

Fund 69000: Sewer Revenue

Focus

All Availability Charges and Sewer Service Charges associated with the Wastewater Management Program are credited to this fund as system revenues. The total receipts from all revenue sources are used to finance the following: Operation and Maintenance (Fund 69010); Construction Improvement Projects (Fund 69300); Debt Service (Fund 69020); Subordinate Debt Service (Fund 69040); and Sewer Bond Construction (Fund 69310). Any remaining balance in Fund 69000, Sewer Revenue, is used for future year requirements and required reserves.



The Program's Availability Charge and Sewer Service Charge are based on staff analysis and consultant recommendations included in the February 2022 Wastewater Revenue Sufficiency and Rate Analysis.

Availability Charges

The Availability Charge is a one-time charge to new customers for initial connection to the system. The revenue from the Availability Charge is used to offset the costs of expanding conveyance and treatment plant upgrades and interjurisdictional payments that result from population growth, more stringent treatment requirements and inflation. In FY 2023, the Availability Charge increased from \$8,507 to \$8,592 for single-family homes based on current projections of capital requirements. Rates are based on requirements associated with conveyance and treatment plant upgrades and interjurisdictional payments that result from population growth, more stringent treatment requirements and inflation.

The FY 2023 rate is consistent with the recommendations of the Department of Public Works and Environmental Services (DPWES) and the analysis included in the February 2022 Wastewater Revenue Sufficiency and Rate Analysis report. The following table displays the rates by category:

Category	FY 2022 Availability Charge	FY 2023 Availability Charge
Single Family	\$8,507	\$8,592
Townhouses and Apartments	\$6,806	\$6,874
Hotels/Motels	\$2,127	\$2,148
Nonresidential	\$425/fixture unit	\$430/fixture unit

Sewer Service and Base Charges

Sewer Service and Base Charges are revenues received from existing customers and are used to fully recover program operation and maintenance costs, debt service payments and capital project requirements attributable to improving wastewater treatment effluent quality as mandated by state and federal agencies. The five-year sewer rate plan approved by the Board of Supervisors as part of the FY 2022 Adopted Budget Plan had proposed to increase the sewer charges by 7.3 percent in FY 2023. After a careful review, the Wastewater Management staff recommended to increase the sewer charges by 5.95 percent in FY 2023. The Sewer Service Charge increased from \$7.72 to \$8.09 per 1,000 gallons of water consumed based on Fairfax County's winter quarter average consumption of 16,000 gallons.

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The Base Charge increased from \$36.54 per quarter to \$40.14 per quarter. The Base Charge provides for a more equitable rate structure by recovering a portion of the program’s fixed costs. The industry practice for a fixed charge revenue rate is 25 percent to 30 percent of operating revenues. The fixed charge revenue percentage in FY 2023 is equal to 23.5 percent. The current system, including sewer lines, facilities, purchased capacity and equipment, is valued at approximately \$2.0 billion. Based on the age and required maintenance of the system, reinvestment must continue to be addressed. The implementation of the increases to the Base Charge will help ensure that all users of the system share in the fixed costs associated with reinvestment and operations.

The annual average customer bill increased from \$640.24 in FY 2022 to \$678.32 in FY 2023, an annual cost increase of \$38.08 or 5.95 percent. The FY 2023 average bill in Fairfax County is one of the lowest compared to the average bill in other regional jurisdictions even with the proposed increases. The increases in the Sewer Service Charge and Base Charge from FY 2024 to FY 2027 will partially offset the increased costs associated with capital project construction, system operation and maintenance, debt service and upgrades to meet new, more stringent nitrogen discharge limitations from wastewater treatment plants.

Year	Sewer Service Charge Per 1,000 gallons of water	Base Charge Per Quarterly Bill	Sewer Charges Percentage Increase	Fixed Charge Revenue Percentage
2022	\$7.72	\$36.54	0.00%	22.3%
2023	\$8.09	\$40.14	5.95%	23.5%
2024	\$8.41	\$44.43	5.50%	24.5%
2025	\$8.73	\$49.09	5.50%	25.6%
2026	\$9.21	\$51.79	5.50%	25.9%
2027	\$9.67	\$54.38	5.00%	25.9%

Charges for Hauled Wastewater

As part of the FY 2020 Adopted Budget Plan, the Board of Supervisors approved the establishment of charges to recover a portion of the cost of disposal and treatment of hauled wastewater at the County’s septage receiving facility (SRF), which is located at the NCPCP.

