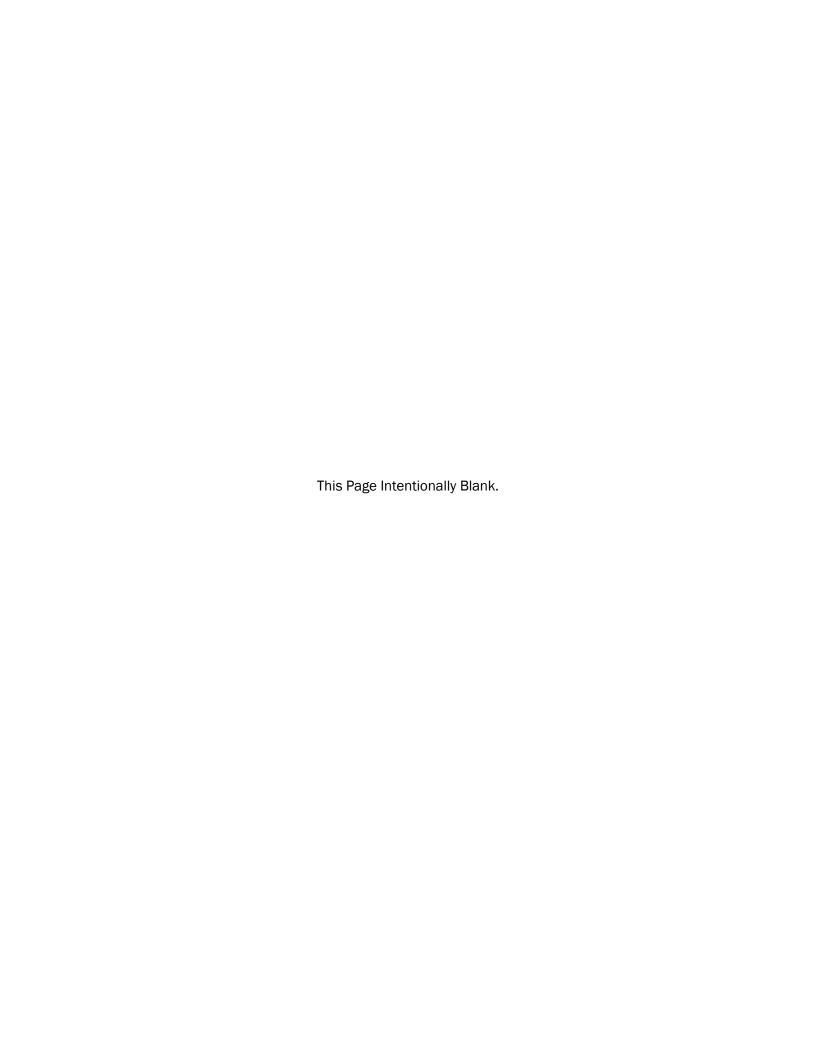


# Water, Sewer and Garbage Funds Rates Study

Prepared for City of Ripon, California November 2020



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## List of Abbreviations

AF acre feet (equal to 325,851 gallons)

CCI Construction Cost Index

CIP Capital Improvement Program

City City of Ripon

DSC debt service coverage

FY Fiscal year (July 1 to June 30)
ENR Engineering News Record
FY21 July 1, 2020 to June 30, 2021

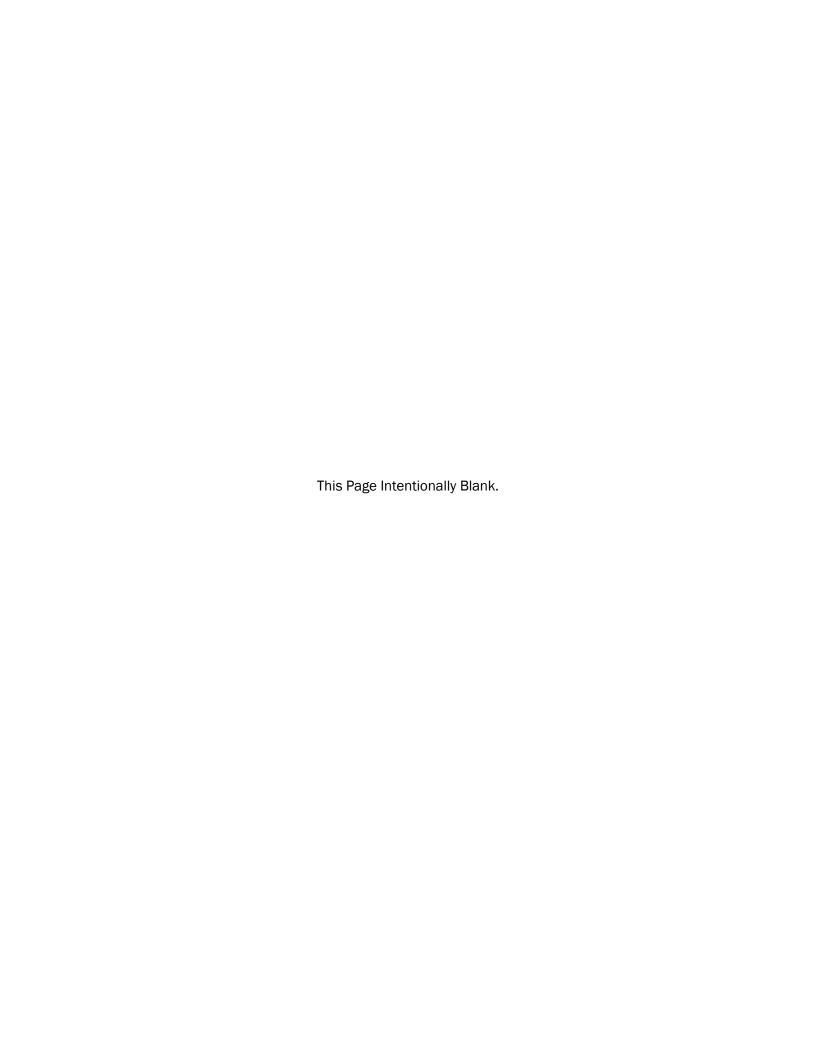
gpd gallons per day

hcf Hundred Cubic Feet (equal to ~ 748.1 gallons)

mgd million gallons per day

O&M Operation and maintenance

RMC Ripon Municipal Code
R&R Repair and Replacement
SFR Single Family Residential



# **Executive Summary**

The City of Ripon has three enterprise funds: Water, Sewer and Garbage.<sup>1,2</sup> Enterprise funds are operated by the City in a "business-type" manner and the City charges customers for services provided through these enterprises. All residents within the City limits are required to sign up for all three services.

The last rate study that recommended utility rate increases was completed in 2015. That study recommended annual rate increases. City council requested staff bring back the proposed rate increases each year for evaluation.

The City, in conjunction with Municipal Financial Services, has analyzed the adequacy of revenues to meet projected expenditures of the enterprise funds to determine whether revenues will be adequate to cover operating and maintenance costs as well as needed capital costs while supporting debt service obligations and meeting target reserve levels. Revenues from rates, which generate approximately 99% of water and garbage enterprise fund revenues and 91% of sewer fund revenues, were developed for the five-year period Fiscal Year 2020 – 2021 (FY21) through FY25.

## **Significant Assumptions**

There are a number of assumptions in this study related to future interest rates, cost inflation, the annual number of new connections, water sales and other items. The unifying theme underlying all assumptions is that rates based on the assumptions should have a very high probability of recovering annual revenue requirements.

A summary of the most significant assumptions made in this study are listed below.

**Assumption 1.** Projected growth in accounts for all enterprises is 40 single family accounts per year, which reflects with recent growth rate of less than 1%. The City has a 2.5% growth cap. The projected water use for each new account is the same as annual average for existing metered single family accounts.

**Assumption 2.** Projected residential average annual water use for FY21 is approximately 22 hcf per month. Projected nonresidential average annual water use for FY21 is approximately 59 hcf per month.

**Assumption 3.** The projected reduction in water use for residential and nonresidential accounts is 3 percent per year for FY21-FY25.

**Assumption 4.** The target cash balance reserve level for the water and sewer funds is 50 percent of annual operating expenditures. The target cash balance reserve level for the garbage fund is 35 percent of annual operating expenditures.

**Assumption 5.** Operating expenditures, including Overhead Reimbursement, are projected to increase at a rate of 3 percent per year for all enterprise funds.

<sup>&</sup>lt;sup>1</sup> The City's financial statements use the term "Refuse Fund." The City's budgets use the term "Garbage Fund." The terms are interchangeable and refer to Fund 120. The term "Garbage" is used in this report.

<sup>&</sup>lt;sup>2</sup> The City's financial statements use the term "Sewer Fund." The City's budgets use the term "Ripon Municipal Sewer District No. 1." The terms are interchangeable and refer to Fund 130. The term "Sewer" is used in this report.

#### **Debt Service Coverage**

As of June 30, 2019, the City has three Revenue Bonds with principal outstanding – two for the Water Fund with \$7,390,000 outstanding and one for the Sewer Fund with \$1,185,000 outstanding – for a total of \$8,575,000. At the end of the five-year rate study period (FY25), the outstanding principal balance for the two Water bonds will be \$3,545,000, and the Sewer bond will reach maturity in October 2025.

Bonds are secured by a pledge of net revenues from each fund. Principal payments are due annually on October 1. Interest payments are payable semi-annually on April 1 and October 1. Rates developed in this study are set to generate Net Revenues greater than or equal to 1.2 times the annual debt service.

Interest rates, maturity dates, amounts issued and amounts outstanding as of June 30, 2019 are summarized in the text below and in Table ES-1.

