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Utility Rate Analysis

City of Carlin

March 2022

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

APPENDICES

1.0 EXECUTIVE SUMMARY

The City of Carlin (City) has retained Farr West Engineering (Farr West) to provide an analysis of user rates for its sewer and water systems. The objective of this study was to review the City's operating and capital costs to evaluate the adequacy of the existing rates and provide a cost basis for the proposed rates.

In general, both the water and sewer systems serve approximately 800 customers and have only recently been monitoring revenues and expenses as separate enterprise funds[1]. Both utilities have significantly aged infrastructure which is at or very near a state of failure. Subsequently, the cost to replace the majority of water distribution and sewer collection system piping will drive the need for any significant adjustments to user rates. External financing (e.g., loans) will also be needed to fund the construction of the large capital improvement projects and will add a debt service component to user rates for both utilities.

1.1 STUDY GOALS AND OBJECTIVES

The following goals and objectives were used as guiding principles in the preparation of the user rate analysis.

- User rate study period shall be 5 years or through Fiscal Year ending in 2026 (FY 26). All rate model calculations are based on a fiscal year starting on July 1st of each year and ending on June 30th of the following calendar year.
- Meet all City financial policies throughout the study period(s). These policies include, but are not limited to:
  - Recurring expenses should be paid by recurring revenues.
  - The maximum debt shall not exceed 20 percent of the City's total asset value for the water and sewer utilities. This City's total assets are valued at $39 million, and the maximum debt amounts to $7.8 million.
  - $3 million in American Rescue Plan Act (ARPA) grant funds are available to fund water and sewer infrastructure needs.
  - The Operating Fund shall maintain a minimum Operating Reserve equal to 90 days of utility operating expenses.
  - The Operating Fund shall maintain a Debt Reserve equal to one year of debt payments for all loans. This balance can be accrued over the first 10 years of any loan at a rate of 10 percent or greater, annually.
  - It is preferred that the utility collect funds equal to one year of depreciation for all assets with a service life greater than 20 years on an annual basis so that adequate reserves can be built to replace aging infrastructure in the future.
  - Each utility should also collect adequate revenues to replace any Short-lived Assets which reach the end of their service life in any given year. A Short-lived Asset is defined as any asset with a service life of 15 years or less.
- Multiple rate adjustment alternatives shall be developed and assessed as part of the rate setting process. A financial model was developed for each alternative that allows for a proper debt to

[1] Separate enterprise funds were created at the beginning of FY 21.

revenues position, does not significantly deplete cash reserves, and minimizes future increases to user rates.

1.2 COMMUNITY ENGAGEMENT

The City of Carlin has been informing its public and utility customers of potential changes in the user rate structure since February of 2017. Notice of rate adjustments has been provided at City Council Meetings on the following dates:

- February 22, 2017
- November 13, 2019
- March 13, 2020
- October 14, 2020
- July 28, 2021
- January 26, 2022
- February 9, 2022
- February 23, 2022

1.3 RATE STUDY APPROACH

The successful and sustainable operation of any utility is contingent on sound financial policy and proper utility planning. This study was conducted based on methodologies and principles established by the American Water Works Association (AWWA) in the *Manual of Water Supply Practices M1 – Principles of Water Rates, Fees, and Charges – Manual of Practice No. 27* published by the Water Environment Federation. The rate study process uses three interrelated analyses to address the adequacy and equity of the utility's rates. These three analyses are summarized below in

Figure 1.

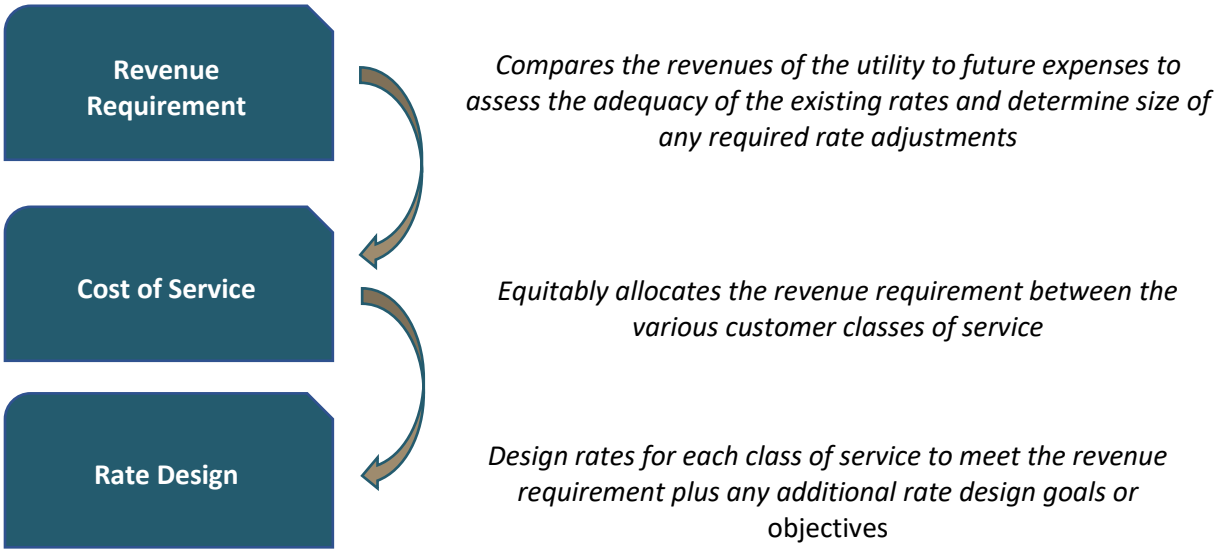

Figure 1: Process of Rate Making

There are two industry standard methods used to project the revenue required on an annual basis. These methods are the Cash Basis approach and the Utility Basis approach. The primary difference between the two methods is that the duty of the Cash Basis approach is to recover annual costs, while the Utility Basis approach sets out to earn a fair return on its investment. This rate study utilizes a Cash Basis approach which is most common for public utilities. Figure 2 displays a comparison of the two approaches.

Cash Basis	Utility Basis
+ O&M expenses	+ O&M expenses
+ Taxes, transfer payments	+ Taxes, transfer payments
+ Debt service	+ Depreciation Expense
+ Capital projects	+ Return on rate base
= Total Revenue Requirement	= Total Revenue Requirement
Typical "Cash Basis" Situations • Commonly used by municipal/governmental utilities. • Conforms to most cash budgets. • Revenue in = Costs out. • Duty to recover costs.	**Typical "Utility Basis" Situations** • Commonly used by privately owned utilities. • Earn "fair" return on investment (Duty to investors). • Revenue in = Operating costs (loss of investment).

Figure 2: Revenue Requirement Methods

1.4 SUMMARY OF KEY FINDINGS AND RECOMMENDATIONS

The findings and recommendations presented in this study were developed in coordination with City staff since March 2020. This study has found that the current water and sewer base rates do not generate sufficient revenues to maintain financial solvency under current user rates. For residential customers of the water fund, it is recommended that the City implement annual increases ranging from 7 to 35 percent. For the sewer fund, it is recommended that the City implement an annual increase, ranging between 7 and 46 percent.

1.4.1 Summary of Rate Analysis

Since the beginning of the study, there have been several iterations of Alternatives. Based on the City's feedback and as more information regarding funding constraints and ARPA funds were made available, the chosen alternatives for water and sewer were refined to the following alternatives:

Water
Alternative 1 – All CIP Projects
Alternative 2 – All CIP Projects + Delays
Sewer
Alternative 1 – All CIP Projects
Alternative 2 – All CIP Projects + Delays

Water

The chosen alternative for water, referred to as Alternative 2, is a modified version of Alternative 4, which was approved at the City Council Meeting that took place in October 2020. Alternative 2 proposes that the City fund Project Phase 1 with ARPA funds and finance Project Phase 2 with a loan from USDA-RD within the 5-year study period.

Sewer

The chosen alternative for sewer, referred to as Alternative 2, is a modified version of Alternative 4, which was approved at the City Council Meeting that took place in October 2020. Alternative 2 proposes that the City self-fund Project Phase 1; fund Project Phase 2 using a combination of loans, ARPA funds, and reserves; and fund Project Phase 5 with reserves.

2.0 DATA USED AND GENERAL ASSUMPTIONS

The City provided historical financial reports, budgets, and other financial information regarding the water and sewer utility for FY 16 through FY 20. This information was used to develop long-term financial projections for the utilities. This report presents a 5-year financial plan and proposes rates through FY 26. The assumptions used to evaluate the financial stability of the utility were developed in coordination with or provided by City staff. Assumptions such as future inflation factors, customer account growth rates, and beginning cash balances are summarized in this section.

2.1 INFLATION

To prepare the 5-year financial plan, inflation factors are applied to future revenue and expense projections over the study period. The inflation factors used, shown in Table 1, were developed in coordination with City staff and considered commonly used price indices such as the Consumer Price Index for all Urban Consumers (CPI-U). CPI-U is assumed to escalate by 2.5 percent based on average historical increases between the years 2014 through 2019. Rate revenues are also assumed to escalate at CPI-U since any rate adjustment will also be accompanied by a CPI increase on an annual basis. The 2021 customer base is described in Section 2.2. Labor cost inflation was assumed to escalate by 2.5 percent and benefits cost inflation was assumed to escalate by 5 percent. See Appendix A for a detailed summary of inflation factors used in this analysis.

Table 1: Inflation Factor Assumptions

Key Factors	Inflation Rate per Year
General (CPI)	2.5%
Construction Costs	3%
Salaries	2.5%
Benefits	5%

2.2 CUSTOMER BASE AND GROWTH

The City provided records of water and sewer customer counts for years 2017 through 2020. Since customer data fluctuated between years of increasing and decreasing population, a customer growth rate was developed in workshops with the City.

2.2.1 Water

A growth rate of 0.50 percent annually was used for this study which equates to approximately 4 new connections per year. Table 2 summarizes the recommended customer growth rate and subsequent customer count used in study projections.

Table 2: Water Projected Customer Growth

FY	2021	2022	2023	2024	2025	2026
Water Customers	836	840	844	848	852	856
Growth	--	0.50%	0.50%	0.50%	0.50%	0.50%

2.2.2 Sewer

A growth rate of 0.50 percent annually was used for this study which equates to approximately 4 new connections per year. Table 3 summarizes the recommended customer growth rate and subsequent customer count used in study projections.

Table 3: Sewer Projected Customer Growth

FY	2021	2022	2023	2024	2025	2026
Sewer Customers	785	789	793	797	801	805
Growth	--	0.80%	0.80%	0.80%	0.80%	0.80%

2.3 ACCOUNT BALANCES

Based on the City's financial records, the combined water and sewer fund beginning FY 22 cash balance was $2 million, including approximately $1 million for the water, and $1 million for the sewer operating funds.

Table 4: Beginning FY 21 Cash Balance for Operating Fee Funds.

FY 22	Balance
Water Operating Fund	$1,000,000
Sewer Operating Fund	$1,000,000
Total	**$2,000,000**

Maintaining a cash balance that allows for variability in revenues and expenses on an annual basis can be accomplished through funding or using reserves to offset annual shortfalls. In developing the revenue requirement presented in Section 3.0 the following financial policies have been incorporated.

Operating Reserve

Water

The Operating Fund shall maintain a minimum balance of at least 90 days of Operating Expenses[2]. This value increased from $154,832 in FY 22 to $175,601 in FY 26.

Sewer

The Operating Fund shall maintain a minimum balance of at least 90 days of Operating Expenses[3]. This value increased from $97,915 in FY 22 to $126,300 in FY 26.

