



CITY OF WHEATLAND

CITY COUNCIL MEETING STAFF REPORT

March 26, 2019

SUBJECT: Proposed Water and Sewer Rate Adjustments

PREPARED BY: Jim Goodwin, City Manager

Recommendation

Conduct public hearing, and upon close of public hearing, in the absence of a valid protest, approve Resolution No. 09-19 adjusting water rates and Resolution No. 10-19 adjusting the sewer rates.

Background

Previously the City Council approved an agreement with Clearsource Financial for review of both water and sewer rates and to develop recommendations for adjustment of those rates. An Ad-hoc committee including Mayor Joe Henderson and Vice-Mayor Rick West subsequently was appointed to work with the consultants.

Ad-hoc Committee meetings were held in November 2017, January 2018, October 2018 and November 2018. The primary objective of these discussions was to develop a rate proposal that meets current legal standards and operational needs while being sensitive to impacts on the rate-payer.

The broad conclusions reached through these discussions include:

1. Rates must be structured to cover costs, including operational cost, debt service and maintenance of a prudent reserve. The current rate structure does not accomplish this;
2. The current rate structure does not meet best practices standards;
3. The timeline covered by a rate action should be shortened due to the potential of new homes being built during the rate cycle.

Please note that the current proposed rate adjustment does not include consideration of future capital investment needs.

A final rate proposal was prepared based on these broad parameters. The rate adjustment is as follows:

Water

Adopt a rate proposal with adjustments in April 2019, October 2019, October 2020, October 2021, and October 2022. See attached rate study.

Sewer

Adopt a rate proposal with a set adjustment in April 2019, followed by annual adjustments of either 3% or according to the ENR index, whichever is higher, through October 2022. See attached rate study.

On January 22, 2019 the City Council approved Resolution No. 06-19 accepting the final rate study and directing staff to provide the required minimum 45-day notice to the public of the City Council's intent to adjust rates.

The notice was prepared and mailed to all current water and sewer utility customers and/or owners of property served by the utilities informing them of the proposed rates and of their right to protest and providing instruction that all written protests must be received by the close of the Public Hearing tonight. Only one protest per parcel of property served by the utilities can be counted. Council may adopt the proposed rates at this meeting unless a valid written protest is received from fifty percent plus one of the affected parcels by close of the public hearing. As of the date of preparation of this staff report, fewer than 30 protests had been received. A copy of the notice is attached.

Alternatives

Council may choose not to adopt the proposed rate adjustment.

Fiscal Impact

Rate adjustments are necessary to achieve break-even in operations, debt service and prudent reserve. Additional funding for capital improvements was not included in the rate analysis.

Attachments

1. Resolution No.'s 09-19 & 10-19 adopting the proposed rate adjustments
2. Notice of Proposed Rate Adjustments
3. Rate Study

RESOLUTION NO. 09-19

**RESOLUTION OF THE CITY COUNCIL OF WHEATLAND
ESTABLISHING WATER SERVICE RATES**

**BE IT RESOLVED AND ORDERED BY THE CITY COUNCIL OF THE
CITY OF WHEATLAND AS FOLLOWS:**

WHEREAS, based on the findings of the water and sewer rate study recently completed, water rate adjustments are necessary to achieve break-even in operations, cover debt service, and establish a prudent reserve; and

WHEREAS, these rate adjustments will help ensure the health and safety of the community while protecting the City's financial health and being sensitive to impacts on the rate-payer; and

WHEREAS, Wheatland Municipal Code sections 13.36.010 and 13.40.020 authorize the City Council to amend water service rates by resolution; and

WHEREAS, the City Council has conducted a public hearing and has considered comments and input from interested parties; and

WHEREAS, forty-five days prior to the public hearing, the proposed rates were noticed to all water customers; and

WHEREAS, the City Council deems it to be in the best public interest to establish new rates for 2019 through 2023; and

WHEREAS, Section (a) of Government Code Section 53756 allows the City to adopt the schedule of rates and inflationary adjustments for a period up to five years; and

WHEREAS, Section (d) of Government Code Section 53756 requires notice of any adjustment pursuant to the rate schedule shall be given not less than 30 days before the effective date of the adjustment; and

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Wheatland:

1. **Findings.** The City Council finds and determines as follows:
 - a. The foregoing recitals are true and correct; and,
 - b. The adjusted water rates implemented by this resolution have been fixed in an amount sufficient to pay the operating expenses of the City's water utility

operations and provide for repair, improvement, and replacement of water system works and facilities.

- c. The adjusted water rates are reasonably related to, and do not exceed, the City's cost of providing the particular utility service.
 - d. The revenues derived from the rates do not exceed the funds required to provide the water utility service and shall not be used for any general fund purpose or purpose other than the water utility enterprise.
 - e. The amount of the water rates imposed on each user does not exceed the proportional cost of the user's service.
 - f. The City Council has conducted a duly noticed public hearing on the proposed rate adjustment in accordance with California Constitution Article XIII D, and the City Council did not receive a majority protest against the proposed adjustment.
2. **Water Service Rates and Charges.** The City Council hereby approves and levies the rates for City water service as shown on Exhibit A.
 3. **Subsequent Adjustments.** Commencing October 1, 2019, the water service rates shall be adjusted as shown in Exhibit A. Commencing October 1, 2022, the water service rates shall be adjusted based on the greater of 3.0 percent or the previous year's change in the construction cost index for 20 U.S. Cities, as reported in the *Engineering News Record* ("ENR") Construction Cost Index. The City Clerk shall make the adjustment and keep and maintain a current schedule of applicable water service rates at City Hall.
 4. **Supersedes Earlier Rates.** This resolution shall amend and supersede the water service rates and charges provisions of City Resolution 28-05 and other prior inconsistent resolutions.
 5. **CEQA.** The City Council finds that this adjustment in the water service rates is for the purposes of meeting operating expenses of the City water utility operation (including labor, supplies, equipment, and materials), meeting financial reserve needs and requirements of the City water system, and fund water system improvements that are necessary to maintain and enhance water service within the existing City service area. Accordingly, the City Council determines that this rate adjustment is exempt from the California Environmental Quality Act and CEQA guidelines. (Public Resources Code section 21080(b); CEQA Guidelines section 15273.
 6. **Effective Date.** This resolution and the new water service rates shall be effective upon adoption.

PASSED, APPROVED AND ADOPTED by the City Council of the City of Wheatland at a regular meeting held on the 26th day of March 2019.

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

Joseph Henderson, Mayor

ATTEST:

Lisa J. Thomason, City Clerk

EXHIBIT A

Water Utility Annual Schedule of Rates

Fiscal Year Ending June 30,

Water Rate Schedule [1]	2019	2020	2021	2022	2023
Effective Date:	Apr-19	1-Oct-19	1-Oct-20	1-Oct-21	1-Oct-22
<u>Fixed Charge - \$/Month</u>					[2]
<i>Usage Allowance in Fixed Charge</i>	<i>First 12 Ccf</i>	<i>First 12 Ccf</i>	<i>First 12 Ccf</i>	<i>First 12 Ccf</i>	<i>First 12 Ccf</i>
3/4-inch	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82
1-inch	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82
1-1/2-inch	\$48.96	\$52.27	\$55.80	\$59.56	\$61.35
2-inch	\$58.30	\$62.23	\$66.43	\$70.91	\$73.04
3-inch	\$99.48	\$106.19	\$113.36	\$121.01	\$124.64
4-inch	\$128.33	\$136.99	\$146.24	\$156.11	\$160.79
6-inch	\$198.75	\$212.16	\$226.48	\$241.77	\$249.02
8-inch	\$281.83	\$300.85	\$321.16	\$342.84	\$353.12
10-inch	\$384.71	\$410.68	\$438.40	\$468.00	\$482.04
<u>Variable Charge - \$/ccf</u>					
First 12 ccf	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Over 12 ccf	\$2.15	\$2.30	\$2.45	\$2.62	\$2.70

[1] "ccf" = one hundred cubic feet. 1 ccf equals approximately 748 gallons.

[2] Rates for October 2022 will increase by the greater of 3.0% or the Engineering News Record Construction Cost Index. Rates shown reflect a 3.0% increase.

