

Petersburg Borough

UTILITY RATE STUDY

FINAL REPORT
October 2020

Washington

7525 166th Avenue NE, Ste. D215
Redmond, WA 98052
425.867.1802

Oregon

4000 Kruse Way Pl., Bldg. 1, Ste 220
Lake Oswego, OR 97035
503.841.6543

Colorado

1320 Pearl St, Ste 120
Boulder, CO 80302
719.284.9168

www.fcsgroup.com

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FCS GROUP
Solutions-Oriented Consulting

October 2, 2020

Karl Hagerman, Utility Director
Borough of Petersburg
PO Box 329
Petersburg, AK 99833

Subject: Utility Rate Study

Dear Karl:

FCS GROUP is pleased to submit this Water, Wastewater, and Sanitation Rate Study report prepared for the City of Petersburg. This report summarizes the methodology, findings, and recommendations for each of the core study elements.

Recommended water and wastewater rate adjustments were presented at a public meeting in September 2019. These rate adjustments were revised in June 2020 due to the COVID-19 pandemic. Sanitation rate adjustments and recycling scenarios were presented to the Assembly in August 2020.

The table below outlines the annual rate revenue adjustments for each utility. The combined monthly residential bill based on average water use (4,000 gallons or 4 kgals) is estimated at \$119.50 in FY 2021. The combined monthly residential bill in FY 2022 is estimated at \$123.70 or a monthly increase of \$4.20 from the prior year.

Annual Rate Revenue Adjustments					
Utility	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Water	0.00%	3.00%	3.00%	3.00%	3.00%
Wastewater	0.00%	3.00%	3.00%	3.00%	3.00%
Sanitation	0.00%	5.00%	5.00%	5.00%	5.00%

Monthly Residential Bill Impact						
Utility	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Water (3/4" Meter and 4 kgals)	\$44.51	\$44.51	\$45.85	\$47.22	\$48.62	\$50.10
Wastewater	\$44.48	\$44.48	\$45.81	\$47.18	\$48.59	\$50.07
Sanitation (32G + Recycle)	\$30.51	\$30.51	\$32.04	\$33.64	\$35.32	\$37.09
Total	\$119.50	\$119.50	\$123.70	\$128.04	\$132.53	\$137.26
<i>Monthly Increase from Prior Year</i>		\$0.00	\$4.20	\$4.34	\$4.49	\$4.73

We appreciate the contributions from Borough staff to this study process. It has been a pleasure working with you and we look forward to assisting you with your future financial / management needs. Any questions or commentary regarding this report can be directed to Matt Hobson at (425) 615-6056 or matthewh@fcsgroup.com.

Regards,



Angie Sanchez-Virnoche
Principal and Vice President



Matt Hobson
Project Manager



Chase Bozett
Senior Analyst

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Section I. INTRODUCTION

I.A. PURPOSE

FCS Group was engaged by the Petersburg Borough (“Borough”) to conduct a utility rate study for the water, wastewater, and sanitation utilities. The purpose of this study was to provide a utility rate and financial forecast for the FY 2021 to FY 2025 planning period. The water and wastewater analyses were conducted sequentially in fall 2019 and the sanitation analysis was completed in spring 2020.

I.B. APPROACH

The methods used to complete the study are based on analytical principles that are generally accepted and widely followed throughout the industry – rates and charges should generate enough revenue to maintain self-supporting and financially viable utilities.

Throughout the study, we worked with staff from the Borough to arrive at rate conclusions that meet forecasted utility financial obligations, achieve financial reserve goals, comply with legal requirements, and adhere to industry best practices. Meetings were held with Borough staff to validate input parameters, review interim findings, and receive policy direction. Recommended water and wastewater rate adjustments were presented at a public meeting in September 2019.

Following the initial completion of the utility study, we worked with staff to revise the rate recommendations to align them to the Borough’s policy goals related to COVID-19. These adjustments are reflected in this report and were reviewed with Borough staff in June 2020.

I.C. SCOPE

The scope of the project included the following key elements:

- Review of fiscal policies.
- Assess revenue needs for a multi-year period that includes adequate funding for operations and maintenance, system reinvestment, debt service, and other program activities.
- Project capital needs and incorporate these needs into a multi-year funding forecast.
- Facilitate staff reviews of preliminary results.
- Facilitate an Assembly workshop and public hearing to present final results, options, and recommendations of the multi-year plans.
- Adjust rate recommendations based on the Borough’s policy goals related to COVID-19.

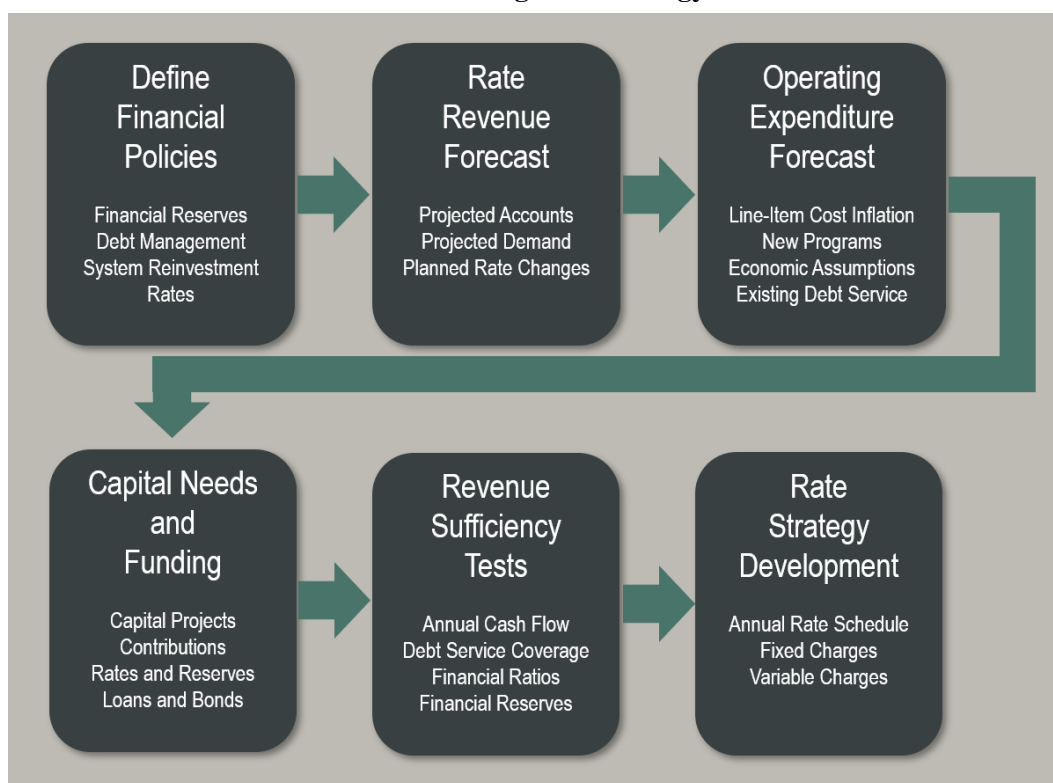
The general methodology for the utility rate study is summarized in **Section II** of the report. **Section III, IV, and V, and VI** detail the assumptions, key factors, conclusions, and recommendations of the water, wastewater, and sanitation utilities. Supporting analyses and financial models for the utility rate study were provided in Microsoft Excel format to the Borough.

Section II. METHODOLOGY

II.A. OVERVIEW

The methods used to establish customer rates are based on principles that are generally accepted and widely followed throughout the industry. These principles are designed to produce rates that equitable recover costs from each class of customer by setting the appropriate level of revenue to be collected from ratepayers. **Exhibit 1** illustrates the rate setting methodology used throughout the study.

Exhibit 1
Rate Setting Methodology



II.B. REVENUE REQUIREMENT

A revenue requirement analysis forms the basis for a long-range financial plan and multi-year rate management strategy for each utility. It also enables the Borough to set utility rates which fully recover the total cost of operating each system: capital improvement and replacement, operations and maintenance, general administration, fiscal policy attainment, cash reserve management, and debt repayment. Linking rate levels to a financial plan such as this helps to enable sound financial performance for the Borough's utilities and creates a clear and reasonable relationship between the costs imposed on utility customers and the costs incurred to provide the service.

A revenue requirement analysis includes the following core elements to form a complete portrayal of the utility's financial obligations.

