



Village of Williston Park

Water Rate Study

Final Report

January 2025

January 15, 2025

Paul Ehrbar
Village Mayor
Village of Williston Park
494 Willis Ave
Williston Park, NY 11596

Subject: Water Rate Study

Dear Mr. Ehrbar:

NewGen Strategies and Solutions is pleased to submit to the Village of Williston Park this report summarizing the water rate study. This document presents the results of our analysis of the forecasted costs of providing water service to the Village's customers and our recommendations for recovering these costs over the next five years. The study provides several recommendations to enhance the financial health and stability of the Village's operations while equitably charging its customers for the services provided.

It has been a distinct pleasure to work with the Village. The assistance provided by management and staff was essential to completing this analysis. The dedication of everyone who assisted in the study process should be acknowledged, as they were vital to the study's success. Thank you for the opportunity to work with the Village on this critical project.

Sincerely,



Michael Maker
Partner

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1. BASIS FOR THE STUDY

1.1 Objective and Scope

The objective and scope of services set forth between the Village of Williston Park and NewGen can be grouped into three major tasks:

1. **Revenue Requirements** - Determine the true cost of providing water service by developing comprehensive revenue requirements (i.e., costs) for the water system.
2. **Financial Plan** - Develop a financial plan for the Village to ensure that water rates and charges provide adequate revenues over the projection period.
3. **Charge and Rate Design** - Create a water rate design that appropriately allocates costs among the Village's customers based on the Village's goals and objectives.

The water rate study has been completed based on these tasks and documented in this report.

1.2 Guiding Principles

The following principles were used to guide the rate study and were developed with the assistance of Village staff:

- The water system must be financially self-supporting. The cost of operating and maintaining the system must be solely supported by the water rates and charges collected from customers.
- The Village should maintain reserves to provide for contingencies and unplanned expenses and ensure that funds are generated to allow for appropriate future system replacement.
- Water rates and charges should adequately cover the costs of the services and the costs for reinvesting in the facilities, including repair, renewal, and replacement of assets.

1.3 Assumptions

The following high-level assumptions were used to guide the rate study and were developed with the assistance of Village staff:

- Operating and maintenance expenses:
 - 0% to 3.0% escalation rate per year (based on the average growth rate of the CPI-U¹ over the 20-year period from 2003 to 2023)
- Customer changes:
 - 0% growth rate per year
- Usage changes:
 - 0% growth rate per year
- Miscellaneous revenues:
 - no growth
- Minimum operating fund balance equal to at least 180 days (50%) of operating expenses

¹ CPI-U = Consumer Price Index for All Urban Consumers. While the percent change in the CPI-U averaged 3.6% per year over the five-year period from 2017 to 2022 and was 8.0% from 2021 to 2022, it averaged 2.6% per year over the twenty-year period from 2003 to 2023.

Depending on availability, actual Fiscal Year (FY) 2022 or FY 2023 or budgeted FY 2024 data was used as the base upon which forecasted figures were developed. All years within this report refer to the Village's fiscal year (June 1 to May 31). While the financial model built for this study allows for projections on a year-by-year basis for ten years, the charts and tables within this report provide data for a five-year planning period in which rates and charges have been calculated (FY 2025 – FY 2029).

2. REVENUE REQUIREMENTS

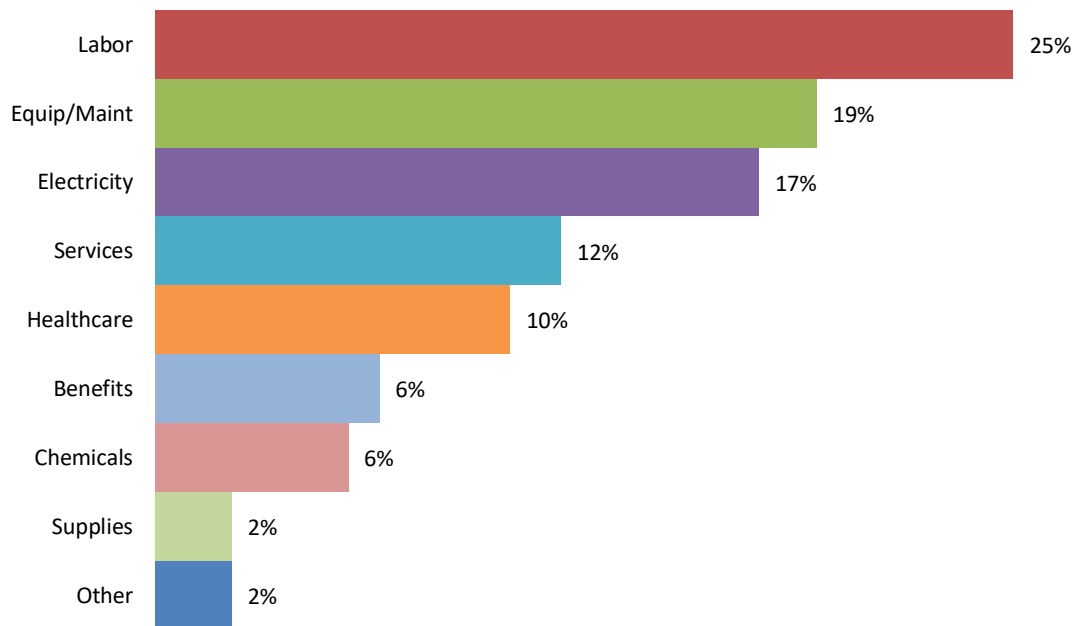
This section of the report outlines the costs of operating and maintaining the Village of Williston Park's water system. These costs constitute the water system's revenue requirements (i.e., the amount of revenue required to be collected from customers). The cost analysis is broken into two main categories of costs: (1) operating costs and (2) capital costs (including debt and cash funding). This section describes each category of costs incurred by the Village as it provides water service. The costs are based on official documents and data provided by the Village.

2.1 Operating Costs

The day-to-day operating and maintenance (O&M) expenses of the water system have been grouped into several categories based on expense type.

Budgeted FY 2024 water expenses total approximately \$1.81 million. Exhibit 2.1.1 provides a breakdown of budgeted FY 2024 expenses by category, sorted by percentage of total expenses.

