



ST. JAMES PARISH, LOUISIANA

FINAL REPORT

WATER RATE STUDY

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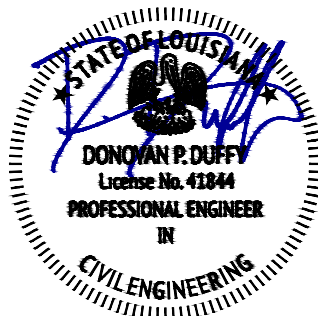
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SECTION 1. PURPOSE AND OVERVIEW OF THE STUDY

PURPOSE

St. James Parish used in-house staff to conduct a comprehensive water rate study for a number of reasons, including meeting long-term revenue requirements, ensuring revenue stability in water rates, providing adequate funding for capital improvements, and ensuring rates comply with applicable laws. The rates developed in this study were developed based on industry standards, meet the requirements of the American Rescue Plan Act of 2021 (ARPA), and Louisiana's Water Sector Program established by Act 410 of the 2021 Regular Session and continued through SB 48 of the 2022 Regular Session. This report is provided with the intent of assisting the parish in maintaining the financial health of its water utility, transparently communicating with the residents and businesses it serves, and documenting the rate study analysis.

PARISH OF ST. JAMES BACKGROUND

St. James Parish operates using a Council-President form of government, which is structured by Home-Rule charter. It is a part of the New Orleans–Metairie, Louisiana metropolitan statistical area, is situated between New Orleans and Baton Rouge, and is divided nearly equally by the Mississippi River. St. James is one of Louisiana's nineteen original parishes, which was created by act of the territorial legislature on March 31, 1807. The original seat of government was the community of St. James on the west bank of the Mississippi River but was moved in 1869 to what is now Convent, Louisiana, on the east bank. St. James Parish has a total area of 258 square miles, of which 242 square miles is land and 16 square miles (6.4%) is water. It is the fourth-smallest parish in Louisiana by land area and second-smallest by total area.

St. James Parish provides water service to approximately 6,801 metered customers, including about 101 households outside the Parish limits. By consumption, about 85% of the water utility's customers are single family residential users and industry. Most recent records indicate that residential households use approximately 51% of total water sold; Industry, small businesses, commercial, and government consume the remaining 49%.

The Parish's municipal water source is acquired 100% from the Mississippi River. Two water treatment facilities collect, process, and distribute potable water throughout the jurisdiction. A water line bored under the Mississippi River allows each plant to transfer water to the other should the need arise. Over the past two decades water production infrastructure, especially on the east bank of the parish, has not maintained pace with demand. The most critical piece of new infrastructure required to increase capacity and rectify this shortfall is the construction of a new water clarifier and filter on the east bank of the parish. This project would double the output of potable water in the most vulnerable sector of the water system.

OVERVIEW OF THE STUDY

Key Issues Addressed – In addition to ensuring that water rates collect revenue sufficient to meet the annual operating and capital improvement plans, there are a number of key issues that were specifically addressed in this study, including:

- **Statewide Doctrine** – The State of Louisiana, specifically the Department of Health and Hospitals, regulate many of the functions performed by municipal water providers. St. James Parish Government has ensured that all doctrine, regulatory guidance, and laws that govern potable water production is an integral component of this study.
- **Long-Term Expansion** – Although St. James Parish is considered a small, county level government, its transportation infrastructure is well positioned to experience rapid growth. Within the last 24 months two new subdivision have been developed with St. James Parish utilities assuming responsibility for water, gas, and sewer. This study takes into account the requirements to expand utility infrastructure to maintain pace with a rapid increase in utilities demand. Subsequently, St. James Parish's current water infrastructure capacity has fallen behind recent growth. Additional water clarifiers and water storage infrastructure are required to maintain capacity with the current level of demand.
- **Rate Design** – The current rate design includes a fixed monthly charge that collects about 28% of the rate revenue, and a uniform volumetric rate based on monthly water consumption that collect the remainder of the rate revenue. The current rate design is not adequately covering all of the Parish's expenses. The Operations Department staff is *not* recommending that St. James Parish Government maintain the current rate design, but rather update rates based upon the actual costs of water collection, processing, and distribution services provided to customers.
- **Financial Planning** – Long-range financial plans for the water utility were closely examined to ensure they meet annual operating expenses, debt services, capital improvement costs, and broader financial management concerns.

Recommendations – The Operations Department recommends that the Parish take the following actions:

- Adopt the long-range financial plan that the Operations Department has developed, including the projected revenues, expenditures, and annual net revenue requirements.
- Based on this plan, annual increases in total rate revenue of 11% for fiscal years 2024 and 2025, 9% in years 2026 and 2027 and 5% in 2028, in addition to increases by the CPI. These increases are needed over the next five years to fund operations and maintenance as well as the majority of the capital improvement programs identified the Capital Improvement Plan of 2021. All subsequent increases should follow the Consumer Price Index for All Urban Consumers: Water and Sewer.
- Develop a rate design that collects approximately 35% of rate revenue from fixed charges, 65% from volumetric charges, and has updated to the costs of service.
- Adopt rates that do not exceed the cost of providing service after a predetermined percentage of revenue is applied to the Utilities Operations Reserve fund, the System Replacement Reserve fund, and the Rate Stabilization Reserve fund. Currently, these funds do not exist and should be created. The current utilities fund balance (065) should be allocated to these new reserve funds.
- Adopt the revenue stabilization rates that would implement small, temporary rate increases whenever rate revenues drop by 10 percent or more in any given month, or for increase in costs during substantial increases in demand, such as a winter storm or hurricane.
- Maintain the recommended reserve fund balance targets.

RATE STUDY METHODOLOGY

Components of the Rate Study Methodology – A comprehensive utility rate study typically encompasses three major components: (1) preparation of a financial plan which identifies the net revenue requirements for the utility; (2) analysis of the cost to serve each customer class, and; (3) the rate structure design.

These three steps, which are shown in **Figure 1**, are intended to follow industry standards and reflect the fundamental principles of cost-of-service rate making embodied in the American Water Works Association (AWWA) Principles of Water Rates, Fees, and Charges¹, also referred to as the Manual M1. These steps address general requirements for equity and fairness. Additionally, the St. James Parish Department of Operations ensured that projected rates did not exceed the cost of providing water service and be proportionate to the cost of service for all customers. In terms of the chronology of the study, these three steps represent the order they were performed in this study.

As a part of this rate study, the Operations Department staff projected revenues and expenditures, developed net revenue requirements, performed cost-of-service rate analyses, and prepared new water rates based upon the data mentioned above. The following sections in this report present an overview of the methodologies, assumptions, and data used along with the financial plans and rates developed during this study.