- **Fiscal Policy Analysis:** Identifies formal and informal fiscal policies of the Borough to ensure that current policies are maintained, including reserve levels, capital/system replacement funding, and debt service coverage.
- **Capital Funding Plan:** Defines a strategy for funding the Borough's capital improvement program, including an analysis of available resources from rate revenues, debt financing, and other special resources that may be readily available.
- **Operating Forecast:** Identifies future annual non-capital costs associated with the operation, maintenance, and administration of the system.
- **Strategy Development:** Designs a forward-looking strategy for adjusting rates to fully fund all financial obligation on an annual basis over the FY 2021 to FY 2025 time period. In July 2020 Borough staff requested that the Sanitation study period extend to FY 2026. This draft report

Section III. WATER UTILITY

III.A. INTRODUCTION

The Borough owns and operates the water utility, which provides water services to customers within the service area. Water is provided from two surface water sources: Cabin Creek and City Creek. As of 2019, the City serves approximately 1,100 connections and maintains over 27 miles of water distribution mains.

III.B. REVENUE REQUIREMENT

The revenue requirement is the amount of revenue that a utility's rates must generate to meet its various financial obligations. This analysis has two main purposes – it serves as a means of evaluating the utility's fiscal health and adequacy of current rate levels, and it sets the revenue basis for near-term and long-term rate planning. The rate revenue required is defined as the net difference between total revenue needs and the revenue generated through non-rate revenues. Hence, the revenue requirement analysis involves defining and forecasting both needs and resources.

III.B.1. Operating Forecast

The purpose of the operating forecast is to determine whether the existing rates and charges are sufficient to recover the costs the utility incurs to operate and maintain the water utility. The operating forecast was developed for the FY 2021 to FY 2025 time period. The FY 2020 budget formed the baseline of the forecast. The operating forecast includes revenues, operating expenses, and debt service.

III.B.1.a Financial Reserves

- **Total Fund Balance:** A total fund balance is designed to provide financial resources to the utility in two ways. The first is as a liquidity cushion to protect the utility from the risk of short-term variation in the timing of revenue collection or payment of expenses and can help smooth rate increases over time. The second is to have funds set aside in case of an emergency should a piece of equipment or a portion of the utility's infrastructure fail unexpectedly. This study assumes an operating reserve target of four months (~120 days) of operating and maintenance expenses consistent with the Borough's current policy. This minimum reserve ranges from \$265,000 to \$295,000 through the study period.

III.B.1.b Operating Revenues

- **Rate Revenue:** Based on budgeted FY 2020 residential and commercial sales revenue.
- **Non-Rate Revenue:** Line-item adjustments were made to non-rate revenues are described below:
 - » The utility receives revenue from charges for services and water delivery in addition to monthly residential and commercial rate revenue. Annual revenue from these sources totaled \$16,000 in FY 2020, which is assumed throughout the financial forecast.
 - » Economic development subsidy based on a minimum of \$165,000 or debt service owed to debt related to Cabin Creek and Scow Bay.
 - » State PERS Relief based on FY 2021 budget and tied to State PERS Relief expense.

- » Investment interest was calculated based on unused fund balances during the study period and a 1.75 percent interest rate. The interest rate was based on feedback from Borough staff and historical investment earnings.

III.B.1.c Operating and Maintenance (O&M) Expenses

- **General Cost Inflation:** 3.00 percent per year; based on the Borough's historical cost increases and discussions with Borough staff.
 - » **Professional Services:** Baseline forecast adjusted downward by \$34,000 in FY 2021 to account for one-time expenses in FY 2020 (e.g., periodic safety inspections at reservoirs and rate study). Inflationary adjustments are applied at 3.00 percent per year thereafter with exception to FY 2023 which includes a one-time \$20,000 adjustment for the safety inspections at the reservoirs.

III.B.1.d Debt Service

- **Existing Debt:** The water utility's existing debt consists of three state loans as well as one loan related to Cabin Creek, and one loan related to Scow Bay improvements. Annual debt service for all existing debt is approximately \$355,000 in FY 2020 and decreases to approximately \$260,000 by the end of the forecast period due to the retirement of the Cabin Creek loan.
- **New Debt:** Annual loans issued by the Alaska Department of Environmental Conservation (ADEC) are assumed in the water revenue requirement. Total loan proceeds throughout the period total \$2,325,000. Each loan is expected to be financed based on the following terms
 - » Twenty (20) year term
 - » 1.50 percent annual interest rate
 - » No debt issuance costs
 - » Historically, a portion of the Borough's ADEC loans have been forgiven (maximum \$500,000 annually or 50 percent of the loan). Based on discussions with Borough staff, the likelihood of future loans being forgiven may be lower than in the past. To be conservative, the forecast assumes that ADEC loans would be repaid by the Borough in full. If the Borough were to have a portion of a loan forgiven, it would reduce the reliance on future borrowing.

III.B.1.e System Reinvestment

System reinvestment funding is a utility best practice that promotes system integrity. It is a funding strategy that recognizes and proactively plans for the eventual retirement and replacement of utility assets with rate revenues. Target system reinvestment funding levels are commonly linked to the annualized replacement cost of assets determined through an asset management plan. In the absence of a formal asset management plan, annual depreciation expense is used as a funding target. The specific benchmark used to set system reinvestment funding targets is a matter of policy and must balance various objectives including managing rate impacts, keeping long-term costs down, and promoting "generational equity" (i.e. not excessively burdening current customers with paying for facilities that will serve a large group of customers in the future).

The Borough does not have a formal system reinvestment policy. While we would generally recommend enacting a reinvestment policy, the Borough has a unique financial resource through low-interest state loans that provides a similar benefit to a system reinvestment policy. Unlike many utilities, the Borough has access to low-interest loans from the Alaska Drinking Water Fund State

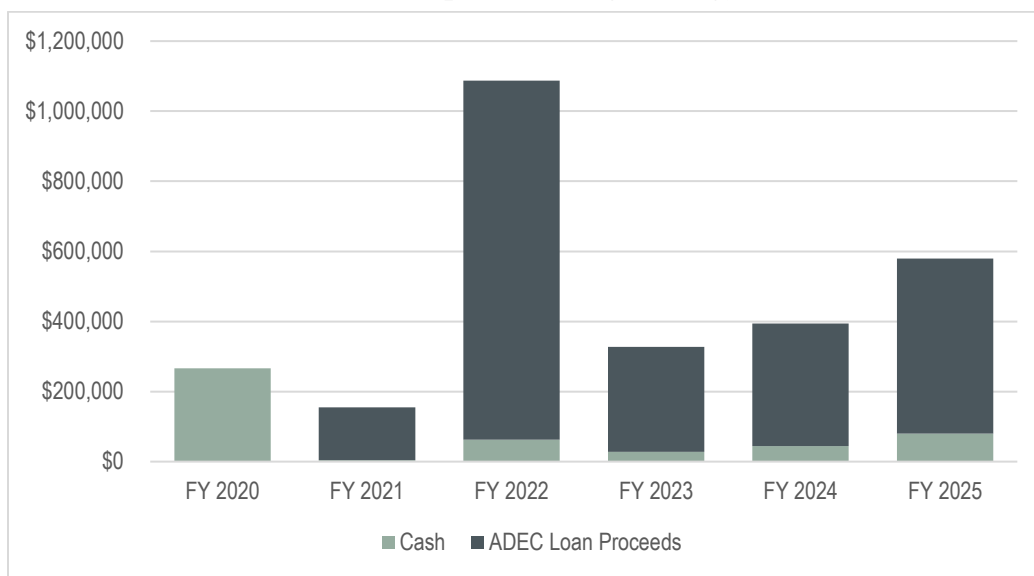
Revolving Fund which is administered by the Alaska Department of Environmental Conservation (ADEC). This state program allows the Borough to access capital project funding at a relatively low interest rate and provides a chance that the loan may be forgiven. Implementing a system reinvestment policy is not recommended at this time. This policy decision should be revisited by the Borough in the future given any changes to the ADEC loan program.

III.B.2. Capital Funding Plan

The water utility’s original capital plan totaled \$6.9 million over the FY 2020 to FY 2025 time period. After an initial review with staff, a revised capital plan was developed to mitigate significant rate increases or “spikes” to customers. The revised rate plan includes \$2.8 million from FY 2020 to FY 2025. Projects not funded within this time frame would be deferred to later years. Funding for these projects has been identified as existing reserves, interest on available fund balance, and ADEC loans. Based on this plan, the Borough would cash fund approximately 17 percent of the capital plan while the remaining 83 percent would be funded by low-interest, forgiveness-eligible, ADEC loans.

Exhibit 2 provides a summary of funding strategy by year.