RESOLUTION NO. 10-19

**RESOLUTION OF THE CITY COUNCIL OF WHEATLAND
ESTABLISHING SEWER SERVICE RATES**

**BE IT RESOLVED AND ORDERED BY THE CITY COUNCIL OF THE
CITY OF WHEATLAND AS FOLLOWS:**

WHEREAS, based on the findings of the water and sewer rate study recently completed, sewer rate adjustments are necessary to achieve break-even in operations, cover debt service, and establish a prudent reserve; and

WHEREAS, these rate adjustments will help ensure the health and safety of the community while protecting the City's financial health and being sensitive to impacts on the rate-payer; and

WHEREAS, Wheatland Municipal Code section 13.24.020 authorizes the City Council to amend sewer service rates by resolution; and

WHEREAS, the City Council has conducted a public hearing and has considered comments and input from interested parties; and

WHEREAS, forty-five days prior to the public hearing, the proposed rates were noticed to all sewer customers; and

WHEREAS, the City Council deems it to be in the best public interest to establish new rates for 2019 through 2023; and

WHEREAS, Section (a) of Government Code Section 53756 allows the City to adopt the schedule of rates and inflationary adjustments for a period up to five years; and

WHEREAS, Section (d) of Government Code Section 53756 requires notice of any adjustment pursuant to the rate schedule shall be given not less than 30 days before the effective date of the adjustment; and

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Wheatland:

1. **Findings.** The City Council finds and determines as follows:
 - a. The foregoing recitals are true and correct; and,
 - b. The adjusted sewer rates implemented by this resolution have been fixed in an amount sufficient to pay the operating expenses of the City's sewer utility

operations and provide for repair, improvement, and replacement of sewer system works and facilities.

- c. The adjusted sewer rates are reasonably related to, and do not exceed, the City's cost of providing the particular utility service.
 - d. The revenues derived from the rates do not exceed the funds required to provide the sewer utility service and shall not be used for any general fund purpose or purpose other than the sewer utility enterprise.
 - e. The amount of the sewer rates imposed on each user does not exceed the proportional cost of the user's service.
 - f. The City Council has conducted a duly noticed public hearing on the proposed rate adjustment in accordance with California Constitution Article XIII D, and the City Council did not receive a majority protest against the proposed adjustment.
2. **Sewer Service Rates and Charges.** The City Council hereby approves and levies the rates for City sewer service as shown on Exhibit A.
 3. **Subsequent Adjustments.** Commencing October 1, 2019, the sewer service rates shall be adjusted annually each October 1 based on the greater of 3.0 percent or the previous year's change in the construction cost index for 20 U.S. Cities, as reported in the *Engineering News Record* ("ENR") Construction Cost Index. The City Clerk shall make the adjustment and keep and maintain a current schedule of applicable sewer service rates at City Hall.
 4. **Supersedes Earlier Rates.** This resolution shall amend and supersede the sewer service rates and charges provisions of City Resolution 39-04 and other prior inconsistent resolutions.
 5. **CEQA.** The City Council finds that this adjustment in the sewer service rates is for the purposes of meeting operating expenses of the City sewer utility operation (including labor, supplies, equipment, and materials), meeting financial reserve needs and requirements of the City sewer system, and fund sewer system improvements that are necessary to maintain and enhance sewer service within the existing City service area. Accordingly, the City Council determines that this rate adjustment is exempt from the California Environmental Quality Act and CEQA guidelines. (Public Resources Code section 21080(b); CEQA Guidelines section 15273.
 6. **Effective Date.** This resolution and the new sewer service rates shall be effective upon adoption.

PASSED, APPROVED AND ADOPTED by the City Council of the City of Wheatland at a regular meeting held on the 26th day of March 2019.

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

Joseph Henderson, Mayor

ATTEST:

Lisa J. Thomason, City Clerk

EXHIBIT A

Sewer Utility Annual Schedule of Rates

Fiscal Year Ending June 30,

Sewer Rate Schedule	2019	2020	2021	2022	2023
Effective Date:	Apr-19	1-Oct-19	1-Oct-20	1-Oct-21	1-Oct-22
<u>Fixed Charge - \$/EDU/Month</u>		[1]	[1]	[1]	[1]
Residential	\$56.33	\$58.02	\$59.77	\$61.56	\$63.40
Apartments, All Units 0.583 EDU [2]	\$32.82	\$33.81	\$34.82	\$35.86	\$36.94
Commercial	\$56.33	\$58.02	\$59.77	\$61.56	\$63.40

[1] Rates for October 2019 through October 2022 will increase by the greater of 3.0% or the Engineering News Record Construction Cost Index. Rates shown reflect 3.0% increases.

[2] "EDU" - Equivalent Dwelling Unit

[3] The sewer rate structure consists of a monthly fixed charge per equivalent dwelling unit (EDU), where one (1) EDU equals 900 cubic feet. 900 cubic feet equals single family residential average winter period water use.

The single-family residential charge is equal to one (1) EDU. For apartments, a single per unit charge will apply to all units equal to 0.583 EDU. Individual commercial EDUs are assigned based on prior year average winter period water usage divided by 900 cubic feet.

[4] Calculation of commercial/institutional/non-residential EDUs

EDUs are calculated for each commercial/institutional customer on an annual basis prior to implementation of each year's new rate adjustment. The resulting EDUs for each customer remain constant in each month for the current rate implementation cycle, generally covering a 12-month period. The following formula is used:

Estimated Annual Sewer flow divided by 12 months divided by 9 ccf, with a minimum of 1 EDU

The following definitions provide further clarification for the calculation:

Equivalent Dwelling Unit (EDU): One EDU equals 900 cubic feet per month; equates to average residential winter period water usage

Annual Estimated Sewer Flow: Minimum of total annual water use or annualized winter period water use

Winter Period: November through April

Annualized Winter Period: Average winter period usage multiplied by 12 months

[5] For new commercial/institutional/non-residential customers without historical water usage the City will assign initial EDUs based on the type of business/facility and anticipated winter period water use.



NOTICE OF PUBLIC HEARING

PROPOSED RATE ADJUSTMENTS FOR WATER AND SEWER SERVICE

A public hearing regarding proposed adjustments to water and sewer rates will be held on:

DATE: MARCH 26, 2019

TIME: 6:30pm

**PLACE: CITY OF WHEATLAND, COMMUNITY CENTER
101 C STREET
WHEATLAND, CA 95692**

This notice is provided to all property owners and customers who currently receive either of these services provided by the City of Wheatland. If adopted, the proposed rate adjustments will become effective March 26, 2019.

This Notice of Public Hearing provides information about proposed rate adjustments to the City's water and sewer service customers pursuant to the requirements of Article XIII D Section 6(a) of the California Constitution (a portion of Proposition 218, which was adopted by voters in 1996). The proposed rate adjustments will be presented to the City Council for adoption on Tuesday, March 26, 2019, at 6:30pm, in the regular meeting location of the City Council at the City of Wheatland Community Center. This notice provides information on (1) how rates are calculated, (2) reasons for the rate adjustments, (3) how customers can receive more information on the effect of the proposed rate adjustments on their water and sewer bills, and (4) how to file a protest against the proposed rate adjustments.

WHY ARE THE WATER AND SEWER RATES BEING ADJUSTED AND WHY ARE YOU RECEIVING THIS NOTICE?

The City's water and sewer utilities are intended to function as self-sustaining enterprises, with revenue collections sufficient to support the costs of ongoing operations, required improvements to the system, and repair and replacement of existing utility assets. In order to maintain alignment of revenues and expenditures, periodic adjustments to water and sewer rates are required.

The proposed rate adjustments were developed to help ensure the health and safety of the community and meet current legal standards, while protecting the City's financial health and being sensitive to impacts on the rate-payer. They are based on the findings of a recently completed water and sewer rate study that examined the City's cost of providing water and sewer services, the sufficiency of revenues generated from current rates, and the rate structures applied to water and sewer customers.

Based on current customer usage patterns, the proposed rate adjustments would allow the City to meet the day-to-day operating costs of utility operations, meet debt service obligations, and establish prudent reserves. In order to maintain sensitivity to impacts on the rate payer, additional funding for rehabilitation and improvement of capital assets is not built into the proposed rate adjustments.

For questions regarding the City's water and sewer operations and maintenance programs, or inquiries about specific water or sewer projects, please contact City Hall at (530) 633-2761.

HOW CAN I FIND OUT MORE ABOUT THE PROPOSED RATE ADJUSTMENTS?

For further details regarding the proposed rate adjustments, or for any questions you may have regarding the proposed fees to be imposed on your parcel, please contact the City of Wheatland, City Hall, at (530) 633-2761 for assistance.

HOW ARE THE WATER AND SEWER RATES CALCULATED?

The proposed water and sewer rates are based on financial plans developed for each utility. The financial plans compare projected sources of funds (revenues) to projected expenditures to determine the sufficiency of current rates and any future rate adjustments required. Revenue from rates is intended to assist the City in meeting current and forecasted financial requirements and obligations of the water and sewer systems. Requirements and obligations can include: annual expenses to operate, maintain, and manage the utilities; targeted capital expenditures related to utility infrastructure, facilities, and equipment; repayment of outstanding debt; satisfaction of legal covenants; and attainment of targeted financial performance metrics. The City also works to maintain rates that are affordable to the community and, when possible, follow a consistent pattern of incremental rate increases. Achieving this goal involves making deliberate choices regarding service levels, timing of expenditures, and timing of water and sewer rate adjustments. Any revenues received from water and sewer rates are restricted solely to meet the requirements and obligations of each utility. This notice contains tables identifying the current and proposed water and sewer rates.

