewer Rate Stabilization Fund** holds reserves, including reserves that are conditions for debt.

Fund 843 – The **City Connection Fee Fund** holds funds from connect fee revenues, reserves, which are restricted for the purpose of paying for growth-related sewer system capital projects.

Fund 943 – The **District Connection Fee Fund** holds funds from connect fee revenues, reserves, which are restricted for the purpose of paying for growth-related sewer system capital projects.

Fund 844 – The **City Capital Reserve** holds unrestricted funds for the use of paying for encumbered capital projects (see Section 3.2.4).

Fund 944 – The **District Capital Reserve** holds unrestricted funds for the use of paying for encumbered capital projects.

While the financial plan models for this Study was developed with an understanding of these funds, the models did not attempt to replicate the internal movement of all moneys between funds.

3.2.3 BEGINNING FUND BALANCES

The FY 2019/20 beginning fund balances for the District and the City are summarized in **Table 2** and **Table 3** respectively. The District's fund balances are not reported in the "940" fund series nomenclature because the District's books simply recognizes the sum of all the District's cash and equivalents (regardless of where the monies are held).

Table 2: District Beginning Cash Balance (FY 2019/20)

FUND	BALANCE
Cash and investments	\$6,327,000
Receivable Settlement Agreement	\$4,000,000
Total:	\$10,327,000

Table 3: City Beginning Cash Balance (FY 2019/20)

FUND	BALANCE
Fund 840	\$1,714,000
Fund 841	\$0
Fund 842	\$2,975,000
Fund 843	\$1,884,000
Fund 844	\$0
TOTAL:	\$6,573,000

Per direction from District staff, the \$4 million receivable related to the Settlement Agreement has been shown as part of the beginning balance for FY 2019/20 even though the District will not receive the money from the City until sometime during FY 2019/20.

3.2.4 RESERVE TARGETS

Reserves for utilities are cash balances that are maintained in order to (a) comply with contractual obligations (e.g. bond covenants), (b) protect the utility from unexpected financial events, and/or (c) accommodate operational and capital program cash flow needs. Often multiple reserves are maintained, each with a specific function. In addition to the direct benefits of financial stability, reserves can help utilities obtain higher credit rankings, which can then help qualify the utility for cheaper debt. Credit rating agencies evaluate utilities on their financial stability, which includes adherence to formally adopted reserve targets.

The City has adopted financial management policies which include guidance with respect to reserve levels. While the District has not formally adopted such policies, the City's policies will be followed for both entities for purposes of this Study.

The City's policies call for City enterprise funds (including the sewer utility) to maintain a minimum working capital balance of at least 25 percent of operating expenses. The primary purpose of this balance is to set aside funds to maintain cash balances sufficient to pay expenses as needed and to provide for unanticipated or emergency expenses that could not be reasonably foreseen during the preparation of the budget.

The City's financial policies also require that fund balances and retained earnings should be sufficient to meet debt service reserve requirements, reserves for encumbrances (see Fund 844 and Fund 944), funding requirements for projects approved in prior years that are carried forward (see Fund 844 and Fund 944), and established rate stabilization reserves (as required by bond covenant, see Fund 842 and Fund 942).

The above policies are generally consistent with Consultant's industry experience for similar systems. In order to further strengthen the current reserve policies, this Study recommends that (1) the minimum working capital balance be raised to 50 percent of operating expenses (which is common for smaller utilities) and (2) establish a Capital Reserve target equal to the average annual planned capital spending (\$670 thousand for the District and \$646 thousand for the City). The working capital reserve ensures continuity of service regardless of short-term changes in cash flow or sudden increases in operating costs. The Capital Reserve is designed to smooth the inherent variability of the capital spending program. In other words, this reserve would be drawn down during years of higher-than-average capital spending and conversely the reserve would be built up during years when capital spending is below average. Such an approach can help reduce the need for large rate adjustments and help ensure continuous funding for capital replacement and rehabilitation projects.

Building on the City's existing reserve policies would establish reserves that are aligned with best practices as reported by reserve studies conducted by the American Water

Works Association (AWWA), and healthy reserve levels for public utilities per the evaluation criteria published by rating agencies (e.g. Fitch, Moody's, and Standard & Poor's).

3.2.5 CUSTOMER GROWTH

Future customer growth affects this Study in terms of (1) anticipated connection fee revenue, (2) increase in rate revenue, and (3) changes in the ratio of ESSSUs between the City and the District. Based on recent connection fee revenue and known difference in growth potential, this Study assumes that the District's growth rate (assumed to be 0.55% per year) will out-pace the City's growth rate (assumed to be 0.08% per year). As a result, the District's ESSSU ratio (currently at 50.16%) is forecasted to slowly increase over time at a rate of 14 basis points per year (while the City ratio decreases at the same pace).

3.2.6 RATE REVENUES

Rate revenue is the revenue generated from customers for sewer service. The City collects all rate revenue from both City and District customers. Rate revenue received from District customers is allocated to the District (in Fund 940) and rate revenue received from City customers is allocated to the City (in Fund 840). Rate revenue for both utilities is collected through a fixed "Base" charge and a variable "Usage" charge, although the rate structures between the City and the District are slightly different (see Section 5.1).

This Study's financial plans propose annual rate revenue adjustments that will meet the City and District's respective revenue requirements. Budgeted and projected rate revenues are listed in **Schedule 2** (District)⁸ and **Schedule 3** (City).

⁸ The rate revenues in Schedule 2 and Schedule 3 includes the proposed rate adjustment recommended by this Study, as described in Section 3.3.

3.2.7 CONNECTION FEE REVENUE

Both the City and the District charge a connection fee to new development as a condition for connecting to the sewer system. By law (see California Government Code 66013), connection fee revenue is required to be used “solely for the purposes for which the charges were collected” (i.e. growth-related capital projects). Both the City and the District have indicated that connection fee revenues (and existing reserves from those revenues) are eligible to pay for the Capacity portion of the 2006 Bond debt service (i.e. 25.8% of the debt service). Based on those instructions, this Study uses available connection fee revenues and reserves to pay for the Capacity portion of the existing debt, as well as the refinancing of that debt.

3.2.8 NON-RATE REVENUES

In addition to rate revenue and connection fee revenue, both utilities receive other revenue, including miscellaneous fees, interest earnings on investments, and property tax revenue (District only). Estimates of future interest income were calculated annually based upon estimated average fund balances and historic effective return on cash and invested funds (1.66% for the District and 0.36% for the City). Projections of all other non-rate revenues were based on FY 2018/19 actual revenues for the District and based on FY 2019/20 budgeted revenue for the City.

All revenues for the District and City are depicted below in Figure 1 and Figure 2 respectively, and detailed in **Schedule 2** (District) and **Schedule 3** (City). Note that the connection fee revenue for the District in FY 2019/20 is unusually high due to a large development paying the fees in the current year.

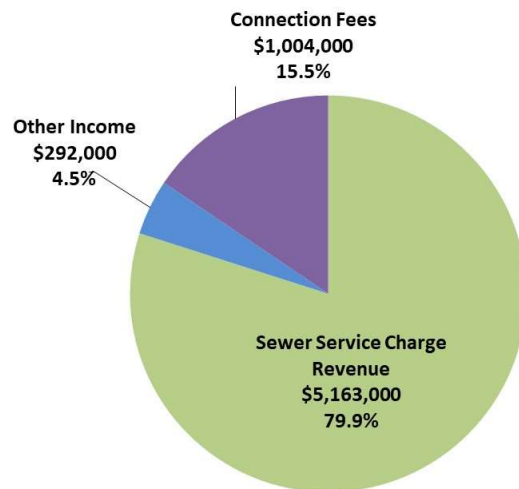


Figure 1: District Revenue Categories (FY 2019/20)

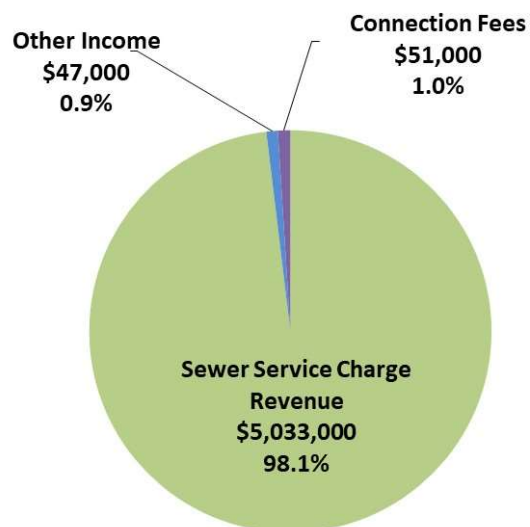


Figure 2: City Revenue Categories (FY 2019/20)

3.2.9 OPERATION AND MAINTENANCE EXPENSES

The combined operating and maintenance expenses include all ongoing collection, treatment, disposal, and administrative expenses. The annual operating and maintenance costs for this Study are based on the City and District's FY 2019/20 budgets and are adjusted for future years based on inflation (see Section 3.2.10). Operating costs are allocated between the City and District as described in Section 2.2.

3.2.10 COST ESCALATION

Annual cost escalation factors for the various types of expenses were developed based upon a review of historical inflation trends, published inflation forecasts, industry experience, and discussions with District and City staff. During the projection period, all operating expenses are projected to increase at 3.0% per year while capital costs are projected to increase at 3.5% per year.

3.2.11 DEBT SERVICE

The City and District currently share responsibility for repayment of a 2006 Revenue Bond. The allocation of the costs associated with the 2006 Bond is described in Section 2.4. A pivotal topic for these financial plans is the possibility of refinancing the 2006 Bond, which has the potential of significantly reducing debt service obligations for both utilities. Based on projected debt service schedules provided by the City's and District's respective financial advisors, the District's annual debt service would decrease by approximately \$520 thousand⁹ and the City's annual debt service would decrease by more than \$144 thousand.

⁹ The change in the debt service for both entities is affected by the change in the allocation methodology (see Section 2.4). In addition, the District plans to use cash reserves to pay down \$2.5 million in outstanding principal and the City will fund part of its Settlement Agreement costs with bond proceeds as well as defer some of the debt service that was previously due in FY 2019/20.

It is critical to note that the financial plans for this Study assume that the 2006 Bond will be refinanced at the terms and debt repayment schedules provided by the City's and District's respective financial advisors. The terms include the debt service coverage ratio targets (1.25 for the City, 1.40 for the District) and the District's principal payment of \$2.5 million from existing cash reserves. The estimated debt repayment schedules are shown in **Table 4** (both City and District), based on the debt terms provided by the City and District's financial advisors (2.42% with a 15 year repayment term).