Exhibit 2.1.1 FY 2024 Water Operating Expenses (% of Total)

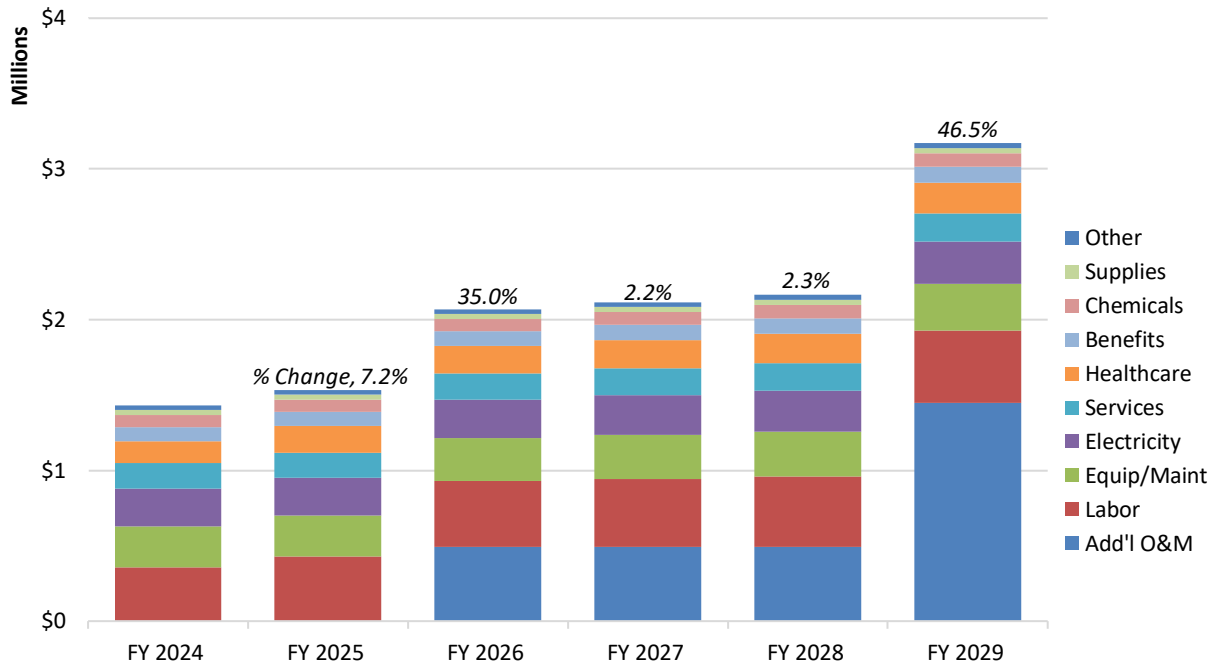


To project operating expenses, the majority of FY 2024 water expense line items were increased using a 3.0% escalation rate (i.e., inflation).

Based on data developed by the Village's consulting engineer, D&B Engineers and Architects, additional operating and maintenance ("Add'l O&M") expenses of \$0.49 million (for tank maintenance) are anticipated to be incurred starting in FY 2026 (recurring annually), \$0.84 million (for granular activated carbon [GAC] media replacement) starting in FY 2029 (recurring every five years), and \$0.12 million (for motor upgrades and increased sampling) starting in FY 2029 (recurring every year).

Exhibit 2.1.2 shows water O&M estimated expenses for the base year and the five-year planning period (with percent change from the previous year).

Exhibit 2.1.2 Projected Water Operating Expenses



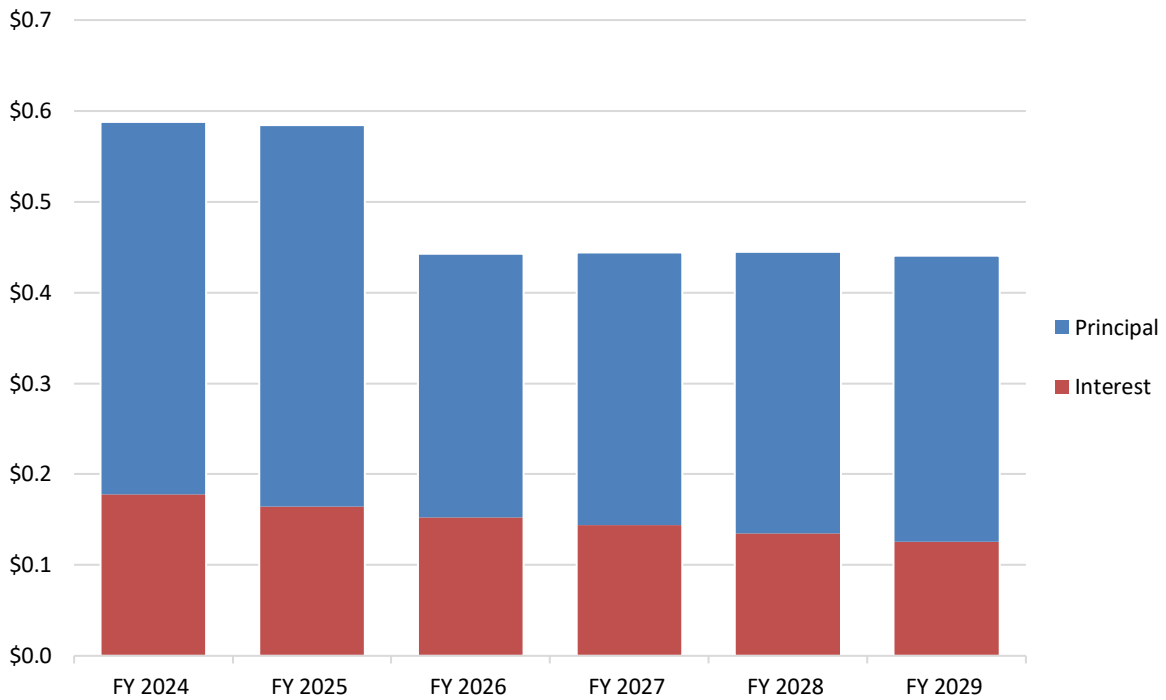
2.2 Capital Costs

The capital costs related to providing water service are generally comprised of current debt service and any anticipated capital projects, which may be funded from the issuance of debt (typically bonds, loans, or similar financial instruments) or funded from cash (either reserves on hand or cash derived from operations).