Figure 1. Primary Components of a Rate Study



Rate Design Criteria – Several criteria are typically considered in setting rates and developing sound rate structures. The fundamentals of this process have been documented in a number of rate-setting manuals, such as the AWWA Manual M1. The foundation for evaluating rate structures is generally credited to James C. Bonbright in the *Principles of Public Utility Rates*² which outlines pricing policies, theories, and economic concepts along with various rate designs. Both manuals are on hardcopy file in the St. James Parish Department of Operations. The following is a simplified list of the attributes of a sound rate structure:

- Rates should be easy to understand from the customer's perspective.
- Rates should be easy to administer from the utility's perspective.

¹ *Principles of Water Rates, Fees, and Charges, Manual of Water Supply Practices, M1*, AWWA, seventh edition, 2017.

² James C. Bonbright; Albert L. Daniels and David R. Kamerschen, *Principles of Public Utility Rates*, (Arlington, VA: Public Utilities Report, Inc., Second Edition, 1988), p. 383-384.

- Rates should promote the efficient allocation of the resource.
- Rates should be equitable and non-discriminating (i.e., cost based).
- There should be continuity in the rate making philosophy over time.
- Addressing other utility policies (e.g., encouraging conservation & economic development).
- Rates should provide month-to-month and year-to-year revenue stability.

The following section covers basic rate design criteria that Operations Department staff considered as a part of their review of the rate structure.

Rate Structure Considerations – The fundamental starting point in considering rate structures is the relationship between fixed costs and variable costs. Fixed costs typically do not vary with the amount of water consumed. Debt service and Parish administrative personnel are examples of a fixed cost. In contrast, variable costs such as the cost of chemicals and electricity that the Parish tends to change with the quantity of water sold. The vast majority of rate structures for municipal water works contain a fixed or minimum charge in combination with a volumetric charge.

Key Financial Assumptions – Following are the key assumptions used in the water rate analyses:

- **Funding of Capital Projects** – After the Parish’s extensive review of the planned capital improvement projects (CIP) and funding requirements, the Operations Department has determined that the water utility can only fund the currently planned CIP by blending the use of grant funding opportunities and the reserve fund balance. The capital improvement projects included in the rate program are designed to keep existing infrastructure in good repair, enhance current service levels, and increase delivery capacity. There is over a \$1 million deficiency in fiscal year 2023 in which the proposed rates in this report are not expected to fund. It is essential that the proposed rate structure resolve the annual water revenue deficiency currently identified in the budget. Within the current fund balance the cash position is approximately \$18,700,000, with \$10,000,000 in depreciable assets.
- **Reserve Targets** – Currently, St. James Parish Utilities operates using one comprehensive fund balance as a reserve fund. However, targeted reserve funds for operations and maintenance (O&M) and capital system replacement are being proposed and are set at the following levels for the water utilities:
 - ✓ Operating Reserve – 90-days of O&M expenses.
 - ✓ System Replacement Reserve – approximately 6.0% of net depreciable assets value.
 - ✓ Rate Stabilization Reserve – equal to 20% of current rate revenue.
- **Inflation and Growth Projections:**
 - ✓ Customer growth is estimated at 1.0 % annually based on historical growth.
 - ✓ General costs (such as professional and contractual services, fuel, insurance vehicle maintenance, etc.) are estimated at 6.0 % annually.
 - ✓ Ground water production costs are estimated at 5.0 % annually based on average annual increases.
 - ✓ Labor costs are estimated at 6.0 % annually and include health and retirement benefits.
 - ✓ Energy expenses are estimated to increase at a rate of 20% in FY 2023/24 and 5% annually thereafter.

- ✓ Inflation is not added to other budget items, such as late fee revenue, lease income, and miscellaneous fees.
- **Revenue Stabilization Rates** – New revenue stabilization rates were developed as part of this study with the intent of stabilizing the Parish’s variable rate revenue that may be affected by low water sales or increased expenses due hurricanes, winter storms, or the loss of major infrastructure. The current ordinances that govern revenue stabilization is St. James Parish Ordinances 09-02 and 21-06. These ordinances were reviewed to determine if modifications were required.
 - ✓ Once adopted these rates can be implemented when volumetric revenue drops by 10%, 15%, 20%, 25% and 30%.
 - ✓ Revenue Stabilization rates are revocable; when volumetric revenue losses subside, revenue stabilization rates would be rescinded and the current proposed volumetric rate would be used. Commodity or volumetric rates are charged per unit of water, or 1,000 gallons.
 - ✓ The Parish will provide adequate notice prior to implementation and rescission.
 - ✓ Although details are yet to be finalized, a key qualification for revenue stabilization rates to be implemented is the period and level of volumetric rate revenue losses (i.e., revenues below the expected revenue level). Higher volumetric rates, beginning with 10 percent increase would be implemented and, depending on the level of revenue losses, can be increased by additional increments of five percent but capped at 30 percent.

SECTION 2: WATER RATE STUDY

KEY WATER RATE STUDY ISSUES

The water rate analysis was undertaken with specific objectives, including:

- Generating sufficient revenue to meet projected funding requirements.
- Analyzing the impacts from hurricanes, flooding, winter storms, and COVID-19 impacts to customer consumption.
- Meeting target reserve fund levels and minimizing customer bill impact on rate payers.

The fixed and volume-based charges calculated were based on the net revenue requirements, number of customer accounts, water consumption, and other information. The following are the basic components included in this analysis:

- **Developing Unit Costs:** The water revenue requirements were “functionalized” into five categories: (1) customer service costs; (2) fixed costs; (3) commodity (or volume-based) costs; (4) fire protection costs; and (5) zonal-specific costs. Unit costs for each of these functions were determined based on allocations to functional areas, which reflect water consumption, peaking factors, number of accounts, and customer class.
- **Determining Revenue Requirements by Customer Class:** The total revenue that should be collected from each customer class was determined using the unit costs and the total units belonging to each class. For example, customer costs are allocated based on number of meters, while volume-related costs are allocated based on the water consumption for each class. Once the costs are allocated and the revenue requirement for each customer class is determined, collecting these revenue requirements from each customer class is addressed in the rate design.
- **Rate Design Fixed vs. Variable Costs:** The revenue requirements for each customer class are collected from fixed service charges and volumetric production charges. The cost-of-service analysis indicated that approximately 35% of the Parish’s costs are fixed and 65% are volumetric. The St. James Parish Operations staff recommends that the council adopt the rates proposed in this report, using an approximate 35/65 fixed/volumetric rate design, which better represents the utility’s true cost structure, and provides greater revenue stability compared to one that collects more revenue from volumetric rates.