Table 4: Estimated Debt Service Schedule for Refinanced Bond*

	District			City		
	Principal	Interest	Total	Principal	Interest	Total
FY 2020/21	\$1,402,578	\$605,121	\$2,007,699	\$1,393,884	\$601,370	\$1,995,254
FY 2021/22	\$1,436,520	\$571,179	\$2,007,699	\$1,427,616	\$567,638	\$1,995,254
FY 2022/23	\$1,471,284	\$536,415	\$2,007,699	\$1,462,164	\$533,090	\$1,995,254
FY 2023/24	\$1,506,889	\$500,810	\$2,007,699	\$1,497,549	\$497,705	\$1,995,254
FY 2024/25	\$1,543,356	\$464,343	\$2,007,699	\$1,533,789	\$461,465	\$1,995,254
FY 2025/26	\$1,580,705	\$426,994	\$2,007,699	\$1,570,907	\$424,347	\$1,995,254
FY 2026/27	\$1,618,958	\$388,741	\$2,007,699	\$1,608,923	\$386,331	\$1,995,254
FY 2027/28	\$1,658,137	\$349,562	\$2,007,699	\$1,647,859	\$347,395	\$1,995,254
FY 2028/29	\$1,698,264	\$309,435	\$2,007,699	\$1,687,737	\$307,517	\$1,995,254
FY 2029/30	\$1,739,362	\$268,337	\$2,007,699	\$1,728,580	\$266,674	\$1,995,254
FY 2030/31	\$1,781,455	\$226,244	\$2,007,699	\$1,770,412	\$224,842	\$1,995,254
FY 2031/32	\$1,824,566	\$183,133	\$2,007,699	\$1,813,256	\$181,998	\$1,995,254
FY 2032/33	\$1,868,720	\$138,979	\$2,007,699	\$1,857,137	\$138,117	\$1,995,254
FY 2033/34	\$1,913,943	\$93,756	\$2,007,699	\$1,902,079	\$93,175	\$1,995,254
FY 2034/35	\$1,960,261	\$47,438	\$2,007,699	\$1,948,110	\$47,144	\$1,995,254

* The debt service schedules in these tables are not identical to the schedules provided by the City and District's financial advisors but they are sufficiently similar for purposes of this Study.

In the event that the bond is not refinanced, the rate revenue increases would need to be materially larger than those recommended in Section 3.3 in order to meet the financial obligations associated with the existing 2006 Bond.

The City is obligated to pay the District \$4 million as a result of the Settlement Agreement. The City has paid \$1 million with cash reserves, intends to fund another \$1.4 million with proceeds from the refinanced bond, and will fund the remaining \$1.6 million with an internal loan which will be repaid over a 10-year period at an interest rate of 2.0%. The City's financial advisor advised Hildebrand Consulting that the internal loan

repayment expense is subordinate to all external debt and therefore isn't included in the debt service coverage ratio in this Study.

3.2.12 DEBT SERVICE COVERAGE

Debt service coverage is a measurement of the cash flow available to pay current debt obligations. The formula is net operating income (i.e., gross income minus operating expenses) divided by annual debt service. A debt service coverage ratio of 1.0 means that a utility has exactly enough money to pay its debt service after paying its operating expenses. The existing 2006 Bond includes covenants that require the City and District to each maintain a minimum debt service coverage ratio of 1.25. Maintaining a higher debt service coverage ratio is recommended in order to access more favorable borrowing terms in the future. Based on recently published guidance from Fitch Ratings¹⁰, utility systems with *midrange* financial profiles should maintain a DCR greater than 1.50 times annual debt service.

Based on guidance provided by the City's and District's financial advisors, these financial plans target minimum debt service coverage ratios of 1.25 for the City and 1.40 for the District¹¹.

3.2.13 CAPITAL IMPROVEMENT PROGRAM

As discussed in Section 2.3, the combined sewer system's capital spending is allocated to the City and the District based on terms of the Operating Agreement. Table 5 provides a summary of all capital projects planned through FY 2022/23. Capital spending for FY 2023/24 and beyond is assumed to be equal to the average spending from FY 2019/20 to FY 2022/23 (\$1.316 million).

¹⁰ As published on July 31, 2013.

¹¹ Hildebrand Consulting and The Reed Group are not financial advisors and are therefore not permitted to provide this type of financial guidance to our clients.

Table 5: Capital Improvement Schedule (FY 2019/20 through FY 2022/23)

Project Name	Split	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23
FACILITIES/BUILDINGS/LAND					
Upgrade HVAC Units on Buildings	Shared	\$ -	\$ -	\$ 150,000	\$ -
INFORMATION TECHNOLOGY					
Utility Billing CIS Replacement	Shared	\$ -	\$ -	\$ -	\$ -
INFRASTRUCTURE					
Chlorine Residual Valve/Alarm on Discharge	Shared	\$ 150,000	\$ -	\$ -	\$ -
Dora Street Utility Improvement Project- Water & Sewer	City only	\$ -	\$ 400,000	\$ -	\$ -
Downtown Streetscape Utility Replacement- Water & Sewer	City only	\$ 1,700,000	\$ -	\$ -	\$ -
Belt Filter Press Replacement	Shared	\$ 500,000	\$ -	\$ -	\$ -
Replace Heat Exchangers	Shared	\$ -	\$ -	\$ -	\$ -
Telemetry	Shared	\$ 30,000	\$ -	\$ -	\$ -
STREETS & RIGHTS-OF-WAY					
Asphalt Zipper - Shared Cost	Shared	\$ -	\$ -	\$ -	\$ 40,000
Asphalt Roller - Shared Cost	Shared	\$ -	\$ -	\$ -	\$ 66,000
Asphalt Paver - Shared Cost	Shared	\$ -	\$ -	\$ -	\$ 70,000
Vactor Replacement - Shared Cost	Shared	\$ -	\$ 150,000	\$ -	\$ -
Water Tender - Shared Cost	Shared	\$ -	\$ 35,000	\$ -	\$ -
Ford/Orchard Lift Station Upgrade	Shared	\$ 100,000	\$ -	\$ -	\$ -
Replace Water/Sewer Operations Call Truck - Shared Cost	Shared	\$ -	\$ -	\$ -	\$ 30,000
Telescoping Lift	Shared	\$ 12,000	\$ -	\$ -	\$ -
Digester Rehabilitation and Methane Scrubber	Shared	\$ -	\$ -	\$ 1,500,000	\$ -
TFSC REXA Valves	Shared	\$ 30,000	\$ -	\$ -	\$ -
Field Analyzer Installation	Shared	\$ 25,000	\$ -	\$ -	\$ -
SCADA Upgrade at Waste Water Treatment Plant	Shared	\$ 200,000	\$ -	\$ -	\$ -
VFD Installation at Wastewater Treatment Plant	Shared	\$ -	\$ -	\$ 55,700	\$ -
Utility Task Vehicle	Shared	\$ 22,000	\$ -	\$ -	\$ -
Total:		\$ 2,769,000	\$ 585,000	\$ 1,705,700	\$ 206,000
Total after escalation:		\$ 2,769,000	\$ 585,000	\$ 1,765,400	\$ 228,396
City Total:		\$ 2,224,898	\$ 490,838	\$ 866,843	\$ 112,146
District Total:		\$ 544,102	\$ 94,162	\$ 898,557	\$ 116,249

3.2.14 FUTURE BORROWING ASSUMPTIONS

Aside from the City's financing of the Settlement Agreement (see Section 3.2.11), this Study does not propose any new debt in order to finance the costs of future capital projects. Debt financing is not utilized because none of the capital projects during the planning period are expected to materially impact cash reserves and it is more cost effective to fund ongoing rehabilitation and replacement projects on a pay-as-you-go basis.

3.2.15 EXPENDITURE SUMMARY

The District's FY 2019/20 budgeted operating, capital and debt expense categories are depicted in **Figure 3** and detailed in **Schedule 2**. The City's FY 2019/20 budgeted operating, capital and debt expense categories are depicted in **Figure 4** and detailed in **Schedule 3**.

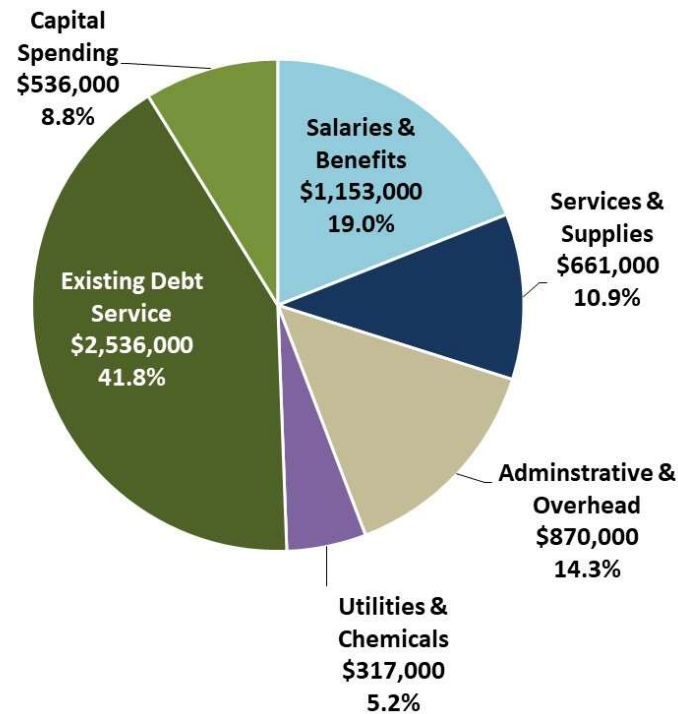


Figure 3: District Budgeted Expense Categories (FY 2019/20)

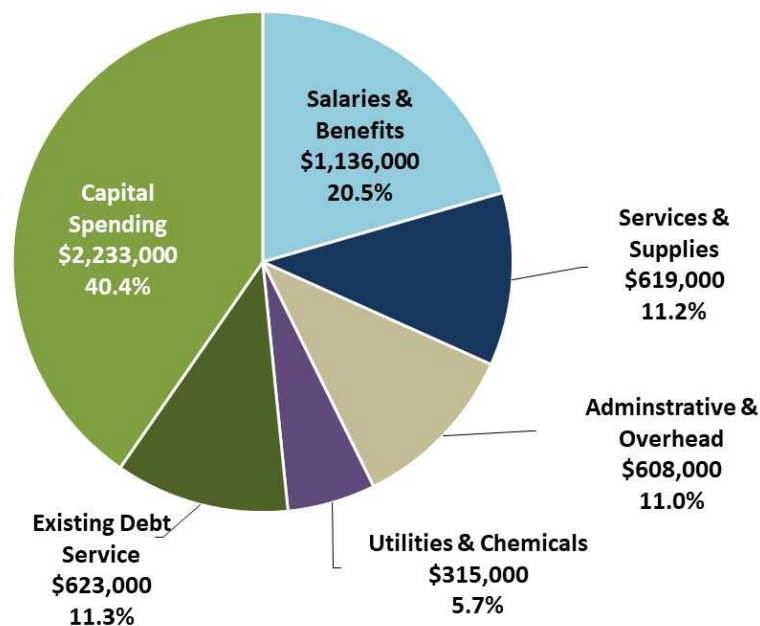


Figure 4: City Budgeted Expense Categories (FY 2019/20)¹²

3.3 PROPOSED RATE REVENUE INCREASES

All of the above information was entered into separate financial planning models (City and District) to produce 10-year financial plans that evaluated the sufficiency of current revenues to meet current and estimated future financial obligations and determined the level of rate revenue increases necessary in each year of the planning period.

Based upon the previously discussed financial data, assumptions, and reserve targets, this Study proposes a 5-year schedule of rate adjustments as detailed in **Table 6** for the District and **Table 7** for the City. As will be described in the sections that follow, rate structure changes are proposed for the new rates to be effective July 1, 2020.