WATER. Proposed monthly water rates for the majority of the City's customers are composed of a fixed monthly charge that includes the first 1,200 cubic feet of water supplied. 1,200 cubic feet is equivalent to approximately 8,977 gallons of water. If more than 1,200 cubic feet of water is used in a month, an additional, incremental, rate applies based on the volume of water supplied. Customers typically use more water in the summer than in the winter, so a customer could expect higher water bills in the summer due to a higher volume of water received.

SEWER. The proposed sewer rate structure consists of a monthly fixed charge per equivalent residential dwelling unit (EDU). The single-family residential charge is equal to one (1) EDU. One (1) EDU is set equal to 900 cubic feet, which is the estimated sewer contribution for a single-family residence based on average winter-period water use. For apartments, a single per unit charge will apply to all units, set at about 60% of the single-family charge. Commercial sewer EDUs are based on current actual winter period water usage for each customer.

WHAT ARE THE CURRENT AND PROPOSED WATER RATES?

Water Rate Schedule [1]	Current	Fiscal Year Ending June 30,				
		2019	2020	2021	2022	2023
Effective Date:		Apr-19	Oct-19	Oct-20	Oct-21	Oct-22
Fixed Charge - \$/Month						[2]
Usage Allowance in Fixed Charge	<i>First 15 Ccf</i>	<i>First 12 Ccf</i>	<i>First 12 Ccf</i>	<i>First 12 Ccf</i>	<i>First 12 Ccf</i>	<i>First 12 Ccf</i>
3/4-inch	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82
1-inch	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82
1-1/2-inch	\$102.10	\$48.96	\$52.27	\$55.80	\$59.56	\$61.35
2-inch	\$163.36	\$58.30	\$62.23	\$66.43	\$70.91	\$73.04
3-inch	\$326.69	\$99.48	\$106.19	\$113.36	\$121.01	\$124.64
4-inch	\$510.49	\$128.33	\$136.99	\$146.24	\$156.11	\$160.79
6-inch	\$1,020.95	\$198.75	\$212.16	\$226.48	\$241.77	\$249.02
8-inch	\$1,633.53	\$281.83	\$300.85	\$321.16	\$342.84	\$353.12
10-inch	\$2,858.70	\$384.71	\$410.68	\$438.40	\$468.00	\$482.04
Variable Charge - \$/ccf						
First 15 ccf	\$0.00					
Next 30 ccf	\$0.48					
Over 45 ccf	\$0.64					
First 12 ccf		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Over 12 ccf		\$2.15	\$2.30	\$2.45	\$2.62	\$2.70

[1] "ccf" = one hundred cubic feet. 1 ccf equals approximately 748 gallons.

[2] Rates for October 2022 will increase by the greater of 3.0% or the ENR CCI Index. Rates shown reflect a 3.0% increase.

WHERE IS MY WATER USAGE LISTED ON MY UTILITY BILL?

UTILITY BILL		DATE		AMOUNT	
PB	1063	R	1054	9.00	110.50
WA					51.04
SK					13.05

This value represents the customer's water usage, expressed in "CCF." This customer uses 9 CCF.

ILLUSTRATION OF SAMPLE WATER BILL IMPACTS FOR TYPICAL RESIDENTIAL CUSTOMERS?

Water Units (ccf)	[1]						% of Residential Bills [2]
	Current	Apr-19	Oct-19	Oct-20	Oct-21	Oct-22	
0	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	5.1%
1	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	7.7%
2	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	11.2%
3	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	16.4%
4	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	22.3%
5	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	28.4%
6	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	34.3%
7	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	40.1%
8	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	45.3%
9	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	49.8%
10	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	54.2%
11	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	58.0%
12	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	61.4%
13	\$51.04	\$45.10	\$48.15	\$51.40	\$54.87	\$56.51	64.3%
14	\$51.04	\$47.26	\$50.45	\$53.85	\$57.49	\$59.21	67.2%
15	\$51.04	\$49.41	\$52.75	\$56.31	\$60.11	\$61.91	70.0%
16	\$51.52	\$51.57	\$55.05	\$58.76	\$62.73	\$64.61	72.3%
17	\$52.00	\$53.72	\$57.35	\$61.22	\$65.35	\$67.31	74.6%
18	\$52.48	\$55.87	\$59.65	\$63.67	\$67.97	\$70.01	76.6%
19	\$52.96	\$58.03	\$61.94	\$66.13	\$70.59	\$72.71	78.6%
20	\$53.44	\$60.18	\$64.24	\$68.58	\$73.21	\$75.41	80.6%
21	\$53.92	\$62.34	\$66.54	\$71.04	\$75.83	\$78.11	82.1%
22	\$54.40	\$64.49	\$68.84	\$73.49	\$78.45	\$80.80	83.4%
23	\$54.88	\$66.64	\$71.14	\$75.94	\$81.07	\$83.50	84.6%
24	\$55.36	\$68.80	\$73.44	\$78.40	\$83.69	\$86.20	85.8%
25	\$55.84	\$70.95	\$75.74	\$80.85	\$86.31	\$88.90	86.8%
26	\$56.32	\$73.11	\$78.04	\$83.31	\$88.93	\$91.60	87.8%
27	\$56.80	\$75.26	\$80.34	\$85.76	\$91.55	\$94.30	88.8%
28	\$57.28	\$77.41	\$82.64	\$88.22	\$94.17	\$97.00	89.7%
29	\$57.76	\$79.57	\$84.94	\$90.67	\$96.79	\$99.70	90.6%
30	\$58.24	\$81.72	\$87.24	\$93.13	\$99.41	\$102.39	91.4%
31	\$58.72	\$83.88	\$89.54	\$95.58	\$102.03	\$105.09	92.1%
32	\$59.20	\$86.03	\$91.84	\$98.04	\$104.65	\$107.79	92.8%
33	\$59.68	\$88.18	\$94.14	\$100.49	\$107.27	\$110.49	93.4%
34	\$60.16	\$90.34	\$96.44	\$102.94	\$109.89	\$113.19	94.0%
35	\$60.64	\$92.49	\$98.73	\$105.40	\$112.51	\$115.89	94.5%
36	\$61.12	\$94.65	\$101.03	\$107.85	\$115.13	\$118.59	94.9%
37	\$61.60	\$96.80	\$103.33	\$110.31	\$117.75	\$121.29	95.2%
38	\$62.08	\$98.95	\$105.63	\$112.76	\$120.37	\$123.99	95.6%
39	\$62.56	\$101.11	\$107.93	\$115.22	\$122.99	\$126.68	95.9%
40	\$63.04	\$103.26	\$110.23	\$117.67	\$125.61	\$129.38	96.2%
41	\$63.52	\$105.42	\$112.53	\$120.13	\$128.24	\$132.08	96.5%
42	\$64.00	\$107.57	\$114.83	\$122.58	\$130.86	\$134.78	96.7%
43	\$64.48	\$109.72	\$117.13	\$125.04	\$133.48	\$137.48	97.0%
44	\$64.96	\$111.88	\$119.43	\$127.49	\$136.10	\$140.18	97.2%
45	\$65.44	\$114.03	\$121.73	\$129.94	\$138.72	\$142.88	97.4%
46	\$66.08	\$116.19	\$124.03	\$132.40	\$141.34	\$145.58	97.5%
47	\$66.72	\$118.34	\$126.33	\$134.85	\$143.96	\$148.28	97.7%
48	\$67.36	\$120.49	\$128.63	\$137.31	\$146.58	\$150.97	97.8%
49	\$68.00	\$122.65	\$130.93	\$139.76	\$149.20	\$153.67	98.0%
50	\$68.64	\$124.80	\$133.23	\$142.22	\$151.82	\$156.37	98.1%

Notes:

[1] Represents illustrative 3.0% increase based on 10-year average historical ENR CCI index. Actual ENR CCI will be used.

[2] Represents % of customer bills over the course of the year with water usage in the corresponding water units columns, or less.

For example, 61.4% of customer bills include water usage of 12 ccf or less.

WHAT ARE THE CURRENT AND PROPOSED SEWER RATES?

Fiscal Year Ending June 30,

Sewer Rate Schedule	Current	Proposed				
		2019	2020	2021	2022	2023
Effective Date:		Apr-19	Oct-19	Oct-20	Oct-21	Oct-22
Fixed Charge - \$/Unit/Month			[1]	[1]	[1]	[1]
Residential	\$ 53.05	\$56.33	\$58.02	\$59.77	\$61.56	\$63.40
Apartments						
First 4 Units	\$ 53.05					
Each Add'l 4 Units	0.578 EDU \$ 30.66					
All Units	0.583 EDU	\$32.82	\$33.81	\$34.82	\$35.86	\$36.94
Commercial	\$ 53.05	\$56.33	\$58.02	\$59.77	\$61.56	\$63.40

[1] Rates for October 2019 through October 2022 will increase by the greater of 3.0% or the ENR CCI index. Rates shown reflect 3.0% increases.