2.2.1 Current Debt Service

The Village issues bonds or takes out loans to fund capital projects to mitigate the financial burden on customers and the Village's available fund balance by spreading the costs of long-lived assets over several years. Exhibit 2.2.1 provides a breakdown of the Village's current principal and interest payments for the base year and five-year planning period.

Exhibit 2.2.1 Current Debt Service Payments

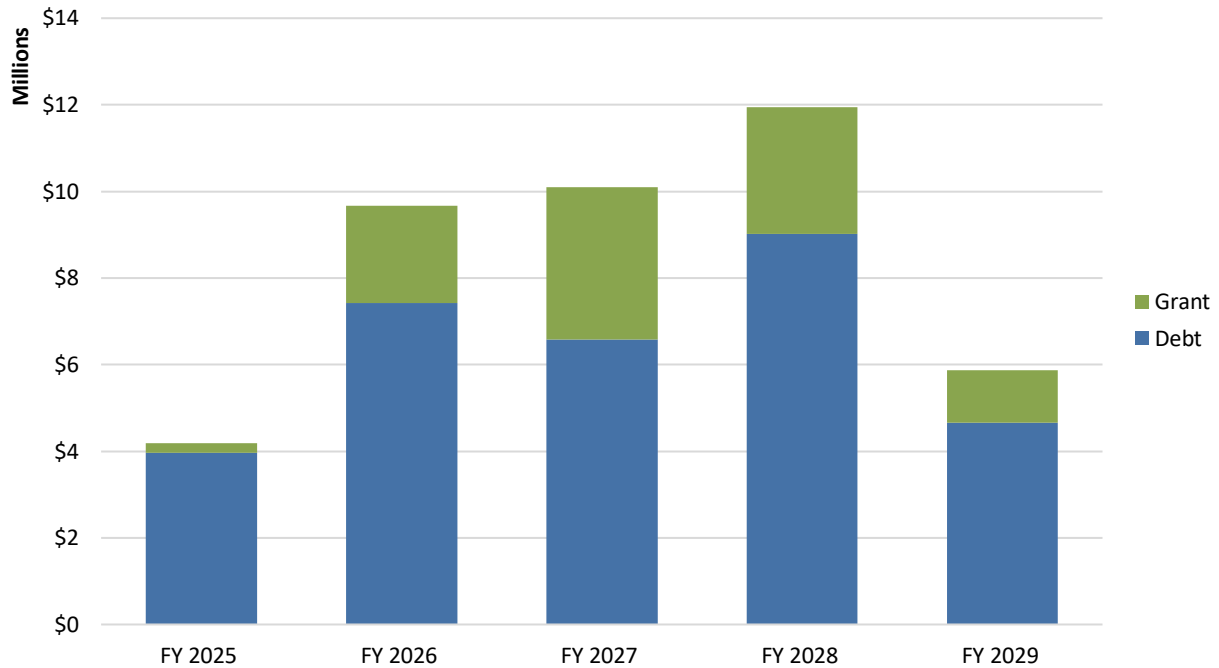


2.2.2 Planned Capital Improvement Projects

The Village's capital improvement program (CIP) includes six planned water projects totaling an estimated \$41.77 million over the five-year period from FY 2025 to FY 2029. All capital projects are anticipated to be funded with debt, apart from a \$10 million grant for PFAS treatment.

Exhibit 2.2.2 provides a breakdown of water capital spending for the base year and five-year planning period by funding source. For the five-year period from FY 2025 to FY 2029, 76% of water projects are anticipated to be debt funded, with the remaining 24% being funded by grants.

Exhibit 2.2.2 Planned Water Capital Projects (by Funding Source)