¹² Debt service in FY 2019/20 is atypically low due to deferral of debt by the City

Table 6: Recommended District Sewer Rate Revenue Increases

Rate Adjustment Date	Proposed Rate Revenue Increase
July 1, 2020	0.0%
July 1, 2021	1.0%
July 1, 2022	1.0%
July 1, 2023	1.0%
July 1, 2024	1.0%

Table 7: Recommended City Sewer Rate Revenue Increases

Rate Adjustment Date	Proposed Rate Revenue Increase
July 1, 2020	5.0%
July 1, 2021	2.0%
July 1, 2022	2.0%
July 1, 2023	1.0%
July 1, 2024	1.0%

As previously emphasized in Section 3.2.11, the above rate increases are directly contingent and dependent on the refinancing of the 2006 Bond, consistent with the anticipated terms and debt repayment schedules provided by the City and District's financial advisors.

The cash flow numbers provided in **Schedule 2** for the District are summarized graphically in **Figure 5**. The cash flow numbers provided in **Schedule 3** for the City are summarized graphically in **Figure 6**.

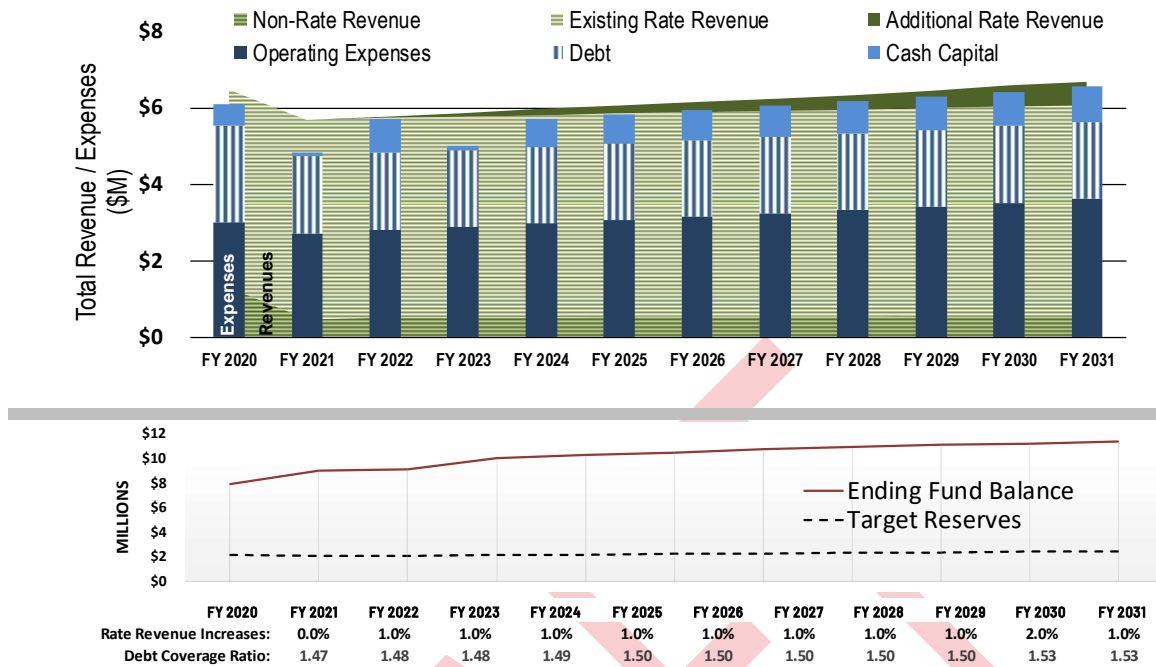


Figure 5: District Financial Forecast with Recommended Rate Increases

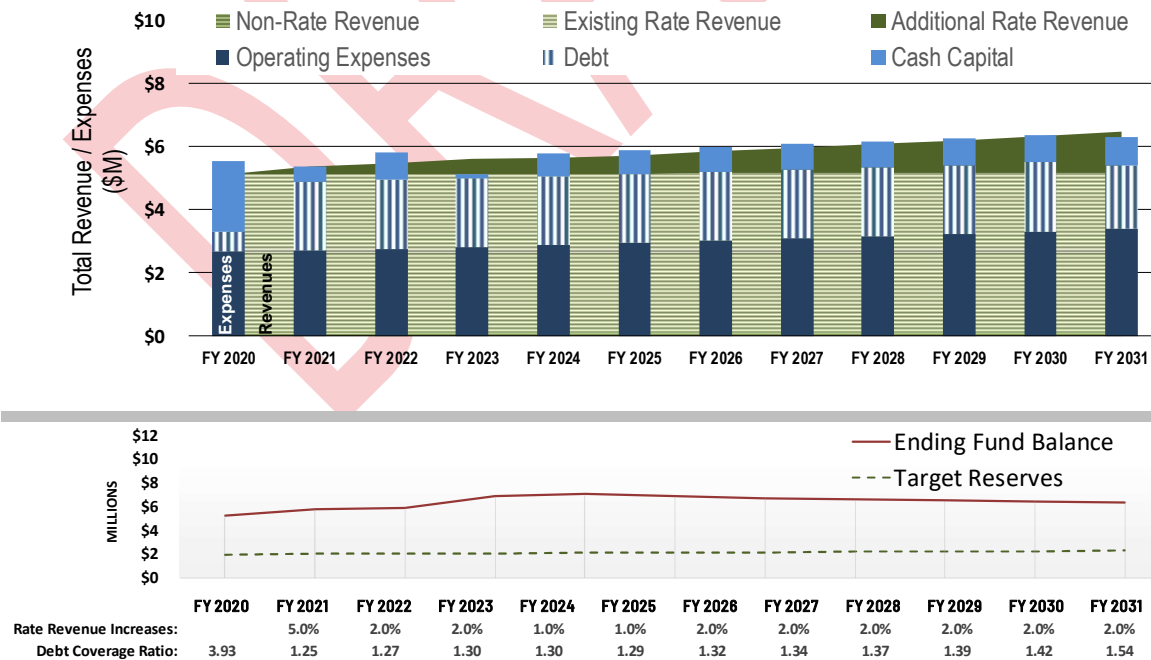


Figure 6: City Financial Plan Estimates with Recommended Rate Increases

As can be interpreted from Figure 6 and Figure 5, all proposed rate revenue increases are driven by the need to maintain the debt service coverage ratios at their respective targeted levels. Cash reserve levels for both the City and the District are expected to remain above their targeted levels for the duration of the planning period based on planned capital project spending. While rate revenues can't be decreased to lower the cash reserve levels (because of the debt service coverage ratio requirements), both the City and the District should consider increasing the level of capital spending to rehabilitate existing infrastructure (i.e., use the surplus reserves to fund additional projects).

Section 4. COST OF SERVICE

Once the respective rate revenue requirements for both utilities have been determined, the next step in the rate setting process is to evaluate the cost of providing service to individual customer classes. A cost-of-service analysis evaluates the cost of providing sewer service and proportionately allocates those costs to customer classes and rate structure components to ensure the proposed rate structure is aligned with the costs of providing sewer service. This is done in order to be equitable among all ratepayers and to comply with Proposition 218. This Study employed well-established industry practices as recognized by the WEF, AWWA, and other accepted industry standards. The cost-of-service analysis and rate structure proposed by this Study is designed to:

- ▶ Fairly and equitably recover costs through sewer rates;
- ▶ Conform to accepted industry practice and legal requirements; and
- ▶ Provide financial stability and recovery of system fixed costs.

The following section presents a detailed description of the cost-of-service and rate structure methodology and the corresponding results. The same cost allocation and rate design methodology has been applied to both the City and the District for consistency. The rate schedules for each utility are different, however, due to the differing revenue requirements and differences in each customer base.

4.1 CUSTOMER STATISTICS

To develop equitable sewer rates, the revenue requirement is allocated to various customer classifications according to the services provided and the demands placed on the sewer system. There are a total of 6,358 accounts between the City and the District (see Table 8). For purposes of allocating costs to various customer classes, this Study calculated metrics to measure the use of the sewer system by various customer classes. As explained in Section 2.1, the ESSUs are assigned to commercial accounts by comparing the winter water use and sewer strength of each commercial account to the

average residential winter water use and strength. In addition, this Study measured Equivalent Sewer Service Flow Units (“ESSFUs”), which is a measure of the average winter water use of residential dwelling units (without the strength factor). ESSFUs are assigned to commercial accounts by comparing the winter water use¹³ of each commercial account to the average winter water usage of all residential dwellings. As with ESSUs (see Section 2.1), the average quantity of water used by residential dwelling customers was calculated based on water usage records from the City’s water utility, Millview County Water District, Willow County Water District, and Regina Water Company. As previously mentioned in Section 2.1, the average monthly winter usage across all residential dwelling units in the winter of 2019 was determined to be 5.68 hcf (or 141 gallons per day).

The sewer strength factors for this Study look at biochemical oxygen demand (BOD) and suspended solids (SS) as these factors play a key role in the cost of treatment plant operations and capital expenditures. Consistent with existing practice by the City and the District, this Study uses five strength classifications: residential, low strength commercial, moderate strength commercial, medium strength commercial, and high strength commercial. Residential customers are assigned standard residential strength factors of 175 mg/l for BOD and 175 mg/l for SS. The strength assumptions for low, moderate, medium, and high commercial strength categories are summarized in Table 8. The strength characteristics used by this Study are the same as current practice for both the City and the District and are consistent with guidelines published by the California State Water Resources Control Board¹⁴.

¹³ As explained in Section 2.1, this Study defines winter water usage as the average monthly water usage from the previous January through March.

¹⁴ California State Resources Control Board Revenue Program Guidelines (March 1998).

Table 8: Account Data and Estimated Sewer Flows and Loadings

Customer Class	No. of Accts. (1)	No. of ESSFUs (1)	No. of ESSSUs (1)	Annual Indoor Water Usage (2) hcf	Estimated Annual Wastewater Flow MG	BOD Strength (3) mg/l	Annual BOD Loading lbs	SS Strength (3) mg/l	Annual SS Loading lbs
Ukiah Valley Sewer District									
Residential									
Single Family	2,291	2,291	2,291	185,741	138.93	175	202,775	175	202,775
Multi-Family	162	1,289	1,289	68,511	51.25	175	74,794	175	74,794
Mobile Homes	11	620	620	49,141	36.76	175	53,648	175	53,648
Commercial									
Low Strength	267	1,410	1,410	89,401	66.87	175	97,599	175	97,599
Moderate Strength	18	433	453	28,149	21.06	200	35,120	200	35,120
Medium Strength	5	52	82	6,015	4.50	500	18,762	500	18,762
High Strength	21	205	399	13,983	10.46	800	69,783	600	52,338
District Totals:	2,775	6,301	6,544	440,941	329.82		552,482		535,036
City of Ukiah									
Residential									
Single Family	2,724	2,724	2,724	184,342	137.89	175	201,248	175	201,248
Multi-Family	247	1,455	1,455	83,060	62.13	175	90,677	175	90,677
Mobile Homes	7	248	248	17,452	13.05	175	19,052	175	19,052
Commercial									
Low Strength	545	1,464	1,464	99,345	74.31	175	108,455	175	108,455
Moderate Strength	14	104	109	7,122	5.33	200	8,886	200	8,886
Medium Strength	9	51	81	3,464	2.59	500	10,805	500	10,805
High Strength	36	217	423	14,800	11.07	800	73,862	600	55,396
City Totals:	3,582	6,263	6,503	409,585	306.37		512,985		494,520

Footnotes:

- (1) From the utility billing system for FY 19-20.
 (2) Water usage data from average winter usage from 2019 (January through March)
 (3) Based on existing ordinance assumptions and SWRCB guidelines.