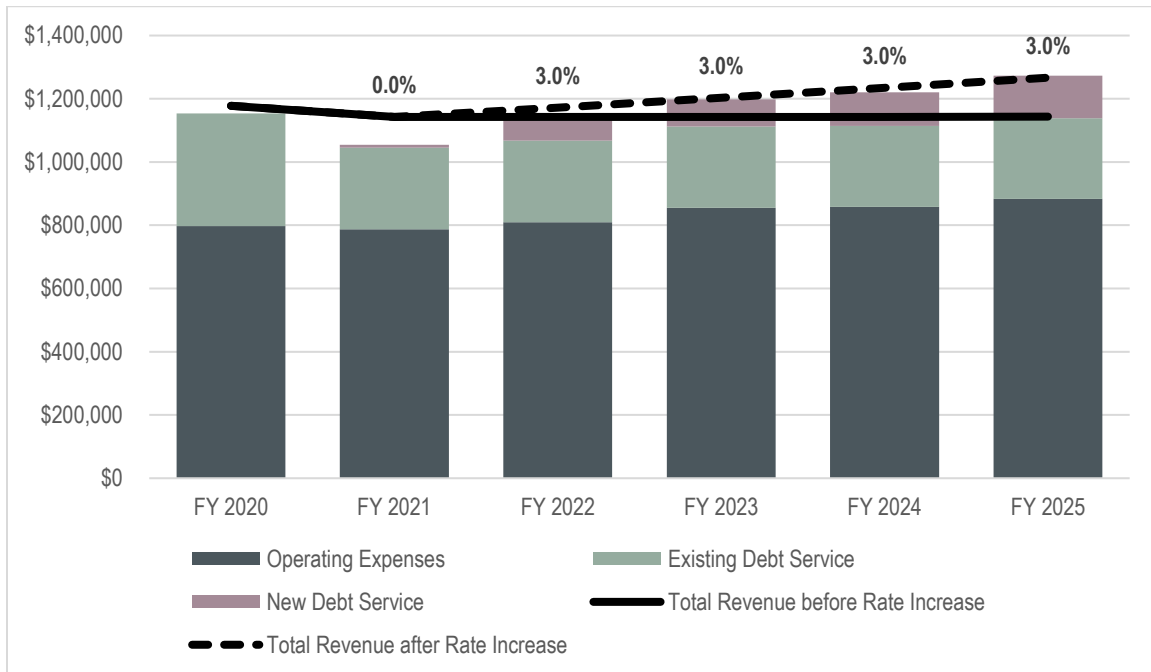
Exhibit 2
Water Capital Funding Strategy



III.C. SUMMARY OF REVENUE REQUIREMENT

The operating forecast components come together to form the multi-year revenue requirement. The revenue requirement compares the overall revenue available to the water utility to the expenses and evaluates the sufficiency of current rates on an annual basis. **Exhibit 3** illustrates a summary of the revenue requirement findings.

Exhibit 3
Water Utility Revenue Requirement



Key observation of the revenue requirement include:

- Total revenues at current rates are sufficient to cover operating cost and existing debt obligations through the forecast period. Existing rates are not sufficient to cover new debt service associated with financing the utility’s FY 2020 to FY 2025 capital plan.
- Final debt payment related to Cabin Creek occurs in FY 2020. As a result, existing debt service is expected to decrease in FY 2021. Debt service for the Cabin Creek and Scow Bay debt are partially offset each year by revenue from the Economic Development Subsidy. This subsidy is expected to decrease in FY 2021 as the Cabin Creek debt reaches maturity.
- To meet projected financial obligations and achieve the Borough’s financial targets, annual revenue increases are needed from FY 2022 to FY 2025 at 3.0 percent.
- In addition to the rate revenue increases, the utility will likely need to rely on available fund balance from FY 2023 to FY 2025. The utility’s fund balance is projected to remain above the minimum reserve target of four months (~122 days) of operating expenses through the forecast period. By 2025, the projected fund balance is estimated at 269 days of operating expenses or approximately \$652,000 as illustrated in **Exhibit 4**.

Exhibit 4
Water Fund Balance



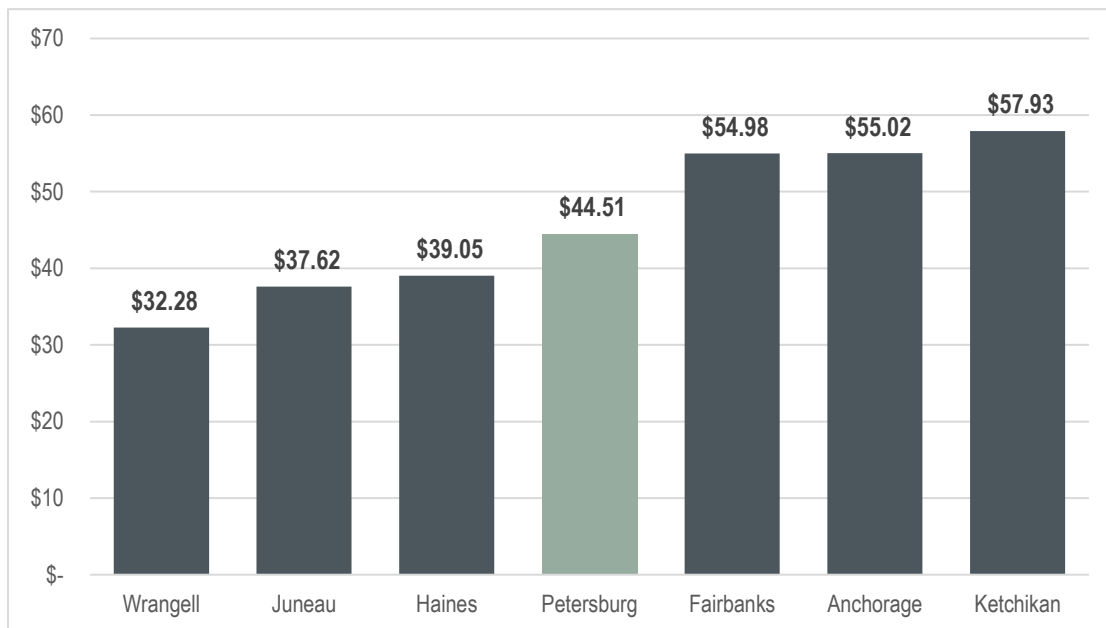
Exhibit 5 illustrates the projected water rates for each customer class from FY 2021 to FY 2025 based on the rate revenue recommendations. All rates are projected to remain at current levels in FY 2021. Annual rate adjustments from FY 2022 to FY 2025 are applied equally or across the board (ATB) to residential and commercial rate classes and to base and volumetric rates. Between FY 2021 and FY 2025 the 3/4-inch residential base charge is expected to increase from \$35.31 to \$39.74 – a difference of \$4.43 over the five-year period. The commodity charge is expected to increase from \$2.30 per 1,000 gallons to \$2.59 per 1,000 gallons over the same time period.

Exhibit 5
Projected FY 2021 to FY 2025 Water Rates

Across-the-Board Rate Schedule	Existing FY 2020	ATB FY 2021	ATB FY 2022	ATB FY 2023	ATB FY 2024	ATB FY 2025
Annual System-Wide Rate Increase		0.00%	3.00%	3.00%	3.00%	3.00%
Charges						
3/4" Residential Base Charge	\$35.31	\$35.31	\$36.37	\$37.46	\$38.58	\$39.74
3/4" Residential 1,000 Gallon Charge	\$2.30	\$2.30	\$2.37	\$2.44	\$2.51	\$2.59
3/4" Residential Senior Discount Base Charge	\$17.66	\$17.66	\$18.19	\$18.74	\$19.30	\$19.88
3/4" Residential Senior Discount 1,000 Gallon Charge	\$1.15	\$1.15	\$1.18	\$1.22	\$1.26	\$1.29
1" Base Charge	\$47.39	\$47.39	\$48.81	\$50.28	\$51.78	\$53.34
1" 1,000 Gallon Charge	\$4.10	\$4.10	\$4.22	\$4.35	\$4.48	\$4.61
1.5" Base Charge	\$118.48	\$118.48	\$122.03	\$125.70	\$129.47	\$133.35
1.5" 1,000 Gallon Charge	\$4.00	\$4.00	\$4.12	\$4.24	\$4.37	\$4.50
2" Base Charge	\$248.81	\$248.81	\$256.27	\$263.96	\$271.88	\$280.04
2" 1,000 Gallon Charge	\$3.81	\$3.81	\$3.92	\$4.04	\$4.16	\$4.29
3" Base Charge	\$544.98	\$544.98	\$561.33	\$578.17	\$595.51	\$613.38
3" 1,000 Gallon Charge	\$2.38	\$2.38	\$2.45	\$2.52	\$2.60	\$2.68
4" Base Charge	\$829.33	\$829.33	\$854.21	\$879.84	\$906.23	\$933.42
4" 1,000 Gallon Charge	\$1.84	\$1.84	\$1.90	\$1.95	\$2.01	\$2.07
6" Base Charge	\$1,244.02	\$1,244.02	\$1,281.34	\$1,319.78	\$1,359.37	\$1,400.16
6" 1,000 Gallon Charge	\$1.04	\$1.04	\$1.07	\$1.10	\$1.14	\$1.17

Exhibit 6 compares sample residential bills between nearby and similar jurisdictions. It is assumed that the typical residential customer uses 4,000 gallons per month with a ¾ inch meter (based on figures from 2019 water quality report).