Debt Reserve

Debt service reserve accrues at the rate of one-tenth of the annual average loan installment for a period of 10 years until a full year of debt service payments are accumulated. This restricted cash balance was

[2 & 3] Daily Operating Expenses are defined as: (Annual O&M Expenses + Annual Non-Operating Expenses) / 365

estimated at $8,281 in FY 23 to $57,966 in FY 26 for water and $6,177 in FY 24 to $18,531 in FY 26 for sewer.

Maximum Debt Limit

Carlin City Charter Section 7.010 states that the City shall not incur debt in excess of 20 percent of the total assessed valuation of the taxable property within the boundaries of the City. The City's total assets are valued at $39 million, therefore the maximum debt amounts to $7.8 million. As of June 30, 2021, the City of Carlin has total outstanding debt of $118,035 from the USDA Senior Citizens Facility, leaving $7.68 million to finance water and sewer projects. If the City chooses to follow through with the recommendations outlined in this study, the City will incur $7.72 million, which is 99 percent of the debt limit, by FY 25.

3.0 DEVELOPMENT OF THE WATER RATE STUDY

3.1 REVENUE REQUIREMENT

The revenue requirement evaluates the relationship between revenue collected from user fees and the costs incurred by serving those customers. This study performs an analysis over the 5-year study period and is used to determine the approximate rate adjustments needed to support projected expenses and capital improvement projects for the water system. In the course of developing the revenue requirement, it is assumed that the City's water utility, as an enterprise fund, is self-sufficient and does not receive financial support from other City funds.

3.1.1 Projected Revenues

The City's historic actuals for FY 17 through FY 21 were reviewed for this study. The City also provided the FY 22 budget. FY 22 was selected to be the starting point for revenue projections for nearly all revenue and expense items. Approximately $400 thousand is projected to be collected in rate revenue and an additional $7 thousand collected from non-rate revenue sources. Table 5 below shows the projected revenues from FY 22 through FY 26. Considering the customer growth and inflationary factors (i.e., CPI-U) described in Section 2.1, total projected revenues will increase to approximately $450 thousand by FY 26 without rate increases or $987 thousand in the same year with the proposed rate increases.

Table 5: Projected Water System Revenues

	FY 22	FY 23	FY 24	FY 25	FY 26
w/o Rate Adjustments	**$ 407,000**	**$ 417,175**	**$ 427,604**	**$ 439,294**	**$ 449,252**
w/ Rate Adjustments	**$ 415,140**	**$ 537,321**	**$ 778,240**	**$ 917,350**	**$ 987,298**

3.1.2 Projected Costs

The City's overall water expense consists of water O&M, non-operating expenses, capital replacement projects funded by rates, and debt service payments. Similar to the revenue forecast, FY 22 was selected to be the starting point or basis for the projection of system costs. Table 6 below shows the projected expenses from FY 22 through FY 26. The total projected costs for the utility will reach $878 thousand in FY 26.

Table 6: Projected Water System Costs

FY 22	FY 23	FY 24	FY 25	FY 26
$ 644,151	**$ 1,120,145**	**$ 842,637**	**$ 859,912**	**$ 877,777**

3.1.2.1 Operating Expenses and Forecast

The City's O&M expenses consist of ongoing annual costs which can generally be classified as treatment, distribution, and administrative. Over the 5-year study period, the total water O&M expenses are projected to increase from $644 thousand in FY 22 to approximately $712 thousand by FY 26.

3.2 CAPITAL PROJECTS AND FUNDING

The City developed a 5-year Water System Capital Improvement Plan (CIP) to forecast and propose projects that address the needs of the system.

Repair and replacement projects maintain the system infrastructure and capacity that is currently in place for existing connections. As the existing system ages, regular investments to repair its facilities are critical to maintaining the integrity of the system. CIP projects are usually the most volatile expense when compared to O&M and Debt Service, which involve fixed costs. There are several repair and replacement projects that will impact the City's Operating Fund which is funded by existing customer monthly rates and the water system reserves.

The CIP currently includes approximately $29.94 million in repair and replacement projects through FY 36. The entire CIP is presented in Table 7 with the projects proposed to be constructed within the 5-year study period in bold.

Table 7: Water Repair and Replacement Capital Projects

Project	Year	Cost
Phase 1 - Spring 1 Replacement	**2023**	**$ 1,142,500**
Phase 2 - Replace Storage Tank Transmission Mains	**2022**	**$ 4,353,000**
Phase 3 - Replace South Distribution System	2032	$5,391,825
Phase 4 - Replace Northeast Distribution System	2035	$9,260,400
Phase 5 - Replace Northwest Distribution System	2038	$8,857,500
Phase 6 - Spring 2 Improvements	2039	$935,700

Table 8: 5-year Capital Project Costs

FY 22	FY 23	FY 24	FY 25	FY 26
$4,353,000	$1,142,500	$0	$0	$0

3.3 FUTURE DEBT SERVICE AND OTHER SOURCES OF FUNDING

The City's water fund does not currently have any existing debt service. USDA approved a loan for the $4.3 million project that the City will start making full payments[4] on after the project is complete. The anticipated annual debt service amounts to $82 thousand in FY 23 and $165 thousand per year thereafter for 40 years.

Other sources of funding include $1.14 million of ARPA funds dedicated to funding the Phase 1 project that will replace the transmission main between Spring 1 and the Hamilton booster pump station. Figure 3 illustrates how external funding will fund the various CIP projects within the study period.

[4] The City will be required to make bi-annual, interest only payments on the amount of project funds which have been expended or issued by January 1 or July 1 during construction.

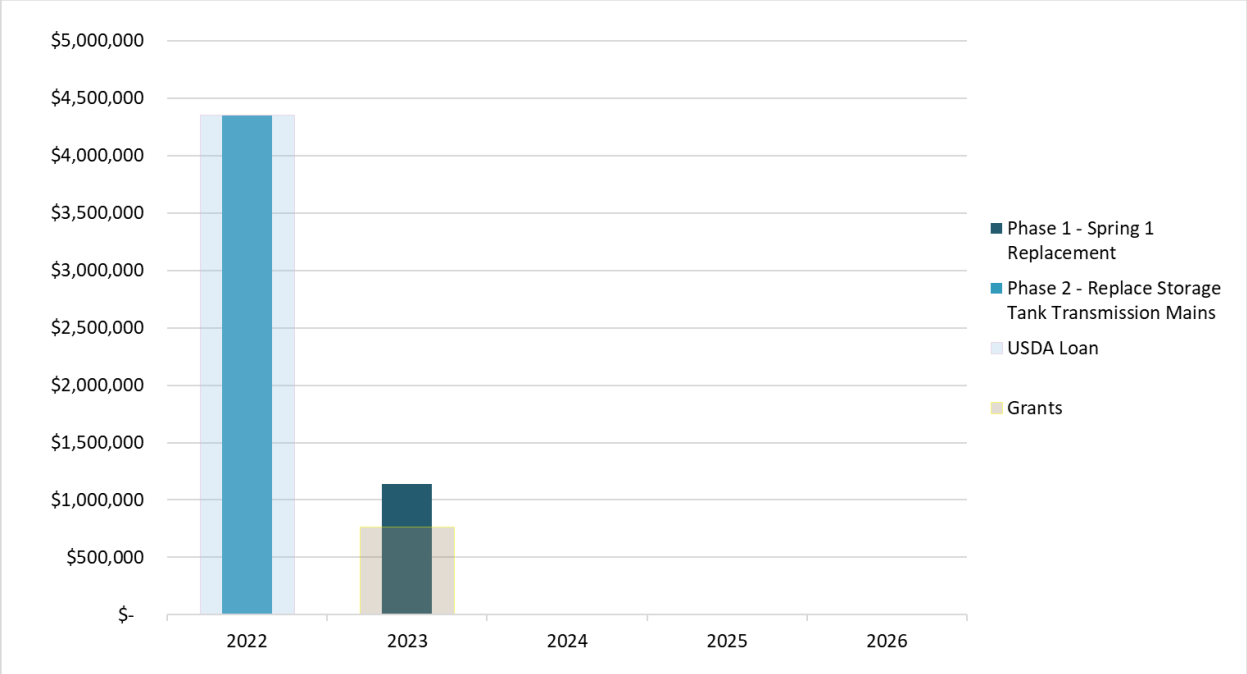

Figure 3: Funding Sources for CIP Projects

3.4 PROJECTED REVENUE REQUIREMENT

As seen in Figure 4, revenue under the existing rates is unable to cover expenses through FY 26; therefore, proposed rate adjustments were considered as part of this study. The rate adjustments proposed in Alternative 2 include both manual and automatic annual increases (i.e., CPI-U) to ensure that the utility remains solvent throughout the study period. Though it appears that total revenues under the proposed rates are not enough to cover expenses for every year during the study period, it should be noted that the water fund has a positive net cash flow starting in FY 26.

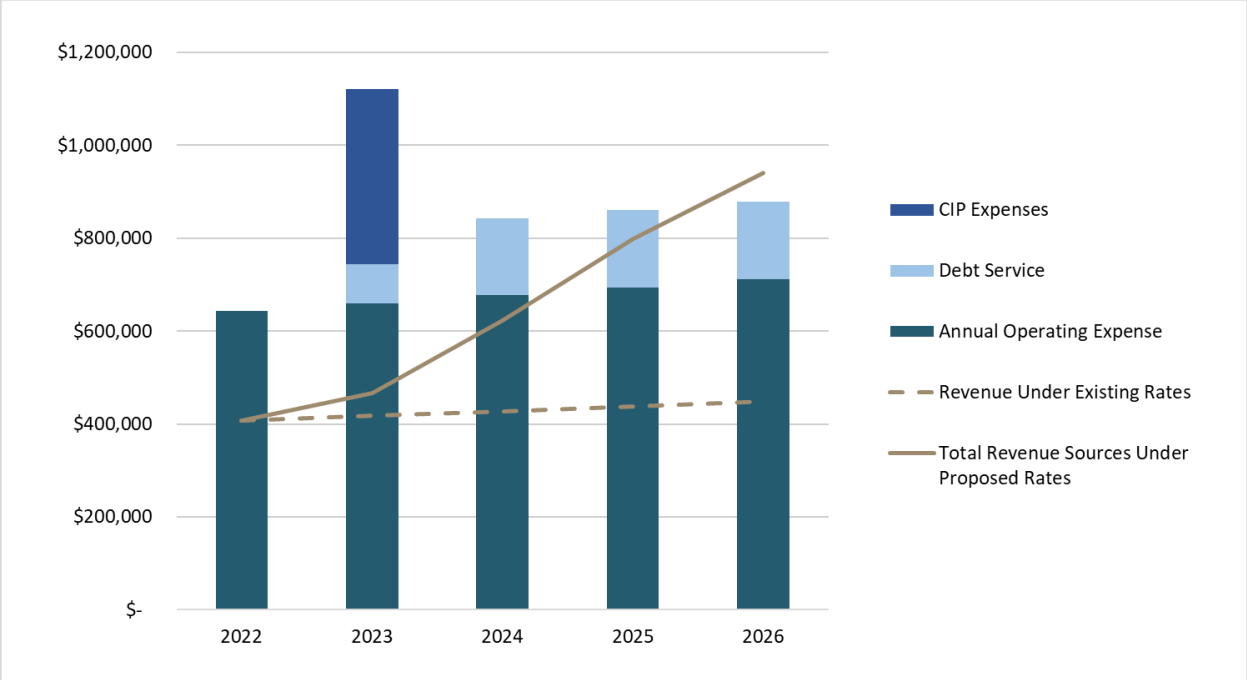

Figure 4: Alternative 2 Revenue Requirement with Proposed Rates

3.5 RATE DESIGN

A primary purpose of this rate study was to analyze the sufficiency of the City's current rates. It was found that the City's current rate structure did not meet the required financial policies. To develop a sufficient rate structure, this study assessed the financial impacts on the Operating Fund when rates were set according to a standard Cost of Service (Cos) approach. The CoS analysis proposes increases listed in Table 9.