4.2 FIXED VS. VARIABLE COST COMPONENTS

Before costs are allocated to individual customer classes (as defined in 4.1), each utility cost is designated to be recovered either through fixed revenue or variable (i.e., usage-based) revenue. This step uses budget data from a “Test Year” (in this case FY 2020/21) and assigns each budgetary line item to either fixed revenue, variable revenue, or a combination of the two. These expense assignments are summarized in Table 9 (District) and Table 10 (City) in Rows 1 through 12. Some costs are designated to be collected entirely through fixed revenue, such as administrative costs, legal costs, billing costs, and debt service, because these costs do not change regardless of operational activities. Other costs are designated to be collected entirely through

variable revenue, such as utilities, chemical and operational supplies, because those costs can be correlated to wastewater flows. All other costs are allocated based on the “indirect allocation method” (based on the proportionate allocation of all costs that were previously allocated either to fixed or variable). In this case, the indirect allocation results in 57% allocation to fixed revenue and 43% to variable revenue.

Rows 13 and 14 are credits of not-rate revenue sources to offset revenue requirements. Connection fees are credits to the variable and fixed categories based on the indirect method, while Miscellaneous Non-Rate Revenue is credited entirely to offset expenses allocated to the fixed category. As a final step in Row 15, the indirect allocation basis is used to allocate the cost of building cash reserves during the Test Year.

The tables conclude with the revenue requirements from fixed and variable revenue components.

Table 9: District Designation of Fixed vs. Variable Revenue (Test Year)

	Test Year Budget	Revenue Recovery			
		Fixed %	Variable %	Fixed \$	Variable \$
1 Salaries and Benefits	\$1,175,958	57%	43%	\$669,174	\$506,783
2 Professional Services	\$448,779	57%	43%	\$255,376	\$193,403
3 Operating Supplies	\$148,974		100%		\$148,974
4 Utilities and Chemicals	\$326,894		100%		\$326,894
5 Administrative	\$190,712	100%		\$190,712	
6 Training	\$26,220	100%		\$26,220	
7 Billing	\$78,960	100%		\$78,960	
8 Legal Fees	\$56,733	100%		\$56,733	
9 Internal Allocation	\$212,246	100%		\$212,246	
10 Miscellaneous	\$61,612	100%		\$61,612	
11 Capital	\$92,799	57%	43%	\$52,807	\$39,992
12 Debt Service	\$2,007,699	100%		\$2,007,699	
13 Use of Connection Fees	-\$518,818	100%	0%	-\$518,818	\$0
14 Misc. Non-Rate Revenue	-\$295,328	100%		-\$295,328	
15 Change in Fund Balance	\$1,177,729	57%	43%	\$670,182	\$507,547
16	\$5,191,171	Revenue Requirement:		\$3,467,577	\$1,723,593
17				66.8%	33.2%
18		Total Revenue Requirement:		\$5,191,171	

Table 10: City Designation of Fixed vs. Variable Revenue (Test Year)

	Test Year Budget	Revenue Recovery			
		Fixed %	Variable %	Fixed \$	Variable \$
1 Salaries and Benefits	\$1,158,813	57%	43%	\$659,418	\$499,395
2 Professional Services	\$438,466	57%	43%	\$249,507	\$188,958
3 Operating Supplies	\$148,013		100%		\$148,013
4 Utilities and Chemicals	\$324,787		100%		\$324,787
5 Administrative	\$186,766	100%		\$186,766	
6 Training	\$25,795	100%		\$25,795	
7 Billing	\$99,639	100%		\$99,639	
8 Legal Fees	\$41,876	100%		\$41,876	
9 Internal Allocation	\$210,878	100%		\$210,878	
10 Miscellaneous	\$61,215	100%		\$61,215	
11 Capital	\$492,201	57%	43%	\$280,085	\$212,116
12 Debt Service	\$2,173,376	100%		\$2,173,376	
13 Use of Connection Fees	-\$515,602	100%		-\$515,602	
14 Misc. Non-Rate Revenue	-\$42,186	100%		-\$42,186	
15 Change in Fund Balance	\$484,098	57%	43%	\$275,474	\$208,624
16	\$5,288,135	Revenue Requirement:		\$3,706,243	\$1,581,893
17				70.1%	29.9%
18		Total Revenue Requirement:		\$5,288,135	

4.3 DETERMINATION OF UNIT COSTS

After allocating revenue requirements to be recovered through fixed vs. variable revenue, Table 11 shows how both the variable and fixed rate components are converted to unit costs. First the variable sewer rate revenue requirement is allocated evenly between the metrics of flow, biochemical oxygen demand (BOD), and suspended solids (SS). BOD and SS are measures of sewerage strength, which drives many of the variable cost of operation including chemicals, power, and labor. Based on existing practices at the City and District, common practice in the sewer utility rate setting community, and best practices promulgated by associations such as WEF, it is reasonable to allocate variable operating costs evenly between flow, BOD and SS.

Unit costs are then calculated by dividing the total cost for each component by the number of units identified in Table 8. For example, the District has approximately 535

thousand pounds of SS and an annual cost of \$569 thousand for solid removal, treatment and disposal, therefore the unit cost for SS is \$1.06 / lb. These unit costs become the basis for then assigning costs to customer classes.

Table 11: Determination of Unit Costs (District and City)

Cost Category	Component Allocation Percentages (1)	Parameter Allocation Percentages (2)	Annual Cost Allocated to Each Parameter	Quantities for Each Parameter		Unit Cost for Each Parameter	
District							
Fixed %	66.8%		\$3,467,577	6,301	ESSFUs	\$550.36	per ESSFU
Variable %	33.2%		\$1,723,593				
Flow (MG)		34%	\$586,022	329.82	mg	\$1.33	per hcf
BOD (lbs)		33%	\$568,786	552,482	lbs	\$1.03	per lb
SS (lbs)		33%	\$568,786	535,036	lbs	\$1.06	per lb
Revenue Requirement:			\$5,191,171				
City							
Fixed Operating Costs	70.1%		\$3,706,243	6,263	ESSFUs	\$591.79	per ESSFU
Variable Operating Costs	29.9%		\$1,581,893				
Flow (MG)		34%	\$537,844	306.37	mg	\$1.31	per hcf
BOD (lbs)		33%	\$522,025	512,985	lbs	\$1.02	per lb
SS (lbs)		33%	\$522,025	494,520	lbs	\$1.06	per lb
Revenue Requirement:			\$5,288,135				

Footnotes:

- (1) Percentages taken from Tables 9 & 10
 (2) Allocations to parameters are consistent with prior rate studies and rate setting practices.

4.4 ALLOCATION OF COSTS TO USERS (BY CUSTOMER CLASSES)

Unit costs are applied to the ESSFUs, annual sewer flows, BOD loadings and SS loadings associated with each customer class to arrive at the allocation of total costs to each customer class. Table 12 presents the allocation of costs to each user class.

Table 12: Allocation of Costs to Users (District and City)

					Service Charge Costs				
No. of ESSFUs	Water Usage (hcf)	BOD Strength (mg/l)	SS Strength (mg/l)	Customer Class	Fixed Costs	Variable Costs (1) Flow BOD SS			Allocation of Total Costs
District									
				Residential	\$550.360/ ESSFU	\$1.33/ hcf	\$1.03/ lb	\$1.060/ lb	
2,291	185,741	175	175	Single Family	\$1,260,886	\$246,855	\$208,759	\$215,566	\$1,932,065
1,289	68,511	175	175	Multi-Family	\$709,420	\$91,053	\$77,001	\$79,512	\$956,987
620	49,141	175	175	Mobile Homes	\$341,226	\$65,310	\$55,231	\$57,032	\$518,799
				Commercial					
1,410	89,401	175	175	Low Strength	\$776,270	\$118,816	\$100,479	\$103,756	\$1,099,321
433	28,149	200	200	Moderate Strength	\$238,366	\$37,410	\$36,157	\$37,335	\$349,268
52	6,015	500	500	Medium Strength	\$28,549	\$7,994	\$19,316	\$19,945	\$75,804
205	13,983	800	600	High Strength	\$112,861	\$18,583	\$71,843	\$55,639	\$258,926
6,301	440,941			Totals:	\$3,467,578	\$586,021	\$568,785	\$568,785	\$5,191,171
City									
				Residential	\$591.79/ ESSFU	\$1.31/ hcf	\$1.02/ lb	\$1.06/ lb	
2,724	184,342	175	175	Single Family	\$1,612,040	\$242,068	\$204,794	\$212,441	\$2,271,343
1,455	83,060	175	175	Multi-Family	\$861,056	\$109,070	\$92,275	\$95,721	\$1,158,122
248	17,452	175	175	Mobile Homes	\$146,764	\$22,917	\$19,388	\$20,112	\$209,182
				Commercial					
1,464	99,345	175	175	Low Strength	\$866,212	\$130,454	\$110,367	\$114,488	\$1,221,521
104	7,122	200	200	Moderate Strength	\$61,482	\$9,352	\$9,042	\$9,380	\$89,257
51	3,464	500	500	Medium Strength	\$30,064	\$4,549	\$10,995	\$11,406	\$57,014
217	14,800	800	600	High Strength	\$128,622	\$19,435	\$75,163	\$58,477	\$281,698
6,263	409,585			Totals:	\$3,706,241	\$537,844	\$522,025	\$522,025	\$5,288,135
Total Fixed:					\$7,173,819 68.5%	Total Variable Costs:		\$3,305,487 31.5%	

4.5 CALCULATION OF STRENGTH MULTIPLIERS

As introduced in Section 2.1, ESSFUs are calculated based on flow and strength characteristics. “Strength factors” are used to quantify the difference between a moderate, medium, or high strength commercial customer as compared to typical residential customers. The strength factor is made up of two elements: the fixed cost component and the variable cost component. The fixed component is based only on flow (not strength) therefore all customer types receive the same value of 68.5% (see bottom of Table 12). The remaining 31.5% (variable cost) is scaled for each customer class in order to reflect their relative strength of the discharge. This scaling is calculated by dividing the sum of the classes’ BOD and SS strength by the sum of residential BOD and SS strength. By way of example, the full ESSFU calculation for High Strength Commercial is shown in Figure 7.

$$\text{High Strength Multiplier} = 68.5\% + \left[\frac{\left(800 \frac{mg}{l} + 600 \frac{mg}{l}\right)}{\left(175 \frac{mg}{l} + 175 \frac{mg}{l}\right)} \right] \times 31.5\% = 1.946$$

Figure 7 – Example Calculation – High Strength Multiplier

Again, ESSSU assignments for commercial accounts are calculated by comparing the account's winter water usage to the average water usage for residential dwellings (5.68 hcf per month) and then multiplied by the numerical strength factor assigned to the commercial classification. As such, a commercial high strength commercial account with month winter water usage of 11.36 hcf would be assigned 3.89 ESSSUs (11.36 hcf divided by 5.68 hcf x 1.946).

The strength multipliers for the four commercial classes are summarized in Table 13.

Table 13: Commercial Strength Factors

Classification	Strength Factor
Low Strength	1.000
Moderate Strength	1.045
Medium Strength	1.586
High Strength	1.946

Section 5. RATE DESIGN & SCHEDULES

The following describes recommended minor modifications the rate structures currently used by the City and the District and concludes with the proposed sewer rates schedules for both the City and the District for the next 5 years.

5.1 EXISTING RATE STRUCTURES

The City and District currently charge for sewer services with very similar rate structures. All customers pay a fixed “minimum charge” in addition to a usage charge (based on winter water usage).

