

# MEMO

**To:** Mr. Richard Calbi Jr. P.E., P.P., Director (Ridgewood Water)

**From:** Alex Burkard, Dave Fox, Zachary Green (Raftelis)

**Date:** 2/19/2025

**Re:** 2025 Ridgewood Water Budget Review

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## Introduction

Raftelis was engaged by Ridgewood Water to review their proposed Calendar Year 2025 (“2025”) operating budget and rate increases. We have reviewed the proposed budget for Ridgewood Water, and it is our opinion that the budget is reasonable and appropriate. We have evaluated the revenue sufficiency to ensure that the proposed rate increases recover the necessary revenues to meet existing and future operating and capital revenue requirements. Ridgewood Water’s budget also continues the ongoing practice of isolating polyfluoroalkyl substances (“PFAS”) related operating expenses and capital costs for recovery through a separate PFAS Surcharge.

## System Overview

The Village of Ridgewood (“Village”) owns and operates a substantially self-supported water utility, which sells water on a direct retail basis to a population of approximately 61,000 persons and 20,621 customer accounts, consisting of not only the residents of the Village of Ridgewood, but also the adjoining Boroughs of Glen Rock and Midland Park and the Township of Wyckoff.<sup>1</sup> All water consumption is metered to ensure full payment for water use. The utility's main assets include 52 groundwater wells, 31 treatment plants (points-of-entry or POE), 275 miles of distribution piping, 1,870 fire hydrants, 10 water storage tanks, and 10 pump stations.<sup>2</sup> As a result of system wide PFAS contamination, the utility is undertaking a costly capital program, which will consolidate the 31 treatment plants to 12 new facilities.

## Budget and Rate Structure Overview

The 2025 budget was developed by assessing operational and capital investments needs and estimating future demands. This comprehensive evaluation incorporates cost considerations for infrastructure maintenance, water treatment facilities, personnel, debt service coverage, and compliance with regulatory standards. The rate structure is a key component of the budget, outlining how costs will be distributed among consumers. A balanced rate structure aims to cover operational expenses, capital improvements, and debt service while ensuring fairness and affordability for customers. It considers factors such as consumption patterns and the

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<sup>1</sup> “Our Water’s Worth It Award to Ridgewood Water.” New Jersey Infrastructure Bank, 19 July 2024.

<sup>2</sup> Village Of Ridgewood In The County Of Bergen, New Jersey General Obligation Bonds, Series 2025 General Improvement Bonds, Water Utility Bonds and Parking Utility Bonds (NJ).

utility's long-term financial sustainability. Ridgewood Water's current rate structure follows industry standards by balancing a quarterly fixed service charge by meter size, and a volumetric rate per thousand gallons of water consumption. Those base rate structures are at present paired with a quarterly PFAS Surcharge by meter size. With regard to the Village policy for rate setting, the Village operates on a calendar year schedule. The proposed rate changes are to be approved in Q2 and go into effect at the beginning of Q3. The 2025 budget proposes a 9% increase to the volumetric rate, a 9% increase to the fixed service charge, and a 50% increase to the PFAS Surcharge.

Raftelis also reviewed the 2023 and 2024 budgets compared to actual expenditures to understand how accurately the budget development process reflects reality for Ridgewood. Raftelis was able to determine that the budget is developed using a "worst case scenario" approach, and that actual expenditures typically are less than budgeted and actual revenues are typically more than budgeted. While this budgeting approach may be conservative, it is also common as it helps municipalities and utilities anticipate and prepare for unexpected events or emergencies, ensure adequate cash flows, support capital investment, stabilize future rates, and ultimately achieve financial resilience and security. Ridgewood Water should continue to evaluate its budget to actual performance, risk profile, and reserve policies on an annual basis to ensure that its budgeting and financial planning efforts are in-line with the overall goals of the Village and industry best practices.

## Model Layout Overview

As part of our budget evaluation, Raftelis reviewed the financial planning model that Ridgewood Water currently uses. The Microsoft Excel-based model uses separate sheets for O&M expenses, debt service, PAYGO capital, revenue projections, and more. The model allows Ridgewood Water to see historical adopted budgets and actual expenditures from prior years as well as budget projections for future years. We carefully reviewed Ridgewood Water's proposed model in its entirety, verifying the integrity of data inputs, underlying assumptions, conceptual methodologies, and output calculations. Our assessment concluded that the model as reviewed is functioning appropriately and rooted in sound data and assumptions.

