

# Sewer Rate Study Prepared for the Village of Capitan (Final Report)

At the Request of the Village of Capitan



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# 1. Executive Summary

Prepared in conjunction with a related water rate study, the purpose of this rate study is to assist the Village plan for the revenue needs of its sewer enterprise fund over the next five years (FY24-FY28) through an examination of its rate structure. These needs include adequate revenue for operations, debt, reserves, and projected capital improvements. The monthly residential sewer charge, at a flat rate of \$15, has not been adjusted in at least 10 years.

This report identifies three rate options for Village consideration. Rate Option 1 provides no increase in utility charges, Rate Option 2 applies a uniform increase to the existing rate structure including, while Rate Option 3 realigns the existing rate structure based on standard industry practices including meter equivalency to establish the access charge and a winter quarter average based on December through February billed usage to establish the commodity charge.

This report recommends adoption of Rate Option 3, which would meet revenue needs of the utility, streamline the Village's existing sewer rate structure, and reduce the impact of increased rates on most utility customers. For a typical residential household *using an average of 3,000 gallons per month* during this winter period, utility rates would increase by **\$12.68** per month effective April 2023. In large part, the need for an immediate increase recognizes that fact that water customers have been subsidizing the costs of operating the sewer utility, a condition addressed in this report. Subsequent increases will be needed to address additional anticipated costs including labor, sludge removal, project debt, and related reserve contributions.<sup>1</sup>

In addition to the primary recommendation of implementing the scheduled rate increase, the report advises the Village to evaluate supporting sources of revenue pertaining to the system. To improve operating and planning efficiency, the report recommends the utilities consider best practices including implementing an asset management plan, conducting an energy audit, and investigating other practices that could improve wastewater operations.

Finally, the report incorporates assumptions about revenue, expenses, water consumption, inflation, system connections, reserve contributions, and the timing and financing of capital improvements, which if not realized, could either diminish or increase the need to adjust rates throughout the forecast period as identified. The Village should review its rate structure periodically (at least annually) implementing appropriate adjustments as needed.

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<sup>1</sup> July 2024 (20%), July 2025 (12%), July 2026 (6%), and July 2027 (3%)

**Supplemental Note:** *Discussion of two additional rate options, at the request of Village trustees, are presented as addenda to this report. At a 3.07.23 council meeting, Village trustees unanimously passed a motion approving the rate option (named “Village Trustee Option”) identified in Addendum #2.*

## 2. Introduction

### Rural Community Assistance Corporation (RCAC)

Founded in 1978, RCAC is a 501(c) (3) nonprofit organization that provides training, technical and financial resources and advocacy so rural communities can achieve their goals and visions. For more than 40 years, our dedicated staff and active board, coupled with our key values of leadership, collaboration, commitment, quality, and integrity, have helped rural communities throughout the West achieve positive change.

### Purpose of this Rate Study

The purpose of this study is to make The Village of Capitan aware of the need to assess appropriate rates for its wastewater utility. This utility must be able to maintain operations and build reserves to cover the inevitable need to replace all components of the operation.

### Board Responsibilities

The Governing Body has a fiduciary responsibility to set the rates at such a level that the utility will be able to continue to operate now and into the future, including providing funds to replace all parts of the system as they wear out. While this document recommends certain rates, the ultimate decision rests with the Governing Body.

### Guiding Principles of This Study

This study is guided by the following principles:

**Sustainability:** Wastewater rates should cover costs permitting the Village’s sewer enterprise fund to provide services now and for the foreseeable future.

**Fairness:** Rates should be fair to all rate payers. No single rate payer or group of rate payers should be singled out for different rates. The Village should not charge more for such services than the cost to provide them.

**Ease of Understanding:** Rates should be easy for staff to understand, implement and explain to customers. The structure should be compatible with current utility billing software.

**Justifiability:** Rates must be based on actual financial needs of the sewer enterprise fund. Revenue generated from such rates cannot be used for anything else but to pay for the costs of providing wastewater services including related debt and reserve contributions.

## Disclaimer

The recommendations contained in this rate study are based on financial information provided to RCAC by the Village and its representatives. Although every effort was made to assure the reliability of this information, no warranty is expressed or implied as to the correctness, accuracy or completeness of the information contained herein.

Any opinions, findings, and conclusions or recommendations expressed in this material are solely the responsibility of the author and do not necessarily represent the official views of RCAC. For accounting advice, a Certified Public Accountant should be consulted. For legal advice, the Village should seek the advice of an attorney.

# 3. Community

## Description

Located in rural Lincoln County, New Mexico, The Village of Capitan is home to Smokey the Bear, whose remains are buried at the Smokey the Bear National Monument. Historically, a commercial hub serving nearby Ft. Stanton, as well as surrounding coal mining and ranching interests, the area enjoys a mild, dry climate receiving approximately 18 inches of rain annually. Average daytime highs range from 49 degrees F in January to 84 degrees F in July.<sup>2</sup> The Village prides itself as a small, friendly, family-oriented community.

The community consists primarily of detached single-family housing units, some commercial establishments, a K-12 school system, and one industrial enterprise. Residential units comprise approximately 80% of the sewer utility's current connections.

According to U.S. Census data, the Village of Capitan had a population of 1356 residents in 2020 representing a 10.7% decline since the 2010 census.<sup>3</sup> While the population of the community declined during this period, recent estimates indicate that this population has stabilized with a census of 1405 residents recorded in 2021.<sup>4</sup> Discussion with the wastewater utility director indicates that the number of connections in the service area has also remained stable over the past several years.

## Median Household Income

A community's Median Household Income (MHI) is a factor in determining grant funding and can reflect general economic conditions of the community, including the proportion of residents on fixed and/or limited incomes. According to the most recent 5-year American Community Survey (2017-2021), The Village of Capitan had a Median Household Income (MHI) of \$46,179 (+/- \$4,045)<sup>5</sup>. This amount is lower than the corresponding 5-year

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<sup>2</sup> [https://en.wikipedia.org/wiki/Capitan,\\_New\\_Mexico#Climate](https://en.wikipedia.org/wiki/Capitan,_New_Mexico#Climate)

<sup>3</sup> <https://datausa.io/profile/geo/capitan-nm>

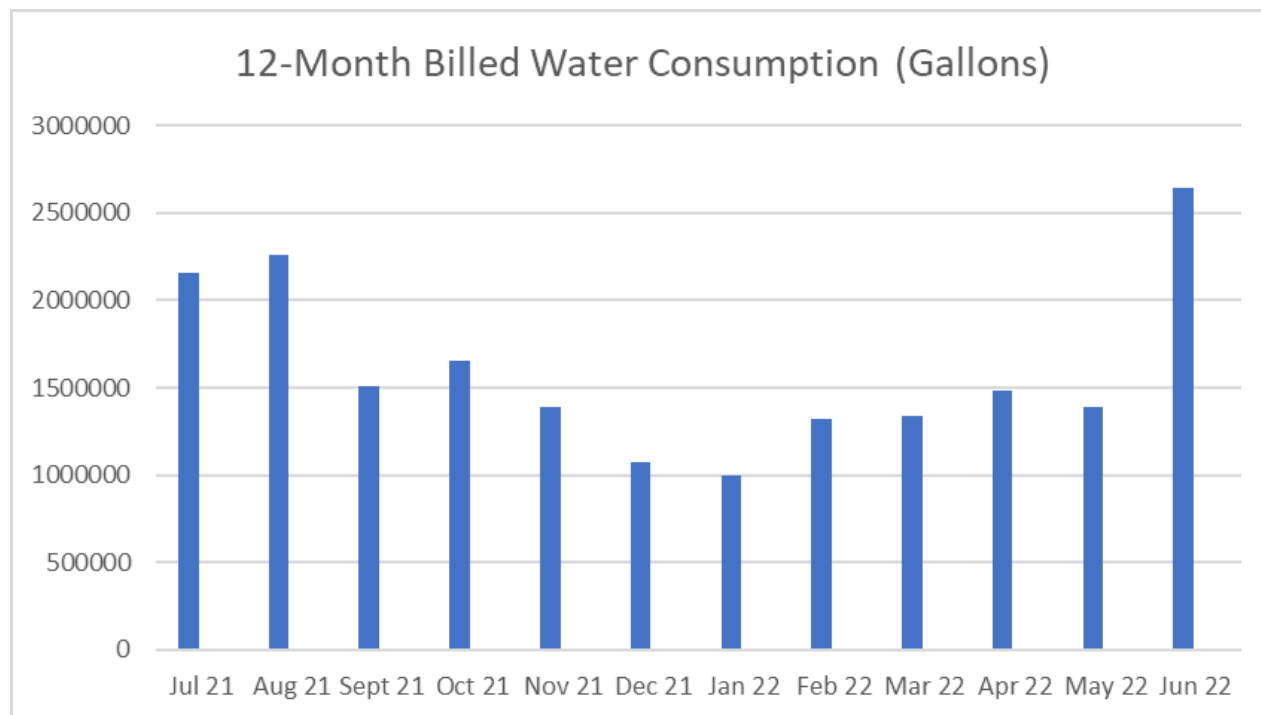
<sup>4</sup> <https://www.newmexico-demographics.com/capitan-demographics>

<sup>5</sup> [Search Results \(census.gov\)](#)



occurs during the winter months during which little outdoor activity involving water consumption typically occurs. Since the Village cannot measure wastewater effluent directly from individual connections, billed water usage during this period provides a reasonable basis for establishing customer sewer flows.

**Exhibit 2: Monthly Billed Water Consumption (Village of Capitan Sewer Utility)**



The following exhibit displays the average billed monthly water consumption by utility rate code with lower usage evident during the winter months for all but one of the rate codes:



**Exhibit 3: Monthly Billed Water Consumption (Village of Capitan Sewer Utility)**

Rate Code	SU01	SU02-108	SU02-312	SU02-44	SU02-76	SU02TaxEx
Designation	Residential	Commercial	Commercial	Commercial	Commercial	Commercial , Tax Exempt
Meter Size	3/4"	3/4"	3/4"	1.5"	3"	3/4", 1.5"
Average Billed Monthly Water Usage	3,898	48	7,027	16,429	58,292	2,347
Average Billed Winter Usage (Dec-Feb)	3,132	0	5,966	16,478	12,925	1,099
# of Connections	223	1	35	10	6	8

**Forecasted Growth**

As summarized below, following consultation with utility staff, the report forecasts no change in community growth (i.e., number of sewer customers) or per capita water consumption during the FY23-28 forecast period. Changes in these assumptions will impact revenue of the sewer enterprise fund and should be monitored closely.

**Exhibit 4: Annual Change in Sewer Utility Connections and Per Connection Usage**

Item	FY23	FY24	FY25	FY26	FY27	FY28
<b>Change in number of connections</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Change in per connection usage</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>

## 5. Projects

The following exhibit identifies one sewer project (Solar for Wastewater Treatment Plant Project) in the Village's 2024-2028 Infrastructure Capital Improvement Plan (ICIP), which remains unfunded. Not shown on the list below, the utility director identified an additional sewer project (Sewer Line Inspection/Rehab) with funding slated for FY27.

### Exhibit 5: The Village of Capitan Infrastructure Capital Improvement Plan (ICIP)

ID	Year	Rank	Project Title	Category	Funded to date	2024	2025	2026	2027	2028	Total Project Cost	Amount Not Yet Funded	Phases?
33029	2024	001	Construct New Water Department Building	Facilities - Administrative Facilities	90,000	650,000	0	0	0	0	740,000	650,000	No
40806	2024	002	Healing Americas Heroes 2023	Economic Development	0	0	0	0	0	0	0	0	No
40074	2024	003	Solar for waste water treatment plant	Equipment - Other	0	150,000	0	0	0	0	150,000	150,000	No
30143	2024	004	Asset Management Plan	Other - Other	0	55,000	0	0	0	0	55,000	55,000	No
37874	2024	005	Rehabilitation of Water Storage Tank	Water - Other	0	360,000	0	0	0	0	360,000	360,000	No
37867	2024	006	Replacing Water Lines from Wells to Brewer Tanks	Water - Water Supply	0	750,000	0	0	0	0	750,000	750,000	No
37897	2024	007	Renovate and Repair Smokey Bear Museum	Facilities - Museums	0	350,000	0	0	0	0	350,000	350,000	No
40380	2024	008	Water meter replacement	Other - Utilities (publicly owned)	0	100,000	0	0	0	0	100,000	100,000	No
37875	2024	009	Fire Hydrant Project	Water - Water Supply	0	600,000	0	0	0	0	600,000	600,000	No
28456	2024	010	SCADA System	Water - Other	25,000	238,000	0	0	0	0	263,000	238,000	Yes
26860	2024	011	Walking/Bike Trail Enhancements	Transportation - Bike/Pedestrian/Equestrian	0	190,000	0	0	0	0	190,000	190,000	No
40276	2024	011	Park and playground upgrade	Equipment - Other	0	707,930	0	0	0	0	707,930	707,930	No
Number of projects:					12								
Grand Totals					Funded to date:	Year 1:	Year 2:	Year 3:	Year 4:	Year 5:	Total Project Cost:	Total Not Yet Funded:	
					115,000	4,150,930	0	0	0	0	4,265,930	4,150,930	

As a municipality, the Village is eligible to apply for loan-grant assistance to finance these sewer improvement projects. Since financing has not been established, the following worksheet was developed in consultation with the utility to assess potential financing. The exhibit assumes that the Village will receive an average of 75% grant funding from multiple sources through the FY28 period. Using this worksheet, the utility's projected annual loan payment for the two projects would be **\$15,199.46** by FY27 (July 2026).