City Residential: All residential accounts with up to 4 dwelling units pay the minimum charge multiplied by the number of dwelling units. In addition, those accounts pay a (lower) consumption rate based on winter water usage (i.e. the water usage from the previous January). Mobile home and apartments with more than 4 dwelling units do not pay the minimum charge, however their consumption rate is equal to the (higher) Commercial 1 rate.

District Residential: All residential accounts pay the minimum charge multiplied by the number of dwelling units. In addition, a consumption rate is charged based on all winter water usage in excess of 3.4 hundred cubic feet (hcf)¹⁵. The District defines winter water usage as the average water usage from the previous January through March.

City and District Commercial: Commercial properties (i.e. non-residential accounts) are charged the same minimum charge as residential accounts *or* a usage charge based on winter water usage and the applicable usage rate, whichever is greater. There are

¹⁵ 1 hcf is 748 gallons, therefore 3.4 hcf is 2,543 gallons per month (or 85 gallons per day)

four commercial classifications, with the higher strength classifications paying a higher usage rate.

5.2 RATE STRUCTURE RECOMMENDATIONS

As described above, the City and District currently have very similar rate structures with only a few minor differences. With the concurrence of both District and City staff, this Study recommends that the rate structures be modified to be identical (although the rates themselves will be different to reflect the different financial needs and objectives of each respective agency). The changes are not expected to be material for either party and having identical rate structures will help the parties coordinate business and rate decisions in the future.

All customers pay a fixed monthly Service Charge and a Usage Charge. Residential customers will pay a Service Charge for each dwelling unit while Commercial customers will pay a Service Charge for each ESSFU¹⁶ (with a minimum of one (1) ESSFU per commercial account). The Usage Charge for all customers is determined by multiplying the account's winter water usage by the respective Usage Charge for the customer classification (which accounts for sewer strength).

The recommendation to change commercial accounts from the current flow-based structure to a structure with both a fixed component and variable component is to reflect the fact that fixed costs are primarily driven by system capacity (size) which is best measured by flow (i.e. ESSFUs) while variable costs are primarily driven by treatment costs (such as chemicals and energy) which are driven by both flow and strength (i.e. ESSUs).

To be clear, the City's mobile home and apartments will no longer be charged as commercial customers and District residential customers will no longer receive a water

¹⁶ ESSFU are calculated based on water usage from the previous winter.

use allowance. Winter water usage will follow the District's convention of using the average of usage values from January, February and March each year.

Table 14 presents the proposed Service Charges and Usage Rates recommended for each customer class for both the City and the District for FY 2020/21.

Table 14: Sewer Rate Determination (District and City for FY 2020/21)

Customer Class	ESSFUs	Annual Indoor Water Use hcf	BOD Strength mg/l	SS Strength mg/l	Monthly Fixed Charges \$/dwelling unit	Usage Rates (1) \$/hcf	Total Fixed Charge Revenue	Total Usage Charge Revenue	Total Annual Rate Revenue
District									
Residential									
Single Family	2,291	185,741	175	175	\$45.86	\$3.61	\$1,260,886	\$671,179	\$1,932,065
Multi-Family	1,289	68,511	175	175	\$45.86	\$3.61	\$709,420	\$247,567	\$956,987
Mobile Homes	620	49,141	175	175	\$45.86	\$3.61	\$341,226	\$177,573	\$518,799
Commercial									
Low Strength	1,410	89,401	175	175	\$45.86	\$3.61	\$776,270	\$323,051	\$1,099,321
Moderate Strength	433	28,149	200	200	\$45.86	\$3.94	\$238,366	\$110,902	\$349,268
Medium Strength	52	6,015	500	500	\$45.86	\$7.86	\$28,549	\$47,255	\$75,804
High Strength	205	13,983	800	600	\$45.86	\$10.45	\$112,861	\$146,065	\$258,926
Totals:	6,301	440,941					\$3,467,578	\$1,723,592	\$5,191,171
City									
Residential									
Single Family	2,724	184,342	175	175	\$49.32	\$3.58	\$1,612,040	\$659,304	\$2,271,343
Multi-Family	1,455	83,060	175	175	\$49.32	\$3.58	\$861,056	\$297,066	\$1,158,122
Mobile Homes	248	17,452	175	175	\$49.32	\$3.58	\$146,764	\$62,417	\$209,182
Commercial									
Low Strength	1,464	99,345	175	175	\$49.32	\$3.58	\$866,212	\$355,308	\$1,221,521
Moderate Strength	104	7,122	200	200	\$49.32	\$3.90	\$61,482	\$27,775	\$89,257
Medium Strength	51	3,464	500	500	\$49.32	\$7.78	\$30,064	\$26,950	\$57,014
High Strength	217	14,800	800	600	\$49.32	\$10.34	\$128,622	\$153,075	\$281,698
Totals:	6,263	409,585					\$3,706,241	\$1,581,895	\$5,288,135

Footnotes:

(1) The usage rate applies to 2019 winter water usage (the average of January through March).

5.3 PROPOSED RATE SCHEDULES

The above rates are proposed to be implemented on July 1, 2020. Subsequently sewer rates would increase by the rate adjustments proposed in Table 6 (for the District) and Table 7 (for the City). The proposed rate schedules for the next 5 years are summarized in Table 15 (District) and Table 16 (City).

Table 15: District 5-Year Sewer Rate Schedule

	July 1, 2020	July 1, 2021	July 1, 2022	July 1, 2023	July 1, 2024
Monthly Service Charge*:	\$45.86	\$46.32	\$46.78	\$47.25	\$47.72
Consumption Rate (per HCF):					
Residential:	\$3.61	\$3.65	\$3.69	\$3.73	\$3.77
Commercial 1:	\$3.61	\$3.65	\$3.69	\$3.73	\$3.77
Commercial 2:	\$3.94	\$3.98	\$4.02	\$4.06	\$4.10
Commercial 3:	\$7.86	\$7.93	\$8.01	\$8.09	\$8.17
Commercial 4:	\$10.45	\$10.55	\$10.66	\$10.77	\$10.88

* Service Charge is per dwelling unit for residential and per ESSFU for commercial accounts (with a minimum charge of 1 ESSFU).

Table 16: City 5-Year Sewer Rate Schedule

	July 1, 2020	July 1, 2021	July 1, 2022	July 1, 2023	July 1, 2024
Monthly Service Charge*:	\$49.32	\$50.31	\$51.32	\$51.83	\$52.35
Consumption Rate (per HCF):					
Residential:	\$3.58	\$3.65	\$3.72	\$3.76	\$3.80
Commercial 1:	\$3.58	\$3.65	\$3.72	\$3.76	\$3.80
Commercial 2:	\$3.90	\$3.98	\$4.06	\$4.10	\$4.14
Commercial 3:	\$7.78	\$7.94	\$8.10	\$8.18	\$8.26
Commercial 4:	\$10.34	\$10.55	\$10.76	\$10.87	\$10.98

* Service Charge is per dwelling unit for residential and per ESSFU for commercial accounts (with a minimum charge of 1 ESSFU).

Section 6. CONCLUSION

This Study used methodologies that are aligned with industry standard practices for rate setting as promulgated by WEF, AWWA and all applicable laws, including California's Proposition 218. The proposed annual adjustments to the rates proportionately assign costs to each customer class and customer based on service demands and will allow the City and District to continue to provide reliable and affordable sewer service to customers.

The sewer rates will need to be adopted in accordance with Proposition 218, which will require a detailed notice describing the proposed rates to be mailed to each affected property owner or customer at least 45 days prior to conducting a public hearing to adopt the rates.

SCHEDULES

Schedule 1 – Detailed Allocation of Operational Expenses between District and City