HOW DO I PROTEST THE PROPOSED RATE ADJUSTMENTS?

If you are the owner of record for a parcel or a tenant directly liable for payment of the fees subject to the proposed rate changes, you may submit a written protest against each proposed rate adjustment (water, sewer). If written protests are filed by a majority of the affected customers, the proposed rate change will not be imposed.

IT IS IMPORTANT TO FOLLOW THESE INSTRUCTIONS IN ORDER FOR YOUR PROTEST TO BE VALID:

1. Any owner of property served by the water or sewer utility, or a tenant (who is the water and/or sewer utility customer responsible for payment of the account), may submit a protest on any original written document to the City Clerk, either by mail or delivery to the City Clerk's Office, 111 C Street, Wheatland CA 95692 or by submitting the protest at the public hearing. Protests must be received by the end of the public hearing. No postmarks will be accepted.
2. Each protest must identify the affected property (by assessor's parcel number or street address) and include the original signature of the record property owner or tenant (who is the water and/or sewer utility customer responsible for payment of the account) and date of signature. The protest must identify if the signature is from the tenant or property owner. Email or facsimile protests cannot be accepted. Although oral comments at the public hearing will not qualify as a formal protest unless accompanied by a written protest, the City Council welcomes input from the community during the public hearing on the proposed fees.
3. A protest by a property owner that is a trust must be signed by the Trustee and identified as such with the signature (i.e., John Smith, Trustee for Smith Family Trust). Protests by property owners that are corporations, partnerships, or similar entities must be signed by a person authorized to execute documents on behalf of the property owner.
4. If a parcel served by the City is owned by one or more record owners or has more than one tenant (who is the water and/or sewer utility customer responsible for payment of the account), each owner or tenant (who is the water and/or sewer utility customer responsible for payment of the account) may submit a protest, but only one protest will be counted per parcel and any one protest submitted in accordance with these rules will be sufficient to count as a protest for that property.
5. In order to be valid, a protest must bear its date, designation of parcel address or parcel number, printed name, and original signature of the record owner or tenant (who is the water and/or sewer utility customer responsible for payment of the account) with respect to the property identified on the protest. Except as set forth in paragraph 3 above protests not bearing the original signature of a record owner or tenant (who is the water and/or sewer utility customer responsible for payment of the account) shall not be counted. Protests which have been altered by someone other than the person who signed them shall not be counted.



Water and Sewer Rate Study

- January 2019 -



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EXECUTIVE SUMMARY

The City of Wheatland engaged ClearSource to complete a rate study for its water and sewer utilities. The purpose of this study is to design an updated schedule of water and sewer rates that promotes the financial sustainability of the utilities and recovers system costs in a fair manner from utility customers. The study focused on the five-year period, FY 2018/19 through FY 2022/23.

The key objectives and outcomes of this study are a culmination of industry best practice, consultant recommendations, and City policy direction. The key objectives are to:

- Design water and sewer rate structures in line with industry standards for cost-based rates,
- Set rate levels sufficient to sustain ongoing operations and maintenance, pay existing debt service obligations, and build adequate cash reserves, and
- Safeguard system sustainability, while providing fair and reasonable rates for customers

The proposed rates do not provide for additional capital investment in the utility systems.

To accomplish the above-stated objectives, this study evaluated current water and sewer rate structures, incorporated cost-based rate setting principals in the design of proposed modifications to current rate structures, and developed five-year financial plans and rate adjustment strategies to recover the costs of water and sewer system operations. A five-year schedule of water and sewer rates is presented for Council approval and implementation through the public rate adoption process.

Rate study findings indicate a need for water and sewer rate restructuring to better align the City's utility pricing structures with current customer demands and best practice trends in utility rate setting. Additionally, annual rate revenue increases are necessary for the water and sewer utilities to meet the ongoing financial obligations of each utility system.

Water Utility

Water rate revenues are projected to increase 6.75% annually for FY 2018/19 through FY 2021/22, followed by an additional 3.0% increase in FY 2022/23. The proposed increases represent the overall increase needed in water utility revenues to break-even with operating and maintenance costs, existing debt service, and contribution to minimum cash reserves. Impacts to individual customer bills will vary based on the size of meter and monthly water usage.

Sewer Utility

Sewer rate revenues are projected to increase 3.0% annually for FY 2018/19 through FY 2022/23. The proposed increases represent the overall increase needed in sewer utility revenues to break-even with operating and maintenance costs, existing debt service, and contribution to minimum cash reserves.

Impacts to individual customer bills will vary based on number of residential dwelling units and the number of assigned commercial equivalent dwelling units.

The proposed five-year schedule of water and sewer rates are presented below.

Five-Year Schedule of Proposed Water Rates

Water Rate Schedule	Current	Fiscal Year Ending June 30,				
		Proposed				
		2019	2020	2021	2022	2023
Effective Date:		Apr-19	Oct-19	Oct-20	Oct-21	Oct-22
Fixed Charge - \$/Month						[1]
Usage Allowance in Fixed Charge	<i>First 15 Ccf</i>	<i>First 12 Ccf</i>	<i>First 12 Ccf</i>	<i>First 12 Ccf</i>	<i>First 12 Ccf</i>	<i>First 12 Ccf</i>
3/4-inch	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82
1-inch	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82
1 1/2-inch	\$102.10	\$48.96	\$52.27	\$55.80	\$59.56	\$61.35
2-inch	\$163.36	\$58.30	\$62.23	\$66.43	\$70.91	\$73.04
3-inch	\$326.69	\$99.48	\$106.19	\$113.36	\$121.01	\$124.64
4-inch	\$510.49	\$128.33	\$136.99	\$146.24	\$156.11	\$160.79
6-inch	\$1,020.95	\$198.75	\$212.16	\$226.48	\$241.77	\$249.02
8 inch	\$1,633.53	\$281.83	\$300.85	\$321.16	\$342.84	\$353.12
10-inch	\$2,858.70	\$384.71	\$410.68	\$438.40	\$468.00	\$482.04
Variable Charge - \$/ccf						
First 15 ccf	\$0.00					
Next 30 ccf	\$0.48					
Over 45 ccf	\$0.64					
First 12 ccf		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Over 12 ccf		\$2.15	\$2.30	\$2.45	\$2.62	\$2.70

Notes:

[1] Rates for October 2022 will increase by the greater of 3.0% or the ENR CCI Index. Rates shown reflect a 3.0% increase.

Five-Year Schedule of Proposed Sewer Rates

Sewer Rate Schedule	Current	Fiscal Year Ending June 30,				
		Proposed				
		2019	2020	2021	2022	2023
Effective Date:		Apr-19	Oct-19	Oct-20	Oct-21	Oct-22
Fixed Charge - \$/Unit/Month			[1]	[1]	[1]	[1]
Residential	\$ 53.05	\$56.33	\$58.02	\$59.77	\$61.56	\$63.40
Apartments						
First 4 Units	\$ 53.05					
Each Add'l 4 Units	0.578 EDU \$ 30.66					
All Units	0.583 EDU	\$32.82	\$33.81	\$34.82	\$35.86	\$36.94
Commercial	\$ 53.05	\$56.33	\$58.02	\$59.77	\$61.56	\$63.40

Notes:

[1] Rates for October 2019 through October 2022 will increase by the greater of 3.0% or the ENR CCI index. Rates shown reflect 3.0% increases.

Supporting analyses of the proposed water and sewer rate schedules are provided in the following study report.

INTRODUCTION

The City of Wheatland engaged ClearSource to complete a rate study for its water and sewer utilities. The purpose of this study is to design an updated schedule of water and sewer rates that promotes the financial sustainability of the utilities and recovers system costs in a fair manner from utility customers. The study focused on the five-year period, FY 2018/19 through FY 2022/23.

Historical Perspective

The current structure of the City's water and sewer rates was established decades ago. Rates have historically increased on an annual basis in proportion to the **Engineering News Record Construction Cost Index (ENR CCI)**. Based on the annual percentage change in the ENR CCI, water and sewer rates have increased an average of three percent (3.0%) per year over the past 10 years. The last water and sewer rate increase was implemented in October 2018. Exhibit 1 presents the annual change in the water and sewer base rates over this time period.

Exhibit 1 – Historical Water and Sewer Rates



The historical rate increases were intended to primarily fund the day-to-day operations of the water and sewer systems. Minimal revenue has been generated to build operating reserves or to invest in new capital infrastructure. Ratemaking trends have evolved over the past 10 years, warranting an evaluation of current utility rate structures, system costs, and revenues required for system sustainability.