The County’s SRF was constructed to receive and treat septage from local onsite sewage disposal systems in accordance with Code of Virginia Ann. Section 15.2-2123. In addition, the SRF receives landfill leachate, portable toilet waste, restaurant grease, and recycled carwash water. Hauled septage and wastewater used to be received and treated at no cost to pump and haul contractors to encourage proper disposal. This cost used to be covered by the sewer charges paid by the customers of the County’s public sewer system. The charges for hauled wastewater improve equity among customers served by the sewer system and those served by the pump and haul contractors. Also, the charges recover a portion of the costs of operation, maintenance, and upcoming necessary improvements to the SRF.

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DPWES initially set the charges at a level comparable to the fees charged by the Upper Occoquan Service Authority (UOSA), the only other facility in the County that receives hauled wastewater. The charge for high strength waste such as septic tank and restaurant grease and landfill leachate remained at \$27 per 1,000 gallons of the hauler's truck capacity in FY 2023. The charge for low strength waste also remained at \$7.72 per 1,000 gallons of hauler truck capacity in FY 2023. Wastewater Management is reviewing these charges and both could be adjusted in the future. The projected FY 2023 revenue from charges for hauled wastewater is equal to \$300,000.

This level of revenue in FY 2023 will allow the system to meet permit conditions, meet and maintain all of the required financial targets through FY 2027, maintain competitive rates with neighboring utilities, continue to preserve its AAA bond rating, and require less debt to support capital projects.

The table below reflects the Wastewater Management Program's projected fiscal health in FY 2023 and FY 2024. The financial planning process incorporates the following indicators that are interrelated and structured to identify the adequacy of rates from a cash flow, business, and compliance standpoint. These indicators are used by the rating agencies to determine the Program's credit rating.

Calculated Financial Indicators			
Financial Indicator	Target	FY 2023	FY 2024
Net Revenue Margin	45% to 65%	51%	52%
Days Working Capital ¹	150 to 200 days	210	209
Debt Coverage Senior	Min. 2.00x	2.96x	2.92x
Debt Coverage All-in ²	1.80x to 2.20x	1.89x	1.94x
Affordability (% of median income spent on sewer bill)	Less than 1.2%	0.6%	0.6%
Debt to Net Plant in Service	Below 40.0% Never above 50.0%	37%	39%
Outstanding Debt per Connection	Max \$3,000	\$2,035	\$2,174
Next Sewer Bond Sale Expected in FY 2024 - \$165 Million			

¹ The Days Working Capital financial indicator is exclusive of Availability Charges in Fund 69000, Sewer Revenue, debt expenses in the Wastewater debt related funds, Fund 69300, Sewer Construction Improvements and Fund 69310, Sewer Bond Construction. It is calculated based on Operating Expenses and 360 days per year.

² The Debt Coverage All-in financial indicator is exclusive of Availability Charges.

It is anticipated that the rates in FY 2023 will support the County's ability to maintain high bond ratings (AAA by Fitch Investor Service and Standard and Poor's Corporation and Aaa by Moody's Investors Service, Inc.) from the rating agencies. These high credit ratings have enabled the County to sell bonds on behalf of the Program at interest rates lower than those obtained by most sewer authorities, thereby achieving savings throughout the life of the bonds.

Changes to FY 2022 Adopted Budget Plan

The following funding adjustments reflect all approved changes in the FY 2022 Revised Budget Plan since passage of the FY 2022 Adopted Budget Plan. Included are all adjustments made as part of the FY 2021 Carryover Review, FY 2022 Mid-Year Review, FY 2022 Third Quarter Review, and all other approved changes through April 30, 2022.

Adjustment to Transfer Out

There have been no expenditure adjustments to this fund. However, the *FY 2022 Revised Budget Plan* Transfer Out to Fund 69010, Sewer Operation and Maintenance, was increased by \$313,000 as part of the *FY 2021 Carryover Review*. This increase was necessary to support a one-time compensation adjustment of \$1,000 for merit employees and \$500 for non-merit employees that was paid in November 2021.

