

Water and Wastewater

Rate Analysis Update

City of Bishopville

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Contents

1.	Introduction	1
2.	Revenue Requirements	2
2.1	Basis of Revenue Requirements	2
2.2	Projected Revenue Requirements	2
2.2.1	Operation and Maintenance	2
2.2.2	Capital Improvements	2
2.2.3	Capital Expenditures	3
3.	Allocation of Costs	4
3.1	Allocation of Cost Components	4
3.2	Distribution to Customer Categories	4
4.	Rate Schedule Development	6
4.1	Water Department	6
4.2	Wastewater Department	6
4.3	Rate Design	6
5.	Proposed Rates	7
6.	Rate Comparison	8

Appendices

Appendix A – Rate Tables

1. Introduction

The City of Bishopville owns, operates and maintains a water supply and distribution system that provides potable water to residential, commercial, and industrial customers, both within and outside of its corporate limits. The water source is groundwater, which is supplied by five (5) groundwater wells. Prior to distribution, chemical treatment is performed and includes the addition of lime, phosphate for corrosion, and sodium hypochlorite for disinfection. Storage for the system includes four (4) elevated tanks. The City of Bishopville also owns, operates, and maintains a wastewater collection, transportation, and treatment system. The system provides retail wastewater treatment service to residential, commercial, and industrial customers, both within and outside of its corporate limits. In order to provide these services, sufficient total revenue must be received to ensure proper operation and maintenance, development and perpetuation of the system, and continuing maintenance of the utility's financial integrity. The revenue should be received from the customers on an equitable and fair cost basis.

The following report outlines a cost-of-service rate study, which is the determination and allocation of the costs of providing utility services to various categories of customers as well as the development of rates to recover the cost of services equitably from each category. The identification of the rate base must reflect the utility's need to maintain and meet future needs. The concepts and procedures described herein are based on engineering and economic principles that are generally accepted and widely followed throughout the utility industry. An effort has been made to ensure that rates developed are truly cost based by drawing on the knowledge of the City of Bishopville's system and utilizing the experience gained in rate development of other systems. It should be recognized that the results of a cost-of-service study are highly dependent on the accuracy and reliability of the record-keeping systems that furnish the basic information for the study.

The purpose of this study is to determine:

1. whether or not the City's present water and wastewater rate structure is adequate to meet the financial needs of the City of Bishopville;
2. whether or not there is a more effective rate system which would better appropriate water and wastewater system costs such that the expenses of a given service are, in fact, being paid by those receiving the service;
3. whether or not the present rate structures are fair and equitable to in-town customers, out-of-town customers, and large as well as small customers.

Recommendations were then made to ensure that the three items listed above were indeed met by the City's water and wastewater systems.

2. Revenue Requirements

The first step in utility rate making is to determine the total annual operating revenue requirements for the period the rates are to be effective. Revenue requirements for the water and wastewater departments include operation and maintenance, capital improvements, capital expenditures and depreciation.

2.1 Basis of Revenue Requirements

The two widely used methods for determining the total revenue requirements of a utility system are the “cash basis” and “utility basis”. The cash basis method is utilized here and is presented in projecting revenue requirements. This is the method generally used by publicly owned utilities and is basically an extension of the cash-oriented budgeting and accounting system. It is most desirable when bond financing with periodic payments toward debt is necessary.

2.2 Projected Revenue Requirements

The projected revenues are comprised of several expenditure categories. These categories include operation and maintenance, capital improvements, and capital expenditures.

In order to complete an accurate rate study for both the water and wastewater departments, the operating budget was divided into the water revenue requirements as shown on Table 1 and the wastewater revenue requirements as shown on Table 2. The costs were separated based on water system annual expenditures and wastewater system annual expenditures. The historical revenue requirements are from revenue/expenditure breakdowns for fiscal year 2017/2018 through 2021/2022. Fiscal year 2023/2024 data are from the water and wastewater budgets. The revenue requirements were projected for the next five (5) years (2024/2025 fiscal year through 2028/2029 fiscal year). The revenue requirements were derived from proposed system expenditures and inflation increases.

The depreciation expense was not included in the revenue requirements because detailed costs for capital improvements have been incorporated into the budget.

Based on the City’s fiscal year 2022/2023 audit, the Water and Sewer operating expenses exceeded the operating revenues, which illustrates that the City’s existing water and wastewater rates should be increased to ensure expenses will be covered by the revenues from water and wastewater charges. Covid relief funds were included in the revenues for the 2022/2023 fiscal year audit for the Water and Sewer Fund.

2.2.1 Operation and Maintenance

The operation and maintenance component is comprised of salaries and benefits, materials and supplies, and general overhead. For the water operation and maintenance expenditures, salaries and benefits are projected to increase by 5% annually based on historical trends. Materials and supplies are projected to increase at a higher rate of 15% annually. This increase will compensate for any increase in the amount of use. General overhead is projected from the past budgets at an annual increase of 10%. For the wastewater operation and maintenance expenditures, salaries and benefits are projected to increase by 5% annually based on historical trends. Materials and supplies are projected to increase at a slightly higher rate of 10% annually. This increase will compensate for any increase in the amount of use. General overhead is projected from the past budgets at an annual increase of 15%.

2.2.2 Capital Improvements

Capital improvements include major improvements to the water and wastewater systems that are required to improve the systems. They do not include operation and maintenance for the systems. These expenses were taken from the City’s Capital Improvement Plan (CIP) which is included as part of the City’s Impact Fee Report. The CIP includes proposed projects through 2028/2029. Tables 3 and 4 outline the capital improvements for the water and wastewater systems.

