

FAIRFAX COUNTY

Wastewater Management Program

Wastewater Rate Study for Fiscal Year 2024 Through Fiscal Year 2029

Final Report / December 1, 2023



FAIRFAX COUNTY
WASTEWATER MANAGEMENT



Quality of Water = Quality of Life



December 1, 2023

Ms. Ellie Coddling, P.E.
Deputy Director
Fairfax County – DPWES
12000 Government Center Parkway, Suite 358
Fairfax, VA 22035-0058

Subject: **2024 Wastewater Revenue Sufficiency and Rate Analysis**

Dear Ms. Coddling:

Raftelis Financial Consultants, Inc. (“Raftelis”) has completed our study of the sufficiency of the existing and adopted wastewater rates and availability charge revenues (the “Study”) for the Wastewater Management Program (“WMP”) of Fairfax County, Virginia (the “County”) and has summarized the results of our analyses, assumptions, conclusions, and recommendations in this report (the “Report”) that is submitted for your consideration. This Report presents our analyses and assumptions and summarizes the basis for the recommended rates and availability charges for wastewater services that are considered necessary to meet the estimated near-term expenditure and funding requirements of the wastewater utility system (the “System”). The Study period recognized for the rate evaluation encompassed the current Fiscal Year 2024 and the subsequent five- (5) fiscal year period ending June 30, 2029 (collectively, the “Forecast Period”).

The proposed wastewater utility rates and charges are intended to meet a number of goals and objectives. The most important objective of the Study was to develop proposed wastewater utility rates and service availability charges that fully recover the identified expenditure and funding requirements of the System to maintain sound financial operations and finance the anticipated capital needs of the System. The other goals and objectives considered in the study include:

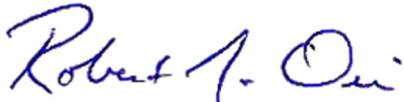
- Wastewater rates should be based on cost of service (full cost recovery) principles;
- Wastewater rates should be reasonable among customer classes;
- Wastewater rates should comply with the covenants as required by the resolutions loan agreements adopted by the Board of Supervisors of the County (the “Board”) associated with the financing of capital improvements to the System;
- Wastewater rates should comply with requirements associated with adopted County fiscal policies and utility best management practices attributable to the wastewater utility system;
- Proposed wastewater rates should promote the System financial creditworthiness and provide adequate reserves for System emergencies and unforeseen capital needs; and

- Service availability charges should reasonably recover the allocable cost of wastewater treatment and backbone transmission / collection infrastructure costs from new customers to promote the policy of growth paying for growth (i.e., not funded by existing customers).

The Report following this letter summarizes the findings, results, and recommendations of this Study. The Report also provides additional details regarding the rate and financial analyses conducted on behalf of the County. The recommended rates for wastewater service are based on the recovery of the total costs anticipated for the County's wastewater utility service area and overall capacity needs of the System. As such, the recommended rates and charges are considered by Raftelis to be reasonable and to reflect the estimated cost of providing service. We appreciate the opportunity to be of service to the County.

Respectfully submitted,

RAFTELIS FINANCIAL CONSULTANTS, INC.



Robert J. Ori
Executive Vice President



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Attachments

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EXECUTIVE SUMMARY

FAIRFAX COUNTY WASTEWATER MANAGEMENT PROGRAM

2024 WASTEWATER REVENUE SUFFICIENCY AND RATE ANALYSIS

EXECUTIVE SUMMARY

General

The objective of the Fairfax County Wastewater Management Program (“WMP”) is to protect and enhance the environment and provide for the health, safety, and well-being of those who work, live, and visit in Fairfax County. The WMP is committed to the following principles:

- Comply with or surpass all regulatory requirements regarding the treatment and disposal of wastewater;
- Seek continual improvement by embracing opportunities and challenges of technological advancement, best management practices, regionalization, and training;
- Strive to eliminate negative environmental impacts through community involvement and engagement, pollution prevention, and employee training; and
- Establish open and consistent communication through employee and community partnerships.

Recognizing the above, the mission of the WMP is to collect, treat and monitor wastewater in compliance with all regulatory requirements, using state-of-the-art technology in the most effective manner for the benefit of our residents. Financial management and planning are integral to the mission of the WMP recognizing that revenues from rates, fees and charges should be sustainable to fully finance the expenditure and funding requirements of the wastewater utility system (the “System”). As part of the management planning cycle, the WMP annually updates and evaluates the financial projections of System operations, cash balances, and fiscal position in order to assess, among other things, the adequacy of the rates, fees and charges to meet: i) future or planned funding requirements for operations and capital investment; ii) compliance with financial policies and required rate (debt) covenants as delineated in the General Bond Resolution adopted by the Board on July 29, 1985, as subsequently amended and restated from time to time (the “General Bond Resolution”) that authorized the issuance of the County's outstanding senior lien bonds and the covenants of the Virginia Resources Authority (“VRA”) Financing Agreement between the County and the Virginia Water Facilities Revolving Fund administered by the VRA associated with the issuance of the outstanding subordinate lien bonds; and iii) certain financial targets selected to monitor financial performance and to maintain / promote the overall long-term creditworthiness of the utility. The basis for the financial forecast relied upon a review of the recent historical revenues, expenses, and customer billing / sales records to identify recent trends, the adopted budget and planned capital improvements, a desktop analysis of the utility plant-in-service lives, as well as information provided by others (e.g., treatment-by-contract providers) associated with long-term capital re-investment funding needs, and discussions with WMP staff. The financial forecast is developed with a conservative outlook of the utility's financial performance and considers, among other things, estimated external conditions affecting future costs such as projections of near-term and long-term inflation as reported by the Congressional Budget Office, industry trends in construction costs as reported by Engineering News Record, changes in operations, and financial effects of regulations, such as the Clean Water Act and the Chesapeake Bay Program, among other things.

The County recently revised the “Statement of Policy Regarding Sewage Disposal” policy on December 6, 2022. Included within this policy is the ability of the County to reimburse the developer for the entire cost

of the wastewater line that needs to be enlarged with exception to the capacity required by the developer for their project. The policy will reimburse the developer for a pro rata portion of the cost to oversized wastewater conveyance infrastructure as required by the comprehensive plan (“Reimbursement Policy”). Raftelis developed a technical memorandum with more detail on this policy which can be found in Appendix B of the report.

Fiscal Year 2023 Results Summary

WMP continuously tracks and reviews prior financial forecasts relative to actual results and makes considerations for the findings in the financial and rate planning process for the Forecast Period. For the most recently completed Fiscal Year 2023, WMP observed net revenues and investment income outperforming the corresponding financial projections for such Fiscal Year by \$2.4 million or 0.95% of gross revenues (excluding availability fees). The differences were primarily due to: i) higher than forecasted investment income; and ii) lower operating expenses than previously forecasted.

Availability Charge revenues received by the County, which are the result of the application of a one-time fee to new development (not a recurring revenue from the customer) requesting capacity, were approximately \$23.5 million for the Fiscal Year 2023, which was \$7.1 million more than the \$16.4 million recognized for the last financial forecast. The variance could be due to an increase in construction due to higher demand since the pause during the pandemic. It should be noted that the determination of Wastewater Service Availability Charge (“Availability Charge”) revenues is solely dependent on new capacity requests and can significantly vary from year to year based on the timing of growth and the payments for the request of capacity. Because the Availability Charge revenue represents non-recurring revenue from a customer service or payment basis (only paid once) and to develop an attainable revenue forecast, the projection of Availability Charge revenues has been conservatively made. To the extent actual revenues are higher than forecasted, they are recognized as a source of funds for the development of the capital improvement funding plan.

The total debt service payments expressed on an "as-paid" basis (when payments are made to investors from amounts on deposit in the Debt Service Subfund which generally forms the basis for financial reporting) were approximately \$54.8 million or \$4.7 million less than what was forecasted in the 2023 Report. The variance was primarily due to timing differences in the funding of the Debt Service Requirement on an “accrual basis” (when deposits from System revenues are made to the Debt Service Subfund which typically relates to the establishment of the revenue requirements funded from rates) when compared to the requirement expressed on an “as-paid” basis.

The growth in gross plant-in-service for the Fiscal Year 2023 (which includes construction-work-in-progress), less developer contributions and grant funding, was approximately \$136 million as reported in the County's financial statements, which was \$24 million less than what was anticipated to be spent (funded from rate revenues) during such fiscal year as referenced in the 2023 Report. The lower level of spending is attributable to the variance in timing from the appropriation of funds for capital expenditures and when the actual expenditures occur from such project fund appropriations. Therefore, unspent appropriations as of the end of Fiscal Year 2023 are expected to carry-over to the Fiscal Year 2024 (recognized as a component for the Forecast Period capital plan); this will result in a greater beginning net position for the current forecast and may also affect investment income projections.

Overall, WMP began the Fiscal Year 2024 with a higher cash reserve / liquidity balance than previously forecasted primarily due to: i) delayed timing in capital expenditures; and ii) greater net revenues due to lower than expected operating costs. For more detail concerning the actual operating results please reference the Fiscal Year 2023 Results in subsequent sections of this report (pages 4-6).

Fiscal Year 2024 and 2025 Forecast Snapshot

Fiscal Year 2024 and 2025 forecast is based among other things, the Fiscal Year 2023 actual results and the Fiscal Year 2024 Budget. It also includes the most recent Board-approved rates, including the currently effective rates for the Fiscal Year 2024. The table below gives a summary of the key financial operating revenues and operating expenses of the System:

Fiscal Year 2024 and 2025 Financial Forecast Snapshot

	2024	2025
Operating Revenues		
Flow Charge Revenues	\$188,997,835	\$198,010,702
Base Charge Revenues	60,905,204	67,995,836
Sales of Service Revenues	11,143,886	11,517,779
Other Miscellaneous Charges	775,000	775,000
Service Availability Charges [2]	18,286,001	18,895,975
Investment Earnings	4,579,000	<u>4,900,000</u>
Operating Revenues and Investment Earnings [3]	\$284,686,925	\$302,095,292
Operating Expenses		
Labor	\$45,541,780	\$46,908,034
Elec / Chem / Fuel / Util	8,753,372	9,344,248
Repair and Maintenance	4,499,893	4,273,278
Treatment by Contract	50,044,186	51,661,410
Billing Agent	7,011,873	7,202,762
Other Operating Expenditures	<u>24,342,289</u>	<u>23,305,440</u>
Total Operating Expenditures	\$140,193,393	\$142,695,172

[1] Represents forecast prepared and presented in the 2024 Report and was based on Fiscal Year 2024 Budget and actual Fiscal Years 2023 operating results. Amounts shown exclude receipt of grant proceeds.

[2] Reflects Availability Charges received by WMP. Amounts shown do not include any contributed property donations which are received by the County and reflect direct capital additions to the System.

[3] Includes charges for service, sales of service (wholesale sales), and other operating revenues. Additionally, the amounts shown include interest income on available fund balances.

Principal Findings, Assumptions and Recommendations

As previously mentioned, the development of the financial forecast relied upon certain information such as recent financial reports, customer billing statistics, adopted budgets, year-to-date results, projected capital expenditure requirements (including carry-over capital appropriations) and associated funding requirements, as well as certain assumptions concerning the forecast as discussed in greater detail throughout this report, which should be read in its entirety. The forecast also relies upon information and projections of operations and capital funding requirements as provided by the County's contract wastewater treatment providers, which include Alexandria Renew Enterprises (a.k.a., the Alexandria Sanitation Authority), Arlington County, District of Columbia Water and Sewer Authority ("DCWASA"), Loudoun Water, and the Upper Occoquan Service Authority ("UOSA") (collectively, the "Contract Providers" or "TBC"). The following provides a summary of key findings and assumptions:

REVENUE FORECAST

- The System primarily generates revenues from: i) ongoing or recurring charges for wastewater service (user charges) from existing retail and wholesale customers; and ii) Availability Charges related to one-time (non-recurring) revenues from new customer growth or development. For the Fiscal Year 2023 the utility generated approximately \$241.5 million in user charges from retail and wholesale customers. In addition to the reported user charges, WMP reported approximately \$23.8 million in growth-related Availability Charges were received (realized). These two revenue sources account for the majority or 99% of gross revenues for the System, with the remaining revenues derived from investment earnings and other operating revenues reported at approximately \$1.6 million. Overall, the County reported approximately \$272.8 million in gross revenues and income during Fiscal Year 2023.
- The revenue forecast assumes an annual average 0.5% growth rate in retail customers served and billed flows above actual Fiscal Year 2023 billing statistics. Availability Charge receipts, which represent revenues from non-recurring charges, were assumed at a conservative \$18.3 million for the Fiscal Year 2024 and then increased to average \$20.5 million for the remainder of the Forecast Period to align more with the historical collections (which supports the continued growth assumption of the System). Overall gross revenues were assumed to grow above Fiscal Year 2024 estimates by approximately 6.2% annually which is primarily due to i) the assumed implementation of the recommended annual retail customer rate adjustments, which are indicated below; and ii) the continuation of System growth in customers served:

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Recommended Quarterly Rate Adjustments to Retail Rates by Fiscal Year

Description	Fiscal Year Ending June 30,					
	Existing	Recommended [1]				
	2024	2025	2026	2027	2028	2029
Currently Approved Rates:						
Quarterly Base Charge	\$44.81	\$49.73	\$52.62	\$55.41	\$58.35	N/A
Flow Charge	\$8.46	\$8.81	\$9.33	\$9.83	\$10.35	N/A
Rate Revenue Adjustment:						
Effective Increase [2]	6.2%	5.9%	5.9%	5.5%	5.3%	1.3%
Annualized Increase [3]	6.2%	5.8%	5.9%	5.3%	5.3%	0.0%
Recommended Rates:						
Quarterly Base Charge	\$44.68	\$49.51	\$52.31	\$55.36	\$58.55	\$61.92
Incremental Base Charge Increase [4]	<u>0.13</u>	<u>0.22</u>	<u>0.31</u>	<u>0.42</u>	<u>0.53</u>	<u>0.65</u>
Quarterly Base Charge (w/Oversizing)	\$44.81	\$49.73	\$52.62	\$55.78	\$59.08	\$62.57
Flow Charge	\$8.43	\$8.77	\$9.27	\$9.81	\$10.37	\$10.96
Incremental Flow Charge Increase [4]	<u>0.03</u>	<u>0.04</u>	<u>0.06</u>	<u>0.07</u>	<u>0.09</u>	<u>0.12</u>
Flow Charge (w/Oversizing)	\$8.46	\$8.81	\$9.33	\$9.88	\$10.46	\$11.08
Rate Revenue Adjustment:						
Effective Increase [2]	6.2%	5.9%	5.9%	5.9%	5.9%	5.9%
Annualized Increase [3]	6.2%	5.8%	5.9%	5.9%	5.9%	5.9%

- [1] Rates shown for Fiscal Years 2024 through 2029 represent the continuation of rate adjustments that were previously approved by the Board during Fiscal Year 2023 (as part of the ongoing five- (5) year rate adoption process as employed by the Board) absent the adjustment for implementation of the Reimbursement Policy.
- [2] Amounts shown reflect the projected effective revenue increase as applied to projected customer billing statistics assuming rates are in effect for nine (9) months of the Fiscal Year. The County recognizes rate adjustments to service rendered effective July 1st of each fiscal year (e.g., bills rendered during the first quarter of the Fiscal Year relate to service provided during a portion of the prior fiscal year).
- [3] Amounts shown reflect the annualized rate revenue increase based on rate increases assumed for an annualized 12-month period as applied to projected customer billing statistics.
- [4] The incremental base charge adjustment is associated with the developer oversizing increase due to the Reimbursement Policy revised by the County during the Fiscal Year 2023.

As can be seen above, the recommended rates for the Fiscal Year 2025 are consistent with the rates previously adopted by the Board pursuant to the 2023 rate analysis. The recommended rates for Fiscal Years 2026 through 2029 are slightly higher than previously adopted rates. This is primarily due to an increase in operating expenditures due to higher-than-normal inflationary costs, and higher capital improvement program costs.

EXPENDITURE FORECAST

- The total expenditures and funding needs of the System funded from the utility revenues (referred to as the “Gross Revenue Requirements”) can be primarily categorized as follows: i) operating and maintenance expenses accounting for 45% of the Gross Revenue Requirements; ii) annual debt service payments accounting for 27% of the Gross Revenue Requirements; and iii) transfers for maintaining minimum cash reserves and for funding capital re-investment (utility plant renewals, replacements, upgrades, and betterments) accounting for approximately 28% of the Gross Revenue Requirements.

- The Fiscal Year 2024 operating budget served as the baseline of the financial forecast of operating expenses. With respect to the escalation of such costs, the System has observed average annual growth in operating expenses of approximately 4.5% per year since the Fiscal Year 2019 due primarily to higher inflation allowances when compared to prior historical periods coupled with continued System growth. The projection of the operating and maintenance expenses assumes a slightly lower rate of change in such expenses at 3.0% which is primarily due to: i) average annual growth in Treatment by Contract (“TBC”) provider expenses of 1.8% annually based on forecasts of wastewater treated flows and information reported by the individual TBC providers, which account for approximately 36% of total operating expenses; ii) assumed average annual increases in personnel salaries and benefit expenses of 3.7% above budgeted Fiscal Year 2024 amounts to account for cost-of-living adjustments, additional personnel, and inflation of employee benefits (e.g., health insurance) representing approximately 33% of total operating expenses; and iii) escalation of remaining expenses employing varying factors for electricity, chemicals, System growth, general inflation, etc. resulting in an average annual increase of 2.0% and representing 29% of the total operating expenses.
- With respect to existing indebtedness, as of June 30, 2023, the System had approximately \$703.2 million in the principal amount of debt outstanding, which includes approximately \$226 million in subordinated debt issued by UOSA which is allocable to the County and is net of approximately 18 million in debt service reserve funds. The debt outstanding including the debt service reserve funds would be approximately \$721.4 million dollars which is consistent with the principal outstanding within the 2023 Annual Comprehensive Financial Report. The annual debt service payments for the Fiscal Year 2023 were approximately \$54.8 million expressed on an "as-paid" basis. The outstanding debt was issued to finance capital improvements to the System or for the acquisition of wastewater treatment capacity rights from the County's TBC providers.
- WMP has identified approximately \$2.2 billion in both County-owned wastewater and TBC capital projects for the next six (6) fiscal years (i.e., Fiscal Years 2024 through 2029) (the “CIP”). Approximately \$462.9 million or 21% of the estimated CIP is associated with TBC capital funding requirements, which the County has no control relative to the timing or amount of such expenditures. The identified funding also includes approximately \$45.1 million for departmental (operating) capital outlay related to the purchase of vehicles, equipment, and other short-lived assets (commonly referred to as General Plant). Based on discussions with WMP staff, it is anticipated that a portion of the identified capital funding requirements (projects managed by WMP for County-owned infrastructure) may be deferred from the timing as presented in the CIP later in or possibly after the Forecast Period due to timing of initiation and duration of construction for such projects; including the ability to manage the capital plan internally by the County. The financial forecast assumes approximately \$595.0 million or 26.5% of the identified CIP will be deferred beyond the Fiscal Year 2029 resulting in a net amount of total capital funding reflected in the financial forecast at \$1.55 billion and at \$1.45 billion to be funded from retail rates after netting the forecasted Sales of Service (wholesale) customer capital contributions and oversizing program capital contributions. Average retail customer capital spending (realized use of funds) is estimated at approximately \$258.9 million a year.
- With respect to financing the capital program, approximately 40.5% or \$629.25 million of the total capital expenditure requirements are anticipated to be funded from internal sources (includes unspent bond proceeds obtained from previously issued debt) and contributions from Sales of Service (wholesale) customers. The forecast assumes much of the funding to be derived from net annual operating revenues (i.e., capital re-investment from rates) and Availability Charges used to pay debt totaling approximately \$684.1 million, which averages approximately \$114 million per year during the Forecast Period.

- The funding of the remaining 59.5% or approximately \$924.5 million of the identified capital improvement program for the Forecast Period is assumed to be from the issuance of additional parity bonds. The following table summarizes the principal amount of bonds assumed to be issued and the corresponding estimated annual debt service payments on such additional bonds (the “Additional Bonds”). The following is a summary of the anticipated additional debt assumed to be issued by or on behalf of the County during the Forecast Period.

Proposed Additional Indebtedness – for the Forecast Period [1]

	Additional Senior Lien / Parity Debt [2]			Additional Subordinate / UOSA Debt [3]		Total
	Series 2024	Series 2026	Series 2028	Series 2024	Series 2027	
Principal Amount	\$188,776,799	\$393,631,471	\$313,380,000	\$32,915,955	\$72,915,900	\$1,001,620,125
Deposit to Construction Fund [4]	175,000,000	361,329,700	288,126,100	31,116,400	68,929,500	\$924,501,700
Issuance Date (On or About)	4/1/2024	1/1/2026	1/1/2028	7/1/2023	7/1/2026	
Fiscal Year of Final Maturity	2054	2056	2058	2054	2057	
Annual Debt Service Payment:						
2024	\$2,897,325	\$0	\$0	\$0	\$0	\$2,897,325
2025	11,589,299	0	0	1,988,884	0	\$13,578,183
2026	11,589,299	9,840,787	0	1,988,884	0	\$23,418,970
2027	11,589,299	19,681,574	0	1,988,884	0	\$33,259,757
2028	11,589,299	19,681,574	7,991,190	1,988,884	4,405,804	\$45,656,751
2029	11,589,299	23,281,699	18,455,400	1,988,884	4,405,804	\$59,721,086

- [1] Amounts reflect additional senior lien parity bonds assumed to be issued by the County and subordinated indebtedness issued by UOSA on behalf of (allocable to) the County.
- [2] Amounts shown were based on financing plan of the CIP recognized for the Forecast Period and assume level debt service payments based on a 30-year repayment term, 1.5% of the total principal amount borrowed associated with cost of issuance, and an average annual interest rate ranging from 4.5% to 5.2% based on assumptions provided by the County's Debt Manager.
- [3] Amounts shown for UOSA were based on prior debt issuances of UOSA allocated to the County and assume a 30-year repayment term, 1.5% issuance cost, a 4.2% average annual interest rate with one- (1) year of capitalized interest (i.e., funded from bond proceeds).
- [4] Amounts represent the amount of bond proceeds available for capital funding; difference between the principal amount of bonds issued and the Construction Fund deposit made from the proceeds of the respective bond issues is associated with the bond issuance costs and the funding of a debt service Reserve Fund.

RISK AND FORECAST SENSITIVITY

With any financial forecast there exist certain assumed risks. The following provides a summary of the primary risks identified for this study:

- The majority of a utility's costs are generally considered as being fixed (i.e., do not vary by flow) and include, but are not limited to, the following: personnel, insurance, debt repayment, capital funding, and other related costs. Continued declines in billed wastewater flows (which is based on metered domestic water use) beyond what is already assumed in the Study can erode financial margins from what is projected and result in reduced funds available for ongoing future capital reinvestment. It is estimated that each one percent (1.0%) decline in billed annual wastewater flows would currently result in an approximate (0.8%) percent or \$1.9 million decline in retail rate revenues. The adopted and recommended rates attempt to minimize this risk through an increase in fixed base rates, which do not vary by flow, and is recommended to continue to be phased in over the next several years.

- The financial forecast has assumed average annual collection of Availability Charges at approximately \$20.1 million annually, which is below recent historical realized collection trends. While this is considered a conservative projection, the receipt of these fees varies greatly and is based on new development in the wastewater service area (driven by economic conditions which may result in variations in realized Availability Charges collected). If the System realized lower collections than what is assumed for the forecast, the projected level of transfers for capital reinvestment would be proportionally reduced or would require a corresponding: i) reduction in expenditures (e.g., additional capital deferral); ii) a decline in financial position (liquidity) which could affect the overall credit rating of the System; or iii) increase in rate revenues to offset the decline in the receipt of Availability Charge revenues.
- TBC providers account for a substantial portion of the total System expenditures, including: i) approximately \$45.4 million or 36% of the total annual operating expenses (before budget / actual adjustments); and ii) \$562.9 million or 36% of the identified capital funding for the Forecast Period. Additional increases in the cost of operations or capital needs beyond what is assumed in the financial forecast, which is not under the control of WMP from a cost management perspective, can materially affect the projected financial position of the System. It should be noted that the System is currently in a favorable financial position and WMP annually re-evaluates the financial forecast and estimated fiscal position to address and minimize the long-term effect of such risks.
- The financial forecast assumes average annual retail customer capital spending of approximately \$242.3 million, which is approximately 7.9% of the reported gross fixed assets of the System per year. Capital spending at this level is greater than the reported depreciation expense (calculated to be 2.2% of reported gross fixed assets) and is indicative of significant capital reinvestment and regulatory improvement needs required by the System. The continuation of capital spending at current period levels is anticipated to result in declines in cash reserves and is expected to require the issuance of additional debt beyond the Forecast Period. WMP staff should continue to closely monitor capital spending requirements relative to fiscal policy targets for the fiscal strength and credit rating consideration of the System.
- Regulations such as the Federal Clean Water Act and the Environmental Protection Agency (“EPA”) Chesapeake Bay Total Maximum Daily Load (“TMDL”) requirements have required significant capital investment to be made from wastewater utilities, including the County and the County's TBC providers, to improve water quality by limiting the amount of pollution or nutrient loadings (e.g., nitrogen) contained in wastewater effluent discharged to the Chesapeake Bay. To the extent that new regulations arise that require the WMP to make additional capital investment than what is contemplated herein, the issuance of additional debt, additional rate adjustments or reprioritization of existing capital funding may be required.

FINDINGS AND RECOMMENDATIONS

- WMP's financial and rate implementation plan has resulted in a strong financial position in support of meeting the adopted financial policies and selected performance metrics or targets. The rates for service allow for the continuation of a capital re-investment rate equal to or greater than the annual depreciation expense on the current installed infrastructure, which will minimize the need for long-term debt and help promote the long-term sustainability of rates. It is recommended that the business-evaluation approach for the development of the annual net revenue requirements be maintained and that the financial forecast be reviewed annually.
- Based on the assumptions and findings as identified in this report it is recommended that the Board consider implementation of the recommended retail customer rates as previously presented herein. The recommended

fee for the upcoming Fiscal Year 2025 represents a reduction to the currently adopted rates approved by the Board during Fiscal Year 2024. WMP staff should continue monitoring the need for the adopted and identified rate adjustments closer towards implementation of the respective rate adjustments.

- The proposed rate adjustments by the County are anticipated to be sufficient to provide net revenues that:
i) will continue to meet the rate covenant as delineated in the General Bond Resolution that authorized the issuance of the County's outstanding senior lien bonds; ii) will provide sufficient revenues to fund the increased Debt Service Requirement associated with the issuance of the Additional Parity Bonds anticipated to be issued by the County to fund System capital improvements and allocated Subordinate Obligation debt associated the TBC facility financings and meet the rate covenants associated with such additional indebtedness; and iii) provide for the continued ability to meet the financial targets or objectives of the System as recognized by WMP during the Forecast Period.
- The existing rates for the Fiscal Year 2024 and the recommended Fiscal Year 2025 rates as presented in this report are expected to remain competitive with the rates charged by other neighboring public wastewater utility systems. This competitive position is also anticipated to be maintained during the remainder of the Forecast Period. The table below provides a comparison of the existing and adopted quarterly wastewater utility bill at 16,000 gallons (typical residential customer) relative to other or neighboring utilities:

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**Single-family Residential Wastewater Service
16,000 Gallons of Billed Wastewater Service per Quarter [1][2]**

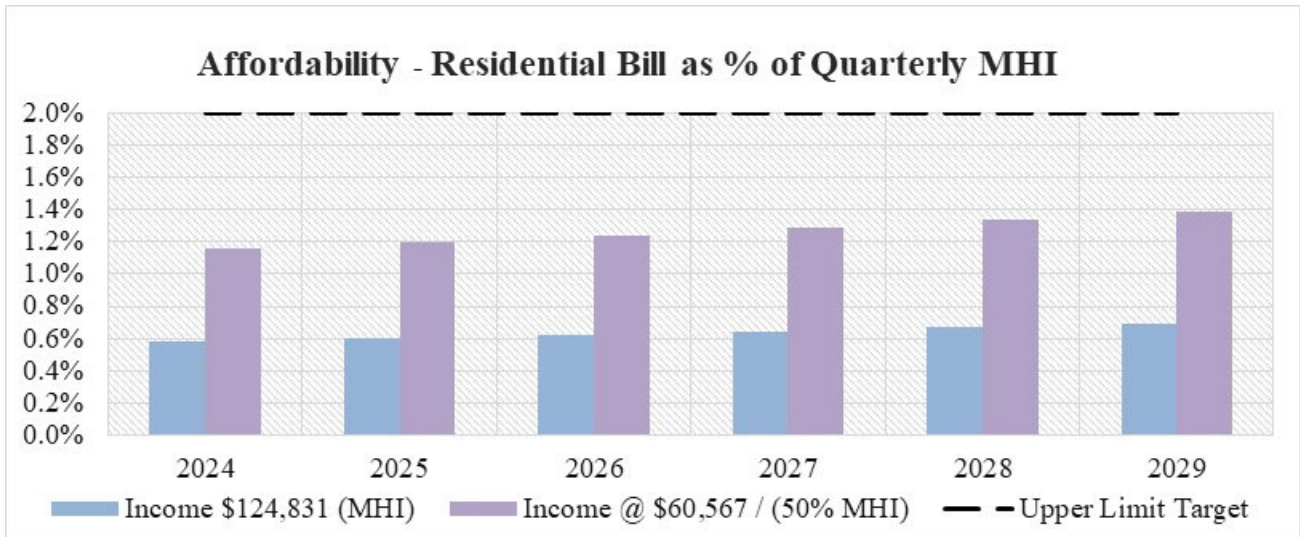
	Quarterly Bill
Fairfax County:	
Existing Rates – Fiscal Year 2024 [3]	\$180.17
Recommended Rates – Fiscal Year 2025 [3]	190.69
Other Neighboring Utilities:	
City of Alexandria (Served by AlexRenew) [3][4]	270.67
Arlington County	167.28
DC Water [3][5]	336.01
Prince William County Service Authority [3]	128.38
Loudoun Water [3]	147.25
Washington Suburban Sanitary Commission [3][6]	223.83
Survey Average	\$212.24

- [1] Unless otherwise noted, amounts shown reflect residential rates in effect October 2023 (Fiscal Year 2024 rates) and are exclusive of taxes or franchise fees, if any, and do not include any surcharges for service rendered outside the corporate limits of the local jurisdiction, for specific capital improvements, or for any other purpose.
- [2] It should be noted that utilities may differ as to the term of billing period and units of measurement used to determine the respective utility customer's wastewater bill. For the purposes of this comparison, all calculations shown have been adjusted to reflect bills rendered on a quarterly basis.
- [3] Utilities shown bill a fixed cost or base charge per billing period per respective account or meter.
- [4] The bill shown for Alexandria Renew Enterprises includes the collection system or facilities charge billed by the City of Alexandria to provide consistency to the rates charged for the other surveyed utilities.
- [5] Amounts shown assumes: i) the Clean Rivers Impervious Area Charge of \$21.86 associated with runoff entering the sewer system; ii) a 50% allocation of the \$7.75 metering fee; iii) a 50% allocation of a Right-of- Way fee to the District of Columbia of \$0.25 per 1,000 gallons; iv) 50% allocation of the PILOT fee charged to water and wastewater customers of \$0.82 per 1,000 gallons; and v) the residential wastewater flow charge of \$15.64 per 1,000 gallons.
- [6] The Washington Suburban Sanitary Commission ("WSSC") bills customers of the utility by calculating the respective customer's average daily flow of use, which is in turn used to determine the variable rate charged to the customer. The calculated bill assumes 16,000 gallons per quarter or approximately 175 gallons per day. Amounts shown assume a 50% allocation of the quarterly Account Maintenance fee of \$18.23 and a \$12.54 infrastructure fee. Amounts shown also include a Bay Restoration Fee of \$5.00 per month.

- In addition to the competitiveness of utility rates, a common measure of rate affordability is to evaluate the typical residential bill (annualized) relative to the annual median household income ("MHI") within the service area. Specifically, a two percent (2%) factor of the MHI is used when evaluating the affordability for wastewater services. It is assumed that a wastewater bill at 2% or greater of the MHI is deemed to signal a "large economic impact" on residents, meaning that the community is likely to experience a greater economic hardship^[1]. The following chart presents a forecast of affordability assuming the adopted and recommended rates for the Forecast Period at the MHI and at 50% MHI for reference:

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[1] <https://www.awwa.org/Portals/0/AWWA/ETS/Resources/AffordabilityAssessmentTool.pdf>



As can be seen from the chart above, the residential wastewater charges for the County are expected to remain within the general range of affordability for the County. It should be noted that the projection of the MHI was calculated assuming income growth of two percent (2%) per year.

To ensure adequate funding for growth-related expenditures and associated debt service payments the existing Availability Charges were evaluated relative to: i) the reported gross investments in capital infrastructure; ii) the identified capital improvement plan; and assumed level of service per equivalent residential unit (“ERU”), which is the typical wastewater capacity allocated to a single-family household or dwelling unit. Based on this analysis as discussed in greater detail in this report, it is recommended that the County increase the existing Availability Charges as follows:

Existing and Recommended Availability Charge

	Existing FY2024	Recommended FY2025	Increase %	Oversize Increase % [1]	Total Increase %
Single-family	\$8,860	\$9,038	1.00%	1.00%	2.00%
Townhouses and Apartments	\$7,088	\$7,231	1.00%	1.00%	2.00%
Hotels / Motels	\$2,215	\$2,260	1.00%	1.00%	2.00%
Non-residential per Fixture	\$443	\$452	1.00%	1.00%	2.00%

[1] The developer oversizing increase is due to the Policy adopted by the County this year.

The proposed Availability Charge for one (1) ERU at \$8,592 is considered competitive with other surveyed Virginia wastewater utilities average at \$8,134. Table 16 at the end of this report provides a listing of the neighboring utilities surveyed.

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**WASTEWATER REVENUE
SUFFICIENCY AND
RATE ANALYSIS**

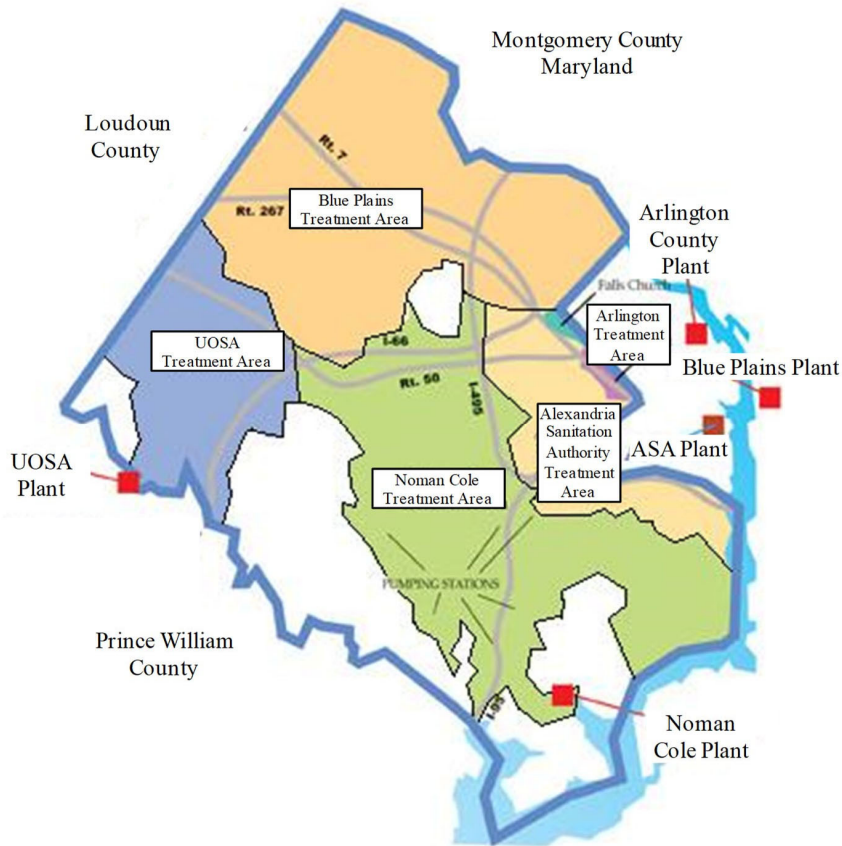
FAIRFAX COUNTY WASTEWATER MANAGEMENT PROGRAM

2024 WASTEWATER REVENUE SUFFICIENCY AND RATE ANALYSIS

Introduction

As shown on Figure 1 as follows, the County provides wastewater service to residents through a combination of wastewater treatment and disposal facilities owned and operated by the County as well as through wholesale service agreements with four adjacent public utilities providing regional wastewater treatment and disposal service (referred to as Treatment by Contract or “TBC”), based on the sewer shed location within the County. Wastewater collected from customers in the northern part of the County is routed to the Blue Plains Advanced Wastewater Treatment Plant, owned and operated by the District of Columbia Water and Sewer Authority (“DCWASA”). Wastewater collected from customers in the western part of the County is routed to the Upper Occoquan Service Authority’s (“UOSA”) Regional Water Reclamation Plant. Wastewater collected from customers in the central and southern part of the County is routed to the County-owned Noman Cole Pollution Control Plant (“Noman Cole PCP”). Wastewater collected from customers in the eastern part of the County is routed either to the Alexandria Renew Enterprise’s (formally Alexandria Sanitation Authority) (“AlexRenew”) Advanced Wastewater Treatment Plant or to Arlington County’s Water Pollution Control Plant (“WPCP”) depending on the physical location of the customers in this sewer shed.

Figure 1 – Wastewater Service Area Map



The Wastewater Management Program (“WMP”) staff currently manages the day-to-day operation of the County-owned Noman Cole PCP, a wastewater facility having a permitted capacity of 67.0 million gallons a day (“MGD”). Additionally, the County has secured an entitlement of 89.68 MGD of TBC wastewater treatment capacity. The County's TBC capacity represents 57% of the total wastewater treatment capacity of the System. In this Report, the County's Noman Cole PCP and TBC capacity, together with the County's collection and transmission system, pumping stations and related facilities and equipment are referred to collectively as the "System."

Total Current System Wastewater Capacity (MGD)

Wastewater Entity	As of August 1, 2023
Fairfax County (Noman Cole PCP)	67.00
Alexandria Renew Enterprises (AlexRenew)	32.40
Arlington County	3.00
UOSA	22.60
DCWASA	31.00
Prince William	0.10
Loudoun Water	1.00
Colchester [1]	0.08
Total	157.18

[1] The Colchester wastewater treatment plant is a package plant owned by a private utility which is dedicated to serve the Colchester residential development.

The WMP currently provides service to an estimated population of 1,170,033^[2] residents. As of June 30, 2023, WMP reported that its gross plant investment in the System, including construction- in-progress and capacity entitlements in wastewater treatment facilities owned by other local governments, was approximately \$3.3 Billion.

WMP monitors its financial position and results on an ongoing basis, continuously prepares financial forecasts to identify anticipated trends in financial position and establishes rates and charges to meet certain financial goals. To support this financial evaluation and rate process, the WMP has engaged the services of Raftelis Financial Consultants, Inc. (“Raftelis”) to assist in the preparation of a five-year financial forecast to evaluate trends and anticipated performance results based on the most recent actual and current year budgetary information and WMP's management practices. The purpose of this rate sufficiency and rate analysis report (the “Report”) is to document the financial and rate evaluation prepared on behalf of Fairfax County, Virginia (the “County”) and to provide our observations and recommendations as to the level of wastewater system rates that should be charged for utility service and support the recommendations for sewer service charges for consideration by the Board of Supervisors of the County (the “Board”) for adoption.

This analysis is prepared annually primarily in support of the County's ongoing budget and capital improvement planning process. The revenue sufficiency and rate analysis reflected in this Report was based on the Adopted Fiscal Year 2024 Budget and encompassed the subsequent five- (5) fiscal year period ending June 30, 2029 (collectively, the “Forecast Period”). Although the analysis focused primarily on the financial needs identified for the Forecast Period, the financial analysis also included a ten fiscal year period ending June 30, 2033 (referred to as the “Planning Period”) to support management's ongoing long-term planning efforts.

[2] Population figures per Demographic and Economic Statistics reported in the County's Comprehensive Annual Financial Report for the Fiscal Year 2023 for the Integrated Sewer System Enterprise Fund.

As documented in this Report, WMP's operations and financial position are impacted by a variety of factors, including: i) increased capital expenditures required for renewals and replacements, regulatory mandates associated with the Chesapeake Bay Program, and to serve new development in the County's wastewater service area; ii) continued effects of inflation on the cost of operations and construction; iii) need to maintain a strong financial position to promote the creditworthiness and sustainability of sewer service charges or user fees for the System; iv) maintain compliance with the rate covenant requirements of the General Bond Resolution adopted by the Board on July 29, 1985, as amended, restated, and supplemented from time to time (the "General Bond Resolution") authorizing the issuance of the Outstanding Bonds^[3]; and v) providing sufficient funds for the payment of the System's allocable share of subordinate debt issued (and held) by UOSA on behalf of the County.

The effect of these factors was recognized last year in the preparation of the Wastewater Revenue Sufficiency and Rate Analysis for the Fiscal Year 2023 through Fiscal Year 2028 dated February 2023, which was prepared in support of the Fiscal Year 2024 WMP Budget (the "2023 Report"). The 2023 Report evaluated the overall expenditure requirements of the System and recognized the criticality of the need for the continued change in the level and cost recovery strategies of wastewater rates charged for service to meet the projected financial requirements but also to increase revenue stability. Revenue sufficiency refers to the increased certainty of the receipt of rate revenues since the rates for service are less dependent on volume or usage rates (flow) which may vary over time which is consistent with trends indicating lower sales per customer served at least over the past ten years – a reduced financial risk. The recommended rates and the annual changes identified in the 2023 Report, which were subsequently approved by the Board included: i) continuation of the phase-in of an increasing fixed cost recovery base charge to enhance revenue sufficiency and equitable cost recovery practices (i.e., recovery of "readiness-to-serve" costs); and ii) a marginal increase in the recommended volumetric rate. The purpose of initially introducing the fixed cost recovery charge in Fiscal Year 2014 was to: i) promote revenue stability (certainty) in revenue recovery; ii) promote equitability in the recovery of cost among the wastewater users (readiness-to-serve); and iii) reflect industry norms and trends in rates. The following is a summary of the Board implemented and adopted rates for the Fiscal Years 2024 through 2028 based on the recommendations in the 2023 Report and the net change in the quarterly wastewater bill for the typical residential customer.

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[3] The Outstanding Bonds reflect bonds issued by the County in accordance with the terms and conditions delineated in the General Bond Resolution and include: Sewer Revenue Bonds, Series 2012; the Sewer Revenue Refunding Bonds, Series 2014; the Sewer Refunding Revenue Bonds, Series 2016A, Sewer Revenue Bonds, Series 2017; and Sewer Revenue Bonds, Series 2021 (the "Outstanding Bonds").

Summary of Fiscal Year 2024 Board-Adopted Rates (FY24-FY28)

Fiscal Year Ending June 30, [1]					
	In Effect	Adopted – Prospective			
	2024 [2]	2025	2026	2027	2028
Volumetric Rate – \$ per 1,000 Gallons	\$8.46	\$8.81	\$9.33	\$9.83	\$10.35
Change from Prior Year	N/A	\$0.35	\$0.52	\$0.50	\$0.52
Quarterly Base Charge – \$ per ERU per Meter Size [3]	\$44.81	\$49.73	\$52.62	\$55.41	\$58.35
Change from Prior Year	N/A	\$4.92	\$2.89	\$2.79	\$2.94
Average Quarterly Residential Bill – Usage of 16,000 Gallons per Quarter					
Quarterly Residential Bill	\$180.17	\$190.69	\$201.90	\$212.69	\$223.95
Percent Combined Change from Prior Year for Usage of 16,000 Gallons per Quarter	N/A	5.84%	5.88%	5.34%	5.29%
Annual Quarterly Increase in Wastewater Bill for Usage of 16,000 Gallons per Quarter [4]	<u>N/A</u>	<u>\$10.52</u>	<u>\$11.21</u>	<u>\$10.79</u>	<u>\$11.26</u>

[1] All rates scheduled to be implemented on July 1st and became fully effective (implemented as a result of prorating rates based on when service is used by customer and the rate in effect as of such service use period) with quarterly bills rendered on October 1st of each fiscal year.

