

MEMO

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

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

Date: 2/14/2024

Re: 2024 Ridgewood Water Budget Review

Introduction

Raftelis was engaged by Ridgewood Water to review their proposed Calendar Year 2024 (“2024”) 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 60,000 persons, 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. 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.¹ 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 2024 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

¹ Village Of Ridgewood In The County Of Bergen New Jersey Bond Anticipation Notes Series 2023B Consisting Of Bond Anticipation Notes And Water Utility Bond Anticipation Notes

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 2024 budget proposes a 3% increase to the volumetric rate and a 75% increase to the PFAS Surcharge.

Raftelis also reviewed the 2022 and 2023 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 2024

In prior years, the budget review process was the responsibility of Mr. Howard Woods of Howard J. Woods, Jr. & Associates, L.L.C. Raftelis wants to recognize the contributions made to the Village by Mr. Woods, who unfortunately passed away in 2023.

Ridgewood Water will also resume purchasing water from Hawthorne in 2024 as their supplies achieve compliance and effective treatment for PFAS. In the prior two years supplies were not budgeted for or purchased from Hawthorne due to PFAS concerns.

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 2005-2023 period, Ridgewood shows a compound annual rate of decline of -0.65% 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 2024. 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 a slight decrease from the 5.78 million gallons per day in 2023. 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 2010 and 2022 resulting in a 0.22% increase each year.

The total revenue budget for 2024 is \$22.678 million. Total water rents and miscellaneous revenues are budgeted at \$17.180 million and \$1.668 million, respectively. The revenue budget also utilizes a \$3.829 million surplus from the water fund to partially offset rate increases in 2024. 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 2024 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 2024 are budgeted at \$22.678 million, which is a 22% increase over 2023 actual expenditures. Only 2% of this increase is attributed to increases in operational expense. The balance of the increase is for increased capital debt and PAYGO capital investment. Raftelis reviewed the revenue requirements for 2024 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 budget for 2024 is approximately \$6.735 million, which represents 30% of the total revenue requirements and a 45% increase over 2023 capital expenditures. PFAS and base-related capital expenditures are budgeted at approximately \$1.633 million and \$5.102 million, respectively. In a review of capital project planning for 2024 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 2024.

O&M

Ridgewood Water's proposed 2024 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 2024. 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 have increased in the 2024 budget. As Ridgewood Water continues implementing the PFAS remediation program, the construction of additional treatment works and systems aimed at removing PFAS from the source water will lead to additional operation and maintenance expenses. Larger portions of direct labor charges will be linked to the maintenance and operation of these facilities. In 2024, the proportion of labor associated with PFAS activities has risen from 7.4% in 2023 to 13.3%. Consequently, Raftelis recommends that PFAS labor allocations necessitate periodic review and revision on an annual basis until PFAS treatment is completed.

PFAS related O&M expenses are approximately \$2.510 million in 2024, which represents 11% of total revenue requirements. The base cost related O&M expenses are approximately \$11.903 million in 2024, which represents 52% of total revenue requirements. Total O&M expenses for 2024 are budgeted at a 14% increase over 2023 actual expenditures.

In reviewing the 2024 budget, Raftelis identified O&M expenditures that were contributing to the overall increase in budgeted costs compared to 2023 actual expenditures. One such contributor is the purchase of bulk water from Veolia, Hawthorne, and PVWC. In prior years, purchased water costs were budgeted with a large buffer due to PFAS contaminants in Ridgewood Water's supply. In 2023, for example, budgeted purchased water costs were approximately \$1.267 million, or 80% higher than actual expenditures. While the budgeted cost for purchases of bulk water in 2024 still contains a buffer, Raftelis finds that it is likely to be much more closely aligned with actual costs for 2024 as purchases increase in correspondence with PFAS treatment coming online in supplier systems.

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. 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 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 \$1.079 million in the 2024 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.²

Village Allocation

In 2022, Ridgewood Water moved their headquarters from the Village Hall to the Elks Club. The Village expense allocations to Ridgewood Water were subsequently updated in 2023 to reflect this change. Raftelis has reviewed the allocation changes and agrees 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. In developing the 2024 budget, Ridgewood Water used the 2022 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 2022 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. For each of the line items in your calculations, Raftelis agrees that Ridgewood Water used the appropriate allocation factor. Therefore, the resulting allocation of approximately \$2.5 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 \$52.2 million. Therefore, only 4.8% of the General Fund expenses are being allocated to Ridgewood Water and 95.2% of those costs are retained in the General Fund or allocated to Parking.

The most significant category of allocated expenses pertains to insurance and pension benefits, encompassing health insurance, workers' compensation insurance, pensions, and general liability insurance. Together, these costs constitute 58% of the total allocation of \$2.5 million from the General Fund to Ridgewood Water. 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 32% 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 \$811,829, which also reflects a portion of the Utility Director's salary.

² 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).

The remaining shared expenses are for materials, supplies and services provided to support water utility operations. This accounts for only 10% 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 1.23, 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 2024. The budget currently projects a reduction from 302 DCOH to 202 DCOH. The ending fund balance projection includes a \$1.000 million estimated adjustment to the applied surplus, which otherwise will be a \$3.829 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 2024 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

Village ordinance allows Ridgewood Water to increase the volumetric rates by 3% annually to keep up with inflationary costs. The proposed budget includes a 3% increase to the volumetric rate, effective in the second half of the year. The proposed volumetric rate is increasing from \$5.69 per thousand gallons to \$5.86 per thousand gallons. The current \$0.01 per thousand gallons New Jersey water quality tax will remain unchanged.