2.2.3 Capital Expenditures

Capital expenditures include repair and replacement improvements to the existing water and wastewater systems as well as the purchase of necessary major equipment needed for the operation and improvement of the water and wastewater systems. This includes items such as backhoe, bush hog, automotive equipment, etc. The water system has a projected annual budget from \$231,139 to \$889,500 over the five (5) fiscal years, and the wastewater system has a projected annual budget from \$60,000 to \$137,000.

3. Allocation of Costs

The establishment of an adequate rate schedule should reflect the cost of providing that service to the different categories of customers. A sound analysis of the adequacy of charges requires allocation of costs among the customers commensurate with their service requirements in order to recognize differences in costs of furnishing service to different types of customers (in-town, out-of-town, residential, and commercial). Cost allocation procedures recognize the particular service requirements of the customers for total volume, peak rates of use, and other factors. Cost allocation includes:

1. Allocation of costs applicable to the components of base and customer costs.
2. Distribution of costs by the various cost components to respective categories of customers in accordance with the respective responsibility of the customer categories for each of the component costs.

Cost allocation and rate development can be studied on a year-to-year basis or a test year concept. The rates were calculated for each of the five (5) years.

3.1 Allocation of Cost Components

Generally, the cost of service for each utility can be separated into two (2) primary cost components: base costs and customer costs. For this analysis, the cost components are defined as follows:

1. Base costs are costs that tend to vary with the total quantity of use plus those expenses associated with service to customers under average load conditions.
2. Customer costs (annual bills) are costs associated with serving customers, regardless of the amount or rate of use.

For the water and wastewater systems, 70 percent of costs were allocated to the base component and 30 percent to the customer component. The allocation of revenue requirements to cost components for the 2024/2025 fiscal year for both the water and wastewater departments are presented in Tables 5 and 6, respectfully. These calculations were completed for each fiscal year, but just the 2024/2025 fiscal year is included as an example in the Appendix.

3.2 Distribution to Customer Categories

Cost of providing service can reasonably be determined for groups or categories of customers that have similar use characteristics or service requirements. In establishing customer categories, consideration is given to service characteristics, demand patterns, and whether service is provided both inside and outside the City (jurisdiction) limits. The general categories of customers used in this analysis are defined as follows:

- Residential (in-town and out-of-town): Single and multi-family dwellings
- Commercial (in-town and out-of-town): Non-residential
- Industrial

The component costs developed in the allocation of revenue requirements tables (Tables 5 and 6) were distributed and the responsibility for each component was expressed in terms of “unit cost”. By distributing component costs to customer categories, it is the unit cost that forms the proposed water and wastewater rates for the base cost and the usage cost.

In order to develop the unit cost for each cost component, the units of service must first be determined. This procedure is illustrated for both water and wastewater systems respectively in Tables 7 and 8. These calculations were completed for each fiscal year, but just the 2024/2025 fiscal year is included as an example in the Appendix. The units of service include the total quantity of use by each category and the number of bills for one year. Based on historical data, it was assumed that the City would not see an increase in the number of water or wastewater customers and only a slight

increase in usage for water or wastewater. Historically the City has not seen any significant growth and has actually seen a decrease in customers and usage for certain customer groups.

Once the units of service are defined for each customer category, the component costs can be distributed to each category in proportion to units of service applicable to that category. This procedure defined the unit cost of service for each cost component and is illustrated for water and wastewater in Tables 9 and 10. These calculations were completed for each fiscal year, but just the 2024/2025 fiscal year is included as an example in the Appendix. Unit costs are determined by dividing the allocated component costs (Tables 5 and 6) by the respective units of service (Tables 7 and 8).

4. Rate Schedule Development

The preceding sections of this report have discussed the general procedures for determining the total costs of service for the water and wastewater systems and assigning these costs to categories of customers in accordance with their respective service requirements. The final step in this analysis is the development of rate schedules to recover, as nearly as possible, the allocated cost of service from the customers. The objective here is to develop rate structures that will attain the maximum degree of equitableness among customers, while being consistent with local practices and conditions. The City of Bishopville's current rate schedule for the water and wastewater departments is included in Tables 11 and 12.

4.1 Water Department

It is common practice in the industry for each rate schedule to be comprised of a two-part rate, which includes one initial charge to recover customer costs and some minimum volume related costs, with a volumetric charge to recover the remaining volume cost. The City of Bishopville's current rate schedule for the water department as displayed in Table 11 indicates the initial charge which includes a minimum volume of 3,750 gallons for monthly in-town and out-of-town residential, commercial, and industrial customers. The commercial customers are provided service at the same rate as the residential customers, and industrial customers are charged the same base cost as out-of-town customers with a reduced volume charge. The City of Bishopville requested a change to the rate structure to include an increase in cost as usage increases, so the proposed rate structure follows that model.

An increasing block rate schedule should recover the costs of serving different categories of customers while maintaining reasonable equitableness between customer categories. Conservation block rates or increasing rates charge increasing volumetric rates for increasing consumption. Blocks rates provide a means of recovering costs for general service categories of residential, commercial, and industrial users under a single rate schedule by recognizing the differing water use and associated cost characteristics.

Based on an average monthly usage, 97% of residential customers and 87% of commercial customers have usage up to 2,000 gallons. Therefore, the proposed rate structure includes 2,000 gallons in the base rate.

4.2 Wastewater Department

Development of rates for the wastewater department is similar to that previously presented for the water department. The City of Bishopville's current rate schedule for the wastewater department is displayed in Table 12. The proposed rates are based on the same rate structure as the proposed water rates. Wastewater charges are based on water usage.