[2] Recommended rates as identified in the 2023 Report, which were adopted by the Board and are being billed.

[3] Amount reflects increase in the base charge to recover a portion of the identified fixed costs incurred to provide wastewater service to improve revenue stability and equitability in cost recovery.

[4] Calculated from immediately preceding Fiscal Year bills.

Fiscal Year 2023 Results

The adopted rates for the Fiscal Years 2024 through 2028 were based on, among other things, the Fiscal Year 2022 actual results, the Fiscal Year 2023 Budget, which was reviewed and adjusted as appropriate based on more recent financial results since its adoption by the Board, and the Fiscal Year 2023 capital improvement plan including capital expenditures anticipated to be incurred by and allocable to the System associated with the County's TBC providers. A comparison of the forecasted and actual results for the Fiscal Year 2023 is now available for consideration and incorporated into the Fiscal Year 2024 Financial Forecast. In evaluating the Fiscal Year 2023 results, a number of observations were made:

1. The actual Fiscal Year 2023 gross revenues and availability fees were approximately \$272.8 million, which is \$8.5 million more than what was initially projected in the prior 2023 financial forecast. The following provides a brief discussion detailing the analysis of the variance among the actual and previously projected revenues:
 - a. The reported Fiscal Year 2023 Service Charge revenues from retail customers was about \$232.9 million, which is approximately \$2.6 million lower than the \$235.5 million estimated for the financial forecast included in the 2023 Report. The revenue shortfall for the base charge was approximately - \$1.5 million, while the variable charge exceeded the financial projection by approximately \$1.1 million. These shortfalls were due to lower-than-expected customer growth and wastewater flows. The actual and forecasted results were still generally consistent, as the variance was approximately 1%.

This recognizes that assumptions concerning rate increases, connected customers and billed flows previously forecasted were mostly realized by the County.

- b. Actual Fiscal Year 2023 Sales of Service (wholesale) revenues was approximately \$8.7 million, which is approximately \$0.6 million less than the projected \$9.3 million estimate presented in the 2023 Report. This variance was due to lower than projected billed flows by the Sale of Service customers. The actual and forecasted results were still generally consistent, which recognizes that assumptions concerning wholesale service charges and the wastewater treatment needs of the customers (billed flows) as previously forecasted were realized by the County.
 - c. Actual Fiscal Year 2023 Service Availability Charge revenues were approximately \$23.5 million, which was \$7.1 million more than the \$16.4 million estimate recognized in the development of the 2023 financial forecast. The variance is primarily due to an increase in the number of new service requests relative to planned requests and may be due to a timing difference of when new service requests are made and the payment of fees. The projection of Availability Charges can vary since they represent one-time fees paid by developers and other applicants to reserve wastewater capacity to serve their development. year.
 - d. Other operating revenues, including investment income, accounted for approximately \$7.6 million of gross revenues, which was more than the forecasted amount recognized in the 2023 Report at approximately \$2.5 million, primarily due to investment income being higher than projected. This was due to better investment rates than previously forecasted, which were conservative in nature.
2. Actual Fiscal Year 2023 operating, and maintenance expenses (not including depreciation) was \$123.1 million, which was approximately \$0.4 million less than estimates contained in the 2023 Report. The actual and forecasted results were still generally consistent, which recognizes that assumptions concerning the forecasted operating expenditures were realized by the County.

The utility plant additions in gross plant-in-service for the Fiscal Year 2023, less amounts received through developer property contributions or financed by grant funding, were approximately \$136.1 million as reported in the County's financial statements, which was \$23.9 million less than what was anticipated to be spent during such fiscal year as referenced in the 2023 Report. The lower level of capital spending is attributable to the variance in timing from when the projects are appropriated (and required to be funded) to actual expenditures and therefore unspent appropriations are expected to carry-over and is anticipated by the County to be expended during the Fiscal Year 2024 (and potentially future years) resulting in a continued increase in net utility assets for the Forecast Period.

The debt service payments expressed on an "as-paid basis" (when payments are made to investors from amounts on deposit in the Debt Service Subfund which generally forms the basis for financial reporting) were approximately \$54.8 million or approximately \$4.7 million less than what was forecasted in the 2023 Report. The variance was primarily due to timing differences in funding of the Debt Service Requirement on an "accrual basis" (when deposits from System revenues are made to the Debt Service Subfund which typically relates to the establishment of the revenue requirements funded from rates) when compared to the requirement expressed on an "as-paid" basis to the investors holding the bonds.

The following table provides a comparison of the actual net operating results for the Fiscal Year 2023 to the projections for such year as presented in the 2023 Report:

Fiscal Year 2023 Financial Results Comparison

	2023 Actual Results	2023 Financial Forecast [1]	Variance to Actual Results Positive/(Negative)
Flow Charge Revenues	179,141,731	180,620,267	(1,478,536)
Base Charge Revenues	53,763,048	54,916,380	(1,153,332)
Sales of Service Revenues	8,744,410	9,316,050	(571,640)
Other Miscellaneous Charges	1,087,651	1,035,000	52,651
Investment Earnings	6,541,726	1,453,000	5,088,726
Operating Revenues and Investment Earnings [2]	\$249,278,565	\$247,340,697	\$1,937,869
Operating Expenses	(123,111,480)	(123,548,793)	437,314
Net Revenues	\$126,167,085	\$123,791,903	\$2,375,182
Total Debt Service Payments [3]	(54,782,735)	(59,504,417)	4,721,682
Net Available for Capital Funding	71,384,350	64,287,486	7,096,864
Capital Funding Allowance [4]:			
County-owned Facilities	(55,972,609)	(55,972,609)	N/A
Treatment-by-Contract Facilities	(35,322,126)	(35,322,126)	N/A
Net Available before Availability Charges	(\$19,910,385)	(\$27,007,249)	\$7,096,864
Service Availability Charges [5]	23,514,132	17,000,000	6,514,132
Net Available for System Use	\$3,603,747	(\$10,007,249)	\$13,610,996

[1] Represents forecast prepared and presented in the 2023 Report and was based on Fiscal Year 2023 Budget and actual Fiscal Years 2022 and year-to-date Fiscal Year 2023 operating results. Amounts shown exclude receipt of grant proceeds, if any, since prior forecast does not assume any.

[2] Includes charges for service, sales of service (wholesale sales), and other operating revenues. Additionally, the amounts shown include interest income on available fund balances.

[3] Includes debt payments on senior debt and subordinate obligations. Actuals are presented on an "as-paid" basis, while prior Fiscal Year 2022 projections are presented on "an accrual" basis (when deposits to Debt Service Subfund from rate revenues is required).

[4] Amount shown reflects a 3% capital asset replacement funding ratio based on: i) County reported original gross plant in service, less land and construction-work-in-progress; and ii) original book value of capacity rights for the County's Treatment-by-Contract providers. The allowance is considered necessary for ongoing capital funding and infrastructure replacement needs and is the funding target recognized in the current financial forecast.

[5] Reflects Availability Charges received by WMP. Amounts shown do not include any contributed property donations which are received by the County and reflect direct capital additions to the System.

As can be seen from the prior table, the actual results for the Fiscal Year 2023 outperformed the prior forecast, including the dedication of funds for ongoing programmed capital reinvestment. This positive variance was due primarily to availability fees and interest income outperforming the conservative forecast.

Projected Financial Results

The Board annually approves a multi-year rate plan and constantly re-evaluates its financial position and expenditure needs / funding commitments as part of its rate evaluation process. As previously mentioned above, the most recent Board-approved rates, including the currently effective rates for the Fiscal Year 2024, were based on an analysis prepared by WMP and Raftelis and presented in the 2023 Report. The Board-approved rates adopted in connection with the prior Fiscal Year 2023 financial forecast were designed with the intent of meeting the expenditure funding

needs of the System and achieving the financial parameters and performance measures established for the System during the Forecast Period presented in that study. These results and the corresponding assumptions recognized in the development of the 2023 financial forecast have been updated and adjusted based on the improved 2023 actual results and most recent budget projections / System needs which has enhanced the ability of the System revenues to fund the projected expenditure requirements and meet the identified financial benchmarks or targets for the Forecast Period. Accordingly, as part of this revenue sufficiency study, a re-evaluation of the System rate adjustments (i.e., total rate revenues estimated to be earned) was considered.

The Fiscal Year 2024 financial forecast includes a multi-year rate phasing program which was prepared to identify the Fiscal Year 2024 through 2029 rates, which are considered necessary to fund the identified revenue requirements for the System and continue to meet the financial planning benchmarks / targets (i.e., financial position) identified with WMP staff to promote the long-term creditworthiness of the System. The creditworthiness objective focuses on maintaining an "AAA" credit rating with the bond rating agencies, limiting long-term financial risks to the System through prudent liquidity and financial operating strategies, and promoting the long-term sustainability of rates while attempting to limit future rate increases to wastewater customers. Based on the assumptions recognized in the development of the financial forecast and the actual Fiscal Year 2023 results, the following rate adjustments are recommended:

Recommended Quarterly Rate Adjustments by Fiscal Year per 2023 Report – for the Forecast Period

Description	Existing	Fiscal Year Ending June 30,				
	2024	2025	2026	2027	2028	2029
<u>Currently Approved Rates (2023 Report):</u>						
Quarterly Base Charge	\$44.81	\$49.73	\$52.62	\$55.41	\$58.35	N/A
Flow Charge	\$8.46	\$8.81	\$9.33	\$9.83	\$10.35	N/A
Rate Revenue Adjustment:						
Effective Increase [1]	N/A	5.9%	5.9%	5.5%	5.3%	1.3%
Annualized Increase [2]	N/A	5.8%	5.9%	5.3%	5.3%	0.0%
<u>Recommended Rates (2024 Report):</u>						
Quarterly Base Charge	\$44.81	\$49.73	\$52.62	\$55.78	\$59.08	\$62.57
Flow Charge	\$8.46	\$8.81	\$9.33	\$9.88	\$10.46	\$11.08
Rate Revenue Adjustment:						
Effective Increase [1]	N/A	5.9%	5.9%	5.9%	5.9%	5.9%
Annualized Increase [2]	N/A	5.8%	5.9%	5.9%	5.9%	5.9%

- [1] Amounts shown reflect the projected effective revenue increase as applied to projected customer billing statistics assuming rates are in effect on average for nine (9) months of the Fiscal Year corresponding to when the rates are placed into effect. The County pro rates the bills based on the customer service attributes and recognizes rate adjustments to service rendered effective July 1st of each fiscal year (e.g., bills rendered during the first quarter of the Fiscal Year relate to service provided during a portion of the prior fiscal year).
- [2] Amounts shown reflect the annualized rate revenue increase based on rate increases assumed for an annualized 12-month period as applied to projected customer billing statistics.

As can be seen from the above table the recommended rates are proposed to be slightly increased when compared to the recommendation presented in the 2023 Report. This is due to the continued high rates of inflation on operating expenses and the cost of materials and capital construction. As can be seen in the above table, it is also recommended that the Board consider approval of the Fiscal Year 2029 identified rates which essentially is a continuation of the level of rate adjustments recognized through the Fiscal Year 2028.

KEY CONSIDERATIONS AND ASSUMPTIONS REGARDING PROJECTED OPERATING RESULTS

The development of the projected net revenue requirements for the System required several assumptions and considerations and the preparation of certain analysis relative to anticipated utility operations. The major assumptions, considerations and analyses that were considered in the development of the projected System revenue requirements for the Forecast Period are as follows:

1. The forecast in accounts, equivalent residential units (“ERUs”) and billed retail wastewater flow was based on a review of historical trends and discussions with WMP staff and is summarized below:

Summary of Historical and Projected Customers (ERUs) and Billed Retail Flow Statistics [1]

Fiscal Year	Equivalent Residential Units (ERU) [2]	Billed Wastewater Sales (Flow)	Average Billed Flow per ERU
Historical Period:			
2018	341,720	23,086,536	5,630
2019	342,591	22,593,545	5,496
2020	343,087	22,770,424	5,531
2021	347,193	22,351,730	5,365
2022	348,198	22,750,614	5,445
2023	347,287	22,426,454	5,381
Average Annual Compound Growth Rate	0.32%	(0.58%)	(0.90%)
Forecast Period: [3]			
2024	348,887	22,587,133	5,395
2025	350,494	22,701,141	5,397
2026	352,111	22,816,405	5,400
2027	353,732	22,931,787	5,402
2028	355,367	23,048,712	5,405
2029	357,009	23,165,973	5,407
Average Annual Compound Growth Rate [4]	0.46%	0.54%	0.08%

[1] Amounts shown derived from Tables 1 and 2.

[2] The County determines the Equivalent Residential Unit (“ERU”) for each active customer account based upon application of a meter equivalency factor per water meter associated with wastewater service for a customer. The meter equivalency factors are based on the information published by American Water Works Association (“AWWA”) regarding instantaneous demand relationships among meter sizes relative to a 5/8" meter and are also used to factor the base charge for the adopted rates. The County bills customers the base charge based on the number of ERUs associated with the customer account. For purposes of this analysis the historical ERUs were calculated based on the reported historical average monthly base charge revenue divided by the base charge for service then in effect.

[3] Reflects customer and sales forecast which formed the basis of the rate revenue from approved and recommended rates.

[4] Reflects average annual compound growth rate from Fiscal Year 2023.

2. As can be seen above, the projection in equivalent residential units is assumed to increase approximately 0.46% annually through the Fiscal Year 2029 (averages 1,620 ERUs annually for the Forecast Period). This average growth rate is assumed to be attainable by WMP staff. It should be noted that the forecast assumes a slightly less billed wastewater flow per ERU than the historical 5-year average for the system (the System has been experiencing a general decreasing trend in billed flow since 2018). As can be seen in the prior table, the average billed wastewater flow per ERU has declined when compared to the average billed wastewater

flow per ERU as experienced during the Fiscal Year 2018; the reported 2023 average billed flows are 4.4% less than the average billed flow per ERU recognized in 2018. This reduction in billed flows per ERU has a direct impact on rate revenues and the development of funding strategies since the revenue expressed on a “contribution per customer” basis is generally decreasing. For the Forecast Period, it has been assumed that the average billed wastewater flow per ERU will be more in line with the historical 5-year average as the flows per ERC in Fiscal Year 2023 were considerably lower than Fiscal Year 2022

3. The Adopted Fiscal Year 2024 Budget estimates as provided by WMP staff served as the basis for the expenditure projections for the System. The budget estimates were compared to actual historical period results and the underlying assumptions and expenditure amounts included therein were assumed to be reasonable and reflect anticipated operations, unless otherwise noted. Such budgetary amounts are incorporated into the development of the Operating Expenses and certain other funding requirements for the first two (2) years of the Forecast Period, except for adjustments and assumptions as noted herein.
4. Projected revenues from existing and adopted rates (sewer service charges) for the System were based on the customer, ERU, and sales forecast as shown on Table 2 and summarized above (reference Item No. 1), and the most current schedule of rates approved by the Board of Supervisors.
5. The projected Sales of Service (wholesale charges) revenues were based on the individual parameters of each specific agreement with the respective wholesale customer for providing service, actual reported revenues for the Fiscal Year 2023, the adopted and projected County retail wastewater rates and billing relationships, the capital plan (as discussed later in this Report), the forecast of Operating Expenses at both the Noman Cole PCP and the TBC Contract wastewater facilities for those wholesale customers that are contractually obligated to share in costs, and other factors. Based on the contract parameters and the overall costs reflected in the analysis, the following sales of service revenue for wholesale service by respective customer was recognized for the Forecast Period:

Summary of Sales of Service (Wholesale) Revenues – for the Forecast Period [1]

	Fiscal Year Ending June 30,					
	2024	2025	2026	2027	2028	2029
City of Fairfax	\$2,910,009	\$2,970,768	\$3,050,184	\$3,131,176	\$3,214,351	\$3,299,274
Town of Herndon	1,932,015	2,012,773	2,096,687	2,183,891	2,274,505	2,368,664
Arlington County	862,066	898,192	935,735	974,754	1,015,305	1,057,447
Fort Belvoir	2,771,507	2,886,167	3,056,520	3,236,701	3,426,709	3,629,822
City of Falls Church	938,785	955,338	979,088	1,002,649	1,025,905	1,049,696
Town of Vienna	998,547	1,037,522	1,065,298	1,093,564	1,122,578	1,152,204
Fairfax Water	172,253	179,561	189,391	200,559	212,345	224,902
I-95 ERRF (Covanta)	303,887	316,779	334,121	353,823	374,615	396,769
Loudoun (County) Water	254,817	260,678	266,152	271,475	277,448	283,551
Total Sales of Service Revenues	<u>\$11,143,886</u>	<u>\$11,517,778</u>	<u>\$11,973,176</u>	<u>\$12,448,592</u>	<u>\$12,943,761</u>	<u>\$13,462,329</u>

[1] Amounts derived from Table 5 at the end of this Report and based on respective wastewater flow forecast and current contractual billing relationships for each Sales of Service customer; amounts shown include projected impacts associated with percent changes in retail rates as applicable based on recommended rates for service. For Sale of Service customers that have contractual rates tied to the County’s retail rates, such revenues include the pro rata increase due to the implementation of the recommended rates as provided in such agreement for service with the County.

6. The capital contributions from the Sales of Service customers were recognized as a reduction in the overall capital funding requirements from the County retail customers since the contributions to the funding of such capital requirements is a condition of service. A summary of the adjustments is shown on Tables 5 and 10 at the end of this report.

7. In order for new development to pay for the initial capital investment necessary to serve such new development (the general policy being that “growth pays for growth”), the County charges an Availability Charge based on the capacity being requested for the intensity of development being requested by the applicant (essentially a reimbursement to the System for the allocated System capital expenditures to serve the new development). The general policy of WMP is to use the charges that are realized and received to first pay for expansion-related debt service payments (to limit immediate rate increases to existing customers) and then to fund expansion-related or allocated capital expenditures. The use of the Service Availability Charges to fund annual expenditures serves to reduce the amount of net revenue requirements that need to be funded annually from Sewer Service Charges or retail rates. For the Forecast Period, the estimate of Availability Charge revenues was based on the forecast of ERUs assumed to connect to the System, the current rate for service (i.e., \$8,860 per ERU), the proposed rate for service (i.e., \$9,038 per ERU beginning with the Fiscal Year 2025), which was subsequently inflated at 2% thereafter for the remainder of the Forecast Period to recognize the phasing of anticipated Availability Charge adjustments over time based on discussions with WMP staff and the developer oversizing increase is due to the Reimbursement Policy. The estimated amount of Availability Charge revenues anticipated to be received during the Forecast Period was determined as follows:

Summary of Estimated Availability Charge Revenues – for the Forecast Period

	Fiscal Years Ending June 30,					
	2024	2025	2026	2027	2028	2029
ERUs Connecting to System	2,738	2,747	2,779	2,783	2,822	2,827
Availability Charge (\$/ERU)	\$8,860	\$9,038	\$9,218	\$9,398	\$9,578	\$9,759
Availability Charge Revenue (\$000s)	\$24,259	\$24,827	\$25,617	\$26,155	\$27,029	\$27,589
Adjustment [1]	(5,973)	(5,931)	(5,846)	(5,709)	(5,697)	(5,573)
Adj. AC Revenue (\$000s)	\$18,286	\$18,896	\$19,771	\$20,446	\$21,332	\$22,015

[1] ERUs shown are presented differently when compared to the ERUs reported for the customer statistics due to the methodology of the determination of the allocated capacity resulting in the receipt of Availability Charges being calculated on fixture basis while rates are on a meter equivalent basis.

[2] Amounts shown reflect an adjustment to the estimated receipt of Availability Charges to reflect a conservative forecast of revenues to be realized (e.g., due to timing differences between payment of fees and connection to the System and other factors) since they represent non-recurring revenues based on discussions with WMD staff.

8. The County does not formally segregate the Availability Charges received from the other operating revenues of the System. To identify the amount of funds on deposit attributable to the receipt and estimated use of such funds, a historical analysis of fee collections and expenditures was performed to estimate beginning Availability Charge fund balances allocable to new customers. For the Forecast Period, such amounts were based on: i) the estimated current cash balance in the new customer (availability charge) fund as of June 30, 2023 representing the beginning fund balance; ii) the level of fees anticipated to be collected during the Forecast Period, including interest income assumed to be earned on funds on deposit; and iii) the projected expansion-related debt service payments identified during the Forecast Period.

Based on the above, the following sources and the corresponding use of the Availability Charge funds was recognized during the Forecast Period:

Summary of Estimated Balance of Availability Charge (AC) Funds – for the Forecast Period [1]

	Fiscal Years Ending June 30,					
	2024	2025	2026	2027	2028	2029
Availability Charge-Related Revenues:						
Estimated Availability Charge Receipts	\$18,286,001	\$18,895,975	\$19,770,973	\$20,446,046	\$21,331,985	\$22,015,343
Investment Income [2]	0	0	0	0	0	0
Less Uses of Funds:						
Debt Service Payments	18,286,001	18,895,975	19,770,973	20,446,046	21,331,985	\$22,015,343
Capital Project Expenditures [3]	0	0	0	0	0	0
Net Balance Available for Debt Recovery Application	\$0	\$0	\$0	\$0	\$0	\$0

[1] Amounts reflect funds that are allocated to capital-related expenditures associated with serving new customers (expansion-related); which resources are derived primarily from the application of Availability Charges.

[2] Amounts include earnings on projected Service Availability Fund balances that are allocable to new customers.

[3] Based on a multi-year historical review of expansion-related debt service and proceeds from the sale of capacity, no Availability Charge revenues were assumed for purposes of this analysis to be used to fund a portion of the new customer-related capital improvements for the System.

As can be seen above, it is projected that all Availability Charge collections will be applied to the payment of the current period expansion-related Debt Service Requirement (payments). As can be seen below, it is estimated that the expansion-related component of the Debt Service Requirement is expected to exceed projected receipts of Availability Charges for all years of the Forecast Period resulting in a carry-forward balance of expansion-related debt payments available to be funded or reimbursed from Availability charges in the future; the difference between the total expansion-related debt payments and the application of the estimated realized Availability Fees must be funded in the interim from existing customer sewer service charge revenues.

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**Summary of Estimated Expansion-Debt funded from Existing Customer Revenues –
to be Reimbursed from Availability Charge Revenues (in \$000s) [1]**

	For the Forecast Period – Fiscal Years Ending June 30,					
	2024	2025	2026	2027	2028	2029
Beginning Existing Customer Reimbursement Balance [1]	\$0	\$18,278	\$40,243	\$65,193	\$93,008	\$124,393
Total Debt Service Payments	63,179	74,303	84,489	94,319	106,703	109,045
Expansion-related Allocation:						
Expansion Debt Percentage	58%	55%	53%	51%	49%	46%
Allocated Debt Service	36,564	40,861	44,721	48,260	52,717	49,668
Availability Charges to Pay Expansion Debt [2]	18,286	18,896	19,771	20,446	21,332	22,015
Carry Forward Balance Increase / (Decrease)	18,278	21,965	24,950	27,814	31,385	27,653
Ending Existing Customer Reimbursement Balance	<u>\$18,278</u>	<u>\$40,243</u>	<u>\$65,193</u>	<u>\$93,008</u>	<u>\$124,393</u>	<u>\$152,046</u>

[1] The Recovery Balance represents the amount of expansion-related debt payments funded from rates (existing customers) and is anticipated to be reimbursed from Service Availability Fees. Amounts determined based on historical Service Availability Charge collections relative to expansion related debt service payments; essentially represents a "due from" new customers payable to existing customers for debt expenditures not funded from the receipt of Availability Charges.

[2] Assumes all Availability Charges will be applied to expansion-related debt service payments (the first priority of use). Any balance of fees available after payment of the expansion-related debt service payments was assumed to be carried over to the subsequent years for future debt service payment application; any deficiency in Availability Charge expansion-related debt funding represents a future reimbursement to the System due from the Availability Charge revenues (deposited into System operating reserves as charges are received).

9. Included in the financial projections are other operating revenues associated with lateral spur fees, connection charges and other customer-related requested service revenues. For the purposes of this Report, other operating revenues were based on i) the Fiscal Year 2024 budgeted revenues; ii) a review of historical amounts received from such charges; and iii) discussions with WMP staff. Based on a review of such sources, it was assumed that such revenues would fluctuate either in relation to anticipated new connections to the System during the Forecast Period or would be held constant during such period.

10. Table 3 at the end of this Report summarizes the projected Operating Expenses for the System. The Fiscal Year 2024 budget represents the County's most recent annual financial plan for the System and served as the baseline of the financial forecast of operating expenses. The budgeted amounts were compared to the prior period results and adjusted as considered necessary in support of the development of the projection of operating expenses. The projected System Operating Expenses have been escalated from adjusted budget levels for the Fiscal Year 2024 based upon several assumptions and the nature of the expense being incurred by the System. A summary of the cost escalation assumptions is provided below:

- a. Personnel expenses were escalated recognizing: i) inflation on salaries and wages estimated at 3.0% annually assuming cost of living adjustments and merit increases; and ii) increases in medical and other benefits assumed at 3.0% annually based on a review of recent historical increases and expectations for such costs for the Forecast Period. It should be noted that the County provides healthcare benefits through a self-insurance policy.

- b. Based on discussions with the County, additional personnel were assumed to be required for the Forecast Period to meet additional demands due to System growth, the imposition of the capital improvement program or due to increased utility service needs during the Forecast Period. Accordingly, 15 additional positions were added over a 3-year period beginning in Fiscal Year 2026 in the development of the Operating Expenses projections for the Forecast Period.
- c. General expenses, other contractual services and certain other operating expenses have been projected to increase at an annual rate of inflation of 2.3%. The escalation factors were based on the Consumer Price Index and the Implicit GDP Deflator forecasts published by the Congressional Budget Office as contained in the Economic and Budget Outlook dated October 31, 2023, recent historical expenditure trends experienced by the System, and discussions with WMP Staff.
- d. Repair and maintenance operating expenses were escalated based upon a factor of 4.0% over the Forecast Period based on discussions with WMP staff, reflecting the continued trend in increased capital reinvestment needs and increases in construction materials costs used in the repair and maintenance of existing wastewater facilities.
- e. General insurance for property, plant and equipment was escalated based upon a factor of 2.3% for the Forecast Period based on discussions with WMP staff and recognizing that the County will control costs through a self-insurance policy.
- f. The projection of variable costs for the County's Noman Cole PCP operations, which included purchased power and chemicals cost, was determined utilizing the cost estimates as outlined in the County's Fiscal Year 2024 budget. These costs were compared to recent trends and were escalated for the Forecast Period based on an allowance for inflation, which is consistent with recent historical trends, and the projection of wastewater treated flow requirements as discussed earlier in this Report. For the Forecast Period, the following was assumed for the following specific variable expenses:
 - i. Electrical expenses were escalated over the Forecast Period at a base annual inflation rate of 2.5% based on a review information published by the Bureau of Labor Statistics regarding historical trends in electricity and energy prices over the past 20 years and the anticipation of increased energy costs.
 - ii. Chemical expenses were escalated over the Forecast Period at a base annual inflation rate of 4.0% annually based on a review of historical indices published by the Bureau of Labor Statistics for industrial chemicals as well as a historical review of actual chemical expenses for WMP.
- g. Bills for retail wastewater service are rendered on a contractual basis by Fairfax Water and the Town of Vienna. For the Forecast Period, the cost of the billing services was based on: i) a composite cost to provide such service predicated on the total bills being rendered; ii) the growth in accounts billed for the Forecast Period; and iii) allowances for inflation on the cost of billing (rate charged for service by the billing agents). For the Forecast Period, this expense was estimated to average approximately \$7.5 million annually.
- h. No contingency allowance has been recognized during the Forecast Period to account for any unknown or unplanned expenditures that may occur during such period or to account for potential changes in the revenues that may occur due to weather, conservation, and other factors has been

recognized based on discussions with WMP staff. The forecast for operating expenses is considered reasonable and attainable by Raftelis.

11. As previously mentioned, the County has entered into several service agreements with other local governments or agencies (i.e., the TBC providers) for wastewater treatment and disposal service. The costs associated with the service for each entity supplying wastewater treatment services were based on: i) the agreement for service between the County and the specific TBC provider; ii) where available and applicable, the costs reflected in the Fiscal Year 2024 operating and capital budget for each respective TBC provider; iii) recent invoices as billed by the TBC providers to the County for service; and iv) the recognition of inflation and estimated flow growth in the projection of the operating costs billed by the respective entity. Based on such information, an upward adjustment to the Fiscal Year 2024 budgeted amounts by approximately \$4.6 million was recognized, with the principal increases associated with wastewater treatment purchases from DC Water. The cost for wastewater treatment purchases is summarized on Table 4 at the end of the Report and was estimated as follows:

- a. Alexandria Renew Enterprises (contractually the Alexandria Sanitation Authority) (“AlexRenew”) – The Operating Expenses include the allocated share of the wastewater treatment and certain conveyance (referred to as joint facilities) costs based on the wastewater flow relationships between the two entities as reflected in the service agreement. The projection of the total joint facility costs was provided by AlexRenew as part of its financial planning process. In addition, the costs invoiced to the County include deposits to a joint use facilities account maintained by AlexRenew to be used exclusively for improvement, repair, and replacement of certain County and AlexRenew shared facilities (the “Joint IR&R”) in an amount equal to 0.7% of the total amount of the capital expenditures made (reported gross plant investment) with respect to the joint use facilities as defined in the service agreement. The payment of the Joint IR&R costs is considered as an operating expense of the County for financial reporting and rate evaluation purposes. For the Forecast Period and based on a review of trends in the percent of flow delivered to the AlexRenew wastewater treatment plant, it was assumed that the County would account for approximately 50% of the total wastewater flows at the AlexRenew wastewater treatment facilities and therefore responsible for the proportionate share of the joint facility operating expenses at this utilization percentage.

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With respect to the County, the estimated invoiced TBC wastewater treatment costs from AlexRenew include: i) allocable joint treatment operating expenses; and ii) deposits to the Joint IR&R for capital reinvestment and were projected as follows:

Estimated Wastewater Treatment Purchases from Alexandria Renew Enterprises – For the Forecast Period

	Fiscal Years Ending June 30,					
	2024	2025	2026	2027	2028	2029
Operational Maintenance Expenses	\$14,314,620	\$14,711,320	\$15,110,966	\$15,521,402	\$15,942,948	\$16,375,902
Deposit to Joint IR&R Account	3,253,058	3,444,007	3,641,845	3,782,473	3,914,859	4,051,879
Accruals / Fiscal Year End Adjustments	0	0	0	0	0	0
Total Operating Expenses	<u>\$17,567,678</u>	<u>\$18,155,327</u>	<u>\$18,752,811</u>	<u>\$19,303,875</u>	<u>\$19,857,807</u>	<u>\$20,427,781</u>

The County also shares in the capital expenditures by AlexRenew for the facilities that are considered joint facilities (with the County being responsible for 60% of such capital costs based on the capacity entitlement in the wastewater treatment facility). Any costs that are required to be directly funded by the County for the joint facility plant-in-service are included as a component of the capital improvement plan for the System since they must be funded upfront by the County (it should be noted that the agreement between the parties does allow AlexRenew to issue debt for joint use improvements for which the County would be responsible for 60% of such debt, but based on discussions with AlexRenew staff and historical precedent, we have assumed that no AlexRenew debt obligations will be issued to fund the County’s allocable share of the joint use facility capital costs during the Forecast Period).

- b. Arlington County – The projected Operating Expenses include the County's allocated share of the wastewater treatment and certain conveyance costs based on the wastewater flow relationships between the two entities as reflected in the service agreement. The projection of the total wastewater plant flows and wastewater plant operating expenses was provided by Arlington County as part of its financial planning process. For the Forecast Period, it was assumed that the County would account for approximately 10% of the total wastewater flows received at the Arlington County wastewater treatment facilities. Based on the estimated operating costs for the Arlington County facilities and the County's flow contribution to such facilities, the expenses for wastewater treatment and disposal services provided by Arlington were estimated as follows:

Estimated Wastewater Treatment Purchases from Arlington County – for the Forecast Period

	Fiscal Years Ending June 30,					
	2024	2025	2026	2027	2028	2029
Arlington Expenses	\$2,534,430	\$2,592,722	\$2,647,169	\$2,700,112	\$2,759,515	\$2,820,224

The County also shares in the capital costs performed by Arlington County on certain facilities (with the County being responsible for approximately 7.5% of such capital costs). Any allocable capital costs that are required to be funded by the County are included in the capital improvement plan of the County since it is assumed that such improvements will not be financed by Arlington County on behalf of the County but will require the complete payment upfront by the County for its proportionate share of such capital costs.

- c. District of Columbia Water and Sewer Authority (“DC Water”) – The projected Operating Expenses include the allocated share of the wastewater treatment and certain conveyance costs based on the wastewater flow relationships between the two entities as reflected in the wastewater service agreement. The projection of DC Water operating expense growth for the County is assumed at 4.3% a year based on expected capacity utilization and the FY2023 – FY2032 Financial Plan supporting the DC Water Fiscal Year 2024 budget. The estimated cost for wastewater treatment and disposal service by DC Water is shown below:

Estimated Wastewater Treatment Purchases from DC Water – for the Forecast Period

	Fiscal Years Ending June 30,					
	2024	2025	2026	2027	2028	2029
DC Water Expenses	\$17,787,153	\$18,595,001	\$19,437,585	\$20,316,401	\$21,233,007	\$22,189,027

The County also shares in the capital costs performed by DC Water on the facilities that are considered as being allocable to the County (the County being responsible for 8.4% of such capital costs). Any capital costs that are required to be funded by the County for the allocated plant-in-service are included in the capital improvement plan of the County since it is assumed that such improvements will not be financed by DC Water on behalf of the County but will require the complete payment upfront by the County for its proportionate share of such capital costs.

- d. Upper Occoquan Service Authority (“UOSA”) – The projected Operating Expenses include the allocated share of the wastewater treatment and certain conveyance costs based on the wastewater flow relationships between the two entities as reflected in the wastewater service agreement. The projection of the total wastewater treatment costs was provided by UOSA as part of its annual budgeting process and such costs were escalated for inflationary allowances. In addition, the County's allocated costs under the wastewater service agreement include deposits to a Reserve and Maintenance Account, which costs are allocated based on the County's reserved capacity in the UOSA facilities. For the Forecast Period, it was assumed that the County would account for an average of 37% of the total wastewater flows at the UOSA wastewater treatment facilities and maintain a 22.1 MGD capacity allocation in such facilities. With respect to the County, the costs considered as System Operating Expenses were estimated as follows:

Estimated Wastewater Treatment Purchases from Upper Occoquan Sewage Authority – For the Forecast Period

	Fiscal Years Ending June 30,					
	2024	2025	2026	2027	2028	2029
Operating Expenses	\$13,439,778	\$13,748,893	\$14,037,620	\$14,318,372	\$14,633,376	\$14,955,311
Deposit to Reserve and Maintenance Account	1,968,205	2,013,474	2,055,757	2,096,872	2,143,003	2,190,149
Total Operating Expenses	\$15,407,983	\$15,762,367	\$16,093,377	\$16,415,244	\$16,776,379	\$17,145,460

The County also shares in the capital costs expended by UOSA on the facilities based on the allocated capacity to the County (with the County being responsible for approximately 41% of the treatment-related capital costs; the conveyance allocation basis varies by allocated interceptor capacity). Any major treatment or conveyance capital expenditures are generally debt financed by UOSA and the County is responsible for its allocable share of the UOSA debt service payments with such debt

requirements being considered as subordinate to the County-issued bonds pursuant to the County’s General Bond Resolution for the wastewater system (the payments are not reflected as an operating expense for financial reporting purposes by the County). It is assumed based on discussions with WMP staff that all UOSA capital funding requirements would be financed through UOSA- issued debt and not by the County and therefore additional subordinated indebtedness was assumed during the Forecast Period.

- e. Utilities, Inc. (Colchester Public Service Corporation Facilities) – Colchester Public Service Corporation, which is wholly Utilities, Inc. currently operates and maintains a wastewater treatment and collection system for service within a development referred to as Harbor View which consists of approximately 170 accounts that are considered as retail customers of the County. No additional growth in the service area served by Utilities, Inc. wastewater facilities is anticipated by the County. The cost for wastewater treatment and collection service to be paid to Utilities, Inc. was based on recent invoices for services provided by Utilities, Inc. and costs were escalated annually for inflationary allowances for the remainder of the Forecast Period.

12. As of June 30, 2023, the County had \$703,154,000 in senior lien bonds outstanding issued pursuant to the General Bond Resolution (“Outstanding Senior Lien Bonds”). A summary of the debt service attributes for the Outstanding Senior Lien Bonds is presented below:

Outstanding Senior Lien Bonds and Debt Service Payments Recognized – for the Forecast Period

Description	Series 2014	Series 2016A	Series 2017	Series 2021A	Series 2021B	Total
Principal Amount of Bonds Outstanding [1]	\$36,150,000	\$156,685,000	\$80,155,000	\$191,990,000	\$24,210,000	\$489,190,000
Fiscal Year of Final Maturity	2029	2040	2048	2052	2043	
Annual Debt Service [2]:						
2024	\$5,958,531	\$12,729,304	\$5,549,542	\$11,858,704	\$895,650	\$36,991,731
2025	5,921,406	12,741,460	5,554,292	11,864,121	895,650	36,976,929
2026	5,947,398	12,751,085	5,554,979	11,871,058	895,650	37,020,170
2027	5,966,138	12,718,658	5,555,958	11,874,225	895,650	37,010,629
2028	5,971,740	12,687,763	5,561,990	11,877,944	895,650	36,995,087
2029	248,831	12,768,179	5,563,208	11,881,933	895,650	31,357,801

[1] Amounts shown reflect amounts outstanding as of June 30, 2023, as reported by the County in the Comprehensive Annual Financial Report.
 [2] Amounts shown are presented on an accrued basis predicated on the monthly deposits made from System revenues, including Availability Charges, to a Debt Service Subfund for principal and interest payments coming due and do not reflect when the actual payments are made to investors by fiscal year (results in a timing difference).

The debt service requirements included in this Report for the Outstanding Senior Lien Bonds were based on the actual debt service schedules for the issue and are presented on a “gross” basis (i.e., not net of interest earnings on any debt service-related funds or accounts). Furthermore, the amounts shown are based on the monthly funding requirements for the Outstanding Senior Lien Bonds under the General Bond Resolution (essentially an accrual basis) as opposed to when the debt service requirements are actually paid by the County to the holders or investors of the respective Bonds.

13. The County has incurred and issued subordinate obligations to finance capital improvements to the System. The subordinate obligations consist of: i) loans incurred by the County from the State of Virginia's Water

Facilities Revolving Fund loan program acting by and through the VRA; and ii) the County's share of debt service on bonds issued by UOSA for capital projects, which debt service is allocated to the County by a wastewater service agreement based on the amount of wastewater treatment capacity reserved for the County by UOSA. A summary of the Subordinate Obligations liability as reported by the County and the corresponding annual debt payments by individual subordinate obligation is set forth below:

**Outstanding Subordinate Obligations and Debt Service Payments Recognized –
for the Forecast Period**

Description	UOSA Revenue Bonds [2]	EDA Facilities Revenue Bonds, Series 2021	Total
Principal Amount of Bonds Outstanding [1]	\$180,102,882	\$20,585,000	\$200,687,882
Fiscal Year of Final Maturity	2043	2041	N/A
Annual Debt Service [3]:			
2024			\$0
2025	\$21,593,328	\$1,696,683	\$23,290,011
2026	\$22,049,847	\$1,697,583	23,747,430
2027	\$22,352,254	\$1,697,283	24,049,537
2028	\$22,352,311	\$1,696,354	24,048,665
2029	\$22,350,780	\$1,700,000	24,050,780

[1] Amounts shown reflect amounts outstanding as of June 30, 2023, as reported by the County in the Annual Comprehensive Financial Report.

[2] The County has an allocable share of several series of subordinate obligations with UOSA with final maturities through 2043; amounts shown on a composite basis. Amounts shown for UOSA are also presented net of the receipt of Federal Direct Subsidies associated with the issuance of Build America Bonds (“BAB”) and/or use of debt service reserve funds applied towards final maturity for repayment, if any.

[3] Amounts shown reflect the debt payments on an accrual basis (i.e., when payments are made by the County to be deposited to a debt service sinking or similar fund or as invoiced by the respective TBC provider and not when actual payments are made) associated with the Outstanding Subordinate Obligations loan repayment requirements.

The Outstanding Subordinate Obligations loan repayment requirements included in this Report were based on the actual loan repayment schedules for each issue. With respect to debt service issued on behalf of the County by UOSA, amounts shown include: i) federally taxable Build America Bonds (“BABs”) issued pursuant to the American Recovery and Reinvestment Act of 2009 and are presented net of any applicable Federal Direct Subsidy Payments anticipated to be received from the U.S. Treasury associated with the BAB financing; and ii) the use of debt service reserve funds (funded from previous UOSA bond financings) applied to final payment for maturity, where applicable. The amounts shown are based on monthly funding (accrual basis) for the interest and principal components of the Subordinate Obligations. A summary of the Outstanding Subordinate Obligations debt service payments for the Forecast Period is included on Table 8 at the end of this Report.

14. To fund the capital improvement plan for the System as shown on Table 10 at the end of this Report, it is anticipated that the County will issue additional utility system revenue bonds on parity with the Outstanding Senior Lien Bonds (the “Additional Parity Bonds”). The issuance of such Additional Parity Bonds was assumed to be incurred consistent with the capital funding plan based on the estimated construction drawdown or needs schedule as identified in the County's Capital Improvement Plan shown on Table 10.

The following Additional Parity Bonds were assumed in the capital improvement financing plan reflected in this Report:

Proposed Additional Bonds and Annual Debt Service Payments – for the Forecast Period [1]

	Series 2024	Series 2026	Series 2028	Total
Principal Amount	\$188,776,799	\$393,631,471	\$313,380,000	\$895,788,270
Deposit to Construction Fund [2]	175,000,000	361,329,700	228,126,100	824,455,800
Issuance Date (On or About)	Jan 1,2024	Jan 1,2026	Jan 1,2028	N/A
Fiscal Year of Final Maturity	2054	2056	2058	N/A
Annual Debt Service Payment [3]:				
2024	\$2,897,325	\$0	\$0	\$2,897,325
2025	11,589,299	0	0	11,589,299
2026	11,589,299	9,840,787	0	21,430,086
2027	11,589,299	19,681,574	0	31,270,873
2028	11,589,299	19,681,574	7,991,190	39,262,063
2029	11,589,299	23,281,699	18,455,400	53,326,398

[1] Amounts reflect Additional Parity Bonds issued by the County in accordance with the General Bond Resolution (i.e., additional senior lien bonds).

[2] Amounts represent the amount of bond proceeds estimated to be available for capital funding; difference between the principal amount of bonds and the Construction Fund deposit is associated with the bond issue costs and the funding of a debt service Reserve Fund, as applicable.

[3] Amounts shown based on financing needs of the CIP and based on discussions with the County, assumes level debt service with a 30-year repayment term, 1.5% issuance cost, and average annual interest rates ranging from 4.5% to 5.2%; the ultimate structure, timing of issue, and sizing of the bonds will be developed by the County and its Financial Advisor; the amounts shown above are assumptions for general rate planning purposes.

Table 8 at the end of this Report provides a summary of the annual Debt Service Requirements for each year of the Forecast Period assumed for the development of the financial forecast.