### Exhibit 6: Funding Scenario for The Village of Capitan's Proposed Wastewater Projects

Proposed Sewer Capital Improvement Projects								
Description	Type	Payments Begin	Total Funding Requested	% Grant	Loan Amount	Term (years)	Interest Rate	Annual PMT
Solar for Wastewater Trmnt Plant	Sewer	FY24	\$ 150,000.00	75%	\$37,500.00	20.00	2.0%	\$2,293.38
Sewer Line Inspection/Rehab (incl. ~100 manholes)	Sewer	FY27	\$ 844,131.61	75%	\$211,032.90	20.00	2.0%	\$12,906.08
			\$994,131.61		\$248,532.90			\$15,199.46

## 6. Financial Condition

### Classification of Revenue and Expenses

The Village of Capitan's Wastewater Enterprise Fund earns system revenue from various sources. The rate study separated these sources of revenue into two categories:

- Operating Revenue – monthly sales from sewer connections; other operating revenue (e.g., service calls)
- Non-Operating Revenue – Municipal GRT-Infrastructure, Interest earned

Similarly, the rate study separated costs into two categories:

- Base Operating Expenses – these expenses are incurred in operating the utility. Examples include salaries and wages, employee benefits, maintenance & repairs, professional services (accounting, engineering, legal), field and office supplies, software, fuel and vehicle maintenance, supplies, telecommunications, field supplies, postage, printing/publishing/advertising, training, travel, and utilities (electricity).
- Debt payments – consists of principal and interest payments on sewer system loans

### FY19-FY22 Financial Performance

The following table summarizes the utility's financial performance for the past three years (FY20-FY22).

**Exhibit 7: The Village of Capitan Wastewater Enterprise Fund (3-Year Financial Performance)**

<b>SEWER</b>				
	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>Average</b>
<b>Operating Revenue</b>				
Sewer Enterprise Revenue	\$ 57,316.88	\$ 62,315.12	\$ 60,356.84	\$ 59,996.28
Total Operating Revenue	\$ 57,316.88	\$ 62,315.12	\$ 60,356.84	\$ 59,996.28
<b>Non-Operating Revenue</b>				
Gross Receipts Tax -Municipal Infrastructure	\$ 38,852.37	\$ 76,607.51	\$ 58,110.28	\$ 57,856.72
Earned Investment Income		\$ -	\$ -	\$ -
Non-Operating Revenue	\$ 38,852.37	\$ 76,607.51	\$ 58,110.28	\$ 57,856.72
<b>Total System Revenue</b>	\$ 96,169.25	\$ 138,922.63	\$ 118,467.12	\$ 117,853.00
Less Base Operating Expenses	\$ 24,017.49	\$ 32,400.34	\$ 44,539.95	\$ 33,652.59
Less Annual Debt Service	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00
<b>Net System Revenue</b>	\$ 58,524.76	\$ 92,895.29	\$ 60,300.17	\$ 70,573.41
Revenue to Expense Ratio (incl. debt service)	2.55	4.29	2.66	3.50

Nominally, the enterprise fund appears in reasonable financial condition, providing capacity to cover system depreciation which was noted at \$44,784 in the Village's most recent financial audit<sup>8</sup>. *However, most of the base operating expenses cited above have been recorded as water system expenses, thus distorting the fund's actual financial performance.* As discussed in Section 9, allocation of these costs (estimated at \$93,151 in FY23) along with other revenue needs, indicates that the utility will not be able to operate at a sustainable level based on its current rate structure.

### Current Rate Schedule

The following exhibit shows the existing rate schedule for customers who are connected to the Village's sewer system. Revenue from these monthly rates generate ~95% of the utility's operating revenue. Residential customers are assessed a flat charge of \$15 per month, while commercial customers pay a \$17 base charge plus a commodity charge of \$0.23 per thousand gallons after the first 6K gallons, which increases accordingly per thousand gallons at the levels shown.

#### Exhibit 8: Current Metered Rate Schedule (Village of Capitan Wastewater Utility)

Rate Code	SU01	SU02-108	SU02-312	SU02-44	SU02-76	SU02TaxEx
Classification	Residential	Commercial	Commercial	Commercial	Commercial	Commercial (Tax Exempt)
# of Connections	223	1	35	10	6	8
Meter Size (inches)	0.75	0.75	0.75	1.5	3	0.75
Base Charge (No Usage)	\$ 15.00	\$ 17.00	\$ 17.00	\$17.00	\$17.00	\$17.00
6000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12000			\$ 0.23	\$ 0.23	\$ 0.23	\$ 0.23
20000			\$ 0.23	\$ 0.23	\$ 0.23	\$ 0.23
35000			\$ 0.30	\$ 0.30	\$ 0.30	\$ 0.30
50000			\$ 0.30	\$ 0.30	\$ 0.30	\$ 0.30
75000			\$ 0.40	\$ 0.40	\$ 0.40	\$ 0.40
100000			\$ 0.50	\$ 0.50	\$ 0.50	\$ 0.50
125000			\$ 0.60	\$ 0.60	\$ 0.60	\$ 0.60
999999999			\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20

It is unknown precisely when the Village last implemented a sewer rate increase, however, the residential flat charge of \$15 per month, as well as commercial base charge of \$17, were both referenced in the Village's 2013 comprehensive plan.<sup>9</sup> While system charges vary based on numerous factors, the Village's \$15 monthly residential

<sup>8</sup> Village of Capitan Audited Financial Statements and Supplementary Information, June 30, 2020, p.52 (<https://www.osa-app.org/uploads/2021/1365f81b-211c-4ab0-8662-a274315c5ce7/6020%20Village%20of%20Capitan%20FY2020%20FINAL.pdf>)

<sup>9</sup> Comprehensive Plan for the Village of Capitan, New Mexico (May 2013), R.M. Draker & Associates and Dennis Engineering Company, p. 68.

sewer rate is far below the average residential rates of \$23.38 and \$31.76 for public systems between 201-1000 and 1001 to 2500 connections, respectively, as surveyed by the New Mexico Environment Department.<sup>10</sup>

## 7. Rate Setting Process

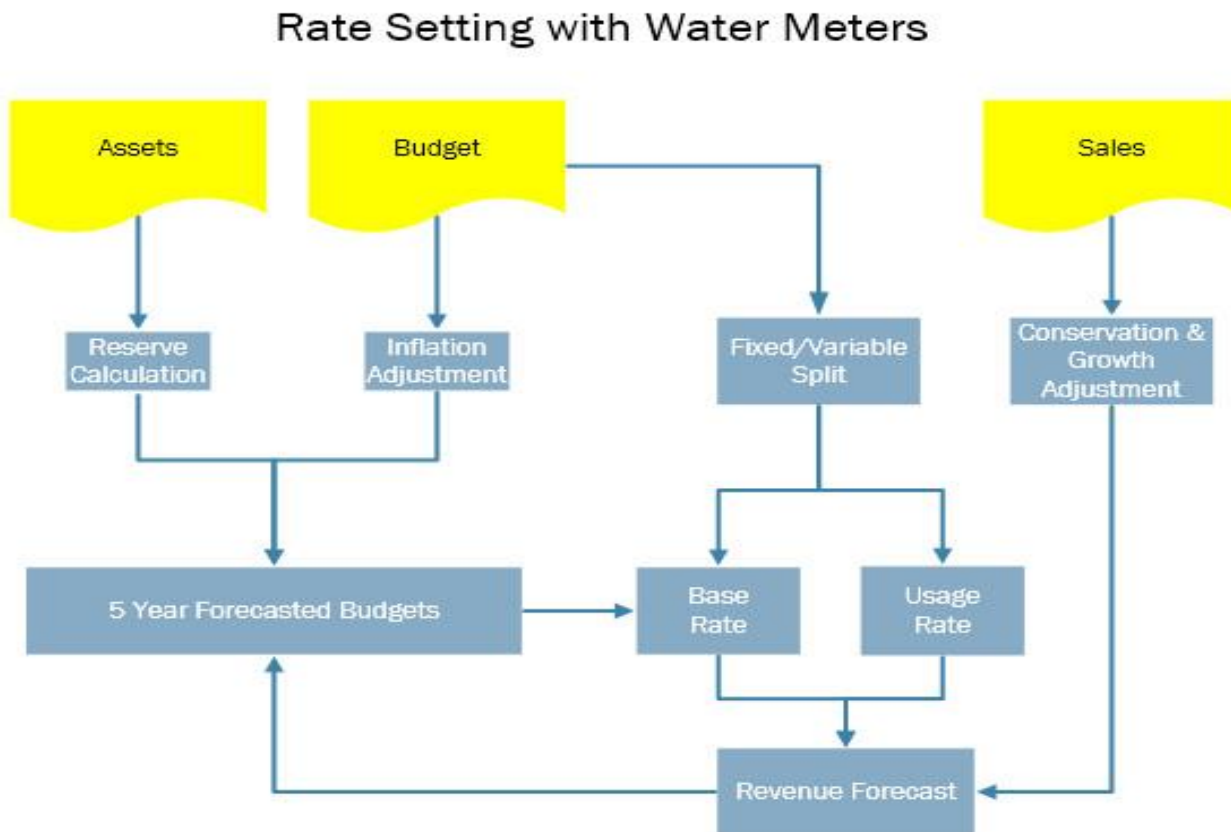
Based on guidance developed by the American Water Works Association,<sup>11</sup> the following graph depicts the rate setting process used to establish proposed rate options for the Village's wastewater utility. The process consists of analyzing key inputs (Sales, Budget, and Assets) to derive an appropriate rate structure that helps fulfill the revenue requirements of the utility. The process involves compiling lists of all capitalized assets, the current budget, and the current sales history as provided by Village, which is adjusted for anticipated changes in usage and number of connections. Recommended reserves are calculated and entered in a 5 to 6-year budget forecast, which is adjusted for inflation. The budgeted expenses are then divided between fixed and variable costs, which leads to the calculation recommended base (access) and usage (commodity) charges based on meter size and other factors.

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<sup>10</sup> 2022 Public Water and Wastewater User Charge Survey for December 2021 Rates, NMED Drinking Water Bureau, p.15, ([NoP4Wd1EyorPC~sl~BWz~sl~H2+PXdCQEKefUZMa+xAIRrWuxlvdEEjyB6bkqqu~sl~DK6AGGYCsSG9Ahu5VdaremwVI84vZUddlRY8ni6NHWgL++cFi2yY+OCy12y29mqah81Q7.pdf \(nm.gov\)](#))

<sup>11</sup> Principles of Water Rates, Fees and Charges, 7<sup>th</sup> Edition (2017), American Water Works Association

Exhibit 9: Rate Setting Process



### Sales

The Village's wastewater utility obtains more than 90% of its operating revenue from its customer sewer connections. Sales from these connections were confirmed by obtaining individual monthly billing data from the utility and by applying the appropriate access (base rate) and usage charges.

## 8. Capital Replacement Program

Detailed in Appendix C, the wastewater utility has established a capital replacement program consisting of two categories: 1) replacement and rehabilitation of existing capital infrastructure; and 2) replacement of future unfunded capital improvement projects.

The following exhibit the water utility has identified cash contributions for items in each category based on remaining useful life and expected replacement or rehabilitation cost. Calculation of expected cost is based on a **3%** annual inflation factor. While adaptable to fit specific needs, the funding approach enables the utility to pay

for smaller cost capital items using 100% cash, providing maximum flexibility, while making smaller % cash contributions for larger cost items and projects for which loan-grant financing could likely be obtained.

**Exhibit 10: Funding of Capital Asset Replacements**

Replacement Value From	To	Cash	Grant	Loan
\$0	\$20,000	100%	0%	0%
\$20,001	\$50,000	20%	50%	30%
\$50,001	\$250,000	10%	50%	40%
\$250,001	\$1,000,000	5.0%	50%	45%
\$1,000,001	\$99,999,999	2.0%	50%	48%

<b>Capitalization Threshold</b>	<b>\$ 5,000</b>
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The analysis indicates that replacement of assets below the capitalization threshold of \$5000 will be included in the system's annual maintenance budget.

## 9. Budget and Forecast

The purpose of the utility operating budget is to ensure the system's revenues balance its expenditures and needed reserves. To achieve a balanced budget, the utility should assess the following items with respect to future operational and capital needs, including the impact of inflation, system growth and water use trends:

- Historic revenues and expenses from the past 2 to 4 fiscal years
- Current debt-service requirements
- Operating revenues and costs
- Uncollectable accounts (as a % of sales)
- Any unplanned "emergency" expenses that occurred within the past several years
- Revenues from customer billings and other sources of income for the past several years
- Required "reserve" levels necessary for the coming year
- Transfers to/from financial reserves

To establish a basis for evaluating the system's revenue needs and for setting appropriate rates, three areas required examination: allocation of joint expenses, designation of fixed and variable costs, and determination of appropriate reserve contributions. RCAC completed this examination in close consultation with utility staff.

### Allocation of Joint Expenses

Establishing a basis (budget) for forecasting purposes required examining the current FY22-23 joint utility budget as well as historic costs. Upon determining an appropriate basis, additional analysis was needed to separate the share of water and sewer expenses within this budget so that appropriate allocation of costs could be realized. Analysis for this activity is shown in Appendix D.

### Fixed and Variable Costs

Once this allocation was completed, RCAC worked with utility staff to analyze the fixed and variable costs of the sewer system. Fixed costs (e.g., insurance) remain the same regardless of the amount of water sold, while variable costs (e.g., electricity) vary with the cost of wastewater treated. In theory, base charges should cover the system's fixed costs, while usage charges should cover the system's variable costs. Based on this analysis fixed costs are expected to comprise 81% of total costs during the FY23-FY28 period (See Appendix D).

### Reserve Funding

AWWA standards guiding this water rate study recommend a review of four types of reserves. RCAC recommends funding for these reserves as cited below. As illustrated in the next exhibit most of this funding would come from utility's unrestricted cash balance, which was identified at **\$450,910** at the beginning of FY23 (July 1, 2022):

1. Debt Reserve: Funding of a debt reserve is required by some lenders. For example, USDA-RD requires its borrowers contribute 10% of an annual loan payment each year until a full year's debt payment has been accumulated. With this requirement in mind, RCAC identifies a 10% annual contribution for new debt as it is incurred with \$0 funding from existing reserves.
2. Operating Reserve: Operating reserves are established to provide the utility with the ability to withstand short term cash-flow fluctuations. A 45- to 90-day operating reserve is a frequently used industry norm.<sup>12</sup> Recognizing the cash flow needs of the enterprise fund, the rate study identified a larger operating reserve balance of **\$121,732** which would be funded from the utility's unrestricted cash balance. The contribution would establish a 45–90-day cash operating, or working capital, reserve throughout the FY24-FY28 period.
3. Emergency Reserve: Emergency reserves are intended to help utilities deal with short-term emergencies, such as mainline breaks or pump failures. The water utility director has recommended establishing an initial **\$20,000** contribution to this fund from utility's unrestricted cash balance.
4. Capital Replacement Program (CRP) Reserve: This reserve is designated strictly for funding the replacement and rehabilitation of water system assets identified in Appendix C. Contributions to this account consist of initial funding (**\$110,178**) from the utility's unrestricted cash balance and a **\$17,960** annual contribution for the FY23 through FY28 period.