4.3 Rate Design

Customer costs are incurred regardless of the amount of water, if any, that is used. These costs should be recovered through the minimum charge. The minimum charge also has an allowance for a specific quantity of usage. The design of rates for water use in blocks beyond the minimum usage is accomplished by assigning base costs to all categories of customers as if a perfect load factor was achieved.

5. Proposed Rates

In this study, revenue requirements have been projected for a five period, 2024/2025 through 2028/2029. Water and wastewater rates were calculated for each of the five (5) years. Tables 13 and 14 illustrate the calculated water and wastewater rates. As illustrated the out-of-town customers have a higher base cost and slightly higher usage charge.

As illustrated in Tables 13 and 14, the rates fluctuate each year due to the revenue requirements (especially the capital improvements) varying year by year, while the number of customers was assumed to remain the same. In addition the increase in rates starting year 1 is a significant increase. Therefore, Tables 15 and 16 illustrate an alternative rate increase strategy which dampens the increases over the 5-year period. It is recommended that the City review the rates annually and evaluate the revenues and projected expenses as well as the customer base to determine if a smaller rate increase may be justified.

6. Rate Comparison

Existing rates and proposed water and wastewater rates for the City of Bishopville were compared with eighteen (18) other utilities in various surrounding areas on the following Tables 17 and 18 using the alternative rates calculated. The comparison was based on monthly usage of 5,000 gallons for in-town residential customers. As illustrated in Tables 17 and 18, the City of Bishopville rates become one of the most expensive for Year 3, 4 and 5, but that is comparing the projected City of Bishopville rates with current rates from other municipalities. Other municipalities may also raise their rates over the next several years, so this comparison would need to be completed again closer to Years 3, 4 and 5 to have an accurate representation of how the City of Bishopville water and wastewater rates compare to the other systems at that time. The systems used in the comparison were:

- City of Abbeville
- City of Aiken
- City of Bamberg
- City of Barnwell
- City of Bennettsville
- City of Camden
- Cassatt Water
- Town of Clio
- City of Conway
- City of Darlington
- City of Hartsville
- Town of Lynchburg
- City of Manning
- Town of Mayesville
- Sumter County
- City of Sumter
- Town of Turbeville

Appendix

**TABLE 1
WATER REVENUE REQUIREMENTS**

CATEGORY	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029
OPERATION & MAINTENANCE												
Salaries & Benefits	\$348,202	\$304,353	\$319,358	\$321,756	\$516,424	\$368,315	\$325,085	\$341,339	\$358,406	\$376,327	\$395,143	\$414,900
Materials & Supplies	\$221,025	\$116,020	\$288,599	\$107,934	\$361,503	\$110,500	\$117,000	\$134,550	\$154,733	\$177,942	\$204,634	\$235,329
General Overhead	\$170,185	\$267,888	\$232,474	\$113,882	\$365,237	\$479,942	\$527,142	\$579,856	\$637,842	\$701,626	\$771,789	\$848,967
TOTAL O & M EXPENSES	\$739,412	\$688,261	\$840,431	\$543,572	\$1,243,164	\$958,757	\$969,227	\$1,055,745	\$1,150,981	\$1,255,895	\$1,371,565	\$1,499,196
CAPITAL IMPROVEMENTS	\$0	\$0	\$0	\$0	\$0	\$0	\$256,000	\$1,295,000	\$274,000	\$271,250	\$11,250	\$236,250
CAPITAL EXPENDITURES	\$0	\$0	\$0	\$0	\$0	\$889,500	\$286,500	\$300,825	\$315,866	\$331,660	\$348,243	\$365,655
TOTAL REVENUE REQUIREMENTS	\$739,412	\$688,261	\$840,431	\$543,572	\$1,243,164	\$1,848,257	\$1,511,727	\$2,651,570	\$1,740,847	\$1,858,804	\$1,731,058	\$2,101,101

**TABLE 2
WASTEWATER REVENUE REQUIREMENTS**

CATEGORY	<i>2017/2018</i>	<i>2018/2019</i>	<i>2019/2020</i>	<i>2020/2021</i>	<i>2021/2022</i>	<i>2022/2023</i>	<i>2023/2024</i>	<i>2024/2025</i>	<i>2025/2026</i>	<i>2026/2027</i>	<i>2027/2028</i>	<i>2028/2029</i>
OPERATION & MAINTENANCE												
Salaries & Benefits	\$508,102	\$444,118	\$466,012	\$605,847	\$717,733	\$522,418	\$488,094	\$512,499	\$538,124	\$565,030	\$593,281	\$622,945
Materials & Supplies	\$262,184	\$137,264	\$352,147	\$410,116	\$478,419	\$148,800	\$141,300	\$155,430	\$170,973	\$188,070	\$206,877	\$227,565
General Overhead	\$317,835	\$523,492	\$377,967	\$529,146	\$510,524	\$885,242	\$1,006,142	\$1,157,063	\$1,330,623	\$1,530,216	\$1,759,749	\$2,023,711
TOTAL O & M EXPENSES	<i>\$1,088,121</i>	<i>\$1,104,874</i>	<i>\$1,196,126</i>	<i>\$1,545,109</i>	<i>\$1,706,676</i>	<i>\$1,556,460</i>	\$1,635,536	\$1,824,992	\$2,039,719	\$2,283,316	\$2,559,907	\$2,874,221
CAPITAL IMPROVEMENTS	\$0	\$0	\$0	\$0	\$0	\$0	\$378,000	\$494,000	\$800,000	\$566,750	\$232,750	\$247,750
CAPITAL EXPENDITURES	\$0	\$0	\$0	\$0	\$0	\$137,000	\$60,000	\$63,000	\$66,150	\$69,458	\$72,930	\$76,577
TOTAL REVENUE REQUIREMENTS	<i>\$1,088,121</i>	<i>\$1,104,874</i>	<i>\$1,196,126</i>	<i>\$1,545,109</i>	<i>\$1,706,676</i>	<i>\$1,693,460</i>	\$2,073,536	\$2,381,992	\$2,905,869	\$2,919,524	\$2,865,588	\$3,198,548