Table 9: Alternative 2 Cost of Service Rates

Customer Class	FY 22	FY 23	FY 24	FY 25	FY 26
Residential	$ 43.52	$ 58.00	$ 74.31	$ 87.59	$ 94.27
Commercial	$ 49.51	$ 65.98	$ 84.53	$ 99.65	$ 107.24
Standby	$ 19.56	$ 26.06	$ 33.40	$ 39.36	$ 42.37
RV	$ 33.22	$ 44.27	$ 56.71	$ 66.85	$ 71.95

3.5.1 Rate Design Criteria and Considerations

The initial consideration for the rate schedule for water service is establishing equitable charges to the customers in proportion to the cost to provide that service to the particular customer class. While the CoS based rates are a standard practice nationally, practical considerations may modify rate adjustments by accounting for limitations such as billing impacts, the utility's financial history or position, and local policies and practices.

Water use, for the majority of City customers, is not metered. Until water meters are installed for more than 50 percent of water users, the City should continue to charge a flat rate structure for water service.

3.5.2 Development of the Proposed Water Rates

Utilizing a CoS analysis, user rates for four customer classes (Residential, Commercial, Standby, and RV) were developed. Key factors used to determine equitable rates for each customer class were as follows:

- The proportional share of expenses that are driven solely by the number of customers in the utility. This cost was $19.56 and is the same for all customer classes.
- Rates include a Base Demand Cost Component of $10.83 per user which is based on the average annual water use for the residential customer class. This charge varies depending on customer class and is $13.54 for commercial, $0.00 for Standby, and $6.17 for RV customers. The difference in charge between customer classes is justified by:
    - Commercial customers use more water on average than residential customers,
    - Standby customers do not use any water, and
    - RV customers use less water than residential customers.
- Rates include a Peak Demand Cost Component which is based on the customer classes' proportional contribution to maximum system demands that the system incurs. This charge is $13.13 for Residential, $16.41 for Commercial, $0.00 for Standby, and $7.48 for RV. The difference in charge between customer classes is justified by:
    - The system incurs expenses at a different rate to provide maximum day demands than they do to provide average day demands.
    - Commercial customers have the ability to drive max day demands (e.g., fire flow) at a greater rate than residential customers,
    - Standby customers do not use any water and therefore do not contribute to max day demands, and
    - RV customers drive max day demands at a lesser rate than residential customers.
- Additional support for how the Standby rates were determined was:
    - Standby users do not use water; therefore, they should not be charged for expenses associated with producing water, supplying water, or funding active employee salaries/benefits.
    - Standby users do benefit from having a viable and operating public water system that they can connect to should they develop their parcel or occupy an existing structure on that property. For this reason, the Standby user pays their proportional share (2.7 percent total) of the following expenses:
    - Operation & Maintenance (36.85 percent)
    - There are 100 Standby customers.

- Additional support for how the RV rates were determined:
  - Typically, RV users consume less water than single-family residential customers. Reasons for that include RV users do not use water for outside irrigation and fewer people are living inside of an RV which results in less water consumption.
  - There are 25 RV customers.
  - We calculated City-wide outdoor average water use and reduced it to a per-person usage. This gave us a per-person, indoor water use value, city-wide. We then multiplied that volume of water by 2 persons using the assumption that the maximum number of people living inside an RV is limited at 2, while the 2019 U.S. Census tells us that there are 2.66 persons per household.
  - In total, this value tells us that RV customers use 57 percent of the water that a Single-Family Residence does. This value sets the relationship between the Residential and RV unit costs for Base Demand and Peak Demand as stated earlier.

Based on the considerations mentioned above, the recommended water user rates will be limited to a flat monthly base rate for all customer classes. The proposed rates ensure that system operating expenses, debt service, and capital improvement costs are covered throughout the study period.

3.5.3 **Proposed Water Rates**

Table 10 outlines the proposed rates for the study period. Rates in FY 22 are actual, and all future years include an estimated annual CPI-U increase of 2.5 percent. Actual rate adjustments in years FY 23 through 26 may differ slightly should CPI-U values in December of the previous year exceed or trail a 2.5 percent increase.

Table 10: Proposed Water Flat Rate Schedule

Customer Class	FY 22	FY 23	FY 24	FY 25	FY 26
Residential	$ 43.52	$ 58.00	$ 74.31	$ 87.59	$ 94.27
Commercial	$ 49.51	$ 65.98	$ 84.53	$ 99.65	$ 107.24
Standby	$ 19.56	$ 26.06	$ 33.40	$ 39.36	$ 42.37
RV	$ 33.22	$ 44.27	$ 56.71	$ 66.85	$ 71.95

Typically, all rate adjustments shall be effective at the beginning of every fiscal year (i.e., July 1). However, due to schedule delays and the City Ordinance modification process, user rates will become effective sometime between March and May (depending on customer class) in FY 22. Additionally, FY 23 rate changes for all customer classes will become effective on January 1, 2023.

3.5.4 **Reserve Account Analysis**

The rate analysis projects a positive Operating Fund cash balance throughout the study period, however the Operating Reserve balance will dip below the stated minimum discussed in Section 2.3 during FY 24 and 25. It is expected that the City will provide a bridge loan from another fund for this 2-year period in the case that the City needs to utilize these reserves for operating purposes. As outlined in Figure 5 and

Appendix A, the City is projected to end FY 26 with a cash balance of $290 thousand which meets all required reserves.

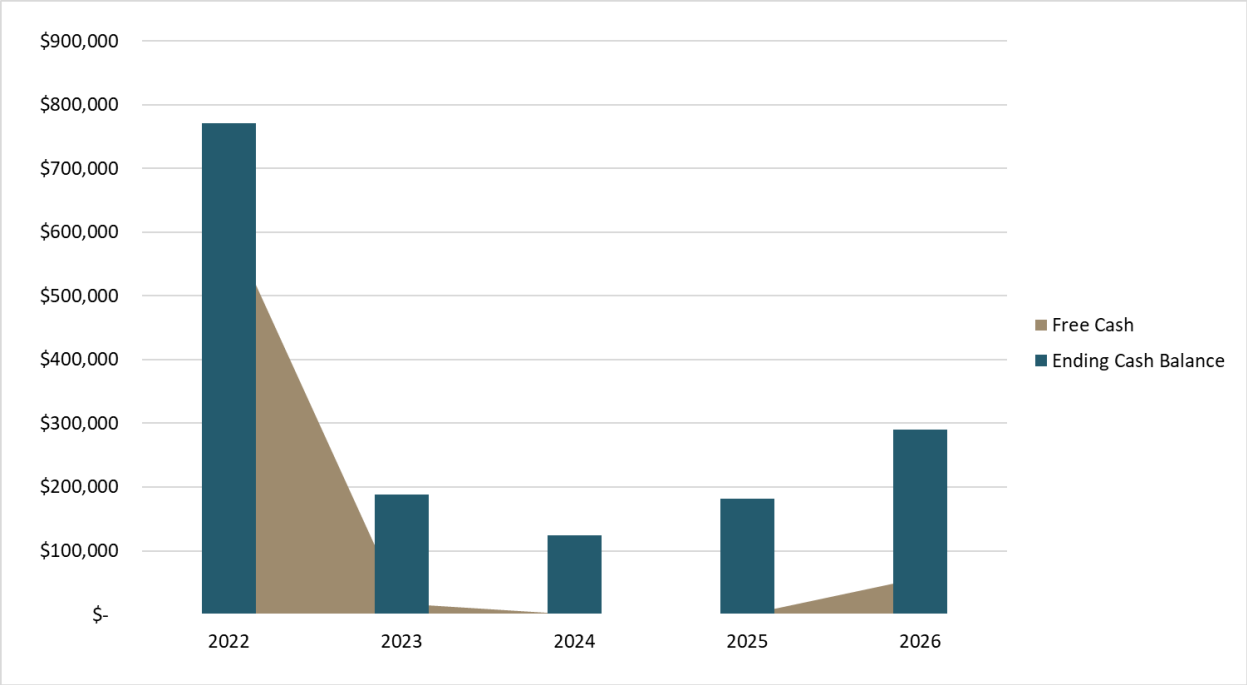

Figure 5: Water Operating Fund Reserves

4.0 DEVELOPMENT OF THE SEWER RATE STUDY

4.1 REVENUE REQUIREMENT

The revenue requirement evaluates the relationship between revenue collected from user fees and the costs incurred by serving those customers. This study performs an analysis over the 5-year study period and is used to determine the approximate rate adjustments needed to support projected expenses and capital improvement projects for the sewer system. In the course of developing the revenue requirement, it is assumed that the City's sewer utility, as an enterprise fund, is self-sufficient and does not receive financial support from other City funds.

4.1.1 Projected Revenues

The City's historic actuals for FY 17 through FY 21 were reviewed for this study. The City also provided the FY 22 budget. FY 22 was selected to be the starting point for revenue projections for nearly all revenue and expense items. Approximately $320 thousand is projected to be collected in rate revenue and an additional $1 thousand collected from non-rate revenue sources. Table 11 shows the projected revenues from FY 22 through FY 26. Considering the customer growth and inflationary factors described in Section 2.1, total projected revenues will increase to approximately $354 thousand by FY 26 without any rate increases or to $689 thousand with the proposed rate increases.

Table 11: Projected System Revenues

	FY 22	FY 23	FY 24	FY 25	FY 26
w/o Rate Adjustments	**$ 321,000**	**$ 329,025**	**$ 337,251**	**$ 345,682**	**$ 354,324**
w/ Rate Adjustments	**$ 342,400**	**$ 506,699**	**$ 594,910**	**$ 640,272**	**$ 689,093**

4.1.2 Projected Costs

The City's overall costs consist of sewer O&M, non-operating expenses, capital replacement projects funded by rates, and debt service. Similar to the revenue forecast, FY 22 was selected to be the starting point or basis for the projection of system costs. Table 12 shows the projected expenses from FY 22 through FY 26. The total projected costs for the utility will reach a peak of $860 thousand in FY 24.

Table 12: Projected System Costs

FY 22	FY 23	FY 24	FY 25	FY 26
$677,101	$626,957	$860,867	$561,505	$635,755

4.1.2.1 Operating Expenses and Forecast

The City's O&M expenses consist of ongoing annual costs which can generally be classified as collection, sewage treatment, and administrative. Over the 5-year study period, the total sewer O&M expenses are projected to increase from $397 thousand in F22 to approximately $512 thousand by FY 26.

4.2 CAPITAL PROJECTS AND FUNDING

The City developed a 5-year Sewer System CIP to forecast and propose projects that address the needs of the system. Repair and replacement projects maintain the system infrastructure and capacity that is currently in place for existing connections. As the existing system ages, the City makes regular investments to maintain the integrity of its facilities through user rate revenues. Repair and replacement projects impact the City's Operating Fund and are funded by existing customers through monthly rates.

The CIP currently includes approximately $21.5 million in repair and replacement projects through FY 38. $3.2 million in external financing and $2.2 million in ARPA funds will be necessary, in addition to sewer utility reserves to fund the repair and replacement projects shown in bold type in Table 13. Table 14 breaks down CIP costs by fiscal year.