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<sup>12</sup> Developing Rates for Small Systems, AWWA Manual M54, 1st Edition (2004), p. 22



**Exhibit 11: Reserve Allocation Worksheet**

<b>SEWER</b>			
Description	Amount	Balance	Remarks
Unrestricted Cash Balance (July 1, 2022)	\$ 450,910	\$ 450,910.00	
Less Budget Adjustments	\$ 160,000	\$ 290,910.00	sludge removal. Balance to be invested earning est.1.0% int.
Debt Reserve	\$ -	\$ 290,910.00	10% of additional debt as incurred
Emergency Reserve	\$ 20,000.00	\$ 270,910.00	per discussion with utility director
Operating Reserve	\$ 121,731.89	\$ 149,178.11	Provides 45-90 days cash on hand annually for FY23-FY28 period
Remaining Available Balance	\$ 149,178.11		
Less Cash Expenditure	\$ 25,000.00		cash component of sewer lift station project.
Less Cash Expenditure	\$ -		\$0. It is assumed that cost savings of the Solar WWTP project of the would equal the nominal \$7.5K cash outlay during the FY24-28 period.
Less Cash Expenditure	\$ 14,000.00		additional cash needs on needed projects & supplies list
Adjusted Remaining Balance for Capital Reserve	\$ 110,178.11	\$ 110,178.11	
Existing Projects Capital Reserve Contribution	\$ 82,633.59	\$ 27,544.53	primarily short-lived assets (75% of available captial reserve balance)
Future Projects Capital Reserve Contribution	\$ 27,544.53	\$ -	future projects (25% of adj. of available capital reserve balance)
Remaining Balance	\$ -		

## 10. Forecasted Revenue Needs

Incorporating information and targets provided by the utility, the following exhibit identifies the anticipated revenue needs for the FY23-FY28 period. Based on this information the utility will need to generate \$1.378M in earned revenue to meet these needs. Reflecting the timing of these revenue needs, the rate study adopts a phased approach for meeting this goal.

**Exhibit 12: Projected Revenue Needs for Village of Capitan Sewer Enterprise Fund (FY23-FY28)**

Village of Capitan Sewer Enterprise Fund (Forecasted Revenue Needed)						
	FY23 Est.	FY24	FY25	FY26	FY27	FY28
<b>Operating Revenue</b>						
Sewer Sales-Connections (Net 5% GRT)	\$ 54,338.16	\$ 127,694.68	\$ 127,694.68	\$ 153,233.61	\$ 171,621.64	\$ 181,918.94
Sewer Sales-Other (Net 5% GRT)	\$ 2,959.75	\$ 2,959.75	\$ 2,959.75	\$ 2,959.75	\$ 2,959.75	\$ 2,959.75
<b>Total Operating Revenue</b>	<b>\$ 57,297.91</b>	<b>\$ 130,654.42</b>	<b>\$ 130,654.42</b>	<b>\$ 156,193.36</b>	<b>\$ 174,581.39</b>	<b>\$ 184,878.69</b>
Additional Revenue From Rate Adjustment	\$ 73,356.52	\$ -	\$ 25,538.94	\$ 18,388.03	\$ 10,297.30	\$ 5,457.57
Partial Year Adjustment	\$ (55,017.39)	\$ -	\$ -	\$ -	\$ -	\$ -
Write-Off/Billing Adjustments	\$ (363.39)	\$ (638.47)	\$ (766.17)	\$ (858.11)	\$ (909.59)	\$ (936.88)
<b>Adjusted Total Revenue</b>	<b>\$ 75,273.65</b>	<b>\$ 130,015.95</b>	<b>\$ 155,427.19</b>	<b>\$ 173,723.28</b>	<b>\$ 183,969.10</b>	<b>\$ 189,399.38</b>
Less: Basic Operating Expenses	\$ 105,455.00	\$ 49,455.00	\$ 50,938.65	\$ 52,466.81	\$ 54,040.81	\$ 55,662.04
Less: Allocation of Joint Fund Expenses	\$ 93,151.25	\$ 97,628.31	\$ 100,557.16	\$ 103,573.87	\$ 106,681.09	\$ 109,881.52
Less: Additional Operating Expenses (Additional Employee)	\$ -	\$ 13,612.76	\$ 14,021.14	\$ 14,441.78	\$ 14,875.03	\$ 15,321.28
<b>Net Operating Revenue</b>	<b>\$ (123,332.60)</b>	<b>\$ (30,680.12)</b>	<b>\$ (10,089.76)</b>	<b>\$ 3,240.83</b>	<b>\$ 8,372.16</b>	<b>\$ 8,534.54</b>
Less: Existing Debt Payments (Principal & Interest)	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00
Less: Debt Payments (Addn'l Projects)		\$ 2,293.38	\$ 2,293.38	\$ 2,293.38	\$ 15,199.46	\$ 15,199.46
Plus: Municipal Gross Receipts-Infrastructure	\$ 48,000.00	\$ 57,856.72	\$ 57,856.72	\$ 57,856.72	\$ 57,856.72	\$ 57,856.72
Plus: Return on Invested Funds		\$ 2,909.10	\$ 2,909.10	\$ 2,909.10	\$ 2,909.10	\$ 2,909.10
<b>Net System Revenue</b>	<b>\$ (88,959.60)</b>	<b>\$ 14,165.33</b>	<b>\$ 34,755.68</b>	<b>\$ 48,086.27</b>	<b>\$ 40,311.53</b>	<b>\$ 40,473.90</b>
Plus: Operating Reserve Balance (from Reserve Allocation Worksheet)	\$ 121,731.89	\$ 14,812.42	\$ 10,788.54	\$ 3,463.18	\$ 9,468.40	\$ 6,408.27
<b>Net Position Before Contribution to Reserves</b>	<b>\$ 32,772.28</b>	<b>\$ 28,977.75</b>	<b>\$ 45,544.23</b>	<b>\$ 51,549.45</b>	<b>\$ 49,779.92</b>	<b>\$ 46,882.17</b>
Debt Reserve (10%)		\$ 229.34	\$ 229.34	\$ 229.34	\$ 1,519.95	\$ 1,519.95
Operating Reserve						
Emergency Reserve						
Capital Reserve	\$ 17,959.86	\$ 17,959.86	\$ 17,959.86	\$ 17,959.86	\$ 17,959.86	\$ 17,959.86
Sludge Pumping Reserve			\$ 23,891.85	\$ 23,891.85	\$ 23,891.85	\$ 23,891.85
<b>Total Reserves</b>	<b>\$ 17,959.86</b>	<b>\$ 18,189.20</b>	<b>\$ 42,081.05</b>	<b>\$ 42,081.05</b>	<b>\$ 43,371.66</b>	<b>\$ 43,371.66</b>
<b>Net Position After Reserves</b>	<b>\$ 14,812.42</b>	<b>\$ 10,788.54</b>	<b>\$ 3,463.18</b>	<b>\$ 9,468.40</b>	<b>\$ 6,408.27</b>	<b>\$ 3,510.51</b>
Operating Revenue/Expenses (incl. debt service)	35.5%	73.6%	85.7%	93.2%	90.0%	90.3%
Revenue/Expenses (incl. debt service)	48.2%	115.6%	112.6%	124.4%	122.6%	124.9%
Projected Debt Coverage Ratio		170.7%	120.0%	153.5%	125.6%	125.9%

The study indicates an initial revenue increase of 135% in April 2023. As shown in Appendix D, the increase is needed primarily to offset allocation of joint utility fund expenses belonging to sewer operations, which are estimated at \$93,151 in FY23. Implementation of the increase will provide full recovery of these expenses in FY24. Adopting the phased-in approach, additional increases of 20%, 12%, 6%, and 3%, respectively, are identified on July 1 annually for the 2024-2027 (FY25-FY28) period. These increases will pay for additional labor, anticipated project debt, and contributions to reserves. These reserves include a capital replacement reserve, a debt reserve, and a reserve for the removal of sludge, an activity that is required under the utility's operating permit and which occurs approximately every ten years. Relying on key assumptions below, use of the operating reserve (\$121,731.89) will help cover anticipated fluctuations in cash flow.

## Key Assumptions

The revenue forecast relies on the following key assumptions, which were developed in consultation with Village staff:

- Estimated FY23 revenue based on sales data provided (net 5% GRT)
- Implementation of revenue increases as indicated: April 2023 (135%), July 2023/FY24 (0%), July 2024/FY25 (20%), July 2025/FY26 (12%), July 2026/FY27 (6%), and July 2027/FY28 (3%)
- 0.5% write-off on billed revenue (uncollectable)
- Expected base operating expenses in of \$105,455 in FY23.
- Expected base expenses of \$49,455 in FY24 with 3% annual increases anticipated thereafter for the remainder of the FY24-28 forecast period.<sup>13</sup>
- Sewer portion of joint fund expenses = \$93,151.25 in FY23, with a 4% increase applied to this amount in FY24, and 3% annual increases thereafter ending FY28
- Additional operating expenses of \$13,612.76 in FY24 with 3% annual increases for FY25-28<sup>14</sup>
- Continued payment of existing debt per debt schedule
- Incurrence of additional annual debt per terms and timing identified in Exhibit 6
- Annual Municipal Gross Receipts-Infrastructure revenue of 48,000 in FY23, then \$57,856.72 annually for the FY24-FY28 period based on FY20-FY22 average.
- 1.0% simple<sup>15</sup> return on invested funds beginning in FY24 based on FY23 adjusted available cash balance (\$290,910) shown in Exhibit 11
- Application of a \$121,731.89 operating reserve identified in Exhibit 11.
- 10% annual contributions to debt reserve based on anticipated additional debt identified for FY24-FY28 period
- Annual contributions to a capital replacement/short-lived asset reserve (i.e., capital replacement reserve) per Appendix C
- Annual contributions to a sludge pumping reserve of \$23,891.85 for the FY25-FY28 forecast period<sup>16</sup>

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<sup>14</sup> Cost is for sewer portion of additional labor for water and wastewater operations.

<sup>15</sup> Not compounded

<sup>16</sup> The utility is required to remove sludge at its treatment plant. The current estimated cost for the activity is \$160K every 10 years, with a future value of \$215,025.62 based on a 3% annual increase in cost. The utility has identified a 9-year timeframe, beginning in FY25, to meet the anticipated cost, resulting in a contribution of \$23,891.85 per year ( $=\$215,025.62/9$ ).

- No change in connections during FY23-28 forecast period
- No change in water usage related to sewerage during the FY23-28 forecast period

## 11. Rate Options

**NOTE: Please refer to the consolidated rate schedules provided in Appendix A**

Incorporating revenue requirements discussed in the previous RCAC prepared three rate options for Village consideration:

**Option 1:** No change in existing rates over the forecast period (FY23-FY28)

**Option 2:** Implementation of a 135% rate increase in existing monthly sewer access (base) and commodity (usage) charges based on existing rate schedule, with additional uniform increases to these rates as follows: 20% in FY25 (July 2024), 12% in FY 26 (July 2025), 6% in FY27 (July 2026), and 3% in FY28 (July 2027)

**Option 3 [Recommended Option]<sup>17</sup>:** Implementation of 135% average overall increase to rates in FY23 based on meter equivalency + a \$2.00 per thousand-gallon usage charge based on average 3-month billed water usage during the December through February period. Subsequent uninform increases to these rates would occur as follow per Option 2: 20% in FY25 (July 2024), 12% in FY 26 (July 2025), 6% in FY27 (July 2026), and 3% in FY28 (July 2027).

### Meter Equivalency Analysis (Rate Option 3)

Rate Option 3 is guided by an analysis of meter size based on the concept of capacity demand. Under this concept, smaller meters exert a smaller demand on system resources based on maximum safe operating pressure, while larger meters exert a higher demand. Using this concept, fixed costs<sup>18</sup> are distributed across the population of meters to establish a theoretical monthly fixed charge for each meter size.

Often the full theoretical monthly charge is not applied. Rather, a proportion of this charge is applied across all meter size classes with the remainder of the system revenue from rates derived from the water usage charge. Consultation with The Village of Capitan staff established a proportional charge of **51.40%** of the full theoretical

<sup>17</sup> Under Rate Option 3, the commodity charge for new customers will be calculated using the 3-month winter average by meter size for their respective rate code until such usage history can be established,

<sup>18</sup> The analysis calculated an average annual fixed cost of \$186,770.07 based on the anticipated total fixed costs over the FY23-28 forecast period.

base rate. The following exhibit summarizes the results of the meter equivalency analysis used to establish the base rate under Option 3.

### Exhibit 13: Meter Equivalency Analysis

Meter Size (inches)	Meter Size (Decimal)	Number of Meters	AWWA Safe Maximum Operating Cap. (GPM)	Max Demand (GPM)	% of Max Demand by Meter Size	Total Fixed Costs Allocated by Meter Size	Theoretical Monthly Base Rate by Meter Size	Proportioned Monthly Base Rate at this % of Theoretical Value
A	B	C	D	E=D*C	F = % of Total	G = % * Total	H = G/C/12	51.40%
3/4"	0.75	265	30	7,950	71.82%	\$134,130.27	\$ 42.18	\$ 21.68
1"	1		50	-	0.00%	-	#DIV/0!	#DIV/0!
1 1/2"	1.5	12	100	1,200	10.84%	\$20,246.08	\$ 140.60	\$72.27
2"	2		160	-	0.00%	-	#DIV/0!	#DIV/0!
3"	3	6	320	1,920	17.34%	\$32,393.73	\$ 449.91	\$ 231.26
4"	4	0	500	-	0.00%	-	#DIV/0!	#DIV/0!
6"	6	0	1600	-	0.00%	-	#DIV/0!	#DIV/0!
<b>Total</b>		<b>283</b>		<b>11,070</b>	<b>100%</b>	<b>\$186,770.07</b>		

Based on data provided, the Village does not have any sewer customers exceeding a 3" diameter. Based on this census, the expected monthly sewer access charge (base rate) for adding a 1" meter would be \$35.97, while a corresponding monthly charge for a 2" meter would be \$113.98.