Exhibit 6
Sample Bill Comparison



Section IV. WASTEWATER UTILITY

IV.A. INTRODUCTION

The Borough owns and operates the wastewater utility, which provides wastewater services to customers within their service area. The wastewater collection system includes 17 miles of underground piping and 20 lift stations. The wastewater treatment plant processes approximately 200 million gallons of wastewater annually from 1,100 connections.

IV.B. REVENUE REQUIREMENT

Similar to the water utility, the revenue requirement is the amount of revenue that a utility's rates must generate to meet its various financial obligations. This analysis has two main purposes – it serves as a means of evaluating the utility's fiscal health and adequacy of current rate levels, and it sets the revenue basis for near-term and long-term rate planning. The rate revenue required is defined as the net difference between total revenue needs and the revenue generated through non-rate revenues. Hence, the revenue requirement analysis involves defining and forecasting both needs and resources.

IV.B.1. Operating Forecast

The purpose of the operating forecast is to determine whether the existing rates are sufficient to recover the costs the utility incurs to operate and maintain the wastewater utility. The operating forecast was developed for the FY 2021 to FY 2025 time period. The FY 2020 budget formed the baseline of the forecast.

IV.B.1.a Financial Reserves

- **Total Fund Balance:** A total fund balance is designed to provide protection in two ways. The first is as a liquidity cushion to protect the utility from the risk of short-term variation in the timing of revenue collection or payment of expenses and can help smooth rate increases over time. The second is to have funds set aside in case of an emergency should a piece of equipment or a portion of the utility's infrastructure fail unexpectedly. This study assumes a target of 4 months (~122 days) of operating and maintenance expenses consistent with the Borough's current policy. This minimum reserve ranges from \$230,000 to \$260,000 through the study period

IV.B.1.b Operating Revenues

- **Rate Revenue:** Based on budgeted FY 2020 residential and commercial sales revenue.
- **Non-Rate Revenue:** Line-item adjustments were made to non-rate revenues are described below:
 - » The utility receives revenue from charges for services in addition to monthly residential and commercial rate revenue. Annual revenue from this source totaled \$10,000 in FY 2020, which is assumed throughout the financial forecast.
 - » State PERS Relief based on FY 2021 budget and tied to State PERS Relief expense.

- » Investment interest was calculated based on unused fund balances during the study period and a 1.75 percent interest rate. The interest rate was based on feedback from Borough staff and historical investment earnings.

IV.B.1.c Operating and Maintenance (O&M) Expenses

- **General Cost Inflation:** 3.00 percent per year; based on the Borough's historical cost increases and discussions with Borough staff.
 - » **Professional Services:** Baseline forecast adjusted downward by \$14,000 in FY 2021 to account for one-time expenses in FY 2020. Inflationary adjustments are applied at 3.00 percent per year thereafter.

IV.B.1.d Debt Service

- **Existing Debt:** The wastewater utility's existing debt consists of four state loans as well as three loans related to Kisenno Street, Scow Bay Pump Station 1, and Pump Station 4 Force Main that begin repayment in FY 2022. Annual debt obligation ranges from \$150,000 at the beginning of the study period to \$210,000 at the end of the period.
- **New Debt:** Annual ADEC loans are assumed in the wastewater revenue requirement. Total loan proceeds throughout the period total \$2,250,000. Each loan is expected to be financed based on the following terms
 - » Twenty (20) year term
 - » 1.50 percent annual interest rate
 - » No debt issuance costs
 - » Historically, a portion of the Borough's ADEC loans have been forgiven (maximum \$500,000 annually or 50% of the loan). Based on discussions with Borough staff, the likelihood of future loans being forgiven may be lower than in the past. To be conservative, the forecast assumes that ADEC loans would be repaid by the Borough in full. If the Borough were to have a portion of a loan forgiven, it would reduce the reliance on future borrowing.

IV.B.1.e System Reinvestment

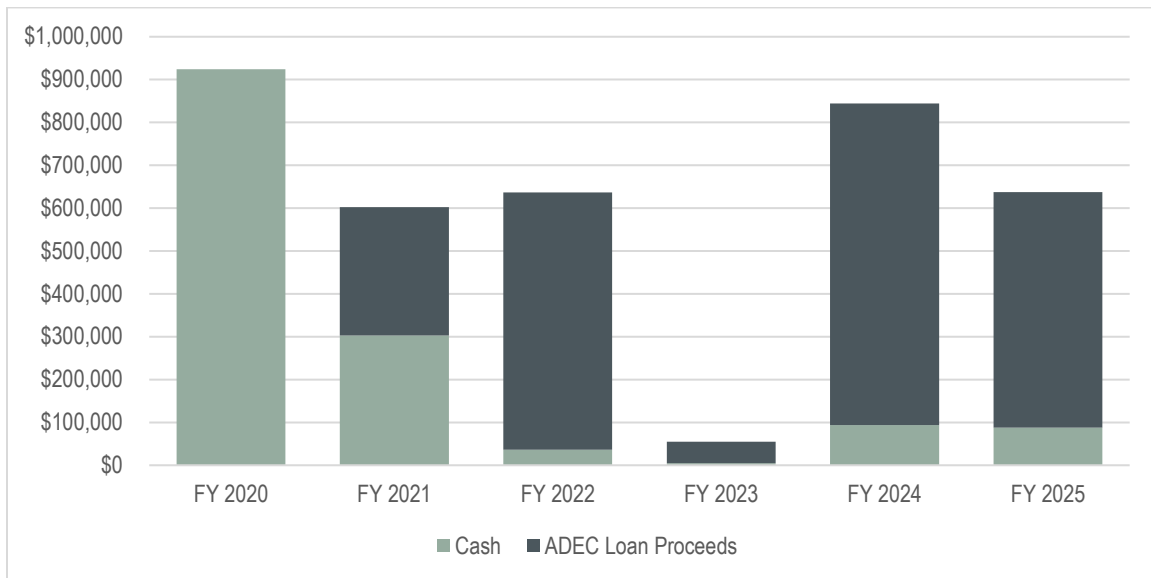
Similar to the water utility, the Borough does not have a formal system reinvestment policy for the wastewater utility. While we would generally recommend enacting a reinvestment policy, the Borough has a unique financial resource through low-interest state loans that provides a similar benefit to a system reinvestment policy. For a description of these state loans and their impact on the water and wastewater utility financial plans, please refer to pages 6 and 7 of this report. In summary, this state program allows the Borough to access capital project funding at a relatively low interest rate and provides a chance that the loan may be forgiven. Implementing a system reinvestment policy is not recommended at this time. This policy decision should be revisited by the Borough in the future given any changes to the ADEC loan program.

IV.B.2. Capital Funding Plan

The wastewater utility's capital plan totals \$3.7 million from FY 2020 to FY 2025. Funding for these projects has been identified as existing reserves, interest on available fund balance, and ADEC loans. Based on this plan, the Borough would finance approximately 39 percent of the capital plan while the

remaining 61 percent would be funded by low-cost, forgiveness-eligible ADEC loans. **Exhibit 7** provides a summary of the capital funding strategy by year.

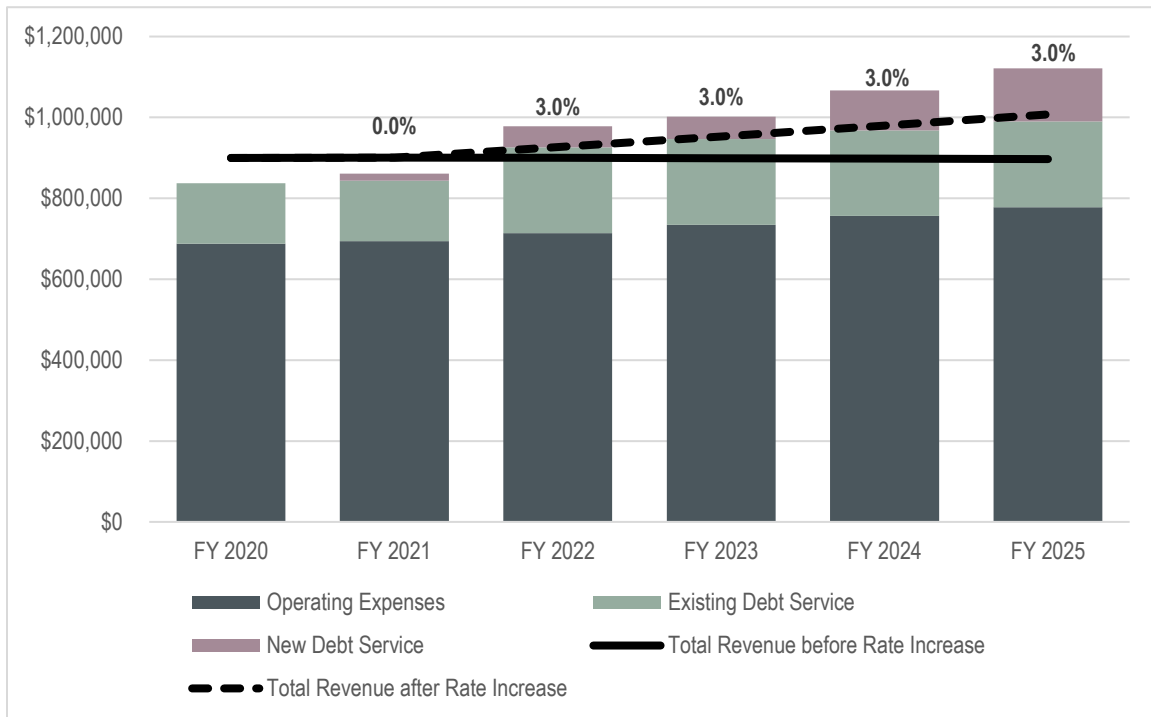
Exhibit 7
Wastewater Capital Funding Strategy