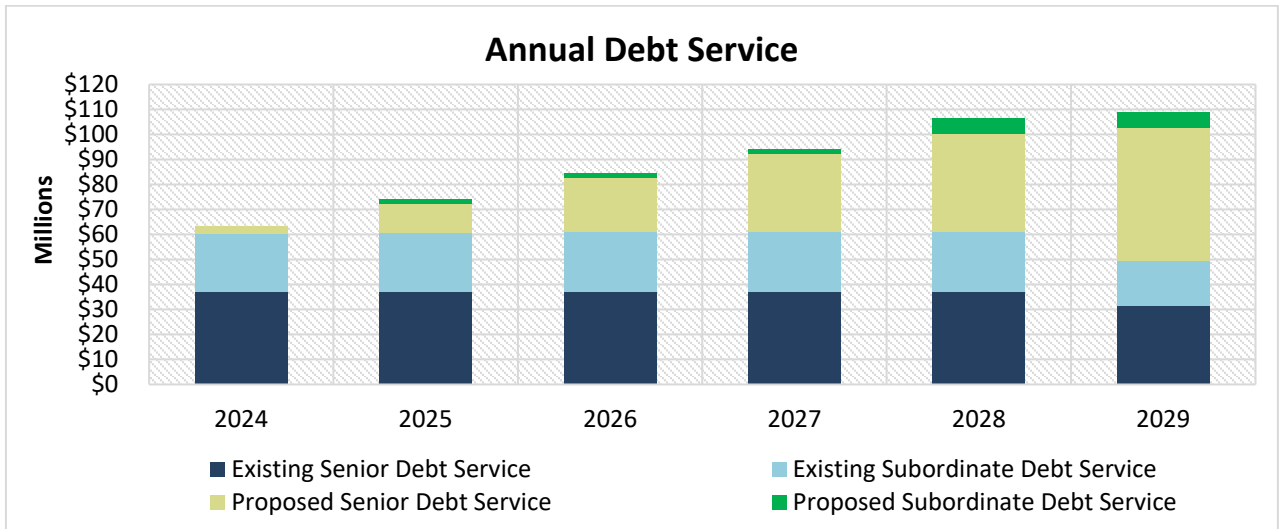
15. Pursuant to the wastewater service agreement between UOSA and the County, the County is, among other things, responsible for the payment of its allocable share of debt service on the bonds issued by UOSA. Historically, the County has treated its payment obligations to UOSA as a "Debt Service Component" of the "Cost of Contracted Services" under the County's General Bond Resolution on a basis subordinate to its Outstanding Senior Lien Revenue Bonds. Based on information provided by UOSA's financial advisor, the UOSA Board anticipates issuing additional bonds to finance certain capital improvements to their treatment facilities. The County anticipates participating in the next and future debt issuances by UOSA assumed as follows:

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**Proposed UOSA Additional Subordinate Obligations and Annual Debt Service Payments –
for the Forecast Period**

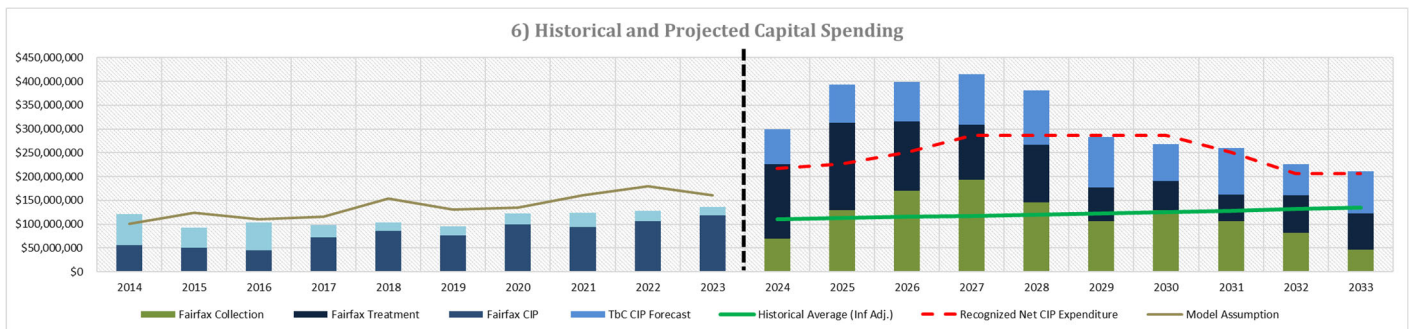
	Series 2024	Series 2027	Total
Principal Amount	\$32,915,955	\$72,915,900	\$105,831,855
Deposit to Construction Fund	31,116,400	68,929,500	100,045,900
Issuance Date (On or About)	4/1/2024	7/1/202	N/A
Fiscal Year of Final Maturity	2054	2057	N/A
Annual Debt Service Payment:			
2024	\$0	\$0	\$0
2025	1,988,884	0	1,988,884
2026	1,988,884	0	1,988,884
2027	1,988,884	0	1,988,884
2028	1,988,884	4,405,804	6,394,688
2029	1,988,884	4,405,804	6,394,688

The following chart provides a summary of the existing and proposed annual debt service requirements (senior and subordinate obligation debt) to be funded from the revenues of the System (rates and Availability Charges) during the Forecast Period:



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16. The Capital Improvement Program for the System was based on: i) the current status of projects previously approved by the County under prior period budgets that are considered to be under construction or still a viable project for which the project appropriations are still outstanding (funds restricted for the project) for future construction as of June 2023; ii) the County's most recent Ten-Year Capital Improvement Plan (the "CIP"); iii) deferral of certain projects (level of spending) based on discussions with WMP staff to reflect adjustments for timing variances among appropriations and actual expenditures or reprioritization of capital spending; and iv) projections of TBC capital expenditure requirements as reported to the County by the TBC providers. To minimize the financial impacts to customers and based on a review of historical capital expenditures and discussions with staff, the financial forecast assumes the deferral of capital funding as shown below:



The capital improvement plan is summarized in Table 10 at the end of this Report. The following table provides a summary of the total funding requirements and proposed deferral:

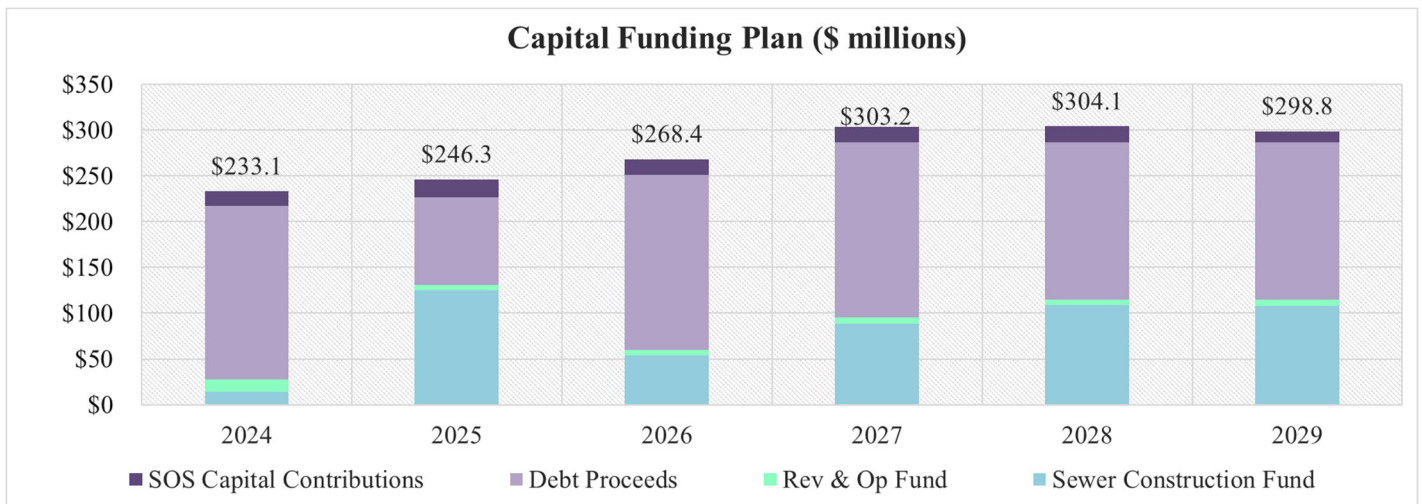
**Amount of Capital Funding Recognized in Retail Rates –
for the Forecast Period (\$000s)**

Description	Fiscal Year Ending June 30,						
	2024	2025	2026	2027	2028	2029	Total
CIP Plan [*]	\$322,412	\$404,182	\$409,527	\$426,774	\$391,713	\$294,200	\$2,248,808
Deferred Project Costs	(89,284)	(157,908)	(141,144)	(123,588)	(87,660)	4,554	(595,030)
Recognized Capital Funding	\$233,128	\$246,274	\$268,383	\$303,186	\$304,053	\$298,754	\$1,653,778
Less SOS Contributions	(15,628)	(20,024)	(17,133)	(16,936)	(17,803)	(12,504)	(100,028)
Net Retail Customer CIP Funding Recognized	\$217,500	\$226,250	\$251,250	\$286,250	\$286,250	\$286,250	\$1,553,750

[*] Includes estimated allocable capital expenditures from TBC providers.

As can be seen above: i) Sales of Service ("SOS") customers are expected to directly contribute approximately \$100 million to the identified CIP plan based on the provisions of the wholesale service agreements between the County and the respective Sale of Service customers during the Forecast Period; and ii) based on discussions with WMP staff, the proposed capital funding plan deferred approximately \$595 million in CIP projects or funding requirements beyond the Forecast Period. The capital funding plan associated with the adjusted capital funding program was based on: i) the purpose of the expenditures (e.g., renewals and replacements, new customer-related); ii) available fund balances in accounts established by the County which are available for capital projects; iii) consideration of any anticipated Availability Charges projected to be received from new development which is recognized as a financial resource in the

development of the cash flow estimates of the System; iv) the use of existing proceeds from previously issued bonds; v) Additional Parity Bonds anticipated to be issued during the Forecast Period; and vi) additional Subordinate Obligations allocated to the County from anticipated debt issues by UOSA associated with their capital planning activities. The County's capital budget includes the planned UOSA subordinate debt service payments which are allocable to the County in lieu of the underlying capital projects funded from such debt. This presentation differs from the rate study, which includes the underlying and allocable projects planned to be debt financed by UOSA as shown on Table 10. For informational purposes we provide a reconciliation as shown on Table 10a which presents the UOSA debt service payments funding the underlying capital projects. The following provides a summary of the Capital Improvement Funding Plan assumed for the evaluation of rate sufficiency which is shown in greater detail on Table 11 at the end of this Report:



In total, the County is expected to fund approximately \$1.55 billion in County and TBC constructed capital improvements (after programed deferrals); net of direct Sales of Service capital contributions, the net capital plan expenditures (funding requirements) allocated to retail customers is approximately \$1.45 billion. To finance the capital needs of the System and as previously noted approximately \$925 million is assumed to be funded from additional debt proceeds during the Forecast Period. This implies that a significant portion of the capital program is funded from Sales of Service contributions and internal sources derived from rate revenues (ongoing operations) and existing cash reserves, including previously issued bond proceeds (as previously mentioned, all Availability Charges are applied to the payment of the annual Debt Service Requirement). This funding approach, which recognized a reasonable use of additional parity bonds, is also projected to result in the continued stabilization of retail wastewater rates over the long-term.

Recognized in the capital improvement program is the use of the Sewer Construction Fund (the “Sewer Construction Fund” designated by the County as Fund 69300), which assumes annual dedicated funding transfers from System operations to finance the recurring capital projects for the betterment or replacement of the capital fixed assets. This fund was established by the General Bond Resolution to be used by the County for, among other things, for paying the costs of unusual or extraordinary maintenance or repairs, repairs or maintenance not recurring annually, and additions to or improvements, extensions, or enlargements of the System. The purpose of the fund is to provide a defined ongoing annual capital financing mechanism to continue to provide high quality service (i.e., maintain same level of service) to its customers as the System plant-in-service ages and reaches the end of its useful service life. The General

Bond Resolution does not mandate a minimum funding requirement or an annual deposit for the Sub-Fund. For purposes of this Report and based on discussions with WMP staff the programmed transfers to the Sewer Construction Fund recognized: i) minimum transfers at least equal to projected annual depreciation expense as a minimum target; and ii) upper target based on a capital funding allowance of 3.0% of County-owned depreciable net utility plant and additional transfers recognizing investments in capacity rights for the County's TBC providers and based on the level of identified capital improvement program funding requirements. The following table provides a summary of the projected transfer to the sewer construction:

Programmed Deposit to Sewer Construction Fund (Capital Reinvestment) for the Forecast Period (in \$000s) [1]

	Fiscal Year Ending June 30,					
	2024	2025	2026	2027	2028	2029
Total Recognized Deposits	\$63,962	\$76,591	\$81,076	\$86,238	\$89,487	\$104,495
Upper Target at 3% of Net Depreciable Plant and TBC Capacity Entitlements [2]	\$99,644	\$104,735	\$110,256	\$117,095	\$124,601	\$132,002
Lower Target at Depreciation	\$73,576	\$77,336	\$81,412	\$86,462	\$92,005	\$97,469

[1] Reflects deposits for ongoing renewals, replacement, and betterments of utility plant, but does not include deposits for the wastewater line extension program for developed but unserved customers.

[2] Amounts shown determined based on the County's audited financial statements, historical fixed asset records, including TBC provider capacity entitlements, and projected CIP additions.

As can be seen above, the forecast assumes annual deposits to the Sewer Construction Fund approximately equal to annual depreciation of the projected total gross depreciable fixed assets of the System during the Forecast Period, which is considered a strong rate for the annual (recurring) funding of capital reinvestment.

17. In addition to the minimum deposits to the Sewer Construction Fund for ongoing renewals, replacement and betterments of utility plant, the County also deposits funds into an account to fund the extension of wastewater service to developed but unserved customers. WMP and County policy is to make deposits into the fund (considered as a sub-fund of the Sewer Construction Fund) until there is on deposit an unencumbered balance of \$5,000,000 for service extensions and then no further deposits are assumed. In addition, the County also deposits other related revenue into this account for service extension purposes (lateral spur fee, connection charge, and frontage fee revenues).
18. Included as a source of funds is interest income earned on available System fund balances. For the Forecast Period, interest income was based on the estimated balances for all cash accounts or funds anticipated to be on deposit for the System and the availability of such earnings to fund the revenue requirements based on the purpose of the fund. The earnings on cash balances included the Revenue Subfund, Debt Service Subfund, Debt Service Reserve Subfund, Sewer Construction Subfund, and other funds established by WMP, including the capital-related accounts, which were recognized as being available to fund System revenue requirements. Earnings on the estimated Availability Charge balances (although considered as a component of operating revenues) were assumed to be restricted for expansion-related expenditure funding to provide a match between the general purpose of the funds received and the cost of financing expansion capital and, therefore, were considered restricted to such fund. The earnings on Availability Charge Fund balances were assumed in this Report to: i) not be a component of the Gross Revenues and not be available to fund the revenue requirements or for determination of the rate covenant as defined in the General Bond

Resolution for the System; and ii) only available to provide an additional source of funds for expansion-related debt repayment (availability fees only) and for capital expenditure financing in relation to expansion-related projects as designated from time-to-time by the County. A summary of the interest earnings recognized in the financial forecast for each Fiscal Year of the Forecast Period is summarized as follows:

Summary of Projected Interest Earnings – for the Forecast Period

	Fiscal Year Ending June 30,					
	2024	2025	2026	2027	2028	2029
Unrestricted Interest Earnings:						
Funds 69000 and 69010 – Revenue Fund [1]	\$1,582,000	\$1,558,000	\$1,764,000	\$1,808,000	\$1,891,000	\$1,974,000
Fund 69300 – Sewer Construction Fund	1,817,000	1,834,000	1,869,000	2,208,000	2,010,000	1,787,000
Fund 69300A – Sewer Construction Fund	33,000	83,000	114,000	120,000	128,000	137,000
Fund 69020 – Debt Service Fund [2]	266,000	324,000	433,000	506,000	576,000	652,000
Fund 69030 – Debt Service Reserve Fund [3]	765,000	972,000	1,316,000	1,551,000	1,820,000	2,097,000
Fund 69040 – Subordinate Obligations Fund	116,000	129,000	145,000	145,000	173,000	141,000
Total Unrestricted Interest Earnings [3]	\$4,579,000	\$4,900,000	\$5,641,000	\$6,338,000	\$6,598,000	\$6,788,000
Restricted Interest Earnings:						
Fund 400-A –Availability Charge Fund [4]	0	0	0	0	0	0
Fund 69310 – Bond Construction Fund	862,000	17,000	20,000	20,000	21,000	22,000
Total Restricted Interest Earnings [5]	\$862,000	\$17,000	\$20,000	\$20,000	\$21,000	\$22,000
Total Interest Earnings	<u>\$5,441,000</u>	<u>\$4,917,000</u>	<u>\$5,661,000</u>	<u>\$6,358,000</u>	<u>\$6,619,000</u>	<u>\$6,810,000</u>

- [1] Reflects estimated earnings on available cash balances in Funds 69000 and 69010 and were assumed to benefit existing customers and, therefore, earnings are available to meet any expenditure requirement allocable to existing customers.
- [2] Amounts shown include additional interest earnings due to increases in annual debt service payments and debt service reserves balances based on the issuance of the Additional Parity Bonds.
- [3] Reflects earnings on various funds which are recognized in development of Gross Revenues.
- [4] Reflects earnings that were assumed to be allocable to new customers (expansion-related) and therefore were assumed to be restricted to this particular fund and not included as a component of Gross Revenues.
- [5] Interest earnings presented for information purposes only; amounts were assumed to be restricted for a specific purpose and not included in the forecast of Gross Revenues.

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19. Based on the assumptions recognized in the development of the financial forecast and the actual Fiscal Year 2023 results, the following forecast of the net revenue requirements and availability of funds for financial performance evaluations was estimated:

Projected Net Revenue Requirements from Rates – for the Forecast Period (\$000s) [1]

	Fiscal Year Ending June 30,					
	2024	2025	2026	2027	2028	2029
Gross Revenue Requirements:						
Operating Expenses	\$140,193	\$142,695	\$147,462	\$152,312	\$157,377	\$162,030
Senior Lien Debt Service	39,889	48,566	58,450	68,282	76,257	84,684
Subordinate Lien Debt Service	23,290	25,736	26,038	26,038	30,445	24,361
Sewer Construction Fund Deposit [2]	63,962	76,591	81,076	86,238	89,487	104,495
Sewer Construction Fund Deposit (Extension Program)	3,000	1,479	0	0	0	0
Transfer to Reserves	1,110	1,028	1,959	1,993	2,081	1,912
Departmental Capital from Rates [3]	13,243	6,000	6,180	6,365	6,556	6,753
Total Gross Revenue Requirements	\$284,687	\$302,095	\$321,165	\$341,228	\$362,203	\$384,235
Less Other Revenue and Income:						
Sales of Service and Other Revenues [4]	(\$11,144)	(\$11,518)	(\$11,973)	(\$12,449)	(\$12,944)	(\$13,462)
Other Operating Revenues	(775)	(775)	(775)	(775)	(775)	(775)
Unrestricted Interest Income	(4,579)	(4,900)	(5,641)	(6,338)	(6,598)	(6,788)
Transfers from Reserves – Fund 69000	0	0	0	0	0	0
Availability Charges – Pay Expansion-related Debt [5]	(18,286)	(18,896)	(19,771)	(20,446)	(21,332)	(22,015)
Net Revenue Requirements	\$249,903	\$266,006	\$283,005	\$301,220	\$320,554	\$341,195
Recognized System Rate Adjustment:						
Existing Rate Revenue – Fiscal Year 2023 Rates	\$249,903	\$254,874	\$256,139	\$257,406	\$258,688	\$259,974
Effective Rate Adjustment [6]	n/a	5.9%	5.9%	5.9%	5.9%	5.9%
Cumulative Additional Rate Revenue from Adjustments [6]	-	11,133	26,867	43,814	61,867	81,221
Adjusted Rate Revenue with Rate Adjustments	\$249,903	\$266,007	\$283,006	\$301,220	\$320,555	\$341,195
Surplus / (Deficiency)	\$0	\$0	\$0	\$0	\$0	\$0

[1] Amounts shown derived from Table 6 at the end of this Report.

[2] Reflects total transfers to the Sewer Construction Fund, excluding transfers for the extension program, and include: i) minimum transfer for capital funding allowance targeted at 3.0% of County-owned depreciable utility plant; and ii) additional transfers recognizing investments in capacity rights for the County's TBC providers and funding requirements of the identified capital improvement program.

[3] Reflects equipment funded annually from rate revenues (short service life assets which are replaced on a recurring basis).

[4] Includes Sales of Service customer operating expense contributions, other miscellaneous operating revenues, and bond-funded Construction Funds which were assumed to be restricted to such account.

[5] The first priority for the use for Availability Charge revenues by the County is to fund new customer-related debt service payments. Since the full debt service requirement is included as a component of the gross revenue requirements, the application of the estimated charges collected provide additional monies for funding operating reserves at minimum reserve levels and for additional capital funding (was recognized as available funds in the overall capital financing plan). If the Availability Charge funds were not available as a financial resource to the System, the following could result: i) an increase in additional bonds issued would result to fully fund the capital program assumed for the Financial Forecast with a corresponding increase the total debt service payment liability; ii) a need to increase retail rates higher than recommended to provide additional funds to replace the financial reduction in cash flow due to reduced Availability Charge receipts; and/or iii) the amount of funding for the capital plan would need to be reduced or deferred.

[6] Amounts shown reflect the estimated increased rate revenue based on the implementation of the proposed rate recommendations as identified in this Report.

The following table provides a summary of the recommended rate adjustments for the Forecast Period:

Recommended Quarterly Rate Adjustments to Retail Rates by Fiscal Year

Description	Existing	Fiscal Year Ending June 30,				
	2024	2025	2026	2027	2028	2029
Currently Approved Rates:						
Quarterly Base Charge	\$44.81	\$49.73	\$52.62	\$55.41	\$58.35	N/A
Flow Charge	\$8.46	\$8.81	\$9.33	\$9.83	\$10.35	N/A
Rate Revenue Adjustment:						
Effective Increase [2]	6.2%	5.9%	5.9%	5.5%	5.3%	1.3%
Annualized Increase [3]	6.2%	5.8%	5.9%	5.3%	5.3%	0.0%
Recommended Rates:						
Quarterly Base Charge	\$44.68	\$49.51	\$52.31	\$55.36	\$58.55	\$61.92
Incremental Base Charge Increase [4]	<u>0.13</u>	<u>0.22</u>	<u>0.31</u>	<u>0.42</u>	<u>0.53</u>	<u>0.65</u>
Quarterly Base Charge (w/Oversizing)	\$44.81	\$49.73	\$52.62	\$55.78	\$59.08	\$62.57
Flow Charge	\$8.43	\$8.77	\$9.27	\$9.81	\$10.37	\$10.96
Incremental Flow Charge Increase [4]	<u>0.03</u>	<u>0.04</u>	<u>0.06</u>	<u>0.07</u>	<u>0.09</u>	<u>0.12</u>
Flow Charge (w/Oversizing)	\$8.46	\$8.81	\$9.33	\$9.88	\$10.46	\$11.08
Rate Revenue Adjustment:						
Effective Increase [2]	6.2%	5.9%	5.9%	5.9%	5.9%	5.9%
Annualized Increase [3]	6.2%	5.8%	5.9%	5.9%	5.9%	5.9%

[1] Amounts shown reflect the projected effective revenue increase as applied to projected customer billing statistics assuming rates are in effect for nine (9) months of the Fiscal Year. The County recognizes rate adjustments to service rendered effective July 1st of each fiscal year (e.g., bills rendered during the first quarter of the Fiscal Year relate to service provided during a portion of the prior fiscal year).

[2] Amounts shown reflect the annualized rate revenue increase based on rate increases assumed for an annualized 12-month period as applied to projected customer billing statistics.

[3] The developer oversizing increase is due to the Reimbursement Policy revised by the County this year.

1. The County recently revised the “Statement of Policy Regarding Sewage Disposal” policy on December 6, 2022. Included within this policy is the ability of the County to reimburse the developer for the entire cost of the wastewater line that needs to be enlarged with exception to the capacity required by the developer for their project. The policy will reimburse the developer for a pro-rata portion of the cost to oversize wastewater conveyance infrastructure to the size required by the comprehensive plan (“Reimbursement Policy”). Raftelis developed a technical memorandum with more detail on this policy which can be found in Appendix B of the report. The memorandum had several key assumptions: i) forecasted developer oversizing at \$15M per year of which a pro-rata portion would be covered by the County which results in \$11.25M of capital cost the county would be responsible for, ii) the revenues forecasted in the memorandum assumed no further rate increases in the 10 year forecast period, iii) a growth in ERCs of 3,000 new connections per year, and iv) a debt structuring of 30 years for financing the improvement costs. The above increases due to the Reimbursement Policy differ slightly from the memorandum due to the projected rate increases in the forecast period. The overall user fee bill impact is slightly less than shown in the memorandum.

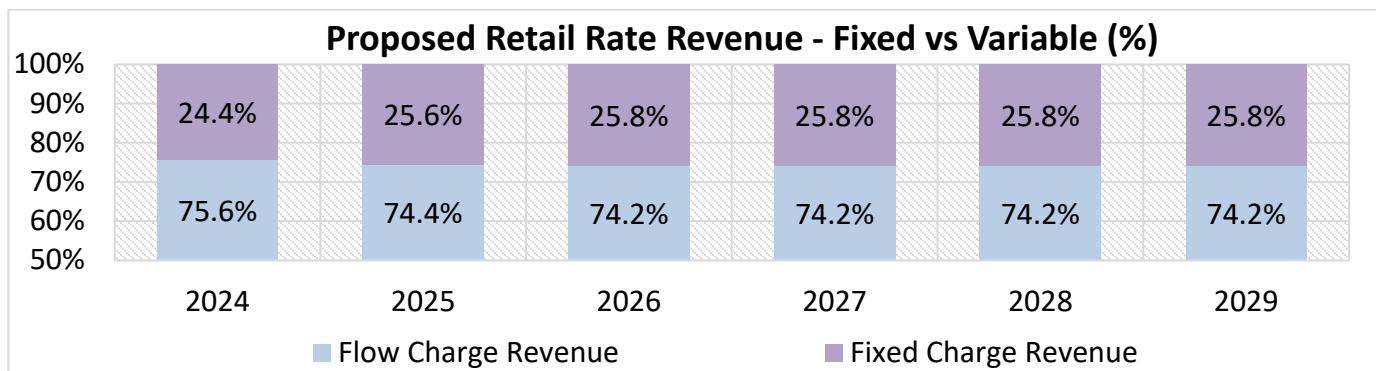
FIXED COST RECOVERY

In Fiscal Year 2013, WMP evaluated changing the cost recovery structure of attributes of the rates to recover fixed costs of operations more fully from a constant base charge and subsequently adopted a multi-year rate plan to phase-in over-time a base charge to more equitably recover the cost of providing wastewater service based on the recommendations of the rate consultant. The purpose of the charge was to recognize that the System has and continues to invest a significant amount of capital in the System and must provide service on a "readiness-to-serve" basis (which links to demand or capacity reservation, not flow).

This change was in keeping with industry norms; the advantages and disadvantages to this structure are as follows:

Advantages	Disadvantages
<ol style="list-style-type: none"> Increases revenue stability since a higher proportion of the rate revenues are recovered on a fixed basis (not subject to flow which is variable and has been decreasing). Reflects industry trends in rates, especially as the predictability in flows and corresponding revenue per customer decreases. Promotes fairness since it recovers costs from users that impact the System from a demand standpoint even though the amount of use may be low. Residential Customers with low winter quarter average to total annual use relationships are paying their fair share of the cost of providing service. Structure favorably viewed by Credit Rating Agencies since tends to increase rate revenue predictability and recovery. 	<ol style="list-style-type: none"> Low-flow customers may experience a higher proportionate (%) increase in wastewater charges during the implementation phases of the rate structure change. Results in a higher percentage (%) increase to the bill when compared to the change in rates based on the application average rate adjustment. May be more difficult to explain utility bill to customers since reflects a change (recent) in rate structure and most do not understand the magnitude of the capital investment required to serve the customer base.

The recommended rates as previously presented continue the phase-in of the fixed cost recovery charge over a five- (5) fiscal year period to limit the immediate or upfront impact to low use customers resulting from the rate structure change (this is also consistent with recommendations in the 2023 Report). The recommended rates were designed to: i) target a fixed cost recovery relationship (i.e., the percent of total rate revenue recovered from a non-volumetric rate) equal to approximately 25% of the total rate revenues by the end of the phase-in period; and ii) maintain a constant flow charge during such phase-in period, all as based on the then revenue requirement needs (cost recovery) of the wastewater system. The recommended rates for the Fiscal Year 2024 continue the overall rate initiative to increase the fixed cost recovery with the goal of targeting an approximate 25% in such fiscal year. The following chart provides a summary of the fixed and variable charge revenue recover under recommended rates:



RESIDENTIAL CUSTOMER IMPACT AND SEWER CHARGE RATE COMPARISON

The average residential customer for the System is billed approximately 16,000 gallons of wastewater service on a quarterly basis (5,333 gallons per month). A comparison of the wastewater bill for service between the County and several utilities surveyed is shown on the table below:

Single-family Residential Wastewater Service 16,000 Gallons of Billed Wastewater Service per Quarter [1][2]

	Quarterly Bill
Fairfax County:	
Existing Rates – Fiscal Year 2024 [3]	\$180.17
Recommended Rates – Fiscal Year 2025 [3]	190.69
Other Neighboring Utilities:	
City of Alexandria (Served by AlexRenew) [3][4]	270.67
Arlington County	167.28
DC Water [3][5]	336.01
Prince William County Service Authority [3]	128.38
Loudoun Water [3]	147.25
Washington Suburban Sanitary Commission [3][6]	223.83
Survey Average	\$212.24

- [1] Unless otherwise noted, amounts shown reflect residential rates in effect October 2023 (Fiscal Year 2024 rates) and are exclusive of taxes or franchise fees, if any, and do not include any surcharges for service rendered outside the corporate limits of the local jurisdiction, for specific capital improvements, or for any other purpose.
- [2] It should be noted that utilities may differ as to the term of billing period and units of measurement used to determine the respective utility customer's wastewater bill. For the purposes of this comparison, all calculations shown have been adjusted to reflect bills rendered on a quarterly basis.
- [3] Utilities shown bill a fixed cost or base charge per billing period per respective account or meter.
- [4] The bill shown for Alexandria Renew Enterprises includes the collection system or facilities charge billed by the City of Alexandria to provide consistency to the rates charged for the other surveyed utilities.
- [5] Amounts shown assumes: i) the Clean Rivers Impervious Area Charge of \$21.86 associated with runoff entering the sewer system; ii) a 50% allocation of the \$7.75 metering fee; iii) a 50% allocation of a Right-of-Way fee to the District of Columbia of \$0.25 per 1,000 gallons; iv) 50% allocation of the PILOT fee charged to water and wastewater customers of \$0.82 per 1,000 gallons; and v) the residential wastewater flow charge of \$15.64 per 1,000 gallons.
- [6] The Washington Suburban Sanitary Commission ("WSSC") bills customers of the utility by calculating the respective customer's average daily flow of use, which is in turn used to determine the variable rate charged to the customer. The calculated bill assumes 16,000 gallons per quarter or approximately 175 gallons per day. Amounts shown assume a 50% allocation of the quarterly Account Maintenance fee of \$18.23 and a \$12.54 infrastructure fee. Amounts shown also include a Bay Restoration Fee of \$5.00 per month.

As can be seen in the prior comparison, the Fiscal Year 2024 existing rates and Fiscal Year 2025 recommended rates produce bills which are lower on average when compared with other neighboring regional utilities for similar service for the typical residential customer. It should be noted that several of the utilities surveyed are anticipating a rate change in the next 12 months (pursuant to a rate evaluation that is underway, an adopted rate-phasing program, or through the application of an inflation-based price index), which should promote the ongoing competitive position of the County's rates during the Forecast Period.

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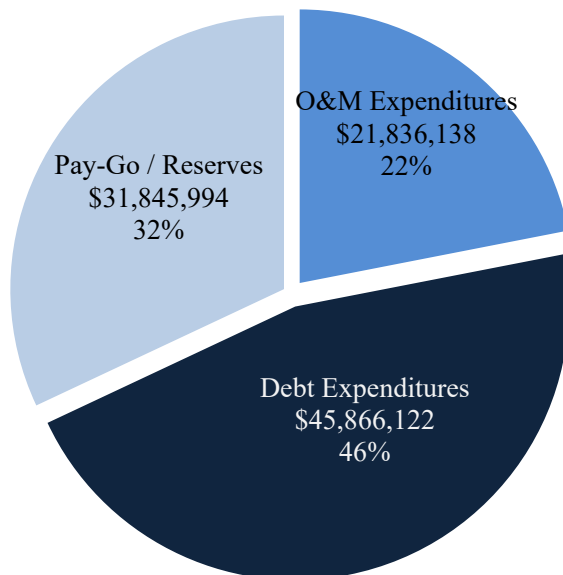
PRIMARY REASONS FOR RATE ADJUSTMENTS

The primary reasons for the continued implementation of additional rate adjustments during the Forecast Period include:

1. Continued inflationary impacts on the cost of providing service and construction of capital improvements, especially as the economy continues to improve and the demand for goods and services increases;
2. Issuance of additional indebtedness required to fund the WMP identified capital program associated with repairs, betterments, and improvements and compliance with regulatory driven capital improvements (i.e., Chesapeake Bay Program);
3. The need to maintain existing net revenue margins to promote a sound capital reinvestment program on a "Pay-As-You-Go" basis, which reduces the need for issuing debt and maintains lower rate levels over the long-run; and
4. The need to meet the adopted financial policies and targets for the System which, among other things, is structured to be an "AAA" credit utility which results in the lowest costs to borrow and recognizes the reduced financial risks to the System resulting in a long-term sustainable (lowest cost over time) rate program. The presentation of the financial position can be found in subsequent sections of this report.

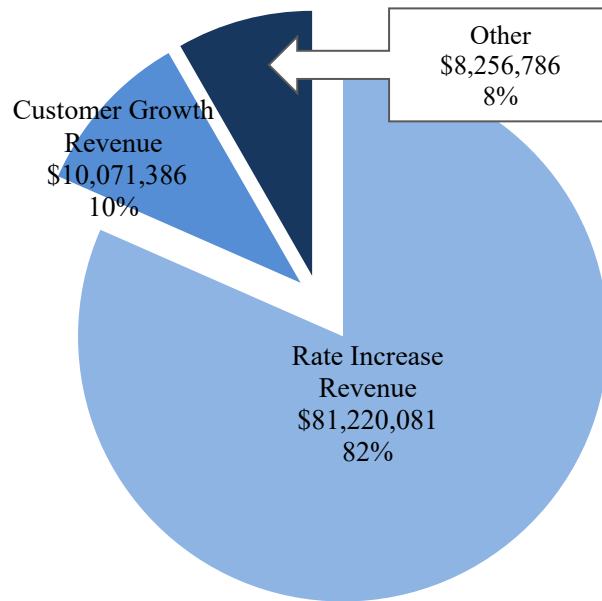
The following charts provide an illustration of the incremental increased expenditures (i.e., changes in cost) in gross revenue requirements and revenues during the Forecast Period to highlight the rate drivers and funding sources for the increases in overall costs:

Change in Gross Revenue Requirements FY24 - FY29



As can be seen above, the incremental increase in gross revenue requirements for the Forecast Period is attributable to: i) an increase of \$21.8 million in annual operating expenses accounting for approximately 22% of the total increase in revenue requirements; ii) \$45.9 million increase in additional annual debt service payments accounting for approximately 46% of the total change in revenue requirements (financing of capital expenditures); and iii) \$31.8 million increase in additional transfers to capital reserves to fund Pay-Go capital and maintain financial margins and promoting a strong fiscal position which accounted for approximately 32% of the total projected change in revenue requirements. As previously discussed, to finance the incremental increase in annually recurring revenue requirements, the forecast recognizes the application of annual rate (revenue) adjustments. However, customer additions due to new developments also contribute to the growth in operating revenues. The following chart provides a summary of the sources for the growth in revenues projected during the Forecast Period:

Change in Gross Revenues FY24 - FY29



As can be seen from the above chart, 82% or \$81.2 million of the incremental growth in revenues is attributable to application of adopted and identified rate adjustments which represents the majority of the increase in revenues for the Forecast Period. Increased rate revenue derived from additional customer growth and minor changes in income and funds from other sources account for approximately 10% or \$10.1 million of the projected growth in revenues during the Forecast Period. The remainder of the increase in revenues is attributable to other operating revenues, including Sales of Service and amount to approximately \$8.3 million or 8% of the change in revenues anticipated for the Forecast Period.

Debt Service Coverage and Covenant Compliance

An important component in the development of the revenue sufficiency analysis is the determination of whether the rate covenants as outlined in the General Bond Resolution authorizing the issuance of System-related Outstanding (Senior Lien) Bonds and any Additional Parity Bonds (the “County Bonds”) will be met. Generally, these covenants are in the form of certain debt service coverage ratios, which are applicable to the level of rates both currently and projected to be in place.

The County's General Bond Resolution contains a rate covenant (reference is made to Article V, Section 501 (a)), which provides that the County will at all times fix, charge, and collect reasonable rates and charges so that:

"The Net Revenues, excluding for purposes of paragraph (a)(i)(A) Excluded Revenues, will be sufficient to provide in each Bond Year an amount at least equal to

(A) one hundred twenty-five percent (125%) of the sum of

(I) the Principal and Interest Requirements in such Bond Year on account of all the Bonds then outstanding under this Resolution in such Bond Year, and

(II) the Debt Service Requirement relating to Parity Indebtedness in such Bond Year; and

(B) one hundred percent (100%) of the sum of

(I) the debt service requirements of Subordinate Obligations in such applicable Bond Year,

(II) the Debt Service Requirements relating to Parity Indebtedness in such Bond Year; and

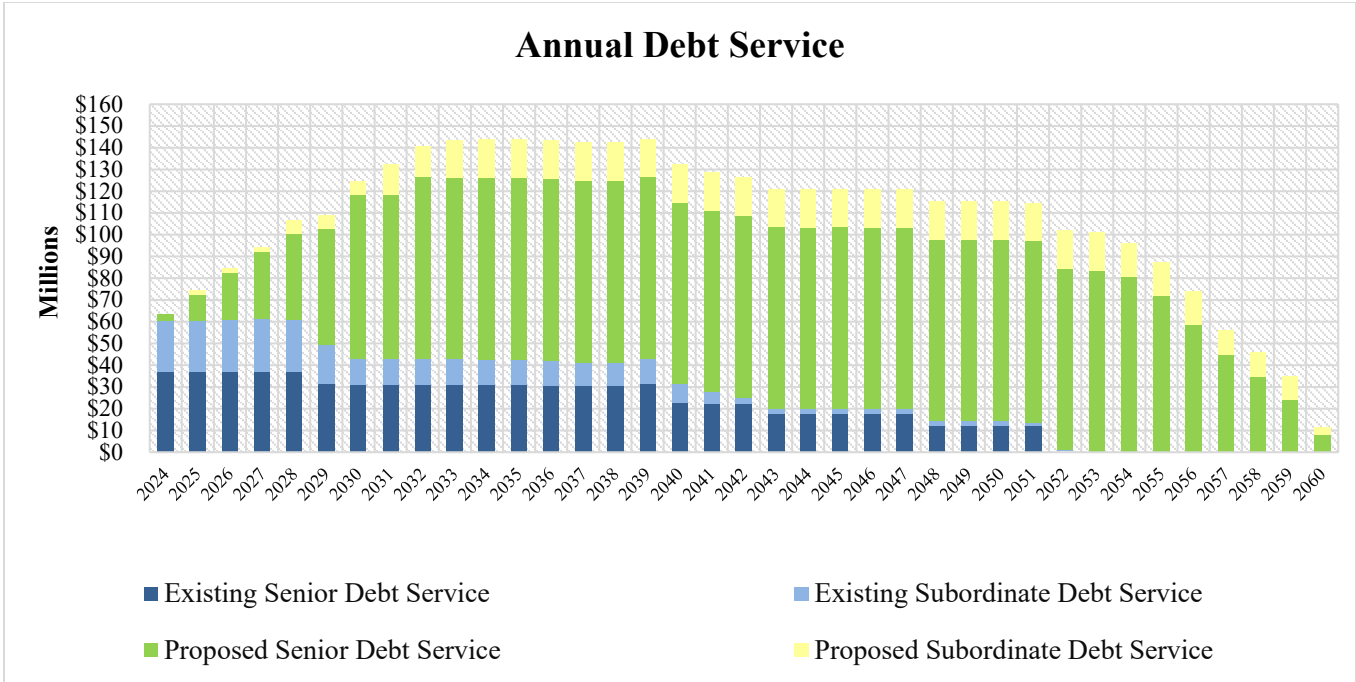
(III) the sum of Principal and Interest Requirements in such Bond Year on account of all the Bonds then outstanding under this Resolution in such Bond Year."

Under the terms of the Financing Agreement, the County shall fix, charge, and collect reasonable rates and charges so that:

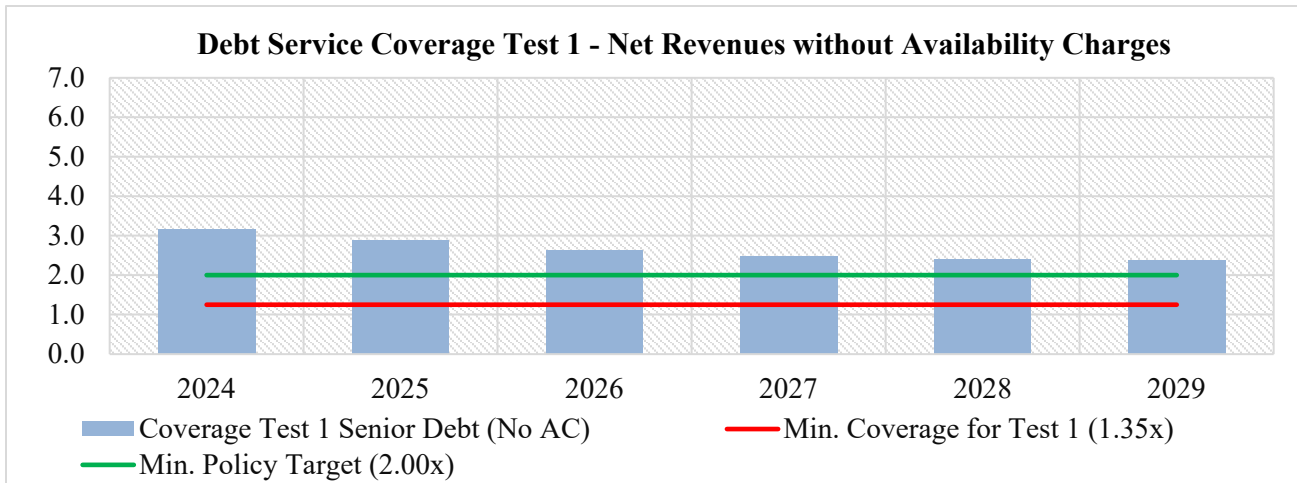
"...each Fiscal Year the Net Revenues Available for Parity Debt Service will equal at least the amount required during the Fiscal Year to pay the principal of and interest on the Local Bond, the Additional Payments, if any, and all other Parity Indebtedness and Subordinate Indebtedness of the Borrower payable from Net Revenues Available for Parity Debt Service."

As can be seen from the following chart and based on the financial forecast presented in this Report, the projected annual debt service payments on the Outstanding and Additional Parity Bonds and Subordinate Obligations are the highest in the most recent years of the repayment period for such bonds. After Fiscal Year 2029, the County will have available future additional bonding capacity to fund capital needs of the System due to certain Outstanding Bonds and Subordinate Obligations maturing and no longer being an outstanding obligation of the System. This debt structure will provide the County with a significant amount of financial flexibility relative to the funding of its future capital improvement program.