### Winter Quarter Averaging (Rate Option 3)

As discussed in Section 4, lower water usage occurs during the winter months during which little outdoor activity involving water consumption typically occurs. Since the Village cannot measure wastewater effluent directly from individual connections, Rate Option 3 uses billed water consumption during this period to calculate the customer's monthly usage charge.

Under this method, known as Winter Quarter Averaging, water consumption is averaged during the December through February billing period, to which the appropriate commodity rate is applied. The resulting charge is the customer's monthly usage charge, which remains in place for the next 12 months. A typical cycle for this method would be to calculate the winter average by April or May of each year, with the new monthly usage charge

reflected in the customer's July bill.<sup>19</sup> Recognizing elevated consumption (i.e., outdoor usage) during the summer months for some commercial users, the proposed **method would apply to both residential and commercial users**, which the utility may modify as it deems appropriate.

## 12. Evaluation and Impact

### Evaluation

The rate study evaluated each based on multiple criteria including the ability to meet the system's defined revenue needs, fairness, justifiability, ease of understanding, ease of implementation, and alignment with existing utility goals such as water conservation. The following table summarizes the relative strengths and weaknesses of each rate option:

#### Option 1

Advantages – lowest rate impact, customer acceptance

Disadvantages – Option is not viable based on inability to meet forecasted revenue needs of the utility; less fair based on meter size and application of usage charges.

#### Option 2

Advantages – meets forecasted revenue needs of the utility, customer familiarity

Disadvantages – less fair based on meter size (equivalency) analysis and application of usage charges, less affordable for most customers versus Option 3

#### Option 3

Advantages – meets forecasted revenue needs of the utility, simplified rate structure, fairer based on meter equivalency and average winter water consumption, more affordable for most customers versus Option 2

Disadvantages – more difficult to implement and monitor

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<sup>19</sup> The revenue analysis assumes all customers have established winter billing histories. Absent such information, the option proposes that new customers be assigned the relevant winter average for the rate code to which they belong until such history can be established.

## Rate Impact

Eliminating Option 1 as unviable, Option 3 is expected to provide the most affordable monthly rates for most of the Village's customers based on meter size and usage. Recognizing that residential users with standard ¾" meters comprise ~80% of the utility's customer base, the following table provides a comparison of anticipated monthly charges at selected usage levels for this group of customers.

**Exhibit 14: Rate Impact at Selected Usage Levels (Rate Code SU-01) – April 2023**

<b>SU-01 (Residential Sewer)</b>			Active # of Accounts	<b>222</b>
Monthly Usage Level (Gallons)	Option 1 (No Change)	Option 2 (Uniform Adjustment)	Option 3 (Adjusted tier)	% of Registers at or Below this Winter Usage Level
0	\$15.00	\$35.25	\$21.68	8.1%
3,000	\$15.00	\$35.25	\$27.68	60.8%
6,000	\$15.00	\$35.25	\$33.68	87.8%
10,000	\$15.00	\$35.25	\$41.68	98.6%
15,000	\$15.00	\$35.25	\$51.68	99.6%
			Avg. Dec-Feb Billed Usage (Gals.)	<b>3,132</b>

Based on average billed monthly usage of 3,132 gallons during the winter months of December through February, Option 3 provides the most affordable option for the bulk of village customers. For some customers, under Rate Option 3, monthly charges may increase substantially based on meter size and usage, *although this impact will be mitigated for very large users, resulting not only on calculation of these charges based on winter averages, but also with a reduction in usage charges at the highest tier consumption levels.*

## Fiscal Impact

The following table summarizes the fiscal impact of each rate option with detailed statements provided in Appendix B:

### Exhibit 15: Fiscal Impact of Each Rate Option

Option	Projected Outcome	Details (End FY23/End FY28)
Option 1: No Change in Rates	Deteriorating fiscal position jeopardizing operations and access to needed funding	Net Position (-\$3.4K/-\$562K), Revenue/Expense Ratio (48.2%/59.2%) Projected Debt Coverage Ratio (no coverage provided through enterprise fund)
Option 2: Uniform Increase to Existing Base and Usage Charges (135% in FY23, 0% in FY24, 20% in FY25, 12% in FY 26, 6% in FY27, and 3% in FY28)	Stable fiscal position meeting system revenue needs	Net Position (\$14.8K/\$4.2K), Revenue/Expense Ratio (48.2%/125%) Projected Debt Coverage Ratio (none/126%)
Option 3: Meter Equivalency/Average Winter Water Usage Approach (135% overall average increase in system rates in FY23, followed by uniform increases to base and usage charges per Option 2 for FY24-FY28)	Stable fiscal position meeting system revenue needs	Net Position (\$14.8K/\$3.9K), Revenue/Expense Ratio (48.2%/125%) Projected Debt Coverage Ratio (none/126%)

During the next 6 years (FY23-28) the Village's wastewater utility will need to generate approximately **\$1.378M** over to meet the utility's defined revenue needs including daily operating expenses, proposed debt, and recommended reserves. Shown in Rate Option 1, unless changes are made the utility will experience a severe revenue shortfall (**-\$562K**) by the end of the forecast period jeopardizing system operations. Rate Options 2 and 3 will place the utility on a sustainable path.

### Summary

Based on the discussion in this section, the report recommends Rate Option #3 for Village approval.



## 13. Conclusion and Recommendations

During the next six years (through FY28) the Village's sewer enterprise fund will need to generate **\$1.378M** in revenue to cover anticipated system needs including daily operating expenses, debt, reserves, and projected capital improvements. Working closely with The Village staff, and guided by AWWA methodology, this report developed three rate options for board consideration.

The report recommends adoption of Rate Option 3, which offers a fair and sustainable approach to meeting the system's revenue needs based on meter size, while also providing the most affordable option for the large majority of the village's customers, both in the near term and over the course of the FY23-28 forecast period. Having stated this, Option 2 provides equivalent revenue and may be deemed suitable based on ease of implementation and other factors. The report dismisses Option 1, which reflects an unsustainable path for the utility.

In addition to recommending Option 3, the report recommends that the Village closely monitor performance of the selected option with particular attention to the assumptions outlined in the report. Looking beyond the forecast period, as revenue needs are met, the utility is strongly advised to implement an annual cost adjustment based on the Consumer Price Index, or similar index, to help prevent recurrence of revenue shortfalls. Finally, the utility is encouraged to assess best practices that could improve operating efficiency. These practices include developing an asset management plan, conducting an energy audit, and investigating other opportunities to reduce expenses and enhance earned revenue.

# 14. Appendices

## Appendix A – Consolidated Rate Schedules (FY23-FY28)

The following pages present the expected monthly rates for each rate option throughout the forecast period. No increase is identified for FY24 (July 2023).

Each schedule identifies the base rate (access charge) and the usage rate (commodity charge), which is based on per thousand-gallon level usage. The designated charge applies to monthly consumption for each usage block (tier) within the usage levels identified.

Under Rate Option 1 (existing rate structure) and Rate Option 2, the usage charge applies only to commercial customers based on the billed monthly water consumption. Under the recommended option (Rate Option 3), the usage charge would apply to all rate codes based on the *average water consumption during the December through February billing period*.

### Example of Monthly Residential Bill under Rate Option #3

December billed water usage = 4,200 gallons

January billed water usage – 2,600 gallons

February billed water consumption = 2,800 gallons

Monthly Bill = Base Rate (Access Charge) + [average 3-month Dec-Feb billed water consumption/1000] x usage charge

= \$21.68 (base rate) + [calculated average of 3,200 gallons average/1000] x \$2.00

= \$21.68 + (3.2 x \$2.00)

= \$28.08

## **FY23 (April 2023)**

### **Rate Option 1**

Rate Code	SU01	SU02-108	SU02-312	SU02-44	SU02-76	SU02TaxEx
Classification	Residential	Commercial	Commercial	Commercial	Commercial	Commercial
Meter Size (inches)	0.75	0.75	0.75	1.5	3	0.75
Base Charge (No Usage)	\$ 15.00	\$ 17.00	\$ 17.00	\$17.00	\$17.00	\$17.00
6000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12000			\$ 0.23	\$ 0.23	\$ 0.23	\$ 0.23
20000			\$ 0.23	\$ 0.23	\$ 0.23	\$ 0.23
35000			\$ 0.30	\$ 0.30	\$ 0.30	\$ 0.30
50000			\$ 0.30	\$ 0.30	\$ 0.30	\$ 0.30
75000			\$ 0.40	\$ 0.40	\$ 0.40	\$ 0.40
100000			\$ 0.50	\$ 0.50	\$ 0.50	\$ 0.50
125000			\$ 0.60	\$ 0.60	\$ 0.60	\$ 0.60
999999999			\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20

### **Rate Option 2**

Rate Code	SU01	SU02-108	SU02-312	SU02-44	SU02-76	SU02TaxEx
Meter Size (inches)	0.75	0.75	0.75	1.5	3	1.5
Base Charge (No Usage)	\$ 35.250	\$ 39.95	\$ 39.95	\$ 39.95	\$ 39.95	\$ 39.95
6000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12000	\$ -	\$ -	\$ 0.54	\$ 0.54	\$ 0.54	\$ 0.54
20000	\$ -	\$ -	\$ 0.54	\$ 0.54	\$ 0.54	\$ 0.54
35000	\$ -	\$ -	\$ 0.71	\$ 0.71	\$ 0.71	\$ 0.71
50000	\$ -	\$ -	\$ 0.71	\$ 0.71	\$ 0.71	\$ 0.71
75000	\$ -	\$ -	\$ 0.94	\$ 0.94	\$ 0.94	\$ 0.94
100000	\$ -	\$ -	\$ 1.18	\$ 1.18	\$ 1.18	\$ 1.18
125000	\$ -	\$ -	\$ 1.41	\$ 1.41	\$ 1.41	\$ 1.41
999999999	\$ -	\$ -	\$ 2.82	\$ 2.82	\$ 2.82	\$ 2.82

### **Rate Option 3**

Rate Code	SU01	SU02-108	SU02-312	SU02-44	SU02-76	SU02TaxEx
Meter Size (inches)	0.75	0.75	0.75	1.5	3	1.5
Base Charge (No Usage)	\$ 21.68	\$ 21.68	\$ 21.68	\$ 72.27	\$ 231.26	\$ 72.27
0	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00
999999999	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00

## **FY25 (July 2024)**

### **Rate Option 1 – no increase in rates**

Rate Code	SU01	SU02-108	SU02-312	SU02-44	SU02-76	SU02TaxEx
Classification	Residential	Commercial	Commercial	Commercial	Commercial	Commercial
Meter Size (inches)	0.75	0.75	0.75	1.5	3	0.75
Base Charge (No Usage)	\$ 15.00	\$ 17.00	\$ 17.00	\$17.00	\$17.00	\$17.00
6000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12000			\$ 0.23	\$ 0.23	\$ 0.23	\$ 0.23
20000			\$ 0.23	\$ 0.23	\$ 0.23	\$ 0.23
35000			\$ 0.30	\$ 0.30	\$ 0.30	\$ 0.30
50000			\$ 0.30	\$ 0.30	\$ 0.30	\$ 0.30
75000			\$ 0.40	\$ 0.40	\$ 0.40	\$ 0.40
100000			\$ 0.50	\$ 0.50	\$ 0.50	\$ 0.50
125000			\$ 0.60	\$ 0.60	\$ 0.60	\$ 0.60
999999999			\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20

### **Rate Option 2 – 20% increase in base and usage charges**

Rate Code	SU01	SU02-108	SU02-312	SU02-44	SU02-76	SU02TaxEx
Meter Size (inches)	0.75	0.75	0.75	1.5	3	1.5
Base Charge (No Usage)	\$ 42.300	\$ 47.94	\$ 47.94	\$ 47.94	\$ 47.94	\$ 47.94
6000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12000	\$ -	\$ -	\$ 0.65	\$ 0.65	\$ 0.65	\$ 0.65
20000	\$ -	\$ -	\$ 0.65	\$ 0.65	\$ 0.65	\$ 0.65
35000	\$ -	\$ -	\$ 0.85	\$ 0.85	\$ 0.85	\$ 0.85
50000	\$ -	\$ -	\$ 0.85	\$ 0.85	\$ 0.85	\$ 0.85
75000	\$ -	\$ -	\$ 1.13	\$ 1.13	\$ 1.13	\$ 1.13
100000	\$ -	\$ -	\$ 1.41	\$ 1.41	\$ 1.41	\$ 1.41
125000	\$ -	\$ -	\$ 1.69	\$ 1.69	\$ 1.69	\$ 1.69
999999999	\$ -	\$ -	\$ 3.38	\$ 3.38	\$ 3.38	\$ 3.38

### **Rate Option 3 – 20% increase in base and usage charges**

Rate Code	SU01	SU02-108	SU02-312	SU02-44	SU02-76	SU02TaxEx
Meter Size (inches)	0.75	0.75	0.75	1.5	3	1.5
Base Charge (No Usage)	\$ 31.22	\$ 26.02	\$ 26.02	\$ 86.72	\$ 277.51	\$ 86.72
0	\$ 2.40	\$ 2.40	\$ 2.40	\$ 2.40	\$ 2.40	\$ 2.40
999999999	\$ 2.40	\$ 2.40	\$ 2.40	\$ 2.40	\$ 2.40	\$ 2.40

## **FY26 (July 2025)**

### **Rate Option 1 – no increase in rates**

Rate Code	SU01	SU02-108	SU02-312	SU02-44	SU02-76	SU02TaxEx
Classification	Residential	Commercial	Commercial	Commercial	Commercial	Commercial
Meter Size (inches)	0.75	0.75	0.75	1.5	3	0.75
Base Charge (No Usage)	\$ 15.00	\$ 17.00	\$ 17.00	\$17.00	\$17.00	\$17.00
6000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12000			\$ 0.23	\$ 0.23	\$ 0.23	\$ 0.23
20000			\$ 0.23	\$ 0.23	\$ 0.23	\$ 0.23
35000			\$ 0.30	\$ 0.30	\$ 0.30	\$ 0.30
50000			\$ 0.30	\$ 0.30	\$ 0.30	\$ 0.30
75000			\$ 0.40	\$ 0.40	\$ 0.40	\$ 0.40
100000			\$ 0.50	\$ 0.50	\$ 0.50	\$ 0.50
125000			\$ 0.60	\$ 0.60	\$ 0.60	\$ 0.60
999999999			\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20