Study Objectives

The overall objectives and outcomes of this rate study are based on detailed analyses, consultant findings and recommendations, and policy direction received via multiple meetings with City staff and ad-hoc committee members and presentations to City Council. The key objectives are to:

- Design water and sewer rate structures in line with industry standards for cost-based rates,
- Set rate levels sufficient to sustain ongoing operations and maintenance, pay existing debt service obligations, and build adequate cash reserves, and
- Safeguard system sustainability, while providing fair and reasonable rates for customers

The proposed rates do not provide for additional capital investment in the utility systems.

Methodology

The objectives of the study, the methodology used to complete the study, and the proposed schedule of water and sewer rates were significantly influenced by legislative guidance and analytical principles that are generally accepted and widely followed throughout the industry. Resources included:

- Articles 13C and 13D of the California Constitution
- Proposition 218
- American Water Works Association, Manual of Water Supply Practices, *Principles of Water Rates, Fees, and Charge* (AWWA Manual M1)
- American Water Works Association, Manual of Water Supply Practices, *Developing Rates for Small Systems* (AWWA Manual M54)

The study involved comprehensive data analysis and the development of alternative rate structures and rate adjustment scenarios for City consideration. ClearSource worked closely with the City to arrive at rate recommendations that achieve near term City goals, consider industry best practice, and comply with legal requirements. Meetings were held with City staff and Committee members to validate input parameters, review interim findings, and receive policy direction. From these meetings, final scenarios were presented to City Council for selection of the preferred water and sewer rate schedules.

Report Organization

The outcomes for the study are presented separately for each utility to address the following major study elements:

- Rate Structure Evaluation
- Revenue Requirement Forecast
- Schedule of Proposed Rates
- Customer Bill Impacts

WATER UTILITY

Water Rate Structure Evaluation

The principal considerations in designing utility rate structures are to establish rates for customers that generate sufficient revenues for the utility and that are reasonably commensurate with the cost of providing utility service. Other considerations in rate design should include City pricing objectives, ease of understanding and implementation, and impact on customer bills.

Existing Water Rate Structure

The existing water rate structure is comprised of both fixed charge and volume charge components. The fixed (base) charge increases with the size of meter and includes a 1,500 cubic foot monthly usage allowance. The volume charge includes a two-tier increasing block structure, applied to water usage over the base charge allowance. The current water rate structure generates about 92% of the utility's rate revenue from the base charge. The remaining 8% of revenue is generated from volume charges.

The cost of service analysis, as well as industry practice, indicates that the existing water rate structure recovers a disproportionate share of utility costs from the fixed base charge. The relatively high fixed charges over-recover costs from low water users. In addition, the current ratios used to scale up the meter charges by size are significantly higher than industry standards. This results in an over-recovery of fixed costs for customers with larger than 1-inch meters. Due to the high fixed charge, the current usage charges are set well below the indicated cost of service for water demand. The relatively low water use charges under-recover costs from higher water users.

Industry best practice suggests that cost recovery for small water systems should be about 60% from fixed charges and 40% from volume charges. This suggested ratio of revenue generation is intended to balance the needs of the utility for adequate revenue stability and a customer's ability to control its water bill through water conservation efforts. Other ratemaking trends include eliminating usage allowances from the fixed charge component and applying the volume charge component to total actual usage and, in some cases, collapsing multiple usage blocks to a single rate per unit of water in order to simplify customer understanding.

Proposed Water Rate Structure

ClearSource recommends that the City move to a revenue generation ratio closer to 60% fixed and 40% volume. This can be accomplished by aligning the fixed cost rate component with the cost allocation results, and reducing the water usage allowance included in the base charge.

City Council selected a water rate structure that incrementally moves the City toward the ultimate goal of a 60% fixed / 40% volume rate structure, while striving to balance rate payer impacts and revenue stability for the water utility. The proposed water rate structure incorporates the following changes:

- Realigns cost recovery between the fixed and variable rate components
- Realigns base charges by meter size with published industry standard ratios
- Reduces the 1,500 cubic foot allowance to a 1,200 cubic foot allowance, and
- Collapses the multiple water usage tiers to a single rate per unit of water over the 1,200 cubic foot allowance

The combination of proposed changes enhances customer equity and achieves significant progress toward the ultimate pricing structure. Under the proposed water rate structure, 70% of revenues are forecasted to be generated from fixed charges and 30% of revenue from volume charges.

Development of Cost-Based Water Rates

Water System Customer Base

The water system customer base is comprised of single family residential (SFR), multi-family residential (MFR), and commercial customers. SFR customers represent about 85% of total system customers, with MFR and commercial customers equally representing the remaining 15%. The City applies the same schedule of water rates to all customers on the system. For a small water system of Wheatland's size, potential demand differences between residential and non-residential customers are presumed immaterial to the cost of providing water service, and as such, a single schedule of rates achieves reasonable equity.

Cost Allocation

FY 2018/19 total utility costs were allocated to water service functions to serve as the building blocks for designing the fixed and variable rate structure components. Water service functions include:

- **Customer** – Costs associated with services that do not vary by water consumptions, such as account billing and servicing
- **Meters & Services** – Costs associated with installation, maintenance, and repairs of meters and services
- **Fire Protection** – Costs associated with the water system's delivery of direct fire protection
- **Water Demand** – Costs associated with the delivery of water to customers

The fixed charge component of restructured water rates was designed to recover costs for the customer, meters & services, and fire protection functions, in addition to the cost of the water allowance to be included in the base charge. The volume charge recovers costs for water demand.

Exhibit 2 presents the results of the cost allocation process.

Exhibit 2 – Water System Cost Allocation

	Functions of Utility Service				Total
	Customer	Meters & Services	Fire Protection	Water Demand	
Total Utility Costs to be Recovered:	\$ 102,398	\$ 70,025	\$ 68,023	\$ 629,662	\$ 870,107
<i>Charge Basis</i>	<i>No. of Customers</i>	<i>No. of MSEs [1]</i>	<i>No. of MCEs [2]</i>	<i>Total Billed Use (ccf)</i>	
Total Utility Units of Service	1,196	1,274	1,316	312,058	
Total Utility Unit Costs - \$ / Unit	\$ 7.13	\$ 4.58	\$ 4.31	\$ 2.02	

Notes:

[1] MSE - Meters & service equivalents, using industry standard cost ratios for larger meters

[2] MCE - Meter capacity equivalents, using industry standard capacity ratios for larger meters.

The proposed base charge adds together the unit costs for customer (\$7.13), meters & services (\$4.58) fire protection (\$4.31), and the unit cost of water demand (\$2.02) multiplied by the 12 hundred cubic foot usage allowance. The volume charge is set equal to cost of water demand (\$2.02).

Exhibit 3 presents a comparison of the existing water rate structure and proposed restructured water rates, prior to incorporating proposed rate revenue increases (discussed in the next section).

Exhibit 3 – Current and Proposed Restructured Water Rates

Water Rate Schedule	Current	Restructured
<u>Fixed Charge - \$/Month</u>		
<i>Usage Allowance in Fixed Charge</i>	<i>First 15 Ccf</i>	<i>First 12 Ccf</i>
3/4-inch	\$51.04	\$40.23
1-inch	\$51.04	\$40.23
1-1/2-inch	\$102.10	\$45.87
2-inch	\$163.36	\$54.61
3-inch	\$326.69	\$93.19
4-inch	\$510.49	\$120.21
6-inch	\$1,020.95	\$186.18
8-inch	\$1,633.53	\$264.01
10-inch	\$2,858.70	\$360.39
<u>Variable Charge - \$/ccf</u>		
First 15 ccf	\$0.00	
Next 30 ccf	\$0.48	
Over 45 ccf	\$0.64	
First 12 ccf		\$0.00
Over 12 ccf		\$2.02

Water Rate Restructuring Implications

The rate restructuring itself is intended to be revenue neutral for the water utility as a whole. The fixed charge revenue is expected to be lower due to reducing the allowance from 1,500 cubic feet to 1,200 cubic feet. Assuming customers use the same amount of water as currently used, the volume charge revenue is expected to be higher due to charging for more water at the higher volume charge. Water usage patterns must be carefully monitored over the next few years to evaluate potential reductions in water use resulting from the new rate structure. The City intends to re-evaluate customer usage patterns and the level of usage allowance in the base charge during the next five-year rate cycle.

Water Revenue Requirement Forecast

The revenue requirement analysis forms the basis for a multi-year financial plan and rate adjustment strategy for the utility. It also forms the basis for establishing a water rate structure that recovers the total costs of operating the system. Linking utility rate levels to a financial plan helps to enable sound financial performance for the utility, and establishes a clear and reasonable relationship between the costs imposed on utility customers and the costs incurred to provide them service.

Financial Policies

In order to establish adequate rates, a utility must define its benchmarks for financial performance. The purpose of establishing financial policies for the City's utilities is to promote the financial integrity and stability of the utilities, and to provide for the sustainability of essential utility services. This section describes the financial policies selected for inclusion in the Water Utility Financial Plan.