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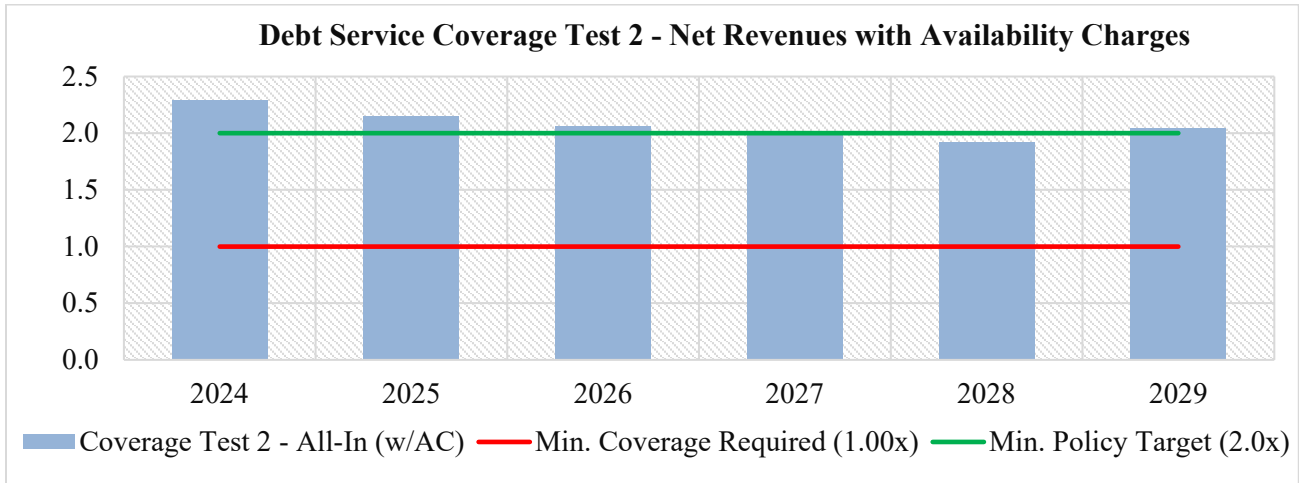
As shown below and summarized on Table 7 at the end of this Report, the System anticipated revenue, which recognize the recommended rate adjustments as identified in this Report for the Fiscal Years 2024 through 2029, are projected to be adequate for the Forecast Period to meet the rate covenant requirements defined in the County's General Bond Resolution.



As can be seen from the prior charts and assuming the implementation of the recommended rates as identified in this report and based on the assumptions made in the development of the Financial Forecast, it is anticipated that:

- i) System Net Revenues (not including Availability Charges which are referred to as Excluded Revenues) are projected to meet the minimum 125% debt service coverage requirement on the County Bonds and Additional Parity Bonds assumed to be issued during the Forecast Period (previously referred to as the "County Bonds") as required by the General Bond Resolution;
- ii) System Net Revenues are projected to meet the 100% debt service coverage requirement of the sum of the debt service requirements of the County Bonds and the Subordinate Obligations; and
- iii) the Net Revenues after the payment of the debt service payments on the County Bonds are projected to meet the

loan coverage requirement as required by the VRA Financing Agreement executed with the Virginia Water Facilities Fund during the Forecast Period.



Projected Financial Position and Performance Measures

Included as part of the development of the Five-Year Financial Forecast and the review of the overall sufficiency of revenues, is an evaluation of the System financial position which recognize the implementation of the recommended rates as identified for the Forecast Period. This evaluation includes the development of certain industry ratios and financial performance indicators to evaluate "where the System is estimated to be financially" during the Forecast Period and to illustrate the projected financial position of the System based on the assumptions documented in this Report. In the development of the net revenue requirements to be funded from rates, consideration as to the financial performance was recognized. The primary purpose of this additional analysis was to continue to promote a financial plan designed to maintain a strong credit rating, especially when one recognizes the current financial constraints being placed upon the System (e.g., lower trends in growth and development, need to meet increased regulations due to Chesapeake Bay Program, etc.). The analysis includes a series of charts and figures prepared to provide WMP with a visual representation of the financial and statistical trends in the selected financial ratios or benchmarks anticipated for the System over the Forecast Period. A complete copy of the Management Dashboard prepared as a component of the financial modeling process is included in Appendix A at the end of this Report. The following is a brief description of key financial ratios and financial results evaluated for WMP's consideration.

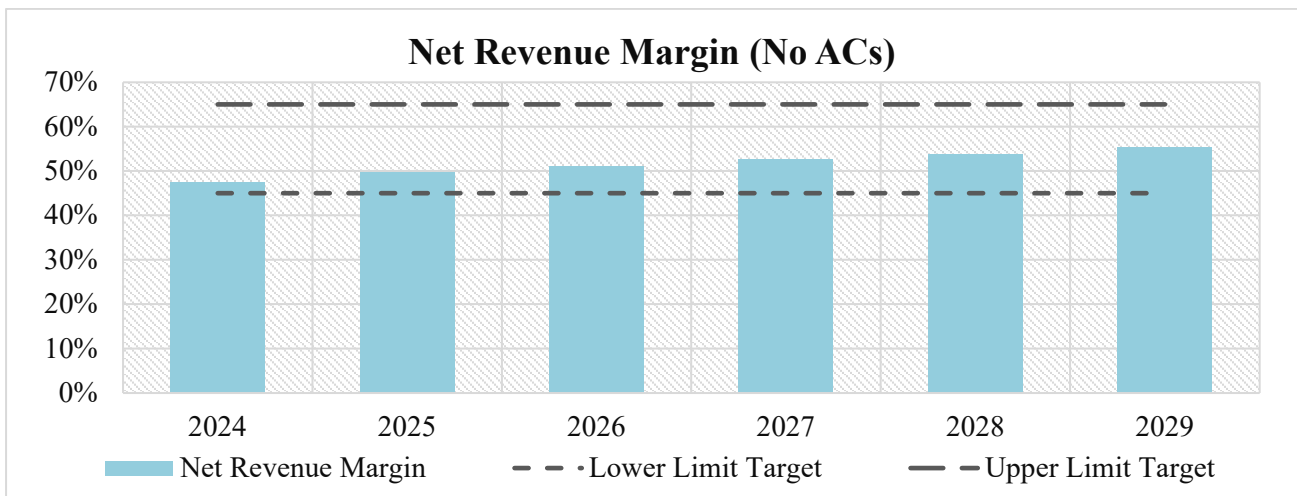
NET REVENUE MARGIN RATIO

The Net Revenue Ratio is a measure of a utility system's ability to meet its operating expenses and indicates the net contribution margin estimated to be earned by the System. The contribution margin represents the amount of Net Revenues from System operations that are available to meet other expenditure requirements after the payment of the operating expenses, exclusive of depreciation expense which is a non-cash expense (i.e., funds available for debt service payments, deposits to the Sewer Construction Fund, etc.). Since Availability Charge revenues are restricted for expansion-related expenditures and represent a one-time charge per customer (i.e., not considered as a recurring revenue), Raftelis has not recognized the Service Availability Charge revenues in the evaluation of the Net Revenue Margin ratio. A relatively low Net Revenue Margin ratio (e.g., 25 percent) indicates that a large portion of operating revenue is used to pay operating expenses and may indicate a low capital re-investment rate for asset renewals, replacement, and betterment. A higher Net Revenue Margin ratio (e.g., 45 percent) indicates a greater portion of operating revenues is available for System expenditures after the payment of operating expenses (e.g., increased

capital reinvestment). As can be seen below and assuming the implementation of the recommended rate adjustments as identified in this Report, the Net Revenue Margin ratio is projected to increase during the Forecast Period which indicates that System contribution margins will also increase thereby supporting increased pay-as-you-go (“PAYGO”) capital financing.

Net Revenue Margin (No Availability Charges) (Millions)

Description	Fiscal Year Ending June 30,					
	2024	2025	2026	2027	2028	2029
Net Revenues	\$126	\$141	\$154	\$168	\$183	\$200
Gross Revenues	\$266	\$283	\$301	\$321	\$341	\$362
Net Revenue Margin	47.4%	49.6%	51.1%	52.5%	53.8%	55.3%
Targets:						
Lower Limit Target	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%
Upper Limit Target	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%

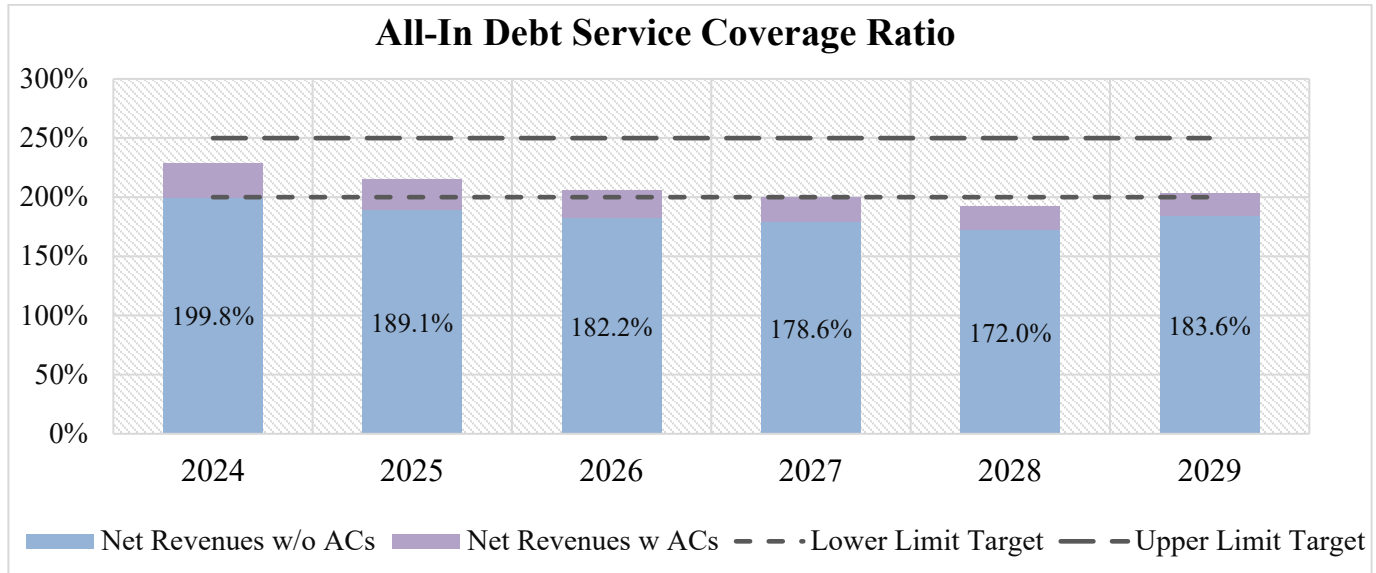


Raftelis recommends that WMP should aim to maintain the System Net Revenue Margin ratio at a target level ranging from 45% to 65% during the Forecast Period to promote the financial health of the System and provide the ability to accrue funds for capital re-investment as discussed later in this section. This target is also within the median range identified by FITCH for municipal water and wastewater utilities. It is projected that the System will maintain a favorable Net Revenue Margin ratio (at or an amount slightly above the upper target) throughout the Forecast Period. This indicates that the estimated identified rates on a stand-alone basis are anticipated to produce sufficient revenue to fund other utility expenditures and that the System is not totally reliant on the use of Availability Charges to fund annual expenditures during the Forecast Period. This ratio is considered favorable by Raftelis, but WMP will need to monitor its operating expenses closely after the CIP program to assess any potential incremental or unknown changes in operating expenses resulting from the implementation of the CIP.

ALL-IN DEBT SERVICE COVERAGE

In addition to the debt service coverage ratio by individual category (priority) of bonds as discussed earlier in this report, an evaluation of the debt service coverage on a combined or "All-in" basis was prepared. This calculation presents the debt service coverage for the aggregate of all System- related debt and loans paid from System revenues.

This ratio more accurately reflects the ability of the Net Revenues of the System to fund the total annual debt service requirements, regardless of payment seniority. The ratio includes a presentation using only System Net Revenues since Availability Charges (although considered as a pledged revenue) are one-time fees and not considered as a recurring revenue for ongoing debt repayment purposes. Additionally, the rating agencies rely on this ratio in the review of utility credits since it links to the total ability to pay debt from ongoing revenues of the utility over the life of the repayment term of such debt and presents the overall leveraging capability of such utility. Raftelis would recommend that the County consider the evaluation of the debt on a Net Revenue-only basis to promote the overall financial health and ability to pay the debt in the future. The All-In Debt Service Coverage ratio for the Forecast Period is presented below:



Raftelis recommends that WMP should aim to maintain a minimum debt service coverage ratio determined on a Net Revenue basis (i.e., without Availability Charges) at a target level of 200% and with inclusion of the Availability Charges at 250%. This range was based on the financial policies approved by the Board and the median debt service coverage ratio as reported by credit rating agencies that are typical for an "AAA" rated utility. With respect to the County's financial policy, the County Board of Supervisors approved a resolution that adopted financial policies for the financial management of the System. These policies are not legally binding but "...state the current and continuing good faith intentions of this Board of Supervisors as to its intended management of the System and its finances." These policies which are considered by WMP in its financial planning activities and in the preparation of the financial forecast state that the Net Revenues of the System, less any Excluded Revenues, will be sufficient to provide the following:

"...an amount at least equal to the sum of two hundred percent (200%) of the sum of (A) the Principal and Interest Requirements in such Bond Year on account of all the Bonds then outstanding under the General Resolution in such Bond Year and (B) the Debt Service Requirements relating to Parity Indebtedness in such Bond Year (the "Senior Debt Service Coverage Policy")."

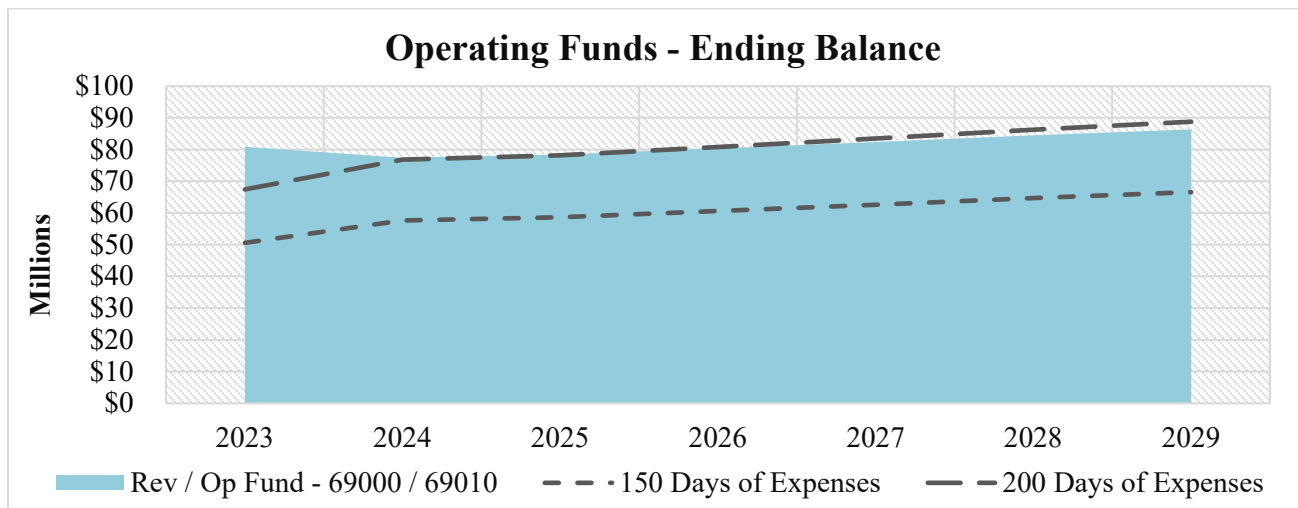
As can be seen from the prior chart, it is projected that the Net Revenues will approximate the target delineated in the County's financial policy and the range reflected in the financial forecast. The debt coverage improves when consideration of Availability Charge revenues is recognized. This ratio is considered favorable by Raftelis and will

support the County's ability to issue Additional Parity Bonds or Subordinate Obligations and to limit the financial risk to the utility.

AVAILABLE WORKING CAPITAL AND CASH BALANCES

Another important component of the evaluation of the System operations is the resulting ending cash balance or cash position of the utility. The estimated cash flows (deposits and withdrawals) and projected ending cash balances for the Forecast Period are shown in detail on Table 9 at the end of this Report. In the evaluation of System liquidity, the cash balances were segregated as either i) operating reserves (not restricted to debt payment and capital expenditures); ii) capital reserves dedicated for ongoing and future capital improvements, replacements, upgrades, and betterments; or iii) restricted for other purposes (i.e., debt service sinking fund and/or reserves, customer deposits, etc.).

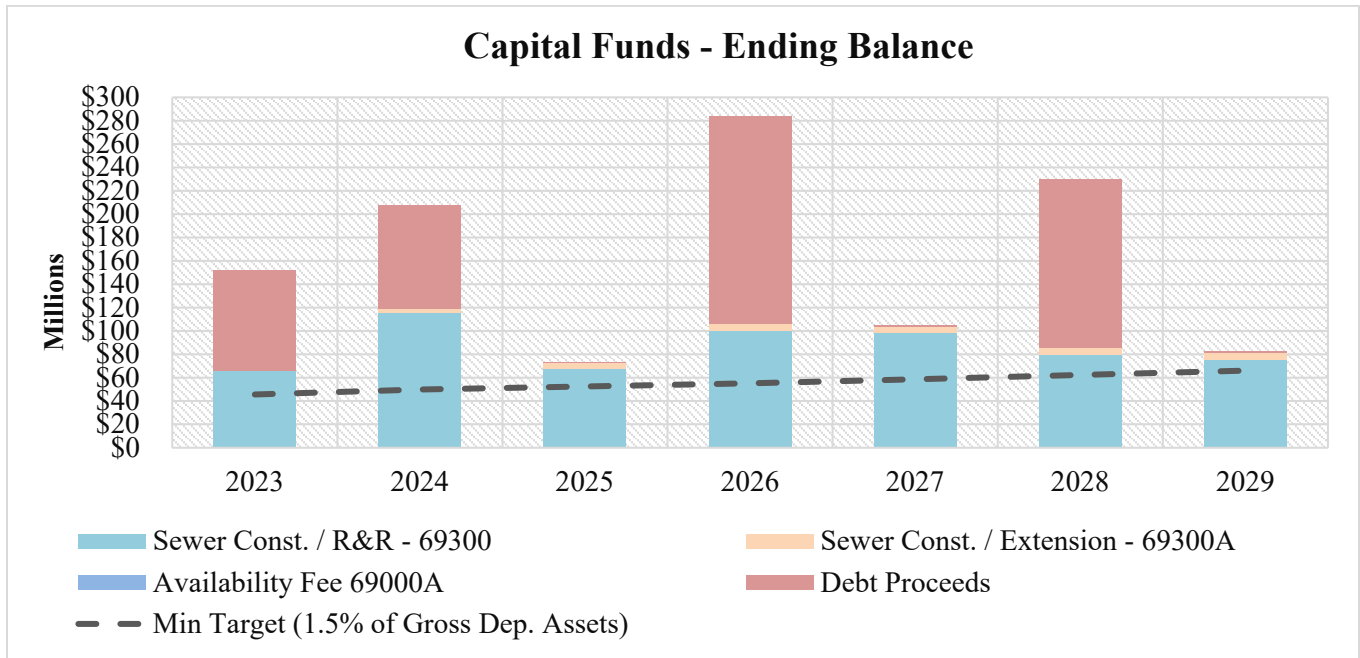
With respect to the operating reserves (Funds 69000 and 69010), Raftelis recommends that WMP should aim to maintain a minimum working capital or operating reserve fund balance ranging from 150 to 200 days of operating expenses. This range was based on discussions with the financial community, general guidelines published by the Governmental Finance Officers Association, and median liquidity ratios as reported by credit rating agencies that are typical for an "AAA" rated utility. It is projected based on the assumptions recognized in the development of the Financial Forecast that the fund balances will meet upper range of the targeted liquidity balance and that the projected ratio results are considered as being favorable by Raftelis and will support the County's ability to limit the financial risk to the utility.



With respect to capital reserves, such cash reserves include funds: i) received from Availability Charges (used towards the payment of new customer debt and capital costs); ii) received through the issuance of additional debt for capital construction; and iii) received from rate revenues (operations) and deposited to the Sewer Construction Fund for ongoing recurring capital re- investment. This segregation of funds allows the County and Raftelis to fully evaluate the liquidity picture based on the intent of the purpose of the funds.

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The following is a summary of the estimated ending cash balances in the capital funds for the Forecast Period based on the forecast of the annual cash flow derived from System operations and the capital funding plan previously presented in this report (which does assume the issuance of additional parity bonds):



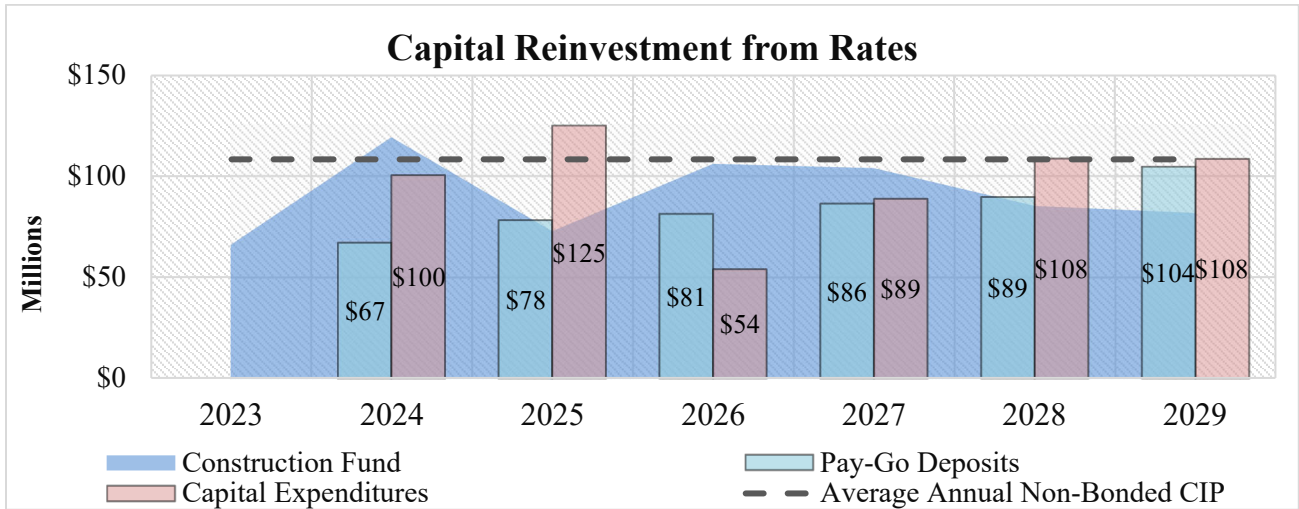
As can be seen above the capital funds generally fluctuate during the Forecast Period. Fluctuations in cash balances are due to the timing of capital needs and the timing of the issuance of additional debt (not all of the debt proceeds are expended in one fiscal year – the debt proceeds are projected to fund projects over multiple years which is also consistent with prior County debt-management practices).

Should the cash position be less than what is currently identified in the financial forecast as presented in this Report, the County does have the option to increase the amount of additional debt to fund the identified capital needs or to defer capital spending during the Forecast Period if this option is prudently available. Therefore, it is recommended that WMP staff continue to closely monitor the cash position for the Sewer Construction Fund and the anticipated capital needs of the System to promote a balanced capital funding plan that supports the overall fiscal position of such System.

With respect to the Availability Charge funds, the forecast assumes the use of all availability charge revenues anticipated to be received to fund expansion-related debt service payments; accordingly, minimal or no Service Availability Charge Fund balances are assumed to be carried (maintained) through the Forecast Period. The remainder of capital-related fund balances is associated with debt proceeds and is generally assumed to be spent within three years of the issuance of the debt during the Forecast Period.

As previously discussed, the forecast assumes annual transfers to the Sewer Construction Fund for capital reinvestment for annual operations. Such transfers are necessary to recognize that the primary need for the funding of capital expenditures deals with existing customer requirements (i.e., renewals, replacements, betterments, and upgrades to the existing plant-in-service). This is due to the constructed fixed assets or utility plant continuing to reach its useful service life as the System ages and the impact of regulations on the cost of treatment (i.e., the

Chesapeake Bay Program) which is allocable to and benefits the existing customer (not providing new capacity but maintaining the availability of existing capacity). The following graph summarizes the assumed sources and uses of funds in the Sewer Construction Fund as it relates to the ongoing capital funding program allocable to the existing customer.

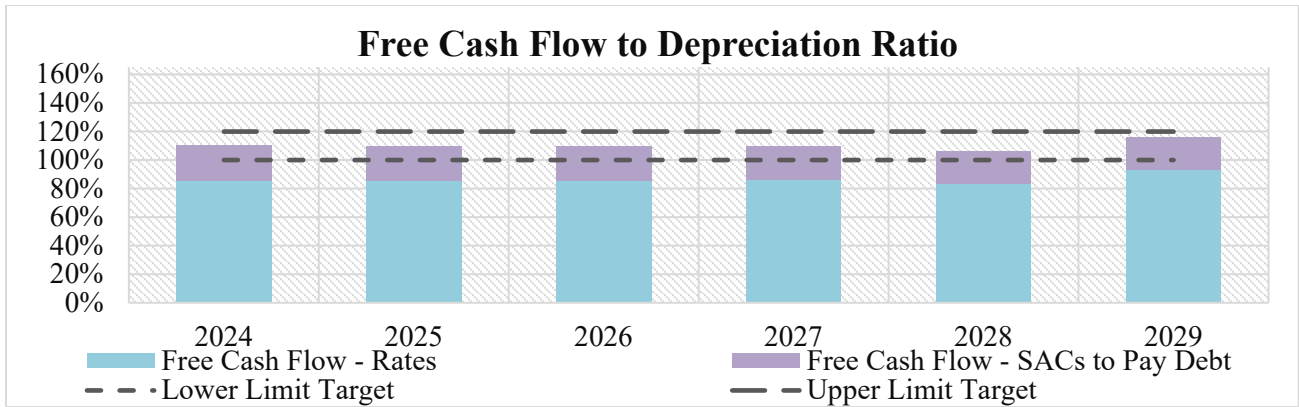


As can be seen above, the deposits to the fund are programmed to be relatively stable yet the expenditures (uses of fund) fluctuate by year and need to be planned in advance such that rate impacts are minimized. Moreover, such transfers to the Sewer Construction Fund are comparable to the annual rate of depreciation and are considered a strong level of capital reinvestment (also reference Free Cash to Depreciation). It should be noted that to the extent that System growth is greater than assumed, if there is a delay in the need to fund the capital improvement plan from what is reflected in the financial forecast presented in this report, or if the County were to receive grant proceeds for capital financing, then it is expected that the cash balances as presented in the figure below would improve.

FREE CASH TO DEPRECIATION RATIO

This figure illustrates the amount of funds available for equity capital funding or for other System purposes after the payment of Operating Expenses, the annual debt service requirements, and any other required cash deposits or funding needs. This ratio is a key ratio of the credit rating agencies since it provides a measure of the annual financial capacity to maintain utility plant facilities at current levels of service (which assumes that such assets will allow for the continuation of service and the ability to generate revenues without a significant rate adjustment associated with unfunded infrastructure needs). As can be seen from the following chart, the System is projected to produce sufficient funds after all required transfers (assumes that the Sewer Construction Fund deposit is considered as a component of the available funds for capital and not a required deposit since it is to be used solely for capital needs) to maintain a strong capital reinvestment rate for ongoing equity capital funding and reduce the need for the issuance of long-term debt.

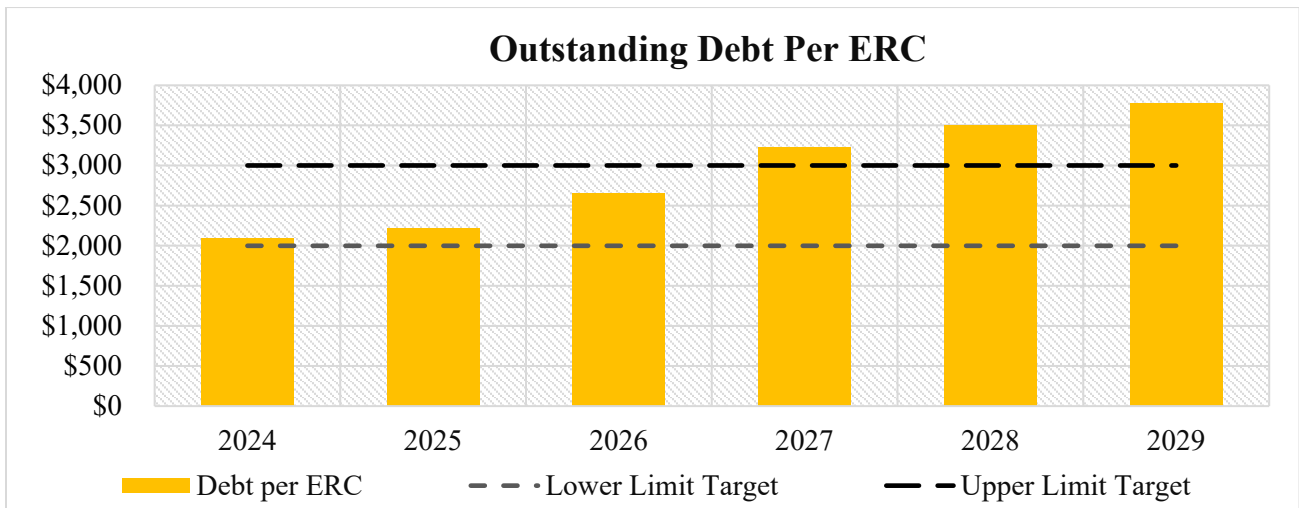
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With respect to the annual funding of the capital needs, Raftelis recommends that WMP should aim to maintain a minimum cash flow ratio for the System ranging from 100% to 120% of the annual depreciation expense for the County-owned utility assets. This range was based on discussions with the financial community and median cash flow ratios as reported by credit rating agencies that are typical for an "AAA" rated utility. The projected ratio for the System is considered favorable by Raftelis and will support the County's ability to limit the financial risk to the utility.

NET OUTSTANDING DEBT PER ERU

The net principal amount of debt outstanding per customer in terms of ERUs measures the amount of net plant investment that a utility has in service and the financial risk a utility has undertaken relative to the customers served. The higher the net customer debt burden, the greater the financial risk to the System (all fixed costs) and generally the rates for service are higher with a greater reliance on availability charges (growth) or other external sources of funds to meet the expenditure needs. It is also an indication of the amount of potential "leveraging" capability a utility may have relative to funding future capital needs. The following chart illustrates the amount of outstanding principal debt (both senior- and subordinate-related debt) in relation to the amount of projected System customers served.

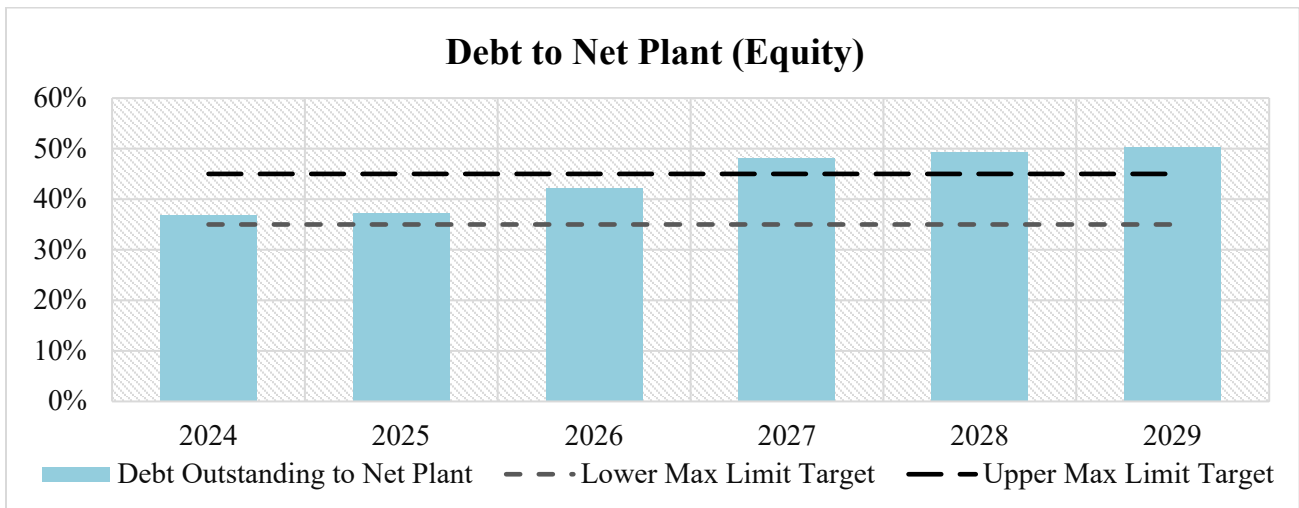


With respect to the amount of outstanding debt relative to the customer base, Authority recommends that WMP should aim to not exceed a maximum customer debt level ranging from \$2,000 to \$3,000 per ERU served. This range

represents approximately 40% to 60% of the net plant investment expressed on a per ERU basis and is consistent with the debt per equity ratio in terms of overall net utility plant funding. Overall, the debt per customer appears reasonable recognizing the amount of plant investment that has been funded by the Authority on behalf of WMP but needs to be closely monitored as the System is reaching the upper target ratio for this benchmark.

DEBT OUTSTANDING TO NET PLANT INVESTMENT (DEBT) RATIO

This figure illustrates the amount of debt issued to fund the net plant investment in service to meet the wastewater demands of the System service area. This ratio presents the net equity of the utility (in terms of net plant investment) and provides an indication of the reliance on debt to fund the existing assets as well as the flexibility in terms of funding future capital assets and overall rate stability. Generally, the higher the ratio, the greater the need to have a larger portion of the rate revenues being dedicated to principal retirement and the payment of the cost of carry (interest) for the financing of capital improvements to the System. The 2022 median Debt Ratio is approximately 41% as reported by FITCH Ratings for water and wastewater utilities (note that this is an average and Authority believes that the Debt Ratio for “high growth” systems or systems with increased treatment standards [higher technology] would generally have a higher debt ratio).



With respect to the Authority, we have identified a maximum target for this ratio ranging from 35% to 45% of the total net plant investment (including TBC capacity entitlements) to maintain a sustainable funding relationship of infrastructure (not relying totally on debt) and recognizing that a significant amount of the capital needs is for the renewal and replacement of existing assets which should be limited as to the amount of debt issued to fund such investment. This range was based on discussions with the financial community and the Authority and is representative of the median liquidity ratios as reported by credit rating agencies that are typical for an “AAA” rated utility. As can be seen and based on the capital financing plan recognized in the development of the financial forecast, the amount of the System net fixed assets funded by debt is below the maximum target range and is considered as being favorable by Authority. However, the general trend in the ratio is rising and will need to be closely monitored by WMP.

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Availability Charge Evaluation

As previously discussed, Authority performed an evaluation of the existing Availability Charges to determine the adequacy of such charges based on the current installed infrastructure and forecasted capital investment that is considered as being available to provide capacity to new customers or development. The evaluation comprised a comprehensive review of the Authority Authority existing fixed assets, TBC purchased capacity rights, ten- (10) year capital improvement, and level of service assumptions per ERU. The following discussion provides a summary of the methodology, assumptions, and findings of the evaluation.

METHODOLOGY AND FEE CALCULATION

The methodology in development of the Availability Charge generally follows a “*system buy-in*” approach or reimbursement method for recovering the incremental cost infrastructure for new customers connecting to the System. An exception was made in the valuation of UOSA capacity reservations, which is based on an “*incremental approach*” or capacity valuation based on the cost of the last facility expansion as determined and provided by UOSA.

The identified infrastructure costs included, among other things, the fixed asset records reported by the Authority as of June 30, 2023, and the identified 10-year capital improvement (the “10-year CIP”). The fixed asset records and the 10-year CIP were adjusted to exclude Sales of Service customer allocations and then allocated by function and categorized as either allocable to the treatment or conveyance function of the System. Non-treatment assets include fixed assets associated with conveyance such as force mains, pump stations, manholes, and indirect capital costs such as warehouse or administrative facilities. Conveyance assets excluded any equipment or donated assets as reported by the Authority. The following table provides a summary of the recognized and allocated fixed asset costs:

Allocation of Existing Retail Customer Capital Assets Recognized in Determination of the Availability Charge [1]

Description	Treatment	Conveyance	Total Assets
Authority Capital Assets [2]	\$799,749,783	\$978,642,147	\$1,778,391,930
TBC Capacity Rights [3]			
Upper Occoquan Service Authority (UOSA)	\$325,791,014	\$4,434,649	\$330,225,663
DC Water (Blue Plains)	343,412,799	0	343,412,799
Alexandria Renew Enterprises (ARE)	406,346,261	5,893,325	412,239,586
Arlington Authority Water Pollution Control Plant	53,324,936	0	53,324,936
Loudon Authority Sanitation Authority	20,942,294	0	20,942,294
Subtotal	\$1,949,567,087	\$988,970,121	\$2,938,537,208
Less: Donated Assets [4]	(24,837)	(234,124,715)	(234,149,552)
Plus: Land, Easements and CWIP [5]	171,146,361	83,966,605	255,112,966
Recognized Existing Capital Assets	\$2,120,688,611	\$838,812,011	\$2,959,500,622

- [1] Amounts shown reflect existing capital assets that are in service as of June 30, 2023, which were considered in the calculation of the Availability Charge.
- [2] Amounts shown include depreciable and non-depreciable assets such as land, easements, and construction work in process, but are exclusive of minor units of property and equipment (i.e., Capital Outlay).
- [3] Amounts shown reflect the reported reservation of capacity rights associated with the County's TBC providers; however, excludes approximately \$0.96 million associated with reservations of capacity with Prince William County.
- [4] Amounts shown reflect the exclusion of donated or contributed assets reported by the County.
- [5] Amounts shown were derived from the County's audited financial statements as of June 30, 2023, and were allocated among treatment and conveyance based on the County's fixed asset records.

As can be seen above, the existing capital assets included in the evaluation of the Availability Charge total approximately \$3.0 billion, which is net of direct Sales of Service customer contributions and donated assets primarily associated with contributed collection lines, pump stations or other conveyance assets within the County's wastewater service area. As discussed, in addition to the existing assets recognized in determination of the Availability Charge, an allocation of the 10-year CIP improvements, net of Sales of Service customer allocations, was performed for recognition in calculation of the Availability Charge as follows:

Allocation of Ten- (10) Year Projected Capital Improvement Program (CIP) [1]

Description	Treatment	Conveyance	Total Assets
County Capital Asset Additions	\$392,637,881	\$1,760,564,575	\$2,153,202,456
TBC Capacity Right Improvements:			
Upper Occoquan Service Authority (UOSA)	\$268,718,050	\$0	\$268,718,050
DC Water (Blue Plains)	248,904,226	0	248,904,226
Alexandria Renew Enterprises (ARE)	299,148,963	0	299,148,963
Arlington County Water Pollution Control Plant	19,381,000	0	19,381,000
Loudon County Sanitation Authority	0	0	0
Subtotal	\$1,228,790,120	\$1,760,564,575	\$2,989,354,695
Less Assumed Retirements [2]	(\$145,276,016)	(\$651,408,893)	(\$796,684,909)
Recognized Net Capital Asset Additions and Improvements	<u>\$1,083,514,104</u>	<u>\$1,109,155,682</u>	<u>\$2,192,669,786</u>

[1] Amounts shown reflect projected capital improvements identified by WMP for the Fiscal Years 2024 through 2032 and are net of direct Sales of Service customer capital contributions.

[2] Amounts shown reflect estimated utility plant retirements associated with assumed renewals and replacements of existing assets as identified in the System 10-year CIP to estimate the net increase in the estimated capital costs for such assets being constructed and allocable to serve new development.

As can be seen above, the allocated 10-year CIP net of estimated retirements totals approximately \$2.19 billion. Based on a review of the specific capital improvements and discussions with WMP staff no improvements are anticipated to increase treatment capacity of the facilities and are primarily related to regulatory improvements, System extension and renewals / replacements / betterments. The allocated capital costs were then weighted based on the remaining retail customer capacity reservations expressed in Millions of Gallons per Day (“MGD”) and calculated in terms of the cost per Average Daily Flow – Gallons per Day (“ADF-GPD”). The remaining retail treatment capacity was determined based on a historical five- (5) year review of the treated retail customer flows.

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The following table provides a summary of the calculated capital costs per ADF-GPD:

Summary of Calculated Cost of Treatment and Conveyance Capital per ADF-GPD [1]

Description	Fairfax	UOSA	DC Water	Alex Renew	Arlington	Loudoun Water	Total
Calculated Cost of Treatment Capacity:							
Net Treatment Assets (\$ Millions) [2]	\$1,218.2	\$594.5	\$592.3	\$705.5	\$72.7	\$20.9	\$3,204.1
Retail Customer Reservations (MGD) [3]	57.55	21.10	26.20	31.40	3.00	1.00	140.25
Cost per Gallon (\$ per ADF-GPD)	\$21.17	\$22.89	\$22.61	\$22.47	\$24.23	\$20.90	\$22.85
UOSA Adjustment [4]	-	(\$5.29)	-	-	-	-	(\$1.01)
Adj. Cost per Gallon (\$ per ADF-GPD)	\$21.61	\$22.89	\$22.42	\$17.21	\$24.67	\$20.94	\$21.84
Weighted Retail Customer Cost:							
Unused Retail Capacity (MGD) [5]	21.06	6.66	0.00	11.00	0.66	1.00	40.38
Capacity Weighting	52.2%	16.5%	0.0%	27.2%	1.6%	2.5%	100.0%
Weighted Cost per Gallon (\$ per ADF-GPD)	\$11.04	\$3.77	\$0.00	\$6.12	\$0.39	\$0.52	\$21.84
Calculated Cost of Conveyance Capacity:							
Net Treatment Assets (\$ Millions) [2]							\$1,947.97
Retail Capacity (MGD) [6]							140.25
Cost per Gallon (\$ per ADF-GPD)							\$13.89
Combined Calculated Cost of Conveyance (\$ per ADF-GPD)							\$35.73

[1] Amounts shown derived from Table 14 at the end of this Report.

[2] Amounts shown reflect the recognized existing and projected capital assets net of equipment, donated assets and estimated retirements associated with the 10-year CIP.

[3] Amounts shown reflect the County's total capacity or capacity reservations net of Sales of Service customer reservations (i.e., to determine estimated allocated retail wastewater capacity).

[4] Adjustment reflects increase to cost per gallon of UOSA capacity reservations based on the incremental cost of capacity as determined by UOSA in November 2018 in support of a capacity sale by the County of USOA capacity to the City of Manassas.

[5] Amounts shown reflect the net retail customer treatment capacity based on a review of a five- (5) year history of retail customer treated flows.

[6] Amounts shown reflect the total retail customer treatment facility capacity net of capacity allocated to wholesale users.

As can be seen above, the calculated cost of the remaining retail customer capital reservation is estimated at approximately \$35.73 per gallon expressed on an average annual daily flow (“ADF”) basis. The calculated cost per gallon was then adjusted for a five- (5) year carrying cost allowance based on the current weighted average cost of capital (“WACC”) at 4.29% (i.e., 5 years × 4.29% = 21.5% WACC adjustment) resulting in an adjusted cost per gallon of \$43.39. The resultant calculated and adjusted cost per gallon is greater than the current charge by the County at \$31.64 per gallon (i.e., Existing Availability Charge = \$8,860 per ERU / 280 gallons per day per ERU). Based on discussions with WMP staff it is recommended that the Availability Charge increase be limited to one percent (1%) and reassessed within twelve months to determine further increases.