### **Rate Option 2 – 12% increase in base and usage charges**

Rate Code	SU01	SU02-108	SU02-312	SU02-44	SU02-76	SU02TaxEx
Meter Size (inches)	0.75	0.75	0.75	1.5	3	1.5
Base Charge (No Usage)	\$ 47.376	\$ 53.69	\$ 53.69	\$ 53.69	\$ 53.69	\$ 53.69
6000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12000	\$ -	\$ -	\$ 0.72	\$ 0.72	\$ 0.72	\$ 0.72
20000	\$ -	\$ -	\$ 0.73	\$ 0.73	\$ 0.73	\$ 0.73
35000	\$ -	\$ -	\$ 0.95	\$ 0.95	\$ 0.95	\$ 0.95
50000	\$ -	\$ -	\$ 0.95	\$ 0.95	\$ 0.95	\$ 0.95
75000	\$ -	\$ -	\$ 1.26	\$ 1.26	\$ 1.26	\$ 1.26
100000	\$ -	\$ -	\$ 1.58	\$ 1.58	\$ 1.58	\$ 1.58
125000	\$ -	\$ -	\$ 1.90	\$ 1.90	\$ 1.90	\$ 1.90
999999999	\$ -	\$ -	\$ 3.79	\$ 3.79	\$ 3.79	\$ 3.79

### **Rate Option 3 – 12% increase in base and usage charges**

Rate Code	SU01	SU02-108	SU02-312	SU02-44	SU02-76	SU02TaxEx
Meter Size (inches)	0.75	0.75	0.75	1.5	3	1.5
Base Charge (No Usage)	\$ 34.97	\$ 29.14	\$ 29.14	\$ 97.13	\$ 310.81	\$ 97.13
0	\$ 2.69	\$ 2.69	\$ 2.69	\$ 2.69	\$ 2.69	\$ 2.69
999999999	\$ 2.69	\$ 2.69	\$ 2.69	\$ 2.69	\$ 2.69	\$ 2.69

## **FY27 (July 2026)**

### **Rate Option 1 – no increase in rates**

Rate Code	SU01	SU02-108	SU02-312	SU02-44	SU02-76	SU02TaxEx
Classification	Residential	Commercial	Commercial	Commercial	Commercial	Commercial
Meter Size (inches)	0.75	0.75	0.75	1.5	3	0.75
Base Charge (No Usage)	\$ 15.00	\$ 17.00	\$ 17.00	\$17.00	\$17.00	\$17.00
6000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12000			\$ 0.23	\$ 0.23	\$ 0.23	\$ 0.23
20000			\$ 0.23	\$ 0.23	\$ 0.23	\$ 0.23
35000			\$ 0.30	\$ 0.30	\$ 0.30	\$ 0.30
50000			\$ 0.30	\$ 0.30	\$ 0.30	\$ 0.30
75000			\$ 0.40	\$ 0.40	\$ 0.40	\$ 0.40
100000			\$ 0.50	\$ 0.50	\$ 0.50	\$ 0.50
125000			\$ 0.60	\$ 0.60	\$ 0.60	\$ 0.60
999999999			\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20

### **Rate Option 2 – 6% increase in base and usage charges**

Rate Code	SU01	SU02-108	SU02-312	SU02-44	SU02-76	SU02TaxEx
Meter Size (inches)	0.75	0.75	0.75	1.5	3	1.5
Base Charge (No Usage)	\$ 50.219	\$ 56.91	\$ 56.91	\$ 56.91	\$ 56.91	\$ 56.91
6000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12000	\$ -	\$ -	\$ 0.77	\$ 0.77	\$ 0.77	\$ 0.77
20000	\$ -	\$ -	\$ 0.77	\$ 0.77	\$ 0.77	\$ 0.77
35000	\$ -	\$ -	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00
50000	\$ -	\$ -	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00
75000	\$ -	\$ -	\$ 1.34	\$ 1.34	\$ 1.34	\$ 1.34
100000	\$ -	\$ -	\$ 1.67	\$ 1.67	\$ 1.67	\$ 1.67
125000	\$ -	\$ -	\$ 2.01	\$ 2.01	\$ 2.01	\$ 2.01
999999999	\$ -	\$ -	\$ 4.02	\$ 4.02	\$ 4.02	\$ 4.02

### **Rate Option 3 – 6% increase in base and usage charges**

Rate Code	SU01	SU02-108	SU02-312	SU02-44	SU02-76	SU02TaxEx
Meter Size (inches)	0.75	0.75	0.75	1.5	3	1.5
Base Charge (No Usage)	\$ 37.06	\$ 30.89	\$ 30.89	\$ 102.95	\$ 329.46	\$ 102.95
0	\$ 2.85	\$ 2.85	\$ 2.85	\$ 2.85	\$ 2.85	\$ 2.85
999999999	\$ 2.85	\$ 2.85	\$ 2.85	\$ 2.85	\$ 2.85	\$ 2.85

## **FY28 (July 2027)**

### **Rate Option 1 – no increase in rates**

Rate Code	SU01	SU02-108	SU02-312	SU02-44	SU02-76	SU02TaxEx
Classification	Residential	Commercial	Commercial	Commercial	Commercial	Commercial
Meter Size (inches)	0.75	0.75	0.75	1.5	3	0.75
Base Charge (No Usage)	\$ 15.00	\$ 17.00	\$ 17.00	\$17.00	\$17.00	\$17.00
6000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12000			\$ 0.23	\$ 0.23	\$ 0.23	\$ 0.23
20000			\$ 0.23	\$ 0.23	\$ 0.23	\$ 0.23
35000			\$ 0.30	\$ 0.30	\$ 0.30	\$ 0.30
50000			\$ 0.30	\$ 0.30	\$ 0.30	\$ 0.30
75000			\$ 0.40	\$ 0.40	\$ 0.40	\$ 0.40
100000			\$ 0.50	\$ 0.50	\$ 0.50	\$ 0.50
125000			\$ 0.60	\$ 0.60	\$ 0.60	\$ 0.60
999999999			\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20

### **Rate Option 2 – 3% increase in base and usage charges**

Rate Code	SU01	SU02-108	SU02-312	SU02-44	SU02-76	SU02TaxEx
Meter Size (inches)	0.75	0.75	0.75	1.5	3	1.5
Base Charge (No Usage)	\$ 51.725	\$ 58.62	\$ 58.62	\$ 58.62	\$ 58.62	\$ 58.62
6000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12000	\$ -	\$ -	\$ 0.79	\$ 0.79	\$ 0.79	\$ 0.79
20000	\$ -	\$ -	\$ 0.79	\$ 0.79	\$ 0.79	\$ 0.79
35000	\$ -	\$ -	\$ 1.03	\$ 1.03	\$ 1.03	\$ 1.03
50000	\$ -	\$ -	\$ 1.03	\$ 1.03	\$ 1.03	\$ 1.03
75000	\$ -	\$ -	\$ 1.38	\$ 1.38	\$ 1.38	\$ 1.38
100000	\$ -	\$ -	\$ 1.72	\$ 1.72	\$ 1.72	\$ 1.72
125000	\$ -	\$ -	\$ 2.07	\$ 2.07	\$ 2.07	\$ 2.07
999999999	\$ -	\$ -	\$ 4.14	\$ 4.14	\$ 4.14	\$ 4.14

### **Rate Option 3 – 3% increase in base and usage charges**

Rate Code	SU01	SU02-108	SU02-312	SU02-44	SU02-76	SU02TaxEx
Meter Size (inches)	0.75	0.75	0.75	1.5	3	1.5
Base Charge (No Usage)	\$ 38.18	\$ 31.81	\$ 31.81	\$ 106.04	\$ 339.34	\$ 106.04
0	\$ 2.93	\$ 2.93	\$ 2.93	\$ 2.93	\$ 2.93	\$ 2.93
999999999	\$ 2.93	\$ 2.93	\$ 2.93	\$ 2.93	\$ 2.93	\$ 2.93

## APPENDIX B: Expected Fiscal Impact for Each Rate Option

### Rate Option 1 – No Change in Rates

Village of Capitan Sewer Enterprise Fund (Rate Option 1)						
	FY23 Est.	FY24	FY25	FY26	FY27	FY28
<b>Operating Revenue</b>						
Sewer Sales-Connections (Net 5% GRT)	\$ 54,338.16	\$ 54,338.16	\$ 54,338.16	\$ 54,338.16	\$ 54,338.16	\$ 54,338.16
Sewer Sales-Other (Net 5% GRT)	\$ 2,959.75	\$ 2,959.75	\$ 2,959.75	\$ 2,959.75	\$ 2,959.75	\$ 2,959.75
<b>Total Operating Revenue</b>	<b>\$ 57,297.91</b>	<b>\$ 57,297.91</b>	<b>\$ 57,297.91</b>	<b>\$ 57,297.91</b>	<b>\$ 57,297.91</b>	<b>\$ 57,297.91</b>
Additonal Revenue From Rate Adjustment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Partial Year Adjustment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Write-Off/Billing Adjustments	\$ (271.69)	\$ (271.69)	\$ (271.69)	\$ (271.69)	\$ (271.69)	\$ (271.69)
<b>Adjusted Total Revenue</b>	<b>\$ 57,026.22</b>	<b>\$ 57,026.22</b>	<b>\$ 57,026.22</b>	<b>\$ 57,026.22</b>	<b>\$ 57,026.22</b>	<b>\$ 57,026.22</b>
Less: Basic Operating Expenses	\$ 105,455.00	\$ 49,455.00	\$ 50,938.65	\$ 52,466.81	\$ 54,040.81	\$ 55,662.04
Less: Allocation of Joint Fund Expenses	\$ 93,151.25	\$ 97,628.31	\$ 100,557.16	\$ 103,573.87	\$ 106,681.09	\$ 109,881.52
Less: Additional Operating Expenses (Additional Employee)	\$ -	\$ 13,612.76	\$ 14,021.14	\$ 14,441.78	\$ 14,875.03	\$ 15,321.28
<b>Net Operating Revenue</b>	<b>\$ (141,580.03)</b>	<b>\$ (103,669.85)</b>	<b>\$ (108,490.73)</b>	<b>\$ (113,456.24)</b>	<b>\$ (118,570.71)</b>	<b>\$ (123,838.62)</b>
Less: Existing Debt Payments (Principal & Interest)	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00
Less: Debt Payments (Addnl Projects)		\$ 2,293.38	\$ 2,293.38	\$ 2,293.38	\$ 15,199.46	\$ 15,199.46
Plus: Municipal Gross Receipts-Infrastructure	\$ 48,000.00	\$ 57,856.72	\$ 57,856.72	\$ 57,856.72	\$ 57,856.72	\$ 57,856.72
Plus: Return on Invested Funds		\$ 2,909.10	\$ 2,909.10	\$ 2,909.10	\$ 2,909.10	\$ 2,909.10
<b>Net System Revenue</b>	<b>\$ (107,207.03)</b>	<b>\$ (58,824.41)</b>	<b>\$ (63,645.29)</b>	<b>\$ (68,610.80)</b>	<b>\$ (86,631.35)</b>	<b>\$ (91,899.26)</b>
Plus: Operating Reserve Balance (from Reserve Allocation Worksheet)	\$ 121,731.89	\$ (3,435.01)	\$ (80,448.62)	\$ (186,174.96)	\$ (296,866.81)	\$ (426,869.82)
<b>Net Position Before Contribution to Reserves</b>	<b>\$ 14,524.85</b>	<b>\$ (62,259.42)</b>	<b>\$ (144,093.91)</b>	<b>\$ (254,785.76)</b>	<b>\$ (383,498.16)</b>	<b>\$ (518,769.08)</b>
Debt Reserve (10%)		\$ 229.34	\$ 229.34	\$ 229.34	\$ 1,519.95	\$ 1,519.95
Operating Reserve						
Emergency Reserve						
Capital Reserve	\$ 17,959.86	\$ 17,959.86	\$ 17,959.86	\$ 17,959.86	\$ 17,959.86	\$ 17,959.86
Sludge Pumping Reserve			\$ 23,891.85	\$ 23,891.85	\$ 23,891.85	\$ 23,891.85
<b>Total Reserves</b>	<b>\$ 17,959.86</b>	<b>\$ 18,189.20</b>	<b>\$ 42,081.05</b>	<b>\$ 42,081.05</b>	<b>\$ 43,371.66</b>	<b>\$ 43,371.66</b>
<b>Net Position After Reserves</b>	<b>\$ (3,435.01)</b>	<b>\$ (80,448.62)</b>	<b>\$ (186,174.96)</b>	<b>\$ (296,866.81)</b>	<b>\$ (426,869.82)</b>	<b>\$ (562,140.74)</b>
Operating Revenue/Expenses (incl. debt service)	26.9%	32.3%	31.4%	30.6%	27.9%	27.2%
Revenue/Expenses (incl. debt service)	48.2%	70.6%	68.8%	66.9%	60.7%	59.2%
Projected Debt Coverage Ratio		-287.8%	-127.2%	-139.7%	-115.2%	-125.2%



