

# Howard J. Woods, Jr. & Associates, L.L.C.

January 27, 2023

Mr. Richard Calbi, Jr., P.E., P.P.  
Director of Operations  
Ridgewood Water  
131 North Maple Avenue  
Ridgewood, N.J. 07450

Re: Proposed 2023 Budget

Dear Mr. Calbi:

I've reviewed the proposed budget for Ridgewood Water and it is my opinion that you have properly allocated shared Village expenses to the Water budget. This includes a proper reflection of the changes in allocation factors resulting from Ridgewood Water's move from the Village Hall. The method used to allocated shared expenses is consistent with the recommendations in my Water Utility Rate Study dated November 17, 2017 and my Supplemental Rate Study 2013-2016 dated December 29, 2017. Your proposed budget also continues the practice of isolating polyfluoroalkyl substances ("PFAS") related operating expenses and capital costs for recovery in a separate PFAS Surcharge.

I reviewed and updated the proposed 2023 allocations of Village expenses to Water. Your move out of the Village Hall and into new office quarters required a revision to the allocation factors for 2023 and beyond. This impacted the allocations for Property Maintenance, Electricity & Gas, Telephone & Telecommunications, and Water - Bulk Purchases. In addition, the related allocation factor used to allocate administrative and overhead charges to water also changed. This last factor is an allocation of all other allocations, so there is a slight reduction in these allocations that must flow through the calculation. In addition to the allocations of shared expenses, I have also reviewed your revenue calculations and the calculation of the available surplus revenue transfer up to 5% to the general fund. Here is a summary of my review and conclusions.

Your proposed 2023 budget segregates costs associated with the impact of the detection of PFAS from your base rates in the same manner used in your prior budgets. Some of these expenses are direct charges incurred only because of your response to the PFAS issue but others are expenses that must be allocated between

---

49 Overhill Road, East Brunswick, New Jersey 08816-4211  
Phone: 267-254-5667  
E-mail: [howard@howardwoods.com](mailto:howard@howardwoods.com)



---

base water charges and charges necessary to recover the PFAS costs. It is important to note that this is an internal water utility cost allocation that has nothing to do with the allocations of shared expenses from the Village General Fund. The PFAS costs are costs incurred by the water utility to produce water that complies with new regulatory standards. Had you not taken the step to segregate these costs from base rates, your base rates would be higher to allow for this cost recovery. It is important to segregate these costs from the basic cost of providing water service as you pursue cost recovery against those who may be responsible for the presence of these compounds in your source water. This is also a transparent way to show your customers the cost of this issue and it will also facilitate your efforts to support grant applications. I have reviewed the PFAS allocations you have made and found these to be reasonable and appropriate. The result of these calculations is a PFAS related revenue requirement of approximately \$3.562 million dollars for 2023. Your proposed budget applies an anticipated surplus of \$2.48 million to this amount thereby reducing the amount recovered directly from Ridgewood Water customers in the proposed surcharge rates. The proposed Budget also benefits from debt service schedules that are now known and reflective of favorable financing from the New Jersey Infrastructure Bank. The resulting projected PFAS rates are actually less than what was previously projected.

The internal allocations for base and PFAS costs will change as you implement the PFAS remediation program. You will be constructing additional treatment works and systems to remove PFAS from your source water. As a result, you will incur additional operation and maintenance expense and greater portions of your direct labor charges will be associated with the maintenance and operation of these facilities. For 2023, for example, the portion of labor associated with PFAS activities has increased over the past two years from 5.9% in 2021 to 7.3% for 2023. As a result, these allocations will need to be reviewed and revised at least annually.

With regard to the base rate budget, I've focused my attention on the overall revenue requirement and the allocations of Village costs to Water. As a municipal water department, you have the advantage of being able to share certain expenses with the Village. These costs must be allocated equitably between the general fund and the water fund. In the Water Utility Rate Study, I developed fourteen allocation factors 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 both the Water Utility Rate Study and the Supplemental Rate Study 2013-2016, I used these factors to allocate actual and budgeted general fund expenses to the water fund. The allocated expenses include the cost of the Village Central Garage, the water utility office space located in the Village Hall, property and casualty insurance, administrative support, governance and asset protection. In addition, a portion of the utility director's salary and benefits were allocated from the water fund to the general fund, recognizing that this position supports Village functions not related to water operations. In your 2023 proposed

---

budget, you have also allocated costs from the Water Utility IT function to the General Fund for support services that the water utility provides to the Village.