The determination of the Availability Charge also encompassed an evaluation of the Level of Service (“LOS”) assumed per ERU currently at 280 GPD. Based on discussions with WMP staff and a historical review of the average annual treated flows per ERU for the last five (5) years it is recommended that the County maintain the assumed

LOS for calculation of the Availability Charge. The LOS is consistent with observed industry trends in declining wastewater flows per ERU attributable to increasing water conservation trends from changing consumer behavior to improvements in water fixtures and water efficient appliances and is believed to be more representative of new growth connecting to the System. The LOS is also consistent with the capacity planning service levels used by WMP in the capacity master planning process, providing consistency in the evaluation of the estimated capacity needs for the System and the development of the Availability Charge. It is recommended that the County continue to monitor the actual treated flows per ERU for further future adjustments and to be consistent with WMP planning LOS assumptions. The following page provides a summary of the calculated Availability Charge with comparison to the existing charge:

Summary of the Calculated Availability Charge

Description	Calculation
Existing Availability Charge:	
<u>LOS GPD Basis:</u>	
Fee (\$ per GPD)	\$31.64
Level of Service (GPD)	280
Fee (\$ per ERU)	\$8,678.00
Developer Oversizing Increase [1]	
Increase to Availability Fee	<u>182.00</u>
Total Availability Fee	\$8,860.00
Calculated Availability Charge:	
Net Assets / CIP (\$ per GPD)	\$35.73
Level of Service (GPD)	280
Fee (\$ per ERU)	\$10,004.19
Carrying Costs:	
Years of Carry Cost	5.0
Current Weighted Cost of Capital	4.29%
Carry Cost (\$ per ERU)	\$2,147.32
<u>Total Calculated Charge:</u>	
Per ERU	\$12,151.51
Per GPD	\$43.40
Total Charge (1% Limit):	
Per ERU	\$8,765.00
Per GPD	\$31.30
Developer Oversizing Increase [1]	
Increase to Availability Fee	273.38
Total Recommended Charge:	
Per ERU	\$9,038.00
Per GPD	\$32.28

[1] The developer oversizing increase is due to the Reimbursement Policy revised by the County this year.

As can be seen above, it is recommended that the existing Availability Charge be raised by 2.1% and subsequently be reviewed within 12 months to reassess further increases. The following table provides a summary of the existing and recommended Availability Charge by customer class and fixture unit basis:

Existing and Recommended Availability Charge

	Existing FY2024	Recommended FY2025	Increase %	Oversize Increase % [1]	Total Increase %
Single-family	\$8,860	\$9,038	1.00%	1.00%	2.00%
Townhouses and Apartments	\$7,088	\$7,231	1.00%	1.00%	2.00%
Non-residential per Fixture	\$443	\$452	1.00%	1.00%	2.00%

[1] The developer oversizing increase is due to the Reimbursement Policy revised by the County this year.

The increase in the charges is considered reasonable and is not expected to adversely affect growth within the County. A survey was performed to assess the competitiveness of the County's Availability Charges with other neighboring jurisdictions and summarized as follows:

Wastewater Availability Charge – Rate per ERU

	Rate per ERU
Fairfax County:	
Existing Charge – Fiscal Year 2024	\$8,860
Recommended Charge – Fiscal Year 2025	9,038
Other Neighboring Utilities: [1]	
City of Alexandria [2]	\$9,446
Arlington County [3]	3,720
District of Columbia Water and Sewer Authority	2,809
Loudoun Water	9,241
Prince William County	11,200
Washington Suburban Sanitary Commission – Unimproved [4]	14,500
Washington Suburban Sanitary Commission – Improved [4]	6,500
Other Surveyed Average Utilities	\$8,202

- [1] It should be noted that no evaluation of the methodology for determining these Availability Charges was conducted. The charges may reflect differences in the methodology utilized in their development as well as differences in such factors as the level of service, capital infrastructure costs recognized, regulatory requirements, and receipt of grants for capital funding.
- [2] Alexandria Renew Enterprises does not charge an Availability Charge. Amounts shown reflect charges from the City of Alexandria related to the collection system infrastructure.
- [3] The County charges the Availability Charge based on the number of fixture counts and for an equivalent dwelling fixture unit (“DFU”) assumes 24 fixture units at a cost of \$155/DFU.
- [4] WSSC charges separate availability charges based on a customer's geographic location for improved and unimproved areas.

This comparison was based on wastewater Availability Charges that would be charged to a typical residential single-family residence (considered as one [1] equivalent residential unit or “ERU”) as shown above. As can be seen in the

comparison, the existing and recommended charges for the County are comparable to the level of fees charged by other surveyed utilities.

Conclusions and Recommendations

Based on our analyses of the financial position and rates for the Wastewater Management Program, we offer the following observations and recommendations:

1. WMP's financial and rate implementation plan has resulted in the County being in a strong financial position in support of meeting the adopted financial policies and selected performance metrics or targets. The proposed rates for service allow for the continuation of a capital re-investment rate equivalent to or above the annual depreciation expense, which will reduce the need for long-term debt which will promote the sustainability of rates. It is recommended that the business-evaluation approach for the development of the annual net revenue requirements be maintained and that the financial forecast be reviewed annually.
2. It is recommended that the Board adopt the recommended rates as contained in this report, which reflect a slight increase to the previously adopted rates for the upcoming Fiscal Year 2024. WMP staff should continue to monitor the need for future adopted and identified rate adjustments closer to the time of implementation of the respective rate adjustments.
3. The proposed rate adjustments by the County are anticipated to be sufficient to provide Net Revenues to meet the Rate Covenant in the General Bond Resolution that authorized the issuance of the County's Outstanding Senior Lien Bonds, meet the terms and conditions of the VRA Financing Agreement between the County and the Virginia Water Facilities Revolving Fund acting by and through the VRA, finance System expenditures including the debt service on Additional Parity Bonds anticipated to be issued by the County to fund System capital improvements, and to meet the financial targets or objectives of the System during the Forecast Period.
4. It is recommended that the County increase the current Availability Charge of \$8,860 per ERU or \$443 per fixture unit based by 2.0% to \$9,038 per ERU or \$452 per fixture unit. WMP staff should continue to monitor trends in treated wastewater flows per ERU affecting the assumed LOS for possible future adjustments.

The proposed wastewater rates and Availability Charges for the Fiscal Year 2025 will remain competitive with the rates and charges imposed by other neighboring public wastewater utility systems; this competitive position is anticipated to be maintained during the Forecast Period.

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FAIRFAX COUNTY WASTEWATER MANAGEMENT PROGRAM

2024 WASTEWATER REVENUE SUFFICIENCY AND RATE ANALYSIS LIST OF TABLES

Table No.	Description
1	Summary of Implied Historical Customer Billing Statistics
2	Summary of Projected Customer Billing Statistics
3	Projection of Operating Expenses
4	Projection of Operating Expenses for Treatment by Contract (TBC)
5	Historical and Projected Sales of Service (Bulk Sales) and Other Revenue
6	Development of Wastewater System Revenue Requirements and Revenue Sufficiency
7	Projected Operating Results and Debt Service Coverage Analysis
8	Summary of Debt Service Payments – Outstanding and Additional Debt
9	Projected Fund Balances and Interest Income Determination
10	Allocated Six-year Estimated Capital Improvement Program for the Wastewater System (in \$000s)
10A	Allocated Six-year Estimated Capital Improvement Program for the Wastewater System (in \$000s) – Includes UOSA Payments
11	Funding Sources for the Allocated Ten-year Estimated Capital Improvement Program for the Wastewater System (in \$000s)
12	Forecasted Statements of Flows of Financial Resources and Changes in Fund Balance
13	Comparison of Typical Quarterly Residential Bills for Wastewater Service
14	Calculation of Weighted Cost by Treatment Facility per MGD of Reserved Capacity
15	Summary of Existing and Calculated Availability Fees
16	Comparison of Availability Fee Charges for Equivalent Residential Unit

APPENDIX A

WASTEWATER REVENUE SUFFICIENCY AND RATE ANALYSIS MODEL OUTPUT – MANAGEMENT DASHBOARD

Chart No.	Description
1	<p>Operating Cash Reserves / Liquidity</p> <ul style="list-style-type: none"> ▪ Identifies the forecast of projected and targeted operating cash reserves, which are used by the utility to maintain working capital for cash flow and to provide a reserve for contingencies such as unexpected increases in expenses or reductions in revenues all to ensure the utility can fund the near-term requirements of the system.
2	<p>Revenue Sufficiency</p> <ul style="list-style-type: none"> ▪ Provides an indication of the annual expenditures funded from revenues by category or type of expenditure and whether existing or recommended rates are sufficient to fund such requirements to essentially determine the sufficiency of the forecast revenues.
3	<p>Capital Reinvestment from Rates</p> <ul style="list-style-type: none"> ▪ Primarily identifies the transfers in and out of capital-related funds for capital investment. Provides an indication of the level or amount of capital reinvestment as a percent of depreciation.
4	<p>Net Revenue Margin (No ACs)</p> <ul style="list-style-type: none"> ▪ Is a ratio calculated as: i) the Gross revenues (excluding ACs) less operating expenses = net revenues (excluding ACs); divided by ii) gross revenues (excluding ACs). Indicates how much net revenue as a percent (%) is available to fund other expenditures above the cost of operation and maintenance. Higher ratios (above 40%) generally indicate more funds available for capital reinvestment.
5	<p>Capital Cash Reserves / Liquidity</p> <ul style="list-style-type: none"> ▪ In addition to operating reserves, the utility should maintain capital-related funds to finance future capital projects and to provide funds for unexpected capital needs (e.g., a major line break). The forecast of such cash by fund provides an indication of the amount of funds available for unexpected capital improvements or cost increases. This also aids in identifying trends, such as declining reserve balances, which may not be sustainable.
6	<p>Projected Capital Funding Program</p> <ul style="list-style-type: none"> ▪ Identifies the annual capital funding (excluding UOSA capital projects) by source (e.g., internal sources such as rate revenues, availability charges, existing reserves, or debt proceeds)
7	<p>Free Cash Flow to Depreciation Ratio</p> <ul style="list-style-type: none"> ▪ Is a ratio to determine the annual cash flow available for capital reinvestment expressed as a percent of depreciation. Free cash is determined as the Gross Revenues less operating expenses and annual debt service payments. Amounts shown are expressed with and without availability charges.

Table 1
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Summary of Implied Historical Customer Billing Statistics

Line No.	Description	Historical Fiscal Year Ended June 30,								
		2006	2007	2008	2009	2010	2011	2012	2013	2014
Total System Customer Statistics (FY 2006 - FY 2014)										
1	ERU Growth	n/a	7,407	3,167	(40,116)	1,886	8,836	(61)	3,859	(2,304)
2	Estimated ERUs [1]	342,904	350,311	353,478	313,362	315,248	324,084	324,023	327,882	325,578
3	Average Billed Wastewater Flows (Kgal) [2]	24,380,182	25,112,557	24,624,563	24,510,612	24,962,443	23,934,607	24,672,538	24,518,064	24,764,339
4	Average Monthly Flow Per Billed ERC (gal)	5,925	5,974	5,805	6,518	6,599	6,154	6,345	6,231	6,339
Total System Customer Statistics (FY 2015 - FY 2023)										
		2015	2016	2017	2018	2019	2020	2021	2022	2023
5	ERU Growth	7,078	11,216	2,345	(4,497)	872	495	4,106	1,005	(910)
6	Estimated ERUs [1]	332,656	343,871	346,217	341,720	342,591	343,087	347,193	348,198	347,287
7	Average Billed Wastewater Flows (Kgal) [2]	23,919,871	23,451,904	23,113,566	23,086,536	22,593,545	22,770,424	22,351,730	22,750,614	22,426,454
8	Average Monthly Flow Per Billed ERC (gal)	5,992	5,683	5,563	5,630	5,496	5,531	5,365	5,445	5,381

Footnotes:

- [1] Amounts shown through the Fiscal Year 2008 represent flow based ERUs reported by the County. Beginning with the Fiscal Year 2009 ERUs were estimated based on reported revenues.
- [2] Billable Wastewater Flow is based on reported revenue divided by the rate in effect.

Table 2
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Summary of Projected Customer Billing Statistics

Line No.	Description	Historical	Projected Fiscal Year Ending June 30,					
		2023	2024	2025	2026	2027	2028	2029
Total System Customer Statistics								
1	ERU Growth		1,600	1,607	1,617	1,621	1,635	1,642
2	Estimated ERUs [1]	347,287	348,887	350,494	352,111	353,732	355,367	357,009
3	Average Billed Wastewater Flows (Kgal)	22,426,454	22,587,133	22,701,141	22,816,405	22,931,787	23,048,712	23,165,973
4	Average Monthly Flow Per Billed ERU	5,381	5,395	5,397	5,400	5,402	5,405	5,407

Footnotes:

[1] Amounts shown for the Fiscal Year 2023 are calculated based on customer statistics provided by Fairfax Water.

Table 3
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Table with columns: Line No., G/L Code, Description, Escalation Reference, Actual 2023, Adopted 2024, Adjustments, Adjusted 2024, Adjusted 2025, and Projected Fiscal Year Ending June 30 (2026, 2027, 2028, 2029). Rows include various expense categories like Personnel Services, Operating Expenses, and Capital Equipment.

Footnotes on Page 14 of 14.

Table 3
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Projection of Operating Expenses

Table with 14 columns: Line No., G/L Code, Description, Escalation Reference, Actual 2023, Adopted 2024, Adjustments, Adjusted 2024, Adjusted 2025, and Projected Fiscal Year Ending June 30 (2026-2029). Rows include Personnel Services, Operating Expenses, and Capital Equipment.

Footnotes on Page 14 of 14.

Table 3
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Table with columns: Line No., G/L Code, Description, Escalation Reference, Actual 2023, Adopted 2024, Adjustments, Adjusted 2024, Adjusted 2025, and Projected Fiscal Year Ending June 30 (2026, 2027, 2028, 2029). Rows include various expense categories like Insurance, Inflation, and Personnel Services.

Footnotes on Page 14 of 14.

Table 3
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Line No.	G/L Code	Description	Escalation Reference	Projection of Operating Expenses					Projected Fiscal Year Ending June 30,				
				Actual 2023	Adopted 2024	Adjustments	Adjusted 2024	Adjusted 2025	2026	2027	2028	2029	
542	G252302002514020	WTDOE Uniform/Wear Appare	Inf/Emp	244	-	-	-	-	-	-	-	-	-
543	G252302002514030	WTDOE Mis Pub Safe Eqp&Sup	Inflation	18,594	-	-	-	-	-	-	-	-	-
544	G252302002520010	WTDOE Bldg Maint&Rep Svcs	Inflation	15,293	-	-	-	-	-	-	-	-	-
545	G252302002520110	WTDOE Other Maint & Repair	Inflation	-	-	-	-	-	-	-	-	-	-
546	G252302002521040	WTDOE Employment Services	Inflation	188,218	2,132	-	2,132	2,181	2,227	2,271	2,321	2,372	2,372
547	G252302002521080	WTDOE Other Pro Cntrct Sv	Inflation	631,495	346,004	-	346,004	353,962	361,395	368,623	376,733	385,021	385,021
548	G252302002521090	WTDOE Comm & Media Servc	Inflation	948	-	-	-	-	-	-	-	-	-
549	G252302002521210	WTDOE Licensing Fees	Inflation	-	-	-	-	-	-	-	-	-	-
550	G252302002521250	WTDOE Misc Services	Inflation	-	-	-	-	-	-	-	-	-	-
551	G252302002530000	WTDOE Electricity County	Elec-Norman	3,477,314	3,734,391	-	3,734,391	5,000,000	5,145,361	5,294,914	5,448,912	5,607,394	5,607,394
552	G252302002530010	WTDOE Natural Gas County	Gas	993,284	2,234,633	-	2,234,633	1,786,000	1,794,930	1,803,905	1,812,924	1,821,989	1,821,989
553	G252302002530040	WTDOE Water County	Water	152,216	591,784	-	591,784	630,099	674,206	714,658	750,391	780,406	780,406
554	G252302002543000	WTDOE Cash Awards	Inflation	-	-	-	-	-	-	-	-	-	-
555	G252302002541730	WTDOE Emergency Assistanc	Inflation	-	-	-	-	-	-	-	-	-	-
556	G252302002544512	WTDOE Internal FFX Suppor	Inflation	10,785	-	-	-	-	-	-	-	-	-
557	G252302002544547	WTDOE Refuse Disposal Exp	Inflation	178,216	275,000	(275,000)	-	-	-	-	-	-	-
558	G252302002544990	WTDOE Other Operating Exp	Inflation	24,825	200,000	-	200,000	204,600	208,897	213,075	217,762	222,553	222,553
559		Total Operating Expenses		\$ 8,427,670	\$ 11,041,641	\$ (275,000)	\$ 10,766,641	\$ 11,794,754	\$ 12,172,664	\$ 12,558,171	\$ 12,952,643	\$ 13,354,257	\$ 13,354,257
		Capital Equipment [1]											
560	G252302002566125	WTDCCE Equipment Expense	Bud Cap	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
561	G252302002566150	WTDCCE Vehicles Expense	Bud Cap		60,000	(60,000)							
562		Total Capital Equipment [1]		\$ -	\$ 60,000	\$ (60,000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
563		Total WWT - Operations		\$ 13,802,849	\$ 17,959,253	\$ 535,917	\$ 18,495,170	\$ 19,755,139	\$ 20,371,860	\$ 21,003,343	\$ 21,651,170	\$ 22,313,740	\$ 22,313,740
		<u>WWT - Maintenance</u>											
		Personnel Services											
564	G252302003500000	WTDPs Regular Salaries	Labor	\$ 3,472,538	\$ 3,948,662	\$ 501,480	\$ 4,450,142	\$ 4,583,646	\$ 4,721,156	\$ 4,862,790	\$ 5,008,674	\$ 5,158,934	\$ 5,158,934
565	G252302003500040	WTDPs New Position-Regular Salaries	Labor	-	-	-	-	-	-	-	-	-	-
566	G252302003500050	WTDPs Annual Comp Increas	Labor	-	483,904	61,456	545,360	561,721	578,572	595,929	613,807	632,221	632,221
567	G252302003500053	WTDPs Annual Comp Inc-P4P	Labor	-	-	-	-	-	-	-	-	-	-
568	G252302003500080	WTDPs POS Turnover-Pay	Labor	-	(189,273)	(24,038)	(213,311)	(219,710)	(226,301)	(233,090)	(240,083)	(247,286)	(247,286)
569	G252302003500090	WTDPs Reg Sal-Non Mert Em	Labor	16,635	890	113	1,003	1,033	1,064	1,096	1,129	1,163	1,163
570	G252302003500100	WTDPs Shift Differential	Labor	1,140	-	-	-	-	-	-	-	-	-
571	G252302003500110	WTDPs Extra pay	Labor	150,368	32,281	4,100	36,381	37,472	38,596	39,754	40,947	42,175	42,175
572	G252302003500130	WTDPs Accrued Leave	Labor	-	-	-	-	-	-	-	-	-	-
573	G252302003500150	WTDPs Leave Pay-out	Labor	12,436	-	-	-	-	-	-	-	-	-
574	G252302003501000	WTDPs Fringe Benefits	Benefits	-	2,185,055	277,502	2,462,557	2,536,434	2,612,527	2,690,903	2,771,630	2,854,778	2,854,778
575	G252302003501010	WTDPs FICA	Benefits	211,452	-	-	-	-	-	-	-	-	-
576	G252302003501011	WTDPs Medicare	Benefits	49,408	-	-	-	-	-	-	-	-	-
577	G252302003501020	WTDPs Retire Contrb-EE Sy	Benefits	982,069	-	-	-	-	-	-	-	-	-
578	G252302003501060	WTDPs Health-Cigna High	Benefits	-	-	-	-	-	-	-	-	-	-
579	G252302003501061	WTDPs Health OAP 90%	Benefits	258,067	-	-	-	-	-	-	-	-	-
580	G252302003501062	WTDPs Health-HSA Plan	Benefits	7,208	-	-	-	-	-	-	-	-	-
581	G252302003501063	WTDPs Health-MyChoice	Benefits	66,848	-	-	-	-	-	-	-	-	-
582	G252302003501070	WTDPs Health-Cigna Low	Benefits	64,562	-	-	-	-	-	-	-	-	-
583	G252302003501080	WTDPs Health-BC/BS	Benefits	-	-	-	-	-	-	-	-	-	-
584	G252302003501090	WTDPs Health-Kaiser	Benefits	284,340	-	-	-	-	-	-	-	-	-
585	G252302003501100	WTDPs Insurance-Group Life	Benefits	5,724	-	-	-	-	-	-	-	-	-
586	G252302003501110	WTDPs Delta Dental	Benefits	26,468	-	-	-	-	-	-	-	-	-
587	G252302003502150	WTDOE Workers Comp Idmty-P	Benefits	-	-	-	-	-	-	-	-	-	-
588		Total Personnel Services		\$ 5,593,338	\$ 6,461,519	\$ 820,613	\$ 7,282,132	\$ 7,500,596	\$ 7,725,614	\$ 7,957,382	\$ 8,196,104	\$ 8,441,987	\$ 8,441,987
		Operating Expenses											
589	G252302003510200	WTDOE Inv-DPWES Wastewate	Inflation	\$ -	\$ 50,441	\$ -	\$ 50,441	\$ 51,602	\$ 52,685	\$ 53,739	\$ 54,921	\$ 56,129	\$ 56,129
590	G252302003510000	WTDOE Office Equip&Furnit	Inflation	332	-	-	-	-	-	-	-	-	-
591	G252302003510010	WTDOE Copier	Inflation	-	-	-	-	-	-	-	-	-	-
592	G252302003510020	WTDOE Office Supplies	Inflation	1,769	-	-	-	-	-	-	-	-	-
593	G252302003510030	WTDOE Computer Equipment	Inflation	55	-	-	-	-	-	-	-	-	-
594	G252302003510040	WTDOE Computer Acces&Supl	Inflation	11,489	-	-	-	-	-	-	-	-	-
595	G252302003510050	WTDOE IT Replacement Part	Inflation	529	3,000	-	3,000	3,069	3,133	3,196	3,266	3,338	3,338
596	G252302003510060	WTDOE Printing Acces&Supl	Inflation	705	-	-	-	-	-	-	-	-	-
597	G252302003510070	WTDOE Clean Supplies Cnty	Inflation	1,222	-	-	-	-	-	-	-	-	-
598	G252302003510080	WTDOE Postage	Inflation	770	-	-	-	-	-	-	-	-	-
599	G252302003510200	WTDOE Bldg Maint & Repair	Repair	98,532	-	-	-	-	-	-	-	-	-
600	G252302003510201	WTDOE Carpentry/LumberSupl	Inflation	3,983	-	-	-	-	-	-	-	-	-
601	G252302003510202	WTDOE Electrical Supplies	Inflation	92,466	-	-	-	-	-	-	-	-	-
602	G252302003510203	WTDOE Hardware	Inflation	5,710	-	-	-	-	-	-	-	-	-
603	G252302003510204	WTDOE HVAC Supplies	Inflation	46,349	9,700	-	9,700	9,923	10,131	10,334	10,561	10,794	10,794
604	G252302003510205	WTDOE Lightbulbs	Inflation	538	5,987	-	5,987	6,124	6,253	6,378	6,518	6,662	6,662
605	G252302003510206	WTDOE Paint/Plnt Supplies	Inflation	12,658	-	-	-	-	-	-	-	-	-
606	G252302003510207	WTDOE Plumbing Supplies	Inflation	1,288	-	-	-	-	-	-	-	-	-
607	G252302003510210	WTDOE Grnds Maint Eq&Sup	Inflation	28,675	5,805	-	5,805	5,939	6,063	6,184	6,321	6,460	6,460
608	G252302003510220	WTDOE Lighting Equipment	Inflation	9,010	339	-	339	347	354	361	369	377	377
609	G252302003510400	WTDOE Educational Supplc	Inflation	198	-	-	-	-	-	-	-	-	-
610	G252302003510600	WTDOE Chemicals	Chem-Norman	651	-	-	-	-	-	-	-	-	-
611	G252302003510610	WTDOE Tools County	Inflation	70,197	60,000	-	60,000	61,380	62,669	63,922	65,329	66,766	66,766
612	G252302003510620	WTDOE Eng Drft&Sur Eqp&Su	Inflation	-	-	-	-	-	-	-	-	-	-
613	G252302003510630	WTDOE Water Treat Eqp&Sup	Inflation	1,498,152	1,922,079	-	1,922,079	1,400,000	1,429,400	1,457,988	1,490,064	1,522,845	1,522,845
614	G252302003510640	WTDOE Food Srv Equip/Supl	Inflation	4,308	-	-	-	-	-	-	-	-	-
615	G252302003510650	WTDOE Hshl Aplnc/Supl/Rep	Inflation	3,174	-	-	-	-	-	-	-	-	-

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Table 3
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Line No.	G/L Code	Description	Escalation Reference	Actual 2023	Adopted 2024	Adjustments	Adjusted 2024	Adjusted 2025	Projected Fiscal Year Ending June 30,			
									2026	2027	2028	2029
616	G252302003510660	WTDOE Med&Lab Eqp and Sup	Inflation	23,149	12,000	-	12,000	12,276	12,534	12,784	13,066	13,353
617	G252302003510670	WTDOE Park/Retn Area Equip	Inflation	-	-	-	-	-	-	-	-	-
618	G252302003510680	WTDOE Lab Equip and Supl	Inflation	711	-	-	-	-	-	-	-	-
619	G252302003512990	WTDOE Other Operating Sup	Inflation	86,336	15,000	-	15,000	15,345	15,667	15,981	16,332	16,691
620	G252302003513016	WTDOE Automotive Parts	Inflation	40	-	-	-	-	-	-	-	-
621	G252302003512992	WTDOE Goods Receipt W/O P	Inflation	-	-	-	-	-	-	-	-	-
622	G252302003513010	WTDOE Automotive Oil	Inflation	-	-	-	-	-	-	-	-	-
623	G252302003513018	WTDOE Tires	Inflation	1,441	-	-	-	-	-	-	-	-
624	G252302003513020	WTDOE Automotive Equip&Sup	Inflation	2,197	-	-	-	-	-	-	-	-
625	G252302003513030	WTDOE Heating Fuel	Inflation	-	12,000	-	12,000	12,276	12,534	12,784	13,066	13,353
626	G252302003514010	WTDOE Fire Protec Eqp&Sup	Inflation	97	-	-	-	-	-	-	-	-
627	G252302003514020	WTDOE Uniform Wear Appare	Inf/Emp	7,202	-	-	-	-	-	-	-	-
628	G252302003514030	WTDOE Mis Pub Safe Eqp&Sup	Inflation	12,196	-	-	-	-	-	-	-	-
629	G252302003520100	WTDOE Scienti/Tech Exp M&R	Repair	-	-	-	-	-	-	-	-	-
630	G252302003520010	WTDOE Bldg Maint & Repair	Repair	624,653	1,923,664	-	1,923,664	1,700,000	1,768,000	1,838,720	1,912,269	1,988,760
631	G252302003520011	WTDOE Electrical M&R	Repair	48,058	5,750	-	5,750	5,980	6,219	6,468	6,727	6,996
632	G252302003520012	WTDOE Elevator M&R	Repair	7,915	3,971	-	3,971	4,129	4,295	4,466	4,645	4,831
633	G252302003520013	WTDOE HVAC M&R	Repair	45,625	4,708	-	4,708	4,896	5,092	5,296	5,508	5,728
634	G252302003520015	WTDOE Overhead Doors M&R	Repair	23,103	20,050	-	20,050	20,852	21,686	22,554	23,456	24,394
635	G252302003520016	WTDOE Extermination Svcs	Repair	1,113	-	-	-	-	-	-	-	-
636	G252302003520025	WTDOE Custodial Services	Repair	35,610	1	-	1	1	1	1	1	1
637	G252302003520014	WTDOE Mechanical Inspect	Repair	8,490	-	-	-	-	-	-	-	-
638	G252302003520017	WTDOE Plumbing M&R	Repair	8,313	-	-	-	-	-	-	-	-
639	G252302003520020	WTDOE Construct Maint/Repr	Repair	-	-	-	-	-	-	-	-	-
640	G252302003520050	WTDOE Automotive Equip M&R	Repair	593	-	-	-	-	-	-	-	-
641	G252302003520110	WTDOE Other Maint & Repai	Repair	365,217	333,604	-	333,604	346,948	360,826	375,259	390,269	405,880
642	G252302003520120	WTDOE Gain/loss - Inv adj	Inflation	-	-	-	-	-	-	-	-	-
643	G252302003521060	WTDOE Computer Services	Inflation	-	-	-	-	-	-	-	-	-
644	G252302003521070	WTDOE Print/Typeset Service	Inflation	3,243	-	-	-	-	-	-	-	-
645	G252302003521090	WTDOE Comm & Media Service	Inflation	6,419	-	-	-	-	-	-	-	-
646	G252302003521100	WTDOE Transportation Svcs	Inflation	570	-	-	-	-	-	-	-	-
647	G252302003521130	WTDOE Grnds/Rec/Parks Sve	Inflation	-	-	-	-	-	-	-	-	-
648	G252302003521210	WTDOE Licensing Fees	Inflation	304	-	-	-	-	-	-	-	-
649	G252302003521240	WTDOE Meals	Inflation	-	-	-	-	-	-	-	-	-
650	G252302003521250	WTDOE Misc Services	Inflation	-	-	-	-	-	-	-	-	-
651	G252302003523020	WTDOE Rent-Operat Equipmn	Inflation	40,823	21,778	-	21,778	22,279	22,747	23,202	23,713	24,234
652	G252302003523030	WTDOE Rent-Construct Equi	Inflation	10,727	-	-	-	-	-	-	-	-
653	G252302003541110	WTDOE Auto Lia Prop Damag	Insurance	-	-	-	-	-	-	-	-	-
654	G252302003542000	WTDOE Local Travel County	Inflation	-	-	-	-	-	-	-	-	-
655	G252302003542200	WTDOE Certification	Inflation	-	-	-	-	-	-	-	-	-
656	G252302003542220	WTDOE Technical Train Cnt	Inflation	-	-	-	-	-	-	-	-	-
657	G252302003543000	WTDOE Cash Awards	Benefits	-	-	-	-	-	-	-	-	-
658	G252302003543020	WTDOE Departmental Awards	Benefits	-	-	-	-	-	-	-	-	-
659	G252302003544538	WTDOE Professional Memberships	Inf/Emp	-	-	-	-	-	-	-	-	-
660	G252302003544540	WTDOE Credit Card Expense	Inflation	-	-	-	-	-	-	-	-	-
661	G252302003544990	WTDOE Other Operating Exp	Inflation	270	220,000	-	220,000	225,060	229,786	234,382	239,538	244,808
662		Total Operating Expenses		\$ 3,257,171	\$ 4,629,877	\$ -	\$ 4,629,877	\$ 3,908,426	\$ 4,030,077	\$ 4,154,001	\$ 4,285,938	\$ 4,422,401
Capital Equipment [1]												
663	G252302003566125	WTDOE Equipment Expense	Bud Cap	\$ 96,803	\$ 54,208	\$ (54,208)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
664	G252302003566150	WTDOE Vehicles Exp SC Only	Bud Cap	-	-	-	-	-	-	-	-	-
665	G252302003566275	WTDOE DO NOT USE Infrastrc	Bud Cap	-	-	-	-	-	-	-	-	-
666		Total Capital Equipment [1]		\$ 96,803	\$ 54,208	\$ (54,208)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
667		Total WWT - Maintenance		\$ 8,947,312	\$ 11,145,604	\$ 766,405	\$ 11,912,009	\$ 11,409,022	\$ 11,755,690	\$ 12,111,383	\$ 12,482,042	\$ 12,864,387
WWT - IT Services												
Personnel Services												
668	G252302004500000	WTDPS Regular Salaries	Labor	\$ 1,010,752	\$ 887,910	\$ 112,765	\$ 1,000,675	\$ 1,030,695	\$ 1,061,616	\$ 1,093,464	\$ 1,126,268	\$ 1,160,056
669	G252302004500050	WTDPS Annual Comp Increas	Labor	-	104,803	13,310	118,113	121,656	125,306	129,065	132,937	136,925
670	G252302004500090	WTDPS Reg Sal-Non Mert Emp	Labor	61,356	-	-	-	-	-	-	-	-
671	G252302004500110	WTDPS Extra pay	Labor	-	-	-	-	-	-	-	-	-
672	G252302004500121	WTDPS WPFO-Labor Charges	Labor	-	-	-	-	-	-	-	-	-
673	G252302004500130	WTDPS Accrued Leave	Labor	30,509	-	-	-	-	-	-	-	-
674	G252302004500140	WTDPS Leave Pay-Out	Labor	-	-	-	-	-	-	-	-	-
675	G252302004500150	WTDPS Employee Leave Pay-out	Labor	-	-	-	-	-	-	-	-	-
676	G252302004501000	WTDPS Fringe Benefits	Benefits	-	353,413	44,883	398,296	410,245	422,553	435,229	448,286	461,735
677	G252302004501010	WTDPS FICA	Benefits	63,707	-	-	-	-	-	-	-	-
678	G252302004501011	WTDPS Medicare	Benefits	14,899	-	-	-	-	-	-	-	-
679	G252302004501020	WTDPS Retire Contrb-EE Sy	Benefits	291,905	-	-	-	-	-	-	-	-
680	G252302004501060	WTDPS Health-Cigna High	Benefits	-	-	-	-	-	-	-	-	-
681	G252302004501061	WTDPS Health OAP 90%	Benefits	79,664	-	-	-	-	-	-	-	-
682	G252302004501062	WTDPS Health-HSA Plan	Benefits	3,050	-	-	-	-	-	-	-	-
683	G252302004501063	WTDPS Health-MyChoice	Benefits	25,575	-	-	-	-	-	-	-	-
684	G252302004501070	WTDPS Health Insurance-Cigna Low	Benefits	-	-	-	-	-	-	-	-	-
685	G252302004501080	WTDPS Health-BC/BS	Benefits	-	-	-	-	-	-	-	-	-
686	G252302004501090	WTDPS Health-Kaiser	Benefits	5,452	-	-	-	-	-	-	-	-
687	G252302004501100	WTDPS Insurance-Group Life	Benefits	1,535	-	-	-	-	-	-	-	-
688	G252302004501110	WTDPS Delta Dental	Benefits	4,469	-	-	-	-	-	-	-	-
689		Total Personnel Services		\$ 1,592,873	\$ 1,346,126	\$ 170,958	\$ 1,517,084	\$ 1,562,597	\$ 1,609,474	\$ 1,657,759	\$ 1,707,491	\$ 1,758,716
Operating Expenses												
690	G252302004510030	WTDOE Computer Equipment	Inflation	\$ 131,672	\$ 201,944	\$ -	\$ 201,944	\$ 206,589	\$ 210,927	\$ 215,146	\$ 219,879	\$ 224,716
691	G252302004510040	WTDOE Computer Acces&Supl	Inflation	96,248	110,532	-	110,532	113,074	115,449	117,758	120,349	122,996
692	G252302004510200	WTDOE Bldg Materials & Sup	Inflation	-	-	-	-	-	-	-	-	-
693	G252302004510600	WTDOE Chemicals	Chemicals	-	-	-	-	-	-	-	-	-
694	G252302004510610	WTDOE Tools County	Inflation	62	-	-	-	-	-	-	-	-
695	G252302004510630	WTDOE Water Treat Eqp&Sup	Inflation	-	-	-	-	-	-	-	-	-

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**Table 3
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis**

Line No.	G/L Code	Description	Escalation Reference	Projection of Operating Expenses					Projected Fiscal Year Ending June 30,				
				Actual 2023	Adopted 2024	Adjustments	Adjusted 2024	Adjusted 2025	2026	2027	2028	2029	
696	G252302004512990	WTDOE Other Operating Supplies	Inflation	-	-	-	-	-	-	-	-	-	-
697	G252302004520000	WTDOE Ofc Eqp Maint&Repai	Repair	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
698	G252302004520020	WTDOE Construct Maint/Repr	Repair	-	-	-	-	-	-	-	-	-	-
699	G252302004520030	WTDOE Parks Ctr Facil M&R	Inflation	-	-	-	-	-	-	-	-	-	-
700	G252302004520100	WTDOE Scienti/Tech Eqp M&	Inflation	-	-	-	-	-	-	-	-	-	-
701	G252302004521030	WTDOE Translation Service	Inflation	-	-	-	-	-	-	-	-	-	-
702	G252302004521050	WTDOE Edu/Training Servic	Inflation	12,417	-	-	-	-	-	-	-	-	-
703	G252302004521060	WTDOE Computer Services	Inflation	171,314	875,393	-	875,393	895,527	914,333	932,619	953,137	974,106	
704	G252302004521061	WTDOE PC Replacement	Inflation	\$ 245,743	\$ 358,000	\$ -	\$ 358,000	\$ 366,234	\$ 373,925	\$ 381,403	\$ 389,794	\$ 398,370	
705	G252302004521062	WTDOE Tech Infra Chargeback	Inflation	-	-	-	-	-	-	-	-	-	-
706	G252302004521080	WTDOE Other Pro Cntret Sv	Inflation	-	75,000	-	75,000	76,725	78,336	79,903	81,661	83,457	
707	G252302004521110	WTDOE Public Works Service	Inflation	-	-	-	-	-	-	-	-	-	-
708	G252302004521250	WTDOE Misc Services	Inflation	-	-	-	-	-	-	-	-	-	-
709	G252302004542210	WTDOE Mgmt/Prof Training	Inflation	-	18,000	-	18,000	18,414	18,801	19,177	19,599	20,030	
710	G252302004542220	WTDOE Technical Train Cnt	Inflation	-	28,600	-	28,600	29,258	29,872	30,470	31,140	31,825	
711	G252302004543000	WTDOE Cash Awards	Inflation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
712	G252302004544540	WTDOE Credit Card Expense	Inflation	-	-	-	-	-	-	-	-	-	-
713	G252302004544538	WTDOE Professional Memberships	Inf/Emp	-	-	-	-	-	-	-	-	-	-
714	G252302004544539	WTDOE Prof Subscriptions	Inf/Emp	-	3,500	-	3,500	3,581	3,656	3,729	3,811	3,895	
715	G252302004544090	WTDOE Services-Other Agency	Inflation	-	-	-	-	-	-	-	-	-	-
716	G252302004544990	WTDOE Other Operating Exp	Inflation	-	-	-	-	-	-	-	-	-	-
717		Total Operating Expenses		\$ 657,455	\$ 1,670,969	\$ -	\$ 1,670,969	\$ 1,709,401	\$ 1,745,299	\$ 1,780,204	\$ 1,819,369	\$ 1,859,395	
		Capital Equipment [1]											
718	G252302004566125	WTDOE Equipment Expense	Bud Cap	\$ 29,312	\$ 1,093,839	\$ (1,093,839)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
719		Total Capital Equipment [1]		\$ 29,312	\$ 1,093,839	\$ (1,093,839)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
720		Total WWT - IT Services		\$ 2,279,640	\$ 4,110,934	\$ (922,881)	\$ 3,188,053	\$ 3,271,998	\$ 3,354,773	\$ 3,437,963	\$ 3,526,860	\$ 3,618,111	
		<u>WWT - Engineering</u>											
		Personnel Services											
721	G252302005500000	WTDPs Regular Salaries	Labor	\$ 761,208	\$ 508,349	\$ 64,560	\$ 572,909	\$ 590,097	\$ 607,800	\$ 626,033	\$ 644,814	\$ 664,159	
722	G252302005500050	WTDPs Annual Comp Increas	Labor	-	42,765	5,431	48,196	49,642	51,131	52,665	54,245	55,873	
723	G252302005500090	WTDPs Reg Sal- Non Mert Em	Labor	35,842	-	-	-	-	-	-	-	-	
724	G252302005500090	WTDPs Shift Differential	Labor	-	-	-	-	-	-	-	-	-	
725	G252302005500110	WTDPs Extra pay	Labor	1,857	-	-	-	-	-	-	-	-	
726	G252302005500130	WTDPs Accrued Leave	Labor	13,999	-	-	-	-	-	-	-	-	
727	G252302005501000	WTDPs Employee Leave Pay-out	Benefits	-	-	-	-	-	-	-	-	-	
728	G252302005501000	WTDPs Fringe Benefits	Benefits	-	237,660	30,183	267,843	275,878	284,154	292,679	301,459	310,503	
729	G252302005501010	WTDPs FICA	Benefits	46,289	-	-	-	-	-	-	-	-	
730	G252302005501011	WTDPs Medicare	Benefits	10,826	-	-	-	-	-	-	-	-	
731	G252302005501020	WTDPs Retire Contrib-EE Sy	Benefits	219,837	-	-	-	-	-	-	-	-	
732	G252302005501060	WTDPs Health Cigna High	Benefits	-	-	-	-	-	-	-	-	-	
733	G252302005501061	WTDPs Health OAP 90%	Benefits	71,553	-	-	-	-	-	-	-	-	
734	G252302005501062	WTDPs Health-HSA Plan	Benefits	-	-	-	-	-	-	-	-	-	
735	G252302005501063	WTDPs Health-MyChoice	Benefits	-	-	-	-	-	-	-	-	-	
736	G252302005501070	WTDPs Health-Cigna Low	Benefits	13,200	-	-	-	-	-	-	-	-	
737	G252302005501080	WTDPs Health-BC/BS	Benefits	-	-	-	-	-	-	-	-	-	
738	G252302005501090	WTDPs Health-Kaiser	Benefits	24,661	-	-	-	-	-	-	-	-	
739	G252302005501100	WTDPs Insurance-Group Life	Benefits	1,175	-	-	-	-	-	-	-	-	
740	G252302005501061	WTDPs Delta Dental	Benefits	4,157	-	-	-	-	-	-	-	-	
741	G252302005501110	WTDPs Tools County	Benefits	175	-	-	-	-	-	-	-	-	
742	G252302005501110	WTDPs Comm & Media Service	Benefits	2,436	-	-	-	-	-	-	-	-	
743		Total Personnel Services		\$ 1,207,213	\$ 788,774	\$ 100,174	\$ 888,948	\$ 915,617	\$ 943,085	\$ 971,378	\$ 1,000,519	\$ 1,030,535	
		Operating Expenses											
744	G252302005544990	WTDOE Other Operating Exp	Inflation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
745		Total Operating Expenses		-	-	-	-	-	-	-	-	-	
746		Total WWT - Engineering		\$ 1,207,213	\$ 788,774	\$ 100,174	\$ 888,948	\$ 915,617	\$ 943,085	\$ 971,378	\$ 1,000,519	\$ 1,030,535	
747		Total Wastewater Treatment Department		\$ 28,554,002	\$ 40,305,265	\$ (2,197,816)	\$ 38,107,450	\$ 39,073,764	\$ 40,245,865	\$ 41,444,146	\$ 42,686,099	\$ 43,960,608	