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FUND STATEMENT

Category	FY 2021 Actual	FY 2022 Adopted Budget Plan	FY 2022 Revised Budget Plan	FY 2023 Advertised Budget Plan	FY 2023 Adopted Budget Plan
Beginning Balance	\$121,830,460	\$101,451,228	\$131,425,356	\$126,856,856	\$126,856,856
Revenue:					
Lateral Spur Fees	\$7,200	\$10,000	\$10,000	\$10,000	\$10,000
Water Reuse Charges ¹	279,066	175,000	175,000	275,000	275,000
Sales of Service ¹	9,316,050	10,635,500	10,635,500	10,288,000	10,288,000
Availability Charges ¹	34,714,848	22,517,000	22,517,000	19,424,000	19,424,000
Connection Charges	417,928	176,000	176,000	250,000	250,000
Sewer Service Charges	205,801,851	219,781,000	219,781,000	234,640,800	234,640,800
Sewer Hauled Charges ²	0	0	0	300,000	300,000
Miscellaneous Revenue ¹	625,675	650,000	650,000	400,000	400,000
Sale Surplus Property	55,287	100,000	100,000	100,000	100,000
Interest on Investments ¹	726,991	1,100,000	1,100,000	1,800,000	1,800,000
Total Revenue	\$251,944,896	\$255,144,500	\$255,144,500	\$267,487,800	\$267,487,800
Total Available	\$373,775,356	\$356,595,728	\$386,569,856	\$394,344,656	\$394,344,656
Transfers Out:					
Sewer Operation and Maintenance (69010)	\$109,250,000	\$116,400,000	\$116,713,000	\$122,100,000	\$122,100,000
Sewer Bond Parity Debt Service (69020)	31,000,000	32,000,000	32,000,000	27,000,000	27,000,000
Sewer Bond Subordinate Debt Service (69040)	25,100,000	25,000,000	25,000,000	22,200,000	22,200,000
Sewer Construction Improvements (69300)	77,000,000	86,000,000	86,000,000	89,000,000	89,000,000
Total Transfers Out	\$242,350,000	\$259,400,000	\$259,713,000	\$260,300,000	\$260,300,000
Total Disbursements	\$242,350,000	\$259,400,000	\$259,713,000	\$260,300,000	\$260,300,000
Ending Balance³	\$131,425,356	\$97,195,728	\$126,856,856	\$134,044,656	\$134,044,656
Management Reserves:					
Operating and Maintenance Reserve ⁴	\$45,000,000	\$43,000,000	\$45,000,000	\$45,000,000	\$45,000,000
New Customer Reserve ⁵	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000
Virginia Resource Authority Reserve ⁶	5,974,892	0	0	0	0
Capital Reinvestment Reserve ⁷	50,450,464	24,195,728	51,856,856	59,044,656	59,044,656
Total Reserves	\$131,425,356	\$97,195,728	\$126,856,856	\$134,044,656	\$134,044,656
Unreserved Balance	\$0	\$0	\$0	\$0	\$0

¹ In order to account for revenues and expenditures in the proper fiscal year, audit adjustments were reflected as a decrease of \$90,172.44 to FY 2021 revenues to properly record revenue in the proper fiscal period. The Annual Comprehensive Financial Report (ACFR) reflects all audit adjustments in FY 2021. Details of the audit adjustments were found in Attachment VI of the *FY 2022 Mid-Year Review*.

² The Sewer Hauled Charges revenues were included in the Miscellaneous Revenue category in FY 2021 and FY 2022. Starting in FY 2023, these revenues will be shown separately.

³ The Wastewater Management Program maintains fund balances at adequate levels relative to projected debt service requirements, operation and maintenance expenses and capital improvements.

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⁴ The Operating and Maintenance Reserve provides for unforeseen expenses associated with sewer system emergencies. This reserve is targeted to be maintained at a level between \$25.0 and \$45.0 million. This level of reserve is based on an industry practice to maintain existing customer reserves at a level that can support 30 and 180 days of working capital and approximately 50 percent of one year's requirements for rehabilitation and replacement of the current system's assets.

⁵ The New Customer Reserve provides for debt service and administrative expenses associated with new customer debt, until such time as adjustments to availability charges can be accommodated. This reserve is based on payment expenses associated with one year of debt service and administrative expenses associated with new customer debt.

⁶ The Virginia Resource Authority Reserve was established in anticipation of debt service reserve requirements for Virginia Resource Authority loans related to future treatment plant issues. The reserve was used to cover the final year of scheduled debt service for FY 2022.

⁷ The Capital Reinvestment Reserve is intended to address both anticipated and unanticipated increases within the Capital Improvement Program. This reserve will provide for significant rehabilitation and replacement of emergency infrastructure repairs. A reserve of 3.0 percent of the five-year capital plan is consistent with other utilities and is recommended by rating agencies. Based on the total five-year capital plan, an amount of \$30.0 million would be required to reach 3.0 percent.