Table 13: Sewer Repair and Replacement Capital Projects

Project	FY	Cost
Phase 1 Sewer System Evaluation Survey + I/I Study	**2022**	**$280,000**
Phase 2 Replace Priority 1 Pipes	**2023**	**$5,854,755**
Phase 3 Sludge Removal	2031	$2,600,000
Phase 4 Lift Station Improvements	2029	$5,071,175
Phase 5 WWTP Monitoring Wells	**2023**	**$151,050**
Phase 6 Phase 2 Sewer System Inspection	2032	$300,000
Phase 7 Replace Priority 2 Pipes	2035	$3,152,170
Phase 8 Replace Priority 3 Pipes	2038	$4,075,043

Table 14: 5-year Capital Project Costs

FY 22	FY 23	FY 24	FY 25	FY 26
$ 280,000	$ 151,050	$ 5,854,755	$ -	$ -

4.3 FUTURE DEBT SERVICE AND OTHER SOURCES OF FUNDING

The sewer fund has no outstanding debt. This study proposes the City use a combination of loans, ARPA funds, and reserves to fund the Phase 2 project that will replace the most critical and/or severely damaged pipes in the system. Figure 6 illustrates the timing and funding source for each CIP project. The anticipated annual debt service amounts to $62 thousand in FY 25 and $124 thousand per year thereafter for 40 years.

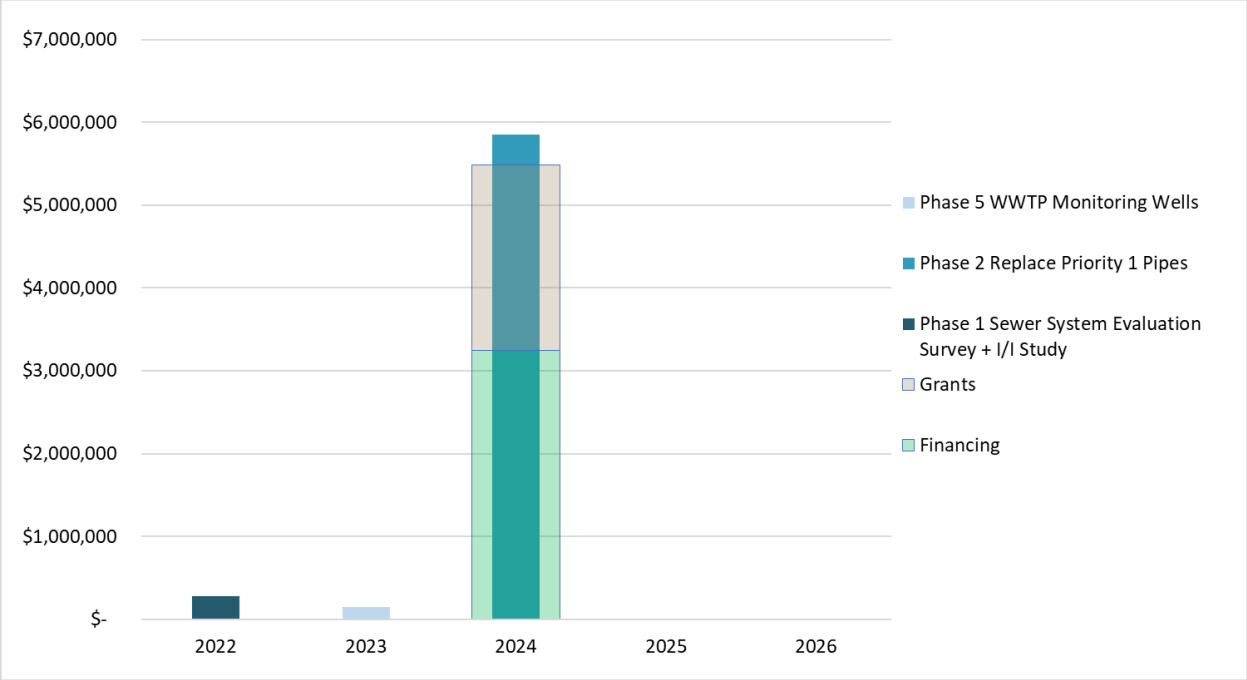

Figure 6: Funding Sources for Sewer CIP Projects

4.4 PROJECTED REVENUE REQUIREMENT

As seen in Figure 7, revenue under the existing rates is unable to cover expenses through FY 26; therefore, proposed rate adjustments were considered as part of this study. The rate adjustments proposed in Alternative 2 include both manual and automatic annual increases (i.e., CPI-U) to ensure that the utility remains solvent throughout the study period. Though it appears that total revenues under proposed rates are not enough to cover expenses for every year during the study period, it should be noted that the sewer fund has a positive net cash flow starting in FY 25.

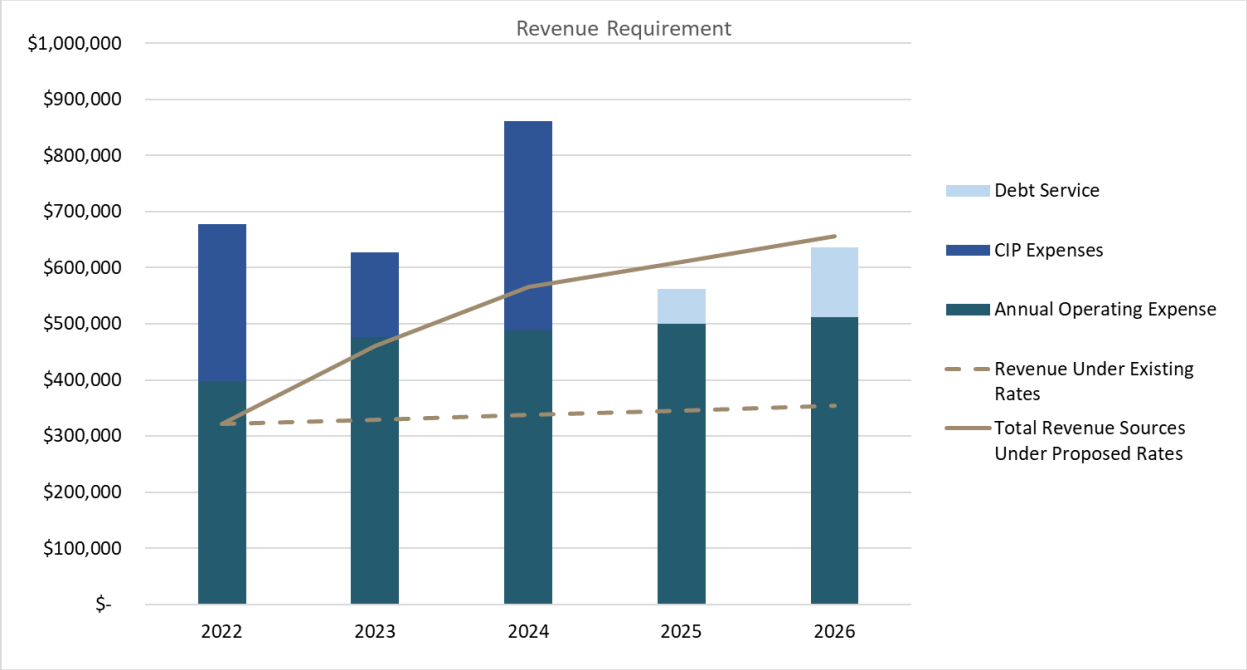

Figure 7: Alternative 2 Revenue Requirement with Proposed Rates

4.5 RATE DESIGN

A primary purpose of this rate study was to analyze the sufficiency of the City's current rates. It was found that the City's current rate structure did not meet the required financial policies. To develop a sufficient rate structure, this study assessed the financial impacts to the Operating Fund when rates were set according to a standard CoS approach. The CoS analysis proposes increases listed in Table 15.

Table 15: Alternative 2 Cost of Service Rates

Customer Class	FY 22	FY 23	FY 24	FY 25	FY 26
Residential	$ 43.72	$ 53.78	$ 57.88	$ 62.30	$ 67.05
Commercial	$ 52.59	$ 64.69	$ 69.62	$ 74.93	$ 80.64
Standby	$ 21.17	$ 26.04	$ 28.02	$ 30.16	$ 32.46
RV	$ 38.13	$ 46.90	$ 50.47	$ 54.32	$ 58.46

4.5.1 Rate Design Criteria and Considerations

The initial consideration for the rate schedule for sewer service is establishing equitable charges to the customers in proportion to the cost to provide that service to the particular customer class. While the CoS based rates are a standard practice nationally, practical considerations may modify rate adjustments by

accounting for limitations such as billing impacts, utility's financial history or position, and local policies and practices.

Water use, for the majority of City customers, is not metered. Until water meters are installed for more than 50 percent of water users, so that the City can use wintertime water use to determine indoor uses, the City should continue to charge a flat rate structure for sewer service.

4.5.2 **Development of the Proposed Sewer Rates**

Based on the considerations mentioned above, the recommended sewer user rates will be limited to a flat monthly base rate for Residential, Commercial, Standby, and RV customers. In general, the basis for determining equitable sewer rates for each customer class was similar to the rationale used in the water rate analysis. That being:

- Standby customers do not contribute any sewer flows to the system and therefore should not pay for any costs associated with the amount of flow pumped or treated per year. However, Standby customers, or property owners, do benefit from the existence of a viable, public sewer utility which could provide service to their property at a future date and therefore should pay their proportional share to maintain the utility,
- RV customers contribute less sewer flow than a standard residential customer, and
- Commercial customers contribute more sewer flow than residential customers.

The proposed rates ensure that expenses, debt service, and capital projects are covered throughout the study period.

4.5.3 **Proposed Sewer Rates**

Table 16 outlines the proposed rates for the study period. Rates in FY 22 are actual, and all future years include an estimated annual CPI-U increase of 2.5 percent. Actual rate adjustments in years FY 23 through 26 may differ slightly should CPI-U values in December of the previous year exceed or trail a 2.5 percent increase.

Table 16: Proposed Water Rate Schedule

Customer Class	FY 22	FY 23	FY 24	FY 25	FY 26
Residential	$ 43.72	$ 53.78	$ 57.88	$ 62.30	$ 67.05
Commercial	$ 52.59	$ 64.69	$ 69.62	$ 74.93	$ 80.64
Standby	$ 21.17	$ 26.04	$ 28.02	$ 30.16	$ 32.46
RV	$ 38.13	$ 46.90	$ 50.47	$ 54.32	$ 58.46

Typically, all rate adjustments shall be effective at the beginning of every fiscal year (i.e., July 1). However, due to schedule delays and the City Ordinance modification process, user rates will become effective sometime between March and May (depending on customer class) in FY 22. Additionally, FY 23 rate changes for all customer classes will become effective on January 1, 2023.

4.5.4 **Reserve Account Analysis**

Projected minimum Operating Fund cash reserves would be met as required by the City's financial policies throughout the study period. These projections are based on historical operating costs and the City's 5-year CIP. As outlined in Figure 8 and Appendix B, the City is projected to end FY 26 with a cash balance of $411 thousand.