WATER UTILITY REVENUE REQUIREMENTS

It is important for St. James Parish Utilities to maintain reasonable reserves in order to handle minor emergencies, fund working capital, maintain a good credit rating, and generally follow sound financial management practices. Rate increases are governed by the need to meet operating and capital costs, maintain adequate debt coverage and maintain sufficient reserve funds. The current condition of the Parish’s water utility, with regard to these objectives is as follows:

- **Meeting Net Revenue Requirements:** The Parish’s water utility is currently running a structural surplus with an ending fund balance for fiscal year 2022 of \$25,072,277 (cash position 18.7 million). However, in fiscal year 2022 there is deficit in annual revenue of \$4,151,900, and a projected revenue

deficit in fiscal year 2023 of \$2,139,700. For Fiscal Year 2023 the projected annual net revenue requirement is approximately \$4.9 million. This average revenue requirement assumes that most of the planned capital improvement projects will be funded over the next five years with reserve funds, rate revenue, and grant funding. Should federal grants not be approved and applied to expenses under the planned capital improvement program, the utilities fund balance will be substantially impacted during fiscal years 2023-2025. Volumetric rates fund the reserve accounts and capital projects. Subsequently, the current volumetric rate for residential customers is \$3.00, which is inadequate to fund water operations, and certainly not adequate to fund capital projects. The current fixed rate of \$11.00 does not cover the general and administrative expenses of the water utility. Water rates for commercial and industrial customers were drastically increased in 2021; therefore, rates for residential, small business, and government should be adjusted accordingly. The Operations Department is recommending the following volumetric and fixed rate adjustments, in addition to adjustments by the Consumer Price Index All Urban Consumers for Water and Sewer:

VOLUMETRIC RATE ADJUSTMENTS ¹				
Percent Increase in FY		Dollar Amount		New Rate
11% in fiscal year 2024:		\$3.00 (.011) = .33 + \$3.00		\$3.33
11% in fiscal year 2025:		\$3.33 (.011) = .37 + \$3.33		\$3.70
9% in fiscal year 2026:		\$3.70 (.09) = .33 + \$3.70		\$4.03
9% in fiscal year 2027:		\$4.03 (.09) = .36 + \$4.39		\$4.39
5% in fiscal year 2028:		\$4.39 (.05) = .21 + \$4.78		\$4.61
FIXED RATE ADJUSTMENTS ¹				
2024	2025	2026	2027	2028
1,061,052 / 5438 /12	1,092,884 / 5438 /12	1,125,671 / 5438 / 12	1,159,441 / 5438 /12	1,194,224 / 5438 /12
\$16.25	\$16.75	\$17.26	\$17.77	\$18.30

1. Residential, small business, and government billing was sourced from St. James Parish Annual Budget Billing Data 2022.

- Building and Maintaining Reserve Funds:** Currently, the St. James Parish Utilities budget uses one comprehensive fund balance and is not structured using reserve funds. The Operations Department recommends that the Parish maintain sufficient and prudent reserves for the water utility. The St. James Parish Operations Department recommends that the Parish maintain reserve levels in order to meet the following reserve fund target balances:
 - ✓ **Operating Reserve:** This fund should normally equal 90 days of the Utility's budgeted annual operating expenses, which is equal to a three-month (or 25%) cash reserve for normal operations. An Operating Reserve is intended to promote financial viability in the event of any short-term fluctuation in revenues and/or expenditures, such as those caused by weather patterns, the natural inflow and outflow of cash during billing cycles, natural variability in demand-based revenue streams (e.g., volumetric charges), and, particularly in periods of economic distress, changes or trends in age of receivables.
 - ✓ **Rate Stabilization Fund:** This fund has a target balance of 20% of the estimated annual rate revenue. Its objective is to further promote financial stability in the event of short-term reductions in rate revenues or substantial increases in demand.
 - ✓ **Capital System Replacement Reserve:** This fund should typically be equal to a minimum of 6% of the water utilities net depreciable capital assets. This target serves simply as a starting point for addressing long- term capital system replacement needs. The utility's most important assets are

its water clarifies and filters located at each processing plant.

Due to the fact that the St. James Parish Utilities Division does not currently have debt services, a debt reserve fund is not recommended in this study. If at some point the Parish Council issues additional debt for utilities, this policy should be revised to reflect the requirements at that time.

Figure 2 is the Summary of Water Revenue Requirements and summarizes the sources and uses of funds and net revenue requirements for the next five years. The Consumer Price Index for All Urban Consumers: Water and Sewer should be applied to rate increases thereafter. Capital projects over this period were not calculated into this chart and will be funded by reserve fund balance or grants.

Summary of Sources, Use of Funds, and Net Revenue Requirements	Budget	5-Year Rate Adoption Period				
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Sources of Water Funds						
Rate Revenue (Volumetric)	\$ 2,652,900	2,944,719	\$ 3,268,638	\$ 3,562,816	\$ 3,883,469	\$ 4,077,642
Gen/Admin Revenues (Flat Rate)	717,816	796,776	884,421	964,019	1,050,781	1,103,320
Interest Earnings	73,900	74,046	75,526	77,036	78,576	80,147
Total Sources of Funds	\$ 3,444,616	\$ 3,815,541	\$ 4,228,585	\$ 4,603,871	\$ 5,012,826	\$ 5,261,109
Uses of Water Funds ³						
Operating Expenses (Volumetric @ 3%)	\$ 3,430,100	\$ 3,533,003	\$ 3,638,993	\$ 3,748,163	\$ 3,860,608	\$ 3,976,426
Gen/Admin Expenses (Flat Rate @ 3%)	1,030,148	1,061,052	1,092,884	1,125,671	1,159,441	1,194,224
Total Water Expenses	\$ 4,460,248	\$ 4,594,055	\$ 4,731,877	\$ 4,873,833	\$ 5,020,048	\$ 5,170,650
Surplus (Deficiency) before Rate Increase	\$ (1,015,632.00)	\$ (1,149,439.44)	\$ (1,287,261.10)	\$ (1,429,217.42)	\$ (1,575,432.42)	\$ (1,726,033.87)
Additional Revenue from Rate Increases	-	370,924.76	783,969.18	1,159,254.51	1,568,209.62	1,816,493.10
Surplus (Deficiency) after Rate Increase	(1,015,632.00)	(778,514.68)	(503,291.92)	(269,962.91)	(7,222.80)	90,459.23
Projected Annual Rate Increase	-	0.11	0.11	0.09	0.09	0.05
Net Revenue Requirement Volumetric ¹	\$ (777,208.00)	\$ (588,284.00)	\$ (378,355.00)	\$ (188,347.38)	\$ 22,861.15	\$ 101,216.36
Net Revenue Requirement Gen/Admin ²	\$ (312,332.00)	\$ (264,276.68)	\$ (208,482.92)	\$ (161,631.54)	\$ (108,639.95)	\$ (90,904.13)

1. Total Sources of Funds less General and Administrative and interest earnings is the annual amount needed for water volumetric rates.