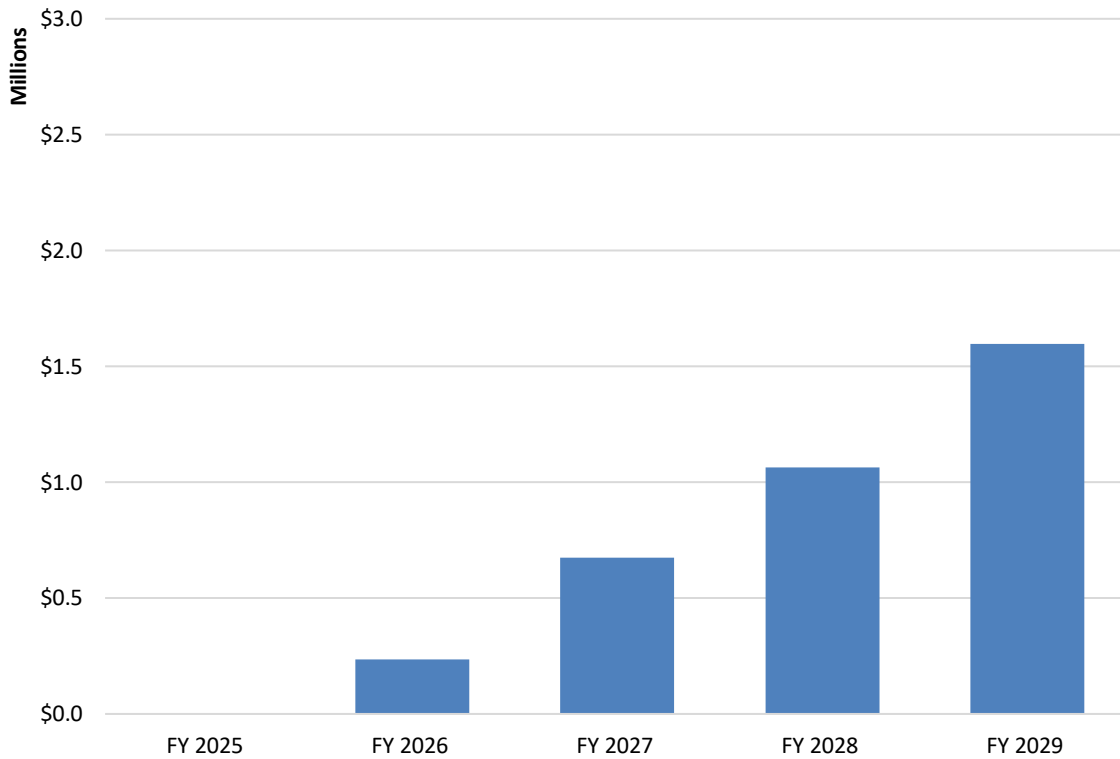


2.2.3 New Debt Service

As the majority of capital projects are anticipated to be debt funded over the next five years, we have calculated the principal and interest payments for these debt issuances. The debt issuances are assumed to have an interest rate of 5.0%, maturity of 40 years, and issuance expense of 1.5%, with payments starting the year after issuance.

Exhibit 2.2.3 provides a breakdown of new debt payments for the five-year planning period (FY 2025 to FY 2029).

Exhibit 2.2.3 New Water Debt Service Payments



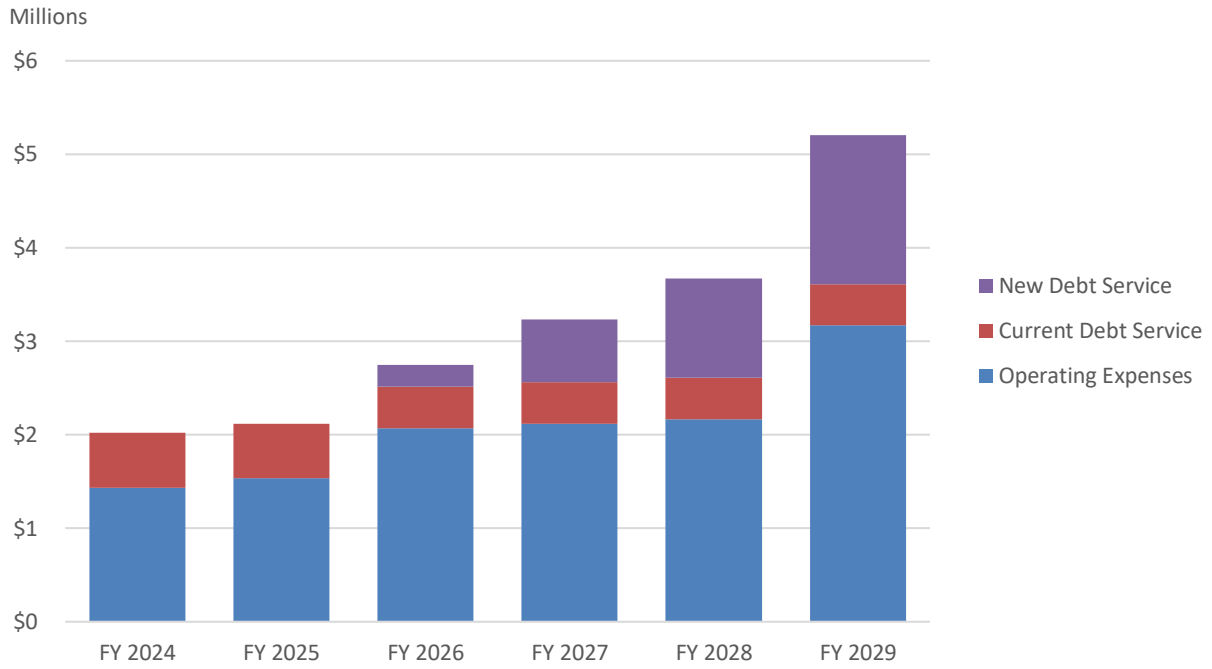
2.3 Revenue Requirements

The total annual cost of operating the Village's water system (the gross revenue requirements) includes operating and maintenance expenses, as well as current and future capital costs. The total of these costs, less any miscellaneous revenues, is the amount that needs to be recovered from user rates (referred to as the net revenue requirement).

Miscellaneous revenues for the Village consist of late payment penalties. Adjustments to miscellaneous revenues are conservatively anticipated to be minimal. Therefore, no growth in miscellaneous revenue was incorporated into the analysis.

Exhibit 2.3.1 shows the revenue requirements for the base year and five-year planning period.

Exhibit 2.3.1 Water Revenue Requirements



3. CUSTOMERS AND USAGE

This section provides a summary of water customers and usage.

3.1 Customer Account Summary

The Village serves residential and commercial customers inside the Village and sells water to the Village of East Williston. The Village bills all customers quarterly. The Village's estimated FY 2024 water customer base includes about 2,100 residential accounts (with 8,284 quarterly bills over the year), 231 commercial accounts (with 866 quarterly bills over the year), and one master meter account for East Williston (serving 854 households). The Village does not anticipate any growth in the customer base over the five-year planning period.

3.2 Usage Summary

The Village's FY 2024 total metered water usage is estimated to be 173.19 million gallons for residential customers, 47.00 million gallons for commercial customers, and 140.79 million gallons for East Williston customers. Similar to the water customer base, water usage is not projected to grow over the five-year planning period.

4. FINANCIAL PLAN AND PROPOSED RATES

4.1 Current Revenue

In Section 2, the projected costs (revenue requirements) of the water system were presented, and in Section 3, projected water customers and usage was presented. In this section, those projections are used to determine an appropriate financial plan and set water rates for the next five years.

The adequacy of revenues from current rates was evaluated to determine if existing rates are sufficient to recover the revenue requirements. Exhibit 4.1.1 compares the revenue requirements with total current revenue projections for the base year and the five-year planning period.