**TABLE 3
WATER CAPITAL IMPROVEMENTS**

Priority	Capital Improvements	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029
1	New Elevated Water Storage Tank & 12" Water Lines (SCIIP)	\$100,000					
4	12-Inch Water Lines (SCIIP)	\$41,000					
5	8-inch Water Lines (SCIIP)	\$15,000					
6	12-Inch Water Lines (SCIIP)	\$50,000					
8	12-Inch Water Line James Industrial Park (SCIIP)	\$30,000					
9	Lime Feed James Industrial Park Well	\$20,000					
	Total 23/24	\$256,000					
1	New Elevated Water Storage Tank & 12" Water Lines (SCIIP)		\$499,000				
4	12-Inch Water Lines (SCIIP)		\$88,000				
5	8-inch Water Lines (SCIIP)		\$51,000				
6	12-Inch Water Lines (SCIIP)		\$83,000				
8	12-Inch Water Line James Industrial Park (SCIIP)		\$124,000				
9	Lime Feed James Industrial Park Well		\$220,000				
14	Automated Meter Reading - AMR		\$230,000				
	Total FY 24/25		\$1,295,000				
6	12-Inch Water Lines (SCIIP)			\$15,000			
9	Lime Feed James Industrial Park Well			\$69,000			
14	Automated Meter Reading - AMR			\$170,000			
17	12" Water Line			\$20,000			
	Total FY 25/26			\$274,000			
14	Automated Meter Reading - AMR				\$170,000		
17	12" Water Line				\$80,000		
18	Lime Feed Piedmont Well				\$10,000		
19	Fire Hydrant Replacement in LMI Areas Phase I				\$11,250		
	Total FY 26/27				\$271,250		
14	Automated Meter Reading - AMR					\$170,000	
17	12" Water Line					\$77,000	
18	Lime Feed Piedmont Well					\$123,000	
19	Fire Hydrant Replacement in LMI Areas Phase I					\$45,000	
22	Fire Hydrant Replacement in LMI Areas Phase II					\$11,250	
	Total FY 27/28					\$426,250	
18	Lime Feed Piedmont Well						\$30,000
19	Fire Hydrant Replacement in LMI Areas Phase I						\$18,750
22	Fire Hydrant Replacement in LMI Areas Phase II						\$45,000
23	Lee Industrial Park Well - Lime Feed						\$120,000
25	Fire Hydrant Replacement in LMI Areas Phase III						\$11,250
26	Fire Hydrant Replacement in non-LMI Areas Phase I						\$11,250
	Total FY 28/29						\$236,250

Note:

1. Costs are based on prices from recent construction projects. There is no control over the cost of construction labor, materials, equipment, or the contractor's methods of determining price or competitive bidding on future projects.
2. Most of the project costs are based on the City receiving grant funds, and costs shown are the City's portion of the project cost.

**TABLE 4
WASTEWATER CAPITAL IMPROVEMENTS**

Priority	Capital Improvements	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029
2	WWTP Improvements (SCIP)	\$263,000					
3	LCI Wastewater Pump Station (SCIP)	\$35,000					
7	Phase IV Sewer Interceptor	\$80,000					
	Total FY 23/24	\$378,000					
2	WWTP Improvements (SCIP)		\$90,000				
3	LCI Wastewater Pump Station (SCIP)		\$64,000				
7	Phase IV Sewer Interceptor		\$250,000				
10	Shaw Street Wastewater Pump Station		\$20,000				
11	Wastewater Collection System Rehabilitation - Phase I		\$10,000				
12	Wastewater Treatment Plant Electrical Improvements		\$30,000				
13	Wastewater Treatment Plant Improvements - Phase II		\$30,000				
	Total FY 24/25		\$494,000				
2	WWTP Improvements (SCIP)			\$31,000			
3	LCI Wastewater Pump Station (SCIP)			\$15,000			
7	Phase IV Sewer Interceptor			\$40,000			
10	Shaw Street Wastewater Pump Station			\$54,000			
11	Wastewater Collection System Rehabilitation - Phase I			\$30,000			
12	Wastewater Treatment Plant Electrical Improvements			\$140,000			
13	Wastewater Treatment Plant Improvements - Phase II			\$300,000			
15	James Industrial Park Wastewater Pump Station			\$170,000			
16	Morgan Street Wastewater Pump Station			\$20,000			
	Total FY 25/26			\$800,000			
10	Shaw Street Wastewater PS				\$30,000		
11	Wastewater Collection System Rehabilitation - Phase I				\$10,000		
12	Wastewater Treatment Plant Electrical Improvements				\$30,000		
13	Wastewater Treatment Plant Improvements - Phase II				\$170,000		
15	James Industrial Park Wastewater Pump Station				\$168,000		
16	Morgan Street Wastewater Pump Station				\$120,000		
19	Wastewater Collection System Rehabilitation in LMI Areas - Phase I				\$18,750		
20	Wastewater Collection System Rehabilitation Phase II				\$20,000		
	Total FY 26/27				\$566,750		
16	Morgan Street Wastewater Pump Station					\$14,000	
19	Wastewater Collection System Rehabilitation in LMI Areas - Phase I					\$75,000	
20	Wastewater Collection System Rehabilitation Phase II					\$35,000	
21	I-20 Wastewater Pump Station					\$90,000	
22	Wastewater Collection System Rehabilitation in LMI Areas - Phase II					\$18,750	
	Total FY 27/28					\$232,750	
19	Wastewater Collection System Rehabilitation in LMI Areas - Phase I						\$31,250
21	I-20 Wastewater Pump Station						\$64,000
22	Wastewater Collection System Rehabilitation in LMI Areas - Phase II						\$75,000
24	Wastewater Collection System Rehabilitation - Phase III						\$40,000
25	Wastewater Collection System Rehabilitation in LMI Areas - Phase III						\$18,750
26	Wastewater Collection System Rehabilitation in non-LMI Areas - Phase I						\$18,750
	Total FY 28/29						\$247,750