2. Total Sources of Funds Less Rate Revenue and interest earnings is the amount needed for flat rates.

3. Operating and General Administrative expenses were projected to increase at a rate of 3% per year.

Figure 3 summarizes the projected reserve fund balances and reserve targets for the next five years including the rate adjustment percentages mentioned above in Figure 2. Without adjusting water rates and excluding any capital projects over the next five fiscal years, the Parish will dip below target reserve levels in fiscal year 2031. This happens when the 2.1-million-dollar annual budget deficit depletes the reserve fund balances when rates are not increased. Detail of the parish water utility proposed 5-year financial plan are included in the Appendix of this report. These tables include revenue requirements, reserve funds, capital improvement detail, revenue sources and proposed rate increases for the 5-year period.

Figure 3. Summary of Water Reserve Funds

Beginning Reserve Fund Balances and Recommended Reserve Targets	Budget	5-Year Rate Adoption Period				
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Water Operations Fund	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000
<i>Recommended Minimum Target</i>	861,154	861,154	861,154	861,154	861,154	861,154
Water System Replacement Fund	\$14,400,000	\$8,637,500	\$8,637,500	\$4,615,000	\$4,615,000	\$4,615,000
<i>Recommended Minimum Target</i>	701,737	701,737	701,737	701,737	701,737	701,737
Rate Stabilization Fund	\$1,800,000	\$1,800,000	\$1,800,000	\$1,800,000	\$1,800,000	\$1,800,000
<i>Recommended Minimum Target</i>	600,000	600,000	600,000	600,000	600,000	600,000
Total Ending Balance¹	\$18,700,000	\$12,937,500	\$12,937,500	\$8,915,000	\$8,915,000	\$8,915,000
Total Recommended Minimum Target	\$2,162,891	\$2,162,891	\$2,162,891	\$2,162,891	\$2,162,891	\$2,162,891

1. In FY 2023, including incurred funds, the total cash position is calculated at \$18,700,000 with depreciable assets valued at \$10,000,000.

2. The chart above indicates cash position only and illustrates how capital projects impact the total ending balance through 2028.

CHARACTERISTICS OF WATER CUSTOMERS BY CLASS

The amount of consumption, the peaking factors, and the number of meters by customer class are all used in allocating costs as a part of the cost-of-service analysis. The Parish's most recent consumption data is summarized in **Figure 4**, peaking factors by customer class are summarized in **Figure 5**, and **Figure 6** compares the total number of meters by customer class.

Figure 4. Consumption Data

Customer Class	FY 2022 Volume (gallons) ¹	Percent of Total Volume
Residential	3,104,564	45.68%
Industrial	2,365,863	34.81%
Public Water West (Pleasure Bend)	520,035	7.65%
Commercial	429,138	6.31%
Small Business	193,876	2.85%
Government	180,942	2.66%
Misc.	2,023	0.03%
Grand Total	6,796,441	100.0%
Fire		

1. Consumption data source: St. James Parish Consumption Billing Data 2022.

Figure 5. Peaking Factors by Customer Class

Customer Class	Average Monthly Use	Peak Monthly Use	Peak Month Factor	Max Month Parish Factor
Residential	272,186	286,063	1.05	37.8%
Industrial	198,526	201,972	1.02	26.7%
Public Water West (Pleasure Bend)	47,204	77,300	1.64	12.8%
Commercial	37,096	91,252	2.46	10.2%
Small Business	17,678	84,127	4.75	11.1%
Government	12,942	16,037	1.24	0.02%
Misc.	N/A	N/A	N/A	N/A
Grand Total	585,632	756,751		100%
Fire	N/A	N/A	N/A	N/A

1. Based on peak monthly data (peak day data not available) St. James Parish Utility Billing Summary.xlsx.

Figure 6. Number of Meters by Customer Class

Customer Class	Number of Meters ¹	Percent of Total
Residential	4722	49.69%
Small Business	242	4.69%
Commercial	86	1.68%
Industrial	46	0.90%
Government	62	1.20%
Misc.	5	0.08%
Public Water West (Pleasure Bend)	1	0.02%
Grand Total	5,164	100.0%

1. Number of meters is from source: St. James Parish Utility Billing Summary.xlsx

COST OF SERVICE ANALYSIS

Once the revenue requirements for the water utility are determined, the cost-of-service analysis distributes those revenue requirements to each of the customer classes. The cost-of-service analysis consists of two major components: (1) the functionalization and classification of expenses, and (2) the allocation of costs to customer classes. This process is described as follows:

Functionalization, Classification, and Allocations

Most costs are not typically allocated 100% to fixed or variable categories and, therefore, are allocated to multiple functions of water service. The classification (i.e., functionalization) of costs provides the basis for allocating the classified costs to the following cost-causation components:

- **Commodity** related costs are those costs associated with the total consumption of water over a specified period of time (e.g., material, utility crews, fuel).
- **Capacity** related costs are those costs associated with the maximum-month demand and the design of Parish facilities required to meet this demand (e.g., chemicals, electricity, water plant crews).
- **Customer** related costs are administrative costs associated with having a customer on the water system, such as meter reading, postage and billing.
- **Fire Protection** costs are associated with providing sufficient capacity in the system for fire meters and other operations and maintenance costs of providing water to properties for public and private fire service protection.
- **Zonal** related costs are costs that are directly allocated to zonal surcharges that include the cost of electricity needed to pump water to further distances with the use of booster pumps or other required water distribution infrastructure. Currently, zonal charges are not implemented in St. James Parish.

Once costs have been organized in the Parish's functional budget categories, they are allocated to these cost components that are used as the basis for establishing new water rates and translate to fixed and variable charges. The tables in the Appendix show how the Parish's expenses were classified and allocated to these cost components and then into fixed and variable costs in more detail.

Fixed costs generally consist of costs that a utility incurs to serve customers irrespective of the amount of water they use. These include (1) the infrastructure (capacity-related facilities) required to provide service to customers, (2) costs associated with the peaking requirements, or maximum demand which affects the maximum size of water supply, treatment and delivery system, and (3) administrative and billing costs associated with management, meter reading, postage, and billing.

Variable costs are those that change as the volume of water produced and delivered changes. These commonly include the costs of chemicals used in the treatment process, energy related to pumping for transmission and distribution, utility service crews, material, and source of supply.

Ideally, utilities should recover all of their fixed costs from fixed charges and all of their variable costs from volumetric charges; when this is the case, fluctuations in water sales revenues would be directly offset by reductions or increases in variable expenses. Because of this, this rate design provides greater revenue stability. However, other factors are often considered when designing water rates such as community values, water conservation goals, ease of understanding, and ease of administration.