In developing your 2023 Water Fund budget, you used the 2021 audited expenses for the Village General Fund as the basis of your allocations. The audit represents the final statement of actual expenses for shared costs that must be allocated to the water budget. The 2021 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. I revised the Allocation Factors to properly reflect the move of Ridgewood Water to new office quarters outside of the Village Hall. This reduced the allocation of Village General Fund costs to Ridgewood Water by approximately \$11,000 per year. For each of the line items in your calculations, you used the appropriate allocation factor developed in the Water Utility Rate Study including the factors I modified to reflect the office move. The resulting allocation of approximately \$2.4 million is reasonable and appropriate. The Village expenses that are being allocated among the General Fund, the Parking Fund and the Water Fund amount to approximately \$50.7 million.<sup>1</sup> Therefore, only 4.75% of the General Fund expenses are being allocated to Water and 95.25% of those costs are retained in the General Fund or allocated to Parking.

The principal category of allocated expenses is insurance and pension benefits. This includes health insurance, workers compensation insurance, pensions and general liability insurance. Collectively, these expenses account for 57% of the \$2.4 million total amount allocated to the Water Fund from the General Fund. Employee insurance and pension expenses are allocated based on the relative labor expense directly assigned to or shared with the Water Utility. Casualty and liability insurance is allocated on the basis of the relative value of Village and Water Utility fixed asset values and on the basis of the relative value of the Water Utility above ground assets and the assessed property values in the Village.

The next largest category of allocated expenses included salaries and wages. This accounts for another 33% of the total allocations to the Water Fund. Within this group, salaries and wages for direct support of the water utility operations from Engineering, Streets & Roads and the Central Garage, for example, are accounted for. The amount allocated to Water is \$794,915. This reflects an allocation of a portion of the Utility Director's salary.

The remaining shared expenses are for materials, supplies and services provided to support water utility operations and collectively, this accounts for only 10% of the total allocated to water.

---

<sup>1</sup> In the Water Utility Rate Study and in the Supplemental Rate Study 2013-2016, all Village general fund allocations to Water and Parking were reversed to establish a complete picture of the budget and actual expenses incurred by the Village. These expenses were then allocated among the General Fund, the Water Fund and the Parking Fund using the fourteen allocation factors.

N.J.S.A. 40A:4-35.1 permits the Water Utility to transfer surplus revenue collected to the General Fund. The amount cannot exceed 5% of the cost of operating the utility. This rule has been applied by the New Jersey Board of Public Utilities (“BPU”) in regulating municipal utility rates. Every municipality supplying electricity, gas steam or other product beyond its corporate limits is subject to regulation by the BPU (N.J.S.A. 40:62-24). In its regulation of municipal water utilities, the BPU has applied the 5% transfer as a surrogate for the return on equity capital earned by investor-owned utilities. Unlike investor-owned utilities, municipal utilities have no equity capital in their debt structure. Only the debt service costs for bonds or notes exists and as a result, there is no direct method, using rate base rate of return regulation, to compensate the owners of such utilities for the risks and responsibilities they take on in raising capital and providing an essential service like potable water service. This transfer essentially becomes the replacement for the return on shareholder equity allowed in establishing investor-owned water utility rates. By way of comparison, I would like to note that the BPU is currently authorizing investor-owned utilities to earn 9.60% on equity capital so, while the 5% rule offers a municipal owner some compensation for risk, it is not on par with what investor-owned utilities are able to include in the rates they charge for service. I have reviewed the calculation of the 5% transfer amount in your proposed budget, and it is my opinion that your calculation is consistent with reasonable interpretations of the BPU rule.