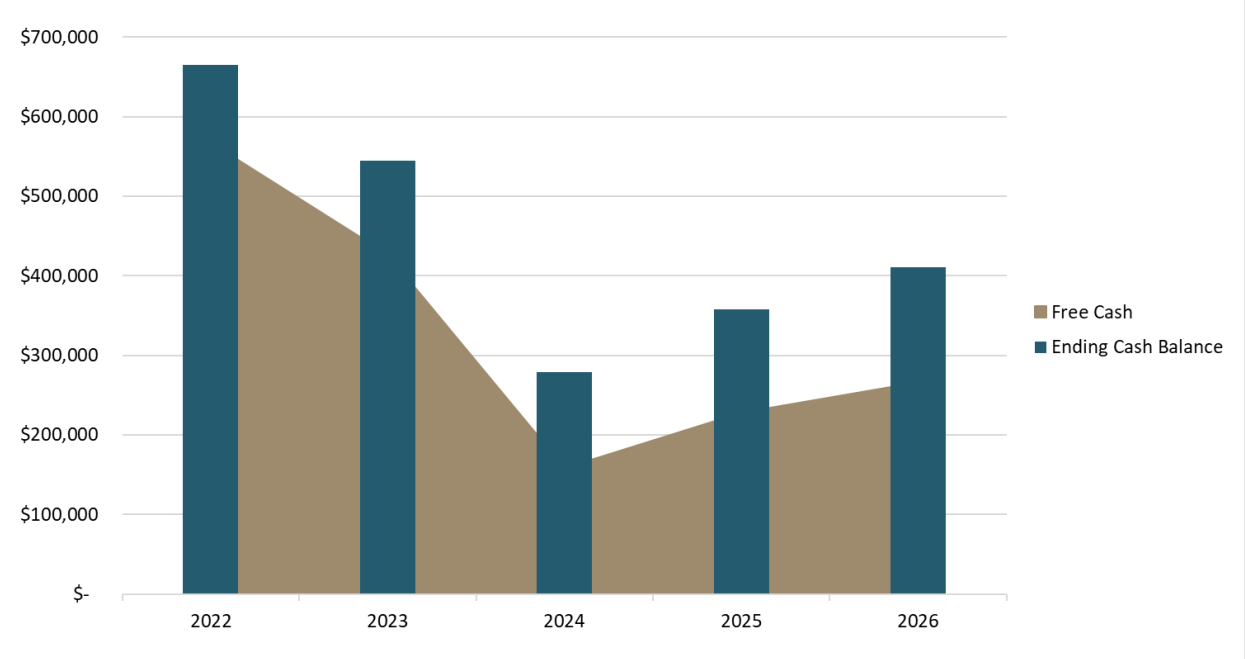

Figure 8: Sewer Operating Fund Reserves

5.0 COMPARISON TO OTHER UTILITIES

To better understand how the City's prosed water and sewer rates compare to other utilities, Farr West worked with the City to develop a list of "sister utilities" that include areas located in Nevada and/or have comparable population sizes and median household incomes as shown in Table 17.

Table 17: FY 22 Residential Rate Comparison with Other Utilities

Utility	Population	Median Household Income[2]	Water	Sewer
City of Carlin	2,050	$ 70,000 (± 22k)	$ 43.52	$ 43.72
City of Yerington	3,121	$ 33,750 (± 5.8k)	$ 33.75	$ 48.98
Fernley[1]	22,895	$ 66,525 (± 7.6k)	**$ 51.44**	$ 43.34
Carson City[1]	58,639	$ 58,305 (± 2.0k)	$ 29.06	$ 43.34
Douglas County[1]	49,488	$ 71,415 (± 2.7k)	$ 32.86	$ 14.00
Dayton (Lyon Co.)[1]	15,153	$ 71,918 (± 5.3k)	$ 28.02	**$ 73.33**
Silver Springs[1]	5,629	$ 42,841 (± 6.9k)	$ 50.00 | $ 54.00	$20.00 (per EDU)
Virginia City[1] (Storey Co.)	787	$ 111,315 (± 46.7k)	$ 45.30	$ 52.88
Elko	53,915	$79,375 (± 4.2k)	$31.68	$25.8

1 – User rate also includes commodity rate ($/1,000 gallons).
2 – Data gathered from the U.S. Census Bureau (2020).

6.0 CONCLUSION

Based on the analysis of the City's revenues and expenses, this study proposes annual rate increases plus a CPI adjustment for both the water and sewer utilities. In addition to the rates recommended, Farr West highly advises the City to revisit rates annually. Although a 5-year rate plan might be in place, an annual review is critical to assess how the rate adjustments have impacted usage behaviors and what true revenues and expenditures are.

The City's proposed water and sewer rates consist of a flat rate. Once water meters are installed for more than half of the City's connections, it would be beneficial to restructure the water rates to incorporate a base rate based on meter size, a commodity rate for all users, and a commercial sewer rate based on wastewater produced. In doing so, the City will be able to maintain better records of water consumption, more accurately define the units of service between customer classes, and charge customers more representative and equitable rates in the future.

The most significant challenge the City faces over the next 5 years is to operate both the water and sewer utilities with infrastructure that has reached the end of its service life and pursue large capital projects to replace the infrastructure in the most critical condition. As stated in this report, the City will need to acquire financing from external sources in order to construct these improvements and the existing debt limit will cap the City's ability to finance projects. It is recommended that the City modify the indebtedness clause in the city charter or seek grant funding for these upcoming projects.

APPENDIX A – WATER UTILITY RATE MODEL SHEETS

City of Carlin
Water Utility Rate Model
Assumptions

FARR WEST ENGINEERING

General Assumptions

Study Details

Enter Current Fiscal Year	**2022**
Duration of Study Period (Years)	**5**

Financial Policies

Debt Covenant/Bond Reserve

Select Debt Covenant Balance Goal: 1

1 1 - 10% Annual Payment
2 2 - Amount at Right
3 3 - No Debt or Reserve Not Funded

FYE:	2022	2023	2024	2025	2026
1	$ -	$ 8,281	$ 24,842	$ 41,404	$ 57,966
2					

Operating Reserve

Minimum Operating Account Balance Goal: 90 days

	2022	2023	2024	2025	2026
	$ 158,832	$ 162,817	$ 166,937	$ 171,196	$ 175,601

Capital Reserve

Select Capital Reserves Balance Goal: 3

1 - Defined as % System Fixed Assets
1 System Assets as of 2021:
2 2 - Amount at Right
3 3 - Reserve Not Funded

	2022	2023	2024	2025	2026
1	2.00%	2.00%	2.00%	2.00%	2.00%
	$ -	$ -	$ -	$ -	$ -
2					
3					

Depreciation Reserve

Select Depreciation Reserve Goal: 3

1 1 - Defined as % of Annual Depreciation Expense
2 2 - Amount at Right
3 3 - Reserve Not Funded

	2022	2023	2024	2025	2026
1	50%	50%	50%	50%	50%
	$ -	$ -	$ -	$ -	$ -
2					

Economic Factors that Govern Cost Projections

		Notes	FYE:	2022	2023	2024	2025	2026
1	General Cost Inflation	Per CPI		2.50%	2.50%	2.50%	2.50%	2.50%
2	Construction Cost Inflation			3.00%	3.00%	3.00%	3.00%	3.00%
3	Labor Cost Inflation			2.50%	2.50%	2.50%	2.50%	2.50%
4	Benefits Cost Inflation			5.00%	5.00%	5.00%	5.00%	5.00%
5	[Other]							
6	[Other]							
7	No Escalation			0.00%	0.00%	0.00%	0.00%	0.00%
8	General Inflation Plus Growth			3.01%	3.01%	3.01%	3.01%	3.01%
9	Fund Earnings			0.00%	0.00%	0.00%	0.00%	0.00%
10	Customer Growth			0.50%	0.50%	0.50%	0.50%	0.50%
	Cumulative Growth			0.50%	1.00%	1.51%	2.02%	2.53%

City of Carlin
Water Utility Rate Model
Operating Fund Revenue & Expenditure Projections

FARR WEST ENGINEERING

Revenues	Projection Method	Historical Actuals 2017	2018	2019	2020	2021	Budget 2022	Select Projection Starting Value	User Override Input	Projection Value	Projection 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Service Charges																				
WATER - UTILITY FEES	General Cost Inflation	$ 406,657	$ 414,855	$ 179,214	$ 394,152	$ 445,713	$ 400,000	Budget 2022 Value		$ 400,000	$ 410,000	$ 420,250	$ 430,756	$ 441,525	$ 452,563	$ 463,877	$ 475,474	$ 487,361	$ 499,545	$ 512,034
WATER - CONNECTION FEES	General Cost Inflation	$ 19,424	$ -	$ -	$ -			Budget 2022 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
WATER - MATERIAL SALES	General Cost Inflation	$ -	$ -	$ 49	$ 49	$ 175		Budget 2022 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	General Cost Inflation							Budget 2022 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	General Cost Inflation							Budget 2022 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Service Charge Revenue		**$ 426,081**	**$ 414,855**	**$ 179,263**	**$ 394,201**	**$ 445,888**	**$ 400,000**			**$ 400,000**	**$ 410,000**	**$ 420,250**	**$ 430,756**	**$ 441,525**	**$ 452,563**	**$ 463,877**	**$ 475,474**	**$ 487,361**	**$ 499,545**	**$ 512,034**
Miscellaneous Revenue																				
WATER - CAP IMPROVEMENT FEE	General Cost Inflation	$ 3,826	$ -	$ 2,110	$ 2,110	$ 229	$ 1,000	Budget 2022 Value	-	$ 1,000	$ 1,025	$ 1,051	$ 1,077	$ 1,104	$ 1,131	$ 1,160	$ 1,189	$ 1,218	$ 1,249	$ 1,280
WATER - SALES	General Cost Inflation	$ 7,622	$ 18,300	$ 1,425	$ 5,514	$ 50,319	$ 6,000	Budget 2022 Value	-	$ 6,000	$ 6,150	$ 6,304	$ 6,461	$ 6,623	$ 6,788	$ 6,958	$ 7,132	$ 7,310	$ 7,493	$ 7,681
	General Cost Inflation							Budget 2022 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	General Cost Inflation							Budget 2022 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Miscellaneous Revenue		**$ 11,448**	**$ 18,300**	**$ 3,535**	**$ 7,624**	**$ 50,549**	**$ 7,000**			**$ 7,000**	**$ 7,175**	**$ 7,354**	**$ 7,538**	**$ 7,727**	**$ 7,920**	**$ 8,118**	**$ 8,321**	**$ 8,529**	**$ 8,742**	**$ 8,961**
Interest Income	Fund Earnings							Budget 2022 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenues		**$ 437,529**	**$ 433,154**	**$ 182,798**	**$ 401,825**	**$ 496,436**	**$ 407,000**				**$ 417,175**	**$ 427,604**	**$ 438,294**	**$ 449,252**	**$ 460,483**	**$ 471,995**	**$ 483,795**	**$ 495,890**	**$ 508,287**	**$ 520,994**