Note:

1. Costs are based on prices from recent construction projects. There is no control over the cost of construction labor, materials, equipment, or the contractor's methods of determining price or competitive bidding on future projects.
2. Most of the project costs are based on the City receiving grant funds, and costs shown are the City's portion of the project cost.

TABLE 5
ALLOCATION TO WATER COST COMPONENTS
FISCAL YEAR 2024/2025

CATEGORY	<i>TOTAL WATER COSTS</i>	WATER BASE	WATER CUSTOMER COSTS
OPERATION & MAINTENANCE			
Salaries & Benefits	<i>\$341,339</i>	\$238,937	\$102,402
Materials & Supplies	<i>\$134,550</i>	\$94,185	\$40,365
General Overhead	<i>\$579,856</i>	\$405,899	\$173,957
TOTAL O&M EXPENSES	<i>\$1,055,745</i>	\$739,022	\$316,724
CAPITAL IMPROVEMENTS	<i>\$1,295,000</i>	\$906,500	\$388,500
CAPITAL EXPENDITURES	<i>\$300,825</i>	\$210,578	\$90,248
TOTAL REVENUE REQUIREMENTS	<i>\$2,651,570</i>	\$1,856,099	\$795,471

TABLE 6
ALLOCATION TO WASTEWATER COST COMPONENTS
FISCAL YEAR 2024/2025

CATEGORY	<i>TOTAL WASTEWATER COSTS</i>	WASTEWATER BASE	WASTEWATER CUSTOMER COSTS
OPERATION & MAINTENANCE			
Salaries & Benefits	<i>\$512,499</i>	\$358,749	\$153,750
Materials & Supplies	<i>\$155,430</i>	\$108,801	\$46,629
General Overhead	<i>\$1,157,063</i>	\$809,944	\$347,119
TOTAL O & M EXPENSES	<i>\$1,824,992</i>	\$1,277,494	\$547,498
CAPITAL IMPROVEMENTS	<i>\$494,000</i>	\$345,800	\$148,200
CAPITAL EXPENDITURES	<i>\$63,000</i>	\$44,100	\$18,900
TOTAL REVENUE REQUIREMENTS	<i>\$2,381,992</i>	\$1,667,394	\$714,598

**TABLE 7
WATER UNITS OF SERVICE
FISCAL YEAR 2024/2025**

CATEGORY	ANNUAL USE PER 1,000 GAL	AVERAGE RATE PER 1,000 GAL	CAPACITY FACTOR Percentage	TOTAL CAPACITY PER 1,000 GAL	ANNUAL BILLS
In-Town:					
Residential	52,511	144	100	14	15,192
Commercial	28,084	77	100	8	2,496
Industrial	<u>171,889</u>	<u>471</u>	<u>100</u>	<u>47</u>	<u>48</u>
Total In-Town	252,484	692	100	69	17,736
Out-of-Town:					
Residential	11,508	32	100	3	2,988
Commercial	14,771	40	100	4	612
Industrial	<u>95,258</u>	<u>261</u>	<u>100</u>	<u>26</u>	<u>168</u>
Total Out-of-Town	121,537	333	100	33	3,768
Total System	374,021	1,025	150	102	21,504

**TABLE 8
WASTEWATER UNITS OF SERVICE
FISCAL YEAR 2024/2025**

CATEGORY	ANNUAL USE PER 1,000 GAL	AVERAGE RATE PER 1,000 GAL	CAPACITY FACTOR Percentage	TOTAL CAPACITY PER 1,000 GAL	ANNUAL BILLS
In-Town:					
Residential	52,511	144	100	14	15,192
Commercial	28,084	77	100	8	2,496
Industrial	<u>83,922</u>	<u>230</u>	<u>100</u>	<u>23</u>	<u>48</u>
Total In-Town	164,517	451	100	45	17,736
Out-of-Town:					
Residential	11,508	32	100	3	2,988
Commercial	14,771	40	100	4	612
Industrial	<u>160,065</u>	<u>439</u>	<u>100</u>	<u>44</u>	<u>168</u>
Total Out-of-Town	186,344	72	100	51	3,768
Total System	350,861	523	100	96	21,504

**TABLE 9
WATER UNIT COSTS
FISCAL YEAR 2024/2025**

CATEGORY	<i>WATER TOTAL</i>	BASE	ANNUAL BILLS
TOTAL SYSTEM UNITS		374,021	21,504
In-Town (per 1,000 gallons)		252,484	17,736
Out-of-Town (per 1,000 gallons)		121,537	3,768
O&M EXPENSES	<i>\$1,055,745</i>	\$739,022	\$316,724
In-Town Unit Cost		\$495,144.62 \$1.96	\$212,204.84 \$11.96
Out-of-Town Unit Cost		\$243,877.20 \$2.01	\$104,518.80 \$27.74
CAPITAL IMPROVEMENTS	<i>\$1,295,000</i>	\$906,500	\$388,500
Capital Expenditure Unit Cost		\$906,500.00 \$2.42	\$388,500.00 \$18.07
CAPITAL EXPENDITURES	<i>\$300,825</i>	\$210,578	\$90,248
Capital Expenditure Unit Cost		\$210,577.50 \$0.56	\$90,247.50 \$4.20
TOTAL UNIT COST	<i>\$2,651,570</i>	\$1,856,099	\$795,471
In-Town		\$4.95	\$34.23
Out-of-Town		\$4.99	\$50.00