The St. James Parish Operations Department allocated the functionalization of costs into categories that can be more generally grouped into the fixed and variable costs discussed above. This analysis resulted in a cost distribution that is about 35% fixed and 65% variable (volumetric). **Figure 7** summarizes how costs are allocated to each cost component and used to establish new water rates. As a result, 36% of revenue will be collected from commodity rates, 29% will be collected from fixed capacity-related charges, 35% from fixed customer-related charges, 0% will be collected from fire-protection fixed charges and 0% will be collected from zonal surcharges.

Figure 7. Allocated Net Revenue Requirements

Classification Components	Proposed Rate Adjusted Net Revenue Requirements (2028)	
Commodity	\$1,893,435	36%
Capacity	\$1,525,267	29%
Customer	\$1,840,840	35%
Fire Protection	\$0	0%
Subtotal Revenue Requirement	\$5,259,543	100.00%
Zonal Related Costs ¹	\$0	0%
Net Total Revenue Requirement	\$5,259,543	100.00%

1. Currently, St. James Parish does not use zonal charges, nor does it bill fire services for water supply.

Costs Allocated to Customer Classes

Customer classes are typically determined by grouping customers with similar demand characteristics into categories that reflect the cost differentials to serve each type of customer. The new rates will remain in the same structure as current rates and will continue to be distinguished between residential and non-residential customer classes. These groups of customers will have different fixed and volumetric charges. **Figure 8** shows how costs are distributed to each customer class (except fire zonal related costs) using fiscal year 2028 data.

Figure 8. Distribution of Costs to Each Customer Class in FY 2028

Customer Class	Cost Classification Components				Cost of Service Net Revenue Req'ts	% of COS Net Revenue Req'ts
	Commodity	Capacity	Customer	Fire Protection		
Residential	865,165	696,938	841,132	0	2,403,236	45.68%
Industrial	659,307	531,109	640,993	0	1,831,409	34.81%
Public Water West	144,921	116,742	140,895	0	402,558	7.65%
Commercial	119,590	96,336	116,268	0	332,195	6.31%
Small Business	54,028	43,523	52,528	0	150,079	2.85%
Government	50,424	40,619	49,023	0	140,067	2.66%
Misc. (immaterial)				0		0.03%
Grand Total	\$1,893,435	\$1,525,267	\$1,840,840	0	\$5,259,543	100.00%

1. Costs Data Source: 2023 St. James Parish Proforma Budget: Expenditure non-Project.

Commodity related costs are distributed to each customer class based on the percentage of water consumed (previously shown in Figure 4). Capacity related costs are distributed to each customer class based on the peaking factors (previously shown in Figure 5). Customer related costs are distributed to each customer class based on the number of customers in each customer class.

CURRENT VS. PROPOSED WATER RATE STRUCTURES

The process of evaluating the water rate structure provides the opportunity to incorporate several rate-design objectives and policies, including revenue stability, equity among customer classes, and water conservation. One of the Parish's main objectives in this study was to develop a rate structure that would provide the utility with continual revenue stability and promote conservation.

Fixed Charges

Currently, the Parish charges all customer classes a fixed monthly charge based on customer class not meter size. The Operations staff recommends maintaining the current fixed rate structure.

Volumetric Rates

Currently, the Parish charges all customers using a multi-tiered volumetric rate for all water consumed by customer class. Volumetric rates are read from meters per unit of water, which is gallons. This number is converted to one thousand gallon units for billing purposes. This rate structure is currently governed by St. James Parish Ordinance 09-02 dated February 4, 2002. The Operations staff recommends maintaining the multi-tiered volumetric rate for all customers.

COMPARISON CURRENT AND PROPOSED WATER RATES

Figure 9 compares the current to proposed water rates for Fiscal Years 2024 through 2028 with a common consumption amount. That amount listed below is 5,000 gallons of treated potable water consumed by a residential household. This data indicates a 59% increase in residential water rates over a five-year time frame. To illustrate that amount of water, it means that by 2028 over ninety 55-gallon drums of potable drinking water will be delivered to a resident's home every month for \$41.35.