Water Fund. In 2002, the City was one of four participants in \$34,335,000 California Statewide Communities Development Authority Water and Wastewater Revenue Bonds (Pooled Financing Program) Series 2002A. The City's portion was \$4,300,000. The bonds are secured by a pledge of net revenues of the Water Enterprise Fund. In September 2012, the City entered into an agreement with Union Bank, N.A. to refund the City's remaining portion (\$3,350,000) of the California Statewide Community Development Authority Water and Wastewater Revenue Bonds Series 2002A. The Water Enterprise Fund is required to establish user fees and rates that will yield net revenues equal to at least 1.2 times the annual debt service.

Bond and Fund	Interest Rates	Maturity Dates	Amounts Issued	Outstanding As of June 30, 2019
Water Fund				
2002 Revenue Bonds				
Serial Bonds	4.10% - 5.00%	REFUNDED	\$2,155,000	\$
Term Bonds	5.13%	REFUNDED	\$840,000	\$
Term Bonds	5.00%	REFUNDED	\$1,305,000	\$
		•	\$4,300,000	\$
2006C Revenue Bonds				
Serial Bonds	3.625% - 4.30%	October 2021	\$3,475,000	\$870,00
Term Bonds	4.50%	October 2027	\$2,120,000	\$2,120,00
Term Bonds	4.50%	October 2032	\$2,250,000	\$2,250,00
		•	\$7,845,000	\$5,240,00
2012 Refunding Revenue Bonds				
Serial Bonds	2.00% - 3.375%	October 2027	\$3,350,000	\$2,150,00
Sewer Fund				
1999 Revenue Bonds		REFUNDED	\$3,250,000	\$
2011 Refunding Revenue Bonds				
Term Bonds	4.20%	October 2025	\$2,195,000	\$1,185,00
Nater and Sewer Funds			\$13,390,000	\$8,575,00

In August 2006, the City issued \$7,845,000 California Statewide Communities Development Authority Water Revenue Bonds Series 2006C. The bonds are secured by a pledge of net revenues of the Water Enterprise Fund.

#### Sewer Fund.

In 1999, the City was one of three participants in \$18,550,000 California Statewide Communities Development Authority Water and Wastewater Revenue Bonds (Pooled Financing Program) Series 1999A. The bonds were secured by a

pledge of net revenues of the Sewer Enterprise Fund. In 2011, the City entered into an Installment Purchase Agreement with Banc of America Leasing to refund the City's portion of the California Statewide Communities Development Authority Water and Wastewater Revenue Bonds Series 1999A. The Sewer Enterprise Fund is required to establish user fees and rates that will yield net revenues equal to at least 1.2 times the annual debt service. The 2011 Sewer bonds will reach maturity in October 2025.

#### **Recommended Water Rates**

Recommended rates for FY21 – FY25 are listed in the table below. Rates that include the Annual Payment Discount or the reduction for Qualified Income are not shown.

Table ES-2. Recommended Water Rates										
	Prop 218									
	Maximum	Current		F	Recommende	d				
Customer Class and Meter Size	FY20	FY20	FY21	FY22	FY23	FY24	FY25			
Rate Change Effective Date >	1-Feb-2020	1-Feb-2020	1-Feb-2021	1-Feb-2022	1-Feb-2023	1-Feb-2024	1-Feb-2025			
Annual percent increase >			2.0%	2.0%	2.0%	2.0%	2.0%			
Residential, Commercial, Industrial										
Meter Rates (\$/month)										
¾-inch	\$36.40	\$31.70	\$32.30	\$32.90	\$33.60	\$34.30	\$35.00			
1-inch	\$36.40	\$31.70	\$32.30	\$32.90	\$33.60	\$34.30	\$35.00			
1½-inch	\$60.90	\$53.30	\$54.40	\$55.50	\$56.60	\$57.70	\$58.90			
2-inch	\$90.20	\$78.50	\$80.10	\$81.70	\$83.30	\$85.00	\$86.70			
2½-inch	\$129.50	\$112.90	\$115.00	\$117.00	\$119.00	\$121.00	\$123.00			
3-inch	\$169.00	\$147.00	\$150.00	\$153.00	\$156.00	\$159.00	\$162.00			
4-inch	\$257.00	\$224.00	\$228.00	\$233.00	\$238.00	\$243.00	\$248.00			
6-inch	\$500.00	\$436.00	\$445.00	\$454.00	\$463.00	\$472.00	\$481.00			
8-inch	\$799.00	\$696.00	\$710.00	\$724.00	\$738.00	\$753.00	\$768.00			
10-inch	\$1,140.00	\$993.00	\$1,013.00	\$1,033.00	\$1,054.00	\$1,075.00	\$1,097.00			
Usage Rates (\$/hcf)	\$1.25	\$1.00	\$1.02	\$1.04	\$1.06	\$1.08	\$1.10			
Non-potable										
Meter Rates (\$/month)	\$6.40	\$5.08	\$5.18	\$5.29	\$5.40	\$5.51	\$5.62			
Usage Rates (\$/hcf)	\$1.09	\$0.86	\$0.88	\$0.89	\$0.91	\$0.93	\$0.95			
Note: Rates that include the Annual Payment Disco	unt or the reduct	ion for Qualified	Income are not si	hown.			·			

#### **Recommended Sewer Rates**

Recommended rates for FY21 – FY25 are listed in the table below. Rates that include the Annual Payment Discount or the reduction for Qualified Income are not shown.

	Table ES-3.	3. Recommended Sewer Rates							
	Prop 218								
	Maximum	Current	Recommended						
Customer Class and Service Type	FY20	FY20	FY21	FY22	FY23	FY24	FY25		
Rate Change Effective Date >	1-Feb-2020	1-Feb-2020	1-Feb-2021	1-Feb-2022	1-Feb-2023	1-Feb-2024	1-Feb-2025		
Annual percent increase >			4.0%	4.0%	4.0%	4.0%	4.0%		
Residential									
Full Rate, \$/month									
Single family dwellings	\$26.70	\$21.50	\$22.40	\$23.30	\$24.20	\$25.20	\$26.20		
Dwelling unit in a duplex	\$26.70	\$21.50	\$22.40	\$23.30	\$24.20	\$25.20	\$26.20		
Dwelling unit in an apartment	\$26.70	\$21.50	\$22.40	\$23.30	\$24.20	\$25.20	\$26.20		
Separate detached apartment	\$2.10	\$1.60	\$1.70	\$1.80	\$1.90	\$2.00	\$2.10		
Retirement home occupants	\$5.80	\$4.70	\$4.90	\$5.10	\$5.30	\$5.50	\$5.70		
Commercial									
Minimum Base Rate	\$25.40	\$20.50	\$21.30	\$22.20	\$23.10	\$24.00	\$25.00		
Flow Charge - Full Rate, hcf	\$1.56	\$1.23	\$1.28	\$1.33	\$1.38	\$1.44	\$1.50		
Minimum Base Rate - Annual	\$289.56	\$233.70	\$242.80	\$253.10	\$263.30	\$273.60	\$285.00		
Flow Charge - 95% Rate	\$1.49	\$1.19	\$1.22	\$1.30	\$1.40	\$1.50	\$1.60		
Minimum Base Rate w/Lndscp Credit	\$25.40	\$20.50	\$21.30	\$22.20	\$23.10	\$24.00	\$25.00		
Flow Charge - Lndscp Credit, hcf	\$1.94	\$1.18	\$1.23	\$1.28	\$1.33	\$1.38	\$1.44		
Industrial									
Flow Charge, \$/1000 gallons	\$1.94	\$1.55	\$1.60	\$1.70	\$1.80	\$1.90	\$2.00		
Biochemical Oxygen Demand, \$/1000 pound	\$209.00	\$168.00	\$174.70	\$181.70	\$189.00	\$196.60	\$204.50		
Suspended Solids, \$/1000 pounds	\$230.00	\$186.00	\$193.40	\$201.10	\$209.10	\$217.50	\$226.20		
Note: Rates that include the Annual Payment Discount or the	ne reduction for (	Qualified Income	are not shown.						

# **Recommended Garbage Rates**

Recommended rates for FY21 – FY25 are listed in the table below. Rates that include the Annual Payment Discount or the reduction for Qualified Income are not shown.