Operating Reserves

An operating reserve is designed to provide a liquidity cushion. It protects the financial viability of the utility from the risk of short-term variation in revenues and expenses - primarily caused by seasonal fluctuations in billings and receipts, unanticipated operating expenses, or lower than expected revenue collections. Target funding levels are generally expressed in number of days' operating and maintenance (O&M) expense, with the minimum requirement varying with the expected risk of unanticipated needs or revenue volatility. Industry practice ranges from 30 days to 120 days of O&M, with the lower end more appropriate for utilities with very stable revenue streams and the higher end more appropriate for utilities with significant seasonal variations. A total of 180 days of O&M is suggested when taking into account total cash on hand (operating and capital reserves). Consistent with general industry guidelines, this study established a minimum water operating reserve of 90 days of O&M - ranging from about \$175,000 to \$215,000. Any excess reserves above the established threshold are transferred to the capital fund to build reserves for future capital needs.

Capital Reserves

In addition to protecting against variations in operating costs and revenues, it is prudent to maintain a capital reserve to meet unexpected emergency capital outlays. Common industry practice is to maintain a minimum balance in the capital account equal to 1%-2% of system fixed assets. This study established a minimum water capital reserve of 2% of fixed assets— about \$112,000 based on current water utility assets of \$5.6 million. This reserve was phased in over the study period to generate a total combined water operating and capital reserve minimum target of 180 days of O&M. The water capital fund is projected to have a cash balance of about \$345,000 by the end of the five-year study period. Total operating and capital cash reserves reach \$560,000 by the end of the study period.

Debt Reserve

A restricted debt reserve is often a requirement associated with the issuance of revenue bonds and some other forms of debt. The reserve is typically set equal to annual or maximum annual debt service payments (principal and interest). This study recommends a water debt reserve target equal to maximum annual debt service payments on all outstanding debt. The water utility has three outstanding debt instruments with annual principal and interest payments averaging about \$180,000 over the study period. The current water debt reserve account is funded at about \$175,000.

Debt Service Coverage

Debt service coverage is also a requirement associated with revenue bonds and some other forms of debt. Under this requirement, the agency agrees to collect sufficient annual system revenues to meet all operating expenses, pay annual debt service, and collect an additional multiple of that debt service. Debt coverage ratios typically range from 1.10 to 1.50 times annual debt service payments. For example, a coverage requirement of 1.25 means the agency will collect an additional 25% of annual debt service payments. The extra revenue is a cushion that makes creditors more confident that debt service will be paid on time. The extra revenue can be used for capital expenditures and/or to build cash reserves. This study assumes a minimum water debt service coverage requirement of 1.0, with a target coverage of 1.25 by the end of the study period. Rates were not impacted by this policy; cash needs are the driver of proposed water rate increases.

Debt-to Fixed Assets Ratio

Another useful measurement in assessing the debt burden of a utility is the capital structure: the outstanding debt as a percentage of net capital assets (original cost less accumulated depreciation). Industry best practice suggests that a target capital structure of no more than 60% debt is appropriately conservative. A debt percentage lower than 60% suggests that the utility has the financial capacity to issue more debt if needed. Conversely, ratios above 60% may limit the City's ability to secure new debt. The water utility's capital structure is currently 88% debt, and projected to climb to over 100% debt by the end of the study period. The utility's debt is forecasted to be greater than the book value of the

system since infrastructure assets are declining in value at a faster pace than outstanding debt is being paid down. The debt ratio will continue to climb until such time as debt is paid off and/or new investments are made in capital to offset currently depreciating infrastructure.

Operating Forecast

The operating forecast focuses on annual expenses incurred to operate, maintain, and manage the utility systems and annual revenue collections to meet those expenses. The baseline for the expense forecast is the adopted FY 2016/17 budget, adjusted for future years to incorporate cost escalation, growth, and known or anticipated future expenditures.

Key Assumptions

The following assumptions were used in preparing the operating forecast:

- Customer revenue growth: 0.25% per year
- Penalties and miscellaneous revenue: maintained at current levels
- Interest earnings on cash balances: 0.33% per year (5-year average California Local Agency Investment Fund (LAIF))
- General cost inflation: 2.5% per year
- Labor cost inflation: 3.0% per year
- Electricity and benefits cost inflation: 5.0% per year
- Additional staffing salaries and benefits: \$100,000 split between water and sewer utilities (beginning in FY 2018/19)
- Water repayment of \$250,00 loan from sewer utility: \$64,000 per year “expense” to water and “revenue” to sewer (repaid over 4-year period starting in FY 2019/20)

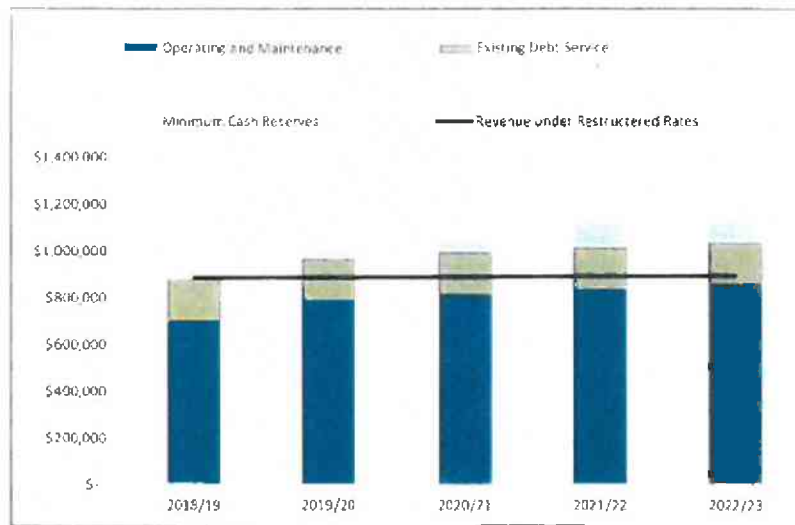
Results

Water utility O&M expense is forecasted at \$709,000 in FY 2018/19, increasing to \$869,000 by the end of the study period. Incorporating annual debt service payments and contributions to cash reserves, brings the total revenue requirement to just under \$1.2 million by the end of the study period.

Water operating revenues are categorized as rate revenue and non-rate revenue. Rate revenue under the existing level of rates uses historical 2016 customer billing system data reconciled with actual reported revenue, and forecasted to incorporate assumed customer growth and CCI rate increases through FY 2017/18. Total operating revenue is currently projected at about \$890,000, increasing slightly, with assumed customer growth, to just under \$900,000 by the end of the study period.

Exhibit 4 presents the results of the water utility operating forecast.

Exhibit 4 – Water Operating Forecast



Revenue Needs Assessment

The revenue needs assessment evaluates the sufficiency of current water utility revenues in meeting forecasted obligations of the utility, and designs a rate adjustment strategy to close any revenue shortfall over the study period.

To close the revenue gap illustrated in Exhibit 4, total water utility rate revenues need to increase 6.75% annually for FY 2018/19 through FY 2021/22, followed by an additional 3.0% increase in FY 2022/23. The proposed increases represent the overall increase needed in water utility revenues to break-even with operating and maintenance costs, existing debt service, and contribution to minimum cash reserves. As noted previously, the proposed rate increases do not provide for additional system capital investment.

Schedule of Proposed Water Rates

Exhibit 5 presents the current water rate structure and proposed five-year schedule of water rates, incorporating the revised water rate structure and utility-wide annual rate revenue increases.

Exhibit 5 – Proposed Five-Year Water Rate Schedule

Water Rate Schedule	Current	Fiscal Year Ending June 30,				
		Proposed				
		2019	2020	2021	2022	2023
Effective Date:		Apr-19	Oct-19	Oct-20	Oct-21	Oct-22
Fixed Charge - \$/Month						[1]
Usage Allowance in Fixed Charge	<i>First 15 Ccf</i>	<i>First 12 Ccf</i>	<i>First 12 Ccf</i>	<i>First 12 Ccf</i>	<i>First 12 Ccf</i>	<i>First 12 Ccf</i>
3/4 inch	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82
1-inch	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82
1-1/2-inch	\$102.10	\$48.96	\$52.27	\$55.80	\$59.56	\$61.35
2 inch	\$163.36	\$58.30	\$62.23	\$66.43	\$70.91	\$73.04
3-inch	\$326.69	\$99.48	\$106.19	\$113.36	\$121.01	\$124.64
4-inch	\$510.49	\$128.33	\$136.99	\$146.24	\$156.11	\$160.79
6-inch	\$1,020.95	\$198.75	\$212.16	\$226.48	\$241.77	\$249.02
8-inch	\$1,633.53	\$281.83	\$300.85	\$321.16	\$342.84	\$353.12
10-inch	\$2,858.70	\$384.71	\$410.68	\$438.40	\$468.00	\$482.04
Variable Charge - \$/ccf						
First 15 ccf	\$0.00					
Next 30 ccf	\$0.48					
Over 45 ccf	\$0.64					
First 12 ccf		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Over 12 ccf		\$2.15	\$2.30	\$2.45	\$2.62	\$2.70

Notes:

[1] Rates for October 2022 will increase by the greater of 3.0% or the ENR CCI Index. Rates shown reflect a 3.0% increase.