With respect to revenues, I developed a linear regression analysis to predict consumption for your future years. I looked at rainfall, temperature, cooling degree days and Palmer-Z Index as potential variables to predict future consumption. None of these alone or in combination produced a strong correlation, however, a trend forecast based on time and rainfall provides a reasonable means of forecasting future water sales. With the exception of a peak in 2012 (7.91 MGD), your water demands are trending down slightly. The downward slope is typical of what I see in other communities, and it will likely continue into the future. More efficient appliances and plumbing devices are driving this and as customers replace older appliances or renovate kitchens and bathrooms, the trend will continue. The annual rate of decline I see over the 2005 through 2022 period for Ridgewood is a compound annual rate of -0.55% per year. The addition of new customers and, in some cases, re-purposing of existing properties and connections offset part or all of this decline. Given the consistent system send-out for your water utility year-over-year, the use of a budget sales volume of 5.78 million gallons per day, which is equal to the average for the last five years less a 5% factor of safety, is appropriate. To the extent that volumetric sales exceed this amount, or any amount projected for future years, the anticipated surplus will be applied to the water fund balance and used to stabilize future rates.

Your method of budgeting revenues for 2023 is also consistent with the Department of Community Affairs (“DCA”) guidelines. You are 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. Your proposed Budget includes a 3% adjustment to the volumetric rate for the second half of the year. The new volumetric rate you are proposing is \$5.70 per thousand gallons, including the \$0.01 per thousand gallons New Jersey water quality tax. You have not proposed a change in the base rate fixed service charges and in my opinion, none is needed.

The PFAS surcharge is increasing from \$7.06 per quarter to \$14.12 per quarter for a customer with a 5/8-inch meter. Customers served through this size meter represent 92% of the customers you serve. 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. You have mitigated the impact of these additional costs on the surcharge rate by applying an anticipated surplus amount of \$2.55 million to the PFAS revenue requirement. Thus, the proposed PFAS surcharges for 2023 will likely recover less than one third of the PFAS revenue requirement for the year.

I also developed a five-year forecast of revenues, expenses and resulting base and PFAS rates. This provides a view of Ridgewood Water for the 2024 through 2028 period beyond the proposed budget. In this forecast, base rates will continue to recover likely increases in costs driven largely by inflation and general industry trends. The PFAS surcharge will also increase over this period to accommodate debt service associated with continuing capital improvements and the resulting operating costs of new treatment facilities. Over this period, the forecast balances the use of reserves to mitigate the surcharge as much as possible while maintaining adequate balances to properly operate the utility.

Your proposed rates compare favorably with the charges of other water utilities in the area and in New Jersey. I have attached a chart showing the current annual water charge to a residential customer served through a 5/8-inch meter using 7,820 gallons of water per month.<sup>2</sup> This is the average use for a customer served through a 5/8-inch meter in your system for the past five years. This chart also highlights the proposed charges with the recommended increase in base rates and the proposed PFAS surcharge in place. These charges are comparable to those charged by Passaic Valley Water Commission and Jersey City MUA and are much less than the charges levied by Veolia Water New Jersey and New Jersey American Water.

In summary, it is my opinion that the budget that you have proposed has been developed in a way that is consistent with industry standards and sound rate setting principles. The budgeted level of revenues is consistent with DCA guidelines and

---

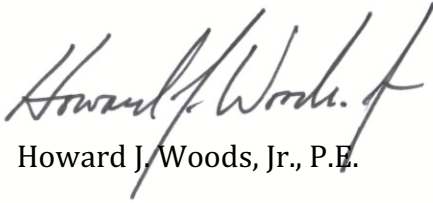
<sup>2</sup> By comparison, New Jersey American Water's average residential use is 5,631 gallons per month. The average use per residential customer for Passaic Valley Water Commission is 5,744 gallons per month.



provides the Water Utility an opportunity to recover the full projected cost of providing service.

If you have any questions about my analysis, please feel free to give me a call.

Regards,

A handwritten signature in cursive script that reads "Howard J. Woods, Jr." with a stylized flourish at the end.

Howard J. Woods, Jr., P.E.

## Annual Charges of Select Water Utilities

Annual Charges Calculated for Average Monthly  
Use of 7,820 gallons/month. Current Tariff as of January 1, 2023