## What's New for 2025

Ridgewood Water made two significant PFAS budget allocation changes in the 2025 budget. The PFAS budget allocations for Salaries & Wages and Administrative & General Expenses were eliminated and are now fully allocated to base costs.

Ridgewood Water also made four Village expense allocation changes. Health Insurance, PERS, Social Security, and Unemployment Insurance were changed from partially allocated Village expenses to direct expenses for Ridgewood Water. We would generally agree that where direct expense information is readily available it should be applied and that it can be blended with the best available information for indirect expense allocations for other line items. Ridgewood Water also began budgeting for newly leased property in Glen Rock.

## Revenues

Ridgewood Water's revenue budget was partially developed using a linear regression analysis to predict consumption for future years. Factors such as rainfall, temperature, cooling degree days, and the Palmer-Z Index were explored as potential variables to forecast future consumption. However, no single factor or

combination demonstrated a strong correlation. Nevertheless, a trend forecast based on time and rainfall appears to offer a reasonable method for predicting future water sales. Ridgewood Water's consumption demand has exhibited a slight downward trend, which is consistent with patterns observed in other communities. This trend is likely to persist due to the prevalence of more efficient appliances and plumbing devices. Over the 2005-2024 period, Ridgewood shows a compound annual rate of decline of -0.68% per year. However, the addition of new customers and, in some instances, the repurposing of existing properties and connections may partially or entirely offset this decline. Considering the consistent annual system production for Ridgewood, the revenue budget has adopted a sales volume of 5.65 million gallons per day in 2025. This figure was developed using a 5-year average less a 5% safety factor as a conservative measure to ensure demand and thereby baseline revenues are not overstated. This represents no change from the 5.65 million gallons per day in 2024. Ridgewood also generates revenue through a fixed charge based on the number of accounts by meter size. The model forecasts that the number of accounts will grow based on the compound annual rate of Ridgewood's population growth from the 2010 and 2020 decennial census resulting in a 0.22% increase each year.

The total revenue budget for 2025 is \$25.123 million. Total water rents and miscellaneous revenues are budgeted at \$18.941 million and \$1.793 million, respectively. The revenue budget also utilizes a \$4.389 million surplus from the water fund to partially offset rate increases in 2025. In the event that water rents exceed the budgeted revenue amount, the surplus will be applied to the water fund balance to stabilize future rates.

Raftelis has reviewed the proposed 2025 revenue budget and has determined that it is reasonable and appropriate.

## Revenue Requirements

Revenue requirements include all operations and maintenance (O&M) costs, capital costs (including debt service payments and other cash funded capital), Village allocation costs, and any other need for purposes of maintaining financial viability. The revenue requirements also include a 5% transfer of budgeted operating and capital expenses to the General Fund. Ridgewood Water's budget also continues the ongoing practice of isolating PFAS-related operating expenses and capital costs. Total revenue requirements for 2025 are budgeted at \$25.123 million, which is a 13% increase over 2024 actual expenditures. Only 2% of this increase is attributed to increases in operational expenses. The balance of the increase is for increased capital debt and PAYGO capital investment. Raftelis reviewed the revenue requirements for 2025 and determined that they are reasonable and appropriate.

## Capital

Raftelis thoroughly reviewed the capital budget for Ridgewood Water, and we affirm its accuracy and alignment with the strategic needs of the utility. The proposed capital budget reflects a comprehensive and well-considered plan for addressing essential infrastructure requirements and potential enhancements. It considers the utility's long-term goals, ensuring the allocation of resources to critical projects that will contribute to the overall efficiency, reliability, and sustainability of the water system. Ridgewood Water funds their current capital budget primarily using debt from the New Jersey Infrastructure Bank which offers favorable financing terms, as well as cash (PAYGO), but historically has also received financing as part of the Village's general obligation bond issuances. The total capital expenditures budget, which includes PAYGO &

CIP and Debt Service, for 2025 is approximately \$7.189 million, which represents 29% of the total revenue requirements and a 17% increase over 2024 actual capital expenditures. PFAS and base-related capital expenditures are budgeted at approximately \$2.697 million and \$4.491 million, respectively. In a review of capital project planning for 2025 with the Director, as well as a detailed review of available bond proceeds from Edmunds reports, Raftelis was able to verify that along with budgeted PAYGO the Village will have more than sufficient proceeds to cover capital investments in 2025.