	Prop 218	C					
Customer Class and Service Type	Maximum FY20	Current FY20	FY21	FY22	FY23	a FY24	FY25
Rate Change Effective Date >	1-Feb-2020	1-Feb-2020		1-Feb-2022 5.0%	1-Feb-2023 5.0%	1-Feb-2024 4.0%	1-Feb-2025 4.0%
Annual percent increase >			5.0%	5.0%	5.0%	4.0%	4.0%
Residential	ć22 <b>7</b> 0	ć22.70	624.20	¢26.00	627.00	¢20.20	Ć40.00
Res Curbside 1 Blk	\$32.70	\$32.70	\$34.30	\$36.00	\$37.80	\$39.30	\$40.90
Res Curbside 2 Blk	\$46.50	\$46.50	\$48.80	\$51.20	\$53.80	\$56.00	\$58.20
Res Curbside 3 Blk Res Curbside 4 Blk	\$60.50 \$74.30	\$60.50	\$63.50 \$78.00	\$66.70 \$81.90	\$70.00 \$86.00	\$72.80 \$89.40	\$75.70 \$93.00
Res Curbside 1 Blk + 1 Grn	\$35.50	\$74.30 \$35.50	\$37.20	\$39.00	\$41.00	\$42.60	\$44.30
Res Curbside 1 Blk + 2 Grn	\$38.30	\$38.30	\$40.10	\$42.00	\$44.20	\$45.90	\$47.70
Res Curbside 2 Blk + 1 Grn	\$49.40	\$49.40	\$51.70	\$54.20	\$57.00	\$59.30	\$61.60
Res Curbside 2 Blk + 2 Grn	\$52.20	\$52.20	\$54.60	\$57.20	\$60.20	\$62.60	\$65.00
Res Curbside 3 Blk + 1 Grn	\$63.20	\$63.20	\$66.40	\$69.70	\$73.20	\$76.10	\$79.10
Res Curbside 4 Blk + 1 Grn	\$77.20	\$77.20	\$80.90	\$84.90	\$89.20	\$92.70	\$96.40
Res Curbside 1 Blk + 3 Grn	\$41.20	\$41.20	\$43.00	\$45.00	\$47.40	\$49.20	\$51.10
Res Curbside 1 Blk + 4 Grn	\$43.80	\$43.80	\$45.90	\$48.00	\$50.60	\$52.50	\$54.50
Res Curbside #2 Blk Only	\$13.90	\$13.90	\$14.60	\$15.30	\$16.10	\$16.70	\$17.40
Res Curbside #2 Blk + Grn	\$16.70	\$16.70	\$17.50	\$18.30	\$19.30	\$20.00	\$20.80
Res Curbside 1 Grn Only	\$2.80	\$2.80	\$2.90	\$3.00	\$3.20	\$3.30	\$3.40
Res Backyard 1 Blk	\$39.70	\$39.70	\$41.70	\$43.80	\$46.00	\$47.80	\$49.70
Res Backyard 1 Blk + 1 Grn	\$49.40	\$49.40	\$51.90	\$54.50	\$57.20	\$59.50	\$61.90
Res Curbside 2 Grn Only	\$5.60	\$5.60	\$5.80	\$6.00	\$6.40	\$6.60	\$6.80
Multiple Dwelling							
Duplex Curbside	\$65.00	\$65.00	\$68.30	\$71.70	\$75.30	\$78.30	\$81.40
Duplex Curbside + 1 Grn	\$68.00	\$68.00	\$71.20	\$74.70	\$78.50	\$81.60	\$84.80
Duplex Curbside + 2 Grn	\$70.00	\$70.00	\$74.10	\$77.70	\$81.70	\$84.90	\$88.20
Duplex Curbside 2 Blk + 1 Grn	\$81.90	\$81.90	\$85.80	\$90.00	\$94.60	\$98.30	\$102.20
Triplex Curbside	\$98.00	\$98.00	\$102.90	\$108.00	\$113.40	\$117.90	\$122.60
Triplex Curbside + 1 Grn	\$101.00	\$101.00	\$105.80	\$111.00	\$116.60	\$121.20	\$126.00
4-Plex Curbside	\$131.00	\$131.00	\$137.60	\$144.50	\$151.70	\$157.80	\$164.10
4-Plex Curbside + 1 Grn			\$140.50	\$147.50	\$154.90	\$161.10	\$167.50
Commercial							
Comm Curbside 1 Blk	\$32.70	\$32.70	\$34.30	\$36.00	\$37.80	\$39.30	\$40.90
Comm Curbside 2 Blk	\$65.00	\$65.00	\$68.30	\$71.70	\$75.30	\$78.30	\$81.40
Comm Curbside 2 Blk + 1 Grn	\$67.80	\$67.80	\$71.20	\$74.70	\$78.50	\$81.60	\$84.80
Comm Curbside 3 Blk	\$98.00	\$98.00	\$102.90	\$108.00	\$113.40	\$117.90	\$122.60
Comm Curbside 3 Blk + 1 Grn	¢25 50	¢25 50	\$105.80	\$111.00	\$116.60	\$121.20	\$126.00
Comm Curbside 1 Blk + 1 Grn Comm Curbside 9 Blk	\$35.50 \$294.00	\$35.50 \$294.00	\$37.20 \$308.70	\$39.00 \$324.00	\$41.00 \$340.20	\$42.60 \$353.70	\$44.30 \$368.10
Comm Curbside 9 Blk + 1 Grn	<i>≯∠34.00</i>	<b>⊅∠</b> 34.00	\$308.70	\$324.00	\$340.20	\$353.70	\$308.10
Comm Backyard 1 Blk	\$39.70	\$39.70	\$41.70	\$43.80	\$46.00	\$47.80	\$49.70
Comm Backyard 2 Blk	\$80.00	\$80.00	\$83.40	\$87.60	\$92.00	\$95.60	\$99.40
Comm Backyard 1 Blk + 1 Grn	\$53.40	\$53.40	\$56.10	\$58.90	\$61.80	\$64.30	\$66.90
Comm Curbside 1 Tubbie	\$148.00	\$148.00	\$155.40	\$163.20	\$171.40	\$178.30	\$185.40
Comm Curbside 1 Tubbies + 1 Grn	,		\$158.30	\$166.20	\$174.60	\$181.60	\$188.80
Comm Curbside 2 Tubbies	\$294.00	\$294.00	\$310.80	\$326.40	\$342.80	\$356.60	\$370.80
Comm Curbside 2 Tubbies + 1 Grn			\$313.70	\$329.40	\$346.00	\$359.90	\$374.20
Comm Curbside ANN 1 Blk	\$372.78	\$372.78	\$391.02	\$410.40	\$430.92	\$448.02	\$466.26
Comm Curbside ANN 1 Blk + 1 Grn	\$404.70	\$404.70	\$424.08	\$444.60	\$467.40	\$485.64	\$505.02
Comm Curbside 4 Blk + 1 Grn	\$133.00	\$133.00	\$139.70	\$146.70	\$154.00	\$160.20	\$166.60
Comm Curbside ANN 3 Blk	\$1,117.20	\$1,117.20	\$1,173.06	\$1,231.20	\$1,292.76	\$1,344.06	\$1,397.64
Comm Curbside ANN 1 Blk + 1 Grn	\$404.70	\$404.70	\$424.08	\$444.60	\$467.40	\$485.64	\$505.02
Comm Curbside ANN Tubbie	\$1,687.20	\$1,687.20	\$1,771.56	\$1,860.48	\$1,953.96	\$2,032.62	\$2,113.56
Comm Curbside ANN Tubbie + 1 Grn			\$1,774.46	\$1,863.48	\$1,957.16	\$2,035.92	\$2,116.96
Comm Curbside 2 Grn	\$5.60	\$5.60	\$5.80	\$6.00	\$6.40	\$6.60	\$6.80
Comm Curbside 4 Grn	\$11.20	\$11.20	\$11.60	\$12.00	\$12.80	\$13.20	\$13.60
Comm Curbside 6 Grn	\$16.80	\$16.80	\$17.40	\$18.00	\$19.20	\$19.80	\$20.40
Comm Curbside 5 Grn	\$13.25	\$13.25	\$14.50	\$15.00	\$16.00	\$16.50	\$17.00
Comm Curbside 1 Blk + 2 Grn	\$38.30	\$38.30	\$40.10	\$42.00	\$44.20	\$45.90	\$47.70

## **Combined Impact of Water, Sewer and Garbage Rates**

The combined impact of the recommended rate increases upon a typical residential customer is summarized in the table and figure below. The impact on the monthly bill is for a residential customer with a 1-inch water meter and 16 hcf per month water use, a sewer connection and residential curbside 1 black + 1 green service.

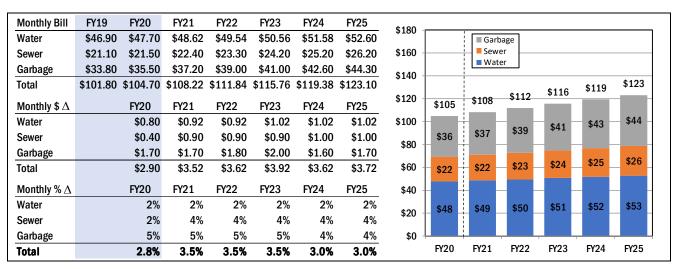


Figure ES-1. Impact of Water, Sewer and Garbage Rates on Residential Monthly Bills

# Introduction

The City's water, sewer and garbage enterprise fund rates are intended to recover revenues sufficient to adequately fund utility operations, maintenance, and capital replacement expenditures, and meet debt service obligations, while keeping rates as competitive as possible and maintaining a prudent level of reserves.

#### 1.1 Organization of the Report

This report is divided into six sections. This introduction provides an overview of the study objectives.

Section 2 discusses the evaluation of water rates and funding requirements.

Section 3 discusses the evaluation of sewer rates and funding requirements.

Section 4 discusses the evaluation of garbage rates and funding requirements.

Section 5 describes the impact of proposed rates on customers.

Section 6 describes the limitations of the study document.

#### 1.2 Overview of Utility Rate Setting Process

Rate studies classically have three categories of technical analysis – the development of revenue required from rates, the allocation of costs among functional cost categories (cost-of-service analysis) and the design of a rate structure. An overview of the rate-setting analytical steps is shown in Figure 1-1.

The revenue required from rates is net of non-rate revenues (for example interest earned on fund balances, loan disbursements and revenue from new connections to the water system) and other

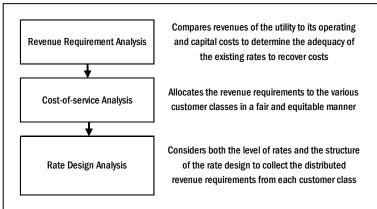


Figure 1-1. Overview of Rate Setting Analytical Steps

revenues not required from rates (such as revenue from meter turn on/off services).

The allocation of costs are structured so that the revenue required from charges is distributed proportionally for every level of service in a manner that allows the development of unit costs.

The rate structure uses the unit costs as a basis for aggregating costs into rates that are applicable to the various customer classes.