Expenditures	Projection Method	FYE	Historical Actuals 2017	2018	2019	2020	2021	Budget 2022	Select Projection Value Methodology	User Override Input	Projection Value	Projection 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
O&M & Non-Operating Expenses																					
SALARIES AND WAGES	Labor Cost Inflation		$ 173,529	$ 182,915	$ 97,479	$ 178,296	$ 202,063	$ 203,335	Budget 2022 Value	-	$ 203,335	$ 208,418	$ 213,629	$ 218,970	$ 224,444	$ 230,055	$ 235,806	$ 241,701	$ 247,744	$ 253,938	$ 260,286
PHYSICALS	General Cost Inflation		$ -	$ -	$ -	$ -	$ -		Budget 2022 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
EMPLOYEE BENEFITS	Benefits Cost Inflation		$ 72,556	$ 61,687	$ 49,400	$ 94,517	$ 105,648	$ 114,141	Budget 2022 Value	-	$ 114,141	$ 119,848	$ 125,840	$ 132,132	$ 138,739	$ 145,676	$ 152,960	$ 160,608	$ 168,638	$ 177,070	$ 185,924
EQUIPMENT REPAIRS	General Cost Inflation		$ 27,315	$ 29,138	$ 15,234	$ 17,960	$ 9,924	$ 20,000	Budget 2022 Value	-	$ 20,000	$ 20,500	$ 21,013	$ 21,538	$ 22,076	$ 22,628	$ 23,194	$ 23,774	$ 24,368	$ 24,977	$ 25,602
TELEPHONE	General Cost Inflation		$ 7,396	$ 7,603	$ 4,265	$ 7,698	$ 8,047	$ 5,000	Budget 2022 Value	-	$ 5,000	$ 5,125	$ 5,253	$ 5,384	$ 5,519	$ 5,657	$ 5,798	$ 5,943	$ 6,092	$ 6,244	$ 6,400
TRAVEL & TRAINING	General Cost Inflation		$ 1,638	$ 270	$ -	$ -	$ 309	$ 4,000	Budget 2022 Value	-	$ 4,000	$ 4,100	$ 4,203	$ 4,308	$ 4,415	$ 4,526	$ 4,639	$ 4,755	$ 4,874	$ 4,995	$ 5,120
UNIFORMS	General Cost Inflation		$ 2,363	$ 2,294	$ 2,382	$ 2,382	$ 2,384	$ 2,400	Budget 2022 Value	-	$ 2,400	$ 2,460	$ 2,522	$ 2,585	$ 2,649	$ 2,715	$ 2,783	$ 2,853	$ 2,924	$ 2,997	$ 3,072
OFFICE EXPENSE	General Cost Inflation		$ 8,051	$ 7,665	$ 1,663	$ 4,522	$ 3,754	$ 5,000	Budget 2022 Value	-	$ 5,000	$ 5,125	$ 5,253	$ 5,384	$ 5,519	$ 5,657	$ 5,798	$ 5,943	$ 6,092	$ 6,244	$ 6,400
MATERIALS & SUPPLIES	General Cost Inflation		$ 28,883	$ 30,910	$ 12,605	$ 26,414	$ 25,026	$ 35,000	Budget 2022 Value	-	$ 35,000	$ 35,875	$ 36,772	$ 37,691	$ 38,633	$ 39,599	$ 40,589	$ 41,604	$ 42,644	$ 43,710	$ 44,803
TESTING - WATER	General Cost Inflation		$ 10,562	$ 14,298	$ 5,391	$ 10,112	$ 9,859	$ 14,000	Budget 2022 Value	-	$ 14,000	$ 14,350	$ 14,709	$ 15,076	$ 15,453	$ 15,840	$ 16,236	$ 16,642	$ 17,058	$ 17,484	$ 17,921
OTHER EXF LEGAL FEES	General Cost Inflation		$ 2,566	$ 4,399	$ 756	$ 3,333	$ 455	$ 12,300	Budget 2022 Value	-	$ 12,300	$ 12,608	$ 12,923	$ 13,246	$ 13,577	$ 13,916	$ 14,264	$ 14,621	$ 14,986	$ 15,361	$ 15,745
ACCOUNTING FEES	General Cost Inflation		$ 10,677	$ 15,811	$ 5,296	$ 15,000	$ 969	$ 18,450	Budget 2022 Value	-	$ 18,450	$ 18,911	$ 19,384	$ 19,869	$ 20,365	$ 20,874	$ 21,396	$ 21,931	$ 22,480	$ 23,042	$ 23,618
ENGINEERING FEES	General Cost Inflation		$ 18,997	$ 16,631	$ 420	$ 16,667	$ 16,667	$ 24,600	Budget 2022 Value	-	$ 24,600	$ 25,215	$ 25,845	$ 26,492	$ 27,154	$ 27,833	$ 28,528	$ 29,242	$ 29,973	$ 30,722	$ 31,490
CONTRACT FEES	General Cost Inflation		$ -	$ -	$ -	$ 333	$ 1,482	$ 410	Budget 2022 Value	-	$ 410	$ 420	$ 431	$ 442	$ 453	$ 464	$ 475	$ 487	$ 500	$ 512	$ 525
BUILDING MAINTENANCE	General Cost Inflation		$ -	$ -	$ -	$ 667	$ 667	$ 820	Budget 2022 Value	-	$ 820	$ 841	$ 862	$ 883	$ 905	$ 928	$ 951	$ 975	$ 999	$ 1,024	$ 1,050
LIABILITY INSURANCE	General Cost Inflation		$ 14,083	$ 14,127	$ 13,924	$ 14,333	$ 14,333	$ 19,680	Budget 2022 Value	-	$ 19,680	$ 20,172	$ 20,676	$ 21,193	$ 21,723	$ 22,266	$ 22,823	$ 23,393	$ 23,978	$ 24,578	$ 25,192
NATURAL GAS	General Cost Inflation		$ 829	$ 973	$ 810	$ 833	$ 122	$ 1,107	Budget 2022 Value	-	$ 1,107	$ 1,135	$ 1,163	$ 1,192	$ 1,222	$ 1,252	$ 1,284	$ 1,316	$ 1,349	$ 1,382	$ 1,417
ELECTRICITY	General Cost Inflation		$ 23,971	$ 24,881	$ 15,716	$ 24,333	$ 9,072	$ 29,930	Budget 2022 Value	-	$ 29,930	$ 30,678	$ 31,445	$ 32,231	$ 33,037	$ 33,863	$ 34,710	$ 35,577	$ 36,467	$ 37,378	$ 38,313
FUEL EXPENSE	General Cost Inflation		$ 8,788	$ 7,783	$ 4,048	$ 11,667	$ 2,280	$ 16,400	Budget 2022 Value	-	$ 16,400	$ 16,810	$ 17,230	$ 17,661	$ 18,103	$ 18,555	$ 19,019	$ 19,494	$ 19,982	$ 20,481	$ 20,993
DEPRECIATION EXPENSE	General Cost Inflation		$ 55,661	$ 49,935	$ -	$ 53,333	$ 48,244	$ 92,250	User Defined >>	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
INTEREST EXPENSE	General Cost Inflation		$ 289	$ -	$ -	$ -	$ 439		Budget 2022 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total O&M Expenses			**$ 472,433**	**$ 475,382**	**$ 232,405**	**$ 487,067**	**$ 466,410**	**$ 532,313**			**$ 532,313**	**$ 548,474**	**$ 565,182**	**$ 582,458**	**$ 600,323**	**$ 618,799**	**$ 637,911**	**$ 657,683**	**$ 678,140**	**$ 699,310**	**$ 721,219**
Non Operating Expenses																					
CAPITAL OUTLAY - SHORT LIVED ASSETS	No Escalation							$ 111,838	User Defined >>	$ 111,838	$ 111,838	$ 111,838	$ 111,838	$ 111,838	$ 111,838	$ 111,838	$ 111,838	$ 111,838	$ 111,838	$ 111,838	$ 111,838
	Select Methodology								Budget 2022 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Select Methodology								Budget 2022 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Non Operating Expenses																					
Total Expenditures			**$ 472,433**	**$ 475,382**	**$ 232,405**	**$ 487,067**	**$ 466,410**	**$ 644,151**				**$ 660,312**	**$ 677,020**	**$ 694,296**	**$ 712,161**	**$ 730,637**	**$ 749,749**	**$ 769,521**	**$ 789,978**	**$ 811,148**	**$ 833,057**

City of Carlin
Water Utility Rate Model
Capital Improvement Plan
Alternative 2

FARR WEST ENGINEERING

			5 - Year CIP Projects					
Project Name	% Repair / Replacement	% Expansion	2022	2023	2024	2025	2026	2027
Phase 1 - Spring 1 Replacement	100%	0%	$ -	$ 1,142,500	$ -	$ -	$ -	$ -
Phase 2 - Replace Storage Tank Transmission Mains	100%	0%	$ 4,353,000	$ -	$ -	$ -	$ -	$ -
Phase 3 - Replace South Distribution System	100%	0%	$ -	$ -	$ -	$ -	$ -	$ -
Phase 4 - Replace Northeast Distribution System	100%	0%	$ -	$ -	$ -	$ -	$ -	$ -
Phase 5 - Replace Northwest Distribution System	100%	0%	$ -	$ -	$ -	$ -	$ -	$ -
Phase 6 - Spring 2 Improvements	100%	0%	$ -	$ -	$ -	$ -	$ -	$ -

City of Carlin
Water Utility Rate Model
Capital Funding Plan

FARR WEST ENGINEERING

CIP Expenditures	FYE	2022	2023	2024	2025	2026
Project Costs Dedicated to Repair and Replacement		$ 4,353,000	$ 1,142,500	$ -	$ -	$ -
Project Costs Dedicated to Expansion		$ -	$ -	$ -	$ -	$ -
Total CIP Expenditures to be Funded		**$ 4,353,000**	**$ 1,142,500**	**$ -**	**$ -**	**$ -**

Capital Funding Plan	FYE	2022	2023	2024	2025	2026
Funding Sources for CIP Projects:						
Grants		$ -	$ 765,475	$ -	$ -	$ -
Developer Contributions		$ -	$ -	$ -	$ -	$ -
Connection Fees		$ -	$ -	$ -	$ -	$ -
Capital Reserve		$ -	$ -	$ -	$ -	$ -
Loans		$ 4,353,000	$ -	$ -	$ -	$ -
Bond Sales		$ -	$ -	$ -	$ -	$ -
Total CIP Funding Resources		**$ 4,353,000**	**$ 765,475**	**$ -**	**$ -**	**$ -**
Total CIP Funded through Rates		**$ -**	**$ 377,025**	**$ -**	**$ -**	**$ -**

City of Carlin
Water Utility Rate Model
Reserve Funds
Alternative 2

FARR WEST ENGINEERING

	FYE	2022	2023	2024	2025	2026
Beginning Cash Balance	$	1,000,000	$ 770,989	$ 188,165	$ 123,768	$ 181,206
Reserve Funded from Rates	$	-	$ -	$ -	$ 57,438	$ 109,521
Reserve Used as Revenue Source	$	-	$ -	$ -	$ -	$ -
Reserve Used to Fund Shortfalls/Capital Projects	$	(229,011)	$ (582,824)	$ (64,397)	$ -	$ -
Debt Reserve	$	-	$ (8,281)	$ (24,842)	$ (41,404)	$ (57,966)
Operating Reserve	$	(158,832)	$ (162,817)	$ (166,937)	$ (171,196)	$ (175,601)
Capital Reserve	$	-	$ -	$ -	$ -	$ -
Free Cash	**$**	**612,157**	**$ 17,067**	**$ -**	**$ -**	**$ 57,161**
Ending Cash Balance	**$**	**770,989**	**$ 188,165**	**$ 123,768**	**$ 181,206**	**$ 290,728**

Internal Reserves

Debt Reserve	$	-	$ 8,281	$ 24,842	$ 41,404	$ 57,966
Goal	*$*	*-*	*$ 8,281*	*$ 24,842*	*$ 41,404*	*$ 57,966*
Operating Reserve	$	158,832	$ 162,817	$ 98,926	$ 139,802	$ 175,601
Goal	*$*	*158,832*	*$ 162,817*	*$ 166,937*	*$ 171,196*	*$ 175,601*
Capital Reserve	$	-	$ -	$ -	$ -	$ -
Goal	*$*	*-*	*$ -*	*$ -*	*$ -*	*$ -*

City of Carlin
Water Utility Rate Model
Revenue Requirement and Rate Adjustments
Alternative 2