## Rate Option 2

Village of Capitan Sewer Enterprise Fund (Rate Option 2)						
	FY23 Est.	FY24	FY25	FY26	FY27	FY28
<b>Operating Revenue</b>						
Sewer Sales-Connections (Net 5% GRT)	\$ 54,338.16	\$ 127,791.24	\$ 127,791.24	\$ 153,349.49	\$ 171,751.43	\$ 182,056.51
Sewer Sales-Other (Net 5% GRT)	\$ 2,959.75	\$ 2,959.75	\$ 2,959.75	\$ 2,959.75	\$ 2,959.75	\$ 2,959.75
<b>Total Operating Revenue</b>	<b>\$ 57,297.91</b>	<b>\$ 130,750.99</b>	<b>\$ 130,750.99</b>	<b>\$ 156,309.24</b>	<b>\$ 174,711.17</b>	<b>\$ 185,016.26</b>
Additional Revenue From Rate Adjustment	\$ 73,453.08	\$ -	\$ 25,558.25	\$ 18,401.94	\$ 10,305.09	\$ 5,461.70
Partial Year Adjustment	\$ (55,089.81)	\$ -	\$ -	\$ -	\$ -	\$ -
Write-Off/Billing Adjustments	\$ (363.51)	\$ (638.96)	\$ (766.75)	\$ (858.76)	\$ (910.28)	\$ (937.59)
<b>Adjusted Total Revenue</b>	<b>\$ 75,297.67</b>	<b>\$ 130,112.03</b>	<b>\$ 155,542.49</b>	<b>\$ 173,852.42</b>	<b>\$ 184,105.98</b>	<b>\$ 189,540.36</b>
Less: Basic Operating Expenses	\$ 105,455.00	\$ 49,455.00	\$ 50,938.65	\$ 52,466.81	\$ 54,040.81	\$ 55,662.04
Less: Allocation of Joint Fund Expenses	\$ 93,151.25	\$ 97,628.31	\$ 100,557.16	\$ 103,573.87	\$ 106,681.09	\$ 109,881.52
Less: Additional Operating Expenses (Additional Employee)	\$ -	\$ 13,612.76	\$ 14,021.14	\$ 14,441.78	\$ 14,875.03	\$ 15,321.28
<b>Net Operating Revenue</b>	<b>\$ (123,308.58)</b>	<b>\$ (30,584.04)</b>	<b>\$ (9,974.46)</b>	<b>\$ 3,369.96</b>	<b>\$ 8,509.05</b>	<b>\$ 8,675.53</b>
Less: Existing Debt Payments (Principal & Interest)	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00
Less: Debt Payments (Addnl Projects)		\$ 2,293.38	\$ 2,293.38	\$ 2,293.38	\$ 15,199.46	\$ 15,199.46
Plus: Municipal Gross Receipts-Infrastructure	\$ 48,000.00	\$ 57,856.72	\$ 57,856.72	\$ 57,856.72	\$ 57,856.72	\$ 57,856.72
Plus: Return on Invested Funds		\$ 2,909.10	\$ 2,909.10	\$ 2,909.10	\$ 2,909.10	\$ 2,909.10
<b>Net System Revenue</b>	<b>\$ (88,935.58)</b>	<b>\$ 14,261.41</b>	<b>\$ 34,870.98</b>	<b>\$ 48,215.40</b>	<b>\$ 40,448.41</b>	<b>\$ 40,614.89</b>
Plus: Operating Reserve Balance (from Reserve Allocation Worksheet)	\$ 121,731.89	\$ 14,836.44	\$ 10,908.65	\$ 3,698.58	\$ 9,832.93	\$ 6,909.69
<b>Net Position Before Contribution to Reserves</b>	<b>\$ 32,796.31</b>	<b>\$ 29,097.85</b>	<b>\$ 45,779.63</b>	<b>\$ 51,913.98</b>	<b>\$ 50,281.34</b>	<b>\$ 47,524.58</b>
Debt Reserve (10%)		\$ 229.34	\$ 229.34	\$ 229.34	\$ 1,519.95	\$ 1,519.95
Operating Reserve						
Emergency Reserve						
Capital Reserve	\$ 17,959.86	\$ 17,959.86	\$ 17,959.86	\$ 17,959.86	\$ 17,959.86	\$ 17,959.86
Sludge Pumping Reserve			\$ 23,891.85	\$ 23,891.85	\$ 23,891.85	\$ 23,891.85
<b>Total Reserves</b>	<b>\$ 17,959.86</b>	<b>\$ 18,189.20</b>	<b>\$ 42,081.05</b>	<b>\$ 42,081.05</b>	<b>\$ 43,371.66</b>	<b>\$ 43,371.66</b>
<b>Net Position After Reserves</b>	<b>\$ 14,836.44</b>	<b>\$ 10,908.65</b>	<b>\$ 3,698.58</b>	<b>\$ 9,832.93</b>	<b>\$ 6,909.69</b>	<b>\$ 4,152.92</b>
Operating Revenue/Expenses (incl. debt service)	35.5%	73.7%	85.7%	93.3%	90.1%	90.4%
Revenue/Expenses (incl. debt service)	48.2%	115.7%	112.6%	124.5%	122.7%	124.9%
Projected Debt Coverage Ratio		171.3%	120.3%	153.8%	125.9%	126.2%

## Rate Option 3

Village of Capitan Sewer Enterprise Fund (Rate Option 3 - Recommended)						
	FY23 Est.	FY24	FY25	FY26	FY27	FY28
<b>Operating Revenue</b>						
Sewer Sales-Connections (Net 5% GRT)	\$ 54,338.16	\$ 127,752.20	\$ 127,752.20	\$ 153,302.64	\$ 171,698.96	\$ 182,000.89
Sewer Sales-Other (Net 5% GRT)	\$ 2,959.75	\$ 2,959.75	\$ 2,959.75	\$ 2,959.75	\$ 2,959.75	\$ 2,959.75
<b>Total Operating Revenue</b>	<b>\$ 57,297.91</b>	<b>\$ 130,711.95</b>	<b>\$ 130,711.95</b>	<b>\$ 156,262.39</b>	<b>\$ 174,658.70</b>	<b>\$ 184,960.64</b>
Additional Revenue From Rate Adjustment	\$ 73,414.04	\$ -	\$ 25,550.44	\$ 18,396.32	\$ 10,301.94	\$ 5,460.03
Partial Year Adjustment	\$ (55,060.53)	\$ -	\$ -	\$ -	\$ -	\$ -
Write-Off/Billing Adjustments	\$ (363.46)	\$ (638.76)	\$ (766.51)	\$ (858.49)	\$ (910.00)	\$ (937.30)
<b>Adjusted Total Revenue</b>	<b>\$ 75,287.96</b>	<b>\$ 130,073.18</b>	<b>\$ 155,495.87</b>	<b>\$ 173,800.21</b>	<b>\$ 184,050.64</b>	<b>\$ 189,483.36</b>
Less: Basic Operating Expenses	\$ 105,455.00	\$ 49,455.00	\$ 50,938.65	\$ 52,466.81	\$ 54,040.81	\$ 55,662.04
Less: Allocation of Joint Fund Expenses	\$ 93,151.25	\$ 97,628.31	\$ 100,557.16	\$ 103,573.87	\$ 106,681.09	\$ 109,881.52
Less: Additional Operating Expenses (Additional Employee)	\$ -	\$ 13,612.76	\$ 14,021.14	\$ 14,441.78	\$ 14,875.03	\$ 15,321.28
<b>Net Operating Revenue</b>	<b>\$ (123,318.29)</b>	<b>\$ (30,622.88)</b>	<b>\$ (10,021.08)</b>	<b>\$ 3,317.75</b>	<b>\$ 8,453.70</b>	<b>\$ 8,618.52</b>
Less: Existing Debt Payments (Principal & Interest)	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00
Less: Debt Payments (Addnl Projects)		\$ 2,293.38	\$ 2,293.38	\$ 2,293.38	\$ 15,199.46	\$ 15,199.46
Plus: Municipal Gross Receipts-Infrastructure	\$ 48,000.00	\$ 57,856.72	\$ 57,856.72	\$ 57,856.72	\$ 57,856.72	\$ 57,856.72
Plus: Return on Invested Funds		\$ 2,909.10	\$ 2,909.10	\$ 2,909.10	\$ 2,909.10	\$ 2,909.10
<b>Net System Revenue</b>	<b>\$ (88,945.29)</b>	<b>\$ 14,222.56</b>	<b>\$ 34,824.37</b>	<b>\$ 48,163.19</b>	<b>\$ 40,393.07</b>	<b>\$ 40,557.89</b>
Plus: Operating Reserve Balance (from Reserve Allocation Worksheet)	\$ 121,731.89	\$ 14,826.73	\$ 10,860.09	\$ 3,603.41	\$ 9,685.55	\$ 6,706.96
<b>Net Position Before Contribution to Reserves</b>	<b>\$ 32,786.59</b>	<b>\$ 29,049.29</b>	<b>\$ 45,684.45</b>	<b>\$ 51,766.60</b>	<b>\$ 50,078.62</b>	<b>\$ 47,264.85</b>
Debt Reserve (10%)		\$ 229.34	\$ 229.34	\$ 229.34	\$ 1,519.95	\$ 1,519.95
Operating Reserve						
Emergency Reserve						
Capital Reserve	\$ 17,959.86	\$ 17,959.86	\$ 17,959.86	\$ 17,959.86	\$ 17,959.86	\$ 17,959.86
Sludge Pumping Reserve			\$ 23,891.85	\$ 23,891.85	\$ 23,891.85	\$ 23,891.85
<b>Total Reserves</b>	<b>\$ 17,959.86</b>	<b>\$ 18,189.20</b>	<b>\$ 42,081.05</b>	<b>\$ 42,081.05</b>	<b>\$ 43,371.66</b>	<b>\$ 43,371.66</b>
<b>Net Position After Reserves</b>	<b>\$ 14,826.73</b>	<b>\$ 10,860.09</b>	<b>\$ 3,603.41</b>	<b>\$ 9,685.55</b>	<b>\$ 6,706.96</b>	<b>\$ 3,893.19</b>
Operating Revenue/Expenses (incl. debt service)	35.5%	73.6%	85.7%	93.2%	90.0%	90.4%
Revenue/Expenses (incl. debt service)	48.2%	115.7%	112.6%	124.5%	122.6%	124.9%
Projected Debt Coverage Ratio		171.1%	120.2%	153.7%	125.8%	126.1%

## **APPENDIX C: Village of Capitan Wastewater Utility Capital Replacement Program**

To facilitate timely replacement and rehabilitation of capital assets, the utility has established a capital replacement program. Contributions to this reserve are designated on a default cash-needs basis as follows:

Replacement Value From	To	Cash	Grant	Loan
\$0	\$20,000	100%	0%	0%
\$20,001	\$50,000	20%	50%	30%
\$50,001	\$250,000	10%	50%	40%
\$250,001	\$1,000,000	5.0%	50%	45%
\$1,000,001	\$99,999,999	2.0%	50%	48%

<b>Capitalization Threshold</b>	<b>\$ 5,000</b>
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The following table lists the assets under the program, which are grouped into two categories: 1) replacement of existing assets for which an annual reserve contribution of **\$6,617** is identified, and 2) reserves for additional capital assets for which a further annual reserve contribution of **\$11,343** is shown. RCAC strongly encourages the utility to establish an asset management plan, which will help the entity further develop this program.

## Village of Capitan Wastewater Utility Capital Replacement Program (Capital Asset List)

Asset	Year Acquired	Unit Cost (Historic, Current or Future)	Cost Type (H, C, F)	% Belonging to Sewer	Estimated Historic Cost (Water only)	Normal Estimated Life	Current Age	Estimated Current Cost	Planned Remaining Life	Estimated Remaining Life	Estimated Future Cost	Fund with Cash	Fund with Grant	Fund with Loan	Existing Reserves	Annual Reserve Required
<b>Replacement of Existing Capital Assets</b>																
SCADA Site WWTP (Needed)	2023	6,000	C	100%	\$6,000	15	0	6,000	15	15	9,348	100%	0%	0%	3,597	301
WWTP Aerator Lagoon #1	2021	10,000	C	100%	\$9,409	10	2	10,000	8	8	12,668	100%	0%	0%	5,995	726
WWTP Lagoon #1 Soft Starter	2012	2,500	C	100%	\$1,788	10	11	2,500	-1	0	2,500	100%	0%	0%	1,499	0
WWTP Aerator Lagoon #2	2016	10,000	C	100%	\$8,080	10	7	10,000	3	3	10,927	100%	0%	0%	5,995	1,572
WWTP Lagoon #2 Soft Starter	2012	2,500	C	100%	\$1,788	10	11	2,500	-1	0	2,500	100%	0%	0%	1,499	0
WWTP Aerator Small Concrete	2021	1,500	C	100%	\$1,411	1	2	1,500	-1	0	1,500	100%	0%	85%	899	0
WWTP Aerator Large Concrete	2022	1,500	C	100%	\$1,455	1	1	1,500	0	0	1,500	100%	0%	0%	899	0
WWTP Aerator Large Concrete	2022	1,500	C	100%	\$1,455	1	1	1,500	0	0	1,500	100%	0%	0%	899	0
WWTP Main Liftstation Pump #1	2016	3,000	C	100%	\$2,424	10	7	3,000	3	3	3,278	100%	0%	0%	1,799	Not Cap.
WWTP Main Liftstation Pump #2	2016	3,000	C	100%	\$2,424	10	7	3,000	3	3	3,278	100%	0%	0%	1,799	Not Cap.
WWTP Main Liftstation Pump Control Panel	2002	2,500	C	100%	\$1,319	30	21	2,500	9	9	3,262	100%	0%	0%	1,499	Not Cap.
WWTP Recirculation Liftstation Pump #1	2021	6,000	C	100%	\$5,645	10	2	6,000	8	8	7,601	100%	0%	0%	3,597	436
WWTP Recirculation Liftstation Pump #2	2019	6,000	C	100%	\$5,312	10	4	6,000	6	6	7,164	100%	0%	0%	3,597	536
WWTP Recirculation Pump Control Panel	2002	2,500	C	100%	\$1,319	30	21	2,500	9	9	3,262	100%	0%	0%	1,499	Not Cap.
WWTP Generator	1988	40,000	C	100%	\$13,774	20	35	40,000	-15	0	40,000	20%	50%	30%	4,796	0
Ford Tractor with 8' Brushhog	1988	50,000	C	100%	\$17,218	20	35	50,000	-15	0	50,000	20%	50%	30%	5,995	0
Jet Rodding Machine	2000	25,000	C	100%	\$12,408	30	23	25,000	7	7	30,747	20%	50%	30%	2,998	399
Service Vehicle #1	2014	35,000	C	10%	\$2,661	10	9	3,500	1	1	3,605	100%	0%	0%	2,098	Not Cap.
Service Vehicle #2	2014	35,000	C	10%	\$2,661	10	9	3,500	1	1	3,605	100%	0%	0%	2,098	Not Cap.
Service Vehicle #	2014	35,000	C	10%	\$2,661	10	9	3,500	1	1	3,605	100%	0%	0%	2,098	Not Cap.
John Deere Backhoe	2014	151,376	C	10%	\$11,508	20	9	15,138	11	11	20,954	20%	50%	30%	1,815	179
Sewage Ejector	2011	3,803	H	100%	\$3,803	10	12	5,422	-2	0	5,111	100%	0%	0%	3,251	0
Wastewater System Additions	2011	38,587	H	100%	\$38,587	15	12	55,016	3	3	60,118	10%	50%	40%	3,298	865
Sewer Work - Senior Center	2012	116,962	H	100%	\$116,962	25	11	161,903	14	14	244,893	10%	50%	40%	9,707	840
WW Extension to Sr. Building	2014	92,633	H	100%	\$92,633	25	9	120,866	16	16	193,954	10%	50%	40%	7,246	588
Lagoon Liner	2014	27,584	H	100%	\$27,584	25	9	35,991	16	16	57,755	10%	50%	40%	2,158	175
															0	0
															0	0
															0	0
															0	0
<b>Subtotal Replacement of Existing Capital Assets</b>					<b>\$392,290</b>			<b>578,336</b>			<b>784,634</b>	<b>22%</b>	<b>44%</b>	<b>34%</b>	<b>82,634</b>	<b>6,617</b>
Asset	Year Acquired	Unit Cost (Current or Future)	Cost Type (C, F)	% Belonging to Sewer Water		Normal Estimated Life	Time to Complete	Estimated Current Cost	Planned Remaining Life	Estimated Remaining Life	Estimated Future Cost	Fund with Cash	Fund with Grant	Fund with Loan	Existing Reserves	Annual Reserve Required
<b>Replacement of Funded Project Assets</b>																
<b>Subtotal Replacement of Funded Project Assets</b>								<b>0</b>			<b>0</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>		<b>0</b>
Enter Existing Reserves for Replacement of Funded Project Assets																
Asset	Year to be Purchased	Unit Cost (Current or Future)	Cost Type (C, F)	Belonging to Sewer Water			Years to save	Estimated Current Cost			Estimated Future Cost	Fund with Cash	Fund with Grant	Fund with Loan	Existing Reserves	Annual Reserve Required
<b>Reserves for Additional Capital Assets</b>																
Reline Aeration Lagoon #1 (2012)	2037	210,000	C	100%			14	210,000			317,644	5%	75%	20%	3,032	778
Reline Aeration Lagoon #2 (2012)	2037	225,000	C	100%			14	225,000			340,333	5%	75%	20%	3,249	833
Reline Facultative Lagoon (2015)	2040	500,000	C	100%			17	500,000			826,424	5%	75%	20%	7,219	1,640
Lift Station Rehab	2053	222,651	C	100%			30	222,651			540,432	5%	75%	20%	3,215	559
Sewer line inspection/Rehab -100 manholes dating from 1940'	2027	750,000	C	100%			4	750,000			844,132	5%	75%	20%	10,829	7,533
												0%	0%	0%	0	0
												0%	0%	0%	0	0
												0%	0%	0%	0	0
												0%	0%	0%	0	0
<b>Subtotal Reserves for Additional Capital Assets</b>								<b>1,907,651</b>			<b>2,868,964</b>	<b>5%</b>	<b>75%</b>	<b>20%</b>	<b>27,545</b>	<b>11,343</b>
Enter Existing Reserves for Additional Capital Assets																
<b>Total Capital Reserves</b>								<b>2,485,987</b>			<b>3,653,599</b>	<b>9%</b>	<b>68%</b>	<b>23%</b>	<b>110,178</b>	<b>17,960</b>