The methodology used to develop rates in this study includes only the revenue requirement analysis. A cost-of-service analysis was not conducted and the rate structures remain the same as the current structures.

Section 1 Introduction

#### 1.3 City Location and Population

The City of Ripon is located in the most southeasterly town in San Joaquin County, approximately 20 miles south of Stockton on Route 99. The city has a total area of 5.5 square miles.

#### 1.4 Overview of City Enterprise Funds

As noted in the City's annual audit reports, the City has three enterprise funds: Water, Sewer, and Garbage. The City charges customers for the



services it provides, these services are reported in proprietary (enterprise) funds. Enterprise funds are reported in the same way all activities are reported in the Statement of Net Position and Statement of Activities. For example, principal payments on long-term debt are recorded as a reduction to the liability. The City's enterprise fund financial statements are essentially the same as the business-type activities reported in the government-wide financial statements. The City utilizes the modified cash basis of accounting and accordingly, capital assets are not capitalized or depreciated.

The three enterprise funds account for the provision of water, sewer and garbage collection and disposal services to residents of the City. All activities necessary to provide such services are accounted for in these funds, including administration, maintenance, operations, capital improvements, financing and related debt service, and billing and collection.

#### 1.5 Source Data for the Study

Information and data for the development of rates and preparation of this report comes from a number of documents provided by the City. The list of documents, and the key information and data from each used in this study, are summarized below.

**City of Ripon Audit Reports.** Data from the *Financial Statements and Independent Auditors' Report* for Fiscal Years ending June 30, 2018 and June 30, 2019 were evaluated. Data from these reports used as part of this rate study include debt service obligations for each enterprise fund.

City of Ripon Adopted Budgets. Data from annual budgets for two years was evaluated – Fiscal Year 2019-20 (FY20) and FY21. The FY21 Annual Budget included actual financial data for FY20. The FY20 Annual Budget included actual financial data for FY19. Data from these reports used as part of this rate study include actual and projected expenditures and revenues for each enterprise fund.

**Utility Billing System data.** Monthly metered water use data for nonresidential sewer accounts for the time period January 2019 through April 2020 was provided by the City.

For each enterprise, the City provided the number of units of use. Units of use included accounts by customer class (for example, residential, multiple family, commercial) and rate type (for example, flat charge for commercial wastewater flow and number of black and/or green cans for garbage service). The City also provided monthly bills for industrial wastewater accounts.

<sup>&</sup>lt;sup>1</sup> See Footnotes 1 and 2 from the Executive Summary regarding names of the enterprise funds.

Introduction Section 1

#### 1.6 Rate-Making Objectives

There are numerous rate-making objectives that must be considered when developing rates and rate structures.

**Revenue sufficiency.** Generate sufficient revenue to fund operating costs, capital costs and bonded debt, and maintain adequate reserves.

**Revenue stability.** Recover revenue from fixed and variable charges that will cover fixed and variable costs (barring water shortages when rationing may be required).

Conservation signal. Reward customer for efficient water use and discourage its waste.

**Administrative efficiency.** Enable efficient implementation and ongoing administration, including monitoring and updating.

**Affordability.** Be as affordable as possible while maintaining the utilities sound financial position and credit rating.

Customer acceptance. Be as simple as possible to facilitate customer understanding and acceptance.

**Fairness**. Provide for each customer class to pay its proportionate share of the required revenue in compliance with legal rate-making requirements.

#### 1.7 Implementation of 2015 Rates Study Adopted Rates

An *Enterprise Funds Rates and Cash Flow Study* was completed in September 2015 (2015 Rates Study). Based on findings and recommendations in the 2015 Rates Study, the City Council approved Resolution No. 15-64 which adopted maximum garbage, sewer and water rates to be effective February 1<sup>st</sup> of 2016, 2017, 2018, 2019 and 2020 (five years).<sup>2</sup>

For two of the enterprise funds, the maximum rates adopted were never implemented. In the Water Fund, the current meter rates (in \$/meter per month) are approximately 13% less than the maximum rates adopted in 2015; the current usage rates (in \$/hcf - hundred cubic feet) are approximately 21% less than the maximum rates adopted in 2015.

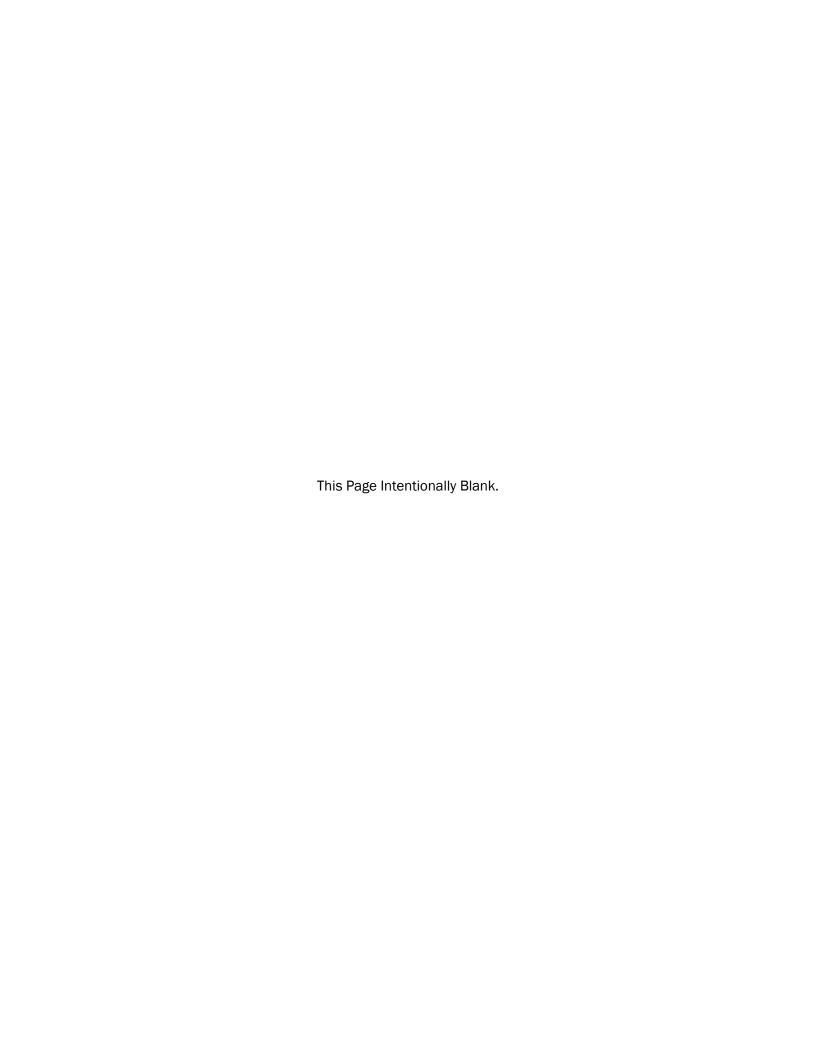
In the Wastewater Fund, the current rates (both fixed monthly and flow-based) are approximately 19% less than the maximum rates adopted in 2015.

Current rates in the Garbage Fund are at the maximum level adopted in 2015.

	Table 1-1. Implementation of 2015 Rates Study Adopted Rates												
	FY20 Bills	FY20 Bills											
	Based on	Based on											
	Adopted Rates	<b>Actual Rates</b>											
<u>Utility</u>	2015	2020	Monthly \$ $\Delta$	Monthly $\%$ $\Delta$	Annual $\Delta$								
Water	\$56.40	\$47.70	-\$8.70	-15%	-\$104.40								
Sewer	\$26.70	\$21.50	-\$5.20	-19%	-\$62.40								
Garbage	\$35.50	\$35.50	\$0.00	0%	\$0.00								
Total	\$118.60	\$104.70	-\$13.90	-12%	-\$166.80								

Note: Monthly bills are for a Single Family residence with a 1-inch water meter, 16 hcf per month water usage, residential sewer service, and curbside pickup of 1 black + 1 green garbage cans

<sup>&</sup>lt;sup>2</sup> The 2015 Rate Study assumed rate increases would be effective January 1<sup>st</sup> of each year. During the rate adoption process, the effective date of rate increases was changed to February 1<sup>st</sup> of each year.



# **Water Enterprise Fund**

The City's meter rates and commodity rates are intended to recover revenues sufficient to adequately fund utility operations, maintenance, and capital replacement expenditures, and meet debt service obligations, while keeping rates as competitive as possible and maintaining a prudent level of reserves.

## 2.1 Water Sources and System Operations

In 2020 all of Ripon's water originated from five groundwater Wells, three are located on the west side of Highway 99 and two on the east side. These Wells tap underground reserves or aquifers from approximately 125-500 feet below the ground surface. The aquifers are replenished by rainfall, the Stanislaus River and agricultural irrigation water. The total pumping capacity for all Wells connected to the City's water distribution system is 9,000 gpm (gallons per minute). The City has two elevated storage tanks, a 1.5 MG (million gallons) located near the Jack Tone Interchange and a 2.5 MG tank on River Road at the Mistlin Sports Complex. These elevated tanks have the capacity to provide an additional 10,000 gpm for peak demand or firefighting needs. Ripon's piping system is designed so that, depending upon the demand, water at a customers' faucet can be supplied from a single Well or any combination of Wells in operation at any given time. In 2015 the City installed water meters on all customer accounts. The installation cost was paid by the City and reimbursed through surcharges on customer's utility bill over a 10-year period, which does not include interest.

#### 2.2 Water Connections, Meters and Usage

The water utility provides service to its residents, institutions, industries, and businesses through approximately 5,050 service connections. Monthly metered water usage data for the time period January 2012 through July 2020 was provided by the City. The approximate number of water meters and projected water usage for FY21, by customer class, are shown in the figures below.