FARR WEST ENGINEERING

Revenue Requirement	**FYE**	**2022**	**2023**	**2024**	**2025**	**2026**
Revenue Sources						
Rate Revenue		$ 407,000	$ 417,175	$ 427,604	$ 438,294	$ 449,252
Additional Rate Revenue After Prior Year Adjustment		$ -	$ 50,061	$ 194,988	$ 359,401	$ 491,032
Miscellaneous Revenues						
Reserves		$ -	$ -	$ -	$ -	$ -
Interest Income		$ -	$ -	$ -	$ -	$ -
Total Revenue Sources		**$ 407,000**	**$ 467,236**	**$ 622,592**	**$ 797,696**	**$ 940,284**
Expenses						
Operation & Maintanence		$ 644,151	$ 660,312	$ 677,020	$ 694,296	$ 712,161
Capital Outlay Directly Funded by Rates		$ -	$ 377,025	$ -	$ -	$ -
Existing Debt Service		$ -	$ -	$ -	$ -	$ -
Future Debt Service		$ -	$ 82,808	$ 165,616	$ 165,616	$ 165,616
Reserves		$ -	$ -	$ -	$ -	$ -
Depreciation Expense		$ -	$ -	$ -	$ -	$ -
Total Revenue Requirement		**$ 644,151**	**$ 1,120,145**	**$ 842,637**	**$ 859,912**	**$ 877,777**
Net Cash Flow (Deficiency)		**$ (237,151)**	**$ (652,909)**	**$ (220,045)**	**$ (62,216)**	**$ 62,507**

Rate Adjustments	**FYE**	**2022**	**2023**	**2024**	**2025**	**2026**
Number of Months Rate Adjustment will be in Effect		2	6	12	12	12
Proposed Rate Adjustment		12.00%	30.00%	25.00%	15.00%	5.00%

Rate Adjustment Impacts	**FYE**	**2022**	**2023**	**2024**	**2025**	**2026**
Rate Revenue after Rate Adjustment		$ 415,140	$ 537,321	$ 778,240	$ 917,350	$ 987,298
Net Cash Flow After Rate Adjustment		$ (229,011)	$ (582,824)	$ (64,397)	$ 57,438	$ 109,521
Cash Ending Balance	$ 1,000,000.00	$ 770,989	$ 188,165	$ 123,768	$ 181,206	$ 290,728

APPENDIX B – SEWER UTILITY RATE MODEL SHEETS

City of Carlin
Sewer Utility Rate Model
Assumptions

FARR WEST ENGINEERING

General Assumptions

Study Details

Enter Current Fiscal Year	**2022**
Duration of Study Period (Years)	**5**

Financial Policies

Debt Covenant/Bond Reserve

Select Debt Covenant Balance Goal: 1

		FYE:	2022	2023	2024	2025	2026
1	10% of Debt Service (Principal + Interest)	1	$ -	$ -	$ -	$ 6,177	$ 18,531
2	2 - Amount at Right	2					
3	3 - No Debt or Reserve Not Funded						

Operating Reserve

	Minimum Operating Account Balance		2022	2023	2024	2025	2026
	Goal: 90 days		$ 97,915	$ 117,347	$ 120,239	$ 123,223	$ 126,300

Capital Reserve

Select Capital Reserves Balance Goal: 3

			2022	2023	2024	2025	2026
	1 - Defined as % System Fixed Assets	1	2.00%	2.00%	2.00%	2.00%	2.00%
1	System Assets as of 2021:		$ -	$ -	$ -	$ -	$ -
2	2 - Amount at Right	2	$ 5,854,755	$ 6,134,755	$ 280,000	$ 6,134,755	$ 6,134,755
3	3 - Reserve Not Funded	3					

Depreciation Reserve

Select Depreciation Reserve Goal: 3

			2022	2023	2024	2025	2026
		1	100%	100%	100%	100%	100%
1	1 - Defined as % of Annual Depreciation Expense		$ -	$ -	$ -	$ -	$ -
2	2 - Amount at Right	2					
3	3 - Reserve Not Funded	3					

Economic Factors that Govern Cost Projections

		Notes	FYE:	2022	2023	2024	2025	2026
1	General Cost Inflation	Per CPI		2.50%	2.50%	2.50%	2.50%	2.50%
2	Construction Cost Inflation	From ENR CCI		3.00%	3.00%	3.00%	3.00%	3.00%
3	Labor Cost Inflation			2.50%	2.50%	2.50%	2.50%	2.50%
4	Benefits Cost Inflation			5.00%	5.00%	5.00%	5.00%	5.00%
5	USDA Interest Rate			1.75%				
6	[Other]							
7	No Escalation			0.00%	0.00%	0.00%	0.00%	0.00%
8	General Inflation Plus Growth			3.01%	3.01%	3.01%	3.01%	3.01%
9	Fund Earnings							
10	Customer Growth			0.50%	0.50%	0.50%	0.50%	0.50%
	Cumulative Growth			0.50%	1.00%	1.51%	2.02%	2.53%

City of Carlin
Sewer Utility Rate Model
Operating Fund Revenue & Expenditure Projections

FARR WEST ENGINEERING

Revenues	Projection Method	Historical Actuals 2017	2018	2019	2020	2021	Budget 2022	Select Projection Starting Value	User Override Input	Projection Value	Projection 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Service Charges																				
SEWER - UTILITY FEES	General Cost Inflation	$ 325,128	$ 323,948	$ 137,572	$ 302,688	$ 336,507	$ 320,000	Budget 2021 Value	-	$ 320,000	$ 328,000	$ 336,200	$ 344,605	$ 353,220	$ 362,051	$ 371,102	$ 380,379	$ 389,889	$ 399,636	$ 409,627
	General Cost Inflation							Budget 2021 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	General Cost Inflation							Budget 2021 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Service Charge Revenue		**$ 325,128**	**$ 323,948**	**$ 137,572**	**$ 302,688**	**$ 336,507**	**$ 320,000**				**$ 328,000**	**$ 336,200**	**$ 344,605**	**$ 353,220**	**$ 362,051**	**$ 371,102**	**$ 380,379**	**$ 389,889**	**$ 399,636**	**$ 409,627**
Miscellaneous Revenue																				
SEWER - CONNECTION FEES	General Cost Inflation	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ -	$ 1,000	Budget 2021 Value	-	$ 1,000	$ 1,025	$ 1,051	$ 1,077	$ 1,104	$ 1,131	$ 1,160	$ 1,189	$ 1,218	$ 1,249	$ 1,280
SEWER - CAP IMPROVEMENT FEE	General Cost Inflation	$ -	$ -	$ -	$ -	$ -		Budget 2021 Value												
SEWER - USE CHARGE	General Cost Inflation	$ -	$ -	$ (2)	$ (2)	$ -		Budget 2021 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
SEWER - MATERIAL SALES	General Cost Inflation	$ -	$ -	$ -	$ 1,208	$ -		Budget 2021 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	General Cost Inflation							Budget 2021 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Miscellaneous Revenue		**$ 1,000**	**$ 1,000**	**$ 998**	**$ 2,205**	**$ - **	**$ 1,000**				**$ 1,025**	**$ 1,051**	**$ 1,077**	**$ 1,104**	**$ 1,131**	**$ 1,160**	**$ 1,189**	**$ 1,218**	**$ 1,249**	**$ 1,280**
Interest Income	Fund Earnings							Budget 2021 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenues		**$ 326,128**	**$ 324,948**	**$ 138,570**	**$ 304,893**	**$ 336,507**	**$ 321,000**				**$ 329,025**	**$ 337,251**	**$ 345,682**	**$ 354,324**	**$ 363,182**	**$ 372,262**	**$ 381,568**	**$ 391,107**	**$ 400,885**	**$ 410,907**