## O&M

Ridgewood Water's proposed 2025 budget continues to separate costs associated with the impact of the detection of PFAS from base costs, which is methodologically consistent with prior budgets. Some of these expenses are direct charges incurred only because of Ridgewood Water's response to the PFAS issue. However, other expenses must be allocated between base water rates and PFAS rates to correctly recover the necessary costs. It is important to emphasize that this is an internal water utility cost allocation and is unrelated to the allocations of shared expenses from the Village General Fund. The PFAS costs represent the expenses incurred by Ridgewood Water to meet new regulatory standards in water production. By separating PFAS costs from the base costs, Ridgewood Water has avoided a larger increase in the base rates necessary for cost recovery in 2025. It is crucial to separate these expenses from the fundamental cost of water service as part of Ridgewood Water's pursuit of cost recovery from those potentially responsible for the presence of these compounds in Ridgewood's water source. This transparent approach not only reveals the actual cost of addressing this issue to Ridgewood Water's customers, but also aids in supporting grant applications.

The internal allocations to PFAS-related O&M expenses have decreased in the 2025 budget. The PFAS budget allocations for Salaries & Wages and Administrative & General Expenses were eliminated and are now fully allocated to base costs. PFAS-related O&M expenses are approximately \$1.783 million in 2025, which represents 7% of total revenue requirements. The base cost related O&M expenses are approximately \$14.954 million in 2025<sup>3</sup>, which represents 60% of total revenue requirements. Total O&M expenses for 2025 are budgeted at a 13% increase over 2024 actual expenditures.

In reviewing the 2025 budget, Raftelis identified O&M expenditures that were contributing to the overall increase in budgeted costs compared to 2024 actual expenditures. A few such contributors are the increase to the purchase price of Poly-Orthophosphate, increases to the outside billing data service and customer data collection solutions provider, and an increase in contributions to the Village pension fund.

In addition to typical operating expenses, N.J.S.A. 40A:4-35.1 allows utilities to transfer surplus revenue to the General Fund, capped at 5% of the utility's operating cost. However, on February 5, 2024, Assembly Bill No. 3456 was introduced, which would amend N.J.S.A. 40A:4-35.1 to cap the transfer of surplus revenue to the General Fund at 3% of the utility's operating cost. The New Jersey Board of Public Utilities ("BPU") applies this rule in regulating municipal utility rates, extending its jurisdiction to municipalities supplying electricity, gas, steam, or other products beyond their corporate limits (N.J.S.A. 40:62-24). In the regulation of municipal water utilities, the BPU utilizes the 5% transfer as a surrogate for the return on equity capital earned by investor-owned utilities. Unlike investor-owned utilities, municipal utilities lack equity in their capital structure, with only debt service costs for bonds or notes. Consequently, there is no direct method, via rate base rate-of-return regulation, to compensate municipal utility owners for the risks and responsibilities

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<sup>3</sup> Includes Salary & Wages, Other Expenses, and Statutory & Deferred Expenses

associated with raising capital and providing essential services like potable water. This transfer essentially serves as a substitute for the return on shareholder equity permitted in establishing investor-owned water utility rates. It's worth noting that the BPU currently authorizes investor-owned utilities to earn 9.60% on equity capital. While the 5% rule provides some compensation for municipal owners' risks, it falls short of the rates allowed for investor-owned utilities. The 5% transfer incurs an additional expense of \$1.196 million in the 2025 budget. After reviewing Ridgewood Water's proposed budget's 5% transfer calculation, Raftelis finds it consistent with prior interpretations of the BPU rule, though generally we would always prefer as a best practice that enterprise utility revenues do not subsidize the general fund.<sup>4</sup>

## Village Allocation

In developing the 2025 budget, Ridgewood Water made four Village expense allocation changes. Health Insurance, PERS, Social Security, and Unemployment Insurance were changed from partially allocated Village expenses to direct expenses for Ridgewood Water.

Ridgewood Water used the 2023 audited expenses for the Village General Fund as the basis of the allocations. The audit represents the final statement of actual expenses for shared costs that must be allocated to the water budget. The 2023 actual expenses are the most recent expenses that have been subjected to a financial audit, so these expenses form the most recent and reliable test period on which you can base your pro forma budget estimates.