**TABLE 10
WASTEWATER UNIT COSTS
FISCAL YEAR 2024/2025**

CATEGORY	<i>WASTEWATER TOTAL</i>	BASE	ANNUAL BILLS
TOTAL SYSTEM UNITS		350,861	21,504
In-Town (per 1,000 gallons)		164,517	17,736
Out-of-Town (per 1,000 gallons)		186,344	3,768
O&M EXPENSES	<i>\$1,824,992</i>	<i>\$1,277,494</i>	<i>\$547,498</i>
In-Town Unit Cost		\$510,997.76 \$3.11	\$218,999.04 \$12.35
Out-of-Town Unit Cost		\$766,496.64 \$4.11	\$328,498.56 \$87.18
CAPITAL IMPROVEMENTS	<i>\$494,000</i>	<i>\$345,800</i>	<i>\$148,200</i>
Capital Expenditure Unit Cost		\$345,800.00 \$0.99	\$148,200.00 \$6.89
CAPITAL EXPENDITURES	<i>\$63,000</i>	<i>\$44,100</i>	<i>\$18,900</i>
Capital Expenditure Unit Cost		\$44,100.00 \$0.13	\$18,900.00 \$0.88
TOTAL UNIT COST	<i>\$2,381,992</i>	<i>\$1,667,394</i>	<i>\$714,598</i>
In-Town		<i>\$4.22</i>	<i>\$20.12</i>
Out-of-Town		<i>\$5.22</i>	<i>\$94.95</i>

**TABLE 11
EXISTING WATER RATES**

	Residential & Commercial		
	In-Town	Out-of-Town	Industrial
Base Cost (3,750 gal) Minimum Charge	\$13.93	\$20.19	\$20.19
Next 3,750 gallons	\$1.82	\$2.76	\$0.75
Next 6,250 gallons	\$1.50	\$2.25	\$0.75
Next 10,000 gallons	\$1.23	\$1.84	\$0.75
Over 23,750 gallons	\$0.85	\$1.25	\$0.75

	Employee	
	In-Town	Out-of-Town
Base Cost (10,000 gal) Minimum Charge	\$13.93	\$20.19
13,750 gallons	\$1.23	\$1.84
Over 23,750 gallons	\$0.85	\$1.25

Rates based on per 1,000 gallons

**TABLE 12
EXISTING WASTEWATER RATES**

	Residential		Commercial			Industrial	
	In-Town	Out-of-Town	In-Town Water & Sewer	In-Town Sewer Only	Out-of-Town	In-Town	Out-of-Town
Base Cost (3,750 gal) Minimum Charge	\$13.88	\$20.82	\$13.88	\$14.12	\$20.82	\$16.70	\$25.03
Over 3,750 Gallons	\$2.85	\$4.27	\$2.85	\$2.85	\$4.27	\$3.45	\$5.16

	Employee	
	In-Town	Out-of-Town
Base Cost (10,000 gal) Minimum Charge	\$13.88	\$2.85
Over 10,000 Gallons	\$20.82	\$4.27

Rates based on per 1,000 gallons

**TABLE 13
CALCULATED WATER RATE SUMMARY**

CATEGORY	EXISTING¹	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
RESIDENTIAL & COMMERCIAL						
In-Town						
Base Cost Minimum Charge (2,000 Gallons)	\$13.93	\$44.12	\$27.73	\$29.51	\$26.91	\$33.07
Cost per 1,000 gallons (2,001 - 6,000 Gallons)	\$1.82	\$4.95	\$3.23	\$3.43	\$3.18	\$3.84
Cost per 1,000 gallons (Over 6,001 Gallons)	\$1.82	\$5.95	\$4.23	\$4.43	\$4.18	\$4.84
Out-of-Town						
Base Cost Minimum Charge (2,000 Gallons)	\$20.19	\$59.99	\$45.03	\$48.40	\$47.56	\$55.65
Cost per 1,000 gallons (2,001 - 6,000 Gallons)	\$2.76	\$4.99	\$3.28	\$3.50	\$3.25	\$3.93
Cost per 1,000 gallons (Over 6,001 Gallons)	\$2.76	\$5.99	\$4.28	\$4.50	\$4.25	\$4.93
INDUSTRIAL						
In-Town						
Base Cost Minimum Charge (5,000 Gallons)	\$20.19	\$58.97	\$37.41	\$39.80	\$36.45	\$44.60
Cost per 1,000 gallons (5,001 - 10,000 Gallons)	\$0.75	\$4.95	\$3.23	\$3.43	\$3.18	\$3.84
Cost per 1,000 gallons (Over 10,001 Gallons)	\$0.75	\$5.95	\$4.23	\$4.43	\$4.18	\$4.84
Out-of-Town						
Base Cost Minimum Charge (5,000 Gallons)	\$20.19	\$74.97	\$54.88	\$58.88	\$57.31	\$67.44
Cost per 1,000 gallons (5,001 - 10,000 Gallons)	\$0.75	\$4.99	\$3.28	\$3.50	\$3.25	\$3.93
Cost per 1,000 gallons (Over 10,001 Gallons)	\$0.75	\$5.99	\$4.28	\$4.50	\$4.25	\$4.93

Notes

¹The existing base charge includes 3,750 gallons of usage.