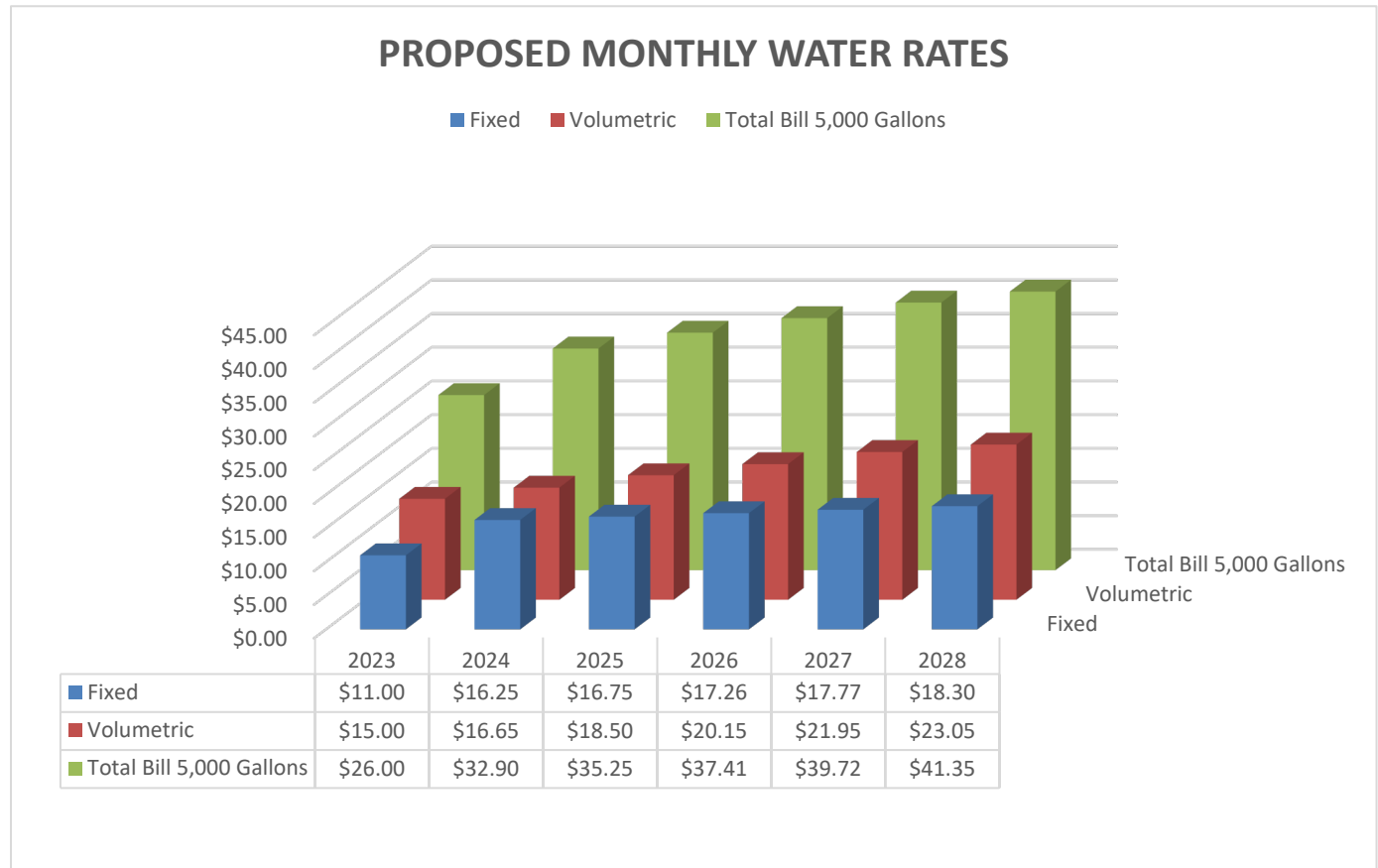


Figure 10 illustrates residential water rates at varying levels of water consumption. It compares the current water rate to the projected water rate in fiscal year 2028. Volume indicates units at 1,000 gallons of water. Again, to illustrate that amount of water, it means that by 2028 over forty-five 55-gallon drums of potable drinking water will be delivered to a resident’s home every month for \$29.83.

Figure 10. Comparison of Monthly Water Bills for Single-Family Residential Customers

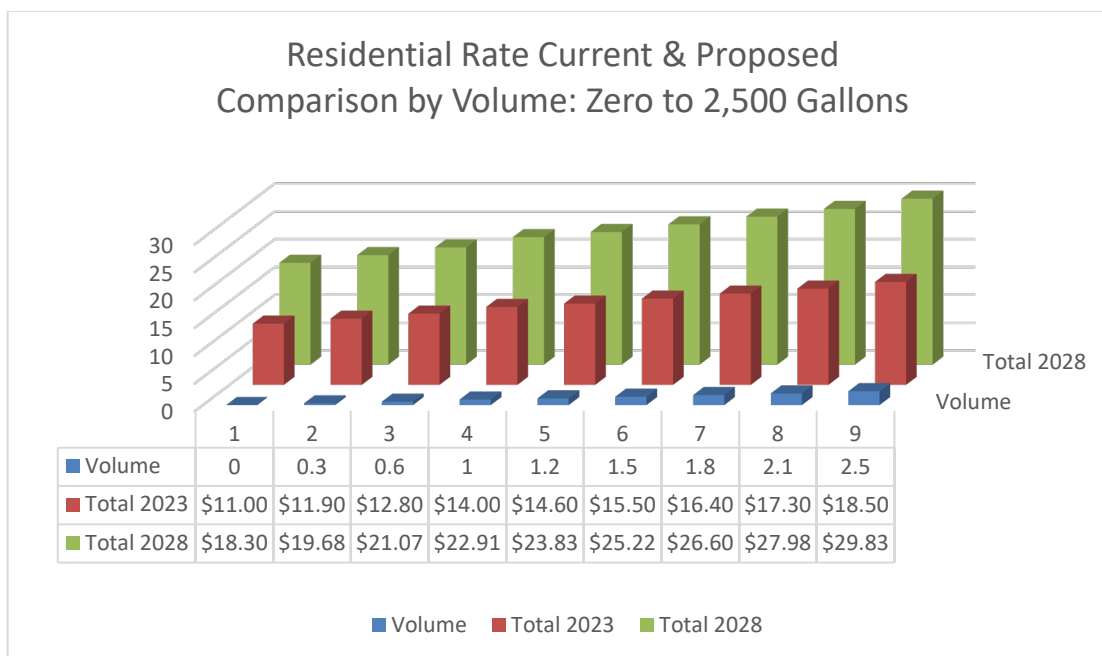


Figure 11 illustrates the current fixed and volumetric charges for all customer classes. **Figure 12** shows the fixed and volumetric rate for residential, small business, and government customers only. The objective is to standardize volumetric rates for all classes of customers. To accomplish this, the commercial volumetric rate would not increase until FY 2024, and industrial not until FY 2026. In FY 2026 all volumetric rates are proposed to standardize (see color coding below).

Figure 11. Current Fixed and Volumetric Rates for All Customer Classes

Residential		Small Business		Commercial ¹		Industrial ²	
Fixed	Volumetric	Fixed	Volumetric	Fixed ¹	Volumetric	Fixed ²	Volumetric
\$11.00	\$3.00	\$11.00	\$3.00	\$34.50	\$3.25	\$200.00	\$4.00

1. Commercial customers pay 3.4 times more for fixed rates than residential, small business, and government customers.

2. Industrial customers pay eighteen times more for fixed rates than residential, small business, and government customers.

Figure 12. Proposed Fixed and Volumetric Rates for Residential Customers

Water Rate Schedule Residential	Current	Proposed Monthly Water Rates				
	Monthly Rates	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Fixed Service Charges						
<u>Residential</u>	\$11.00	\$16.25	\$16.75	\$17.26	\$17.77	\$18.30
Volumetric Charges						
<u>Residential</u>	\$3.00	\$3.33	\$3.70	\$4.03	\$4.39	\$4.61

CURRENT POLICIES AND PAYMENT OPTIONS

The graphics in Figures 12 and 13 listed below illustrate the current policies and trends related to water payment options, connection, reconnection, and delinquent fees. St. James Parish fees were compared with fees of St. Charles and Lafourche Parishes. The results indicate that St. James Parish is aligned regionally in terms of costs for ancillary services:

Figure 12

Service Fees			
Fee	Lafourche	St. Charles	St. James
Reconnect	\$25	\$30	\$25
Delinquent	\$30	10% of bill	\$50
Overtime	\$40	\$100	\$65
NSF	\$25	\$30	\$25

Figure 13

New Water Service Installation Fees			
Meter	Lafourche	St. Charles	St. James
5/8	NA	\$825	\$365
3/4	\$725	\$825	\$365
1in	\$1,025	\$1,100	\$600
2in	NA	\$3,500	\$1,400
3in	NA	\$1,200	\$1,800
4in	NA	\$1,800	\$2,400
6in	NA	\$2,700	\$3,500
8in	NA	\$3,200	\$4,500
10in	NA	NA	\$2,000*
12in	NA	NA	\$2,500*

Note: * is costs plus materials.

SECTION 3. REVENUE STABILIZATION RATE ANALYSIS

Revenue stabilization rates are intended to offset revenue losses for any reason. For example, revenue losses could be related to auxiliary power use post hurricane, a drastic increase in production cost during winter storms, a catastrophic loss of system infrastructure, or similar emergencies. Revenue stabilization rates have been developed so that the water utility would still be kept financially whole under these conditions.