## APPENDIX D: Expense Analysis (Village of Capitan Wastewater Enterprise Fund)

The following table establishes the allocation of joint utility expenses into water and sewer components, as well as the determination of fixed costs, and projected increases in sewer costs (including debt payments and reserve contributions) during the FY24-28 period.

Sewer Utility Fund Analysis																
FY23 Joint Budget Expense	AMT	% Sewer	FY23 Sewer Allocation	Cost Factor	FY24 Basis	Cost Factor	FY25	Cost Factor	FY26	Cost Factor	FY27	Cost Factor	FY28	FY23-FY28 Total	% Fixed	Total Fixed
51020 Salaries - Full-Time Positions	\$ 202,259.00	25%	\$ 50,564.75	1.06	\$ 53,598.64	1.03	\$ 55,206.59	1.03	\$ 56,862.79	1.03	\$ 58,568.68	1.03	\$ 60,325.74	\$ 335,127.18	90%	\$ 301,614.46
52010 FICA - Regular	\$ 12,540.00	25%	\$ 3,135.00	1.06	\$ 3,323.10	1.03	\$ 3,422.79	1.03	\$ 3,525.48	1.03	\$ 3,631.24	1.03	\$ 3,740.18	\$ 20,777.79	90%	\$ 18,700.01
52011 FICA - Medicare	\$ 2,933.00	25%	\$ 733.25	1.06	\$ 777.25	1.03	\$ 800.56	1.03	\$ 824.58	1.03	\$ 849.32	1.03	\$ 874.80	\$ 4,859.75	90%	\$ 4,373.77
52020 Retirement	\$ 6,604.00	25%	\$ 1,651.00	1.06	\$ 1,750.06	1.03	\$ 1,802.56	1.03	\$ 1,856.64	1.03	\$ 1,912.34	1.03	\$ 1,969.71	\$ 10,942.31	90%	\$ 9,848.08
52030 Health and Medical Premiums	\$ 34,906.00	25%	\$ 8,726.50	1.03	\$ 8,988.30	1.03	\$ 9,257.94	1.03	\$ 9,535.68	1.03	\$ 9,821.75	1.03	\$ 10,116.41	\$ 56,446.58	90%	\$ 50,801.92
52100 Workers' Compensation Premium	\$ 1,953.00	25%	\$ 488.25	1.03	\$ 502.90	1.03	\$ 517.98	1.03	\$ 533.52	1.03	\$ 549.53	1.03	\$ 566.02	\$ 3,158.20	90%	\$ 2,842.38
52110 Workers' Compensation Employer's Fee	\$ 40.00	25%	\$ 10.00	1.03	\$ 10.30	1.03	\$ 10.61	1.03	\$ 10.93	1.03	\$ 11.26	1.03	\$ 11.59	\$ 64.68	90%	\$ 58.22
52999 Other Employee Benefits	\$ 1,250.00	25%	\$ 312.50	1.03	\$ 321.88	1.03	\$ 331.53	1.03	\$ 341.48	1.03	\$ 351.72	1.03	\$ 362.27	\$ 2,021.38	90%	\$ 1,819.24
53030 Travel - Employees	\$ 1,000.00	25%	\$ 250.00	1.03	\$ 257.50	1.03	\$ 265.23	1.03	\$ 273.18	1.03	\$ 281.38	1.03	\$ 289.82	\$ 1,617.10	90%	\$ 1,455.39
54010 Maintenance & Repairs - Building/Structure	\$ 525.00	25%	\$ 131.25	1.03	\$ 135.19	1.03	\$ 139.24	1.03	\$ 143.42	1.03	\$ 147.72	1.03	\$ 152.15	\$ 848.98	100%	\$ 848.98
54040 Maintenance & Repairs - Vehicles	\$ 3,000.00	25%	\$ 750.00	1.03	\$ 772.50	1.03	\$ 795.68	1.03	\$ 819.55	1.03	\$ 844.13	1.03	\$ 869.46	\$ 4,851.31	100%	\$ 4,851.31
54050 Maintenance & Repair - Furniture/Fixtures/Equipment	\$ 90,000.00	0%	\$ -	1.03	\$ -	1.03	\$ -	1.03	\$ -	1.03	\$ -	1.03	\$ -	\$ -	100%	\$ -
55020 Contract - Attorney Fees	\$ 6,000.00	25%	\$ 1,500.00	1.03	\$ 1,545.00	1.03	\$ 1,591.35	1.03	\$ 1,639.09	1.03	\$ 1,688.26	1.03	\$ 1,738.91	\$ 9,702.61	100%	\$ 9,702.61
55030 Contract - Professional Services	\$ 37,000.00	0%	\$ -	1.03	\$ -	1.03	\$ -	1.03	\$ -	1.03	\$ -	1.03	\$ -	\$ -	100%	\$ -
55999 Contract - Other Services	\$ 1,000.00	25%	\$ 250.00	1.03	\$ 257.50	1.03	\$ 265.23	1.03	\$ 273.18	1.03	\$ 281.38	1.03	\$ 289.82	\$ 1,617.10	100%	\$ 1,617.10
56010 Software	\$ 2,500.00	25%	\$ 625.00	1.03	\$ 643.75	1.03	\$ 663.06	1.03	\$ 682.95	1.03	\$ 703.44	1.03	\$ 724.55	\$ 4,042.76	100%	\$ 4,042.76
56020 Supplies - General Office	\$ 2,000.00	25%	\$ 500.00	1.03	\$ 515.00	1.03	\$ 530.45	1.03	\$ 546.36	1.03	\$ 562.75	1.03	\$ 579.64	\$ 3,234.20	100%	\$ 3,234.20
56040 Supplies - Furniture/Fixtures/Equipment (Non-Capital)	\$ 15,000.00	25%	\$ 3,750.00	1.03	\$ 3,862.50	1.03	\$ 3,978.38	1.03	\$ 4,097.73	1.03	\$ 4,220.66	1.03	\$ 4,347.28	\$ 24,256.54	90%	\$ 21,830.88
56120 Supplies - Vehicle Fuel	\$ 14,000.00	25%	\$ 3,500.00	1.03	\$ 3,605.00	1.03	\$ 3,713.15	1.03	\$ 3,824.54	1.03	\$ 3,939.28	1.03	\$ 4,057.46	\$ 22,639.43	90%	\$ 20,375.49
56121 Supplies - Vehicle Lub & Anti Freeze	\$ 1,000.00	25%	\$ 250.00	1.03	\$ 257.50	1.03	\$ 265.23	1.03	\$ 273.18	1.03	\$ 281.38	1.03	\$ 289.82	\$ 1,617.10	90%	\$ 1,455.39
56122 Supplies - Vehicle Tires	\$ 2,500.00	25%	\$ 625.00	1.03	\$ 643.75	1.03	\$ 663.06	1.03	\$ 682.95	1.03	\$ 703.44	1.03	\$ 724.55	\$ 4,042.76	90%	\$ 3,638.48
56999 Supplies - Other	\$ 10,000.00	25%	\$ 2,500.00	1.03	\$ 2,575.00	1.03	\$ 2,652.25	1.03	\$ 2,731.82	1.03	\$ 2,813.77	1.03	\$ 2,898.19	\$ 16,171.02	90%	\$ 14,553.92
57050 Employee Training	\$ 2,000.00	25%	\$ 500.00	1.03	\$ 515.00	1.03	\$ 530.45	1.03	\$ 546.36	1.03	\$ 562.75	1.03	\$ 579.64	\$ 3,234.20	100%	\$ 3,234.20
57070 Insurance - General Liability/Property	\$ 11,085.00	25%	\$ 2,771.25	1.03	\$ 2,854.39	1.03	\$ 2,940.02	1.03	\$ 3,028.22	1.03	\$ 3,119.07	1.03	\$ 3,212.64	\$ 17,925.58	100%	\$ 17,925.58
57080 Postage	\$ 3,000.00	25%	\$ 750.00	1.03	\$ 772.50	1.03	\$ 795.68	1.03	\$ 819.55	1.03	\$ 844.13	1.03	\$ 869.46	\$ 4,851.31	100%	\$ 4,851.31
57090 Printing/Publishing/Advertising	\$ 2,000.00	25%	\$ 500.00	1.03	\$ 515.00	1.03	\$ 530.45	1.03	\$ 546.36	1.03	\$ 562.75	1.03	\$ 579.64	\$ 3,234.20	100%	\$ 3,234.20
57150 Subscriptions & Dues	\$ 5,400.00	25%	\$ 1,350.00	1.03	\$ 1,390.50	1.03	\$ 1,432.22	1.03	\$ 1,475.18	1.03	\$ 1,519.44	1.03	\$ 1,565.02	\$ 8,732.35	100%	\$ 8,732.35
57160 Telecommunications	\$ 7,200.00	25%	\$ 1,800.00	1.03	\$ 1,854.00	1.03	\$ 1,909.62	1.03	\$ 1,966.91	1.03	\$ 2,025.92	1.03	\$ 2,086.69	\$ 11,643.14	100%	\$ 11,643.14
57170 Utilities - Electricity	\$ 85,000.00	0%	\$ -	1.03	\$ -	1.03	\$ -	1.03	\$ -	1.03	\$ -	1.03	\$ -	\$ -	15%	\$ -
57171 Utilities - Natural Gas	\$ 3,675.00	25%	\$ 918.75	1.03	\$ 946.31	1.03	\$ 974.70	1.03	\$ 1,003.94	1.03	\$ 1,034.06	1.03	\$ 1,065.08	\$ 5,942.85	100%	\$ 5,942.85
57173 Utilities - Water	\$ 5,660.00	25%	\$ 1,415.00	1.03	\$ 1,457.45	1.03	\$ 1,501.17	1.03	\$ 1,546.21	1.03	\$ 1,592.59	1.03	\$ 1,640.37	\$ 9,152.80	100%	\$ 9,152.80
57999 Other Operating Costs	\$ 50,000.00	0%	\$ -	1.03	\$ -	1.03	\$ -	1.03	\$ -	1.03	\$ -	1.03	\$ -	\$ -	100%	\$ -
56030 Supplies - Field Supplies	\$ 50,000.00	0%	\$ -	1.03	\$ -	1.03	\$ -	1.03	\$ -	1.03	\$ -	1.03	\$ -	\$ -	80%	\$ -
56050 Supplies - Janitorial/Maintenance	\$ 2,000.00	25%	\$ 500.00	1.03	\$ 515.00	1.03	\$ 530.45	1.03	\$ 546.36	1.03	\$ 562.75	1.03	\$ 579.64	\$ 3,234.20	100%	\$ 3,234.20
56090 Supplies - Safety	\$ 2,000.00	25%	\$ 500.00	1.03	\$ 515.00	1.03	\$ 530.45	1.03	\$ 546.36	1.03	\$ 562.75	1.03	\$ 579.64	\$ 3,234.20	100%	\$ 3,234.20
56110 Supplies - Uniforms/Linen	\$ 3,375.00	25%	\$ 843.75	1.03	\$ 869.06	1.03	\$ 895.13	1.03	\$ 921.99	1.03	\$ 949.65	1.03	\$ 978.14	\$ 5,457.72	100%	\$ 5,457.72
58060 Lease Purchase	\$ 4,200.00	25%	\$ 1,050.00	1.03	\$ 1,081.50	1.03	\$ 1,113.95	1.03	\$ 1,147.36	1.03	\$ 1,181.78	1.03	\$ 1,217.24	\$ 6,791.83	100%	\$ 6,791.83
<b>Allocated Water Operating Expenses</b>	\$ 684,605.00		\$ 93,151.25	104.81%	\$ 97,628.31	103%	\$ 100,557.16		\$ 103,573.87		\$ 106,681.09		\$ 109,881.52	\$ 611,473.19		\$ 561,099.01
54060 Maintenance Supplies	\$ 14,000.00	100%	\$ 14,000.00		\$ 10,000.00	1.03	\$ 10,300.00	1.03	\$ 10,609.00	1.03	\$ 10,927.27	1.03	\$ 11,255.09	\$ 67,081.36	90%	\$ 60,382.22
55030 Contract - Professional Services	\$ 30,000.00	100%	\$ 30,000.00		\$ 6,000.00	1.03	\$ 6,180.00	1.03	\$ 6,365.40	1.03	\$ 6,556.36	1.03	\$ 6,753.05	\$ 61,854.81	100%	\$ 61,854.81
57170 Utilities - Electricity	\$ 13,000.00	100%	\$ 13,000.00		\$ 13,000.00	1.03	\$ 13,390.00	1.03	\$ 13,791.70	1.03	\$ 14,205.45	1.03	\$ 14,631.61	\$ 82,018.77	15%	\$ 12,302.81
57173 Utilities - Water	\$ 455.00	100%	\$ 455.00		\$ 455.00	1.03	\$ 468.65	1.03	\$ 482.71	1.03	\$ 497.19	1.03	\$ 512.11	\$ 2,870.66	90%	\$ 2,583.59
58020 Equipment & Machinery	\$ 15,000.00	100%	\$ 15,000.00		\$ 2,000.00	1.03	\$ 2,060.00	1.03	\$ 2,121.80	1.03	\$ 2,185.45	1.03	\$ 2,251.02	\$ 25,618.27	90%	\$ 23,056.44
56030 Supplies - Field Supplies	\$ 14,000.00	100%	\$ 14,000.00		\$ 14,000.00	1.03	\$ 14,420.00	1.03	\$ 14,852.60	1.03	\$ 15,298.18	1.03	\$ 15,757.12	\$ 88,327.90	80%	\$ 70,662.32
57999 Other Operating Costs	\$ 19,000.00	100%	\$ 19,000.00		\$ 4,000.00	1.03	\$ 4,120.00	1.03	\$ 4,243.60	1.03	\$ 4,370.91	1.03	\$ 4,502.04	\$ 40,236.54	90%	\$ 36,212.89
<b>Base Operating Expenses</b>			\$ 105,455.00		\$ 49,455.00		\$ 50,938.65		\$ 52,466.81		\$ 54,040.81		\$ 55,662.04	\$ 368,018.31		\$ 267,055.10
Additional Operating Expenses (Additional Employee)					\$ 13,612.76	1.03	\$ 14,021.14	1.03	\$ 14,441.78	1.03	\$ 14,875.03	1.03	\$ 15,321.28	\$ 72,271.99	90%	\$ 65,044.79
<b>Additional Operating Expenses</b>	\$ -				\$ 13,612.76		\$ 14,021.14		\$ 14,441.78		\$ 14,875.03		\$ 15,321.28	\$ 72,271.99		\$ 65,044.79
<b>Debt and Reserves</b>																
Existing Loan Payments (Principal and Interest)	\$ 13,627.00	100%	\$ 13,627.00		\$ 13,627.00		\$ 13,627.00		\$ 13,627.00		\$ 13,627.00		\$ 13,627.00	\$ 81,762.00	100%	\$ 81,762.00
Additional Loan Payments	\$ -	100%	\$ -		\$ 2,293.38		\$ 2,293.38		\$ 2,293.38		\$ 15,199.46		\$ 15,199.46	\$ 37,279.04	100%	\$ 37,279.04
Debt Reserve (10%)	\$ -	100%	\$ -		\$ 229.34		\$ 229.34		\$ 229.34		\$ 1,519.95		\$ 1,519.95	\$ 3,727.90	100%	\$ 621.32
Operating Reserve	\$ -	100%	\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$ -	100%	\$ -
Emergency Reserve	\$ -	100%	\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$ -	100%	\$ -
Capital Reserve	\$ 17,959.86	100%	\$ 17,959.86		\$ 17,959.86		\$ 17,959.86		\$ 17,959.86		\$ 17,959.86		\$ 17,959.86	\$ 107,759.19	100%	\$ 107,759.19
Sludge Pumping Reserve	\$ -				\$ -		\$ 23,891.85		\$ 23,891.85		\$ 23,891.85		\$ 23,891.85	\$ 95,567.39		
<b>Total Debt and Reserves</b>	\$ 31,586.86	100%	\$ 31,586.86		\$ 34,109.58		\$ 58,001.43		\$ 58,001.43		\$ 72,198.11		\$ 72,198.11	\$ 326,095.53		\$ 227,421.55
<b>Total All Expenses</b>	\$ 716,191.86		\$ 230,193.11		\$ 194,805.65		\$ 223,518.37		\$ 228,483.88		\$ 247,795.04		\$ 253,062.95	\$ 1,377,859.02	81.3%	\$ 1,120,620.45
																<b>FY23-28 AVG \$ 186,770.07</b>