Expenditures	Projection Method	FYE	Historical Actuals 2017	2018	2019	2020	2021	Budget 2022	Select Projection Value Methodology	User Override Input	Projection Value	Projection 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
O&M & Non-Operating Expenses																					
SALARIES AND WAGES	Labor Cost Inflation		$ 125,186	$ 87,358	$ 52,729	$ 103,050	$ 117,146	$ 135,000	Budget 2021 Value	-	$ 135,000	$ 138,375	$ 141,834	$ 145,380	$ 149,015	$ 152,740	$ 156,559	$ 160,473	$ 164,484	$ 168,597	$ 172,811
PHYSICALS	General Cost Inflation		$ -	$ -	$ -	$ -	$ -		Budget 2021 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
EMPLOYEE BENEFITS	Benefits Cost Inflation		$ 47,627	$ 22,446	$ 25,199	$ 49,003	$ 60,298	$ 57,835	Budget 2021 Value	-	$ 57,835	$ 60,727	$ 63,763	$ 66,951	$ 70,299	$ 73,814	$ 77,504	$ 81,380	$ 85,449	$ 89,721	$ 94,207
EQUIPMENT REPAIRS	General Cost Inflation		$ 14,134	$ 8,445	$ 881	$ 8,366	$ 3,001	$ 20,000	Budget 2021 Value	-	$ 20,000	$ 20,500	$ 21,013	$ 21,538	$ 22,076	$ 22,628	$ 23,194	$ 23,774	$ 24,368	$ 24,977	$ 25,602
TELEPHONE	General Cost Inflation		$ 217	$ 599	$ 200	$ 1,204	$ 1,634	$ 2,000	Budget 2021 Value	-	$ 2,000	$ 2,050	$ 2,101	$ 2,154	$ 2,208	$ 2,263	$ 2,319	$ 2,377	$ 2,437	$ 2,498	$ 2,560
TRAVEL & TRAINING	General Cost Inflation		$ 1,000	$ -	$ -	$ (21)	$ -	$ 3,000	Budget 2021 Value	-	$ 3,000	$ 3,075	$ 3,152	$ 3,231	$ 3,311	$ 3,394	$ 3,479	$ 3,566	$ 3,655	$ 3,747	$ 3,840
UNIFORMS	General Cost Inflation		$ 1,616	$ 2,049	$ 879	$ 2,387	$ 3,184	$ 1,800	Budget 2021 Value	-	$ 1,800	$ 1,845	$ 1,891	$ 1,938	$ 1,987	$ 2,037	$ 2,087	$ 2,140	$ 2,193	$ 2,248	$ 2,304
OFFICE EXPENSE	General Cost Inflation		$ 7,347	$ 3,284	$ 18	$ 4,684	$ 5,658	$ 3,500	Budget 2021 Value	-	$ 3,500	$ 3,588	$ 3,677	$ 3,769	$ 3,863	$ 3,960	$ 4,059	$ 4,160	$ 4,264	$ 4,371	$ 4,480
MATERIALS & SUPPLIES	General Cost Inflation		$ 32,183	$ 43,168	$ 20,014	$ 28,506	$ 27,755	$ 40,000	Budget 2021 Value	-	$ 40,000	$ 41,000	$ 42,025	$ 43,076	$ 44,153	$ 45,256	$ 46,388	$ 47,547	$ 48,736	$ 49,955	$ 51,203
TESTING - SEWER	General Cost Inflation		$ 10,508	$ 14,298	$ 5,393	$ 9,847	$ 9,859	$ 14,000	Budget 2021 Value	-	$ 14,000	$ 14,350	$ 14,709	$ 15,076	$ 15,453	$ 15,840	$ 16,236	$ 16,642	$ 17,058	$ 17,484	$ 17,921
LEGAL FEES	General Cost Inflation		$ 2,566	$ 4,399	$ 756	$ 3,333	$ 422	$ 11,400	Budget 2021 Value		$ 11,400	$ 11,685	$ 11,977	$ 12,277	$ 12,583	$ 12,898	$ 13,221	$ 13,551	$ 13,890	$ 14,237	$ 14,593
ACCOUNTING FEES	General Cost Inflation		$ 10,677	$ 15,811	$ 5,296	$ 15,000	$ 898	$ 17,100	Budget 2021 Value		$ 17,100	$ 17,528	$ 17,966	$ 18,415	$ 18,875	$ 19,347	$ 19,831	$ 20,327	$ 20,835	$ 21,356	$ 21,889
ENGINEERING FEES	General Cost Inflation		$ 18,997	$ 16,631	$ 420	$ 16,667	$ 1,262	$ 22,800	Budget 2021 Value		$ 22,800	$ 23,370	$ 23,954	$ 24,553	$ 25,167	$ 25,796	$ 26,441	$ 27,102	$ 27,780	$ 28,474	$ 29,186
CONTRACT FEES	General Cost Inflation		$ -	$ -	$ -	$ 333	$ 1,374	$ 380	Budget 2021 Value		$ 380	$ 390	$ 399	$ 409	$ 419	$ 430	$ 441	$ 452	$ 463	$ 475	$ 486
POSTAGE	General Cost Inflation		$ 4,280	$ 4,061	$ 3,018	$ 4,667	$ 300	$ 5,320	Budget 2021 Value		$ 5,320	$ 5,453	$ 5,589	$ 5,729	$ 5,872	$ 6,019	$ 6,170	$ 6,324	$ 6,482	$ 6,644	$ 6,810
BUILDING MAINTENANCE	General Cost Inflation		$ -	$ -	$ -	$ 667	$ 667	$ 760	Budget 2021 Value		$ 760	$ 779	$ 798	$ 818	$ 839	$ 860	$ 881	$ 903	$ 926	$ 949	$ 973
LIABILITY INSURANCE	General Cost Inflation		$ 14,083	$ 14,127	$ 13,924	$ 14,333	$ 14,333	$ 18,240	Budget 2021 Value		$ 18,240	$ 18,696	$ 19,163	$ 19,642	$ 20,134	$ 20,637	$ 21,153	$ 21,682	$ 22,224	$ 22,779	$ 23,349
NATURAL GAS	General Cost Inflation		$ 829	$ 973	$ 810	$ 833	$ 113	$ 1,026	Budget 2021 Value		$ 1,026	$ 1,052	$ 1,078	$ 1,105	$ 1,133	$ 1,161	$ 1,190	$ 1,220	$ 1,250	$ 1,281	$ 1,313
ELECTRICITY	General Cost Inflation		$ 23,971	$ 24,881	$ 15,716	$ 24,333	$ 4,563	$ 27,740	Budget 2021 Value	-	$ 27,740	$ 28,434	$ 29,144	$ 29,873	$ 30,620	$ 31,385	$ 32,170	$ 32,974	$ 33,798	$ 34,643	$ 35,510
FUEL EXPENSE	General Cost Inflation		$ 8,788	$ 7,783	$ 4,048	$ 11,667	$ 2,246	$ 15,200	Budget 2021 Value	-	$ 15,200	$ 15,580	$ 15,970	$ 16,369	$ 16,778	$ 17,197	$ 17,627	$ 18,068	$ 18,520	$ 18,983	$ 19,457
DEPRECIATION EXPENSE	General Cost Inflation		$ 55,661	$ 49,935	$ -	$ 53,333	$ 104,391	$ 85,500	User Defined >>	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
INTEREST EXPENSE	General Cost Inflation		$ 289	$ -	$ -	$ -	$ 406		Budget 2021 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total O&M Expenses			**$ 324,299**	**$ 270,315**	**$ 149,300**	**$ 298,859**	**$ 255,118**	**$ 397,101**				**$ 408,474**	**$ 420,204**	**$ 432,304**	**$ 444,785**	**$ 457,662**	**$ 470,949**	**$ 484,660**	**$ 498,811**	**$ 513,418**	**$ 528,496**
Non Operating Expenses																					
SHORT LIVED ASSETS - CAPITAL OUTLAY	No Escalation		$ -	$ -	$ -	$ -	$ 132,958	$ 67,433	User Defined >>	$ 67,433	$ -	$ 67,433	$ 67,433	$ 67,433	$ 67,433	$ 67,433	$ 67,433	$ 67,433	$ 67,433	$ 67,433	$ 67,433
	Select Methodology								Budget 2021 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Select Methodology								Budget 2021 Value	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Non Operating Expenses												**$ 67,433**	**$ 67,433**	**$ 67,433**	**$ 67,433**	**$ 67,433**	**$ 67,433**	**$ 67,433**	**$ 67,433**	**$ 67,433**	**$ 67,433**
Total Expenditures			**$ 324,299**	**$ 270,315**	**$ 149,300**	**$ 298,859**	**$ 255,118**	**$ 397,101**				**$ 475,907**	**$ 487,637**	**$ 499,737**	**$ 512,218**	**$ 525,095**	**$ 538,382**	**$ 552,093**	**$ 566,244**	**$ 580,851**	**$ 595,929**

City of Carlin
Sewer Utility Rate Model
Capital Improvement Plan
Alternative 2

FARR WEST ENGINEERING

Project Name	% Repair / Replacement	% Expansion	5 - Year CIP Projects					
			2022	2023	2024	2025	2026	2027
Phase 1 Sewer System Evaluation Survey + I/I Study	100%	0%	$ 280,000	$ -	$ -	$ -	$ -	$ -
Phase 2 Replace Priority 1 Pipes	100%	0%	$ -	$ -	$ 5,854,755	$ -	$ -	$ -
Phase 3 Sludge Removal	100%	0%	$ -	$ -	$ -	$ -	$ -	$ -
Phase 4 Lift Station Improvements	100%	0%	$ -	$ -	$ -	$ -	$ -	$ -
Phase 5 WWTP Monitoring Wells	100%	0%	$ -	$ 151,050	$ -	$ -	$ -	$ -
Phase 6 Phase 2 Sewer System Inspection	100%	0%	$ -	$ -	$ -	$ -	$ -	$ -
Phase 7 Replace Priority 2 Pipes	100%	0%	$ -	$ -	$ -	$ -	$ -	$ -
Phase 8 Replace Priority 3 Pipes	100%	0%	$ -	$ -	$ -	$ -	$ -	$ -

City of Carlin
Sewer Utility Rate Model
Capital Funding Plan
Alternative 2

FARR WEST ENGINEERING

CIP Expenditures	FYE	2022	2023	2024	2025	2026
Project Costs Dedicated to Repair and Replacement		$ 280,000	$ 151,050	$ 5,854,755	$ -	$ -
Project Costs Dedicated to Expansion		$ -	$ -	$ -	$ -	$ -
Total CIP Expenditures to be Funded		**$ 280,000**	**$ 151,050**	**$ 5,854,755**	**$ -**	**$ -**

Capital Funding Plan	FYE	2022	2023	2024	2025	2026
Funding Sources for CIP Projects:		$ -	$ -	$ -	$ -	$ -
Grants		$ -	$ -	$ 2,234,525	$ -	$ -
Developer Contributions		$ -	$ -	$ -	$ -	$ -
Connection Fees		$ -	$ -	$ -	$ -	$ -
Capital Reserve		$ -	$ -	$ -	$ -	$ -
Loans		$ -	$ -	$ 3,247,000	$ -	$ -
Bond Sales		$ -	$ -	$ -	$ -	$ -
Total CIP Funding Resources		**$ -**	**$ -**	**$ 5,481,525**	**$ -**	**$ -**
Total CIP Funded through Rates		**$ 280,000**	**$ 151,050**	**$ 373,230**	**$ -**	**$ -**

City of Carlin
Sewer Utility Rate Model
Operating Reserve Funds
Alternative 2

FARR WEST ENGINEERING

FYE	2022	2023	2024	2025	2026
Beginning Cash Balance	$ 1,000,000	$ 665,299	$ 545,040	$ 279,083	$ 357,850
Reserve Funded from Rates	$ -	$ -	$ -	$ 78,767	$ 53,338
Reserve Used as Revenue Source	$ -	$ -	$ -	$ -	$ -
Reserve Used to Fund Shortfalls/Capital Projects	$ (334,701)	$ (120,259)	$ (265,957)	$ -	$ -
Debt Reserve	$ -	$ -	$ -	$ (6,177)	$ (18,531)
Operating Reserve	$ (97,915)	$ (117,347)	$ (120,239)	$ (123,223)	$ (126,300)
Capital Reserve	$ -	$ -	$ -	$ -	$ -
Free Cash	**$ 567,384**	**$ 427,693**	**$ 158,843**	**$ 228,450**	**$ 266,357**
Ending Cash Balance	**$ 665,299**	**$ 545,040**	**$ 279,083**	**$ 357,850**	**$ 411,188**

Internal Reserves

Debt Reserve	$ -	$ -	$ -	$ 6,177	$ 18,531
Goal	*$ -*	*$ -*	*$ -*	*$ 6,177*	*$ 18,531*
Operating Reserve	$ 97,915	$ 117,347	$ 120,239	$ 123,223	$ 126,300
Goal	*$ 97,915*	*$ 117,347*	*$ 120,239*	*$ 123,223*	*$ 126,300*
Capital Reserve	$ -	$ -	$ -	$ -	$ -
Goal	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*

City of Carlin
Sewer Utility Rate Model
Revenue Requirement and Rate Adjustments
Alternative 2

FARR WEST ENGINEERING

Revenue Requirement	**FYE**	**2022**	**2023**	**2024**	**2025**	**2026**
Revenue Sources						
Rate Revenue		$ 321,000	$ 329,025	$ 337,251	$ 345,682	$ 354,324
Additional Rate Revenue After Prior Year Adjustment		$ -	$ 131,610	$ 229,330	$ 264,101	$ 301,955
Miscellaneous Revenues						
Reserves		$ -	$ -	$ -	$ -	$ -
Interest Income		$ -	$ -	$ -	$ -	$ -
Total Revenue Sources		**$ 321,000**	**$ 460,635**	**$ 566,581**	**$ 609,783**	**$ 656,279**
Expenses						
Operation & Maintanence		$ 397,101	$ 475,907	$ 487,637	$ 499,737	$ 512,218
Capital Outlay Directly Funded by Rates		$ 280,000	$ 151,050	$ 373,230	$ -	$ -
Existing Debt Service		$ -	$ -	$ -	$ -	$ -
Future Debt Service		$ -	$ -	$ -	$ 61,768	$ 123,537
Reserves		$ -	$ -	$ -	$ -	$ -
Depreciation Expense		$ -	$ -	$ -	$ -	$ -
Total Revenue Requirement		**$ 677,101**	**$ 626,957**	**$ 860,867**	**$ 561,505**	**$ 635,755**
Net Cash Flow (Deficiency)		**$ (356,101)**	**$ (166,322)**	**$ (294,286)**	**$ 48,278**	**$ 20,524**

Rate Adjustments	**FYE**	**2022**	**2023**	**2024**	**2025**	**2026**
Number of Months Rate Adjustment will be in Effect		2	6	12	12	12
Proposed Rate Adjustment		40.00%	20.00%	5.00%	5.00%	5.00%

Rate Adjustment Impacts	**FYE**		**2022**	**2023**	**2024**	**2025**	**2026**
Rate Revenue after Rate Adjustment			$ 342,400	$ 506,699	$ 594,910	$ 640,272	$ 689,093
Net Cash Flow After Rate Adjustment			$ (334,701)	$ (120,259)	$ (265,957)	$ 78,767	$ 53,338
Cash Ending Balance	**$**	**1,000,000**	**$ 665,299**	**$ 545,040**	**$ 279,083**	**$ 357,850**	**$ 411,188**