IV.C. SUMMARY OF REVENUE REQUIREMENT

The operating forecast components come together to form the multi-year revenue requirement. The revenue requirement compares the overall revenue available to the wastewater utility to the expenses and evaluates the sufficiency of current rates on an annual basis. **Exhibit 8** illustrates a summary of the revenue requirement findings.

Exhibit 8 Wastewater Revenue Requirement



Key observation of the revenue requirement include:

- Total revenues at current rates are sufficient to cover operating cost obligations through the forecast period. Beginning in FY 2022, revenue levels are not projected to cover existing and new debt service costs.
- The initial rate recommendation included 3.0 percent annual adjustments from FY 2021 to FY 2025. In response to the financial impacts of COVID-19, this initial recommendation was revised in June 2020 to defer any rate action in FY 2021. The revised rate recommendation includes 3.0 percent annual rate adjustments beginning one year later from FY 2022 to FY 2025.
- By deferring rate action in FY 2021, the wastewater utility will need to rely more on available fund balance to meet its operating cost and debt service obligations. The utility’s fund balance is projected to remain above the minimum reserve target of four months (~122 days) of operating expenses through the forecast period. By FY 2025, the projected fund balance is estimated at 269 days of operating expenses or approximately \$573,000 as illustrated in **Exhibit 9**.

Exhibit 9
Wastewater Fund Balance

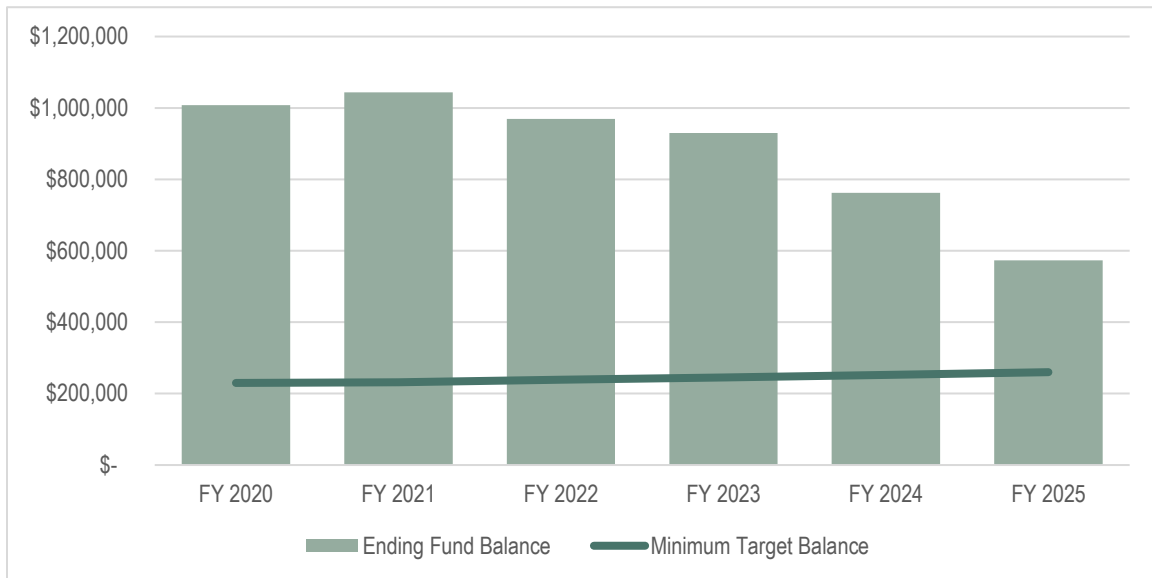


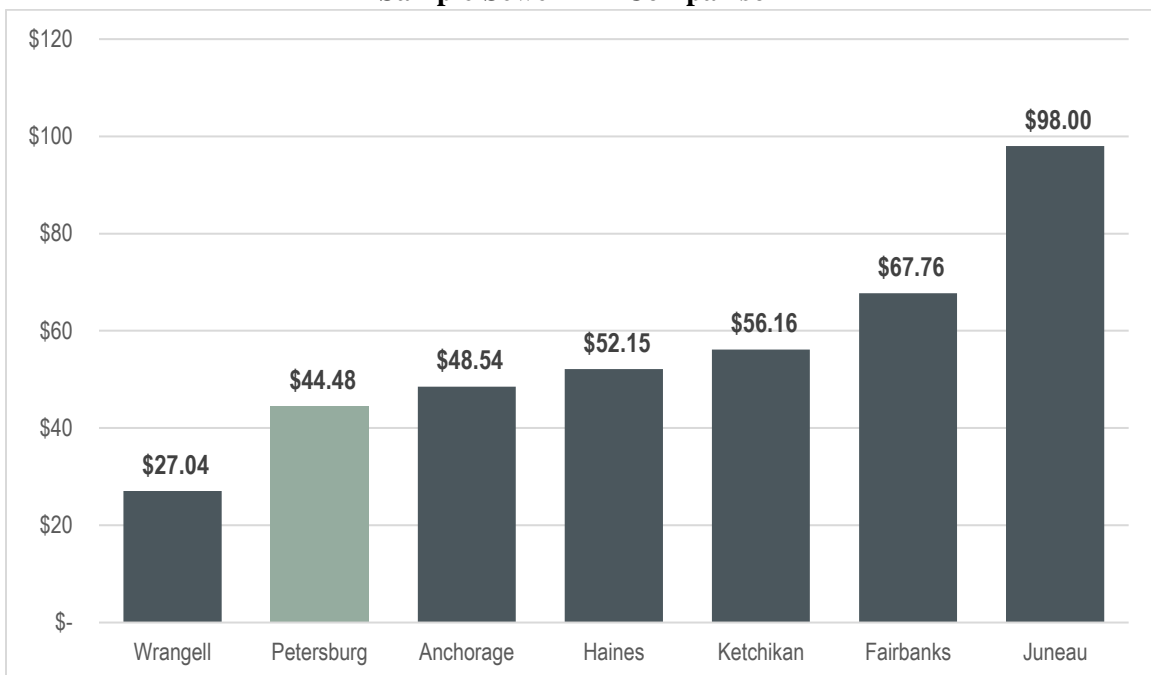
Exhibit 10 illustrates the projected wastewater rates for each customer class from FY 2021 to FY 2025 based on the rate revenue recommendations. All rates are projected to remain at current levels in FY 2021. Annual rate adjustments from FY 2022 to FY 2025 are applied equally or across the board (ATB) to residential and commercial rate classes and to base and volumetric rates. Between FY 2021 and FY 2025 the residential base charge is expected to increase from \$40.40 to \$45.57 – a difference of \$5.07 for the five-year time period. The commodity charge is expected to increase from \$1.02 per 1,000 gallons to \$1.15 per 1,000 gallons over the same time period.

Exhibit 10
Projected FY 2021 to FY 2025 Wastewater Rates

Across-the-Board Rate Schedule	Existing FY 2020	ATB FY 2021	ATB FY 2022	ATB FY 2023	ATB FY 2024	ATB FY 2025
Annual System-Wide Rate Increase		0.00%	3.00%	3.00%	3.00%	3.00%
Base Charges						
Residential	\$40.40	\$40.40	\$41.61	\$42.86	\$44.15	\$45.47
1" Sewer	\$90.51	\$90.51	\$93.23	\$96.02	\$98.90	\$101.87
1.5" Sewer	\$217.81	\$217.81	\$224.34	\$231.07	\$238.01	\$245.15
2" Sewer	\$435.64	\$435.64	\$448.71	\$462.17	\$476.04	\$490.32
3" Sewer	\$839.16	\$839.16	\$864.33	\$890.26	\$916.97	\$944.48
6" Sewer	\$2,191.66	\$2,191.66	\$2,257.41	\$2,325.13	\$2,394.89	\$2,466.73
Industrial	\$528.61	\$528.61	\$544.47	\$560.80	\$577.63	\$594.96
Commodity Charge per 1,000 Gallons						
Senior Citizen Discount	\$0.51	\$0.51	\$0.53	\$0.54	\$0.56	\$0.57
All Other Accounts	\$1.02	\$1.02	\$1.05	\$1.08	\$1.11	\$1.15

Exhibit 11 compares sample residential bills between nearby and similar jurisdictions. It is assumed that the typical residential customer uses 4,000 gallons per month.