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Table 3
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Line No.	G/L Code	Description	Escalation Reference	Projection of Operating Expenses					Projected Fiscal Year Ending June 30,			
				Actual 2023	Adopted 2024	Adjustments	Adjusted 2024	Adjusted 2025	2026	2027	2028	2029
WPM - WASTEWATER PLANNING & MONITORING												
WP&M - Fiscal												
Personnel Services												
748	G252303001500000	WPMPs Regular Salaries	Labor	\$ 5,305,128	\$ 2,583,809	\$ 328,144	\$ 2,911,953	\$ 2,999,311	\$ 3,089,291	\$ 3,181,969	\$ 3,277,428	\$ 3,375,751
749	G252303001500040	WPMPs New Position-Regular Salaries	Labor	-	-	-	-	-	-	-	-	-
750	G252303001500050	WPMPs Annual Comp Increas	Labor	-	216,653	27,515	244,168	251,493	259,038	266,809	274,813	283,058
751	G252303001500080	WPMPs POS Turnover-Pay	Labor	-	(27,561)	(3,500)	(31,061)	(31,993)	(32,953)	(33,941)	(34,960)	(36,008)
752	G252303001500090	WPMPs Reg Sal-Non Mert Em	Labor	252,179	12,682	1,611	14,293	14,721	15,163	15,618	16,086	16,569
753	G252303001500100	WPMPs Shift Differential	Labor	-	-	-	-	-	-	-	-	-
754	G252303001500110	WPMPs Extra pay	Labor	3,954	4,907	623	5,530	5,696	5,867	6,043	6,224	6,411
755	G252303001500130	WPMPs Accrued Leave	Labor	61,450	132,804	16,866	149,670	154,160	158,785	163,549	168,455	173,509
756	G252303001500150	WPMPs Leave Pay out	Labor	18,603	-	-	-	-	-	-	-	-
757	G252303001501000	WPMPs Fringe Benefits	Benefits	48,696	900,939	114,419	1,015,358	1,045,819	1,077,194	1,109,509	1,142,795	1,177,078
758	G252303001501010	WPMPs FICA	Benefits	326,337	-	-	-	-	-	-	-	-
759	G252303001501011	WPMPs Medicare	Benefits	76,930	-	-	-	-	-	-	-	-
760	G252303001501020	WPMPs Retire Contrib-EE Sy	Benefits	1,449,686	-	-	-	-	-	-	-	-
761	G252303001501055	WPMPs OPEB Contributions	Benefits	272,767	215,183	27,328	242,511	249,787	257,280	264,999	272,949	281,137
762	G252303001501060	WPMPs Health-Cigna High	Benefits	-	-	-	-	-	-	-	-	-
763	G252303001501061	WPMPs Health OAP 90%	Benefits	271,820	-	-	-	-	-	-	-	-
764	G252303001501062	WPMPs Health-HSA Plan	Benefits	13,583	-	-	-	-	-	-	-	-
765	G252303001501063	WPMPs Health-MyChoice	Benefits	137,873	-	-	-	-	-	-	-	-
766	G252303001501070	WPMPs Health-Cigna Low	Benefits	93,988	-	-	-	-	-	-	-	-
767	G252303001501080	WPMPs Health-BC/BS	Benefits	-	-	-	-	-	-	-	-	-
768	G252303001501090	WPMPs Health-Kaiser	Benefits	109,452	-	-	-	-	-	-	-	-
769	G252303001501100	WPMPs Insurance-Group Life	Benefits	8,465	-	-	-	-	-	-	-	-
770	G252303001501110	WPMPs Delta Dental	Benefits	24,644	-	-	-	-	-	-	-	-
771	G252303001502120	WPMPs Worker Comp Ins Plc	Benefits	-	102,000	12,954	114,954	118,403	121,955	125,613	129,382	133,263
772		Total Personnel Services		\$ 8,475,555	\$ 4,141,416	\$ 525,960	\$ 4,667,376	\$ 4,807,397	\$ 4,951,619	\$ 5,100,168	\$ 5,253,173	\$ 5,410,768
Operating Expenses												
773	G252303001510000	WPMOE Office Equip&Furnit	Inflation	\$ 954	\$ 5,000	\$ -	\$ 5,000	\$ 5,115	\$ 5,222	\$ 5,327	\$ 5,444	\$ 5,564
774	G252303001510020	WPMOE Office Supplies	Inflation	328	1,001	-	1,001	1,024	1,046	1,067	1,090	1,114
775	G252303001510030	WPMOE Computer Equipment	Inflation	8,674	2,000	-	2,000	2,046	2,089	2,131	2,178	2,226
776	G252303001510000	WPMOE Othr NonCap Eqp Pur	Inflation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
777	G252303001510020	WPMOE Computer Acces&Supl	Inflation	3,782	5,000	-	5,000	5,115	5,222	5,327	5,444	5,564
778	G252303001510030	WPMOE Printing Acces&Supl	Inflation	1,298	500	-	500	512	522	533	544	556
779	G252303001510000	WPMOE Postage	Inf/Cust	\$ 568	\$ 2,000	\$ -	\$ 2,000	\$ 2,054	\$ 2,106	\$ 2,157	\$ 2,214	\$ 2,272
780	G252303001510020	WPMOE Bldg Maint & Repair	Repair	154	3,000	-	3,000	3,120	3,245	3,375	3,510	3,650
781	G252303001510030	WPMOE Educational Supplie	Inflation	132	1,000	-	1,000	1,023	1,044	1,065	1,089	1,113
782	G252303001510000	WPMOE Library Equipment	Inflation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
783	G252303001510020	WPMOE Chemicals	Inflation	-	-	-	-	-	-	-	-	-
784	G252303001510030	WPMOE Tools County	Inflation	-	-	-	-	-	-	-	-	-
785	G252303001510000	WPMOE Eng Drft&Sur Eqp&Sup	Inflation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
786	G252303001510020	WPMOE Hshl Aplne/Supl/Rep	Inflation	107	-	-	-	-	-	-	-	-
787	G252303001510030	WPMOE Med&Lab Eqp and Sup	Inflation	173	200	-	200	205	209	213	218	223
788	G252303001510000	WPMOE Park/Retn Area Equi	Inflation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
789	G252303001510020	WPMOE Lab Equip and Supl	Inflation	-	-	-	-	-	-	-	-	-
790	G252303001510030	WPMOE Other Operating Sup	Inflation	24	2,000	-	2,000	2,046	2,089	2,131	2,178	2,226
791	G252303001510000	WPMOE Automotive Equip&Supl	Inflation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
792	G252303001510020	WPMOE Poli/Prison Eqp&Supl	Inflation	-	-	-	-	-	-	-	-	-
793	G252303001510030	WPMOE Uniform/Wear Appare	Inf/Emp	-	-	-	-	-	-	-	-	-
794	G252303001510000	WPMOE Ofc Eqp Maint&Repai	Repair	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
795	G252303001510020	WPMOE Construct Maint/Repr	Repair	-	10,000	-	-	-	-	-	-	-
796	G252303001510030	WPMOE Scientif/Tech Eqp M&R	Inflation	-	-	-	-	-	-	-	-	-
797	G252303001510000	WPMOE Other Maint & Repai	Repair	\$ -	\$ 5,000	\$ -	\$ 5,000	\$ 5,200	\$ 5,408	\$ 5,624	\$ 5,849	\$ 6,083
798	G252303001510020	WPMOE Financial Services	Inflation	108,426	161,631	-	161,631	165,349	168,821	172,198	175,986	179,858
799	G252303001510030	WPMOE Audit/Acct Services	Inflation	44,296	50,000	-	50,000	51,150	52,224	53,269	54,441	55,638
800	G252303001510000	WPMOE Educational/Training Services	Inflation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
801	G252303001510020	WPMOE Computer Services	Inflation	-	250,000	-	250,000	255,750	261,121	266,343	272,203	278,191
802	G252303001510030	WPMOE Computer Replacement	Inflation	-	-	-	-	-	-	-	-	-
803	G252303001510000	WPMOE Tech Infra Chrgbck	Inflation	\$ 2,435	\$ 20,000	\$ -	\$ 20,000	\$ 20,460	\$ 20,890	\$ 21,307	\$ 21,776	\$ 22,255
804	G252303001510020	WPMOE Other Pro Cntrct Sv	Inflation	752,413	769,692	-	769,692	500,000	510,500	520,710	532,166	543,873
805	G252303001510030	WPMOE Comm & Media Servc	Inflation	2,786	10,000	-	10,000	10,230	10,445	10,654	10,888	11,128
806	G252303001510000	WPMOE Telecommunication Chargeback	Inflation	\$ 6,151	\$ 50,000	\$ -	\$ 50,000	\$ 51,150	\$ 52,224	\$ 53,269	\$ 54,441	\$ 55,638
807	G252303001510020	WPMOE Special Events	Inflation	695	-	-	-	-	-	-	-	-
808	G252303001510020	WPMOE Licensing Fees	Inflation	24,906	16,000	-	16,000	16,368	16,712	17,046	17,421	17,804
809	G252303001510030	WPMOE Meals	Inflation	-	15,000	-	15,000	15,345	15,667	15,981	16,332	16,691
810	G252303001510000	WPMOE Misc Services	Inflation	\$ 2,310	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
811	G252303001510020	WPMOE Rent-Copier Equipment	Inflation	5,057	1,000	-	-	-	-	-	-	-
812	G252303001510030	WPMOE Electricity County	Inflation	-	-	-	-	-	-	-	-	-
813	G252303001510000	WPMOE OPEB	Inflation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
814	G252303001510020	WPMOE Gen Liab Admin	Insurance	-	1,100	-	1,100	1,125	1,149	1,172	1,198	1,224
815	G252303001510030	WPMOE Auto Liab Admin	Insurance	1,213	15,000	-	15,000	15,345	15,667	15,981	16,332	16,691
816	G252303001510000	WPMOE Local Travel County	Inflation	\$ 2,041	\$ 1,000	\$ -	\$ 1,000	\$ 1,023	\$ 1,044	\$ 1,065	\$ 1,089	\$ 1,113
817	G252303001510020	WPMOE Miscellaneous Travel	Inflation	3,149	25,351	-	25,351	25,934	26,479	27,009	27,603	28,210
818	G252303001510030	WPMOE Certification	Inflation	1,150	3,000	-	3,000	3,069	3,133	3,196	3,266	3,338
819	G252303001542210	WPMOE Mgmt/Prof Training	Inflation	13,856	40,000	-	40,000	40,920	41,779	42,615	43,552	44,511
820	G252303001542210	WPMOE Technical Train Cnt	Inflation	102	25,000	-	25,000	25,575	26,112	26,634	27,220	27,819
821	G252303001542210	WPMOE Reimb-Telephone Exp	Inflation	-	-	-	-	-	-	-	-	-
822	G252303001542210	WPMOE Other General Expenses	Inflation	-	-	-	-	-	-	-	-	-
823	G252303001542210	WPMOE Cash Awards	Inflation	-	-	-	-	-	-	-	-	-
824	G252303001542210	WPMOE Departmental Awards	Inflation	1,914	5,862	-	5,862	5,997	6,123	6,245	6,383	6,523

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**Table 3
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis**

Line No.	G/L Code	Description	Escalation Reference	Actual 2023	Adopted 2024	Adjustments	Adjusted 2024	Adjusted 2025	Projected Fiscal Year Ending June 30,			
									2026	2027	2028	2029
825	G252303001542210	WPMOE Plaques and Awards	Inflation	-	1,000	-	1,000	1,023	1,044	1,065	1,089	1,113
826	G252303001542210	WPMOE Copying	Inflation	-	-	-	-	-	-	-	-	-
827	G252303001542210	WPMOE Phototypesetting	Inflation	-	-	-	-	-	-	-	-	-
828	G252303001542210	WPMOE Printing and Bindin	Inflation	547	-	-	-	-	-	-	-	-
829	G252303001542210	WPMOE Assigned Agency Veh	Inflation	3,369	2,954	-	2,954	3,022	3,085	3,147	3,216	3,287
830	G252303001542210	WPMOE Motor Pool	Inflation	183	-	-	-	-	-	-	-	-
831	G252303001542210	WPMOE Fuel	Inflation	1,535	-	-	-	-	-	-	-	-
832	G252303001542210	WPMOE Service-Other Agenc	Inflation	146,198	500,000	-	500,000	200,000	204,200	208,284	212,866	217,549
833	G252303001542210	WPMOE Mileage Allow Auto	Inflation	-	-	-	-	-	-	-	-	-
834	G252303001542210	WPMOE Internal Fairfax Support	Inflation	-	-	-	-	-	-	-	-	-
835	G252303001542210	WPMOE Operating Bad Debt Expense	Inflation	-	-	-	303,054	310,025	316,535	322,866	329,969	337,228
836	G252303001542210	WPMOE Prof Memberships	Inf/Emp	89,501	60,192	-	60,192	61,577	62,870	64,127	65,538	66,980
837	G252303001542210	WPMOE Prof Subscriptions	Inflation	136	-	-	-	-	-	-	-	-
838	G252303001542210	WPMOE Credit Card Expense	Inflation	-	-	-	-	-	-	-	-	-
839	G252303001542210	WPMOE Other Operating Exp	Inflation	2,078	19,044	-	19,044	19,482	19,891	20,289	20,735	21,191
840	G252303001544990	Total Operating Expenses		\$ 1,232,642	\$ 2,079,528	\$ -	\$ 2,371,583	\$ 1,827,378	\$ 1,865,920	\$ 1,903,420	\$ 1,945,467	\$ 1,988,445
Recovered Costs												
841	G252303001500121	WPMRC WPFO-Labor Charges	Labor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
842	G252303001500122	WPMRC WPFO-Agency OH Cost	Inflation	-	-	-	-	-	-	-	-	-
843	G252303001542590	WPMRC Misc Exp Reimb	Constant	\$ (494,484)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
844		Total Recovered Costs		\$ (494,484)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Equipment [1]												
845	G252303001563040	WPMCE Design-Consultant	Bud Cap	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
846	G252303001564100	WPMCE Construct-Equip Acq	Bud Cap	-	-	-	-	-	-	-	-	-
847	G252303001566125	WPMCE Equipment Expense	Bud Cap	-	-	-	-	-	-	-	-	-
848	G252303001566150	WPMCE Vehicles Expense	Bud Cap	-	-	-	-	-	-	-	-	-
849		Total Capital Equipment [1]		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
850		Total WP&M - Fiscal		\$ 9,213,713	\$ 6,220,944	\$ 525,960	\$ 7,038,958	\$ 6,634,775	\$ 6,817,539	\$ 7,003,588	\$ 7,198,639	\$ 7,399,212
WP&M - Engineer Planning												
Personnel Services												
851	G252303002500000	WPMPs Regular Salaries	Labor	\$ 1,093,392	\$ 989,957	\$ 125,725	\$ 1,115,682	\$ 1,149,152	\$ 1,183,627	\$ 1,219,135	\$ 1,255,709	\$ 1,293,381
852	G252303002500050	WPMPs Annual Comp Increas	Labor	-	78,702	9,995	88,697	91,358	94,099	96,922	99,829	102,824
853	G252303002500080	WPMPs POS Turnover-Pay	Labor	-	(47,297)	(6,007)	(53,304)	(54,903)	(56,550)	(58,246)	(59,994)	(61,794)
854	G252303002500090	WPMPs Reg Sal-Non Mert Emp	Labor	-	852	108	960	989	1,019	1,049	1,081	1,113
855	G252303002500110	WPMPs Extra pay	Labor	-	-	-	-	-	-	-	-	-
856	G252303002500130	WPMPs Accrued Leave	Labor	55,466	-	-	-	-	-	-	-	-
857	G252303002500150	WPMPs Leave Pay out	Labor	12,890	-	-	-	-	-	-	-	-
858	G252303002501000	WPMPs Fringe Benefits	Benefits	-	386,828	49,127	435,955	449,034	462,505	476,380	490,671	505,392
859	G252303002501010	WPMPs FICA	Benefits	66,548	-	-	-	-	-	-	-	-
860	G252303002501011	WPMPs Medicare	Benefits	15,564	-	-	-	-	-	-	-	-
861	G252303002501020	WPMPs Retire Contrib-EE Sy	Benefits	297,041	-	-	-	-	-	-	-	-
862	G252303002501060	WPMPs Health-Cigna High	Benefits	-	-	-	-	-	-	-	-	-
863	G252303002501061	WPMPs Health OAP 90%	Benefits	28,727	-	-	-	-	-	-	-	-
864	G252303002501062	WPMPs Health-HSA Plan	Benefits	1,400	-	-	-	-	-	-	-	-
865	G252303002501063	WPMPs Health-MyChoice	Benefits	12,599	-	-	-	-	-	-	-	-
866	G252303002501070	WPMPs Health-Cigna Low	Benefits	39,215	-	-	-	-	-	-	-	-
867	G252303002501080	WPMPs Health-B/C/BS	Benefits	-	-	-	-	-	-	-	-	-
868	G252303002501090	WPMPs Health-Kaiser	Benefits	25,162	-	-	-	-	-	-	-	-
869	G252303002501100	WPMPs Insurance-Group Life	Benefits	1,764	-	-	-	-	-	-	-	-
870	G252303002501110	WPMPs Delta Dental	Benefits	4,065	-	-	-	-	-	-	-	-
871	G252303002501110	WPMPs Computer Sys Lic Non	Benefits	-	-	-	-	-	-	-	-	-
872	G252303002501110	WPMPs Health Related Srvs	Benefits	115	-	-	-	-	-	-	-	-
873	G252303002501110	WPMPs Services-Other Agency	Benefits	403	-	-	-	-	-	-	-	-
874		Total Personnel Services		\$ 1,654,350	\$ 1,409,042	\$ 178,948	\$ 1,587,990	\$ 1,635,630	\$ 1,684,699	\$ 1,735,240	\$ 1,787,297	\$ 1,840,916
Operating Expenses												
875	G252303002544990	WPMCE Other Operating Supplies	Repair	-	-	-	-	-	-	-	-	-
876	G252303002520110	WPMCE Other Professional Consultant & Co	Inflation	\$ -	\$ -	\$ 1,000,000	\$ 1,000,000	\$ 1,100,000	\$ 1,123,100	\$ 1,145,562	\$ 1,170,764	\$ 1,196,521
877	G252303002544990	WPMCE Miscellaneous Services	Inflation	-	1,009,000	(1,009,000)	-	-	-	-	-	-
878	G252303002520110	WPMCE Certification	Inflation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
879	G252303002544990	WPMCE Management / Professional Training	Inflation	-	-	-	-	-	-	-	-	-
880	G252303002520110	WPMCE Technical Training County	Inflation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
881	G252303002544990	WPMCE Cash Awards	Inflation	-	-	-	-	-	-	-	-	-
882	G252303002520110	WPMCE Professional Memberships	Inflation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
883	G252303002544990	WPMCE Other Operating Exp	Inflation	-	-	-	-	-	-	-	-	-
884		Total Operating Expenses		\$ -	\$ 1,009,000	\$ (9,000)	\$ 1,000,000	\$ 1,100,000	\$ 1,123,100	\$ 1,145,562	\$ 1,170,764	\$ 1,196,521
885		Total WP&M - Engineer Planning		\$ 1,654,350	\$ 2,418,042	\$ 169,948	\$ 2,587,990	\$ 2,735,630	\$ 2,807,799	\$ 2,880,802	\$ 2,958,061	\$ 3,037,437
WP&M - Lab												
Personnel Services												
886	G252303003500000	WPMPs Regular Salaries	Labor	\$ 1,456,556	\$ 1,649,662	\$ 209,507	\$ 1,859,169	\$ 1,914,944	\$ 1,972,392	\$ 2,031,564	\$ 2,092,511	\$ 2,155,287
887	G252303003500050	WPMPs Annual Comp Increas	Labor	-	179,623	22,812	202,435	208,508	214,763	221,206	227,843	234,678
888	G252303003500080	WPMPs POS Turnover-Pay	Labor	-	(70,947)	(9,010)	(79,957)	(82,356)	(84,827)	(87,371)	(89,993)	(92,629)
889	G252303003500080	WPMPs Reg Sal Non Mert Em	Labor	109,350	1,643	209	1,852	1,907	1,964	2,023	2,084	2,147
890	G252303003500080	WPMPs Extra pay	Labor	93,978	35,929	4,563	40,492	41,707	42,958	44,247	45,574	46,941
891	G252303003500080	WPMPs Accrued Leave	Labor	83,385	-	-	-	-	-	-	-	-
892	G252303003500080	WPMPs Leave Pay out	Labor	29,547	-	-	-	-	-	-	-	-
893	G252303003500080	WPMPs Fringe Benefits	Benefits	-	652,221	82,832	735,053	757,105	779,818	803,212	827,309	852,128
894	G252303003500080	WPMPs FICA	Benefits	99,017	-	-	-	-	-	-	-	-
895	G252303003500080	WPMPs Medicare	Benefits	23,223	-	-	-	-	-	-	-	-
896	G252303003500080	WPMPs Retire Contrib-EE Sy	Benefits	422,696	-	-	-	-	-	-	-	-

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Table 3
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Table with 13 columns: Line No., G/L Code, Description, Escalation Reference, Actual 2023, Adopted 2024, Adjustments, Adjusted 2024, Adjusted 2025, and Projected Fiscal Year Ending June 30, 2026-2029. The table lists various operating expenses such as Personnel Services, Operating Expenses, and Recovered Costs, along with their respective financial values.

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Table 3
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Line No.	G/L Code	Description	Escalation Reference	Projection of Operating Expenses					Projected Fiscal Year Ending June 30,				
				Actual 2023	Adopted 2024	Adjustments	Adjusted 2024	Adjusted 2025	2026	2027	2028	2029	
<u>TBC - Treatment by Contract</u>													
974	550000	WPMOE	Pmt-Alex Sanitation	Input	\$ 11,827,697	\$ 12,500,000	\$ 1,814,620	\$ 14,314,620	\$ 14,711,320	\$ 15,110,966	\$ 15,521,402	\$ 15,942,948	\$ 16,375,902
975	550010	WPMOE	Pmt-Arlington Sewag	Input	2,447,972	2,600,000	(65,570)	2,534,430	2,592,722	2,647,169	2,700,112	2,759,515	2,820,224
976	550030	WPMOE	Pmt-Falls Church Sw	Repair	171,177	438,000	-	438,000	455,520	473,741	492,690	512,398	532,894
977	550040	WPMOE	Pmt-Harbor View Swg	Inflation	572,484	16	-	16	16	17	17	17	18
978	550050	WPMOE	Pmt-Inter-Jurisdic	AgentFee	-	-	-	-	-	-	-	-	-
979	550060	WPMOE	Pmt-Loudoun Water	AgentFee	-	-	-	-	-	-	-	-	-
980	550100	WPMOE	Payments-DC Water	Input	18,012,612	15,500,073	2,287,080	17,787,153	18,595,001	19,437,585	20,316,401	21,233,007	22,189,027
981	550110	WPMOE	Pmt-UOSA Sewage	Input	14,783,192	14,800,008	607,975	15,407,983	15,762,367	16,093,377	16,415,244	16,776,379	17,145,460
982	550120	WPMOE	Pmt-Loudoun Water	AgentFee	42,707	68,693	-	68,693	70,563	72,343	74,094	76,037	78,031
983	550210	WPMOE	Pmt-PWSA	AgentFee	360,267	384,648	-	384,648	395,120	405,083	414,891	425,769	436,933
984			Total TBC - Treatment by Contract		\$ 48,218,107	\$ 46,291,439	\$ 4,644,104	\$ 50,935,543	\$ 52,582,629	\$ 54,240,280	\$ 55,934,852	\$ 57,726,070	\$ 59,578,489
<u>Contracted Billing Services</u>													
985	550020	WPMOE	FCWA	AgentFee	\$ 6,875,289	\$ 8,511,873	\$ (1,500,000)	\$ 7,011,873	\$ 7,202,762	\$ 7,384,395	\$ 7,563,175	\$ 7,761,483	\$ 7,965,001
986			Total Contracted Billing Service		\$ 6,875,289	\$ 8,511,873	\$ (1,500,000)	\$ 7,011,873	\$ 7,202,762	\$ 7,384,395	\$ 7,563,175	\$ 7,761,483	\$ 7,965,001
987			Total O&M Expenses & Capital Outlay		\$ 123,111,480	\$ 145,136,167	\$ (5,227,528)	\$ 140,193,393	\$ 142,695,172	\$ 146,862,064	\$ 151,112,176	\$ 155,576,635	\$ 160,175,531
988			Capital Outlay		\$ 2,138,083	\$ 13,242,784	\$ (13,242,784)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
989			Total O&M Expenses Net of Capital Outlay		\$ 120,973,397	\$ 131,893,383	\$ 8,015,256	\$ 140,193,393	\$ 142,695,172	\$ 146,862,064	\$ 151,112,176	\$ 155,576,635	\$ 160,175,531
990			Op. Exp. Adj.					-	-	-	-	-	-
991			Additional Personnel					-	-	600,000	1,200,000	1,800,000	1,854,000
992			Total Adj. O&M Expenses Net of Capital Outlay		\$ 120,973,397	\$ 131,893,383	\$ 8,015,256	\$ 140,193,393	\$ 142,695,172	\$ 147,462,064	\$ 152,312,176	\$ 157,376,635	\$ 162,029,531

Footnotes:

- [1] WMP capitalizes budgeted equipment and capital outlays and therefore was reclassified to the forecasted Capital Improvement Program (reference Table 10).
- [2] Forecasted amounts are based on: i) appo Forecasted amounts are based on the apportionment of costs from budgetary estimates and forecasts provided by the respective Treatment by Contract (TBC) provider and based on discussions with WMP staff.

**Table 4
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis
Projection of Operating Expenses for Treatment By Contract (TBC)**

Line No.	Description	Escalation Reference [1]	Projected Fiscal Year Ending June 30							
			Proposed Budget	Adjustments	Adjusted 2024	2025	2026	2027	2028	2029
AlexRenew - Alexandria Renew Enterprise										
<u>AlexRenew - O&M Costs Allocated to Fairfax Co.[2]</u>										
1	Total Operating Expenses	O&M ARE	\$ 33,023,593	\$ -	\$ 33,023,593	\$ 33,849,183	\$ 34,695,412	\$ 35,562,798	\$ 36,451,868	\$ 37,363,164
2	Less: AlexRenew Only Expense:	Input	(4,546,660)	-	(4,546,660)	(4,660,327)	(4,776,835)	(4,896,256)	(5,018,662)	(5,144,128)
3	Joint Operating Expenses		\$ 28,476,933	\$ -	\$ 28,476,933	\$ 29,188,856	\$ 29,918,578	\$ 30,666,542	\$ 31,433,206	\$ 32,219,036
4	Percentage Allocation to Fairfax Co		45.00%	0.00%	45.00%	45.12%	45.21%	45.31%	45.41%	45.50%
5	Operating Expenses Allocated to Fairfax Co		\$ 12,814,620	\$ -	\$ 12,814,620	\$ 13,169,751	\$ 13,527,518	\$ 13,894,946	\$ 14,272,319	\$ 14,659,904
6	Less: Charges for Alexandria City Flow		-	-	-	-	-	-	-	-
7	Adjustments for Historical Budget to Actual Variance		-	1,500,000	1,500,000	1,541,569	1,583,447	1,626,456	1,670,629	1,715,998
8	Operating Expenses Allocated to Fairfax Co. - FY Ad		\$ 12,814,620	\$ 1,500,000	\$ 14,314,620	\$ 14,711,320	\$ 15,110,966	\$ 15,521,402	\$ 15,942,948	\$ 16,375,902
9	Gross Joint Assets	IR&R ARE	\$ 772,711,685	\$ -	\$ 772,711,685	\$ 835,764,958	\$ 877,553,006	\$ 908,267,361	\$ 940,056,719	\$ 972,958,704
10	Funding Percentage per Agreeem		0.70%	0.00%	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%
11	Fairfax Co. Share (60%) [3]		3,245,389	-	3,245,389	3,510,213	3,685,723	3,814,723	3,948,238	4,086,427
12	Adjustments		-	-	-	-	-	-	-	-
13	IR&R Expenditures Allocated to Fairfax County [3]		\$ 3,245,389	\$ -	\$ 3,245,389	\$ 3,510,213	\$ 3,685,723	\$ 3,814,723	\$ 3,948,238	\$ 4,086,427
	Subtotal ARE - O&M Costs Allocated to Fairfax Co. Accruals/Fiscal Year End Adjustments [4]				\$ 17,567,678	\$ 18,155,327	\$ 18,752,811	\$ 19,303,875	\$ 19,857,807	\$ 20,427,781
	Total ARE - O&M Costs Allocated to Fairfax Co.				\$ 17,567,678	\$ 18,155,327	\$ 18,752,811	\$ 19,303,875	\$ 19,857,807	\$ 20,427,781
Arlington County - WPCF										
<u>Arlington WPCF - O&M Costs Allocated to Fairfax Co.[5]</u>										
14	Arlington Total Operating Expenses	Composite	\$ 25,980,662	\$ -	\$ 25,980,662	\$ 26,578,217	\$ 27,136,360	\$ 27,679,087	\$ 28,288,027	\$ 28,910,364
15	Annual Sewage Flow - Fairfax Co. to Arlington	Input	-	-	797,525	797,525	797,525	797,525	797,525	797,525
16	Annual Sewage Flow at Arlington (WPCF)	Input	-	-	8,175,498	8,175,498	8,175,498	8,175,498	8,175,498	8,175,498
17	Allocation Factor (Line 15/Line 16)		9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%
18	Fairfax County Allocable O&M Payment		\$ 2,534,430	\$ -	\$ 2,534,430	\$ 2,592,722	\$ 2,647,169	\$ 2,700,112	\$ 2,759,515	\$ 2,820,224
19	Accruals/Fiscal Year End Adjustments [6]		-	-	-	-	-	-	-	-
20	Total Arlington WPCF - O&M Costs Allocated to Fairfax Co.[5]		\$ 2,534,430	\$ -	\$ 2,534,430	\$ 2,592,722	\$ 2,647,169	\$ 2,700,112	\$ 2,759,515	\$ 2,820,224
Blue Plains - DCWater										
<u>DCWater - O&M Costs Allocated to Fairfax Co.[7]</u>										
21	Interceptors	Inflation	\$ 671,559	\$ -	\$ 671,559	\$ 700,436	\$ 730,555	\$ 761,969	\$ 794,734	\$ 828,908
22	Pumping Stations	Inflation	432,432	-	432,432	451,027	470,421	490,649	511,747	533,752
23	Screen Chambers	Inflation	115	-	115	120	125	130	136	142
24	Wastewater Treatment Plant	Inflation	11,340,505	-	11,340,505	11,828,147	12,336,757	12,867,238	13,420,529	13,997,612
25	D.C. Sludge Costs	DC Sludge	2,118,288	-	2,118,288	2,209,374	2,304,377	2,403,465	2,506,814	2,614,607
26	Indirect Costs	Inflation	2,888,431	-	2,888,431	3,012,634	3,142,177	3,277,291	3,418,215	3,565,198
27	Rental and User Fees	Inflation	496,607	-	496,607	517,961	540,233	563,463	587,692	612,963
28	WSSC Biosolids	Inflation	839,216	-	839,216	875,302	912,940	952,196	993,140	1,035,845
29	Excess Flow and Other Payments	Inflation	-	-	-	-	-	-	-	-
30	Additional Costs	Inflation	-	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)
31	Accruals/Fiscal Year End Adjustments [8]	Inflation	-	-	-	-	-	-	-	-
32	Total DCWater - O&M Costs Allocated to Fairfax Co.[7]		\$ 18,787,153	\$ (1,000,000)	\$ 17,787,153	\$ 18,595,001	\$ 19,437,585	\$ 20,316,401	\$ 21,233,007	\$ 22,189,027
	Percentage Change									
Upper Occoquan Sewage Authority - UOSA										
<u>UOSA - O&M Costs Allocated to Fairfax Co.[9]</u>										
33	UOSA Total Operating Expenses	Composite	\$ 35,906,380	\$ 1,077,191	\$ 36,983,571	\$ 37,834,193	\$ 38,628,712	\$ 39,401,286	\$ 40,268,114	\$ 41,154,013
34	Annual Sewage Flow - Fairfax Co. to UOSA (MG)	Input	-	-	4,458,901	4,458,901	4,458,901	4,458,901	4,458,901	4,458,901
35	Annual Sewage Flow at UOSA (MG)	Input	-	-	12,270,000	12,270,000	12,270,000	12,270,000	12,270,000	12,270,000
36	Allocation Factor		36.3%	0.0%	36.3%	36.3%	36.3%	36.3%	36.3%	36.3%
37	Fairfax County Allocable O&M Payment		13,048,328	391,450	13,439,778	13,748,893	14,037,620	14,318,372	14,633,376	14,955,311
38	Accruals/Fiscal Year End Adjustments [10]		-	-	-	-	-	-	-	-
39	Reserve and Maintenance Fund Deposit:	Composite	\$ 4,809,192	\$ -	\$ 4,809,192	\$ 4,919,803	\$ 5,023,119	\$ 5,123,581	\$ 5,236,300	\$ 5,351,499
40	Fairfax Co. Reserved Capac. from UOSA	Input	-	-	22.10	22.10	22.10	22.10	22.10	22.10
41	Total Capacity of UOSA WWTP	Input	-	-	54.00	54.00	54.00	54.00	54.00	54.00
42	Allocation Factor		40.93%	40.93%	40.93%	40.93%	40.93%	40.93%	40.93%	40.93%

Footnotes on Page 2 of 2.

**Table 4
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis
Projection of Operating Expenses for Treatment By Contract (TBC)**

Line No.	Description	Escalation Reference [1]	Projected Fiscal Year Ending June 30							
			Proposed Budget	Adjustments	Adjusted 2024	2025	2026	2027	2028	2029
43	Fairfax County Allocable R&M Deposits		\$ 1,968,205	\$ -	\$ 1,968,205	\$ 2,013,474	\$ 2,055,757	\$ 2,096,872	\$ 2,143,003	\$ 2,190,149
44	Accruals/Fiscal Year End Adjustments [10]		-	-	-	-	-	-	-	-
45	Total UOSA Allocated Cost		<u>\$ 15,016,533</u>	<u>\$ 391,450</u>	<u>\$ 15,407,983</u>	<u>\$ 15,762,367</u>	<u>\$ 16,093,377</u>	<u>\$ 16,415,244</u>	<u>\$ 16,776,379</u>	<u>\$ 17,145,460</u>
Loudoun County Sanitation Authority										
47	Fairfax Flow to BRWRF		-	-	-	-	-	-	-	-
48	Total Wastewater Treated at BRWRF		-	-	-	-	-	-	-	-
49	Fairfax Proportion		0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
50	LCSA Total Operating Costs		\$ 21,500,000		\$ 21,500,000	\$ 21,500,000	\$ 21,500,000	\$ 21,500,000	\$ 21,500,000	\$ 21,500,000
51	Fairfax County Allocable O&M Payment		-		-	-	-	-	-	-

Footnotes:

- [1] Escalation reference apply to costs beginning with the Fiscal Year 2025 and beyond.
- [2] Forecasted amounts are based on: i) apportionment of costs from budgetary estimates by AlexRenew; and ii) escalation of costs based on information provided by AlexRenew and discussions with WMP Staff.
- [3] Projected IR&R contribution based on the master indenture of trust agreement that entitles AlexRenew to collect IR&R Funds not to exceed 0.70% of the prior year's gross utility plant in service multiplied by the Fairfax Allocation of such plant in service (currently at 60.0%).
- [4] Adjustment made for Historical Fiscal Years to account for: i) true up of the operating costs performed by AlexRenew at the end of the Fiscal Year; and ii) adjustments to account for the difference in the Fiscal Year period between AlexRenew and Fairfax County.
- [5] Forecasted amounts are based on: i) apportionment of costs from budgetary estimates by Arlington County; and ii) escalation of costs based on information provided by Arlington County and discussions with WMP Staff.
- [6] Adjustment made for Historical Fiscal Years to account for: i) true up of the operating costs performed by Arlington County at the end of the Fiscal Year, if any.
- [7] Forecasted amounts are based on apportionment of costs from budgetary estimates by DCWater; and ii) escalation of costs based on information provided by DCWater and discussions with WMP Staff.
- [8] Adjustment made for Historical Fiscal Years to account for: i) true up of the operating costs performed by DCWater at the end of the Fiscal Year; and ii) adjustments to account for the difference in the Fiscal Year period between DCWater and Fairfax County.
- [9] Forecasted amounts are based on: i) apportionment of costs from budgetary estimates by UOSA; and ii) escalation of costs based on information provided by UOSA and discussions with WMP Staff.
- [10] Adjustment made for Historical Fiscal Years to account for: i) true up of the operating costs performed by UOSA at the end of the Fiscal Year; and ii) Interest earnings and additional charges/credits that occurred during the F

**Table 5
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis**

Historical and Projected Sales of Service (Bulk Sales) and Other Revenue

Total Capacity Reservation for County	31.00	31.00	31.00	31.00	31.00	31.00
Allocation Percentage - Capital Costs	9.68%	9.68%	9.68%	9.68%	9.68%	9.68%
CIP costs allocated to Herndon	\$1,806,290	\$2,748,484	\$2,840,710	\$4,182,000	\$4,541,613	\$3,808,645
Adjustments	0	0	0	0	0	0
Total Capital Reimbursement - Herndon	\$1,806,290	\$2,748,484	\$2,840,710	\$4,182,000	\$4,541,613	\$3,808,645
Determination of Rate						
Adjusted Total Sales of Service Revenue - Herndon	\$1,932,015	\$2,012,773	\$2,096,687	\$2,183,891	\$2,274,505	\$2,368,664
Total Capital Reimbursement - Herndon	\$1,806,290	\$2,748,484	\$2,840,710	\$4,182,000	\$4,541,613	\$3,808,645
Total Payment due from Herndon	\$3,738,306	\$4,761,257	\$4,937,397	\$6,365,891	\$6,816,118	\$6,177,309
Sewage Flows (000's gallons)	1,078,064	1,078,064	1,078,064	1,078,064	1,078,064	1,078,064
Rate Charged	\$3.47	\$4.42	\$4.58	\$5.90	\$6.32	\$5.73
Calculation of Balance (Informational)						
Beginning Balance Due from/(to) Herndon	\$0	\$0	\$0	\$0	\$0	\$0
Ending Balance Due from/(to) Herndon	\$0	\$0	\$0	\$0	\$0	\$0
[4] Arlington County:						
District of Columbia Conveyance and Disposal Charge						
Blue Plains - O&M Payments	\$17,290,546	\$18,077,040	\$18,897,352	\$19,752,938	\$20,645,315	\$21,576,064
Sewage Flows - Arlington County	478,296	478,296	478,296	478,296	478,296	478,296
Total Flows sent to Blue Plains	9,925,226	9,959,694	9,994,318	10,029,065	10,063,967	10,099,023
Allocation Percentage	4.82%	4.80%	4.79%	4.77%	4.75%	4.74%
Blue Plains O&M Costs Allocable to Arlington County	\$833,230	\$868,117	\$904,367	\$942,037	\$981,181	\$1,021,856
Adjustments for Accruals/True-Up	0	0	0	0	0	0
Adjusted Blue Plains O&M Costs - Arlington County	\$833,230	\$868,117	\$904,367	\$942,037	\$981,181	\$1,021,856
Blue Plains Annual User Fee Payments (IMA)						
Fairfax County Payments	\$496,607	\$517,961	\$540,233	\$563,463	\$587,692	\$612,963
Capacity Reservation - Arlington	1.80	1.80	1.80	1.80	1.80	1.80
Total Capacity Reservation for Fairfax County	31.00	31.00	31.00	31.00	31.00	31.00
Arlington County Share of Payments	5.81%	5.81%	5.81%	5.81%	5.81%	5.81%
Blue Plains User Fee Payments (IMA)	\$28,835	\$30,075	\$31,368	\$32,717	\$34,124	\$35,591
Pimmit Run Trunk Sewer O&M Payment						
Annual O&M Costs - Fairfax Trunk Sewers	\$0	\$0	\$0	\$0	\$0	\$0
Sewage Flows - Arlington County	0	0	0	0	0	0
Annual Flow of Sewage - Pimmit Run System of Fairfax	1	1	1	1	1	1
Allocation Percentage - Pimmit Run O&M Costs	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Pimmit Run O&M Costs Allocable to Arlington	\$0	\$0	\$0	\$0	\$0	\$0
Adjustments for Accruals/True-Up	0	0	0	0	0	0
Adjusted Pimmit Run Trunk Sewer O&M payment	\$0	\$0	\$0	\$0	\$0	\$0
Total Sales of Services Receivables - Arlington County	\$862,066	\$898,192	\$935,735	\$974,754	\$1,015,305	\$1,057,447
Adjustments for Accruals/True-Up	\$0	\$0	\$0	\$0	\$0	\$0
Adjusted Total Sales of Service Revenue for Arlington County	\$862,066	\$898,192	\$935,735	\$974,754	\$1,015,305	\$1,057,447
Blue Plains - Capital Payment						
Blue Plains CIP Costs	\$21,580,000	\$33,330,000	\$34,523,000	\$46,884,000	\$48,546,000	\$39,601,000
Capacity Reservation - Arlington	1.80	1.80	1.80	1.80	1.80	1.80
Total Capacity Reservation for County	31.00	31.00	31.00	31.00	31.00	31.00
Allocation Percentage	5.81%	5.81%	5.81%	5.81%	5.81%	5.81%
CIP costs Allocated to Arlington	\$1,253,032	\$1,935,290	\$2,004,561	\$2,722,297	\$2,818,800	\$2,299,413
Accrual/Adjustments	0	0	0	0	0	0
Total Capital Reimbursement - Arlington	\$1,083,774	\$1,649,090	\$1,704,426	\$2,509,200	\$2,724,968	\$2,285,187
[5] Fort Belvoir:						
Noman Cole CIP Costs	142,775,000	177,317,000	139,242,333	108,860,333	114,833,333	64,246,000
Capacity Reservation - Fort Belvoir	3.00	3.00	3.00	3.00	3.00	3.00
Total Payment due from Herndon	67.00	67.00	67.00	67.00	67.00	67.00
Allocation Percentage	4.48%	4.48%	4.48%	4.48%	4.48%	4.48%
CIP costs Allocated to Arlington	\$6,392,910	\$7,939,567	\$6,234,731	\$4,874,343	\$5,141,791	\$2,876,687
Accrual/Adjustments	0	0	0	0	0	0
Total Capital Reimbursement - Fort Belvoir	\$6,392,910	\$7,939,567	\$6,234,731	\$4,874,343	\$5,141,791	\$2,876,687
Norman Cole O&M Payment	0	0	0	0	0	0
Sewage Flows	398,434	398,434	398,434	398,434	398,434	398,434
Rate Charged	\$6.96	\$7.24	\$7.67	\$8.12	\$8.60	\$9.11
Total Sales of Services Receivables - Fort Belvoir	\$2,771,507	\$2,886,167	\$3,056,520	\$3,236,701	\$3,426,709	\$3,629,822
Accrual/Adjustments	0	0	0	0	0	0
Adjusted Total Sales of Service Revenue for Fort Belvoir	\$2,771,507	\$2,886,167	\$3,056,520	\$3,236,701	\$3,426,709	\$3,629,822
[6] City of Falls Church:						
AlexRenew O&M Payment						
AlexRenew WWTP O&M Costs	\$17,567,678	\$18,155,327	\$18,752,811	\$19,303,875	\$19,857,807	\$20,427,781
City of Falls Church Flows	400,916	400,916	400,916	400,916	400,916	400,916
Total Flows Sent to AlexRenew	6,116,451	6,145,949	6,169,654	6,193,443	6,217,338	6,241,339
Allocation Percentage	5.81%	5.81%	5.81%	5.81%	5.81%	5.81%
AlexRenew O&M Costs allocable to City of Falls Church	\$1,151,511	\$1,184,318	\$1,218,594	\$1,249,585	\$1,280,502	\$1,312,190
Adjustments for Accruals/True-Up	(212,726)	(228,980)	(239,505)	(246,936)	(254,596)	(262,494)
Adjusted Total Sales of Service Revenue for the City of Falls Church	\$938,785	\$955,338	\$979,088	\$1,002,649	\$1,025,905	\$1,049,696
AlexRenew O&M Payment						
AlexRenew WWTP O&M Costs	\$36,420,000	\$38,991,000	\$40,884,000	\$45,050,000	\$38,730,000	\$38,343,000
City of Falls Church Flows	1.0	1.0	1.0	1.0	1.0	1.0
Total Flows Sent to AlexRenew	32	32	32	32	32	32
Allocation Percentage	3.09%	3.09%	3.09%	3.09%	3.09%	3.09%
AlexRenew O&M Costs allocable to City of Falls Church	\$1,124,074	\$1,203,426	\$1,261,852	\$1,390,432	\$1,195,370	\$1,183,426
Adjustments for Accruals/True-Up	0	0	0	0	0	0
Adjusted Total Sales of Service Revenue for the City of Falls Church	\$1,124,074	\$1,203,426	\$1,261,852	\$1,390,432	\$1,195,370	\$1,183,426

Historical and Projected Sales of Service (Bulk Sales) and Other Revenue

[7] **Town of Vienna**

Payment Number 1 - O&M Payments

A. Noman Cole O&M Payment

Noman Cole O&M Costs	\$41,078,961	\$42,101,617	\$43,403,120	\$44,736,756	\$46,112,693	\$47,524,335
Plus: Overhead @ 4.0% of Allocable O&M Costs	1,643,158	1,684,065	1,736,125	1,789,470	1,844,508	1,900,973
Total Allocable Costs	\$42,722,120	\$43,785,681	\$45,139,245	\$46,526,226	\$47,957,201	\$49,425,309