CALCULATION OF REVENUE STABILIZATION RATES

The intent of revenue stabilization rates is to offset the revenue losses that may be due to a variety of reasons. Revenue stabilization rates are the expected volumetric rate revenue divided by the reduced

levels of water sales, or rates multiplied by the percentage increase in expenditure.

Figure 13. Proposed Revenue Stabilization Rates FY 2024 through FY 2028

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
10% Revenue Stabilization Rate*	\$3.66	\$4.07	\$4.43	\$4.83	\$4.61
15% Revenue Stabilization Rate*	\$3.83	\$3.70	\$4.63	\$5.05	\$5.30
20% Revenue Stabilization Rate*	\$4.00	\$4.44	\$4.84	\$5.27	\$5.53
25% Revenue Stabilization Rate*	\$4.16	\$4.63	\$5.04	\$5.49	\$5.76
30% Revenue Stabilization Rate*	\$4.33	\$4.81	\$5.24	\$5.71	\$5.99

* Revenue Stabilization Rates would be implemented by council ordinance if current revenue from water sales below the percentages indicated, or expenses exceed to percentages indicated.

REVENUE-STABILIZATION RATE TRIGGER AND COUNCIL NOTIFICATION

For background/informational purposes, Parish Staff (staff) will provide the Parish Council with the average units of water sales (for each month) for the rolling previous three years at the periodic financial update, which will serve as the “baseline” against which current annual sales to date will be compared. The Parish will include a revenue stabilization rate schedule in each budget indicating the volumetric rate for increases of 10%, 15%, 20%, 25% and 30%. This information will be provided as a part of the budget package each year.

If staff determines that annual water sales revenue to date is more than 10% below expected year-to-date levels (based on monthly averages over the previous three-years) and expense reduction measures have been reviewed and considered, staff will implement the revenue-stabilization rates. Staff will inform the Council of the revenue-stabilization rates implementation at the earliest financial update. Staff will also update the Council on current reserve levels and provide an analysis of why the revenue losses are occurring, along with a six-month projection of anticipated water sales.

Implementing Revenue Stabilization Rates: Once Parish staff has informed the Council of implementation, the Council may:

- Act to implement less than 100% of the revenue stabilization rates at the earliest billing cycle.
- Utilize reserves to meet all or part of the revenue gap.
- Take no action, which results in implementation of revenue stabilization fund.

Rescinding Revenue Stabilization Rates: Once the volumetric water sales revenue has returned to expected levels, Parish staff will rescind the revenue-stabilization rates and previously adopted uniform volumetric rate are (again) in effect. In addition, Parish staff will inform the Council of such action at the earliest financial update.

SECTION 4. RECOMMENDATIONS AND NEXT STEPS

OVERVIEW OF ZONAL SURCHARGES

While most of the Parish's water customers are located within normal zones (those not requiring significant additional infrastructure to get water to the distant locations), some customers are in zones that costs more to pump water to them (Pleasure Bend). These surcharges would be part of the current rate structure. The Operations Department staff evaluated the current cost of service for these customers and has determined that these costs are immaterial and that zonal charges are not required at this time.

OPERATIONS DEPARTMENT RECOMMENDATIONS

Operations recommends that the Parish take the following actions for the water and wastewater rates:

- **Approve and Accept This Study Report:** Operations recommends that the Parish Council formally approve and adopt this report and its recommendations. This will provide documentation of the rate study analyses and the basis for analyzing potential changes to future rates.
- **Maintain Reserve Fund Targets:** The Parish should periodically evaluate reserve fund levels and make it a long-term goal to achieve these levels for the Operating, Capital, and Rate Stabilization Reserves.
- **Implement Recommended Levels of Rate Increases and Proposed Rates:** Based on the analysis presented in this report, the Parish Council should implement the proposed water rates recommended in this report for the next five years as shown in Section 2 of this report.
- **Adopt Revenue Stabilization Rates:** Adopt the revenue stabilization rates shown in Section 3 of this report.
- **Adopt Zone Surcharges:** Adopt the zonal surcharges shown in Section 4 of this report.
- **Complete a Legal Review:** This rate study outlines proposed new rates, including new revenue stabilization rates, updated zonal surcharges, and the continued use of outside surcharges. These rates should be reviewed by competent legal counsel with respect to compliance with State laws prior to adoption, including language for new resolutions and public notices required to implement these rates.

NEXT STEPS

- **Annually Review Rates and Revenue** – Any time an Agency adopts new utility rates or rate structures, those new rates should be closely monitored over the next several years to ensure the revenue generated is sufficient to meet the annual revenue requirements. Changing economic and drought-related water consumption patterns underscore the need for this review, as well as potential and unseen changing revenue requirements, particularly those related to environmental regulations that can significantly affect capital improvements and repair and replacement costs.

PRINCIPAL ASSUMPTIONS AND CONSIDERATIONS

In preparing this report and the recommendations included herein, the Operations Department has relied on several principal assumptions and considerations about financial matters, number of customer accounts, conditions and events that may occur in the future. This information and assumptions, including the Parish's budgets and customer account information from Parish staff, were provided by sources we believe to be reliable.

While we believe that SJP Operations use of such information and assumptions is reasonable for the purpose of this report and its recommendations, some assumptions will invariably not materialize as stated herein or may vary significantly due to unanticipated events and circumstances. Therefore, the actual results can be expected to vary from those projected to the extent that actual future conditions differ from those assumed by us or provided to us by others.

APPENDIX - WATER RATE ANALYSIS

Table 1: CAPITAL IMPROVEMENT PROGRAM COSTS

CAPITAL IMPROVEMENT PROGRAM PROJECTS	FUND	2023	2024	2025	2026	2027	2028
Automated Water Meter	65	\$750,000	\$750,000				
East Bank Land Purchase	65	\$250,000					
East Bank Clarifier	65	\$725,000	\$725,000				
Elevated Storage Tank Rehab	65	\$600,000					
High Service Pumps	65	\$31,500					
Highway 20 Utilities Relocate	65	\$200,000					
Hwy 20 Sewer Facility Generator	65	\$181,000					
Hwy 70 Utilities Relocate	65	\$50,000					
West Bank Land Purchase	65	\$250,000					
West Bank Above Ground Storage Tank	65	\$625,000	\$625,000				
West Bank Water Plant Clarifier	65			\$4,576,000			