Exhibit 11
Sample Sewer Bill Comparison



Section V. SANITATION UTILITY

V.A. INTRODUCTION

The Borough owns and operates the sanitation utility, which provides solid waste and recycling services to customers within the service area. As of 2018, the City serves approximately 1,200 customers. The City collects municipal solid waste from customers and utilizes service contracts for the transport, disposal, and material processing of collected material. The planning period for the Sanitation utility was originally FY 2021 to FY 2025. In July 2020, Borough staff requested to extend the planning period by one additional year to FY 2026.

V.B. REVENUE REQUIREMENT

Like the water and wastewater utilities, the revenue requirement analysis for sanitation evaluates the revenue sufficiency of existing rates against forecasted operating, capital, and financial policy expenses. This assessment provides the foundation for a multi-year rate plan that ensures long-term financial sustainability and compliance with the Borough's financial reserve goals.

V.B.1. Operating Forecast

The purpose of the operating forecast is to determine whether the existing rates and charges are sufficient to recover the costs the utility incurs to operate and maintain the sanitation utility. The operating forecast was developed for the FY 2021 to FY 2026 time period. The FY 2020 budget formed the baseline of the forecast. The operating forecast includes refuse collection rate revenues, baler charges, and operating expenses (e.g., staff, equipment fuel and maintenance, disposal contract charges).

V.B.1.a Financial Reserves

- **Total Fund Balance:** A total fund balance is designed to provide financial resources to the utility in two ways. The first is as a liquidity cushion to protect the utility from the risk of short-term variation in the timing of revenue collection or payment of expenses and can help smooth rate increases over time. The second is to have funds set aside in case of an emergency should a piece of equipment or a portion of the utility's infrastructure fail unexpectedly. This study assumes an operating reserve target of four months (~120 days) of operating and maintenance expenses consistent with the Borough's current policy. This minimum reserve ranges from \$295,000 to \$350,000 through the study period.

V.B.1.b Operating Revenues

- **Rate Revenue:** Based on budgeted FY 2020 refuse collection and baler/landfill charges revenue. No growth in customer accounts are assumed in the forecast.
- **Non-Rate Revenue:** Line-item adjustments were made to non-rate revenues are described below:
 - » State PERS Relief based on FY 2020 budget and tied to State PERS Relief expense.

V.B.1.c Operating and Maintenance (O&M) Expenses

- **General Cost Inflation:** 3.00 percent per year; based on the Borough's historical cost increases and discussions with Borough staff.
 - » Motorpool O&M line item is adjusted downward in FY 2021 from approximately \$109,000 to \$90,000.
 - » Additional maintenance expenses for a new baler are estimated at \$26,000 per year beginning in FY 2021 and increases each subsequent year with general cost inflation.
 - » Additional annual equipment replacement funding for a new collection truck estimated at \$4,000 in FY 2021 and increasing to \$18,000 each year thereafter.
- **MSW Transport and Disposal:** 3.50 percent per year; based on the Borough's 2018 contract renewal with Republic Services.

V.B.1.d Debt Service

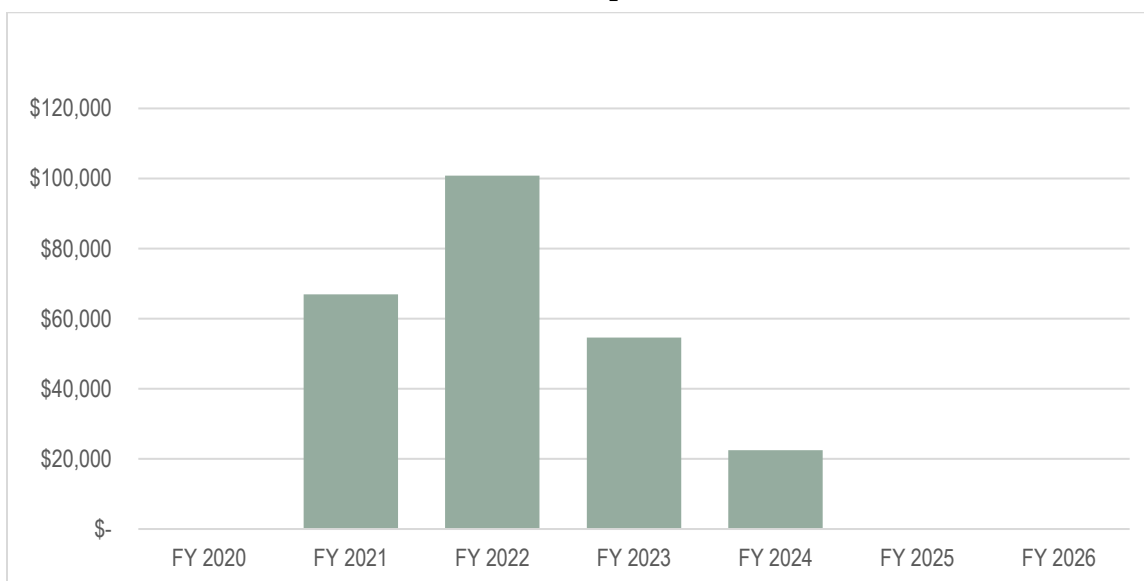
The Sanitation utility currently does not have any outstanding debt and is not projected to issue debt for any capital projects over the study period.

V.B.2. Capital Funding Plan

The sanitation utility's capital plan totals \$250,000 over the FY 2020 to FY 2026 time period.

Exhibit 12 provides a summary of capital by year. The Borough has also identified a roof replacement project beyond the study period for \$200,000 (FY 2028).

Exhibit 12
Sanitation Capital Plan

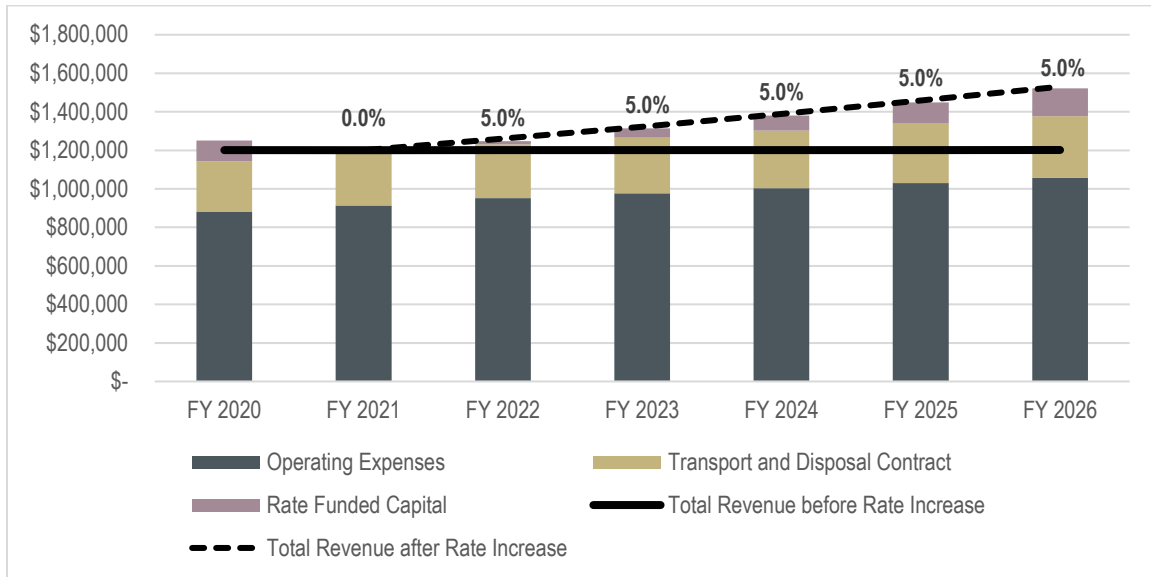


V.C. SUMMARY OF REVENUE REQUIREMENT

The operating forecast components come together to form the multi-year revenue requirement. The revenue requirement compares the overall revenue available to the sanitation utility to the expenses

and evaluates the sufficiency of current rates on an annual basis. **Exhibit 13** illustrates a summary of the revenue requirement findings.

