

# 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 January 2023 Wastewater Revenue Sufficiency and Rate Analysis report.

### 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 2024, the Availability Charge will increase from \$8,592 to \$8,860 for single-family homes with \$182 of the \$268 increase due to the Developers' Reimbursement Program approved by the Board of Supervisors on December 13, 2022. 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 2024 rate is consistent with the recommendations of the Department of Public Works and Environmental Services (DPWES) and the analysis included in the January 2023 Wastewater Revenue Sufficiency and Rate Analysis report. The following table displays the rates by category:

| Category                  | FY 2023 Availability Charge | FY 2024 Availability Charge |
|---------------------------|-----------------------------|-----------------------------|
| Single Family             | \$8,592                     | \$8,860                     |
| Townhouses and Apartments | \$6,874                     | \$7,088                     |
| Hotels/Motels             | \$2,148                     | \$2,215                     |
| Nonresidential            | \$430/fixture unit          | \$443/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 2023 Adopted Budget Plan had proposed to increase the sewer charges by 5.5 percent in FY 2024. After a careful review, the Wastewater Management staff recommended to increase the sewer charges by 6.2 percent in FY 2024, including a baseline increase of 5.9 percent and an increase of 0.3 percent due to the Developers' Reimbursement Program approved by the Board of Supervisors on December 13, 2022. The Sewer Service Charge will increase from \$8.09 to \$8.46

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per 1,000 gallons of water consumed based on Fairfax County’s winter quarter average consumption of 16,000 gallons.

The Base Charge will increase from \$40.14 per quarter to \$44.81 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 2024 is equal to 24.4 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 will increase from \$678.32 in FY 2023 to \$720.68 in FY 2024, an annual cost increase of \$42.36 or 6.2 percent with \$2.16 of the annual increase due to the Developers’ Reimbursement Program approved by the Board of Supervisors on December 13, 2022. The FY 2024 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 2028 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 |
|------|---|--------------------------------|-----------------------------------|---------------------------------|
| 2023 | \$8.09  | \$40.14                        | 0.00%                             | 23.3%                           |
| 2024 | \$8.46  | \$44.81                        | 6.20%                             | 24.4%                           |
| 2025 | \$8.81  | \$49.73                        | 5.80%                             | 25.6%                           |
| 2026 | \$9.33  | \$52.62                        | 5.90%                             | 25.9%                           |
| 2027 | \$9.83  | \$55.41                        | 5.30%                             | 25.8%                           |
| 2028 | \$10.35   | \$58.35                        | 5.30%                             | 25.8%                           |

### **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 will remain at \$27 per 1,000 gallons of the hauler’s truck capacity in FY 2024. The charge for low strength waste will also remain at \$7.72 per 1,000 gallons of hauler truck capacity in FY 2024. Wastewater Management is reviewing these charges and both could be adjusted in the future. The projected FY 2024 revenue from charges for hauled wastewater is equal to \$200,000.

This level of revenue in FY 2024 will allow the system to meet permit conditions, meet and maintain all of the required financial targets through FY 2028, 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 2024 and FY 2025. 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 2024 | FY 2025 |
| Net Revenue Margin   | 45% to 65%                       | 52%     | 53%     |
| Days Working Capital <sup>1</sup>                          | 150 to 200 days                  | 218     | 216     |
| Debt Coverage Senior                                       | Min. 2.75x                       | 3.13x   | 2.95x   |
| Debt Coverage All-in <sup>2</sup>                          | 1.80x to 2.20x                   | 2.03x   | 2.00x   |
| Affordability (% of median income spent on sewer bill)     | Less than 1.2%                   | 0.57%   | 0.59%   |
| Debt to Net Plant in Service                               | Below 40.0%<br>Never above 50.0% | 35%     | 33%     |
| Outstanding Debt per Connection                            | Max \$3,000                      | \$1,976 | \$2,134 |
| Next Sewer Bond Sale Expected in FY 2024 - \$227.1 Million |                                  |         |         |

<sup>1</sup> 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.

<sup>2</sup> The Debt Coverage All-in financial indicator is exclusive of Availability Charges.

It is anticipated that the rates in FY 2024 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 2023 Adopted Budget Plan**

*The following funding adjustments reflect all approved changes in the FY 2023 Revised Budget Plan since passage of the FY 2023 Adopted Budget Plan. Included are all adjustments made as part of the FY 2022 Carryover Review and all other approved changes through December 31, 2022:*

#### **Adjustment to Transfer Out**

There have been no expenditure adjustments to this fund. However, the *FY 2023 Revised Budget Plan* Transfer Out to Fund 69020, Sewer Bond Parity Debt Service, was increased by \$1,500,000 as part of the *FY 2022 Carryover Review*. This increase was necessary to support projected expenditures in Fund 69020, Sewer Bond Parity Debt Service, in FY 2023.