Exhibit 4.1.1 Water Revenue Requirements and Current Revenue

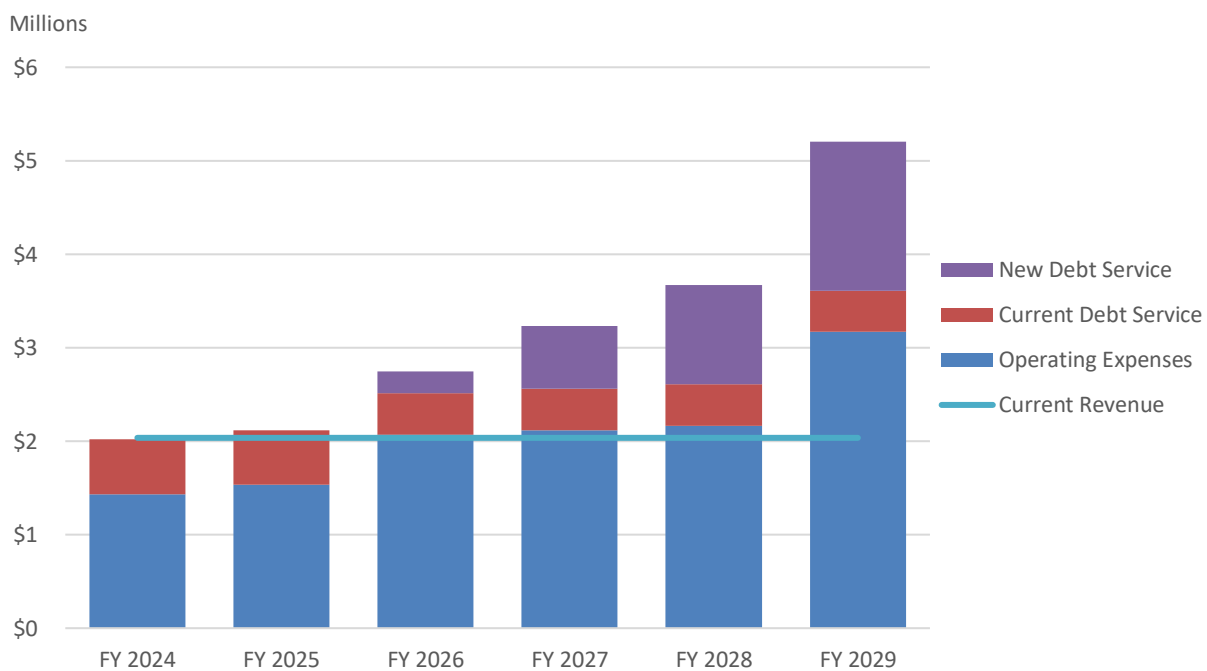


Exhibit 4.1.1 demonstrates that revenue collected at current rates is insufficient to cover the revenue requirements for FY 2024 through FY 2029. If left in place, current water rates would not generate sufficient revenue to fund the costs of the systems.

4.2 Proposed Revenue

To maintain the financial health of the Village's water operations over the five-year planning period, revenue needs to be increased. In addition to covering the revenue requirements, revenue must also be sufficient to satisfy an operating cash balance equal to or greater than 180 days (i.e., 50%) of operating expenses.

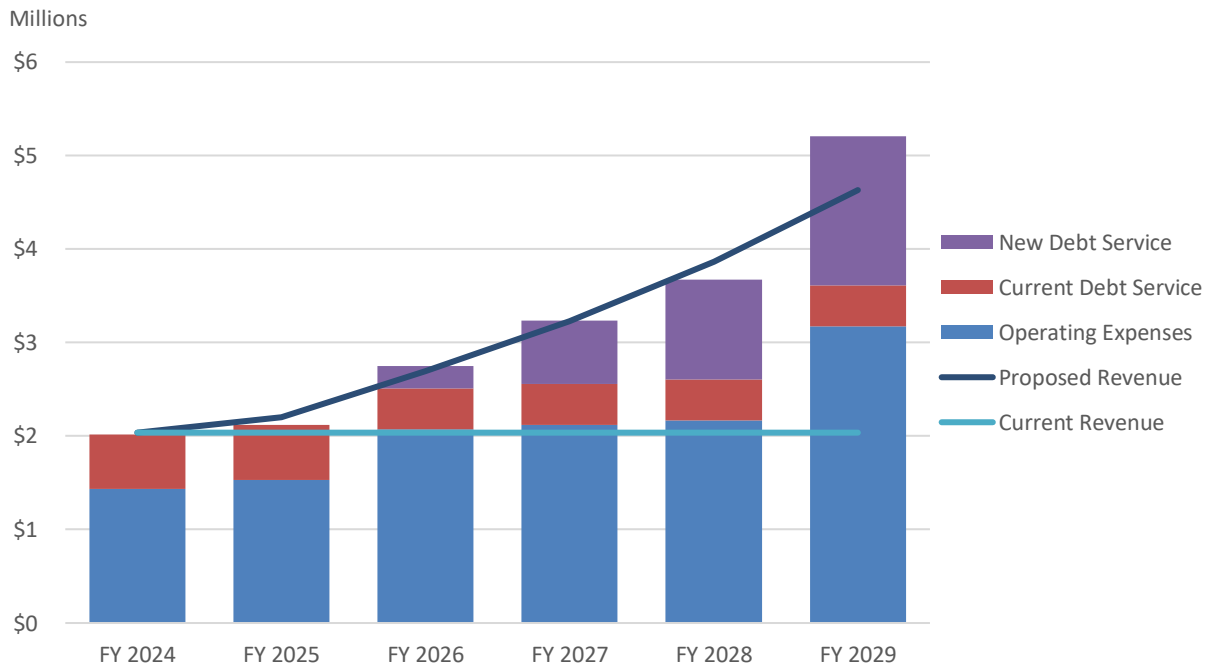
To address these shortfalls, we propose using multi-year rate adjustments. A multi-year approach will help mitigate rate increases over the planning period and alleviate some of the financial burden on the Village's customers. Additionally, this approach will allow for proper planning and adjustment by customers and the Village.

Exhibit 4.2.1 compares the revenue requirements with total current revenue projections and total proposed revenue projections for the base year and the five-year planning period.