There are three primary methods for allocating costs to charge them out to departments from a general fund: the Direct Method, the Step-Down Method, and the Reciprocal Method. The Direct Method is the simplest method for allocating costs. In this method, the costs of each support department are allocated directly to the operating departments based on either of several allocation bases (such as the square footage, valuation of assets, number of vehicles, or the percentage by department that results from all other allocations and direct expenses etc.). Allocation bases can take the form of activity based costing, time driven activity based costing, rate based costing, and can be further classified as push (expectation driven, where a fixed share of anticipated overhead utilization is an example) or pull (resource consumption driven, where square footage allocation of rent is an example) based.<sup>5</sup> No consideration is made for any support provided by one support department to another. This method is straightforward and easy to apply but might not fully account for all relationships between departments. The Step-Down Method is a more comprehensive approach to allocating costs. It considers the services provided by one support department to another before allocating the costs to operating departments. The process begins with allocating the costs of the support department that provides the most services to other support departments, followed by the next highest, and so on. Once all support department costs have been allocated to other support departments, the remaining costs are allocated to the operating departments. The Reciprocal Method is the most accurate and complex method for allocating costs. In this method, the costs of all support departments are allocated to both operating and other support departments, considering the reciprocal services provided among support departments. The use of simultaneous equations or matrix algebra is involved in this method. The choice of which method to use depends on the organization's complexity, the relationships between support and operating departments, and the desired level

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<sup>4</sup> Water utility capital financing / Richard (Toby) Fedder, Eric Hofeld, John Mastracchio. – Fourth edition. Pages 52, 62-63 –

“Management Practices of Highly Rates Utilities: #9 Limit non-utility related transfers to the general fund (AWWA manual ; M29).

<sup>5</sup> Jones, Darragh. “7 Methods of Cost Allocation in Accounting | CostPerform.” CostPerform | World Class Activity Based Costing Software, 17 Jan. 2025.



of accuracy.<sup>6</sup> The allocation approach applied uses the Direct Method, which is most common for utilities of similar size and administrative resourcing.

For each of the line items in the calculations, Raftelis agrees that Ridgewood Water used an appropriate allocation factor, and that the allocation factors were properly developed using the guidelines detailed in Seventh Edition of the Manual of Water Supply Practice M-1: Principles of Water Rates, Fees and Charges prepared by the American Water Works Association. Therefore, the resulting allocation of approximately \$3.287 million is reasonable and appropriate. The Village expenses that are being allocated among the General Fund, the Parking Fund and Ridgewood Water amount to approximately \$58.098 million. Therefore, only 5.7% of the General Fund expenses are being allocated to Ridgewood Water and 94.3% of those costs are retained in the General Fund or allocated to Parking. This meets the test of reasonableness established in prior reviews, which noted that a General Fund allocation of 6% or less is in an appropriate range.

The most significant category of allocated expenses pertains to insurance and benefits, encompassing Health Insurance, PERS, Social Security, Unemployment Insurance, Workers' Compensation Insurance and General Liability Insurance. Together, these costs constitute 67.2% of the total allocation of \$3.287 million from the General Fund to Ridgewood Water. The direct expenses – Health Insurance, PERS, Social Security, and Unemployment Insurance – constitute \$2.029 million by themselves. Allocation of employee insurance and pension expenses is determined by the proportionate labor expense directly associated with or shared by Ridgewood Water. Additionally, the allocation of casualty and liability insurance is based on the relative value of fixed assets in both the Village and water utility, as well as the assessed property values within the Village.

The subsequent significant category of allocated expenses pertains to salaries and wages, constituting an additional 24.7% of the total allocations to Ridgewood Water. Salaries and wages specifically designated for the direct support of water utility operations, such as those from Engineering, Streets & Roads, and the Central Garage, are included in this category. The allocated amount for water utility operations amounts to \$813,000 which also reflects a portion of the Utility Director's salary.

The remaining shared expenses are for materials, supplies and services provided to support water utility operations. This accounts for only 8.1% of the total expenses allocated to Ridgewood Water.