Water Customer Bill Impacts

Exhibit 6 provides a comparison of existing and proposed water base charges for up to a 1-inch meter.

Exhibit 6 – Comparison of Water Base Charges

Fiscal Year	Current	2018/19	2019/20	2020/21	2021/22	2022/23	Cumulative
Effective Date:		Apr-19	Oct-19	Oct-20	Oct-21	Oct-22	
Utility-Wide Rate Revenue Increase							
Rate Adjustment		6.75%	6.75%	6.75%	6.75%	3.00%	33.75%
Monthly Base Charge							
Monthly Base charge	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	
Monthly Dollar Difference		(\$8.09)	\$2.90	\$3.09	\$3.30	\$1.57	\$2.78
Rate Adjustment		-15.85%	6.75%	6.75%	6.75%	3.00%	5.44%

[1] Current rate includes up to 1-inch meter and usage allowance of 1500 cubic feet.

[2] Restructured rate includes 1 inch meter and usage allowance of 1200 cubic feet.

Customers under this usage profile will experience an increase of only \$2.78 a month over the five-year period - a cumulative increase of about 5% compared to the system average increase of about 34%. This usage profile encompasses about 61% of average annual residential customer bills. Individual customer water bills will vary based on size of meter and actual monthly water use above the 1,200 cubic foot allowance. In general, as meter size and water use increases, the corresponding monthly water bill increases.

Exhibit 7 provides a sample comparison of existing and proposed monthly water bills at varying units of water usage for customers with up to a 1-inch meter. The highlighted cells represent the point at which proposed water bills exceed the current water base rate.

Exhibit 7 – Sample Water Bill Impacts

Water Units (ccf)	Current	[1]					% of Residential Bills [2]
		Apr-19	Oct-19	Oct-20	Oct-21	Oct-22	
0	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	5.1%
1	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	7.7%
2	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	11.2%
3	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	16.4%
4	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	22.3%
5	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	28.4%
6	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	34.3%
7	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	40.1%
8	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	45.3%
9	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	49.8%
10	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	54.2%
11	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	58.0%
12	\$51.04	\$42.95	\$45.85	\$48.94	\$52.25	\$53.82	61.4%
13	\$51.04	\$45.10	\$48.15	\$51.40	\$54.87	\$56.51	64.3%
14	\$51.04	\$47.26	\$50.45	\$53.85	\$57.49	\$59.21	67.2%
15	\$51.04	\$49.41	\$52.75	\$56.31	\$60.11	\$61.91	70.0%
16	\$51.52	\$51.57	\$55.05	\$58.76	\$62.73	\$64.61	72.3%
17	\$52.00	\$53.72	\$57.35	\$61.22	\$65.35	\$67.31	74.6%
18	\$52.48	\$55.87	\$59.65	\$63.67	\$67.97	\$70.01	76.6%
19	\$52.96	\$58.03	\$61.94	\$66.13	\$70.59	\$72.71	78.6%
20	\$53.44	\$60.18	\$64.24	\$68.58	\$73.21	\$75.41	80.6%
21	\$53.92	\$62.34	\$66.54	\$71.04	\$75.83	\$78.11	82.1%
22	\$54.40	\$64.49	\$68.84	\$73.49	\$78.45	\$80.80	83.4%
23	\$54.88	\$66.64	\$71.14	\$75.94	\$81.07	\$83.50	84.6%
24	\$55.36	\$68.80	\$73.44	\$78.40	\$83.69	\$86.20	85.8%
25	\$55.84	\$70.95	\$75.74	\$80.85	\$86.31	\$88.90	86.8%
26	\$56.32	\$73.11	\$78.04	\$83.31	\$88.93	\$91.60	87.8%
27	\$56.80	\$75.26	\$80.34	\$85.76	\$91.55	\$94.30	88.8%
28	\$57.28	\$77.41	\$82.64	\$88.22	\$94.17	\$97.00	89.7%
29	\$57.76	\$79.57	\$84.94	\$90.67	\$96.79	\$99.70	90.6%
30	\$58.24	\$81.72	\$87.24	\$93.13	\$99.41	\$102.39	91.4%
31	\$58.72	\$83.88	\$89.54	\$95.58	\$102.03	\$105.09	92.1%
32	\$59.20	\$86.03	\$91.84	\$98.04	\$104.65	\$107.79	92.8%
33	\$59.68	\$88.18	\$94.14	\$100.49	\$107.27	\$110.49	93.4%
34	\$60.16	\$90.34	\$96.44	\$102.94	\$109.89	\$113.19	94.0%
35	\$60.64	\$92.49	\$98.73	\$105.40	\$112.51	\$115.89	94.5%
36	\$61.12	\$94.65	\$101.03	\$107.85	\$115.13	\$118.59	94.9%
37	\$61.60	\$96.80	\$103.33	\$110.31	\$117.75	\$121.29	95.2%
38	\$62.08	\$98.95	\$105.63	\$112.76	\$120.37	\$123.99	95.6%
39	\$62.56	\$101.11	\$107.93	\$115.22	\$122.99	\$126.68	95.9%
40	\$63.04	\$103.26	\$110.23	\$117.67	\$125.61	\$129.38	96.2%
41	\$63.52	\$105.42	\$112.53	\$120.13	\$128.24	\$132.08	96.5%
42	\$64.00	\$107.57	\$114.83	\$122.58	\$130.86	\$134.78	96.7%
43	\$64.48	\$109.72	\$117.13	\$125.04	\$133.48	\$137.48	97.0%
44	\$64.96	\$111.88	\$119.43	\$127.49	\$136.10	\$140.18	97.2%
45	\$65.44	\$114.03	\$121.73	\$129.94	\$138.72	\$142.88	97.4%
46	\$66.08	\$116.19	\$124.03	\$132.40	\$141.34	\$145.58	97.5%
47	\$66.72	\$118.34	\$126.33	\$134.85	\$143.96	\$148.28	97.7%
48	\$67.36	\$120.49	\$128.63	\$137.31	\$146.58	\$150.97	97.8%
49	\$68.00	\$122.65	\$130.93	\$139.76	\$149.20	\$153.67	98.0%
50	\$68.64	\$124.80	\$133.23	\$142.22	\$151.82	\$156.37	98.1%

Notes:

[1] Represents illustrative 3.0% increase based on 10-year average historical ENR CCI index. Actual ENR CCI will be used.

[2] Represents % of customer bills over the course of the year with water usage in the corresponding water units columns, or less. For example, 61.4% of customer bills include water usage of 12 ccf or less.

SEWER UTILITY

Sewer Rate Structure Evaluation

Existing Sewer Rate Structure

The existing sewer rate structure consists of a monthly fixed charge per equivalent residential dwelling unit (EDU). The single-family residential charge is equal to one (1) EDU. Multi-family residential customers are assigned 1 EDU for the first four dwelling units and 0.578 EDU for each additional four dwelling units. Commercial customers are assigned number of EDUs based on type of business.

The cost of service analysis indicates that the existing sewer rate structure recovers a reasonable share of costs for single family residential customers. The current base charge plus additional unit charge for apartments over-recovers costs for the multi-family class as a whole. About 30 % of apartment dwelling units are charged at the single-family rate. This does not adequately recognize that apartments contribute less sewer to the system on a per unit basis than single family customers. Based on an analysis of average winter-period water usage, per unit sewer contribution for multiple family customers is about 60% of single family residential. The commercial class as a whole recovers reasonable cost of service. However; in many instances, assigned EDUs for individual commercial customers do not correlate to estimated sewer contribution.

Industry best practice has trended toward volume-based rates for all customers, plus an account servicing charge. For administrative practicality, many utilities maintain flat rates per dwelling unit for residential customers, and charge commercial customers based on water usage – either actual monthly water usage or average winter-period usage. Since sewer contribution is not measured for individual customers, winter-period water usage is often used as a surrogate for estimated sewer contribution, especially for residential customers. This approach discounts usage for assumed outdoor watering that does not enter the sewer system.

Proposed Sewer Rate Structure

ClearSource recommends that the City ultimately move to a volume-based sewer rate structure for commercial customers. Prior to implementation of this change, an audit of individual commercial water use should be performed to ensure reliability of revenues from a volume-based structure. In the near term, ClearSource recommends an incremental approach that moves the City in that direction. This is accomplished by realigning individual commercial customer EDUs to reflect estimated sewer contribution based on actual winter-period water usage. The proposed sewer rate structure incorporates the following changes:

- Realigns the per EDU charge with single family residential estimated sewer contribution based on average winter-period water use - one (1) EDU is set equal to 900 cubic feet

- Eliminates the apartment class additional per unit charge and applies a single per unit charge to all units, set at about 60% of the single-family charge
- Realigns commercial sewer EDUs with current actual winter period water usage for each customer

The combination of proposed changes achieves customer equity and maintains revenue stability for the utility.