Within the exhibit, "Current Revenue" and "Proposed Revenue" reflect the sum of rate revenue and miscellaneous revenue. While "Current Revenue" reflects rate revenue calculated using projected customer and usage growth at the current rates, "Proposed Revenue" reflects rate revenue calculated using projected customer and usage growth at the recommended rates. "Proposed Revenue" reflects the following:

- a 33% increase to rates in FY 2025; rates are assumed to be effective March 1, 2025, resulting in only three months of revenue with the new rates (and approximately a 8% increase in revenue)
- no increase to rates in FY 2026; however, a full year of the new rates in FY 2025 results in an approximately 23% increase in revenue in FY 2026
- a 20% increase to rates (and revenue) in FY 2027
- a 20% increase to rates (and revenue) in FY 2028
- a 20% increase to rates (and revenue) in FY 2029

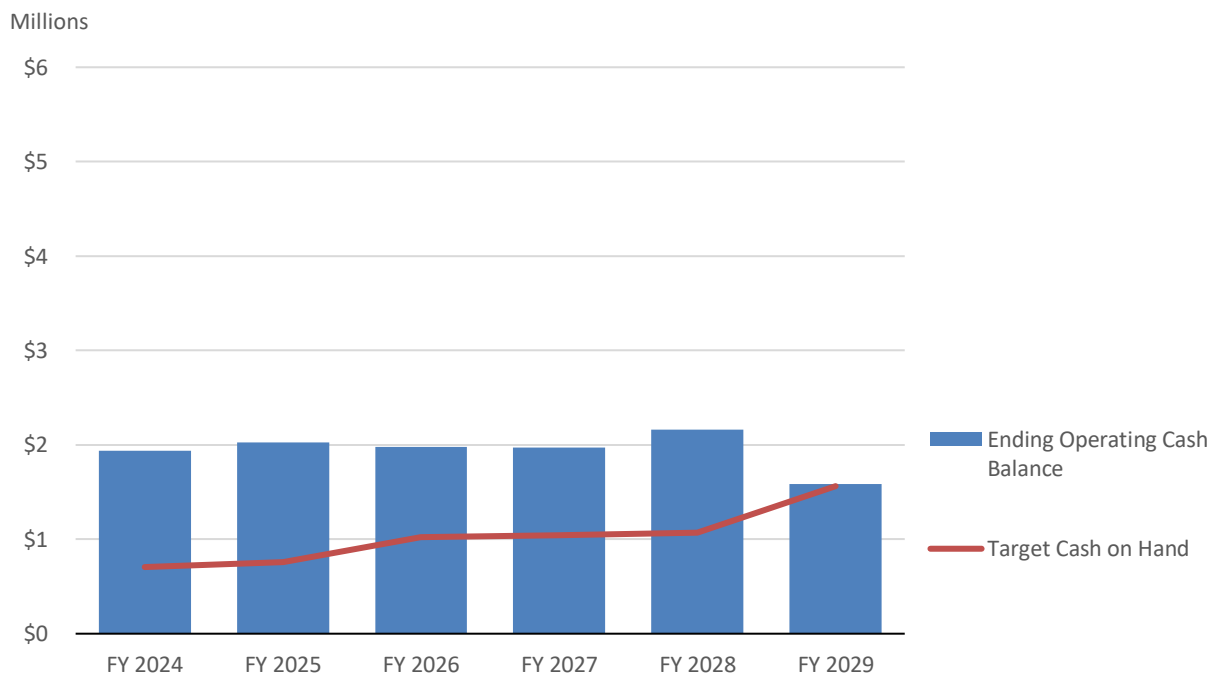
Exhibit 4.2.1 Water Revenue Requirements, Current Revenue, and Proposed Revenue



4.3 Cash Balance

Days cash on hand represents the number of days an organization can continue to pay its operating expenses with the current cash it has available. For this analysis, days cash on hand is defined as available cash divided by operating expenses multiplied by 365. The number of days of cash on hand can vary by utility, and policies typically range anywhere from 60 (2 months, ~0.166%) to 360 days (12 months, 100%) of operating expenses. A higher days cash on hand goal provides greater financial liquidity and is looked upon favorably by rating agencies, which improves the utility's chances of attaining higher credit ratings and qualifying for lower interest rates. NewGen recommends the Village maintain a cash balance equal to at least 180 days (six months, or 50%) of operating expenses. A days cash on hand target of 180 days would allow the Village to maintain reserves equal to two quarterly billing periods (i.e., six months) worth of operating expenses. Exhibit 4.3.1 shows the operating balance and cash on hand target, equal to 180 days (50%) of operating expenses for the base year and five-year planning period. The rate increases discussed in the previous section were set so that both the current cash balance was maintained each year and the 180-day cash on hand target was met or exceeded.

Exhibit 4.3.1 Water Cash Balance



4.4 Current Rates

Water charges and rates vary for residential, commercial, and East Williston customers. The rate structure for residential customers consists of a quarterly minimum service charge (which includes 10,000 gallons of usage) and a two-tier increasing block unit rate per 1,000 gallons. Tier 1 contains usage from 10,000 gallons per quarter to 50,000 gallons per quarter, and Tier 2 contains all usage over 50,000 gallons per quarter. The rate structure for commercial customers consists of a quarterly minimum service charge (which includes 10,000 gallons of usage) and a unit rate per 1,000 gallons for all usage over 10,000 gallons per quarter. East Williston is charged a flat unit rate per 1,000 gallons of usage per quarter.

Exhibit 4.4.1 shows the current charges and rates.

Exhibit 4.4.1 Current Water Charges and Rates

	Current
Residential	
Minimum (10,000 gallons)	\$51.40
Tier 1 (10,000 - 50,000 gallons)	\$5.14
Tier 2 (Over 50,000 gallons)	\$5.36
Commercial	
Minimum (10,000 gallons)	\$56.70
Tier 1 (Over 10,000 gallons)	\$5.67
East Williston	
All Usage	\$5.65

4.5 Projected Water Rate Design

Exhibit 4.5.1 shows the current charges and rates, as well as those projected for FY 2025 through FY 2029.