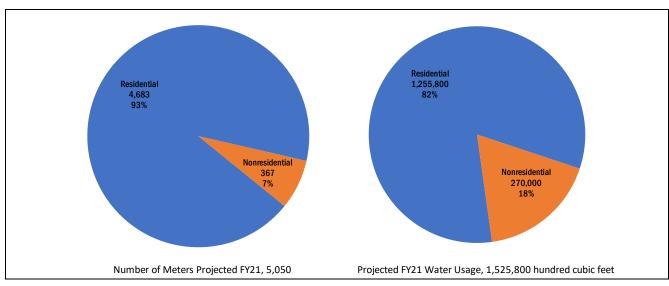


Figure 2-1. Projected Number of Metered Accounts and Water Usage

Section 2 Water Enterprise Fund

The number of water connections and meters by customer class and size projected for FY21 is shown below in Table 2-1. Residential meters make up approximately 93% of all customers. Approximately 96% of all meters are 1-inch or less in size. Another 4% are 1½-inch or 2-inch meters. There are 26 meters that are 2½-inch or larger. The number of residential meters is projected to increase by approximately 40 per year (less than 1% per year).

Table 2-1. Number of Water Meters by Customer Class and Size (June 2020)										
Customer Class	¾-inch	1-inch	1½-inch	2-inch	2½-inch	3-inch	4-inch	6-inch	Total	% of Total
Residential Metered	611	4,016	56						4,683	93%
<b>Commercial Metered</b>	71	133	42	95	1	15	8	2	367	7%
Total	682	4,149	98	95	1	15	8	2	5,050	
% of Total	14%	82%	2%	2%	0.02%	0.30%	0.16%	0.04%		

#### 2.3 Historic and Projected Water Usage

Historic and projected water usage is shown in the table below. For the purpose of projecting metered water usage for FY21 onward, average usage for FY20 is used as a starting point. Water usage projections for FY21 – FY27 are based upon the net impact of two variables: 1) increase in usage due to the growth in the number of metered accounts by 40 per year; and 2) decrease in usage due to conservation.

The decrease in usage is based on a percent reduction in average water use per account from the previous years' value. Metered residential and nonresidential average water usage is projected to decrease by 3 percent per year for FY22 – FY27.

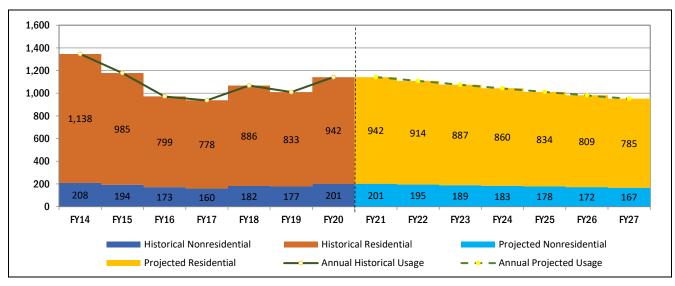


Figure 2-2. Historic and Projected Water Usage

Water Enterprise Fund Section 2

## 2.4 Water Operating and Capital Funds Cash Flow

The evaluation of water rates involved the update of projected expenditures, revenue from rates, number of accounts and water usage. Operating cash flow (revenues, expenditures, and beginning, ending and target fund balances), and debt service coverage ratios are shown in the table below. Note that current projections of the debt service coverage ratio exceed the technical minimum of 1.20 times Net Revenues in all years. The target reserve level of unrestricted cash is 50 percent of annual operating expenditures.

Water operating fund expenditures, revenues and balances are shown below in Table 2-2.

Table 2-2. Water Operating Fund Cash Flow										
	Actual	Budget		Projec	cted					
Water Operating Fund	FY20	FY21	FY22	FY23	FY24	FY25				
Beginning Cash	926,500	1,064,700	1,168,100	1,256,800	1,328,100	1,375,400				
Revenues										
Water Charges	3,486,700	3,633,400	3,672,100	3,713,700	3,759,000	3,804,700				
Other Revenues	26,700	22,600	22,600	22,600	22,600	22,600				
Total Revenues	3,513,400	3,656,000	3,694,700	3,736,300	3,781,600	3,827,300				
Expenditures										
Operating	1,721,500	1,673,100	1,729,400	1,787,800	1,848,200	1,910,700				
Debt Service	786,100	779,500	776,600	777,200	786,100	778,700				
Transfer to Capital	867,600	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000				
Total Expenditures	3,375,200	3,552,600	3,606,000	3,665,000	3,734,300	3,789,400				
Revenues less Total Expenditures	138,200	103,400	88,700	71,300	47,300	37,900				
Ending Cash	1,064,700	1,168,100	1,256,800	1,328,100	1,375,400	1,413,300				
Target Cash @ 0.50x Oper & Trans	860,800	836,600	864,700	893,900	924,100	955,400				
Debt Service Coverage Test										
Net Revenues	1,791,900	1,982,900	1,965,300	1,948,500	1,933,400	1,916,600				
Add: Developer Capacity Charges	1,095,707	120,000	120,000	120,000	120,000	120,000				
Net Income	2,887,607	2,102,900	2,085,300	2,068,500	2,053,400	2,036,600				
Debt Service	786,100	779,500	776,600	777,200	786,100	778,700				
Coverage Ratio	3.67	2.70	2.69	2.66	2.61	2.62				
\$ Over/(Under) 1.20 Ratio	1,944,287	1,167,500	1,153,380	1,135,860	1,110,080	1,102,160				

Section 2 Water Enterprise Fund

Operating cash flow (expenditures, and target and ending fund balances), debt service coverage ratios and the annual increase in Single Family monthly bills are shown in the figure below.

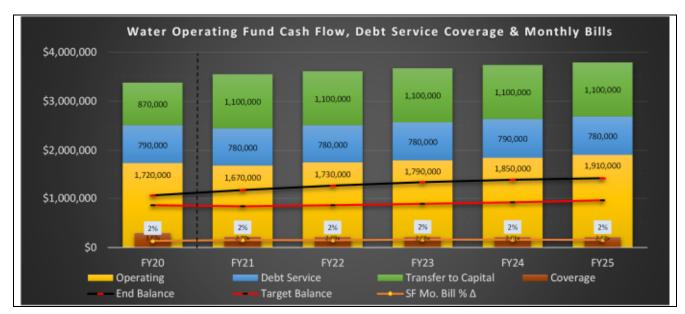


Figure 2-3. Water Operating Fund Cash Flow, Debt Service Coverage & Monthly Bill Increases

Water Enterprise Fund Section 2

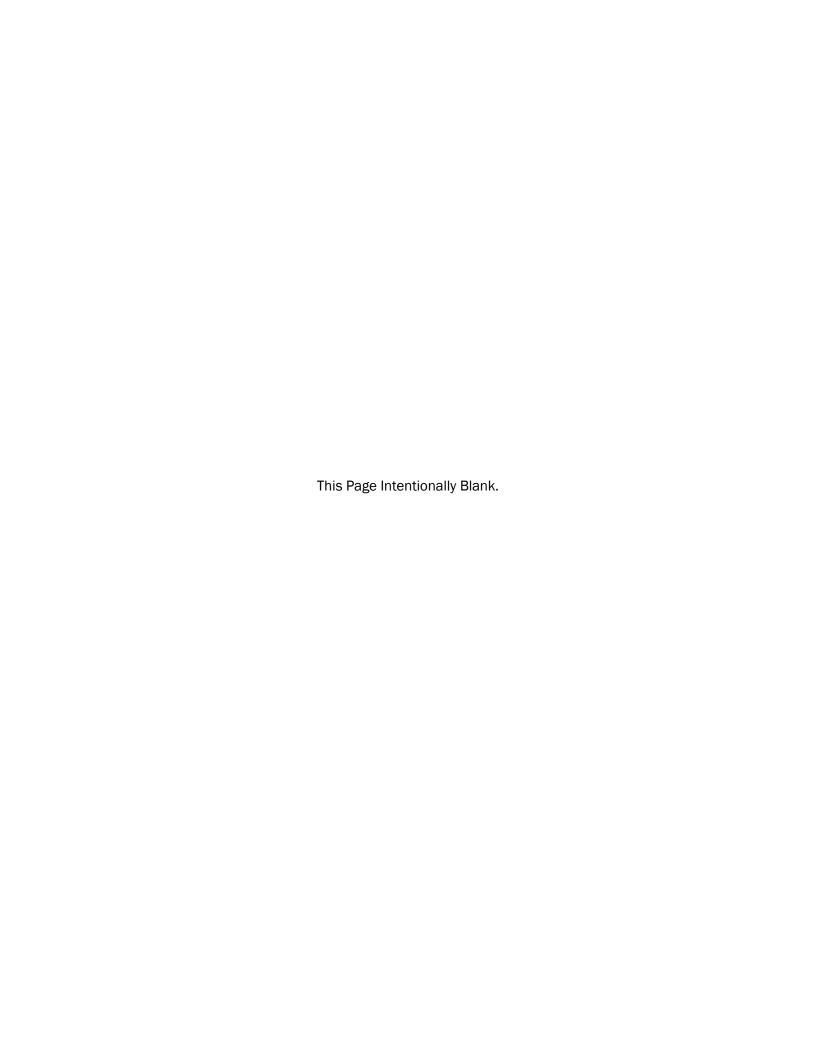
#### 2.5 Recommended Water Rates

Current and recommended water rates are summarized in the table below. Rates that include the Annual Payment Discount or the reduction for Qualified Income are not shown.