Exhibit 13
Sanitation Utility Revenue Requirement

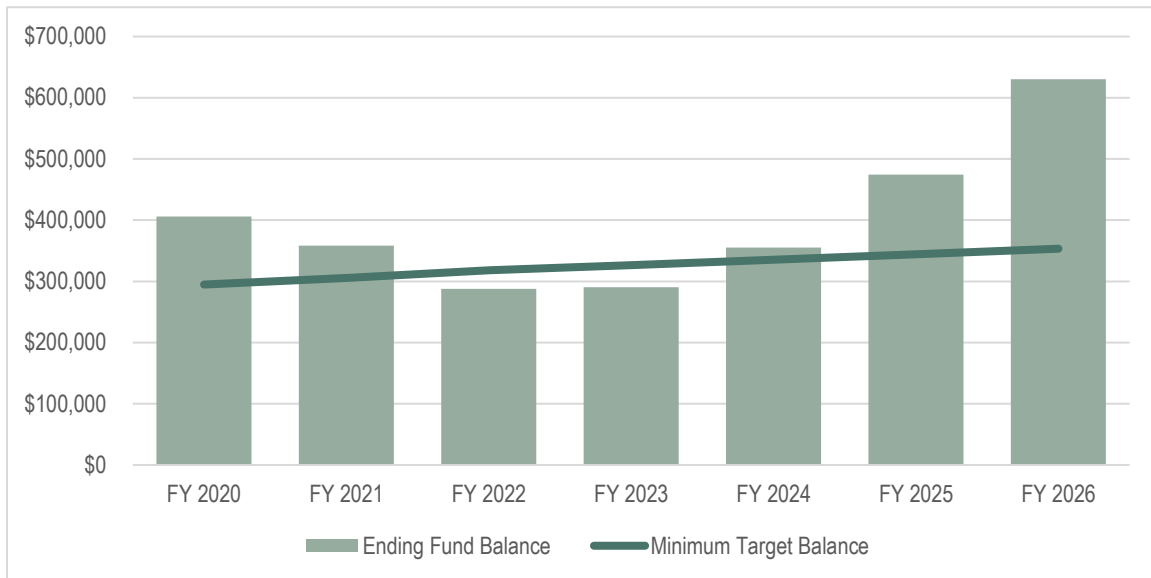


Key observation of the revenue requirement include:

- Total revenues at current rates are sufficient to cover operating costs including the transport and disposal contract in FY 2021.
- Operating expenses begin to outpace rate revenues beginning in FY 2022. Operating expenses are expected to exceed revenues by \$175,000 in FY 2026.
- Annual rate adjustments of 5.00 percent beginning in FY 2022 are anticipated to fund operating expenses, generate revenue for the planned capital projects, and maintain a financial reserve at or near the Borough’s target level.

Exhibit 14 summarizes the fund balance through the forecast period compared to the target level of four months of operating expenses.

Exhibit 14
Sanitation Fund Balance



Key observations on the utilities ending fund balance include:

- Fund balance drops to 110 and 108 days of O&M expenses in FY 2022 and FY 2023 respectively to fund capital needs.
- Fund balance increases after FY 2023 to target levels throughout remaining years of study period.

Exhibit 15 illustrates the projected sanitation rates for each customer from FY 2021 to FY 2026 based on the rate revenue recommendations. All rates are projected to remain at current levels in FY 2021. Annual rate adjustments from FY 2022 to FY 2026 are applied equally or across the board (ATB) to all rates.

Based on this multi-year rate plan, the customer monthly rate for a 32-gallon solid waste can and recycling service is expected to increase from \$30.51 to \$32.04 in FY 2022 – an increase of \$1.53. Between FY 2021 and FY 2026 the customer monthly rate for a 32-gallon solid waste can and recycling service is expected to increase from \$30.51 to \$38.94 – a increase of \$8.43 over the five-year period.

Exhibit 15
Projected FY 2021 to FY 2026 Sanitation Rates

Across-the-Board Rate Schedule	Existing FY 2020	ATB FY 2021	ATB FY 2022	ATB FY 2023	ATB FY 2024	ATB FY 2025	ATB FY 2026
Annual System-Wide Rate Increase		0.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Charges							
G1R	\$ 30.51	\$ 30.51	\$ 32.04	\$ 33.64	\$ 35.32	\$ 37.09	\$ 38.94
G1	\$ 36.61	\$ 36.61	\$ 38.44	\$ 40.36	\$ 42.38	\$ 44.50	\$ 46.72
G2	\$ 54.19	\$ 54.19	\$ 56.90	\$ 59.74	\$ 62.73	\$ 65.87	\$ 69.16
G2S	\$ 27.10	\$ 27.10	\$ 28.46	\$ 29.88	\$ 31.37	\$ 32.94	\$ 34.59
G3	\$ 63.57	\$ 63.57	\$ 66.75	\$ 70.09	\$ 73.59	\$ 77.27	\$ 81.13
G1S	\$ 18.30	\$ 18.30	\$ 19.22	\$ 20.18	\$ 21.18	\$ 22.24	\$ 23.36
G1SR	\$ 15.25	\$ 15.25	\$ 16.01	\$ 16.81	\$ 17.65	\$ 18.54	\$ 19.46
G5	\$ 304.84	\$ 304.84	\$ 320.08	\$ 336.09	\$ 352.89	\$ 370.53	\$ 389.06
G6	\$ 184.20	\$ 184.20	\$ 193.41	\$ 203.08	\$ 213.23	\$ 223.90	\$ 235.09
G7	\$ 342.54	\$ 342.54	\$ 359.67	\$ 377.65	\$ 396.53	\$ 416.36	\$ 437.18
G8	\$ 83.68	\$ 83.68	\$ 87.86	\$ 92.26	\$ 96.87	\$ 101.71	\$ 106.80
G9	\$ 123.89	\$ 123.89	\$ 130.08	\$ 136.59	\$ 143.42	\$ 150.59	\$ 158.12
G10	\$ 365.16	\$ 365.16	\$ 383.42	\$ 402.59	\$ 422.72	\$ 443.85	\$ 466.05
G11	\$ 606.43	\$ 606.43	\$ 636.75	\$ 668.59	\$ 702.02	\$ 737.12	\$ 773.98
G12	\$ 681.83	\$ 681.83	\$ 715.92	\$ 751.72	\$ 789.30	\$ 828.77	\$ 870.21
G13	\$ 113.16	\$ 113.16	\$ 118.82	\$ 124.76	\$ 131.00	\$ 137.55	\$ 144.42
G14	\$ 184.20	\$ 184.20	\$ 193.41	\$ 203.08	\$ 213.23	\$ 223.90	\$ 235.09
G15	\$ 546.11	\$ 546.11	\$ 573.42	\$ 602.09	\$ 632.19	\$ 663.80	\$ 696.99
G16	\$ 908.01	\$ 908.01	\$ 953.41	\$ 1,001.08	\$ 1,051.14	\$ 1,103.69	\$ 1,158.88
G17	\$ 1,021.11	\$ 1,021.11	\$ 1,072.17	\$ 1,125.77	\$ 1,182.06	\$ 1,241.17	\$ 1,303.22
G18	\$ 244.52	\$ 244.52	\$ 256.75	\$ 269.58	\$ 283.06	\$ 297.22	\$ 312.08
G19	\$ 485.79	\$ 485.79	\$ 510.08	\$ 535.58	\$ 562.36	\$ 590.48	\$ 620.00
G20	\$ 244.52	\$ 244.52	\$ 256.75	\$ 269.58	\$ 283.06	\$ 297.22	\$ 312.08
G21	\$ 727.06	\$ 727.06	\$ 763.41	\$ 801.58	\$ 841.66	\$ 883.75	\$ 927.93
G22	\$ 1,209.60	\$ 1,209.60	\$ 1,270.08	\$ 1,333.58	\$ 1,400.26	\$ 1,470.28	\$ 1,543.79
G23	\$ 1,360.39	\$ 1,360.39	\$ 1,428.41	\$ 1,499.83	\$ 1,574.82	\$ 1,653.56	\$ 1,736.24
G24	\$ 908.01	\$ 908.01	\$ 953.41	\$ 1,001.08	\$ 1,051.14	\$ 1,103.69	\$ 1,158.88
G25	\$ 1,511.19	\$ 1,511.19	\$ 1,586.75	\$ 1,666.09	\$ 1,749.39	\$ 1,836.86	\$ 1,928.70
G26	\$ 1,699.68	\$ 1,699.68	\$ 1,784.66	\$ 1,873.90	\$ 1,967.59	\$ 2,065.97	\$ 2,169.27
G27	\$ 2,076.66	\$ 2,076.66	\$ 2,180.49	\$ 2,289.52	\$ 2,403.99	\$ 2,524.19	\$ 2,650.40
G28	\$ 2,378.25	\$ 2,378.25	\$ 2,497.16	\$ 2,622.02	\$ 2,753.12	\$ 2,890.78	\$ 3,035.32
G29	\$ 1,088.97	\$ 1,088.97	\$ 1,143.42	\$ 1,200.59	\$ 1,260.62	\$ 1,323.65	\$ 1,389.83
G30	\$ 1,081.43	\$ 1,081.43	\$ 1,135.50	\$ 1,192.28	\$ 1,251.89	\$ 1,314.48	\$ 1,380.21
G31	\$ 2,174.68	\$ 2,174.68	\$ 2,283.41	\$ 2,397.58	\$ 2,517.46	\$ 2,643.34	\$ 2,775.50
G32	\$ 681.82	\$ 681.82	\$ 715.91	\$ 751.71	\$ 789.29	\$ 828.76	\$ 870.19
G33	\$ 1,360.39	\$ 1,360.39	\$ 1,428.41	\$ 1,499.83	\$ 1,574.82	\$ 1,653.56	\$ 1,736.24
G34	\$ 2,038.96	\$ 2,038.96	\$ 2,140.91	\$ 2,247.95	\$ 2,360.35	\$ 2,478.37	\$ 2,602.29
G35	\$ 2,717.53	\$ 2,717.53	\$ 2,853.41	\$ 2,996.08	\$ 3,145.88	\$ 3,303.17	\$ 3,468.33
G36	\$ 3,396.10	\$ 3,396.10	\$ 3,565.91	\$ 3,744.20	\$ 3,931.41	\$ 4,127.98	\$ 4,334.38
G37	\$ 4,074.67	\$ 4,074.67	\$ 4,278.40	\$ 4,492.32	\$ 4,716.94	\$ 4,952.79	\$ 5,200.43
G38	\$ 4,753.24	\$ 4,753.24	\$ 4,990.90	\$ 5,240.45	\$ 5,502.47	\$ 5,777.59	\$ 6,066.47
G39	\$ 2,038.96	\$ 2,038.96	\$ 2,140.91	\$ 2,247.95	\$ 2,360.35	\$ 2,478.37	\$ 2,602.29
G40	\$ 727.06	\$ 727.06	\$ 763.41	\$ 801.58	\$ 841.66	\$ 883.75	\$ 927.93
G41	\$ 402.86	\$ 402.86	\$ 423.00	\$ 444.15	\$ 466.36	\$ 489.68	\$ 514.16
G42	\$ 523.49	\$ 523.49	\$ 549.66	\$ 577.15	\$ 606.01	\$ 636.31	\$ 668.12
G43	\$ 1,043.73	\$ 1,043.73	\$ 1,095.92	\$ 1,150.71	\$ 1,208.25	\$ 1,268.66	\$ 1,332.09
G44	\$ 1,563.96	\$ 1,563.96	\$ 1,642.16	\$ 1,724.27	\$ 1,810.48	\$ 1,901.00	\$ 1,996.05
G45	\$ 968.33	\$ 968.33	\$ 1,016.75	\$ 1,067.58	\$ 1,120.96	\$ 1,177.01	\$ 1,235.86
G46	\$ 2,604.44	\$ 2,604.44	\$ 2,734.66	\$ 2,871.40	\$ 3,014.96	\$ 3,165.71	\$ 3,324.00
G47	\$ 164.10	\$ 164.10	\$ 172.31	\$ 180.92	\$ 189.97	\$ 199.46	\$ 209.44
G48	\$ 44.47	\$ 44.47	\$ 46.69	\$ 49.03	\$ 51.48	\$ 54.05	\$ 56.76
G49	\$ 68.15	\$ 68.15	\$ 71.56	\$ 75.14	\$ 78.89	\$ 82.84	\$ 86.98
G51	\$ 2,084.20	\$ 2,084.20	\$ 2,188.41	\$ 2,297.83	\$ 2,412.72	\$ 2,533.36	\$ 2,660.03
G52	\$ 112.16	\$ 112.16	\$ 117.77	\$ 123.66	\$ 129.84	\$ 136.33	\$ 143.15
G53	\$ 365.16	\$ 365.16	\$ 383.42	\$ 402.59	\$ 422.72	\$ 443.85	\$ 466.05
G54	\$ 3,883.73	\$ 3,883.73	\$ 4,077.92	\$ 4,281.81	\$ 4,495.90	\$ 4,720.70	\$ 4,956.73
G55	\$ 3,056.82	\$ 3,056.82	\$ 3,209.66	\$ 3,370.14	\$ 3,538.65	\$ 3,715.58	\$ 3,901.36
G56	\$ 508.55	\$ 508.55	\$ 533.98	\$ 560.68	\$ 588.71	\$ 618.15	\$ 649.05
G57	\$ 1,454.13	\$ 1,454.13	\$ 1,526.84	\$ 1,603.18	\$ 1,683.34	\$ 1,767.50	\$ 1,855.88
G97	\$ 304.84	\$ 304.84	\$ 320.08	\$ 336.09	\$ 352.89	\$ 370.53	\$ 389.06