Development of Cost-Based Sewer Rates

Sewer System Customer Base

The sewer system customer base is comprised of single family residential (SFR) multi-family residential (MFR), and commercial customers. While there are minor differences in customers served by the water and sewer systems, the distribution of customers is about the same: SFR = 87%, MFR = 7%, and commercial = 6%. (excludes water system irrigation customers). For a small sewer system of Wheatland’s size, potential differences in strength contribution from commercial customers is considered immaterial to the cost of providing treatment services. As such, a flow-based EDU charge achieves reasonable equity.

Cost Allocation

Since proposed sewer rates are designed on a flow-based equivalent dwelling basis, a detailed cost allocation process was not performed.

Exhibit 8 presents a comparison of the existing sewer rate structure and proposed restructured sewer rates, prior to incorporating proposed rate revenue increases (discussed in the next section).

Exhibit 8 – Current and Proposed Restructured Sewer Rates

Sewer Rate Schedule	Current	Restructured
Fixed Charge - \$/Unit/Month		
Residential	\$ 53.05	\$ 54.69
Apartments		
First 4 Units	\$ 53.05	
Each Add'l 4 Units	0.578 EDU \$ 30.66	
All Units	0.583 EDU	\$ 31.86
Commercial	\$ 53.05	\$ 54.69

Sewer Rate Restructuring Implications

The rate restructuring itself is intended to be revenue neutral for the sewer utility as a whole. Individual customer bills will vary based on number of residential dwelling units and assigned commercial EDUs.

Sewer Revenue Requirement Forecast

Consistent with the water revenue requirement analysis, this study developed a multi-year financial plan and rate adjustment strategy for the sewer utility.

Financial Policies

This section describes the financial policies selected for inclusion in the Sewer Utility Financial Plan.

Operating Reserves

Consistent with general industry guidelines, this study established a minimum sewer operating reserve of 60 days of O&M – ranging from about \$125,000 to \$140,000. The sewer utility has a lower target threshold than water due to greater revenue stability realized from the flat sewer rate structure. Any excess reserves above the established threshold are transferred to the capital fund to build reserves for future capital needs.

Capital Reserves

Consistent with the water utility, a minimum sewer capital reserve was established at 2% of fixed assets– about \$140,000 based on current sewer utility assets of \$7 million. This reserve was phased in over the study period to generate a total combined sewer operating and capital reserve minimum target of 180 days of O&M. The sewer capital fund is projected to have a cash balance of about \$390,000 by the end of the five-year study period. Total operating and capital cash reserves reach \$530,000 by the end of the study period.

Debt Reserve

Consistent with the water utility, a sewer debt reserve target was set equal to maximum annual debt service payments on all outstanding debt. The sewer utility has two outstanding debt instruments with annual principal and interest payments of about \$215,000 over the study period. The current sewer debt reserve account is funded at about \$165,000.

Debt Service Coverage

Consistent with the water utility, a minimum sewer debt service coverage requirement was set at 1.0, with a target coverage of 1.25 by the end of the study period. Rates were not impacted by this policy; cash needs are the driver of proposed sewer rate increases.

Debt-to-Fixed Assets Ratio

The sewer utility's capital structure is currently over 100% debt, and projected to climb to about 150% debt by the end of the study period. Similar to the water utility, sewer utility debt is forecasted to be greater than the book value of the system since infrastructure assets are declining in value at a faster pace than outstanding debt is being paid down. The debt ratio will continue to climb until such time as

debt is paid off and/or new investments are made in capital to offset currently depreciating infrastructure.

Operating Forecast

The sewer utility operating forecast relies on the same key assumptions as previously described for the water utility.

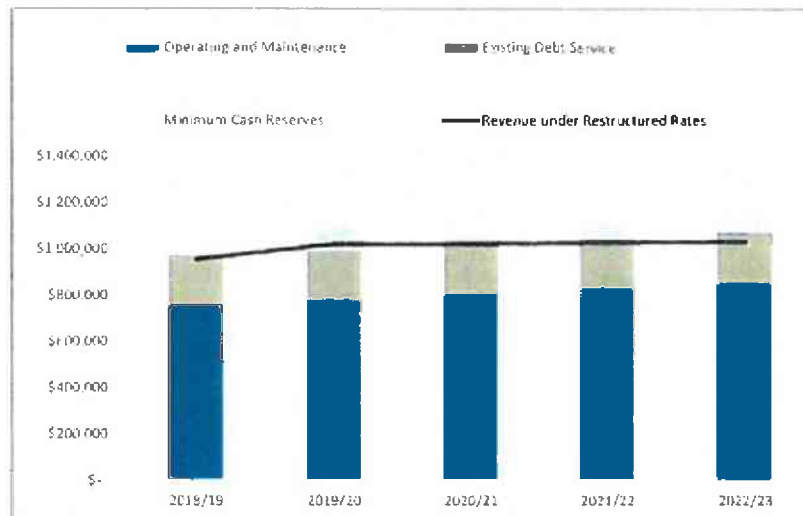
Results

Sewer utility O&M expense is forecasted at \$761,000 in FY 2018/19, increasing to \$862,000 by the end of the study period. Incorporating annual debt service payments and contributions to cash reserves, brings the total revenue requirement to just under \$1.2 million by the end of the study period.

Sewer operating revenues are categorized as rate revenue and non-rate revenue. Rate revenue under the existing level of rates uses historical 2016 customer billing system data reconciled with actual reported revenue, and forecasted to incorporate assumed customer growth and CCI rate increases through FY 2017/18. Total operating revenue is currently projected at about \$960,000, increasing slightly, with assumed customer growth, to just over \$1 million by the end of the study period.

Exhibit 9 presents the results of the sewer utility operating forecast.

Exhibit 9 – Sewer Operating Forecast



Revenue Needs Assessment

The revenue needs assessment evaluates the sufficiency of current sewer utility revenues in meeting forecasted obligations of the utility, and designs a rate adjustment strategy to close any revenue shortfall over the study period.

To close the revenue gap illustrated in Exhibit 9, total sewer utility rate revenue needs to increase 3.0% per year over the five-year study period (FY 2018/19 through FY 2021/22). The proposed increases represent the overall increase needed in sewer utility revenues to break-even with operating and maintenance costs, existing debt service, and contribution to minimum cash reserves. As noted previously, the proposed rate increases do not provide for additional system capital investment.

Schedule of Proposed Sewer Rates

Exhibit 10 presents the current sewer rate structure and proposed five-year schedule of sewer rates, incorporating the revised sewer rate structure and utility-wide annual rate revenue increases.

Exhibit 10 – Proposed Five-Year Sewer Rate Schedule

Sewer Rate Schedule	Current	Fiscal Year Ending June 30,				
		2019	2020	2021	2022	2023
Effective Date:		Apr-19	Oct-19	Oct-20	Oct-21	Oct-22
Fixed Charge - \$/Unit/Month			[1]	[1]	[1]	[1]
Residential	\$ 53.05	\$56.33	\$58.02	\$59.77	\$61.56	\$63.40
Apartments						
First 4 Units	\$ 53.05					
Each Add'l 4 Units	0.578 EDU \$ 30.66					
All Units	0.583 EDU	\$32.82	\$33.81	\$34.82	\$35.86	\$36.94
Commercial	\$ 53.05	\$56.33	\$58.02	\$59.77	\$61.56	\$63.40

Notes:

[1] Rates for October 2019 through October 2022 will increase by the greater of 3.0% or the ENR CCI Index. Rates shown reflect 3.0% increases.

Sewer Customer Bill Impacts

Exhibit 11 provides a comparison of existing and proposed sewer rates for one (1) EDU.

Exhibit 11 – Comparison of Sewer Rates

Fiscal Year	Current	2018/19	2019/20	2020/21	2021/22	2022/23	Cumulative
Effective Date:		Apr-19	Oct-19	Oct-20	Oct-21	Oct-22	
Utility-Wide Rate Revenue Increase							
Rate Adjustment		3.00%	3.00%	3.00%	3.00%	3.00%	15.93%
Monthly Bill per EDU							
Monthly Bill per EDU	\$53.05	\$56.33	\$58.02	\$59.77	\$61.56	\$63.40	
Monthly Dollar Difference		\$3.28	\$1.69	\$1.74	\$1.79	\$1.85	\$10.35
Rate Adjustment		6.19%	3.00%	3.00%	3.00%	3.00%	19.52%

Notes:

one (1) EDU - 900 cubic feet per month

Customers under this usage profile will experience an increase of about \$10 a month over the five-year period - a cumulative increase of about 19.5% compared to the system average increase of about 16%. This usage profile encompasses all single-family residential customers. Individual apartment and commercial sewer bills will vary based on number of dwelling units or assigned number of EDUs.