**TABLE 14
CALCULATED WASTEWATER RATE SUMMARY**

CATEGORY	EXISTING¹	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
RESIDENTIAL & COMMERCIAL						
In-Town						
Base Cost Minimum Charge (2,000 Gallons)	\$13.88	\$28.55	\$36.22	\$34.51	\$31.32	\$34.75
Cost per 1,000 gallons (2,001 - 6,000 Gallons)	\$2.85	\$4.22	\$5.17	\$5.09	\$4.87	\$5.39
Cost per 1,000 gallons (Over 6,001 Gallons)	\$2.85	\$5.22	\$6.17	\$6.09	\$5.87	\$6.39
Out-of-Town						
Base Cost Minimum Charge (2,000 Gallons)	\$20.82	\$105.40	\$122.14	\$130.73	\$139.24	\$155.97
Cost per 1,000 gallons (2,001 - 6,000 Gallons)	\$4.27	\$5.22	\$6.31	\$6.39	\$6.34	\$7.07
Cost per 1,000 gallons (Over 6,001 Gallons)	\$4.27	\$6.22	\$7.31	\$7.39	\$7.34	\$8.07
INDUSTRIAL						
In-Town						
Base Cost Minimum Charge (5,000 Gallons)	\$16.70	\$41.20	\$51.73	\$49.78	\$45.93	\$50.92
Cost per 1,000 gallons (5,001 - 10,000 Gallons)	\$3.45	\$4.22	\$5.17	\$5.09	\$4.87	\$5.39
Cost per 1,000 gallons (Over 10,001 Gallons)	\$3.45	\$5.22	\$6.17	\$6.09	\$5.87	\$6.39
Out-of-Town						
Base Cost Minimum Charge (5,000 Gallons)	\$25.03	\$121.07	\$141.08	\$149.90	\$158.27	\$177.19
Cost per 1,000 gallons (5,001 - 10,000 Gallons)	\$5.16	\$5.22	\$6.31	\$6.39	\$6.34	\$7.07
Cost per 1,000 gallons (Over 10,001 Gallons)	\$5.16	\$6.22	\$7.31	\$7.39	\$7.34	\$8.07

Notes

¹The existing base charge includes 3,750 gallons of usage.

**TABLE 15
CALCULATED WATER RATE SUMMARY ALTERNATIVE**

CATEGORY	EXISTING¹	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
RESIDENTIAL						
In-Town						
Base Cost Minimum Charge (2,000 Gallons)	\$13.93	\$17.76	\$21.59	\$25.42	\$29.25	\$33.07
Cost per 1,000 gallons (2,001 - 6,000 Gallons)	\$1.82	\$2.37	\$2.74	\$3.10	\$3.47	\$3.84
Cost per 1,000 gallons (Over 6,001 Gallons)	\$1.82	\$3.37	\$3.74	\$4.10	\$4.47	\$4.84
Out-of-Town						
Base Cost Minimum Charge (2,000 Gallons)	\$20.19	\$35.52	\$40.55	\$45.59	\$50.62	\$55.65
Cost per 1,000 gallons (2,001 - 6,000 Gallons)	\$2.76	\$3.59	\$3.67	\$3.76	\$3.85	\$3.93
Cost per 1,000 gallons (Over 6,001 Gallons)	\$2.76	\$4.59	\$4.67	\$4.76	\$4.85	\$4.93
COMMERCIAL						
In-Town						
Base Cost Minimum Charge (2,000 Gallons)	\$13.93	\$18.11	\$21.85	\$25.59	\$29.33	\$33.07
Cost per 1,000 gallons (2,001 - 6,000 Gallons)	\$1.82	\$2.37	\$2.86	\$3.35	\$3.84	\$4.33
Cost per 1,000 gallons (Over 6,001 Gallons)	\$1.82	\$3.37	\$3.86	\$4.35	\$4.84	\$5.33
Out-of-Town						
Base Cost Minimum Charge (2,000 Gallons)	\$20.19	\$36.22	\$41.08	\$45.94	\$50.80	\$55.66
Cost per 1,000 gallons (2,001 - 6,000 Gallons)	\$2.76	\$3.59	\$4.33	\$5.07	\$5.81	\$6.55
Cost per 1,000 gallons (Over 6,001 Gallons)	\$2.76	\$4.59	\$5.33	\$6.07	\$6.81	\$7.55
INDUSTRIAL						
In-Town						
Base Cost Minimum Charge (5,000 Gallons)	\$20.19	\$25.21	\$30.06	\$34.91	\$39.75	\$44.60
Cost per 1,000 gallons (5,001 - 10,000 Gallons)	\$0.75	\$2.37	\$2.74	\$3.11	\$3.48	\$3.85
Cost per 1,000 gallons (Over 10,001 Gallons)	\$0.75	\$3.37	\$3.74	\$4.10	\$4.47	\$4.84
Out-of-Town						
Base Cost Minimum Charge (5,000 Gallons)	\$20.19	\$46.98	\$52.10	\$57.21	\$62.33	\$67.44
Cost per 1,000 gallons (5,001 - 10,000 Gallons)	\$0.75	\$3.59	\$3.67	\$3.76	\$3.85	\$3.93
Cost per 1,000 gallons (Over 10,001 Gallons)	\$0.75	\$4.59	\$4.67	\$4.76	\$4.85	\$4.93

Notes

¹The existing base charge includes 3,750 gallons of usage.