V.D. RECYCLING PROGRAM ALTERNATIVES

FCS Group coordinated with Borough staff to estimate the cost and rate impacts of reducing or eliminating recycling service. These recycling service alternatives included:

- Every-other-week recycling service (existing service is weekly)
- Replace weekly recycling collection with a drop off site for recyclables
- Eliminate recycling service

The following section summarize the estimated rate impacts of each scenario as well as the key assumptions supporting the estimates. **Figure 16** compares the projected sanitation rate increases of each scenario to the baseline annual rate adjustment of 5 percent from FY 2021 to FY 2026.

Exhibit 16
Projected Sanitation Rate Increases by Recycling Service Scenario

Scenario	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Baseline	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Every-Other-Week Collection	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Recycling Drop-Off Center	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Eliminate Recycling Service	0.00%	1.00%	1.00%	1.00%	1.00%	1.00%

V.D.1. Every-Other-Week Recycling Service

In this alternative, recycling pick-up would be picked up every other week compared to the current weekly service. Key changes to the utility's cost include:

- Recycling routes are run half as often as current levels reducing Motorpool O&M costs.
- Routes are recalibrated to move one front-line truck to a reserve truck.
- With reduced recycling pickups, it is assumed that a portion of previously recycled materials will be placed in solid waste bins which will increase disposal costs and reduce recycling processing costs.

V.D.2. Drop Off Site Only Recycling

In this alternative, recycling collection service is replaced by a recycling drop-off center. Key assumptions for this scenario include:

- All recycling routes are eliminated reducing the Motorpool O&M costs.
- Routes are recalibrated to move one front-line truck to a reserve truck.
- Fifty (50) percent of recycling tonnage would be baled as solid waste for disposal.
- \$20,000 worth of capital improvements would need to be completed at the drop off site to accommodate increased customer traffic.

V.D.3. Eliminate Recycling Service

In this alternative recycling service is eliminated and all municipal solid waste is collected in the garbage bin. Key changes to the utility's cost include:

- All recycling routes are eliminated reducing the Motorpool O&M costs.
- Routes are recalibrated to move one front-line truck to a reserve truck.
- All recycling tonnage would be baled as solid waste for disposal.

Section VI. CONCLUSION

The results of this study provide a financial plan and rate strategy for the water, wastewater, and sanitation utilities for the FY 2021 to FY 2025 planning period. The recommended annual rate adjustments are designed to generate adequate funding in each year of the planning period for utility operations, existing and new debt service, capital projects, and the Borough's financial reserve policies.

Throughout the study, we worked with staff from the Borough to arrive at these rate recommendations. Meetings were held with Borough staff to validate cost and revenue assumptions, review interim findings, and receive policy direction. Recommended water and wastewater rate adjustments were presented at a public meeting in September 2019. Sanitation rate adjustments and recycling scenarios were presented to the Assembly in August 2020.

Exhibit 17 outlines the annual rate revenue adjustments for each utility. The combined monthly residential bill based on average water use (4,000 gallons or 4 kgals) is estimated at \$119.50 in FY 2021. The combined monthly residential bill in FY 2022 is estimated at \$123.70 or a monthly increase of \$4.20 from the prior year. We recommend that the Borough regularly monitor the financial status of the utility, adjusting the rate strategy as needed to maintain equitable rates that are adequate to meet the Borough's financial needs.

Exhibit 17
Summary of Annual Rate Adjustments and Monthly Residential Rates

Annual Rate Revenue Adjustments						
Utility	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	
Water	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Wastewater	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Sanitation	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%

Monthly Residential Bill Impact						
Utility	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Water (3/4" Meter and 4 kgals)	\$44.51	\$44.51	\$45.85	\$47.22	\$48.62	\$50.10
Wastewater	\$44.48	\$44.48	\$45.81	\$47.18	\$48.59	\$50.07
Sanitation (32G + Recycle)	\$30.51	\$30.51	\$32.04	\$33.64	\$35.32	\$37.09
Total	\$119.50	\$119.50	\$123.70	\$128.04	\$132.53	\$137.26
<i>Monthly Increase from Prior Year</i>		\$0.00	\$4.20	\$4.34	\$4.49	\$4.73