The current meter rates (in \$/meter per month) are approximately 13% less than the maximum rates adopted in 2015; the current usage rates (in \$/hcf - hundred cubic feet) are approximately 21% less than the maximum rates adopted in 2015.

The existing rate structure has 13 unique rates (not including the Annual Payment Discount or the reduction for Qualified Income rates) and currently recovers approximately 57% of revenues from meter charges (both residential and nonresidential) and 43% of revenues from usage charges (both residential and nonresidential). Approximately 85% of revenues are from residential customers with the remaining 15% of revenues from commercial/industrial customers and sales of nonpotable water.

	Table 2	-3. Recomm	ended Wate	r Rates			
	Prop 218						
	Maximum	Current		i	Recommende	d	
Customer Class and Meter Size	FY20	FY20	FY21	FY22	FY23	FY24	FY25
Rate Change Effective Date >	1-Feb-2020	1-Feb-2020	1-Feb-2021	1-Feb-2022	1-Feb-2023	1-Feb-2024	1-Feb-2025
Annual percent increase >			2.0%	2.0%	2.0%	2.0%	2.0%
Residential, Commercial, Industrial							
Meter Rates (\$/month)							
¾-inch	\$36.40	\$31.70	\$32.30	\$32.90	\$33.60	\$34.30	\$35.00
1-inch	\$36.40	\$31.70	\$32.30	\$32.90	\$33.60	\$34.30	\$35.00
1½-inch	\$60.90	\$53.30	\$54.40	\$55.50	\$56.60	\$57.70	\$58.90
2-inch	\$90.20	\$78.50	\$80.10	\$81.70	\$83.30	\$85.00	\$86.70
2½-inch	\$129.50	\$112.90	\$115.00	\$117.00	\$119.00	\$121.00	\$123.00
3-inch	\$169.00	\$147.00	\$150.00	\$153.00	\$156.00	\$159.00	\$162.00
4-inch	\$257.00	\$224.00	\$228.00	\$233.00	\$238.00	\$243.00	\$248.00
6-inch	\$500.00	\$436.00	\$445.00	\$454.00	\$463.00	\$472.00	\$481.00
8-inch	\$799.00	\$696.00	\$710.00	\$724.00	\$738.00	\$753.00	\$768.00
10-inch	\$1,140.00	\$993.00	\$1,013.00	\$1,033.00	\$1,054.00	\$1,075.00	\$1,097.00
Usage Rates (\$/hcf)	\$1.25	\$1.00	\$1.02	\$1.04	\$1.06	\$1.08	\$1.10
Non-potable							
Meter Rates (\$/month)	\$6.40	\$5.08	\$5.18	\$5.29	\$5.40	\$5.51	\$5.62
Usage Rates (\$/hcf)	\$1.09	\$0.86	\$0.88	\$0.89	\$0.91	\$0.93	\$0.95
Note: Rates that include the Annual Payment Disco	unt or the reduct	ion for Qualified	Income are not s	hown.			



# **Sewer Enterprise Fund**

The City's flat rates and commodity rates are intended to recover revenues sufficient to adequately fund utility operations, maintenance, and capital replacement expenditures, and meet debt service obligations, while keeping rates as competitive as possible and maintaining a prudent level of reserves.

## 3.1 Wastewater System Operations

The Public Works Department maintains approximately 40 miles of sewer collection system piping and provides operation and maintenance of six (6) wastewater pumping stations. The treatment plant is permitted for 1.4 Million Gallons per Day (MGD) and is currently processing 1 MGD. The City's treatment plant processes approximately 367 million gallons of wastewater each year. The facility is located at the south-end of Acacia Avenue and consists of 15 acres of treatment ponds with four (4) 10 horsepower mechanical brush aerators, which provides additional oxygen transfer for the biological treatment process. Treated wastewater is disposed into forty (40) acres of disposal ponds located to the west of the treatment ponds.

#### 3.2 Sewer Accounts

The sewer utility provides service to its approximately 4,700 residential dwelling units and 180 commercial connections. Multiple family accounts are categorized as residential in terms of their sewer rate category and as commercial in terms of their water rate category. The number of residential accounts is projected to increase by approximately 40 per year.

Section 3 Sewer Enterprise Fund

#### 3.3 Sewer Operating and Capital Funds Cash Flow

The evaluation of sewer rates involved the update of projected expenditures, revenue from rates, and number of accounts. Operating cash flow (revenues, expenditures, and beginning, ending and target fund balances), and debt service coverage ratios are shown in the table below. Note that current projections of the debt service coverage ratio exceed the technical minimum of 1.20 times Net Revenues in all years. The target reserve level of unrestricted cash is 35 percent of annual operating expenditures.

Sewer operating fund expenditures, revenues and balances are shown below in Table 3-1.

Table 3-1. Sewer Operating Fund Cash Flow										
	Actual	Budget		Projec	cted					
Sewer Operating Fund	FY20	FY21	FY22	FY23	FY24	FY25				
Beginning Cash	763,700	753,100	667,200	622,200	590,900	578,600				
Revenues										
Sewer Charges	1,519,600	1,583,300	1,659,100	1,737,600	1,820,000	1,907,000				
<b>Customer Classification Updates</b>		11,000	34,300	35,700	37,100	38,600				
Other Revenues	143,200	147,100	147,100	147,100	147,100	147,100				
Interest	15,900	7,500	6,700	6,200	5,900	5,800				
Total Revenues	1,678,700	1,748,900	1,847,200	1,926,600	2,010,100	2,098,500				
Expenditures										
Operating	1,002,500	1,021,000	1,053,600	1,087,200	1,122,100	1,158,000				
Debt Service	196,600	195,200	193,600	196,700	194,400	196,900				
Capital R&R	250,600	355,000	355,000	355,000	355,000	355,000				
Capital Reserve	239,600	263,600	290,000	319,000	350,900	386,000				
Total Expenditures	1,689,300	1,834,800	1,892,200	1,957,900	2,022,400	2,095,900				
Revenues less Total Expenditures	(10,600)	(85,900)	(45,000)	(31,300)	(12,300)	2,600				
Ending Cash	753,100	667,200	622,200	590,900	578,600	581,200				
Target Cash @ 0.50x Oper & Trans	501,300	510,500	526,800	543,600	561,100	579,000				
Debt Service Coverage Test										
Net Revenues	676,200	727,900	793,600	839,400	888,000	940,500				
Add: Developer fees	587,945	275,000								
Net Income	1,264,145	1,002,900	793,600	839,400	888,000	940,500				
Debt Service	196,600	195,200	193,600	196,700	194,400	196,900				
Coverage Ratio	6.43	5.14	4.10	4.27	4.57	4.78				
\$ Over/(Under) 1.20 Ratio	1,028,225	768,660	561,280	603,360	654,720	704,220				

In October 2020, City Council agreed to collect \$2 million over the next 7 years to meet State requirements for the Storm Water Trash Provisions. The Trash Provisions include the installation of catch basin grates and other trash capture devices to capture trash up to 5 millimeters, in high traffic areas. Staff would provide a technical analysis in 2022 with more information on the type of devices, locations, expenditures, etc., for Council to review and discuss. The Capital Repair and Replacement (R&R) also includes the funding collected for the Trash Provisions.

The Capital Reserve includes funding collected for the future Waste Water Treatment Plant (WWTP). In March 2015, City Council agreed to collect funding from existing customers to fund future WWTP upgrades, to meet future state permitting requirements.

Sewer Enterprise Fund Section 3

Operating cash flow (expenditures, and target and ending fund balances), debt service coverage ratios and the annual increase in Single Family monthly bills are shown in the figure below.

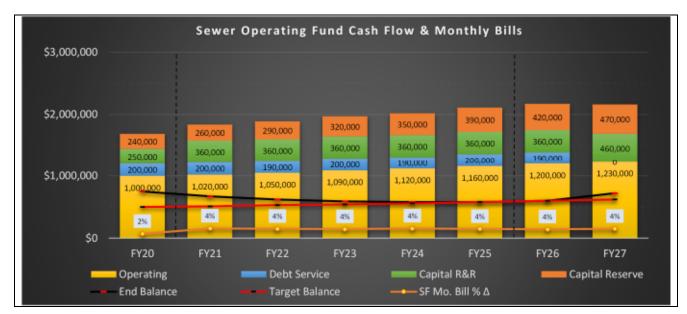


Figure 3-1. Sewer Operating Fund Cash Flow, Debt Service Coverage & Monthly Bill Increases

Section 3 Sewer Enterprise Fund

#### 3.4 Recommended Sewer Rates

Current and recommended sewer rates are summarized in the table below. Rates that include the Annual Payment Discount or the reduction for Qualified Income are not shown.

The current rates are approximately 19% less than the maximum rates adopted in 2015.

The existing rate structure has 14 unique rates and currently recovers approximately 91% of revenues from residential customers, 7% of revenues from commercial customers (except schools and churches) and 7% of revenues from industrial customers. Rates for all customers were increased by the same percentages.