**TABLE 16
CALCULATED WASTEWATER RATE SUMMARY ALTERNATIVE**

CATEGORY	EXISTING¹	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
RESIDENTIAL						
In-Town						
Base Cost Minimum Charge (2,000 Gallons)	\$13.88	\$18.04	\$25.73	\$33.41	\$41.09	\$48.77
Cost per 1,000 gallons (2,001 - 6,000 Gallons)	\$2.85	\$3.42	\$4.03	\$4.63	\$5.24	\$5.84
Cost per 1,000 gallons (Over 6,001 Gallons)	\$2.85	\$4.42	\$5.03	\$5.63	\$6.24	\$6.84
Out-of-Town						
Base Cost Minimum Charge (2,000 Gallons)	\$20.82	\$36.09	\$50.08	\$64.07	\$78.06	\$92.05
Cost per 1,000 gallons (2,001 - 6,000 Gallons)	\$4.27	\$4.51	\$4.89	\$5.26	\$5.64	\$6.01
Cost per 1,000 gallons (Over 6,001 Gallons)	\$4.27	\$5.51	\$5.89	\$6.26	\$6.64	\$7.01
COMMERCIAL						
In-Town						
Base Cost Minimum Charge (2,000 Gallons)	\$13.88	\$21.00	\$27.94	\$34.88	\$41.82	\$48.76
Cost per 1,000 gallons (2,001 - 6,000 Gallons)	\$2.85	\$4.30	\$5.20	\$6.10	\$7.00	\$7.90
Cost per 1,000 gallons (Over 6,001 Gallons)	\$2.85	\$5.30	\$6.20	\$7.10	\$8.00	\$8.90
Out-of-Town						
Base Cost Minimum Charge (2,000 Gallons)	\$20.82	\$42.00	\$54.51	\$67.02	\$79.53	\$92.04
Cost per 1,000 gallons (2,001 - 6,000 Gallons)	\$4.27	\$6.45	\$7.80	\$9.15	\$10.50	\$11.85
Cost per 1,000 gallons (Over 6,001 Gallons)	\$4.27	\$7.45	\$8.80	\$10.15	\$11.50	\$12.85
INDUSTRIAL						
In-Town						
Base Cost Minimum Charge (5,000 Gallons)	\$16.70	\$28.30	\$37.80	\$47.29	\$56.79	\$66.28
Cost per 1,000 gallons (5,001 - 10,000 Gallons)	\$3.45	\$5.30	\$7.08	\$8.86	\$10.63	\$12.41
Cost per 1,000 gallons (Over 10,001 Gallons)	\$3.45	\$6.30	\$8.08	\$9.86	\$11.63	\$13.41
Out-of-Town						
Base Cost Minimum Charge (5,000 Gallons)	\$25.03	\$49.62	\$64.73	\$79.85	\$94.96	\$110.07
Cost per 1,000 gallons (5,001 - 10,000 Gallons)	\$5.16	\$6.45	\$8.41	\$10.38	\$12.34	\$14.31
Cost per 1,000 gallons (Over 10,001 Gallons)	\$5.16	\$7.45	\$9.41	\$11.38	\$13.34	\$15.31

Notes

¹The existing base charge includes 3,750 gallons of usage.

TABLE 17
WATER RATE COMPARISON ALTERNATIVE
RESIDENTIAL IN-TOWN

Rank	Community	5,000 Gallons
1	<i>Bishopville (Existing)</i>	<i>\$16.21</i>
2	Aiken, City of	\$17.20
3	Bennettsville, City of	\$17.25
4	Sumter, City of	\$17.70
5	Barnwell, City of	\$19.75
6	Conway, City of	\$23.08
7	Bishopville (Proposed Year 1)	\$24.86
8	Sumter County	\$25.27
9	Manning, City of	\$26.44
10	Bishopville (Proposed Year 2)	\$29.80
11	Abbeville, City of	\$29.80
12	Camden, City of	\$30.45
13	Darlington, City of	\$30.47
14	Lynchburg, Town of	\$30.50
15	Hartsville, City of	\$31.96
16	Clio, Town of	\$32.35
17	Bamberg, City of	\$34.55
18	Bishopville (Proposed Year 3)	\$34.73
19	Mayesville Town of	\$35.40
20	Turbeville, Town of	\$36.00
21	Bishopville (Proposed Year 4)	\$39.67
22	Bishopville (Proposed Year 5)	\$44.60
23	Cassatt Water	\$48.59
<i>Average Rate</i>		<i>\$28.63</i>

TABLE 18
WASTEWATER RATE COMPARISON ALTERNATIVE
RESIDENTIAL IN-TOWN

Rank	Community	5,000 Gallons
1	<i>Bishopville (Existing)</i>	\$17.44
2	Bennettsville, City of	\$23.90
3	Conway, City of	\$25.06
4	Barnwell, City of	\$26.50
5	Bishopville (Proposed Year 1)	\$28.30
6	Lynchburg, Town of	\$29.40
7	Sumter County	\$30.00
8	Sumter, City of	\$31.20
9	Turbeville, Town of	\$33.00
10	Camden, City of	\$33.23
11	Aiken, City of	\$34.21
12	Abbeville, City of	\$35.93
13	Manning, City of	\$36.07
14	Bishopville (Proposed Year 2)	\$37.80
15	Hartsville, City of	\$39.50
16	Clio, Town of	\$39.91
17	Darlington, City of	\$39.78
18	Bishopville (Proposed Year 3)	\$47.30
19	Bamberg, City of	\$49.32
20	Bishopville (Proposed Year 4)	\$56.80
21	Mayesville Town of	\$62.40
22	Bishopville (Proposed Year 5)	\$66.29
<i>Average Rate</i>		<i>\$35.59</i>