**FUND STATEMENT**

| Category                                       | FY 2022 Actual       | FY 2023 Adopted Budget Plan | FY 2023 Revised Budget Plan | FY 2024 Advertised Budget Plan |
|--|----------------------|-----------------------------|-----------------------------|--------------------------------|
| <b>Beginning Balance</b>                       | <b>\$131,476,283</b> | <b>\$126,856,856</b>        | <b>\$119,896,270</b>        | <b>\$125,584,070</b>           |
| <b>Revenue:</b>                                |                      |                             |                             |                                |
| Lateral Spur Fees                              | \$3,000              | \$10,000                    | \$10,000                    | \$10,000                       |
| Water Reuse Charges                            | 219,082              | 275,000                     | 275,000                     | 275,000                        |
| Sales of Service                               | 9,239,645            | 10,288,000                  | 10,288,000                  | 10,288,000                     |
| Availability Charges                           | 16,355,050           | 19,424,000                  | 19,424,000                  | 18,300,000                     |
| Connection Charges                             | 707,819              | 250,000                     | 250,000                     | 250,000                        |
| Sewer Service Charges                          | 220,776,398          | 234,640,800                 | 234,640,800                 | 251,365,500                    |
| Sewer Hauled Charges                           | 137,192              | 300,000                     | 300,000                     | 200,000                        |
| Miscellaneous Revenue                          | 278,169              | 400,000                     | 400,000                     | 400,000                        |
| Sale Surplus Property                          | 70,862               | 100,000                     | 100,000                     | 100,000                        |
| Interest on Investments                        | 345,770              | 1,800,000                   | 1,800,000                   | 800,000                        |
| <b>Total Revenue</b>                           | <b>\$248,132,987</b> | <b>\$267,487,800</b>        | <b>\$267,487,800</b>        | <b>\$281,988,500</b>           |
| <b>Total Available</b>                         | <b>\$379,609,270</b> | <b>\$394,344,656</b>        | <b>\$387,384,070</b>        | <b>\$407,572,570</b>           |
| <b>Transfers Out:</b>                          |                      |                             |                             |                                |
| Sewer Operation and Maintenance (69010)        | \$116,713,000        | \$122,100,000               | \$122,100,000               | \$124,000,000                  |
| Sewer Bond Parity Debt Service (69020)         | 32,000,000           | 27,000,000                  | 28,500,000                  | 38,400,000                     |
| Sewer Bond Subordinate Debt Service (69040)    | 25,000,000           | 22,200,000                  | 22,200,000                  | 22,400,000                     |
| Sewer Construction Improvements (69300)        | 86,000,000           | 89,000,000                  | 89,000,000                  | 90,000,000                     |
| <b>Total Transfers Out</b>                     | <b>\$259,713,000</b> | <b>\$260,300,000</b>        | <b>\$261,800,000</b>        | <b>\$274,800,000</b>           |
| <b>Total Disbursements</b>                     | <b>\$259,713,000</b> | <b>\$260,300,000</b>        | <b>\$261,800,000</b>        | <b>\$274,800,000</b>           |
| <b>Ending Balance<sup>1</sup></b>              | <b>\$119,896,270</b> | <b>\$134,044,656</b>        | <b>\$125,584,070</b>        | <b>\$132,772,570</b>           |
| <b>Management Reserves:</b>                    |                      |                             |                             |                                |
| Operating and Maintenance Reserve <sup>2</sup> | \$45,000,000         | \$45,000,000                | \$45,000,000                | \$45,000,000                   |
| New Customer Reserve <sup>3</sup>              | 30,000,000           | 30,000,000                  | 30,000,000                  | 30,000,000                     |
| Capital Reinvestment Reserve <sup>4</sup>      | 44,896,270           | 59,044,656                  | 50,584,070                  | 57,772,570                     |
| <b>Total Reserves</b>                          | <b>\$119,896,270</b> | <b>\$134,044,656</b>        | <b>\$125,584,070</b>        | <b>\$132,772,570</b>           |
| <b>Unreserved Balance</b>                      | <b>\$0</b>           | <b>\$0</b>                  | <b>\$0</b>                  | <b>\$0</b>                     |

<sup>1</sup> The Wastewater Management Program maintains fund balances at adequate levels relative to projected debt service requirements, operation and maintenance expenses and capital improvements.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> 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.