Town of Vienna Sewage Flow

Total Noman Cole Sewage Flow	337,114	337,114	337,114	337,114	337,114	337,114
Allocation Percentage	14,423,178	14,479,909	14,538,873	14,597,983	14,657,604	14,717,480
	2.34%	2.33%	2.32%	2.31%	2.30%	2.29%

Noman Cole O&M Costs allocable to Town of Vienna

	\$998,547	\$1,019,396	\$1,046,647	\$1,074,439	\$1,102,980	\$1,132,121
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B. Alex Renew O&M Payment

Alex Renew O&M Costs Allocable to Fairfax	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Plus: Overhead @ 4.0% of Allocable O&M Costs	\$17,567,678	\$18,155,327	\$18,752,811	\$19,303,875	\$19,857,807	\$20,427,781
Total Allocable Costs	702,707	726,213	750,112	772,155	794,312	817,111
	\$18,270,385	\$18,881,540	\$19,502,923	\$20,076,030	\$20,652,119	\$21,244,893

Accotink Flows - Vienna

Total Flows to Alex Renew	0	5,900	5,900	5,900	5,900	5,900
Allocation Percentage	6,116,451	6,145,949	6,169,654	6,193,443	6,217,338	6,241,339
	0.00%	0.10%	0.10%	0.10%	0.09%	0.09%

Alex Renew O&M Cost Allocated to Town of Vienna

	\$0	\$18,126	\$18,651	\$19,125	\$19,598	\$20,083
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Total O&M Payments

Adjustments for Accruals/True-Up	\$998,547	\$1,037,522	\$1,065,298	\$1,093,564	\$1,122,578	\$1,152,204
Adjusted Total O&M Payments	0	0	0	0	0	0
	\$998,547	\$1,037,522	\$1,065,298	\$1,093,564	\$1,122,578	\$1,152,204

Payment Number 2 - Capital Payments

A. Capital Contributions for Nitrogen Removal

	\$0	\$0	\$0	\$0	\$0	\$0
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B. Noman Cole CIP

	142,775,000	177,317,000	139,242,333	108,860,333	114,833,333	64,246,000
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Capacity Reservation - Vienna

Total Capacity - Noman Cole	\$67	\$67	\$67	\$67	\$67	\$67
Allocation Percentage - Capital Costs	\$1	\$1	\$1	\$1	\$1	\$1
	\$0	\$0	\$0	\$0	\$0	\$0

Total Capital Payments

Accrual/Adjustments	\$2,663,713	\$3,308,153	\$2,597,805	\$2,030,976	\$2,142,413	\$1,198,619
Adjusted Total Capital Payments	0	0	0	0	0	0
	\$2,663,713	\$3,308,153	\$2,597,805	\$2,030,976	\$2,142,413	\$1,198,619

[8] **FCWA:**

Sewage Flows

Rate Charged	20,586	20,586	20,586	20,586	20,586	20,586
Total Sales of Services Receivables - Fairfax Water	\$8.37	\$8.72	\$9.20	\$9.74	\$10.32	\$10.93
Adjustments for Accruals/True-Up	\$172,253	\$179,561	\$189,391	\$200,559	\$212,345	\$224,902
Adjusted Total Sales of Service Revenue for Fairfax Water	0	0	0	0	0	0
	\$172,253	\$179,561	\$189,391	\$200,559	\$212,345	\$224,902

Blue Plains CIP Costs

	\$15,774,935	\$24,003,426	\$24,808,865	\$36,522,800	\$39,663,419	\$33,262,168
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Capacity Reservation - FCWA

Total Capacity - Noman Cole	67	67	67	67	67	67
Allocation Percentage - Capital Costs	1.00	1.00	1.00	1.00	1.00	1.00
	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%

Total Capital Payments

Accrual/Adjustments	\$235,446.80	\$358,260.09	\$370,281.56	\$545,116.42	\$591,991.33	\$496,450.26
Adjusted Total Capital Payments	(235,447)	(358,260)	(370,282)	(545,116)	(591,991)	(496,450)
	\$172,253	\$179,561	\$189,391	\$200,559	\$212,345	\$224,902

[9] **L-95 ERF (Covanta):**

Sewage Flows

Rate Charged	36,318	36,318	36,318	36,318	36,318	36,318
Total Sales of Services Receivables - Covanta	\$8.37	\$8.72	\$9.20	\$9.74	\$10.32	\$10.93
Adjustments for Accruals/True-Up	\$303,887	\$316,779	\$334,121	\$353,823	\$374,615	\$396,769
Adjusted Total Sales of Service Revenue for Covanta	0	0	0	0	0	0
	\$303,887	\$316,779	\$334,121	\$353,823	\$374,615	\$396,769

B. Noman Cole CIP

	\$142,775,000	\$177,317,000	\$139,242,333	\$108,860,333	\$114,833,333	\$64,246,000
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Capacity Reservation - Vienna

Total Capacity - Noman Cole	67	67	67	67	67	67
Allocation Percentage - Capital Costs	1.00	1.00	1.00	1.00	1.00	1.00
	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%

Total Capital Payments

Accrual/Adjustments	\$2,130,970	\$2,646,522	\$2,078,244	\$1,624,781	\$1,713,930	\$958,896
Adjusted Total Capital Payments	(2,130,970)	(2,646,522)	(2,078,244)	(1,624,781)	(1,713,930)	(958,896)
	\$303,887	\$316,779	\$334,121	\$353,823	\$374,615	\$396,769

[10] **Loudoun County Sanitation Authority:**

1. UOSA O&M Payments Billed to Fairfax Co.

Fairfax Co. Paym. of O&M to UOSA	\$13,439,778	\$13,748,893	\$14,037,620	\$14,318,372	\$14,633,376	\$14,955,311
LCSA Share of Payments	1.23%	1.23%	1.23%	1.23%	1.23%	1.23%
UOSA O&M Payments Allocated to LCSA	\$165,758	\$169,570	\$173,131	\$176,594	\$180,479	\$184,450

2. UOSA Reserve Maintenance Billed to Fairfax Co.

Fairfax County Payments	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
LCSA Share of Payments	\$1,968,205	\$2,013,474	\$2,055,757	\$2,096,872	\$2,143,003	\$2,190,149
UOSA R&M Payments Allocated to LCSA	4.52%	4.52%	4.52%	4.52%	4.52%	4.52%
	\$89,059	\$91,107	\$93,021	\$94,881	\$96,968	\$99,102

Total Sales of Services Allocated to LCSA

Adjustments for Accruals/True-Up	\$254,817	\$260,678	\$266,152	\$271,475	\$277,448	\$283,551
Adjusted Total Sales of Service Revenue for LCSA	0	0	0	0	0	0
	\$254,817	\$260,678	\$266,152	\$271,475	\$277,448	\$283,551

[11] Amounts Shown considered as a Non-recurring Revenue pursuant to the General Bond Resolution

[12] Amounts Shown reflect SOS customer direct capital contributions. Other SOS customers such as Fort Belvoir are charged a single rate to recover both operating and capital cost apportionment and is considered an oper

Table 6
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Development of Wastewater System Revenue Requirements and Revenue Sufficiency

Line No.	Description	Projected Fiscal Year Ending June 30,					
		2024	2025	2026	2027	2028	2029
1	Total Operating Expenses (Including TBC) [1]	\$ 140,193,393	\$ 142,695,172	\$ 147,462,064	\$ 152,312,176	\$ 157,376,635	\$ 162,029,531
	Debt Service [2]						
	Senior Debt Service						
2	Existing Debt	\$ 36,991,731	\$ 36,976,929	\$ 37,020,171	\$ 37,010,629	\$ 36,995,085	\$ 31,357,802
3	Proposed Debt [3]	2,897,325	11,589,299	21,430,086	31,270,872	39,262,062	53,326,399
4	Subtotal - Senior Debt Service	\$ 39,889,056	\$ 48,566,228	\$ 58,450,257	\$ 68,281,502	\$ 76,257,148	\$ 84,684,201
	Subordinate Debt Service						
5	Existing Debt (Includes UOSA Planned Debt) [4]	\$ 23,290,012	\$ 23,747,430	\$ 24,049,537	\$ 24,048,665	\$ 24,050,780	\$ 17,966,302
6	Proposed Debt [5]	-	1,988,884	1,988,884	1,988,884	6,394,687	6,394,687
7	Subtotal - Subordinate Debt Service	\$ 23,290,012	\$ 25,736,314	\$ 26,038,421	\$ 26,037,549	\$ 30,445,468	\$ 24,360,989
8	Total Debt Service	\$ 63,179,068	\$ 74,302,542	\$ 84,488,677	\$ 94,319,050	\$ 106,702,615	\$ 109,045,190
	Other Revenue Requirements						
9	Transfer to Capital - Subfund C69300 (Programmed)	\$ 63,961,681	\$ 76,590,524	\$ 81,076,060	\$ 86,237,641	\$ 89,486,931	\$ 104,495,256
10	Transfer to Extension - Subfund 69300A	3,000,000	1,478,927	-	-	-	-
11	Transfer to Reserves - Fund 69000	1,110,000	1,028,128	1,958,997	1,993,196	2,081,285	1,912,149
12	Capital Improvements Funded from Rates	13,242,784	6,000,000	6,180,000	6,365,400	6,556,362	6,753,053
13	Total Other Revenue Requirements	\$ 81,314,465	\$ 85,097,579	\$ 89,215,057	\$ 94,596,237	\$ 98,124,578	\$ 113,160,458
14	Gross Revenue Requirements	\$ 284,686,926	\$ 302,095,292	\$ 321,165,798	\$ 341,227,463	\$ 362,203,828	\$ 384,235,179
	Less Income and Funds from Other Sources:						
15	Sales of Service (Bulk Revenue) [6]	\$ 11,143,886	\$ 11,517,779	\$ 11,973,177	\$ 12,448,591	\$ 12,943,761	\$ 13,462,329
16	Other Operating Revenues [7]	775,000	775,000	775,000	775,000	775,000	775,000
17	Unrestricted Interest Income [8]	4,579,000	4,900,000	5,641,000	6,338,000	6,598,000	6,788,000
18	Transfers from Reserves - Fund 69000	-	-	-	-	-	-
19	Availability Fees Used to Pay Debt	18,286,001	18,895,975	19,770,973	20,446,046	21,331,985	22,015,343
20	Subtotal Other Operating Revenues	\$ 34,783,887	\$ 36,088,754	\$ 38,160,150	\$ 40,007,638	\$ 41,648,746	\$ 43,040,673
21	Net Revenue Requirements	\$ 249,903,039	\$ 266,006,539	\$ 283,005,648	\$ 301,219,826	\$ 320,555,082	\$ 341,194,507
	Revenues from Proposed Sewer Service Charges:						
22	Proposed Rate Adjustments - Effective	0.0%	5.9%	5.9%	5.9%	5.9%	5.9%
23	Rate Revenues Under Proposed Rates	\$ 249,903,039	\$ 266,006,538	\$ 283,005,648	\$ 301,219,826	\$ 320,555,083	\$ 341,194,506
24	Rate Revenue Surplus/(Deficiency)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Footnotes on Page 2 of 2.

Table 6
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Development of Wastewater System Revenue Requirements and Revenue Sufficiency

Line No.	Description	Projected Fiscal Year Ending June 30,				
		2024	2025	2026	2027	2028

Footnotes:

- [1] Amounts shown derived from information as contained on Table 3.
- [2] The total Outstanding Senior Lien Debt Service include debt service associated with the Sewer Revenue Bonds, Series 2012 (the "Series 2012 Bonds"), the Sewer Revenue Refunding Bonds, Series 2014 (the "Series 2014 Bonds"), the Sewer Revenue Refunding Bonds, Series 2016A (the "Series 2016A Bonds"), the Sewer Revenue Bonds, Series 2017 (the "Series 2017 Bonds"), and the Sewer Revenue Bonds, Series 2021 (the "Series 2021 Bonds").

[3] The following table summarizes the assumptions utilized for additional Senior Lien Debt:

	2024	2026	2028	2033
Term-Years	30	30	30	30
Interest Rate	4.50%	5.00%	5.10%	5.60%
Issue Month - Principal Pmt (Jan=1)	4	1	1	7
Total Projects Funded (Millions)	\$ 175.0	\$ 361.3	\$ 288.1	\$ 47.5
Total Principal Issued (Millions)	\$ 188.8	\$ 393.6	\$ 313.4	\$ 48.2
Annual Debt Service (Millions)	\$ 11.6	\$ 19.7	\$ 18.5	\$ 0.0

- [4] Amount shown includes debt service associated with outstanding VRA Loan 2001 C-515259-01, VRA Loan 2002 C-515273-01 and various outstanding UOSA debt issues.
- [5] Based on discussions with WMP staff, forecast assumes the County will participate in issuances by UOSA.
- [6] Amounts shown derived from information as contained on Table 5.
- [7] Other Revenues includes revenues derived from: miscellaneous revenue, pretreatment charges and the sale of property. Amount shown include Non-Recurring Revenues from growth related miscellaneous charges.
- [8] Amounts shown derived from information as contained on Table 9.

Table 7
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Projected Operating Results and Debt Service Coverage Analysis

Line No.	Description	Projected Fiscal Year Ending June 30,					
		2024	2025	2026	2027	2028	2029
Operating Revenues: [1]							
1	Sewer Service Charges (Retail Customers)	\$ 249,903,039	\$ 266,006,538	\$ 283,005,648	\$ 301,219,826	\$ 320,555,083	\$ 341,194,506
2	Sales of Service (Bulk revenue)	11,143,886	11,517,779	11,973,177	12,448,591	12,943,761	13,462,329
3	Other Revenues [2]	775,000	775,000	775,000	775,000	775,000	775,000
4	Interest Income	4,579,000	4,900,000	5,641,000	6,338,000	6,598,000	6,788,000
5	Other	-	-	-	-	-	-
6	Total Operating Revenues Before Availability Charge:	\$ 266,400,925	\$ 283,199,317	\$ 301,394,825	\$ 320,781,417	\$ 340,871,843	\$ 362,219,835
Operating Expenses: [3]							
7	Total Operating Expenses	\$ 140,193,393	\$ 142,695,172	\$ 147,462,064	\$ 152,312,176	\$ 157,376,635	\$ 162,029,531
8	Net Operating Revenues	\$ 126,207,532	\$ 140,504,146	\$ 153,932,761	\$ 168,469,241	\$ 183,495,208	\$ 200,190,304
Non-Recurring Revenues and Revenue Subfund Credit: [4]							
9	Availability Charge Revenues [5]	\$ 18,286,001	\$ 18,895,975	\$ 19,770,973	\$ 20,446,046	\$ 21,331,985	\$ 22,015,343
10	Availability Charge Interest Income [5]	-	-	-	-	-	-
11	Other Non-recurring Revenues [6]	260,000	261,073	262,152	263,234	264,321	265,413
12	Moneys Held to Credit of Revenue Subfund [7]	-	-	-	-	-	-
13	Net Revenues [8]	\$ 144,753,532	\$ 159,661,194	\$ 173,965,886	\$ 189,178,522	\$ 205,091,514	\$ 222,471,060
Rate Covenant Test [9]							
TEST 1 - Net Revenue Less Excluded Revenues							
14	Net Revenues [8]	\$ 144,753,532	\$ 159,661,194	\$ 173,965,886	\$ 189,178,522	\$ 205,091,514	\$ 222,471,060
Less: Excluded Revenues [4]:							
15	Availability Charge Revenues	\$ (18,286,001)	\$ (18,895,975)	\$ (19,770,973)	\$ (20,446,046)	\$ (21,331,985)	\$ (22,015,343)
16	Availability Charge Interest Earned	-	-	-	-	-	-
17	Other Non-recurring Revenues [6]	(260,000)	(261,073)	(262,152)	(263,234)	(264,321)	(265,413)
18	Net Revenues Available Less Excluded Revenues	\$ 126,207,532	\$ 140,504,146	\$ 153,932,761	\$ 168,469,241	\$ 183,495,208	\$ 200,190,304
Debt Service Requirements:							
Principal and Interest Requirements [10]							
19	Sewer Revenue Refunding Bonds, Series 2014	\$ 5,958,531	\$ 5,921,406	\$ 5,947,398	\$ 5,966,138	\$ 5,971,740	\$ 248,831
20	Series 2016A Refunding Bonds [11]	12,729,304	12,741,460	12,751,085	12,718,658	12,687,763	12,768,179
21	Sewer Revenue Bonds, Series 2017 [11]	5,549,542	5,554,292	5,554,979	5,555,958	5,561,990	5,563,208
22	Series 2021A [11]	11,858,704	11,864,121	11,871,058	11,874,225	11,877,944	11,881,933
23	Series 2021B [11]	895,650	895,650	895,650	895,650	895,650	895,650
24	Series 2024 Bonds [11]	2,897,325	11,589,299	11,589,299	11,589,299	11,589,299	11,589,299
25	Series 2026 Bonds [11]	0	0	9,840,787	19,681,574	19,681,574	23,281,699
26	Series 2028 Bonds [11]	0	0	0	0	7,991,190	18,455,400
28	Series 2030 Bonds [11]	0	0	0	0	0	0
29	Series 2032 Bonds [11]	0	0	0	0	0	0
30	Total Debt Service Requirements	\$ 39,889,056	\$ 48,566,228	\$ 58,450,257	\$ 68,281,502	\$ 76,257,148	\$ 84,684,201
31	Calculated Coverage	3.16	2.89	2.63	2.47	2.41	2.36
32	Required Coverage	1.25	1.25	1.25	1.25	1.25	1.25
33	Policy Target	2.00	2.00	2.00	2.00	2.00	2.00

-AND-

Footnotes on Page 2 of 3.

**Table 7
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis**

Projected Operating Results and Debt Service Coverage Analysis

TEST 2 - Net Revenues With Excluded Revenues							
34	Net Revenues [8]	\$ 144,753,532	\$ 159,661,194	\$ 173,965,886	\$ 189,178,522	\$ 205,091,514	\$ 222,471,060
Debt Service Requirements:							
Subordinate Obligations [12]:							
35	EDA Facilities Revenue Bonds, Series 2021 [11]	\$ 1,696,683	\$ 1,697,583	\$ 1,697,283	\$ 1,696,354	\$ 1,700,000	\$ 1,697,250
35	Subtotal VRA Debt Service	\$ 1,696,683	\$ 1,697,583	\$ 1,697,283	\$ 1,696,354	\$ 1,700,000	\$ 1,697,250
UOSA Subordinate Debt							
36	UOSA Existing Subordinate Debt	\$ 21,593,328	\$ 22,049,847	\$ 22,352,254	\$ 22,352,311	\$ 22,350,780	\$ 16,269,052
37	Subtotal UOSA Debt Service	\$ 21,593,328	\$ 22,049,847	\$ 22,352,254	\$ 22,352,311	\$ 22,350,780	\$ 16,269,052
38	UOSA Proposed Subordinate Debt [13]	-	1,988,884	1,988,884	1,988,884	1,988,884	1,988,884
39	UOSA Proposed Subordinate Debt [13]	-	-	-	-	4,405,804	4,405,804
40	UOSA Proposed Subordinate Debt [13]	-	-	-	-	-	-
41	UOSA Proposed Subordinate Debt [13]	-	-	-	-	-	-
42	Total Subordinate Obligations	\$ 23,290,012	\$ 25,736,314	\$ 26,038,421	\$ 26,037,549	\$ 30,445,468	\$ 24,360,989
43	Principal and Interest Requirements [10]	\$ 39,889,056	\$ 48,566,228	\$ 58,450,257	\$ 68,281,502	\$ 76,257,148	\$ 84,684,201
44	Total Debt Service Requirements	\$ 63,179,068	\$ 74,302,542	\$ 84,488,677	\$ 94,319,050	\$ 106,702,615	\$ 109,045,190
45	Calculated Coverage	2.29	2.15	2.06	2.01	1.92	2.04
46	Required Minimum Coverage	1.00	1.00	1.00	1.00	1.00	1.00
47	Min. Recommended Target for Test 2 - 2.00	2.00	2.00	2.00	2.00	2.00	2.00
48	Net Revenues [8]	\$ 144,753,532	\$ 159,661,194	\$ 173,965,886	\$ 189,178,522	\$ 205,091,514	\$ 222,471,060
Less Transfers to Other Funds [14]:							
49	Debt Service Subfund [15]	\$ 39,889,056	\$ 48,566,228	\$ 58,450,257	\$ 68,281,502	\$ 76,257,148	\$ 84,684,201
50	Subordinate Obligations Subfund [16]	23,290,012	25,736,314	26,038,421	26,037,549	30,445,468	24,360,989
51	Amount Available for Other Purposes	\$ 81,574,464	\$ 85,358,652	\$ 89,477,209	\$ 94,859,471	\$ 98,388,899	\$ 113,425,870

Footnotes:

[1] Operating Revenues reflect rates recently adopted by the Board of Supervisors pursuant to the Rate Ordinance

	Projected Fiscal Year Ending June 30,					
	2024 (Existing)	2025 (Recommended)	2026 (Recommended)	2027 (Recommended)	2028 (Recommended)	2029 (Recommended)
<u>Recommended Rates</u>						
Quarterly Base Charge	\$ 44.81	\$ 49.73	\$ 52.62	\$ 55.78	\$ 59.08	\$ 62.57
Quarterly Billing Charge	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
Flow Charge	8.46	8.81	9.33	9.88	10.46	11.08
Effective Rate Revenue Adjustment (%)		5.9%	5.9%	5.9%	5.9%	5.9%
Annualized Rate Revenue Adjustment (%) [*]		5.8%	5.9%	5.9%	5.9%	5.9%

[*] Reflects expected annualized increase to rate revenues from adopted and forecasted rate changes, everything else held constant, and assuming they are effective for an entire fiscal year or

- [2] Amounts shown include other miscellaneous revenues of the System (customer service fees, sale of property, etc.); amounts do not include Non-Recurring Revenues associated with lateral spur
- [3] Amounts include the Operating Component of the Cost of Contracted Services, i.e., treatment by contract (TbCs) costs. Amounts shown do not include depreciation and amortization expenses, which are non-cash expenses and are not considered Operating Expenses as defined in the General Bond Resolution.
- [4] The sum of the amounts shown for Non-recurring Revenue and the Revenue Subfund credit balance is defined in the General Bond Resolution as the "Excluded Revenues".
- [5] Amounts shown represent fees charged to new development and interest income earned on the balance of deposits from such fees for the allocable share of conveyance, treatment and disposal
- [6] Amounts shown include lateral spur fees, connection charges for meter replacement and other similar charges which are considered as a Non-recurring Revenues in the General Bond Resolution (represents a one-time charge generally to new development to initiate or receive service).

Projected Operating Results and Debt Service Coverage Analysis

Footnotes (continued):

- [7] Pursuant to the General Bond Resolution, Net Revenues shall include income previously received and currently held by the County to the credit of the Revenue Subfund and all rights to receive the same (cash and cash equivalents). For the purposes of this report, no recognition for the availability of funds held by the County in the Revenue Subfund has been assumed for purposes of determining Net Revenues as defined in the General Bond Resolution; such amounts were assumed to be available for ongoing System purposes (Operating Expenses and Capital Project
- [8] Net Revenues as defined in the General Bond Resolution includes: i) Non-recurring Revenues (e.g., availability fee revenue and investment earnings on available balances, connection fees, reconnection fees, charges for meter replacements, etc.); and ii) income previously received and currently held by the County to the credit of the Revenue Subfund and all rights to receive the
- [9] Rate Covenant requirements as defined in the General Bond Resolution under Article V, Section 501
- [10] Amounts shown reflect Debt Service Requirement on all Outstanding Bonds and Additional Parity Bonds assumed to be issued during the Forecast Period on parity with the Outstanding Bonds. Amounts shown reflect payments required to the Sinking Fund (accrual basis) and not when such Bonds are paid.
- [11] The financial forecast assumes the issuance of additional parity bonds to fund certain improvements to the System. The terms of the debt assume: i) level annual debt service payments over a 30 year repayment period; ii) interest rate of ranging from 4.50% - 5.20%; iii) debt service reserve funded from the debt proceeds; and iii) issuance costs equal to 1.5% of the principal amount of

- [12] Subordinate Obligations as defined in the General Bond Resolution includes any Debt Service Component of the Cost of Contracted Services (for the UOSA debt obligation) (other than Parity Debt Service Components) and any other obligations of the County with respect to the System (VRA obligations).
- [13] Based on discussions with WMP staff, forecast assumes the County will participate in issuances by UOSA.
- [14] Amounts shown reflect transfers to other subfunds as delineated in the General Bond Resolution
- [15] Amounts shown reflect transfers to the Debt Service Subfund associated with the payment of the Principal and Interest Requirements on the Outstanding and Additional Parity Bonds based on the deposit requirements delineated in the General Bond Resolution (on an accrual basis and not when the payments are made). Also included in the recognized deposits would be funds required to pay Parity Indebtedness, if any, which are required to be set aside in a special account in the Debt Service Subfund.
- [16] Amounts shown reflect transfers to the Subordinate Obligations Subfund associated with the payment of debt on any loans considered subordinate to the Senior Lien Bonds and the Parity Indeb

Table 8
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Summary of Debt Service Payments - Outstanding and Additional Debt [1]

Line No.	Description	Projected Fiscal Year Ending June 30,					
		2024	2025	2026	2027	2028	2029
Outstanding Senior Lien Debt Service:							
1	Sewer Revenue Bonds Series 2014	\$ 5,958,531	\$ 5,921,406	\$ 5,947,398	\$ 5,966,138	\$ 5,971,740	\$ 248,831
2	Series 2016A Refunding Bonds	12,729,304	12,741,460	12,751,085	12,718,658	12,687,763	12,768,179
3	Sewer Revenue Bonds, Series 2017	5,549,542	5,554,292	5,554,979	5,555,958	5,561,990	5,563,208
4	Sewer Revenue Bonds Series 2021A	11,858,704	11,864,121	11,871,058	11,874,225	11,877,944	11,881,933
5	Sewer Revenue Bonds Series 2021B	895,650	895,650	895,650	895,650	895,650	895,650
6	Subtotal - Current Senior Lien Debt Service	<u>\$ 36,991,731</u>	<u>\$ 36,976,929</u>	<u>\$ 37,020,171</u>	<u>\$ 37,010,629</u>	<u>\$ 36,995,085</u>	<u>\$ 31,357,802</u>
Additional Senior Lien Debt Service:							
7	Series 2024 Bonds [2]	\$ 2,897,325	\$ 11,589,299	\$ 11,589,299	\$ 11,589,299	\$ 11,589,299	\$ 11,589,299
8	Series 2026 Bonds [2]	-	-	9,840,787	19,681,574	19,681,574	23,281,699
9	Series 2028 Bonds [2]	-	-	-	-	7,991,190	18,455,400
10	Series 2030 Bonds [2]	-	-	-	-	-	-
11	Series 2032 Bonds [2]	-	-	-	-	-	-
12	Subtotal - Additional Senior Debt Service	<u>\$ 2,897,325</u>	<u>\$ 11,589,299</u>	<u>\$ 21,430,086</u>	<u>\$ 31,270,872</u>	<u>\$ 39,262,062</u>	<u>\$ 53,326,399</u>
13	Total Senior Debt Service	<u>\$ 39,889,056</u>	<u>\$ 48,566,228</u>	<u>\$ 58,450,257</u>	<u>\$ 68,281,502</u>	<u>\$ 76,257,148</u>	<u>\$ 84,684,201</u>
Outstanding Subordinate Debt Service:							
14	EDA Facilities Revenue Bonds, Series 2021	\$ 1,696,683	\$ 1,697,583	\$ 1,697,283	\$ 1,696,354	\$ 1,700,000	\$ 1,697,250
15	UOSA Existing Subordinate Debt [3]	21,593,328	22,049,847	22,352,254	22,352,311	22,350,780	16,269,052
16	Subtotal - Current Subordinate Debt Service	<u>\$ 23,290,012</u>	<u>\$ 23,747,430</u>	<u>\$ 24,049,537</u>	<u>\$ 24,048,665</u>	<u>\$ 24,050,780</u>	<u>\$ 17,966,302</u>
Additional Subordinate Debt Service:							
17	Series 2024 Bonds - UOSA	\$ -	\$ 1,988,884	\$ 1,988,884	\$ 1,988,884	\$ 1,988,884	\$ 1,988,884
18	Series 2027 Bonds - UOSA	-	-	-	-	4,405,804	4,405,804
19	Series 2030 Bonds - UOSA	-	-	-	-	-	-
20	Series 2033 Bonds - UOSA	-	-	-	-	-	-
21	Subtotal - Subordinate Debt Service	<u>\$ -</u>	<u>\$ 1,988,884</u>	<u>\$ 1,988,884</u>	<u>\$ 1,988,884</u>	<u>\$ 6,394,687</u>	<u>\$ 6,394,687</u>
22	Total Subordinate Debt Service	<u>\$ 23,290,012</u>	<u>\$ 25,736,314</u>	<u>\$ 26,038,421</u>	<u>\$ 26,037,549</u>	<u>\$ 30,445,468</u>	<u>\$ 24,360,989</u>
23	Total Debt Service (Senior Lien and Subordinate)	<u><u>\$ 63,179,068</u></u>	<u><u>\$ 74,302,542</u></u>	<u><u>\$ 84,488,677</u></u>	<u><u>\$ 94,319,050</u></u>	<u><u>\$ 106,702,615</u></u>	<u><u>\$ 109,045,190</u></u>

Footnotes:

- [1] Amounts are shown reflect deposits to the sinking fund for future debt service payments (i.e., accrued payments) and do not reflect actual debt service payments (i.e., cash basis).
- [2] The financial forecast assumes the issuance of additional parity bonds to fund certain improvements to the System. The terms of the debt assume:
 - i) level annual debt service payments over a 30 year repayment period; ii) interest rate of ranging from 4.50% - 5.20%;
 - iii) debt service reserve funded from the debt proceeds; and iii) issuance costs equal to 1.5% of the principal amount of bonds.
- [3] Represents subordinated indebtedness issued on behalf of the County by UOSA as the contractual wastewater treatment provider.

Table 9
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Projected Fund Balances and Interest Income Determination

Line No.	Description	Historical FY	Fiscal Year Ending June 30,					
		2023	2024	2025	2026	2027	2028	2029
ENDING FUND BALANCE SUMMARY								
1	Revenue and Operating Fund - 69000 / 69010	\$ 80,836,855	\$ 77,389,995	\$ 78,418,123	\$ 80,377,120	\$ 82,370,317	\$ 84,451,601	\$ 86,363,750
2	Availability Charge Funds - 69000A [1]	-	-	-	-	-	-	-
3	VRA Debt Service Reserve - 69000B	-	-	-	-	-	-	-
4	Sewer Construction Fund - 69300	65,889,803	115,787,911	67,629,435	100,563,547	98,166,588	79,209,881	75,458,189
5	Sewer Construction Subfund - 69300A	-	3,260,000	5,000,000	5,262,152	5,525,386	5,789,707	6,055,119
6	Parity Debt Service Reserve - 69030	32,463,311	48,609,470	48,609,470	69,813,243	69,813,243	90,741,664	90,741,664
7	Sewer Bond Construction - 69310 (Exist Proceeds)	86,192,943	862,000	879,000	899,000	919,000	940,000	962,000
8	Sewer Bond Construction - 69310 (Add'l Proceeds)	-	87,500,000	-	176,694,400	-	143,659,000	-
9	Total Projected Ending Balance	\$ 265,382,912	\$ 333,409,375	\$ 200,536,028	\$ 433,609,462	\$ 256,794,533	\$ 404,791,852	\$ 259,580,723
Allocation of Ending Fund Balances								
10	Existing Customers	\$ 253,696,120	\$ 315,909,966	\$ 183,036,618	\$ 408,476,694	\$ 231,661,765	\$ 372,124,853	\$ 226,913,724
11	New Customers (Includes DSR Allocation)	11,686,792	17,499,409	17,499,409	25,132,767	25,132,767	32,666,999	32,666,999
REVENUE AND OPERATING FUND - 69000 / 69010								
12	Beginning Balance		\$ 80,836,855	\$ 77,389,995	\$ 78,418,123	\$ 80,377,120	\$ 82,370,317	\$ 84,451,601
Transfers In:								
13	Operations		\$ 1,110,000	\$ 1,028,128	\$ 1,958,997	\$ 1,993,196	\$ 2,081,285	\$ 1,912,149
14	Debt Service Reserve - 69030		-	-	5,678,052	-	-	-
15	VRA Debt Service Reserve - 69000B		-	-	-	-	-	-
16	Subtotal		\$ 1,110,000	\$ 1,028,128	\$ 7,637,049	\$ 1,993,196	\$ 2,081,285	\$ 1,912,149
Transfers Out:								
17	Operations		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18	Debt Service Reserve - 69030		4,556,860	0	0	0	0	0
19	Sewer Construction Fund 69300		0	0	5,678,052	0	0	0
20	CIP		0	0	0	0	0	0
21	Subtotal		\$ 4,556,860	\$ 0	\$ 5,678,052	\$ -	\$ -	\$ -
22	Interest Rate		2.00%	2.00%	2.22%	2.22%	2.27%	2.31%
23	Interest Income		\$ 1,582,000	\$ 1,558,000	\$ 1,764,000	\$ 1,808,000	\$ 1,891,000	\$ 1,974,000
24	Recognition Of Interest in Revenue Requirements	Yes	1,582,000	1,558,000	1,764,000	1,808,000	1,891,000	1,974,000
25	Ending Balance (Excl. New Customer Share)		\$ 77,389,995	\$ 78,418,123	\$ 80,377,120	\$ 82,370,317	\$ 84,451,601	\$ 86,363,750
AVAILABILITY CHARGE FUNDS - 69000A [1]								
26	Beginning Balance		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
27	Transfer In - Availability Charges Collection:		\$ 18,286,001	\$ 18,895,975	\$ 19,770,973	\$ 20,446,046	\$ 21,331,985	\$ 22,015,343
28	Transfer In - Sale of Capacity / Other Contributions		0	0	0	0	0	0
Transfers Out:								
29	Debt Service		\$ 18,286,001	\$ 18,895,975	\$ 19,770,973	\$ 20,446,046	\$ 21,331,985	\$ 22,015,343
30	CIP		-	-	-	-	-	-
31	Total Transfers Out		\$ 18,286,001	\$ 18,895,975	\$ 19,770,973	\$ 20,446,046	\$ 21,331,985	\$ 22,015,343
32	Interest Rate		2.00%	2.00%	2.22%	2.22%	2.27%	2.31%
33	Interest Income		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
34	Recognition Of Interest in Revenue Requirements	No	-	-	-	-	-	-
35	Ending Balance (Availability Charges Fund)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VRA DEBT SERVICE RESERVE - FUND 69000B								
36	Beginning Balance		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Revenues / Transfers In								
37	New Debt		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Expenditures / Transfers Out								
38	Operating Reserves - Fund 69000		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
39	Interest Rate	Med. Term	2.00%	2.00%	2.22%	2.22%	2.27%	2.31%
40	Interest Income		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
41	Recognition of Interest in Revenue Requirements	Yes	-	-	-	-	-	-
42	Ending Balance		\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

Footnotes on Page 3 of 3.

Table 9
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Projected Fund Balances and Interest Income Determination

Line No.	Description	Historical FY 2023	Fiscal Year Ending June 30,					
			2024	2025	2026	2027	2028	2029
SEWER CONSTRUCTION FUND 69300								
Renewals and Replacements - Fund 69300								
43	Beginning Balance		\$ 65,889,803	\$ 115,787,911	\$ 67,629,435	\$ 100,563,547	\$ 98,166,588	\$ 79,209,881
Revenues / Transfers In:								
44	Transfers In From Operations		\$ 63,961,681	\$ 76,590,524	\$ 81,076,060	\$ 86,237,641	\$ 89,486,931	\$ 104,495,256
45	Transfers In From Revenue Fund 69000		-	-	5,678,052	-	-	-
46	Total Transfers In		\$ 63,961,681	\$ 76,590,524	\$ 86,754,112	\$ 86,237,641	\$ 89,486,931	\$ 104,495,256
Expenditures / Transfers Out								
47	Transfers Out Capital Expenditures		\$ 14,063,573	\$ 124,749,000	\$ 53,820,000	\$ 88,634,600	\$ 108,443,638	\$ 108,246,947
48	Interest Rate		2.00%	2.00%	2.22%	2.22%	2.27%	2.31%
49	Interest Income		\$ 1,817,000	\$ 1,834,000	\$ 1,869,000	\$ 2,208,000	\$ 2,010,000	\$ 1,787,000
50	Recognition Of Interest in Revenue Requirements	Yes	1,817,000	1,834,000	1,869,000	2,208,000	2,010,000	1,787,000
51	Ending Balance Fund 69300		\$ 115,787,911	\$ 67,629,435	\$ 100,563,547	\$ 98,166,588	\$ 79,209,881	\$ 75,458,189
Service Line Extensions - Subfund 69300A								
52	Beginning Balance		\$ -	\$ 3,260,000	\$ 5,000,000	\$ 5,262,152	\$ 5,525,386	\$ 5,789,707
Revenues / Transfers In								
53	Transfers In From Operations		\$ 3,000,000	\$ 1,478,927	\$ -	\$ -	\$ -	\$ -
54	Non-Recurring Revenues		260,000	261,073	262,152	263,234	264,321	265,413
55	Total Transfers In		\$ 3,260,000	\$ 1,740,000	\$ 262,152	\$ 263,234	\$ 264,321	\$ 265,413
Expenditures / Transfers Out								
56	Transfers Out Capital Expenditures		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
57	Interest Rate		2.00%	2.00%	2.22%	2.22%	2.27%	2.31%
58	Interest Income		\$ 33,000	\$ 83,000	\$ 114,000	\$ 120,000	\$ 128,000	\$ 137,000
59	Recognition Of Interest in Revenue Requirements	Yes	33,000	83,000	114,000	120,000	128,000	137,000
60	Ending Balance Fund C69300A		\$ 3,260,000	\$ 5,000,000	\$ 5,262,152	\$ 5,525,386	\$ 5,789,707	\$ 6,055,119
SENIOR SINKING FUND - 69020								
61	Annual Senior Debt Service		\$ 39,889,056	\$ 48,566,228	\$ 58,450,257	\$ 68,281,502	\$ 76,257,148	\$ 84,684,201
62	Average Balance		\$ 13,296,352	\$ 16,188,743	\$ 19,483,419	\$ 22,760,501	\$ 25,419,049	\$ 28,228,067
63	Interest Rate		2.00%	2.00%	2.22%	2.22%	2.27%	2.31%
64	Interest Income		266,000	324,000	433,000	506,000	576,000	652,000
65	Recognition Of Interest in Revenue Requirements	Yes	266,000	324,000	433,000	506,000	576,000	652,000
DEBT SERVICE RESERVE - FUND 69030								
66	Beginning Balance		\$ 32,463,311	\$ 48,609,470	\$ 48,609,470	\$ 69,813,243	\$ 69,813,243	\$ 90,741,664
Revenues / Transfers In								
67	Transfer In - Deficiency Below Reserve Requirement from Reserve:		\$ 4,556,860	\$ 0	\$ -	\$ -	\$ -	\$ -
68	Transfer in New Debt Proceeds		11,589,299	-	26,881,825	-	20,928,421	-
Expenditures / Transfers Out								
69	Transfer Out - Excess Above Requirement to Reserves		\$ -	\$ -	\$ 5,678,052	\$ -	\$ -	\$ -
70	Interest Rate		2.00%	2.00%	2.22%	2.22%	2.27%	2.31%
71	Interest Income		\$ 765,000	\$ 972,000	\$ 1,316,000	\$ 1,551,000	\$ 1,820,000	\$ 2,097,000
72	Recognition Of Interest in Revenue Requirements	Yes	765,000	972,000	1,316,000	1,551,000	1,820,000	2,097,000
73	Ending Balance Fund C69030		\$ 48,609,470	\$ 48,609,470	\$ 69,813,243	\$ 69,813,243	\$ 90,741,664	\$ 90,741,664
SUBORDINATE DEBT SINKING FUND - 69040								
74	Annual Subordinate Debt Service		\$ 23,290,012	\$ 25,736,314	\$ 26,038,421	\$ 26,037,549	\$ 30,445,468	\$ 24,360,989
75	Average Balance		\$ 5,822,503	\$ 6,434,078	\$ 6,509,605	\$ 6,509,387	\$ 7,611,367	\$ 6,090,247
76	Interest Rate		2.00%	2.00%	2.22%	2.22%	2.27%	2.31%
77	Interest Income		\$ 116,000	\$ 129,000	\$ 145,000	\$ 145,000	\$ 173,000	\$ 141,000
78	Recognition Of Interest in Revenue Requirements	Yes	116,000	129,000	145,000	145,000	173,000	141,000

Table 9
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Projected Fund Balances and Interest Income Determination

Line No.	Description	Historical FY 2023	Fiscal Year Ending June 30,					
			2024	2025	2026	2027	2028	2029
SEWER BOND CONSTRUCTION - FUND 69310 (Existing Proceeds)								
79	Beginning Balance		\$ 86,192,943	\$ 862,000	\$ 879,000	\$ 899,000	\$ 919,000	\$ 940,000
Revenues / Transfers In								
80	Transfers In		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
81	Interest Income from Additional Debt Proceeds		-	-	-	-	-	-
Expenditures / Transfers Out								
82	Transfers Out - CIP		\$ 86,192,943	\$ -	\$ -	\$ -	\$ -	\$ -
83	Interest Rate		2.00%	2.00%	2.22%	2.22%	2.27%	2.31%
84	Interest Income		\$ 862,000	\$ 17,000	\$ 20,000	\$ 20,000	\$ 21,000	\$ 22,000
85	Recognition Of Interest in Revenue Requirements	No	-	-	-	-	-	-
86	Ending Balance Fund C69310		<u>\$ 862,000</u>	<u>\$ 879,000</u>	<u>\$ 899,000</u>	<u>\$ 919,000</u>	<u>\$ 940,000</u>	<u>\$ 962,000</u>
SEWER BOND CONSTRUCTION - FUND 69310 (Additional Debt Proceeds)								
87	Total Beginning Balance		\$ -	\$ 87,500,000	\$ -	\$ 176,694,400	\$ -	\$ 143,659,000
Transfers In - Additional Debt Proceeds								
88	Transfers In Series 2017 Bonds		<u>\$ 175,000,000</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
89	Total Transfers Out CIP Funded From New Bonds		<u>\$ 191,500,700</u>	<u>\$ 8,001,000</u>	<u>\$ 367,944,400</u>	<u>\$ 14,555,600</u>	<u>\$ 314,909,000</u>	<u>\$ 27,591,000</u>
Transfers Out - CIP								
90	Series 2017 Bonds		<u>\$ 87,500,000</u>	<u>\$ 87,500,000</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
91	Sweep Interest Income to Fund 69310		<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
92	Total Transfers Out CIP Funded From New Bonds		<u>\$ 104,000,700</u>	<u>\$ 95,501,000</u>	<u>\$ 191,250,000</u>	<u>\$ 191,250,000</u>	<u>\$ 171,250,000</u>	<u>\$ 171,250,000</u>
93	Interest Rate		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
94	Interest Income		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
95	Recognition Of Interest in Revenue Requirements	No	-	-	-	-	-	-
96	Ending Balance Fund C69310B		<u>\$ 87,500,000</u>	<u>\$ -</u>	<u>\$ 176,694,400</u>	<u>\$ -</u>	<u>\$ 143,659,000</u>	<u>\$ -</u>
97	TOTAL UNRESTRICTED INTEREST INCOME		<u>\$ 4,579,000</u>	<u>\$ 4,900,000</u>	<u>\$ 5,641,000</u>	<u>\$ 6,338,000</u>	<u>\$ 6,598,000</u>	<u>\$ 6,788,000</u>

Footnotes:

[1] Fund C69000A will be used only to finance new customer capital projects. Fund C69000A includes new customer monies from Fund C6930C