Exhibit 4.5.1 Projected Charges and Rates

	Current	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Residential						
Minimum (10,000 gallons)	\$51.40	\$68.40	\$68.40	\$82.00	\$98.40	\$118.10
Tier 1 (10,000 - 50,000 gallons)	\$5.14	\$6.84	\$6.84	\$8.20	\$9.84	\$11.81
Tier 2 (Over 50,000 gallons)	\$5.36	\$7.13	\$7.13	\$8.55	\$10.26	\$12.32
Commercial						
Minimum (10,000 gallons)	\$56.70	\$75.40	\$75.40	\$90.50	\$108.60	\$130.30
Tier 1 (Over 10,000 gallons)	\$5.67	\$7.54	\$7.54	\$9.05	\$10.86	\$13.03
East Williston						
All Usage	\$5.65	\$7.52	\$7.52	\$9.01	\$10.82	\$12.98

Note: Minimums include 10,000 gallons of usage and are charged per quarter; all other rates are per 1,000 gallons

5. CUSTOMER BILL IMPACTS

5.1 Sample Quarterly Bills

Exhibit 5.1.1 demonstrates the quarterly bill impact of the projected water rates for three typical Village residential customers: a small user with quarterly usage of 11,000 gallons, a median user with usage of 17,000 gallons, and a large user with usage of 26,000 gallons. The quarterly bill increase (in dollars and percentage) is also shown for the median user (17,000 gallons).

Exhibit 5.1.1 Residential Quarterly Bill Impact

Customer	Usage (gallons)	Quarterly Bill					
		Current	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Small User	11,000	\$56.54	\$75.24	\$75.24	\$90.20	\$108.24	\$129.91
Median User	17,000	\$87.38	\$116.28	\$116.28	\$139.40	\$167.28	\$200.77
Large User	26,000	\$133.64	\$177.84	\$177.84	\$213.20	\$255.84	\$307.06
Median User (\$ Inc)	17,000		\$28.90	-	\$23.12	\$27.88	\$33.49
Median User (% Inc)	17,000		33%	-	20%	20%	20%

Exhibit 5.1.2 demonstrates the quarterly bill impact on the Village of East Williston using last fiscal year's average quarterly usage of 35,197,500 gallons.

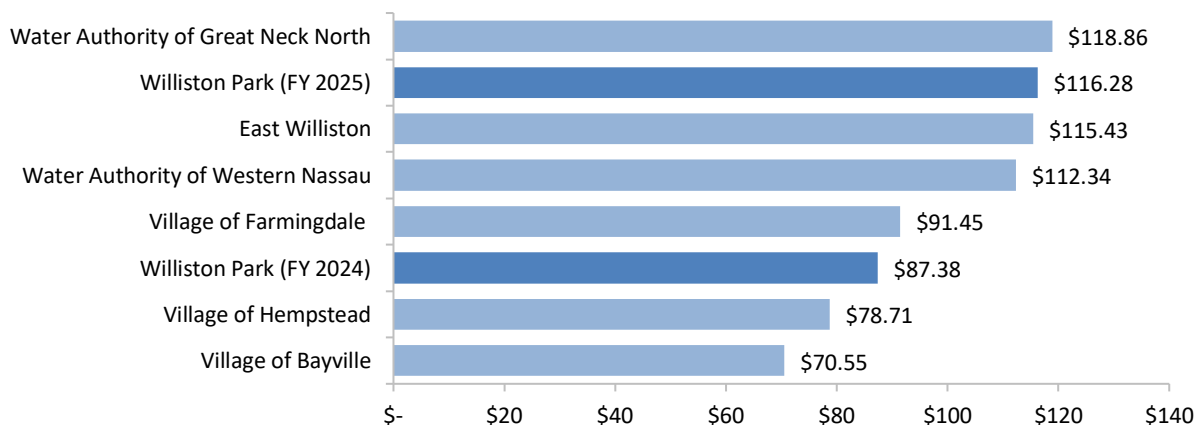
Exhibit 5.1.2 East Williston Quarterly Bill Impact

Customer	Usage (gallons)	Quarterly Bill					
		Current	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
East Williston	35,197,500	\$198,866	\$264,685	\$264,685	\$317,129	\$380,837	\$456,864
East Williston (\$ Inc)	35,197,500		\$65,819	-	\$52,444	\$63,707	\$76,027
East Williston (% Inc)	35,197,500		33%	-	20%	20%	20%

5.2 Quarterly Bill Comparison

It can be helpful for the Village to compare sample bills of various utilities to a bill calculated using the Village's current and recommended rates. Exhibit 5.2.1 compares an FY 2025 quarterly Village water bill for a residential customer with usage of 17,000 gallons with other municipalities on Long Island.

Exhibit 5.2.1 FY 2025 Village of Williston Park Water Bill Comparison (17,000 gallons)



6. FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

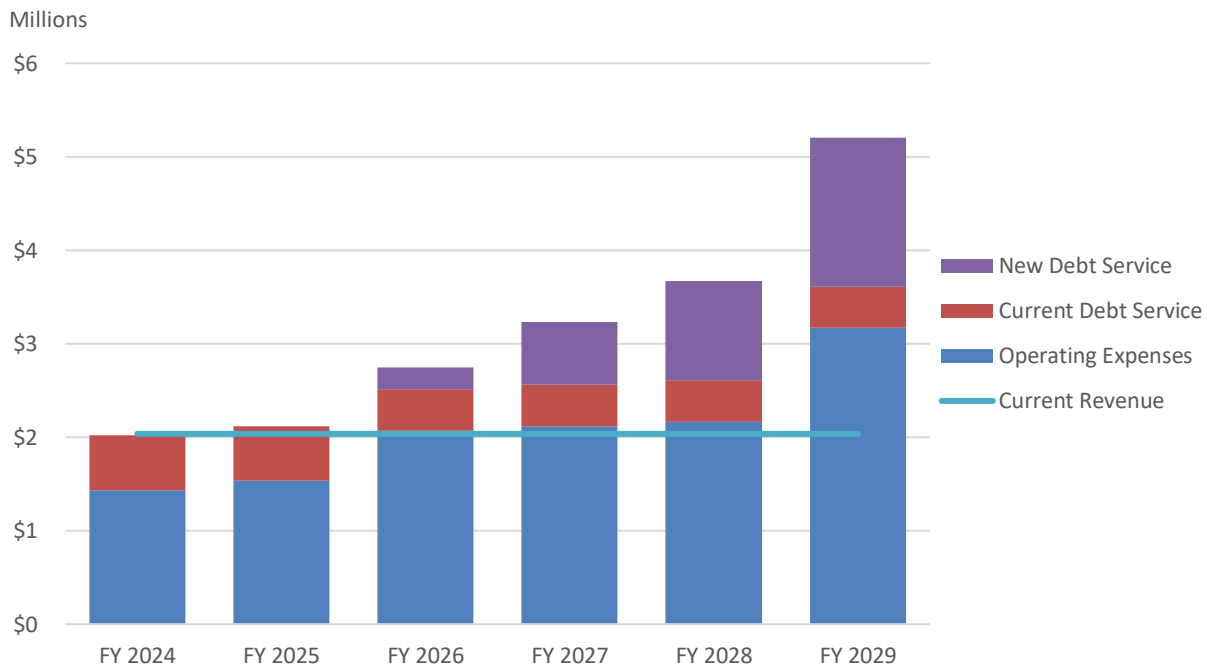
The following findings, conclusions, and recommendations were developed during the study.