Fixed Charge

The proposed budget does not include an increase to the base rate fixed service charge this year. Raftelis agrees that it is sensible to have no adjustment at this time, particularly given the need to increase fixed cost recovery via the PFAS surcharge. In the future, particularly if the PFAS surcharge goes away, the base fixed charge should likely adjust annually 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 with 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. The current fixed service charge of \$32.98 per quarter for a customer with a 5/8-inch meter will remain unchanged for 2024.

PFAS Surcharge

The proposed budget includes a 75% increase to the PFAS Surcharge, effective in the second half of the year. The proposed PFAS Surcharge is increasing from \$14.12 per quarter to \$24.71 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 \$2.475 million to the PFAS revenue requirement. Thus, the proposed PFAS surcharges, despite the significant increase for 2024, will likely only recover roughly 40% of the PFAS revenue requirement for the year. Raftelis believes this is an appropriate application of surplus to help offset rate impacts.

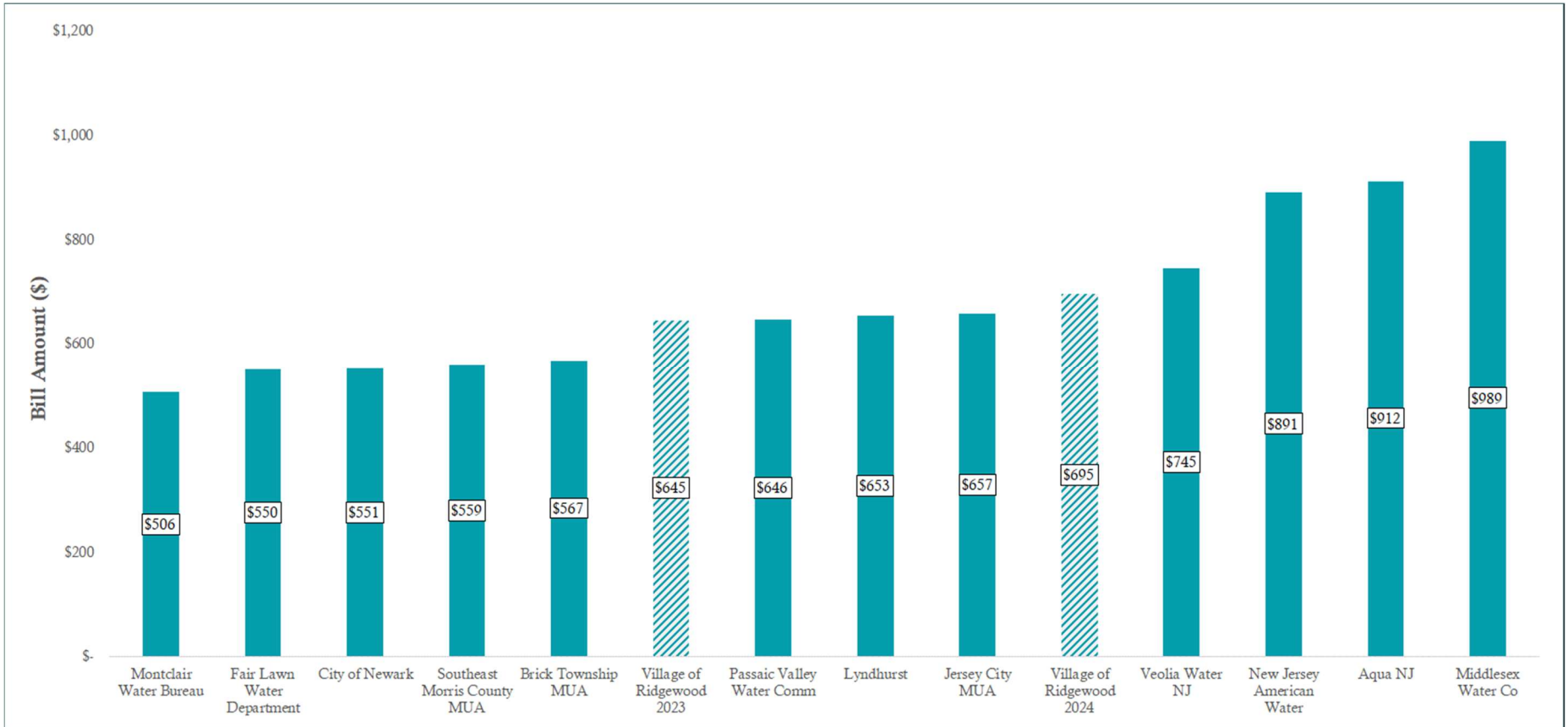
Customer Impacts

The typical customer who uses 5,000 gallons per month with a 5/8-inch meter will see their quarterly bill increase from \$132.60 to \$145.74 once the new rates go into effect. This represents an increase of 9.91%. As a rate consultancy with engagements all over the country Raftelis can confirm that high single 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 2023 and 2024 Ridgewood Water rates with a set of local peers based on the most recent publicly available information, which may not be fully current for 2024 pending the fiscal and publication cycles of each comparator. While Ridgewood Water's 2024 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 2024 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, 2024*



*Current Tariffs are the most recent publicly available rates. Some communities may not have yet published 2024 rates.