Schedule 2 – District Cash Flow Pro Forma

Schedule 3 – City Cash Flow Pro Forma

DRAFT

		Amount eligible to be split	Percent Split		Dollar Split		Notes
	FY 2019/20 Budget		District	City	District	City	
District Operating Expense Budget							
EXPENSES							
1 Wages & Payroll (Personnel)							
2 District Manager	\$49,500	90%	50.2%	49.8%	\$27,296	\$22,204	
3 Administrative Assistant/Sec.	\$50,000	95%	50.2%	49.8%	\$26,326	\$23,674	
4 Office Assistant	\$31,200	95%	50.2%	49.8%	\$16,427	\$14,773	
5 Employer Contribution (SS, UE, WC)	\$8,500	95%	50.2%	49.8%	\$4,475	\$4,025	
6 Office Expense							
7 Telephone & DSL	\$1,100	95%	50.2%	49.8%	\$579	\$521	
8 Dues & Subscriptions	\$10,622	95%	50.2%	49.8%	\$5,593	\$5,029	
9 Office Rent	\$5,100	95%	50.2%	49.8%	\$2,685	\$2,415	
10 Office Utilities	\$1,500	95%	50.2%	49.8%	\$790	\$710	
11 Postage	\$500	95%	50.2%	49.8%	\$263	\$237	
12 Supplies	\$2,000	95%	50.2%	49.8%	\$1,053	\$947	
13 Office Equipment	\$1,500	95%	50.2%	49.8%	\$790	\$710	
14 Software/ Web	\$4,500	95%	50.2%	49.8%	\$2,369	\$2,131	
15 Auditing & Fiscal Services							
16 Audit Services-FS Preparation	\$22,000	100%	50.2%	49.8%	\$11,035	\$10,965	
17 Accounting/bookkeeping Services	\$1,500	100%	50.2%	49.8%	\$752	\$748	
18 Banking Services	\$360	100%	50.2%	49.8%	\$181	\$179	
19 State Controllers Report	\$1,500	100%	50.2%	49.8%	\$752	\$748	
20 Liability and Property Insurance	\$8,200	100%	50.2%	49.8%	\$4,113	\$4,087	
21 Financial Review/Monthly Reports	\$55,000	100%	50.2%	49.8%	\$27,588	\$27,412	
22 Other Prof & Special Services							
23 Engineer Services	\$20,000	100%	50.2%	49.8%	\$10,032	\$9,968	
24 Mapping Services (GIS)	\$1,000	0%	50.2%	49.8%	\$1,000	\$0	
25 Computer Services/Hardware	\$2,500	100%	50.2%	49.8%	\$1,254	\$1,246	
26 County Auditor (property tax admin)	\$2,500	0%	50.2%	49.8%	\$2,500	\$0	
27 Financial Consulting Contract	\$15,000	75%	50.2%	49.8%	\$9,393	\$5,607	
28 Publication & Legal Notices	\$105	100%	50.2%	49.8%	\$53	\$52	
29 Legal Fees							
30 Bond Refinancing	\$60,000	0%	100%	0%	\$60,000	\$0	Expense reduced to \$0 in FY2020/21
31 Dispute Resolution & Arbitration	\$200,000	0%	100%	0%	\$200,000	\$0	Expense reduced to \$0 in FY2020/21
32 District Legal Support	\$60,000	50%	50.2%	49.8%	\$45,048	\$14,952	
33 Training/Transportation/Travel							
34 Travel to Seminars (Board)	\$4,000	100%	50.2%	49.8%	\$2,006	\$1,994	
35 Travel for District Manager	\$2,500	90%	50.2%	49.8%	\$1,379	\$1,121	
36 Staff Training and Development	\$3,000	100%	50.2%	49.8%	\$1,505	\$1,495	
37 Seminars/Conferences	\$3,500	100%	50.2%	49.8%	\$1,756	\$1,744	
District Revenue Budget FY 2018/19 Actuals							
REVENUE							
38 PROPERTY TAX CURRENT SECURED	-\$54,400	0%	100%	0%	-\$54,400	\$0	
39 PROPERTY TAX CURRENT UNSEC	-\$1,634	0%	100%	0%	-\$1,634	\$0	
40 SUPPLEMENTAL ROLL TAX	-\$1,170	0%	100%	0%	-\$1,170	\$0	
41 PROPERTY TAX PRIOR UNSECUR	-\$93	0%	100%	0%	-\$93	\$0	
42 HOMEOWNERS PROP TAX RELIEF	-\$437	0%	100%	0%	-\$437	\$0	
43 INTEREST	-\$65,170	0%	100%	0%	-\$65,170	\$0	
44 SPECIAL TAX - FIRE ASSMT	-\$76,792	0%	100%	0%	-\$76,792	\$0	
45 Other Income	-\$2,485	0%	100%	0%	-\$2,485	\$0	
46 OTHER	-\$21,697	0%	100%	0%	-\$21,697	\$0	
Fund 840 (City Operating Fund) FY 2019/20 Budget							
REVENUE							
47 42421 WASTE DISCHARGE PERMIT	-\$429	0%	0%	100%	\$0	-\$429	
48 42422 GREASE TRAP PERMIT FEES CITY	-\$306	0%	0%	100%	\$0	-\$306	
49 44170 PLAN CHECK FEES	-\$8,183	0%	0%	100%	\$0	-\$8,183	
50 44621 SEWER 1 RESIDENCE (CITY)	-\$2,117,905	0%	0%	100%	\$0	-\$2,117,905	
51 44622 SEWER 2 RESIDENCE (CITY)	-\$194,112	0%	0%	100%	\$0	-\$194,112	
52 44623 SEWER 3 RESIDENCE (CITY)	-\$42,154	0%	0%	100%	\$0	-\$42,154	
53 44624 SEWER 4 RESIDENCE (CITY)	-\$120,933	0%	0%	100%	\$0	-\$120,933	
54 44625 SEWER RESIDENTIAL/UNIT (CITY)	-\$528,122	0%	0%	100%	\$0	-\$528,122	
55 44626 SEWER COMMERCIAL (CITY)	-\$274,369	0%	0%	100%	\$0	-\$274,369	
56 44627 SEWER COMM LOW PER UNIT CITY	-\$670,130	0%	0%	100%	\$0	-\$670,130	
57 44628 SEWER COMM MODERATE/UNIT CIT	-\$88,668	0%	0%	100%	\$0	-\$88,668	
58 44629 SEWER COMM MEDIUM/UNIT CITY	-\$61,435	0%	0%	100%	\$0	-\$61,435	
59 44630 SEWER COMM HIGH/UNIT CITY	-\$285,593	0%	0%	100%	\$0	-\$285,593	
60 44631 SEWER APARTMENTS CITY	-\$471,059	0%	0%	100%	\$0	-\$471,059	
61 44632 SEW LAT INSPECTION FEE-CITY	-\$2,652	0%	0%	100%	\$0	-\$2,652	
62 44633 SEWER MOBILE HOMES CITY	-\$178,095	0%	0%	100%	\$0	-\$178,095	
63 44640 CONNECTION FEES	-\$500	0%	0%	100%	\$0	-\$500	
64 44732 SEW LAT INSPECTION FEE-UUSD	-\$357	0%	0%	100%	\$0	-\$357	
65 44830 REIMBURSABLE JOBS	\$0	0%	0%	100%	\$0	-\$1,075	
66 46110 INTEREST ON INVESTMENTS	-\$6,884	0%	0%	100%	\$0	-\$6,884	
67 44820 SALES OF PROPERTY	-\$3,621	0%	0%	100%	\$0	-\$3,621	

			Amount eligible	Percent Split		Dollar Split		Notes
			to be split	District	City	District	City	
EXPENSES								
68	54103 LAB SUPPLIES	\$20,000	100%	50.2%	49.8%	\$10,032	\$9,968	Shared based on # of accounts
69	56125 LAB EQUIP-REPAIR & MAINT.	\$10,000	100%	50.2%	49.8%	\$5,016	\$4,984	
70	51110 REGULAR SALARIES & WAGES	\$1,266,534	100%	50.2%	49.8%	\$635,286	\$631,248	
71	51120 NON-REGULAR SALARIES & WAGES	\$7,000	100%	50.2%	49.8%	\$3,511	\$3,489	
72	51210 RETIREMENT (PERS)	\$156,008	100%	50.2%	49.8%	\$78,253	\$77,755	
73	51220 INSURANCE	\$255,474	100%	50.2%	49.8%	\$128,144	\$127,330	
74	51230 WORKERS COMP	\$93,228	100%	50.2%	49.8%	\$46,763	\$46,465	
75	51240 MEDICARE	\$20,742	100%	50.2%	49.8%	\$10,404	\$10,338	
76	51130 OVERTIME SALARIES & WAGES	\$53,000	100%	50.2%	49.8%	\$26,584	\$26,416	
77	51250 UNEMPLOYMENT	\$14,365	100%	50.2%	49.8%	\$7,205	\$7,160	
78	51290 CELL PHONE STIPEND	\$4,737	100%	50.2%	49.8%	\$2,376	\$2,361	
79	51140 STAND-BY SALARIES & WAGES	\$35,000	100%	50.2%	49.8%	\$17,556	\$17,444	
80	51211 PERS UNFUNDED LIABILITY	\$248,440	100%	50.2%	49.8%	\$124,616	\$123,824	
81	61300 BILLING & COLLECTION ALLOCATIO	\$171,680	100%	43.7%	56.3%	\$74,943	\$96,737	
82	61600 GARAGE ALLOCATION	\$72,904	100%	50.2%	49.8%	\$36,568	\$36,336	
83	61420 BUILDING MAINTENANCE ALLOCATIO	\$5,232	100%	50.2%	49.8%	\$2,624	\$2,608	
84	61422 IT ALLOCATION	\$95,841	100%	50.2%	49.8%	\$48,073	\$47,768	
85	61500 INSURANCE ALLOCATION	\$157,031	100%	50.2%	49.8%	\$78,766	\$78,265	
86	61200 PURCHASING ALLOCATION	\$46,426	100%	50.2%	49.8%	\$23,287	\$23,139	
87	61430 CORP YARD ALLOCATION	\$16,763	100%	50.2%	49.8%	\$8,408	\$8,355	
88	61700 DISPATCH	\$16,603	100%	50.2%	49.8%	\$8,328	\$8,275	
89	62100 ADMIN & OVERHEAD ALLOCATION	\$249,789	100%	50.2%	49.8%	\$125,293	\$124,496	
90	54100 SUPPLIES	\$142,000	100%	50.2%	49.8%	\$71,226	\$70,774	
91	54101 POSTAGE	\$700	100%	50.2%	49.8%	\$351	\$349	
92	55100 TELEPHONE	\$4,800	100%	50.2%	49.8%	\$2,408	\$2,392	
93	55210 UTILITIES	\$312,200	100%	50.2%	49.8%	\$156,598	\$155,602	
94	56300 BUILDING MAINT. & REPAIR	\$18,000	100%	50.2%	49.8%	\$9,029	\$8,971	
95	57100 LEARNING AND DEVELOPMENT	\$37,500	100%	50.2%	49.8%	\$18,810	\$18,690	
96	52100 CONTRACTUAL SERVICES	\$405,298	100%	50.2%	49.8%	\$203,295	\$202,003	
97	52150 LEGAL SERVICES/EXPENSES	\$20,000	100%	50.2%	49.8%	\$10,032	\$9,968	
98	56120 EQUIPMENT MAINTENANCE & REPAIR	\$287,000	100%	50.2%	49.8%	\$143,958	\$143,042	
99	57300 MEMBERSHIPS & SUBSCRIPTIONS	\$7,800	100%	50.2%	49.8%	\$3,912	\$3,888	
100	54320 SOFTWARE	\$42,000	100%	50.2%	49.8%	\$21,067	\$20,933	
101	52113 PLANNING STUDIES	\$125,000	100%	50.2%	49.8%	\$62,699	\$62,301	
102	52180 SECURITY SERVICES	\$1,500	100%	50.2%	49.8%	\$752	\$748	
103	54330 COMPUTER AND TECHNOLOGY	\$27,000	100%	50.2%	49.8%	\$13,543	\$13,457	
104	56210 FUEL & FLUIDS	\$47,500	100%	50.2%	49.8%	\$23,826	\$23,674	
105	59100 PROPERTY TAXES PAID	\$10,750	100%	50.2%	49.8%	\$5,392	\$5,358	
106	59101 FEES	\$33,300	100%	50.2%	49.8%	\$16,703	\$16,597	
107	59400 OTHER EXPENSES	\$10,000	100%	50.2%	49.8%	\$5,016	\$4,984	
108	54102 SMALL TOOLS	\$27,000	100%	50.2%	49.8%	\$13,543	\$13,457	
109	56130 EXTERNAL SERVICES	\$40,000	100%	50.2%	49.8%	\$20,064	\$19,936	
110	56410 EQUIPMENT RENTAL - PRIVATE	\$2,000	100%	50.2%	49.8%	\$1,003	\$997	
111	58510 REIMBURSABLE JOBS	\$5,000	100%	50.2%	49.8%	\$2,508	\$2,492	
112	52114 COMPLIANCE STUDIES	\$25,000	100%	50.2%	49.8%	\$12,540	\$12,460	
113	54700 FINES & PENALTIES	\$50,000	100%	50.2%	49.8%	\$25,080	\$24,920	
114	55200 PG&E	\$33,000	100%	50.2%	49.8%	\$16,553	\$16,447	
115	56504 FACILITY MAINTENANCE & REPAIR	\$20,000	100%	50.2%	49.8%	\$10,032	\$9,968	
116	58201 WATER PURCHASES	\$1,000	100%	50.2%	49.8%	\$502	\$498	
117	58202 TREATMENT PLANT CHEMICALS	\$240,000	100%	50.2%	49.8%	\$120,383	\$119,617	
Fund 841 (City Debt Fund)		FY 2019/20 Budget						
REVENUE								
118	46110 INTEREST ON INVESTMENTS	-\$21,297	100%	52.0%	48.0%	-\$11,074	-\$10,223	
EXPENSES								
119	52500 TRUSTEE FEES	\$8,000	100%	50.2%	49.8%	\$4,013	\$3,987	