	Table 3-3.	Recommend	led Sewer Ra	ates			
	Prop 218						
	Maximum	Current		F	Recommende	ed .	
Customer Class and Service Type	FY20	FY20	FY21	FY22	FY23	FY24	FY25
Rate Change Effective Date >	1-Feb-2020	1-Feb-2020	1-Feb-2021	1-Feb-2022	1-Feb-2023	1-Feb-2024	1-Feb-2025
Annual percent increase >			4.0%	4.0%	4.0%	4.0%	4.0%
Residential							
Full Rate, \$/month							
Single family dwellings	\$26.70	\$21.50	\$22.40	\$23.30	\$24.20	\$25.20	\$26.20
Dwelling unit in a duplex	\$26.70	\$21.50	\$22.40	\$23.30	\$24.20	\$25.20	\$26.20
Dwelling unit in an apartment	\$26.70	\$21.50	\$22.40	\$23.30	\$24.20	\$25.20	\$26.20
Separate detached apartment	\$2.10	\$1.60	\$1.70	\$1.80	\$1.90	\$2.00	\$2.10
Retirement home occupants	\$5.80	\$4.70	\$4.90	\$5.10	\$5.30	\$5.50	\$5.70
Commercial							
Minimum Base Rate	\$25.40	\$20.50	\$21.30	\$22.20	\$23.10	\$24.00	\$25.00
Flow Charge - Full Rate, hcf	\$1.56	\$1.23	\$1.28	\$1.33	\$1.38	\$1.44	\$1.50
Minimum Base Rate - Annual	\$289.56	\$233.70	\$242.80	\$253.10	\$263.30	\$273.60	\$285.00
Flow Charge - 95% Rate	\$1.49	\$1.19	\$1.22	\$1.30	\$1.40	\$1.50	\$1.60
Minimum Base Rate w/Lndscp Credit	\$25.40	\$20.50	\$21.30	\$22.20	\$23.10	\$24.00	\$25.00
Flow Charge - Lndscp Credit, hcf	\$1.94	\$1.18	\$1.23	\$1.28	\$1.33	\$1.38	\$1.44
Industrial							
Flow Charge, \$/1000 gallons	\$1.94	\$1.55	\$1.60	\$1.70	\$1.80	\$1.90	\$2.00
Biochemical Oxygen Demand, \$/1000 pound	\$209.00	\$168.00	\$174.70	\$181.70	\$189.00	\$196.60	\$204.50
Suspended Solids, \$/1000 pounds	\$230.00	\$186.00	\$193.40	\$201.10	\$209.10	\$217.50	\$226.20

# **Garbage Enterprise Fund**

The City's rates are intended to recover revenues sufficient to adequately fund utility operations, maintenance, and capital replacement expenditures, while keeping rates as competitive as possible and maintaining a prudent level of reserves.

## 4.1 Garbage Operations

City commercial accounts have the option to retain garbage disposal services from other service providers. Garbage and disposal services are provided to approximately 4,850 residential and multiple family accounts and 73 commercial accounts.

#### 4.2 Garbage Operating and Capital Funds Cash Flow

The evaluation of garbage rates involved the update of projected expenditures, revenue from rates, and number of accounts. Operating cash flow (revenues, expenditures, and beginning, and ending and target fund balances), are shown in the table below. The target reserve level of unrestricted cash is 35 percent of annual operating expenditures.

Garbage operating fund expenditures, revenues and balances are shown below in Table 4-1.

Tal	ble 4-1. Garbage 0	perating Fun	d Cash Flow				
	Actual	Budget	Projected				
Garbage Operating Fund	FY20	FY21	FY22	FY23	FY24	FY25	
Beginning Cash	208,700	191,600	289,200	332,700	442,500	613,400	
Revenues							
Garbage Charges	2,079,000	2,263,300	2,442,400	2,583,100	2,720,700	2,848,900	
Other Revenues	6,500	6,500	3,900	4,300	5,400	7,100	
Total Revenues	2,085,500	2,269,800	2,446,300	2,587,400	2,726,100	2,856,000	
Expenditures							
Operating	1,942,600	1,892,200	2,122,800	2,197,600	2,275,200	2,355,700	
Transfer to Capital Fund	160,000	280,000	280,000	280,000	280,000	280,000	
Total Expenditures	2,102,600	2,172,200	2,402,800	2,477,600	2,555,200	2,635,700	
Revenues less Total Expenditures	-17,100	97,600	43,500	109,800	170,900	220,300	
Ending Cash	191,600	289,200	332,700	442,500	613,400	833,700	
Target Cash @ 0.35x Operating	679,900	662,300	743,000	769,200	796,300	824,500	

The increase in transfer to the Capital Fund is due to State regulatory requirements, relating to organic waste recycling. The regulatory requirements will result in needing an extra garbage truck and added cans, in addition to other operating expenses.

Section 4 Garbage Enterprise Fund

Operating cash flow (expenditures, and target and ending fund balances), debt service coverage ratios and the annual increase in Single Family monthly bills are shown in the figure below.

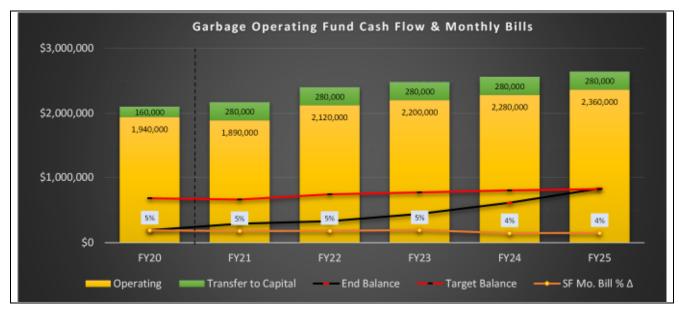


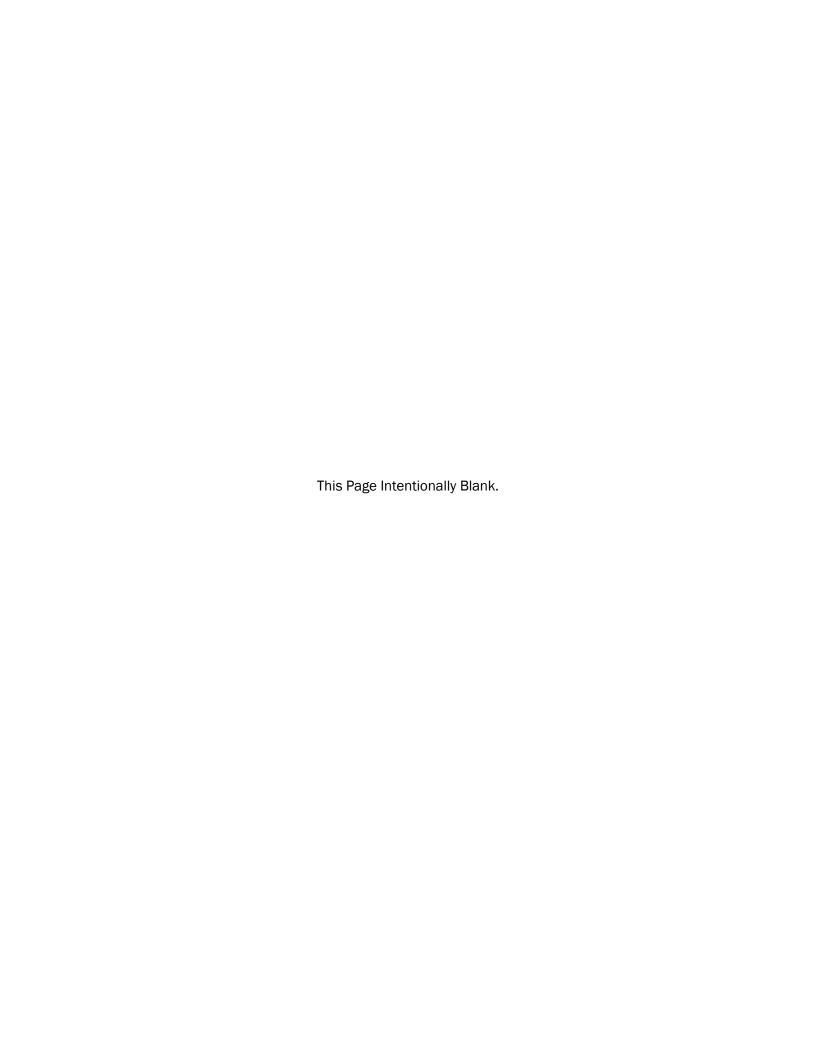
Figure 4-1. Garbage Operating Fund Cash Flow, Debt Service Coverage & Monthly Bill Increases

## 4.3 Recommended Garbage Rates

Current and recommended garbage rates are summarized in the table on the next page. The existing rate structure has 53 unique rates and currently recovers approximately 97% of revenues from residential customers, 2% of revenues from commercial customers and 1% of revenues from bulk service customers. Rates for all customers were increased by the same percentages.