Table 2: FIVE YEAR FINANCIAL PLAN

FIVE YEAR FINANCIAL PLAN (Proforma)						
Water System	2023	2024	2025	2026	2027	2028
Salaries-Regular Full Time	\$742,289	\$764,558	\$787,494	\$811,119	\$835,453	\$860,516
Salaries-Part Time	\$6,392	\$6,584	\$6,781	\$6,985	\$7,194	\$7,410
Salaries-Overtime	\$94,291	\$97,120	\$100,034	\$103,035	\$106,126	\$109,310
Salaries-Call Out Overtime	\$16,676	\$17,176	\$17,691	\$18,222	\$18,769	\$19,332
Salaries-Unused Leave	\$15,790	\$16,264	\$16,752	\$17,254	\$17,772	\$18,305
Retirement	\$93,501	\$96,306	\$99,196	\$102,171	\$105,237	\$108,394
Social Security Taxes	\$2,662	\$2,741	\$2,824	\$2,908	\$2,996	\$3,085
Medicare Taxes	\$10,974	\$11,303	\$11,642	\$11,991	\$12,351	\$12,721
Group Employee Health Insurance	\$251,051	\$258,583	\$266,340	\$274,330	\$282,560	\$291,037

Group Life Insurance	\$954	\$982	\$1,012	\$1,042	\$1,073	\$1,106
Group Disability Insurance	\$2,208	\$2,275	\$2,343	\$2,413	\$2,485	\$2,560
Uniforms	\$10,109	\$10,413	\$10,725	\$11,047	\$11,378	\$11,720
Workers Compensation Insurance	\$27,337	\$28,157	\$29,002	\$29,872	\$30,768	\$31,691
Unemployment	\$6,106	\$6,289	\$6,478	\$6,672	\$6,872	\$7,078
Deferred Compensation - Parish Match	\$13,952	\$14,371	\$14,802	\$15,246	\$15,704	\$16,175
Advertising/Publishing	\$670	\$690	\$710	\$732	\$754	\$776
Membership Dues	\$380	\$391	\$403	\$415	\$428	\$441
Lab Testing Fees	\$24,375	\$25,106	\$25,859	\$26,635	\$27,434	\$28,257
Drug Testing Fees	\$1,140	\$1,174	\$1,210	\$1,246	\$1,283	\$1,322
Pre-Employment Screenings	\$1,525	\$1,571	\$1,618	\$1,667	\$1,717	\$1,768
Other Professional Fees	\$542	\$558	\$575	\$592	\$610	\$628
Subcontract Fees	\$66,375	\$68,367	\$70,418	\$72,530	\$74,706	\$76,947
Other Disposal Fees	\$48	\$50	\$51	\$53	\$54	\$56
Licenses/License Renewals	\$4,238	\$4,366	\$4,497	\$4,631	\$4,770	\$4,914
Rentals-Equipment	\$5,129	\$5,283	\$5,442	\$5,605	\$5,773	\$5,946
Repairs & Maintenance	\$213,380	\$219,781	\$226,375	\$233,166	\$240,161	\$247,366
Vehicle/Equipment Repairs & Maintenance	\$37,988	\$39,128	\$40,302	\$41,511	\$42,756	\$44,039
Contract Costs-Gas & Water Sales	\$20,600	\$21,218	\$21,855	\$22,510	\$23,185	\$23,881
Small Buildings & Bldg. Improvements	\$5,150	\$5,305	\$5,464	\$5,628	\$5,796	\$5,970
Supplies-Janitorial	\$501	\$516	\$531	\$547	\$563	\$580
Small Tools & Work Equipment	\$16,979	\$17,488	\$18,013	\$18,553	\$19,109	\$19,683
Supplies-Automotive	\$114	\$118	\$121	\$125	\$129	\$133
Supplies-Office	\$2,880	\$2,966	\$3,055	\$3,147	\$3,241	\$3,339
Non-Capital Office Furniture & Equipment	\$680	\$700	\$721	\$743	\$765	\$788
Supplies-Data Processing	\$515	\$530	\$546	\$563	\$580	\$597
Non-Capital Data Process Equipment/Software	\$2,676	\$2,756	\$2,839	\$2,924	\$3,012	\$3,102
Supplies-Other	\$18,919	\$19,487	\$20,071	\$20,673	\$21,294	\$21,932
Supplies-Chemicals	\$66,976	\$68,985	\$71,055	\$73,186	\$75,382	\$77,643
Shells, Landfill & Concrete	\$1,545	\$1,591	\$1,639	\$1,688	\$1,739	\$1,791
Meters	\$39,610	\$40,798	\$42,022	\$43,283	\$44,581	\$45,918
Freight/Shipping	\$4,550	\$4,686	\$4,827	\$4,971	\$5,121	\$5,274
ools & Work Equipment	\$24,893	\$25,640	\$26,409	\$27,201	\$28,017	\$28,858

Vehicles & Heavy Equipment	\$8,537	\$8,793	\$9,057	\$9,328	\$9,608	\$9,896
Depreciation	\$64,938	\$66,887	\$68,893	\$70,960	\$73,089	\$75,281
Travel Out-of-Parish	\$309	\$318	\$328	\$338	\$348	\$358
Conferences & Seminars	\$3,486	\$3,590	\$3,698	\$3,809	\$3,923	\$4,041
Meals	\$402	\$414	\$426	\$439	\$452	\$466
Training & Technical Assistance	\$2,616	\$2,695	\$2,776	\$2,859	\$2,945	\$3,033
Office Expense	\$103	\$106	\$109	\$113	\$116	\$119
Claims & Judgments	\$10,300	\$10,609	\$10,927	\$11,255	\$11,593	\$11,941
Miscellaneous	\$2,810	\$2,894	\$2,981	\$3,070	\$3,162	\$3,257
Electricity	\$262,269	\$270,137	\$278,241	\$286,588	\$295,186	\$304,042
Gas, Water, Garbage, Mosquito Spray	\$4,200	\$4,326	\$4,456	\$4,590	\$4,728	\$4,869
Telephone	\$3,270	\$3,368	\$3,469	\$3,573	\$3,681	\$3,791
Computer Network Fees/Internet	\$838	\$864	\$889	\$916	\$944	\$972
GPS Tracking Fees	\$330	\$339	\$350	\$360	\$371	\$382
Total Water System	\$3,496,469	\$3,601,363	\$3,709,404	\$3,820,686	\$3,935,307	\$4,053,366

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- ³ *Water Rate Study, City of Morgan Hill, Final Report*: Morgan Hill, California, NBS Consultants, March 2022, <https://www.morgan-hill.ca.gov/DocumentCenter/View/40704/2022-Water-Rate-Update-Study>
- ⁴ *Water and Waste Water Utility Rate Study, City of Daytona Beach, Final Report*: Daytona Beach, Florida, Raftelis Financial Consultants, January 19, 2021, https://www.codb.us/DocumentCenter/View/19280/CODB-Rate-Study-FINAL_Jan-21-2021
- ⁵ *Water and Sewer Rate Study, Village of Oak Park*: Oak Park, Illinois, Baxter and Woodman Consultants, January 19, 2021, https://www.codb.us/DocumentCenter/View/19280/CODB-Rate-Study-FINAL_Jan-21-2021