6.1 Findings

The following findings were developed during the study:

- Revenue collected at current rates is insufficient to cover the water revenue requirements for FY 2024 through FY 2029. As shown in the exhibit below, current water rates, if left in place, would not generate sufficient revenue to fund the revenue requirements over the five-year planning period.

Exhibit 6.1.1 Water Revenue Requirements and Current Revenue

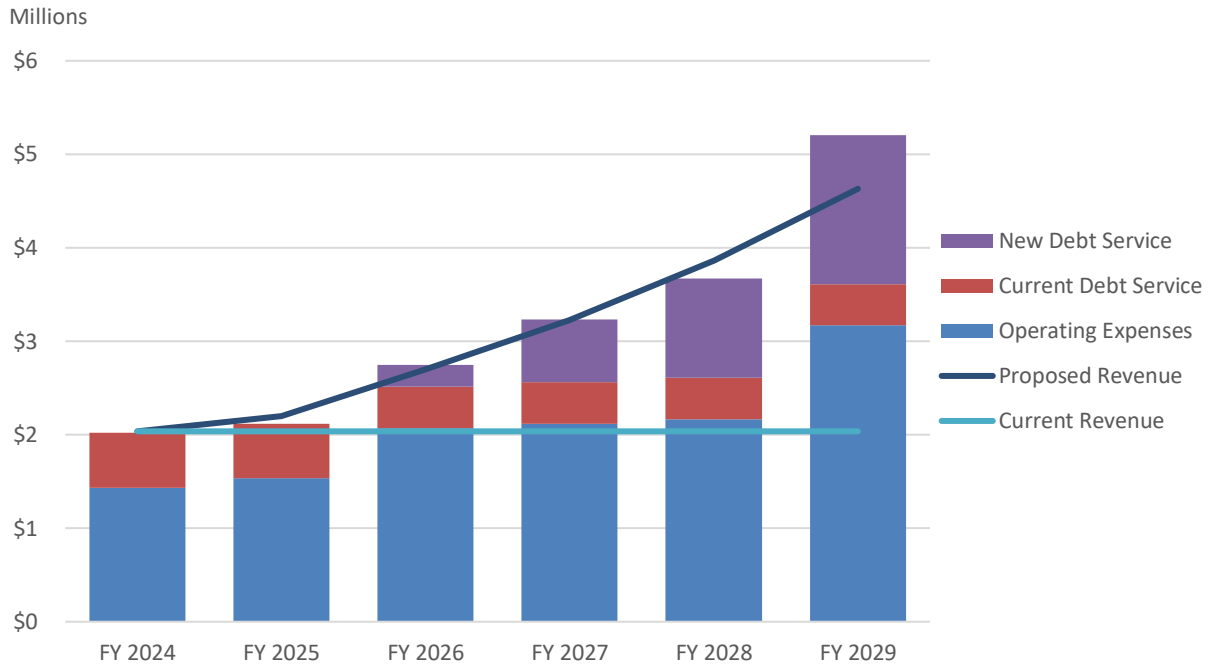


6.2 Conclusions

Based on our findings, the following conclusions were drawn:

- The Village needs to increase water rates over the five-year planning period to keep revenues in line with expenses, fund the required operating and capital costs identified, and maintain cash balance targets.
- The Village should implement required rate increases through a multi-year financial plan, as depicted by the "Proposed Revenue" line in the exhibit below. This will allow the Village to smooth rate increases over the planning period (as shown by the revenue at proposed rates in the exhibits below) and mitigate customer rate shock while meeting its days cash on hand target.

Exhibit 6.2.1 Water Revenue Requirements, Current Revenue, and Proposed Revenue



6.3 Recommendations

Based on our conclusions, the following recommendations were made:

- Adopt the following recommended charges and rates for the next five years.

Exhibit 6.3.1 Recommended Charges and Rates

	Current	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Residential						
Minimum (10,000 gallons)	\$51.40	\$68.40	\$68.40	\$82.00	\$98.40	\$118.10
Tier 1 (10,000 - 50,000 gallons)	\$5.14	\$6.84	\$6.84	\$8.20	\$9.84	\$11.81
Tier 2 (Over 50,000 gallons)	\$5.36	\$7.13	\$7.13	\$8.55	\$10.26	\$12.32
Commercial						
Minimum (10,000 gallons)	\$56.70	\$75.40	\$75.40	\$90.50	\$108.60	\$130.30
Tier 1 (Over 10,000 gallons)	\$5.67	\$7.54	\$7.54	\$9.05	\$10.86	\$13.03
East Williston						
All Usage	\$5.65	\$7.52	\$7.52	\$9.01	\$10.82	\$12.98

- Establish an operating balance policy with a minimum balance equal to at least 180 days (50%) of expenses.
- Review charges and rates on an annual basis and revise as needed. Consider a full cost of service study for all charges and rates every four to five years. While it is recommended that charges and rates be adopted for five years so they do not have to be revisited and voted on every year by the Village Board, it is financially prudent to review expenses and revenues annually to ensure actual values are relatively in line with those projected.