Garbage Enterprise Fund Section 4

	Table 4-2.	Recomme	nded Garba	ige Rates					
	Prop 218								
	Maximum	Current			Recommende				
Customer Class and Service Type	FY20	FY20	FY21	FY22	FY23	FY24	FY25		
Rate Change Effective Date >	1-Feb-2020	1-Feb-2020		1-Feb-2022					
Annual percent increase >			5.0%	5.0%	5.0%	4.0%	4.0%		
Residential									
Res Curbside 1 Blk	\$32.70	\$32.70	\$34.30	\$36.00	\$37.80	\$39.30	\$40.90		
Res Curbside 2 Blk	\$46.50	\$46.50	\$48.80	\$51.20	\$53.80	\$56.00	\$58.20		
Res Curbside 3 Blk	\$60.50 \$74.30	\$60.50	\$63.50	\$66.70	\$70.00	\$72.80	\$75.70		
Res Curbside 4 Blk Res Curbside 1 Blk + 1 Grn	<i>\$74.30</i> <i>\$35.50</i>	\$74.30 \$35.50	\$78.00 \$37.20	\$81.90 \$39.00	\$86.00 \$41.00	\$89.40 \$42.60	\$93.00 \$44.30		
Res Curbside 1 Blk + 2 Grn	\$33.30	\$33.30	\$40.10	\$42.00	\$44.20	\$45.90	\$47.70		
Res Curbside 2 Blk + 1 Grn	\$49.40	\$49.40	\$51.70	\$54.20	\$57.00	\$59.30	\$61.60		
Res Curbside 2 Blk + 2 Grn	\$52.20	\$52.20	\$54.60	\$57.20	\$60.20	\$62.60	\$65.00		
Res Curbside 3 Blk + 1 Grn	\$63.20	\$63.20	\$66.40	\$69.70	\$73.20	\$76.10	\$79.10		
Res Curbside 4 Blk + 1 Grn	\$77.20	\$77.20	\$80.90	\$84.90	\$89.20	\$92.70	\$96.40		
Res Curbside 1 Blk + 3 Grn	\$41.20	\$41.20	\$43.00	\$45.00	\$47.40	\$49.20	\$51.10		
Res Curbside 1 Blk + 4 Grn	\$43.80	\$43.80	\$45.90	\$48.00	\$50.60	\$52.50	\$54.50		
Res Curbside #2 Blk Only	\$13.90	\$13.90	\$14.60	\$15.30	\$16.10	\$16.70	\$17.40		
Res Curbside #2 Blk + Grn	\$16.70	\$16.70	\$17.50	\$18.30	\$19.30	\$20.00	\$20.80		
Res Curbside 1 Grn Only	\$2.80	\$2.80	\$2.90	\$3.00	\$3.20	\$3.30	\$3.40		
Res Backyard 1 Blk	\$39.70	\$39.70	\$41.70	\$43.80	\$46.00	\$47.80	\$49.70		
Res Backyard 1 Blk + 1 Grn	\$49.40	\$49.40	\$51.90	\$54.50	\$57.20	\$59.50	\$61.90		
Res Curbside 2 Grn Only	\$5.60	\$5.60	\$5.80	\$6.00	\$6.40	\$6.60	\$6.80		
Multiple Dwelling									
Duplex Curbside	\$65.00	\$65.00	\$68.30	\$71.70	\$75.30	\$78.30	\$81.40		
Duplex Curbside + 1 Grn	\$68.00	\$68.00	\$71.20	\$74.70	\$78.50	\$81.60	\$84.80		
Duplex Curbside + 2 Grn	\$70.00	\$70.00	\$74.10	\$77.70	\$81.70	\$84.90	\$88.20		
Duplex Curbside 2 Blk + 1 Grn	\$81.90	\$81.90	\$85.80	\$90.00	\$94.60	\$98.30	\$102.20		
Triplex Curbside	\$98.00	\$98.00	\$102.90	\$108.00	\$113.40	\$117.90	\$122.60		
Triplex Curbside + 1 Grn	\$101.00	\$101.00	\$105.80 \$137.60	\$111.00	\$116.60	\$121.20	\$126.00		
4-Plex Curbside 4-Plex Curbside + 1 Grn	\$131.00	\$131.00	\$137.60	\$144.50 \$147.50	\$151.70 \$154.90	\$157.80 \$161.10	\$164.10 \$167.50		
Commercial			7140.50	Ş147.JU	Ş134.30	J101.10	\$107.50		
Comm Curbside 1 Blk	\$32.70	\$32.70	\$34.30	\$36.00	\$37.80	\$39.30	\$40.90		
Comm Curbside 2 Blk	\$65.00	\$65.00	\$68.30	\$71.70	\$75.30	\$78.30	\$81.40		
Comm Curbside 2 Blk + 1 Grn	\$67.80	\$67.80	\$71.20	\$74.70	\$78.50	\$81.60	\$84.80		
Comm Curbside 3 Blk	\$98.00	\$98.00	\$102.90	\$108.00	\$113.40	\$117.90	\$122.60		
Comm Curbside 3 Blk + 1 Grn			\$105.80	\$111.00	\$116.60	\$121.20	\$126.00		
Comm Curbside 1 Blk + 1 Grn	\$35.50	\$35.50	\$37.20	\$39.00	\$41.00	\$42.60	\$44.30		
Comm Curbside 9 Blk	\$294.00	\$294.00	\$308.70	\$324.00	\$340.20	\$353.70	\$368.10		
Comm Curbside 9 Blk + 1 Grn			\$311.60	\$327.00	\$343.40	\$357.00	\$371.50		
Comm Backyard 1 Blk	\$39.70	\$39.70	\$41.70	\$43.80	\$46.00	\$47.80	\$49.70		
Comm Backyard 2 Blk	\$80.00	\$80.00	\$83.40	\$87.60	\$92.00	\$95.60	\$99.40		
Comm Backyard 1 Blk + 1 Grn	\$53.40	\$53.40	\$56.10	\$58.90	\$61.80	\$64.30	\$66.90		
Comm Curbside 1 Tubbie	\$148.00	\$148.00	\$155.40	\$163.20	\$171.40	\$178.30	\$185.40		
Comm Curbside 1 Tubbies + 1 Grn	¢204.00	¢204.00	\$158.30	\$166.20	\$174.60	\$181.60	\$188.80		
Comm Curbside 2 Tubbies Comm Curbside 2 Tubbies + 1 Grn	\$294.00	\$294.00	\$310.80 \$313.70	\$326.40 \$329.40	\$342.80 \$346.00	\$356.60 \$359.90	\$370.80 \$374.20		
Comm Curbside 2 Tubbles + 1 Gm Comm Curbside ANN 1 Blk	\$372.78	\$372.78	\$313.70	\$329.40	\$430.92	\$448.02	\$466.26		
Comm Curbside ANN 1 Blk + 1 Grn	\$404.70	\$404.70	\$424.08	\$444.60	\$467.40	\$485.64	\$505.02		
Comm Curbside 4 Blk + 1 Grn	\$133.00	\$133.00	\$139.70	\$146.70	\$154.00	\$160.20	\$166.60		
Comm Curbside ANN 3 Blk	\$1,117.20	\$1,117.20	\$1,173.06	\$1,231.20	\$1,292.76	\$1,344.06	\$1,397.64		
Comm Curbside ANN 1 Blk + 1 Grn	\$404.70	\$404.70	\$424.08	\$444.60	\$467.40	\$485.64	\$505.02		
Comm Curbside ANN Tubbie	\$1,687.20	\$1,687.20	\$1,771.56	\$1,860.48	\$1,953.96	\$2,032.62	\$2,113.56		
Comm Curbside ANN Tubbie + 1 Grn			\$1,774.46	\$1,863.48	\$1,957.16	\$2,035.92	\$2,116.96		
Comm Curbside 2 Grn	\$5.60	\$5.60	\$5.80	\$6.00	\$6.40	\$6.60	\$6.80		
Comm Curbside 4 Grn	\$11.20	\$11.20	\$11.60	\$12.00	\$12.80	\$13.20	\$13.60		
Comm Curbside 6 Grn	\$16.80	\$16.80	\$17.40	\$18.00	\$19.20	\$19.80	\$20.40		
Comm Curbside 5 Grn	\$13.25	\$13.25	\$14.50	\$15.00	\$16.00	\$16.50	\$17.00		
Comm Curbside 1 Blk + 2 Grn	\$38.30	\$38.30	\$40.10	\$42.00	\$44.20	\$45.90	\$47.70		



# **Evaluation of Single Family Monthly Bills**

The impact of rate increases on customer classes are evaluated separately for each enterprise.

#### 5.1 Combined Impact of Water, Sewer and Garbage Rates

The combined impact on the monthly bill for a residential customer with a 1-inch water meter and 16 hcf per month water use, a sewer connection and residential curbside 1 black + 1 green service is shown in the table and figure below.

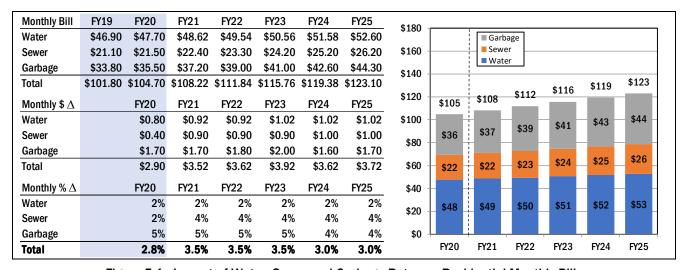


Figure 5-1. Impact of Water, Sewer and Garbage Rates on Residential Monthly Bills

Section 5 Evaluation of Monthly Bills

## 5.2 Survey of Residential Customer Bills

Current and projected FY21 residential customer bills for Ripon were compared to those in the cities of Ceres, Escalon, Lathrop, Manteca, Modesto and Oakdale.

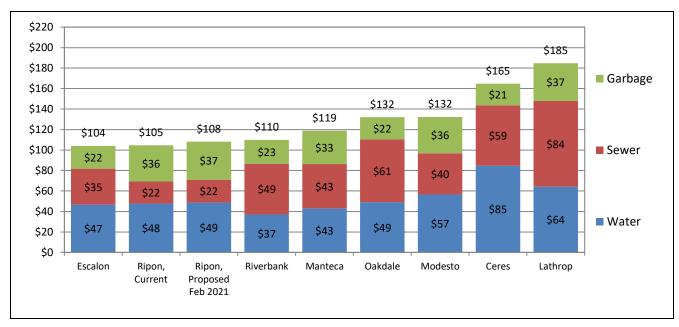


Figure 5-2. Survey of Single Family Customer Bills

# **Limitations**

This document was prepared solely for the City of Ripon in accordance with professional standards at the time the services were performed and in accordance with the agreement between the City of Ripon and Municipal Financial Services. This document is governed by the specific scope of work authorized by the City of Ripon in an Agreement dated March 10, 2020; it is not intended to be relied upon by any other party. We have relied on information or instructions provided by the City of Ripon and, unless otherwise expressly indicated, have made no independent investigation as to the validity, completeness, or accuracy of such information.