## **Village Policies**

As part of our review, Raftelis has checked policies set forth by the Village to ensure that Ridgewood Water is in compliance. The Village Surplus Policy (“Resolution 16-114”), which requires Ridgewood Water to maintain 10% of the prior year’s operating budget in reserves was affirmed. The budget also projects that the Debt Service Coverage Ratio (“DSCR”) will be 1.22, which is above the Village policy of maintaining at least a 1.00 DSCR. Raftelis also reviewed the projected Days Cash on Hand ratio (“DCOH”) at the end of 2025. The budget currently projects a reduction from 136 DCOH to 101 DCOH. There is not a universal formula for deciding how much in reserves a utility should hold. The right level of both operating and capital reserves differs for each utility, and multiple factors such as billing frequency, rate structure, variability of water

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<sup>6</sup> Horngren's Cost Accounting 16th Edition: Chapter 15 / Srikant M. Datar, Madhav V. Rajan.

consumption, bond ratings, and use of budget contingencies can be evaluated to set these levels. Raftelis finds that an appropriate DCOH for Ridgewood Water is 90 days.

The ending fund balance projection includes a \$1.000 million estimated adjustment to the applied surplus, which otherwise will be a \$4.389 million cash draw on the water fund. This adjustment is based on historical performance and expectations about capital execution capacity and other factors and is believed to be a reasonable adjustment to the expected cash drawdown for budgeting purposes.

## Base Water Rates

Raftelis found that the method of budgeting revenues for FY 2025 is consistent with the Department of Community Affairs (“DCA”) guidelines. Under these guidelines, Ridgewood Water is limited to last year’s revenues plus the retained anticipated surplus. Any additional revenues required to cover the water fund revenue requirement must come from rate adjustments.

## Volumetric User Charge

The proposed budget includes a 9% increase to the volumetric rate, effective in the second half of the year. The proposed volumetric rate is increasing from \$5.86 per thousand gallons to \$6.39 per thousand gallons. The current \$0.01 per thousand gallons New Jersey water quality tax will remain unchanged.

## Fixed Charge

The proposed budget includes a 9% increase to the base rate fixed service charge, effective in the second half of the year. The proposed fixed service charge is increasing from \$32.98 per quarter to \$35.95 per quarter for a customer with a 5/8-inch meter. Raftelis also verified that Ridgewood Water aligned their base rate fixed service charges to the AWWA meter capacity ratios.

In the future, particularly if the PFAS surcharge goes away, the base rate fixed service charge should adjust accordingly to ensure it is capturing a target portion of capital or other forms of fixed costs. Fixed rate components should be designed to balance affordability while ensuring customers cover the costs of the infrastructure in place that drives Ridgewood Water revenue requirement regardless of customer usage. A full rate study or policy analysis may be needed to confirm the precise level of base fixed charge escalation in the future.

## PFAS Surcharge

The proposed budget includes a 50% increase to the PFAS Surcharge, effective in the second half of the year. The proposed PFAS Surcharge is increasing from \$24.71 per quarter to \$37.07 per quarter for a customer with a 5/8-inch meter. Customers served through this meter size represent 91% of the customer base. The increase in the charge is driven by an increase in debt service and PFAS-related operating expenses. The additional debt has been used to fund numerous treatment and production improvements to assure continued compliance with New Jersey PFAS standards, which are among the most stringent in the Country. Ridgewood Water has mitigated the impact of these additional costs on the surcharge rate by applying an anticipated surplus amount of \$1.688 million to the PFAS revenue requirement. Thus, the proposed PFAS surcharges, despite the significant increase for 2025, will likely only recover roughly 64% of the PFAS revenue

requirement for the year. Raftelis believes this is an appropriate application of surplus to help offset rate impacts.