		Amount eligible to be split	Percent Split		Dollar Split		Notes
			District	City	District	City	
Fund 842 (City Rate Stabilization) FY 2019/20 Budget							
REVENUE							
120	46110 INTEREST ON INVESTMENTS	-\$7,720	100%	0%	100%	\$0	-\$7,720
Fund 843 (City Connection Fee) FY 2019/20 Budget							
REVENUE							
121	46110 INTEREST ON INVESTMENTS	-\$5,894	100%	0%	100%	\$0	-\$5,894
122	44770 SALE OF RECYCLED WATER	\$0	100%	0%	100%	\$0	\$700
Fund 844 (City Capital Fund) FY 2019/20 Budget							
REVENUE							
123	46110 INTEREST ON INVESTMENTS	-\$10	100%	0%	100%	\$0	-\$10
EXPENSES							
124	53000 LAWSUIT SETTLEMENT	\$1,000,000	100%	0%	100%	\$0	\$1,000,000
125	52150 LEGAL SERVICES - CITY ONLY	\$0	100%	0%	100%	\$0	\$15,737
Fund 940 (District Operating Fund) FY 2018/19 Actuals							
REVENUE							
126	42421 WASTE DISCHARGE PERMIT	\$0	0%	100%	0%	\$0	\$0
127	42423 GREASE TRAP PERMIT FEES (UVSD)	-\$100	0%	100%	0%	-\$100	\$0
128	44721 SEWER 1 RESIDENCE (UVSD)	-\$1,456,628	0%	100%	0%	-\$1,456,628	\$0
129	44722 SEWER 2 RESIDENCE (UVSD)	-\$79,946	0%	100%	0%	-\$79,946	\$0
130	44723 SEWER 3 RESIDENCE (UVSD)	-\$17,539	0%	100%	0%	-\$17,539	\$0
131	44724 SEWER 4 RESIDENCE (UVSD)	-\$69,850	0%	100%	0%	-\$69,850	\$0
132	44725 SEWER RESIDENTIAL/UNIT (UVSD)	-\$1,026,504	0%	100%	0%	-\$1,026,504	\$0
133	44726 SEWER COMMERCIAL (UVSD)	-\$85,050	0%	100%	0%	-\$85,050	\$0
134	44727 SEWER COMM LOW/UNIT (UVSD)	-\$789,429	0%	100%	0%	-\$789,429	\$0
135	44728 SEWER COMM MODERAT/UNIT UVSD	-\$240,662	0%	100%	0%	-\$240,662	\$0
136	44729 SEWER COMM MEDIUM/UNIT UVSD	-\$76,227	0%	100%	0%	-\$76,227	\$0
137	44730 SEWER COMM HIGH/UNIT UVSD	-\$252,579	0%	100%	0%	-\$252,579	\$0
138	44731 SEWER APARTMENTS (UVSD)	-\$676,634	0%	100%	0%	-\$676,634	\$0
139	44732 SEW LAT INSPECTION FEE-UVSD	\$0	0%	100%	0%	\$0	\$0
140	44733 SEWER MOBILE HOMES UVSD	-\$391,655	0%	100%	0%	-\$391,655	\$0
141	44735 SEWER COMM LEACHATE UVSD	-\$3,111	0%	100%	0%	-\$3,111	\$0
142	46110 INTEREST ON INVESTMENTS	-\$17,893	0%	100%	0%	-\$17,893	\$0
143	48110 MISCELLANEOUS RECEIPTS	\$0	0%	100%	0%	\$0	\$0
144	48130 COLLECTION OF BAD DEBTS	\$0	0%	100%	0%	\$0	\$0
145	48150 CASH OVER/SHORT	\$8,590	0%	100%	0%	\$8,590	\$0
146	46116 MISCELLANEOUS INCOME	\$0	0%	100%	0%	\$0	\$0
147	52101 UVSD - PREP OF SCO REPORT	\$0	0%	100%	0%	\$0	\$0
148	52102 UVSD - CONSULTANT SERVICES	\$0	0%	100%	0%	\$0	\$0
149	52105 UVSD - SHARE CAP PROJECTS 844	\$0	0%	100%	0%	\$0	\$0
EXPENSES							
150	52100 CONTRACTUAL SERVICES	\$30,690	0%	100%	0%	\$30,690	\$0
Fund 842 (District Rate Stabilization) FY 2019/20 Budget							
REVENUE							
151	46110 INTEREST ON INVESTMENTS	-\$1	0%	100%	0%	-\$1	\$0
Fund 843 (District Connection Fee) FY 2019/20 Budget							
REVENUE							
152	44640 CONNECTION FEES	-\$1,003,701	0%	100%	0%	-\$1,003,701	\$0
153	46110 INTEREST ON INVESTMENTS	-\$10,665	0%	100%	0%	-\$10,665	\$0
EXPENSES							
154	61300 BILLING & COLLECTION ALLOCATIO	\$3,332	0%	100%	0%	\$3,332	\$0
155	62100 ADMIN & OVERHEAD ALLOCATION	\$1,313	0%	100%	0%	\$1,313	\$0
Fund 844 (District Capital Fund) FY 2019/20 Budget							
REVENUE							
156	46110 INTEREST ON INVESTMENTS	\$24	0%	100%	0%	\$24	\$0
157	44835 REIMBURSEMENTS/RETAINAGE	-\$34,068	0%	100%	0%	-\$34,068	\$0
EXPENSES							
158	61300 BILLING & COLLECTION ALLOCATIO	\$607	0%	100%	0%	\$607	\$0

SCHEDULE 2 – District Cash Flow Proforma

	Budget FY 2020	Forecast FY 2021	Forecast FY 2022	Forecast FY 2023	Forecast FY 2024	Forecast FY 2025	Forecast FY 2026	Forecast FY 2027	Forecast FY 2028	Forecast FY 2029	Forecast FY 2030	Forecast FY 2031
1 Sewer Rate Revenue Increase:	0.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	2.0%	1.0%
Revenue												
2 Sewer Service Charge Revenue	\$5,162,702	\$5,162,702	\$5,191,171	\$5,271,708	\$5,353,496	\$5,436,552	\$5,520,896	\$5,606,550	\$5,693,532	\$5,781,863	\$5,871,565	\$6,021,374
3 Change due to growth		\$28,469	\$28,626	\$29,070	\$29,521	\$29,979	\$30,444	\$30,917	\$31,396	\$31,883	\$32,378	\$33,204
4 Increase due to rate adjustments		\$0	\$51,912	\$52,717	\$53,535	\$54,366	\$55,209	\$56,065	\$56,935	\$57,819	\$117,431	\$60,214
Non-Rate Revenues												
5 Other Income	\$49,661	\$24,907	\$25,156	\$25,408	\$25,662	\$25,919	\$26,178	\$26,440	\$26,704	\$26,971	\$27,241	\$27,513
6 Other Operating Revenue	\$3,211	\$3,243	\$3,275	\$3,308	\$3,341	\$3,374	\$3,408	\$3,442	\$3,477	\$3,511	\$3,546	\$3,582
7 Interest Earnings	\$104,778	\$130,217	\$149,724	\$151,293	\$165,528	\$169,770	\$173,705	\$177,295	\$180,502	\$183,284	\$185,599	\$188,374
8 Property Tax	\$56,564	\$59,001	\$61,543	\$64,195	\$66,961	\$69,846	\$72,855	\$75,994	\$79,269	\$82,684	\$86,247	\$89,963
9 Special Tax	\$77,962	\$77,962	\$77,962	\$77,962	\$77,962	\$77,962	\$77,962	\$77,962	\$77,962	\$77,962	\$77,962	\$77,962
10 Connection Fees	\$1,003,701	\$186,896	\$186,896	\$186,896	\$186,896	\$186,896	\$186,896	\$186,896	\$186,896	\$186,896	\$186,896	\$186,896
11 Settlement Agreement Rev	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12 Grant Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13 Total Revenue	\$6,458,578	\$5,673,397	\$5,776,265	\$5,862,558	\$5,962,902	\$6,054,663	\$6,147,553	\$6,241,561	\$6,336,672	\$6,432,874	\$6,588,866	\$6,689,082
O&M Costs												
14 Salaries and Benefits	\$1,152,847	\$1,175,904	\$1,202,710	\$1,230,117	\$1,258,139	\$1,286,790	\$1,316,083	\$1,346,034	\$1,376,655	\$1,407,962	\$1,439,970	\$1,472,695
15 Professional Services	\$516,537	\$448,759	\$463,488	\$478,698	\$494,403	\$510,619	\$527,363	\$544,652	\$562,504	\$580,936	\$599,968	\$619,618
16 Operating Supplies	\$144,628	\$148,967	\$153,857	\$158,905	\$164,119	\$169,502	\$175,060	\$180,799	\$186,725	\$192,844	\$199,161	\$205,685
17 Utilities and Chemicals	\$317,359	\$326,879	\$337,609	\$348,687	\$360,127	\$371,939	\$384,135	\$396,729	\$409,732	\$423,158	\$437,021	\$451,335
18 Administrative	\$185,149	\$190,704	\$196,963	\$203,426	\$210,100	\$216,991	\$224,107	\$231,454	\$239,040	\$246,873	\$254,961	\$263,312
19 Training	\$25,455	\$26,219	\$27,079	\$27,968	\$28,886	\$29,833	\$30,811	\$31,821	\$32,864	\$33,941	\$35,053	\$36,201
20 Billing	\$78,882	\$78,960	\$81,552	\$84,228	\$86,992	\$89,845	\$92,791	\$95,833	\$98,974	\$102,217	\$105,566	\$109,024
21 Legal Fees	\$315,080	\$56,732	\$58,594	\$60,517	\$62,502	\$64,552	\$66,669	\$68,855	\$71,112	\$73,442	\$75,848	\$78,332
22 Internal Allocation	\$206,055	\$212,237	\$219,203	\$226,396	\$233,823	\$241,493	\$249,412	\$257,589	\$266,031	\$274,749	\$283,750	\$293,043
23 Miscellaneous	\$59,815	\$61,610	\$63,632	\$65,720	\$67,876	\$70,102	\$72,401	\$74,775	\$77,225	\$79,756	\$82,369	\$85,067
24 Total Operating Expenses	\$3,001,807	\$2,726,970	\$2,804,686	\$2,884,663	\$2,966,967	\$3,051,666	\$3,138,833	\$3,228,540	\$3,320,863	\$3,415,879	\$3,513,668	\$3,614,312
Capital Costs												
25 Total Capital Spending	\$536,204	\$92,795	\$885,514	\$110,688	\$732,099	\$757,722	\$784,243	\$811,691	\$840,100	\$869,504	\$899,936	\$931,434
26 Bond Proceeds (net of issuance costs)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
27 Cash Funded Capital Projects	\$536,204	\$92,795	\$885,514	\$110,688	\$732,099	\$757,722	\$784,243	\$811,691	\$840,100	\$869,504	\$899,936	\$931,434
28 Existing Debt Service	\$2,536,235	\$2,007,699	\$2,007,699	\$2,007,699	\$2,007,699	\$2,007,699	\$2,007,699	\$2,007,699	\$2,007,699	\$2,007,699	\$2,007,699	\$2,007,699
29 One-time Principal Contribution	\$2,500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
30 New Debt Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
31 Total Capital Expenses	\$5,572,439	\$2,100,494	\$2,893,213	\$2,118,387	\$2,739,798	\$2,765,421	\$2,791,942	\$2,819,390	\$2,847,799	\$2,877,203	\$2,907,636	\$2,939,133
32 Total Revenue Requirement	\$8,574,247	\$4,827,464	\$5,697,900	\$5,003,050	\$5,706,765	\$5,817,088	\$5,930,775	\$6,047,931	\$6,168,662	\$6,293,082	\$6,421,303	\$6,553,445
Beginning Year Balance (all funds*)												
33	10,326,633	7,862,662	9,040,516	9,135,262	9,994,770	10,250,907	10,488,483	10,705,261	10,898,891	11,066,901	11,206,693	11,374,255
* includes restricted connection fee funds												
34 Use of Connection Fees for Existing Debt	\$655,399	\$518,818	\$203,277	\$186,896	\$186,896	\$186,896	\$186,896	\$186,896	\$186,896	\$186,896	\$186,896	\$186,896
35 Surplus/(Shortfall)	(\$2,463,971)	\$1,177,854	\$94,746	\$859,508	\$256,137	\$237,576	\$216,779	\$193,630	\$168,010	\$139,792	\$167,562	\$135,637
36 End of Year Balance	7,862,662	9,040,516	9,135,262	9,994,770	10,250,907	10,488,483	10,705,261	10,898,891	11,066,901	11,206,693	11,374,255	11,509,893
37 Minimum Reserve Target	\$2,161,215	\$2,023,796	\$2,062,654	\$2,102,643	\$2,143,795	\$2,186,144	\$2,229,728	\$2,274,581	\$2,320,743	\$2,368,251	\$2,417,145	\$2,467,467
38 Available Cash	\$5,701,447	\$7,016,720	\$7,072,608	\$7,892,127	\$8,107,113	\$8,302,338	\$8,475,533	\$8,624,310	\$8,746,158	\$8,838,442	\$8,957,110	\$9,042,426
39 Restricted Fund Balance (Connection Fees)	\$348,302	\$16,381	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debt Coverage Calculations												
Total Revenue Available for Debt Service												
40 ...with Connection Fees	\$3,456,771	\$2,946,427	\$2,971,579	\$2,977,895	\$2,995,935	\$3,002,997	\$3,008,720	\$3,013,020	\$3,015,809	\$3,016,995	\$3,075,198	\$3,074,771
41 ...without Connection Fees	\$2,453,070	\$2,759,531	\$2,784,683	\$2,790,999	\$2,809,039	\$2,816,101	\$2,821,824	\$2,826,124	\$2,828,913	\$2,830,099	\$2,888,302	\$2,887,875
42 Total Yearly Parity Debt Payment	\$2,536,235	\$2,007,699	\$2,007,699	\$2,007,699	\$2,007,699	\$2,007,699	\$2,007,699	\$2,007,699	\$2,007,699	\$2,007,699	\$2,007,699	\$2,007,699
43 Debt Coverage Ratio (with Connection Fees)	1.36	1.47	1.48	1.48	1.49	1.50	1.50	1.50	1.50	1.50	1.53	1.53
44 Debt Coverage Ratio (without Connection Fees)	0.97	1.37	1.39	1.39	1.40	1.40	1.41	1.41	1.41	1.41	1.44	1.44