## 15. Addendum #1

In response to comments following a 2.21.23 council meeting to discuss the rate study, RCAC considered a 4<sup>th</sup> rate option that would *uniformly* distribute rate increases identified under Rate Option #3 during the FY25-FY28 period. Due to the cash flow (revenue) needs of the system, with absorption of allocated expenses, as well as additional operating expenses and debt identified in FY24, such an outcome could not be reasonably achieved for this period.

## 16. Addendum #2

In response to comments following a 2.28.23 council meeting to discuss the rate study, RCAC prepared a final option for Village consideration **based on Rate Option 3**. This rate option, named the “Village Trustee Option,” would incorporate proposed transfers from the water fund to the wastewater fund reducing the rate impact on sewer customers versus Rate Option 3.

Under this rate option, as directed by Village trustees, the initial rate increase (effective April 2023) would be **\$5** per month for standard residential customers (i.e., Rate Code SU01) with an average water consumption of 3,000 gallons during the December-February billing period. As with Rate Option 3, different access charges would apply to each code based on meter size. Consistent with Option 3, subsequent annual rate increases of 20%, 12%, 6%, and 3%, for FY25-FY28 (July 2024 through July 2027), respectively, for base and usage charges, would apply to all codes.

**Table 1: Projected Rates Under “Village Trustee Option” (April 2023)**

Rate Code	SU01	SU02-108	SU02-312	SU02-44	SU02-76	SU02TaxEx
Meter Size (inches)	0.75	0.75	0.75	1.5	3	1.5
Base Charge (No Usage)	\$ 17.00000	\$ 17.00	\$ 17.00	\$ 56.67	\$ 181.33	\$ 56.67
0	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00
999999999	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00

**Advantages:** Incorporating proposed transfers from the water fund to the wastewater fund will reduce the level of sewer rate increases versus Rate Option 3.

**Disadvantages:** The proposed transfer of funds from the water fund to the wastewater fund is not justified by allocation of water and wastewater costs; the ability of the wastewater fund to independently maintain its operations will be compromised.

**Table 2: Projected Fiscal Impact of “Village Trustee Option” (FY23-FY28)**

Village of Capitan Sewer Enterprise Fund (Village Trustee Option)						
	FY23 Est.	FY24	FY25	FY26	FY27	FY28
<b>Operating Revenue</b>						
Sewer Sales-Connections (Net 5% GRT)	\$ 54,338.16	\$ 91,427.33	\$ 91,427.33	\$ 109,712.80	\$ 122,878.33	\$ 130,251.03
Sewer Sales-Other (Net 5% GRT)	\$ 2,959.75	\$ 2,959.75	\$ 2,959.75	\$ 2,959.75	\$ 2,959.75	\$ 2,959.75
<b>Total Operating Revenue</b>	<b>\$ 57,297.91</b>	<b>\$ 94,387.08</b>	<b>\$ 94,387.08</b>	<b>\$ 112,672.54</b>	<b>\$ 125,838.08</b>	<b>\$ 133,210.78</b>
Additonal Revenue From Rate Adjustment	\$ 37,089.17	\$ -	\$ 18,285.47	\$ 13,165.54	\$ 7,372.70	\$ 3,907.53
Partial Year Adjustment	\$ (27,816.88)	\$ -	\$ -	\$ -	\$ -	\$ -
Write-Off/Billing Adjustments	\$ (318.05)	\$ (457.14)	\$ (548.56)	\$ (614.39)	\$ (651.26)	\$ (670.79)
<b>Adjusted Total Revenue</b>	<b>\$ 66,252.15</b>	<b>\$ 93,929.94</b>	<b>\$ 112,123.98</b>	<b>\$ 125,223.69</b>	<b>\$ 132,559.52</b>	<b>\$ 136,447.52</b>
Less: Basic Operating Expenses	\$ 105,455.00	\$ 49,455.00	\$ 50,938.65	\$ 52,466.81	\$ 54,040.81	\$ 55,662.04
Less: Allocation of Joint Fund Expenses	\$ 93,151.25	\$ 97,628.31	\$ 100,557.16	\$ 103,573.87	\$ 106,681.09	\$ 109,881.52
Less: Additional Operating Expenses (Additional Employee)	\$ -	\$ 13,612.76	\$ 14,021.14	\$ 14,441.78	\$ 14,875.03	\$ 15,321.28
<b>Net Operating Revenue</b>	<b>\$ (132,354.10)</b>	<b>\$ (66,766.13)</b>	<b>\$ (53,392.97)</b>	<b>\$ (45,258.77)</b>	<b>\$ (43,037.41)</b>	<b>\$ (44,417.32)</b>
Less: Existing Debt Payments (Principal & Interest)	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00	\$ 13,627.00
Less: Debt Payments (Addnl Projects)		\$ 2,293.38	\$ 2,293.38	\$ 2,293.38	\$ 15,199.46	\$ 15,199.46
Plus: Municipal Gross Receipts-Infrastructure	\$ 48,000.00	\$ 57,856.72	\$ 57,856.72	\$ 57,856.72	\$ 57,856.72	\$ 57,856.72
Plus: Return on Invested Funds		\$ 2,909.10	\$ 2,909.10	\$ 2,909.10	\$ 2,909.10	\$ 2,909.10
<b>Net System Revenue</b>	<b>\$ (97,981.10)</b>	<b>\$ (21,920.68)</b>	<b>\$ (8,547.53)</b>	<b>\$ (413.33)</b>	<b>\$ (11,098.05)</b>	<b>\$ (12,477.96)</b>
Plus: Operating Reserve Balance (from Reserve Allocation Worksheet)	\$ 115,544.96	\$ 35,849.24	\$ 33,697.75	\$ 24,898.37	\$ 27,541.52	\$ 21,679.07
Plus: Transfer from Water Fund	\$ 35,644.48	\$ 37,357.63	\$ 41,228.43	\$ 44,536.76	\$ 48,006.49	\$ 49,446.68
<b>Net Position Before Contribution to Reserves</b>	<b>\$ 53,208.34</b>	<b>\$ 51,286.18</b>	<b>\$ 66,378.65</b>	<b>\$ 69,021.80</b>	<b>\$ 64,449.97</b>	<b>\$ 58,647.80</b>
Debt Reserve (10%)		\$ 229.34	\$ 229.34	\$ 229.34	\$ 1,519.95	\$ 1,519.95
Operating Reserve						
Emergency Reserve						
Capital Reserve	\$ 17,359.10	\$ 17,359.10	\$ 17,359.10	\$ 17,359.10	\$ 17,359.10	\$ 17,359.10
Sludge Pumping Reserve			\$ 23,891.85	\$ 23,891.85	\$ 23,891.85	\$ 23,891.85
<b>Total Reserves</b>	<b>\$ 17,359.10</b>	<b>\$ 17,588.44</b>	<b>\$ 41,480.28</b>	<b>\$ 41,480.28</b>	<b>\$ 42,770.89</b>	<b>\$ 42,770.89</b>
<b>Net Position After Reserves</b>	<b>\$ 35,849.24</b>	<b>\$ 33,697.75</b>	<b>\$ 24,898.37</b>	<b>\$ 27,541.52</b>	<b>\$ 21,679.07</b>	<b>\$ 15,876.91</b>
Operating Revenue/Expenses (incl. debt service)	31.2%	53.2%	61.8%	67.2%	64.8%	65.1%
Revenue/Expenses (incl. debt service)	48.2%	93.4%	90.9%	99.1%	96.9%	98.3%
Projected Debt Coverage Ratio with Transfer from Water Fund		197.0%	122.1%	150.8%	124.7%	124.8%

**Note:** Determination of Debt Coverage Ratio includes water fund transfers and treats contributions to the sludge pumping reserve, a required obligation, as a cash expense.

**Table 3: Rate Impact of “Village Trustee Option” for Standard Residential Customers at Selected Usage Levels  
—Rate Code SU01 (April 2023)**

SU-01 (Residential Sewer)					Active # of Accounts	223
Monthly Usage Level (Gallons)	Option 1 (No Change)	Option 2 (Uniform Adjustment)	Option 3 (Recommended)	Village Trustee Option	% of Registers at or Below this Winter Usage Level	
0	\$15.00	\$35.25	\$21.68	\$17.00	8.5%	
3,000	\$15.00	\$35.25	\$27.68	<b>\$20.00</b>	61.0%	
6,000	\$15.00	\$35.25	\$33.68	\$23.00	87.9%	
10,000	\$15.00	\$35.25	\$41.68	\$27.00	98.7%	
15,000	\$15.00	\$35.25	\$51.68	\$32.00	99.6%	
				Avg. Dec-Feb Billed Usage (Gals.)	3,132	