## Customer Impacts

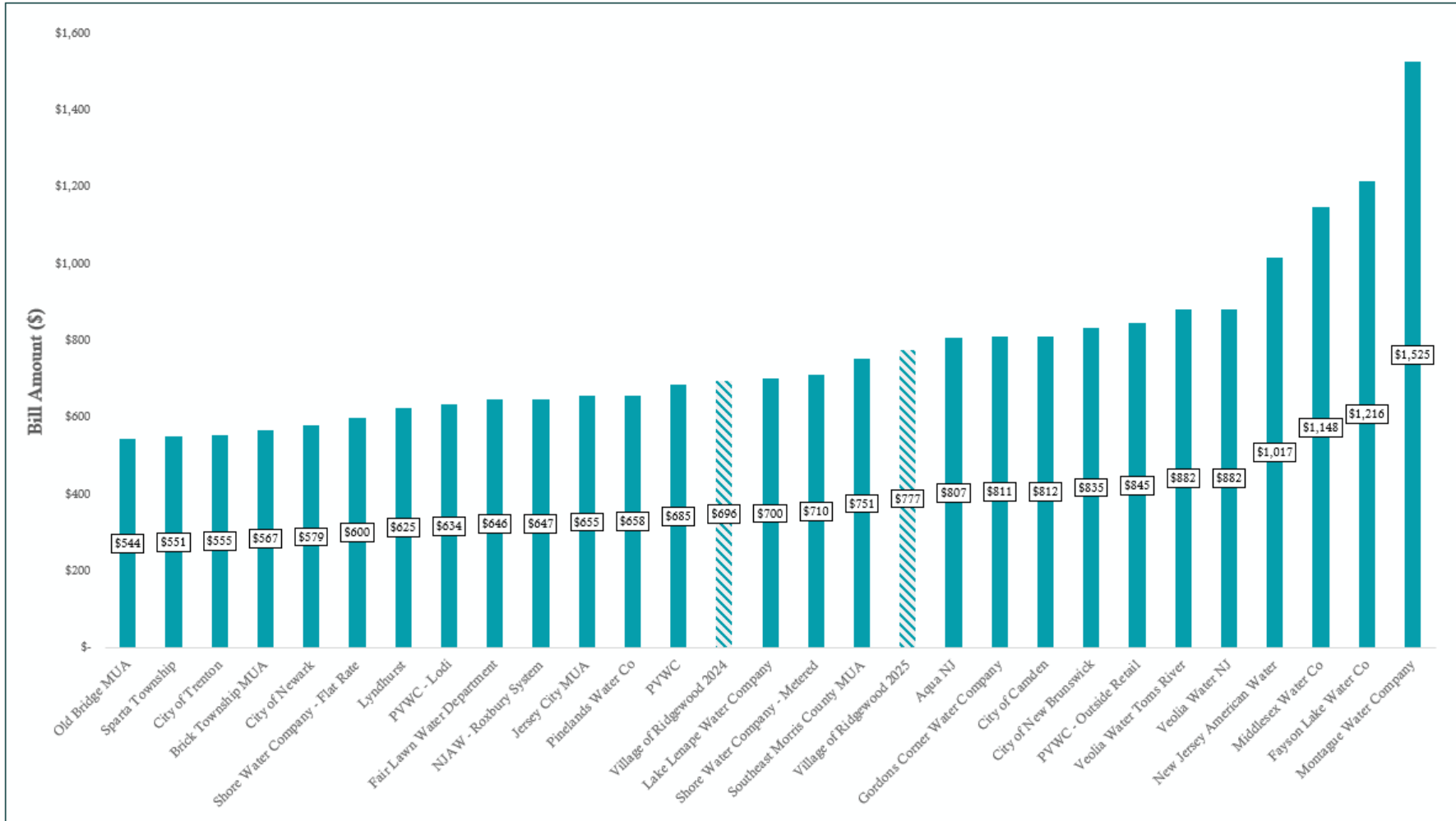
The typical customer who uses 7,000 gallons per month with a 5/8-inch meter will see their quarterly bill increase from \$180.96 to \$207.42 once the new rates go into effect. This represents an increase of 14.6%. As a rate consultancy with engagements all over the country Raftelis can confirm that low double digit water rate increases have been common in recent years for many municipalities due to the combined impacts of aging infrastructure, emerging contaminants, and inflation. Exhibit A compares the 2024 and 2025 Ridgewood Water rates with a set of local peers based on the most recent publicly available information, which may not be fully current for 2025 pending the fiscal and publication cycles of each comparator. While Ridgewood Water's 2025 rates come in higher than some comparator's it is likely that the Village is ahead of many peers' efforts to modernize their infrastructure and that over time rates will remain competitive, particularly given the system quality and reliability that will proceed from current investments.

## Conclusion

Based on the review of the proposed budget, Raftelis finds that the 2025 budget has been developed in a manner that aligns with industry standards, sound principles for rate setting, and applicable state and local statutes. The proposed budget also complies with Resolution 16-114 set forth by the Village. The budgeted revenues allow for the utility to recover the full cost of providing service to customers, and Raftelis finds that the proposed rate increases are generally justifiable and reasonable.



**Exhibit A**  
**Annual Water Bill for Residential Customers**  
 (5/8-inch meter; 7,000 gallons/month)  
 Current Tariff as of January 1, 2025\*



\*Current Tariffs are the most recent publicly available rates. Some communities may not have yet published 2025 rates.