SCHEDULE 3 – City Cash Flow Proforma

	Budget FY 2020	Forecast FY 2021	Forecast FY 2022	Forecast FY 2023	Forecast FY 2024	Forecast FY 2025	Forecast FY 2026	Forecast FY 2027	Forecast FY 2028	Forecast FY 2029	Forecast FY 2030	Forecast FY 2031
1 Sewer Rate Revenue Increase:	5.0%	2.0%	2.0%	2.0%	1.0%	1.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Revenue												
2 Sewer Service Charge Revenue	\$5,032,575	\$5,032,575	\$5,288,135	\$5,398,030	\$5,510,207	\$5,569,614	\$5,629,662	\$5,746,653	\$5,866,076	\$5,987,980	\$6,112,418	\$6,239,442
3 Change due to growth		\$3,932	\$4,131	\$4,217	\$4,305	\$4,351	\$4,398	\$4,490	\$4,583	\$4,678	\$4,775	\$4,875
4 Increase due to rate adjustments		\$251,629	\$105,763	\$107,961	\$55,102	\$55,696	\$112,593	\$114,933	\$117,322	\$119,760	\$122,248	\$124,789
5 Non-Rate Revenues												
6 Other Income	\$3,621	\$3,657	\$3,694	\$3,731	\$3,768	\$3,806	\$3,844	\$3,882	\$3,921	\$3,960	\$4,000	\$4,040
7 Other Operating Revenue	\$19,187	\$19,379	\$19,572	\$19,768	\$19,966	\$20,166	\$20,367	\$20,571	\$20,777	\$20,984	\$21,194	\$21,406
8 Interest Earnings	\$23,847	\$19,150	\$20,906	\$21,437	\$24,943	\$25,595	\$24,984	\$24,454	\$24,007	\$23,641	\$23,356	\$23,153
9 Connection Fees	\$50,500	\$30,500	\$30,500	\$30,500	\$30,500	\$30,500	\$30,500	\$30,500	\$30,500	\$30,500	\$30,500	\$30,500
10 Total Revenue	\$5,129,729	\$5,360,821	\$5,472,701	\$5,585,644	\$5,648,791	\$5,709,728	\$5,826,348	\$5,945,483	\$6,067,185	\$6,191,504	\$6,318,492	\$6,448,205
O&M Costs												
11 Salaries and Benefits	\$1,136,144	\$1,158,867	\$1,178,783	\$1,199,034	\$1,219,622	\$1,240,555	\$1,261,838	\$1,283,476	\$1,305,475	\$1,327,841	\$1,350,581	\$1,373,699
12 Professional Services	\$475,555	\$438,486	\$450,395	\$462,623	\$475,181	\$488,075	\$501,315	\$514,911	\$528,871	\$543,206	\$557,925	\$573,039
13 Operating Supplies	\$143,709	\$148,020	\$152,040	\$156,168	\$160,407	\$164,760	\$169,229	\$173,819	\$178,532	\$183,371	\$188,339	\$193,441
14 Utilities and Chemicals	\$315,341	\$324,802	\$333,623	\$342,681	\$351,983	\$361,534	\$371,341	\$381,412	\$391,753	\$402,372	\$413,275	\$424,470
15 Administrative	\$181,335	\$186,775	\$191,848	\$197,056	\$202,405	\$207,898	\$213,537	\$219,329	\$225,275	\$231,381	\$237,651	\$244,088
16 Training	\$25,045	\$25,796	\$26,497	\$27,216	\$27,955	\$28,714	\$29,493	\$30,292	\$31,114	\$31,957	\$32,823	\$33,712
17 Billing	\$96,737	\$99,639	\$102,345	\$105,124	\$107,978	\$110,908	\$113,916	\$117,006	\$120,178	\$123,435	\$126,780	\$130,214
18 Minor Capital	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
19 Legal Fees	\$40,658	\$41,877	\$43,015	\$44,183	\$45,382	\$46,613	\$47,878	\$49,176	\$50,510	\$51,879	\$53,284	\$54,728
20 Internal Allocation	\$204,745	\$210,887	\$216,615	\$222,496	\$228,536	\$234,737	\$241,105	\$247,644	\$254,358	\$261,252	\$268,331	\$275,600
21 Miscellaneous	\$59,435	\$61,218	\$62,881	\$64,588	\$66,341	\$68,141	\$69,990	\$71,888	\$73,837	\$75,838	\$77,893	\$80,003
22 Total Operating Expenses	\$2,678,703	\$2,696,367	\$2,758,041	\$2,821,170	\$2,885,789	\$2,951,934	\$3,019,643	\$3,088,952	\$3,159,902	\$3,232,532	\$3,306,882	\$3,382,995
Capital Costs												
23 Total Capital Spending	\$2,232,796	\$492,205	\$879,885	\$109,984	\$727,445	\$752,906	\$779,257	\$806,531	\$834,760	\$863,977	\$894,216	\$925,513
24 Settlement Agreement Payment (Cash)	\$1,000,000											
25 Cash Funded Capital Projects	\$2,232,796	\$492,205	\$879,885	\$109,984	\$727,445	\$752,906	\$779,257	\$806,531	\$834,760	\$863,977	\$894,216	\$925,513
26 Existing Debt Service	\$623,370	\$1,995,254	\$1,995,254	\$1,995,254	\$1,995,254	\$1,995,254	\$1,995,254	\$1,995,254	\$1,995,254	\$1,995,254	\$1,995,254	\$1,995,254
27 Internal Loan Repayments	\$0	\$178,122	\$178,122	\$178,122	\$178,122	\$178,122	\$178,122	\$178,122	\$178,122	\$178,122	\$178,122	\$0
28 New Debt Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
29 Total Settlement & Capital Expenses	\$3,856,166	\$2,665,581	\$3,053,261	\$2,283,361	\$2,900,821	\$2,926,282	\$2,952,634	\$2,979,908	\$3,008,136	\$3,037,353	\$3,067,592	\$2,920,767
30 Total Revenue Requirement	\$6,534,869	\$5,361,949	\$5,811,302	\$5,104,530	\$5,786,610	\$5,878,216	\$5,972,276	\$6,068,860	\$6,168,038	\$6,269,885	\$6,374,474	\$6,303,762
31 Beginning Year Balance (all funds*)	\$6,572,638	\$5,278,086	\$5,762,060	\$5,908,561	\$6,874,775	\$7,054,576	\$6,886,089	\$6,740,160	\$6,616,784	\$6,515,930	\$6,437,549	\$6,381,567
* includes restricted connection fee funds												
31 Use of Connection Fees for Existing Debt	\$161,088	\$515,602	\$515,602	\$515,602	\$348,120	\$30,500	\$30,500	\$30,500	\$30,500	\$30,500	\$30,500	\$30,500
32 Surplus/(Shortfall)	(\$1,294,552)	\$483,974	\$146,501	\$966,215	\$179,801	(\$168,488)	(\$145,928)	(\$123,377)	(\$100,854)	(\$78,381)	(\$55,982)	\$144,443
33 End of Year Balance	\$5,278,086	\$5,762,060	\$5,908,561	\$6,874,775	\$7,054,576	\$6,886,089	\$6,740,160	\$6,616,784	\$6,515,930	\$6,437,549	\$6,381,567	\$6,526,010
34 Minimum Reserve Target	\$1,995,465	\$2,004,297	\$2,035,134	\$2,066,699	\$2,099,008	\$2,132,081	\$2,165,935	\$2,200,590	\$2,236,065	\$2,272,380	\$2,309,555	\$2,347,611
35 Available Cash	\$3,282,620	\$3,757,763	\$3,873,426	\$4,808,077	\$4,955,568	\$4,754,008	\$4,574,225	\$4,416,194	\$4,279,865	\$4,165,169	\$4,072,012	\$4,178,399
36 Restricted Fund Balance (Connection Fees)	\$1,772,924	\$1,287,823	\$802,721	\$317,620	-	-	-	-	-	-	-	-
Debt Coverage Calculations												
37 ...with Connection Fees	\$2,451,026	\$2,486,331	\$2,536,538	\$2,586,351	\$2,584,880	\$2,579,672	\$2,628,583	\$2,678,409	\$2,729,160	\$2,780,849	\$2,833,488	\$3,065,210
38 ...without Connection Fees	\$2,400,526	\$2,455,831	\$2,506,038	\$2,555,851	\$2,554,380	\$2,549,172	\$2,598,083	\$2,647,909	\$2,698,660	\$2,750,349	\$2,802,988	\$3,034,710
39 Total Yearly Parity Debt Payment	\$623,370	\$1,995,254	\$1,995,254	\$1,995,254	\$1,995,254	\$1,995,254	\$1,995,254	\$1,995,254	\$1,995,254	\$1,995,254	\$1,995,254	\$1,995,254
40 Debt Coverage Ratio (with Connection Fees)	3.93	1.25	1.27	1.30	1.30	1.29	1.32	1.34	1.37	1.39	1.42	1.54
41 Debt Coverage Ratio (without Connection Fees)	3.85	1.23	1.26	1.28	1.28	1.28	1.30	1.33	1.35	1.38	1.40	1.52

ATTACHMENT 2

Wastewater Rate Study Presentation

(Placeholder – Presentation will be made available when received.)