Table 10
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Allocated Ten-Year Estimated Capital Improvement Program for the Wastewater System (in \$000s)

Line No.	Project #	Description	Projected Fiscal Year Ending June 30,						Total Cost
			2024	2025	2026	2027	2028	2029	
WASTEWATER TREATMENT DIVISION									
1	WTD1	2025 WTD Master Plan	\$ 1,100,000	\$ 817,000	\$ -	\$ -	\$ -	\$ -	\$ 1,917,000
2	WTD2	Accotink Odor Control Facility	1,400,000	-	-	-	-	-	1,400,000
3	WTD3	APW/CW System Optimization	262,000	-	1,333,333	1,333,333	1,333,333	-	4,262,000
4	WTD4	Activated Sludge Effluent (ASE) Pump Station	6,300,000	4,300,000	2,900,000	-	-	-	13,500,000
5	WTD5	Biosolids Processing Rehabilitation, Phase III	19,100,000	9,100,000	4,100,000	-	-	-	32,300,000
6	WTD6	Biosolids Phase IV	899,000	1,800,000	9,900,000	18,600,000	14,300,000	422,000	45,921,000
7	WTD7	Biosolids Master Plan	-	-	2,000,000	-	-	-	2,000,000
8	WTD8	Expansion to 80 MGD	-	-	-	-	-	6,300,000	6,300,000
9	WTD9	Future Regulatory Project	-	-	-	-	-	3,000,000	3,000,000
10	WTD10	Generator Facility Rehabilitation	-	-	-	-	-	-	-
11	WTD11	WPMD Lab HVAC Upgrade	5,700,000	6,500,000	-	-	-	-	12,200,000
12	WTD12	Master Filtration	-	-	-	-	-	-	-
13	WTD13	Miscellaneous Small Projects	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	36,000,000
14	WTD14	Modernization of Support and Administrative Facilities	2,100,000	1,200,000	-	-	-	-	3,300,000
15	WTD15	MSP - Project Management and In-house Design	442,000	3,600,000	-	-	-	-	4,042,000
16	WTD16	MSP - In-house Design Construction	2,300,000	3,800,000	450,000	-	-	-	6,550,000
17	WTD17	MSP - Current Needs: Barscreen and Degrit	1,200,000	4,400,000	5,700,000	5,700,000	3,100,000	224,000	20,324,000
18	WTD18	MSP - FF Gates	4,400,000	5,700,000	808,000	208,000	-	-	11,116,000
19	WTD19	MSP - FF Capacity Improvements	1,000,000	33,400,000	21,800,000	20,300,000	11,000,000	-	87,500,000
20	WTD20	MSP - Current Needs Clarifiers, MBBRs, and DD	-	1,500,000	541,000	16,200,000	14,700,000	15,700,000	48,641,000
21	WTD21	MSP - Phase 1 MBBR Capacity Improvements	1,100,000	10,700,000	6,700,000	-	-	-	18,500,000
22	WTD22	MSP - Future Needs Tertiary Clarifiers and DD Renewal	-	1,000,000	1,500,000	541,000	15,200,000	14,700,000	32,941,000
23	WTD23	Next Generation Biosolids Program	-	-	-	-	6,900,000	6,900,000	13,800,000
24	WTD24	Pohick Creek Stream Stabilization	381,000	3,000,000	419,000	-	-	-	3,800,000
25	WTD25	Primary and Secondary Sustaining Project	30,500,000	19,000,000	24,400,000	78,000	-	-	73,978,000
26	WTD26	Primary and Secondary In-House Projects	2,000,000	-	-	-	-	-	2,000,000
27	WTD27	Primary and Secondary Program, Phase II	791,000	1,500,000	791,000	-	-	-	3,082,000
28	WTD28	Raw Wastewater Pump Station - B3	1,300,000	-	-	-	-	-	1,300,000
29	WTD29	Raw Wastewater Pump Station - B4	54,500,000	59,000,000	48,900,000	38,900,000	31,300,000	-	232,600,000
30	WTD30	Reclaimed Water Drought Relief	-	-	-	-	-	-	-
31	WTD31	Sustainability and Energy Projects	-	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000
32	WTD32	Unidentified Future Projects	-	-	-	-	10,000,000	10,000,000	20,000,000
33		Total Wastewater Treatment Division	\$ 142,775,000	\$ 177,317,000	\$ 139,242,333	\$ 108,860,333	\$ 114,833,333	\$ 64,246,000	\$ 747,274,000
TREATMENT BY CONTRACT									
<u>ASA Program</u>									
34	TbC3	ASA Construction- Joint Projects	\$ 36,420,000	\$ 38,991,000	\$ 40,884,000	\$ 45,050,000	\$ 38,730,000	\$ 38,343,000	\$ 238,418,000
35		Subtotal ASA Program	\$ 36,420,000	\$ 38,991,000	\$ 40,884,000	\$ 45,050,000	\$ 38,730,000	\$ 38,343,000	\$ 238,418,000
<u>Blue Plains Program Total</u>									
36	TbC5	Blue Plains Capital Projects	\$ 18,665,000	\$ 28,401,000	\$ 29,354,000	\$ 43,214,000	\$ 46,930,000	\$ 39,356,000	\$ 205,920,000
37		Subtotal Blue Plains Program Total	\$ 18,665,000	\$ 28,401,000	\$ 29,354,000	\$ 43,214,000	\$ 46,930,000	\$ 39,356,000	\$ 205,920,000
<u>Arlington Program</u>									
38	TbC12	Arlington Process Upgrades	\$ 2,915,000	\$ 4,929,000	\$ 5,169,000	\$ 3,670,000	\$ 1,616,000	\$ 245,000	\$ 18,544,000
39		Subtotal Arlington Program	\$ 2,915,000	\$ 4,929,000	\$ 5,169,000	\$ 3,670,000	\$ 1,616,000	\$ 245,000	\$ 18,544,000
<u>UOSA Projects Place Holder</u>									
40	TbC14	Delivery System Expansion to 54 mg	\$ 2,163,800	\$ -	\$ -	\$ 186,900	\$ 840,300	\$ 2,131,900	\$ 5,322,900
41	TbC15	Reserve Maintenance	10,808,900	4,439,400	3,368,500	10,987,700	25,942,600	25,459,100	81,006,200
42	TbC16	Hydraulic Improvements	-	-	-	-	-	-	-
43	TbC17	Nutrient Cap	3,380,200	3,561,600	3,246,200	3,381,000	-	-	13,569,000
44	TbC18	Master Planning	147,800	-	-	-	-	-	147,800
45	TbC19	Delivery System Expansion to 64 mg	-	-	-	-	-	-	-
46		Subtotal UOSA Projects Place Holder	\$ 16,500,700	\$ 8,001,000	\$ 6,614,700	\$ 14,555,600	\$ 26,782,900	\$ 27,591,000	\$ 100,045,900
47		Total Treatment By Contract	\$ 74,500,700	\$ 80,322,000	\$ 82,021,700	\$ 106,489,600	\$ 114,058,900	\$ 105,535,000	\$ 562,927,900

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Table 10
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Allocated Ten-Year Estimated Capital Improvement Program for the Wastewater System (in \$000s)

Line No.	Project #	Description	Projected Fiscal Year Ending June 30,					Total Cost	
			2024	2025	2026	2027	2028		2029
WASTEWATER COLLECTION DIVISION (WCD)									
<u>Pumping Stations</u>									
48	PS1	PUMP STATION CONDITION ASSESSMENT	\$ 250,000	\$ 100,000	\$ -	\$ -	\$ -	\$ 350,000	
49	PS2	Accotink Pump Station	3,912,416	17,997,889	17,752,005	22,877,284	22,877,284	5,719,323	91,136,200
50	PS3	Holmes Run Pump Station	5,187,447	2,932,353	2,057,218	-	-	-	10,177,018
51	PS4	Difficult Run Odor & Grit	2,348,928	1,792,681	-	-	-	-	4,141,608
52	PS5	Savile Lane Pump Station	2,304,026	-	-	-	-	-	2,304,026
53	PS6	Oak Marr Pump Station	1,528,516	1,340,617	-	-	-	-	2,869,133
54	PS7	Wellington II Pump Station	-	181,503	-	-	-	-	181,503
55	PS8	Wellington I Pump Station	27,302	2,031,254	-	-	-	-	2,058,556
56	PS9	Lakebarcroft Odor Control	294,178	1,909,540	1,690,489	1,137,254	-	-	5,031,461
57	PS10	Jones Point Pump Station and Foremain	411,995	2,096,156	6,259,764	603,269	1,498,719	-	10,869,903
58	PS11	Langley School Pump Station and Foremain	120,749	246,127	-	-	-	-	366,876
59	PS12	LLV LOW PRESSURE SYSTEM	2,037,254	1,000,000	1,000,000	1,000,000	1,500,000	1,500,000	8,037,254
60	PS13	Oxford and Washington Woods PS	197,848	-	1,266,413	3,063,015	1,030,340	-	5,557,616
61	PS14	Penderbrook and Wesley House Pump Stations	113,991	1,532,745	1,585,173	1,267,797	-	-	4,499,706
62	PS15	FREUND HOUSE PUMP STATION SCREENS	131,795	880,732	121,984	-	-	-	1,134,511
63	PS16	SCADA	846,000	350,000	1,723,010	4,667,452	4,667,452	3,500,589	15,754,503
64	PS17	EMERGENCY Langley School PS	20,099	-	-	-	-	-	20,099
65	PS18	Edgewater and The Fairfax Pump Stations	165,187	-	790,000	1,855,312	-	-	2,810,500
66	PS19	Waynewood I & Waynewood II PS	213,550	-	1,334,472	5,092,190	2,116,689	-	8,756,901
67	PS20	Covanta FM Replacement	1,777,279	4,232,533	3,208,245	-	-	-	9,218,057
68	PS21	Yacht Haven Structure Abandonment	-	-	55,000	575,000	-	-	630,000
69	PS22	BRADDOCK ROAD	-	416,506	2,058,997	9,253,224	10,035,022	12,485,434	34,249,183
70	PS23	Dead Run Valve Replacement	175,142	-	-	-	-	-	175,142
71	PS24	Downscrest PS Replacement	188,427	-	906,303	3,458,582	1,442,243	-	5,995,555
72	PS25	Little Hunting Creek Foremain	750,575	7,460,621	1,188,112	-	-	-	9,399,308
73	PS26	Mount Vernon Terrace Foremain	675,948	984,370	181,407	-	-	-	1,841,726
74	PS27	Wellington I Foremain	21,214	899,901	-	-	-	-	921,115
75	PS28	Riverwood Foremain	870,121	151,293	-	-	-	-	1,021,414
76	PS29	Miscellaneous Pump Station Projects	1,600,000	1,711,602	2,775,156	4,392,817	10,043,236	11,515,744	32,038,555
77		Total Pumping Stations	\$ 26,169,987	\$ 50,248,423	\$ 45,953,751	\$ 59,243,195	\$ 55,210,984	\$ 34,721,090	\$ 271,547,430
<u>Gravity Sewers</u>									
78	GS1	Meter Rehabilitation - Project 4	\$ 46,890	\$ 2,288,694	\$ 3,405,055	\$ 1,123,824	\$ -	\$ -	\$ 6,864,463
79	GS2	Little Hunting Creek Sewer Sag	259,045	-	-	-	-	-	259,045
80	GS3	Carderock Gravity Sewer Rehabilitation	2,242,572	143,832	263,043	-	-	-	2,649,447
81	GS4	Inspections	2,000,000	2,060,000	2,121,800	2,185,454	2,251,018	2,318,548	12,936,820
82	GS5	Asset Repairs	5,633,811	5,204,102	4,463,539	4,172,800	6,207,360	8,248,832	33,930,444
83	GS6	CIPP LINING	8,000,000	7,000,000	6,000,000	6,180,000	4,120,000	4,243,600	35,543,600
84	GS7	Sag Replacement Package 2	1,402,112	4,323,042	43,075	-	-	-	5,768,229
85	GS8	CREEK BED PROGRAM	850,000	875,500	250,000	250,000	200,000	200,000	2,625,500
86	GS9	CAMERON RUN I&I	-	-	50,000	50,000	50,000	-	150,000
87	GS10	Pohick Creek Rehabilitation-Phase 1 (Pohick Interceptor)	4,400,000	6,000,000	-	-	-	-	10,400,000
88	GS11	Springfield Estates Gravity Bypass	926,430	5,177,169	861,505	-	-	-	6,965,104
89	GS12	Little Pimmit Run Sewer Relocation	380,815	574,338	2,590,893	3,820,126	1,020,458	-	8,386,630
90	GS13	UTILITY INTRUSION	200,000	100,000	105,000	110,250	115,763	121,551	752,563
91	GS14	Chain Bridge Vault - Site Safety Improvements	5,653	-	-	-	-	-	5,653
92	GS15	Augusta Drive Sewer	10,118	-	-	-	-	-	10,118
93	GS16	Coon Branch Tributary Sewer Replacement	50,000	550,000	-	-	-	-	600,000
94	GS17	Bellevue Program	2,336,536	3,044,260	7,000,000	4,000,000	4,120,000	4,243,600	24,744,397
95	GS18	WEST SPRINGFIELD STREAM CROSSING	102,321	1,579,065	-	-	-	-	1,681,386
96	GS19	MH 198 Study	219,831	146,610	-	-	-	-	366,441
97	GS20	EMERGENCY Wolf Trap	423,409	-	-	-	-	-	423,409
98	GS21	Old Mill Odor Study	81,000	-	-	-	-	-	81,000
99	GS22	Pohick Phase 2	508,752	1,166,217	3,446,021	2,333,726	-	-	7,454,715
100	GS23	Town of Vienna Pipes Construction	250,000	250,000	250,000	250,000	250,000	250,000	1,500,000
101	GS24	Chain Bridge Siphon Project - Arlington	300,000	2,000,000	3,000,000	-	-	-	5,300,000
102	GS25	Abilene Street Pipe Replacement	600,000	-	-	-	-	-	600,000
103	GS26	Emergency Joseph Barnes Battery Park	266,339	-	-	-	-	-	266,339
104	GS27	Emergency - Reservoir Road	94,213	-	-	-	-	-	94,213
105	GS28	Emergency - Shreve Road	100,000	-	-	-	-	-	100,000
106	GS29	Miscellaneous Gravity Sewer Projects	2,400,000	2,100,000	2,100,000	5,266,863	9,625,589	6,458,726	27,951,178
107		Total Gravity Sewers	\$ 34,089,848	\$ 44,582,828	\$ 35,949,932	\$ 29,743,044	\$ 27,960,187	\$ 26,084,857	\$ 198,410,695
<u>Expansion</u>									
108	E1	TYSONS WEST	\$ 3,017,068	\$ 12,545,489	\$ 54,253,245	\$ 66,673,029	\$ 34,198,424	\$ 11,341,498	\$ 182,028,752
109	E2	Route 1 Sewer Capacity Access Improvements	1,500,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	51,500,000
110	E3	UTILITY MANAGEMENT PLAN	850,000	-	-	-	-	-	850,000
111	E4	Accotink Creek Relief Sewer-Phase 1	1,458,615	4,571,569	22,378,459	24,476,118	5,320,895	-	58,205,657
112	E5	Lakevale Capacity Improvements	223,397	2,052,076	1,530,730	1,513,504	-	-	5,319,707
113	E6	Merrifield Capacity Upgrade	270,994	2,865,188	766,996	-	-	-	3,903,179
114	E7	TYSONS EAST	1,509,297	-	-	1,076,816	3,195,429	3,186,674	8,968,215
115	E8	L495 Next Lane	303,816	2,427,811	-	-	-	-	2,731,627
116	E9	Miscellaneous Expansion Projects	-	-	-	1,083,317	9,128,823	21,081,400	31,293,540
117		Total Expansion	\$ 9,133,186	\$ 34,462,134	\$ 88,929,431	\$ 104,822,783	\$ 61,843,571	\$ 45,609,572	\$ 344,800,677
118		Total Wastewater Collection Division	\$ 69,393,021	\$ 129,293,385	\$ 170,833,114	\$ 193,809,022	\$ 145,014,743	\$ 106,415,518	\$ 814,758,802
<u>C&C Conveyance Projects</u>									
119	OP1	Oversizing Projects - County Responsibility	\$ 22,500,000	\$ 11,250,000	\$ 11,250,000	\$ 11,250,000	\$ 11,250,000	\$ 11,250,000	\$ 78,750,000
120		Total Oversizing Program	\$ 22,500,000	\$ 11,250,000	\$ 11,250,000	\$ 11,250,000	\$ 11,250,000	\$ 11,250,000	\$ 78,750,000
121		Capital Outlay (From Operations)	\$ 13,242,784	\$ 6,000,000	\$ 6,180,000	\$ 6,365,400	\$ 6,556,362	\$ 6,753,053	\$ 45,097,598
122		Total System Capital Projects	\$ 322,411,504	\$ 404,182,385	\$ 409,527,147	\$ 426,774,355	\$ 391,713,338	\$ 294,199,571	\$ 2,248,808,301

Footnotes:

[1] Amounts shown reflect estimated proportionate share of County allocable capital costs pursuant to the service agreement with UOSA to maintain the County's capacity rights with UOSA.

Table 10A
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Allocated Ten-Year Estimated Capital Improvement Program for the Wastewater System (in \$000s)

Line No.	Project #	Description	Projected Fiscal Year Ending June 30,					Total Cost	
			2024	2025	2026	2027	2028		2029
<u>WASTEWATER TREATMENT DIVISION</u>									
1	WTD1	2025 WTD Master Plan	\$ 1,100,000	\$ 817,000	\$ -	\$ -	\$ -	\$ -	\$ 1,917,000
2	WTD2	Accotink Odor Control Facility	1,400,000	-	-	-	-	-	1,400,000
3	WTD3	APW/CW System Optimization	262,000	-	1,333,333	1,333,333	1,333,333	-	4,262,000
4	WTD4	Activated Sludge Effluent (ASE) Pump Station	6,300,000	4,300,000	2,900,000	-	-	-	13,500,000
5	WTD5	Biosolids Processing Rehabilitation, Phase III	19,100,000	9,100,000	4,100,000	-	-	-	32,300,000
6	WTD6	Biosolids Phase IV	899,000	1,800,000	9,900,000	18,600,000	14,300,000	422,000	45,921,000
7	WTD7	Biosolids Master Plan	-	-	2,000,000	-	-	-	2,000,000
8	WTD8	Expansion to 80 MGD	-	-	-	-	-	6,300,000	6,300,000
9	WTD9	Future Regulatory Project	-	-	-	-	-	3,000,000	3,000,000
10	WTD10	Generator Facility Rehabilitation	-	-	-	-	-	-	-
11	WTD11	WPMD Lab HVAC Upgrade	5,700,000	6,500,000	-	-	-	-	12,200,000
12	WTD12	Master Filtration	-	-	-	-	-	-	-
13	WTD13	Miscellaneous Small Projects	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	36,000,000
14	WTD14	Modernization of Support and Administrative Facilities	2,100,000	1,200,000	-	-	-	-	3,300,000
15	WTD15	MSP - Project Management and In-house Design	442,000	3,600,000	-	-	-	-	4,042,000
16	WTD16	MSP - In-house Design Construction	2,300,000	3,800,000	450,000	-	-	-	6,550,000
17	WTD17	MSP - Current Needs: Barscreen and Degrit	1,200,000	4,400,000	5,700,000	5,700,000	3,100,000	224,000	20,324,000
18	WTD18	MSP - FF Gates	4,400,000	5,700,000	808,000	208,000	-	-	11,116,000
19	WTD19	MSP - FF Capacity Improvements	1,000,000	33,400,000	21,800,000	20,300,000	11,000,000	-	87,500,000
20	WTD20	MSP - Current Needs Clarifiers, MBBRs, and DD	-	1,500,000	541,000	16,200,000	14,700,000	15,700,000	48,641,000
21	WTD21	MSP - Phase 1 MBBR Capacity Improvements	1,100,000	10,700,000	6,700,000	-	-	-	18,500,000
22	WTD22	MSP - Future Needs Tertiary Clarifiers and DD Renewal	-	1,000,000	1,500,000	541,000	15,200,000	14,700,000	32,941,000
23	WTD23	Next Generation Biosolids Program	-	-	-	-	6,900,000	6,900,000	13,800,000
24	WTD24	Pohick Creek Stream Stabilization	381,000	3,000,000	419,000	-	-	-	3,800,000
25	WTD25	Primary and Secondary Sustaining Project	30,500,000	19,000,000	24,400,000	78,000	-	-	73,978,000
26	WTD26	Primary and Secondary In-House Projects	2,000,000	-	-	-	-	-	2,000,000
27	WTD27	Primary and Secondary Program, Phase II	791,000	1,500,000	791,000	-	-	-	3,082,000
28	WTD28	Raw Wastewater Pump Station - B3	1,300,000	-	-	-	-	-	1,300,000
29	WTD29	Raw Wastewater Pump Station - B4	54,500,000	59,000,000	48,900,000	38,900,000	31,300,000	-	232,600,000
30	WTD30	Reclaimed Water Drought Relief	-	-	-	-	-	-	-
31	WTD31	Sustainability and Energy Projects	-	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000
32	WTD32	Unidentified Future Projects	-	-	-	-	10,000,000	10,000,000	20,000,000
33		Total Wastewater Treatment Division	\$ 142,775,000	\$ 177,317,000	\$ 139,242,333	\$ 108,860,333	\$ 114,833,333	\$ 64,246,000	\$ 747,274,000
<u>TREATMENT BY CONTRACT</u>									
<u>ASA Program</u>									
34	TbC3	ASA Construction- Joint Projects	\$ 36,420,000	\$ 38,991,000	\$ 40,884,000	\$ 45,050,000	\$ 38,730,000	\$ 38,343,000	\$ 238,418,000
35		Subtotal ASA Program	\$ 36,420,000	\$ 38,991,000	\$ 40,884,000	\$ 45,050,000	\$ 38,730,000	\$ 38,343,000	\$ 238,418,000
<u>Blue Plains Program Total</u>									
36	TbC5	Blue Plains Capital Projects	\$ 18,665,000	\$ 28,401,000	\$ 29,354,000	\$ 43,214,000	\$ 46,930,000	\$ 39,356,000	\$ 205,920,000
37		Subtotal Blue Plains Program Total	\$ 18,665,000	\$ 28,401,000	\$ 29,354,000	\$ 43,214,000	\$ 46,930,000	\$ 39,356,000	\$ 205,920,000
<u>Arlington Program</u>									
38	TbC12	Arlington Process Upgrades	\$ 2,915,000	\$ 4,929,000	\$ 5,169,000	\$ 3,670,000	\$ 1,616,000	\$ 245,000	\$ 18,544,000
39		Subtotal Arlington Program	\$ 2,915,000	\$ 4,929,000	\$ 5,169,000	\$ 3,670,000	\$ 1,616,000	\$ 245,000	\$ 18,544,000
<u>UOSA Projects Place Holder</u>									
40		UOSA Existing Debt Service	\$ 21,435,239	\$ 21,751,418	\$ 22,348,276	\$ 22,356,232	\$ 22,348,390	\$ 22,353,171	\$ 132,592,725
41		Subtotal UOSA Projects Place Holder	\$ 21,435,239	\$ 21,751,418	\$ 22,348,276	\$ 22,356,232	\$ 22,348,390	\$ 22,353,171	\$ 132,592,725
42		Total Treatment By Contract	\$ 79,435,239	\$ 94,072,418	\$ 97,755,276	\$ 114,290,232	\$ 109,624,390	\$ 100,297,171	\$ 595,474,725

Footnotes on Page 2 of 2

Table 10A
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Allocated Ten-Year Estimated Capital Improvement Program for the Wastewater System (in \$000s)

Line No.	Project #	Description	Projected Fiscal Year Ending June 30,					Total Cost	
			2024	2025	2026	2027	2028		2029
WASTEWATER COLLECTION DIVISION (WCD)									
<u>Pumping Stations</u>									
43	PS1	PUMP STATION CONDITION ASSESSMENT	\$ 250,000	\$ 100,000	\$ -	\$ -	\$ -	\$ 350,000	
44	PS2	Accotink Pump Station	3,912,416	17,997,889	17,752,005	22,877,284	22,877,284	5,719,323	91,136,200
45	PS3	Holmes Run Pump Station	5,187,447	2,932,353	2,057,218	-	-	-	10,177,018
46	PS4	Difficult Run Odor & Grit	2,348,928	1,792,681	-	-	-	-	4,141,608
47	PS5	Savile Lane Pump Station	2,304,026	-	-	-	-	-	2,304,026
48	PS6	Oak Marr Pump Station	1,528,516	1,340,617	-	-	-	-	2,869,133
49	PS7	Wellington II Pump Station	-	181,503	-	-	-	-	181,503
50	PS8	Wellington I Pump Station	27,302	2,031,254	-	-	-	-	2,058,556
51	PS9	Lakebarcroft Odor Control	294,178	1,909,540	1,690,489	1,137,254	-	-	5,031,461
52	PS10	Jones Point Pump Station and Forcemain	411,995	2,096,156	6,259,764	603,269	1,498,719	-	10,869,903
53	PS11	Langley School Pump Station and Forcemain	120,749	246,127	-	-	-	-	366,876
54	PS12	LLV LOW PRESSURE SYSTEM	2,037,254	1,000,000	1,000,000	1,000,000	1,500,000	1,500,000	8,037,254
55	PS13	Oxford and Washington Woods PS	197,848	-	1,266,413	3,063,015	1,030,340	-	5,557,616
56	PS14	Penderbrook and Wesley House Pump Stations	113,991	1,532,745	1,585,173	1,267,797	-	-	4,499,706
57	PS15	FREUND HOUSE PUMP STATION SCREENS	131,795	880,732	121,984	-	-	-	1,134,511
58	PS16	SCADA	846,000	350,000	1,723,010	4,667,452	4,667,452	3,500,589	15,754,503
59	PS17	EMERGENCY Langley School PS	20,099	-	-	-	-	-	20,099
60	PS18	Edgewater and The Fairfax Pump Stations	165,187	-	790,000	1,855,312	-	-	2,810,500
61	PS19	Waynewood I & Waynewood II PS	213,550	-	1,334,472	5,092,190	2,116,689	-	8,756,901
62	PS20	Covanta FM Replacement	1,777,279	4,232,533	3,208,245	-	-	-	9,218,057
63	PS21	Yacht Haven Structure Abandonment	-	-	55,000	575,000	-	-	630,000
64	PS22	BRADDOCK ROAD	-	416,506	2,058,997	9,253,224	10,035,022	12,485,434	34,249,183
65	PS23	Dead Run Valve Replacement	175,142	-	-	-	-	-	175,142
66	PS24	Downscrest PS Replacement	188,427	-	906,303	3,458,582	1,442,243	-	5,995,555
67	PS25	Little Hunting Creek Forcemain	750,575	7,460,621	1,188,112	-	-	-	9,399,308
68	PS26	Mount Vernon Terrace Forcemain	675,948	984,370	181,407	-	-	-	1,841,726
69	PS27	Wellington I Forcemain	21,214	899,901	-	-	-	-	921,115
70	PS28	Riverwood Forcemain	870,121	151,293	-	-	-	-	1,021,414
71	PS29	Miscellaneous Pump Station Projects	1,600,000	1,711,602	2,775,156	4,392,817	10,043,236	11,515,744	32,038,555
72		Total Pumping Stations	\$ 26,169,987	\$ 50,248,423	\$ 45,953,751	\$ 59,243,195	\$ 55,210,984	\$ 34,721,090	\$ 271,547,430
<u>Gravity Sewers</u>									
73	GS1	Meter Rehabilitation - Project 4	\$ 46,890	\$ 2,288,694	\$ 3,405,055	\$ 1,123,824	\$ -	\$ -	\$ 6,864,463
74	GS2	Little Hunting Creek Sewer Sag	259,045	-	-	-	-	-	259,045
75	GS3	Carderock Gravity Sewer Rehabilitation	2,242,572	143,832	263,043	-	-	-	2,649,447
76	GS4	Inspections	2,000,000	2,060,000	2,121,800	2,185,454	2,251,018	2,318,548	12,936,820
77	GS5	Asset Repairs	5,633,811	5,204,102	4,463,539	4,172,800	6,207,360	8,248,832	33,930,444
78	GS6	CIPP LINING	8,000,000	7,000,000	6,000,000	6,180,000	4,120,000	4,243,600	35,543,600
79	GS7	Sag Replacement Package 2	1,402,112	4,323,042	43,075	-	-	-	5,768,229
80	GS8	CREEK BED PROGRAM	850,000	875,500	250,000	250,000	200,000	200,000	2,625,500
81	GS9	CAMERON RUN I&I	-	-	50,000	50,000	50,000	-	150,000
82	GS10	Pohick Creek Rehabilitation-Phase 1 (Pohick Interceptor)	4,400,000	6,000,000	-	-	-	-	10,400,000
83	GS11	Springfield Estates Gravity Bypass	926,430	5,177,169	861,505	-	-	-	6,965,104
84	GS12	Little Pimmit Run Sewer Relocation	380,815	574,338	2,590,893	3,820,126	1,020,458	-	8,386,630
85	GS13	UTILITY INTRUSION	200,000	100,000	105,000	110,250	115,763	121,551	752,563
86	GS14	Chain Bridge Vault - Site Safety Improvements	5,653	-	-	-	-	-	5,653
87	GS15	Augusta Drive Sewer	10,118	-	-	-	-	-	10,118
88	GS16	Coon Branch Tributary Sewer Replacement	50,000	550,000	-	-	-	-	600,000
89	GS17	Bellevue Program	2,336,536	3,044,260	7,000,000	4,000,000	4,120,000	4,243,600	24,744,397
90	GS18	WEST SPRINGFIELD STREAM CROSSING	102,321	1,579,065	-	-	-	-	1,681,386
91	GS19	MH 198 Study	219,831	146,610	-	-	-	-	366,441
92	GS20	EMERGENCY Wolf Trap	423,409	-	-	-	-	-	423,409
93	GS21	Old Mill Odor Study	81,000	-	-	-	-	-	81,000
94	GS22	Pohick Phase 2	508,752	1,166,217	3,446,021	2,333,726	-	-	7,454,715
95	GS23	Town of Vienna Pipes Construction	250,000	250,000	250,000	250,000	250,000	250,000	1,500,000
96	GS24	Chain Bridge Siphon Project - Arlington	300,000	2,000,000	3,000,000	-	-	-	5,300,000
97	GS25	Abilene Street Pipe Replacement	600,000	-	-	-	-	-	600,000
98	GS26	Emergency Joseph Barnes Battery Park	266,339	-	-	-	-	-	266,339
99	GS27	Emergency - Reservoir Road	94,213	-	-	-	-	-	94,213
100	GS28	Emergency - Shreve Road	100,000	-	-	-	-	-	100,000
101	GS29	Miscellaneous Gravity Sewer Projects	2,400,000	2,100,000	2,100,000	5,266,863	9,625,589	6,458,726	27,951,178
102		Total Gravity Sewers	\$ 34,089,848	\$ 44,582,828	\$ 35,949,932	\$ 29,743,044	\$ 27,960,187	\$ 26,084,857	\$ 198,410,695
<u>Expansion</u>									
103	E1	TYSONS WEST	\$ 3,017,068	\$ 12,545,489	\$ 54,253,245	\$ 66,673,029	\$ 34,198,424	\$ 11,341,498	\$ 182,028,752
104	E2	Route 1 Sewer Capacity Access Improvements	1,500,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	51,500,000
105	E3	UTILITY MANAGEMENT PLAN	850,000	-	-	-	-	-	850,000
106	E4	Accotink Creek Relief Sewer-Phase 1	1,458,615	4,571,569	22,378,459	24,476,118	5,320,895	-	58,205,657
107	E5	Lakevale Capacity Improvements	223,397	2,052,076	1,530,730	1,513,504	-	-	5,319,707
108	E6	Merrifield Capacity Upgrade	270,994	2,865,188	766,996	-	-	-	3,903,179
109	E7	TYSONS EAST	1,509,297	-	-	1,076,816	3,195,429	3,186,674	8,968,215
110	E8	I-495 Next Lane	303,816	2,427,811	-	-	-	-	2,731,627
111	E9	Miscellaneous Expansion Projects	-	-	-	1,083,317	9,128,823	21,081,400	31,293,540
112		Total Expansion	\$ 9,133,186	\$ 34,462,134	\$ 88,929,431	\$ 104,822,783	\$ 61,843,571	\$ 45,609,572	\$ 344,800,677
113		Total Wastewater Collection Division	\$ 69,393,021	\$ 129,293,385	\$ 170,833,114	\$ 193,809,022	\$ 145,014,743	\$ 106,415,518	\$ 814,758,802
<u>C&C Conveyance Projects</u>									
114	OP1	Oversizing Projects - County Responsibility	\$ 22,500,000	\$ 11,250,000	\$ 11,250,000	\$ 11,250,000	\$ 11,250,000	\$ 11,250,000	\$ 78,750,000
115		Total Oversizing Program	\$ 22,500,000	\$ 11,250,000	\$ 11,250,000	\$ 11,250,000	\$ 11,250,000	\$ 11,250,000	\$ 78,750,000
116		Capital Outlay (From Operations)	\$ 13,242,784	\$ 6,000,000	\$ 6,180,000	\$ 6,365,400	\$ 6,556,362	\$ 6,753,053	\$ 45,097,598
117		Total System Capital Projects	\$ 327,346,043	\$ 417,932,804	\$ 425,260,723	\$ 434,574,987	\$ 387,278,828	\$ 288,961,742	\$ 2,281,355,126

Table 11
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Funding Sources for the Allocated Ten-Year Estimated Capital Improvement Program for the Wastewater System (in \$000s)

Line No.	Description	Projected Fiscal Year Ending June 30,						Total Cost
		2024	2025	2026	2027	2028	2029	
Funding Requirements								
1	New Customer / Expansion	\$ 139,732,429	\$ 181,855,453	\$ 193,752,274	\$ 203,314,634	\$ 177,013,568	\$ 132,830,596	\$ 1,028,498,955
2	Existing Customer / Non-Expansion	167,051,150	202,302,385	198,641,457	206,523,032	196,896,898	148,865,736	\$ 1,120,280,657
3	Existing Customer / Non-Expansion	15,627,926	20,024,547	17,133,416	16,936,689	17,802,871	12,503,239	\$ 100,028,688
4	Total	\$ 322,411,504	\$ 404,182,385	\$ 409,527,147	\$ 426,774,355	\$ 391,713,338	\$ 294,199,571	\$ 2,248,808,301
5	SOS Contributions	\$ (15,627,926)	\$ (20,024,547)	\$ (17,133,416)	\$ (16,936,689)	\$ (17,802,871)	\$ (12,503,239)	(100,028,688)
6	Net Funding Requirements - Existing	\$ 306,783,578	\$ 384,157,838	\$ 392,393,732	\$ 409,837,666	\$ 373,910,466	\$ 281,696,332	\$ 2,148,779,613
7	Deferred Funding [1]	(89,283,578)	(157,907,838)	(141,143,732)	(123,587,666)	(87,660,466)	4,553,668	(595,029,613)
8	Net Funding Requirements - Existing	\$ 217,500,000	\$ 226,250,000	\$ 251,250,000	\$ 286,250,000	\$ 286,250,000	\$ 286,250,000	\$ 1,553,750,000
Funding Sources:								
9	Rate Revenues	\$ 13,242,784	\$ 6,000,000	\$ 6,180,000	\$ 6,365,400	\$ 6,556,362	\$ 6,753,053	\$ 45,097,598
10	Rev & Op Fund - 69000 / 69010	-	-	-	-	-	-	-
11	Availability Fee Fund - 69000A	-	-	-	-	-	-	-
12	Construction (E&I) Fund - 69300	14,063,573	124,749,000	53,820,000	88,634,600	108,443,638	108,246,947	497,957,759
13	Construction (E&I) Fund - 69300A (Extensions)	-	-	-	-	-	-	-
14	Bond Construction Fund - 69310	86,192,943	-	-	-	-	-	86,192,943
15	Grants / Contributions	-	-	-	-	-	-	-
16	New Debt 1 - Existing	35,394,087	40,154,216	-	-	-	-	75,548,303
17	New Debt 1 - New	29,605,913	36,095,784	-	-	-	-	65,701,697
18	New Debt 1 - Oversizing Program	22,500,000	11,250,000	-	-	-	-	33,750,000
19	New Debt 2 - Existing	-	-	87,772,831	83,369,787	-	-	171,142,618
20	New Debt 2 - New	-	-	85,612,469	82,074,613	-	-	167,687,082
21	New Debt 2 - Oversizing Program	-	-	11,250,000	11,250,000	-	-	22,500,000
22	New Debt 3 - Existing	-	-	-	-	70,150,574	69,973,091	140,123,665
23	New Debt 3 - New	-	-	-	-	63,066,526	62,435,909	125,502,435
24	New Debt 3 - Oversizing Program	-	-	-	-	11,250,000	11,250,000	22,500,000
25	New Debt 4 - Existing - UOSA	8,919,261	4,324,847	3,575,499	-	-	-	16,819,607
26	New Debt 4 - New - UOSA	7,581,439	3,676,153	3,039,201	-	-	-	14,296,793
27	New Debt 4 - Oversizing Program	-	-	-	-	-	-	-
28	New Debt 5 - Existing - UOSA	-	-	-	7,867,860	14,477,185	14,913,994	37,259,038
29	New Debt 5 - New - UOSA	-	-	-	6,687,740	12,305,715	12,677,006	31,670,462
30	New Debt 5 - Oversizing Program	-	-	-	-	-	-	-
31	New Debt 6 - Existing - UOSA	-	-	-	-	-	-	-
32	New Debt 6 - New - UOSA	-	-	-	-	-	-	-
33	New Debt 6 - Oversizing Program	-	-	-	-	-	-	-
34	New Debt 7 - Existing - UOSA	-	-	-	-	-	-	-
35	New Debt 7 - New - UOSA	-	-	-	-	-	-	-
36	New Debt 7 - Oversizing Program	-	-	-	-	-	-	-
37	New Debt 8 - Existing - UOSA	-	-	-	-	-	-	-
38	New Debt 8 - New - UOSA	-	-	-	-	-	-	-
39	New Debt 8 - Oversizing Program	-	-	-	-	-	-	-
40	New Debt 9 - Existing	-	-	-	-	-	-	-
41	New Debt 9 - New	-	-	-	-	-	-	-
42	New Debt 9 - Oversizing Program	-	-	-	-	-	-	-
43	New Debt 10 - Existing	-	-	-	-	-	-	-
44	New Debt 10 - New	-	-	-	-	-	-	-
45	New Debt 10 - Oversizing Program	-	-	-	-	-	-	-
46	Subordinate Debt - UOSA	-	-	-	-	-	-	-
48	Total	\$ 217,500,000	\$ 226,250,000	\$ 251,250,000	\$ 286,250,000	\$ 286,250,000	\$ 286,250,000	\$ 1,553,750,000

Footnotes:
[1] Based on discussions with WMP staff, certain capital improvements were deferred to reduce existing customer impacts and to recognize timing adjustments for the actual need of funds.
[2] UOSA is a Treatment by Contract provider (TBC) to the County and funds all jointly shared improvements through the issuance of additional indebtedness.

**Table 12
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis**

Forecasted Statements of Flows of Financial Resources and Changes in Fund Balance

Line No.		Projected Fiscal Year Ending June 30,					
		2024	2025	2026	2027	2028	2029
1	Beginning Balance [1]	\$ 265,382,912	\$ 333,409,375	\$ 200,536,028	\$ 433,609,462	\$ 256,794,533	\$ 404,791,852
	Operating Revenues:						
2	Sewer Service Charges [2]	\$ 249,903,039	\$ 266,006,538	\$ 283,005,648	\$ 301,219,826	\$ 320,555,083	\$ 341,194,506
3	Sales of Service (Bulk Revenue)				12,448,591		
4	Other Operating Revenues [3]				1,038,234		
5	Subtotal Operating Revenues	\$262,081,925 11,143,886	\$278,560,391 11,517,779	\$296,015,977 11,973,177	\$314,706,651	\$334,538,164 12,943,761	\$355,697,248 13,462,329
	Non -Operating Revenues:						
6	Proposed (New) Debt Proceeds [4]	\$ 191,500,700	\$ 8,001,000	\$ 367,944,400	\$ 14,555,600	\$ 314,909,000	\$ 27,591,000
7	Additions to Debt Reserve Fund [4]						
8	Availability Fees	\$ 18,286,001	\$ 18,895,975	\$ 19,770,973	\$ 20,446,046	\$ 21,331,985	\$
9	Unrestricted Interest Earned						22,015,343
10	Restricted Interest Income [5]	\$1,589,299	862,000	\$ 17,000	\$6,881,825	20,000	\$ 22,000
11	Grants				20,000		
12	Subtotal	\$4,579,000 236,816,999	\$4,900,000 1,813,975	\$6,641,000 20,258,199	\$6,338,000 1,359,646	\$8,598,000 3,788,406	\$8,788,000 6,416,343
13	TOTAL FUNDS AVAILABLE	\$ 754,281,836	\$ 643,783,741	\$ 916,810,203	\$ 789,675,759	\$ 955,121,103	\$ 816,905,444
	Operating Expenses						
14	Personnel Services	\$ 45,541,780	\$ 46,908,034	\$ 48,315,275	\$ 49,764,733	\$ 51,257,675	\$ 52,795,405
15	Operating Expenses						
16	Recovered Costs					45,272,727	
17	TBC and Billing Agent Costs						
18	General Fund Transfer	42,205,437	41,740,257	42,888,789	44,042,192	(665,616)	46,533,329
19	Operating Expense Adjustment	(508,010)	(614,520)	(621,096)	(647,000)		(683,500)
20	Subtotal	\$0,044,140 180,193,393	\$1,661,440 1,695,172	\$3,289,007 47,462,064	\$4,953,159 2,312,176	\$6,711,849 376,635	\$ (683,500) 613
	Capital Expenses by Funding Source						
21	Cash Reserves / Rate Revenues [6]	\$ 14,063,573	\$ 124,749,000	\$ 600,000	\$ 53,820,000	\$ 88,634,600	\$ 108,443,638
22	Availability Charge Fund						
23	Existing Debt Proceeds	-	-	-	-	-	-
24	New Debt Proceeds [7]					171,250,000	
25	Grant Funding						
26	Capital Outlay	86,192,943 104,000,700	95,501,999	191,250,000	191,250,000		171,250,000
27	Subtotal	\$ 217,500,000	\$ 228,250,000	\$ 251,250,000	\$ 286,250,000	\$ 286,250,000	\$
	Footnotes on Page 2 of 2	13,242,784	6,000,000	6,180,000	6,365,400	6,556,362	6,799,000

Table 12
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

Forecasted Statements of Flows of Financial Resources and Changes in Fund Balance

<u>Debt Service:</u>							
28	Existing Senior Debt Service	\$ 36,991,731	\$ 36,976,929	\$ 37,020,171	\$ 37,010,629	\$ 36,995,085	\$ 31,357,802
29	Proposed Senior Debt Service [4]				31,270,872		
30	Existing Subordinate Debt Service				24,048,665		
31	Proposed Subordinate Debt Service [7]						
32	Subtotal	<u>\$ 897,326,179,068</u>	<u>\$ 1,589,299,302,542</u>	<u>\$ 1,430,084,488,677</u>	<u>\$ 94,319,050</u>	<u>\$ 9,262,062,702,615</u>	<u>\$ 3,326,109,045,190</u>
		23,290,012	23,747,430	24,049,537		24,050,780	17,966,302
33	<u>TOTAL USE OF FUNDS</u>	<u>\$ 420,872,461</u>	<u>\$ 988,884,247,714</u>	<u>\$ 988,884,200,742</u>	<u>\$ 1,988,884,532,881,226</u>	<u>\$ 3,394,687,550,329,250</u>	<u>\$ 3,394,687,557,324,721</u>
34	<u>ENDING BALANCE BEFORE RESERVES</u>	<u>\$ 333,409,375</u>	<u>\$ 200,536,027</u>	<u>\$ 433,609,462</u>	<u>\$ 256,794,533</u>	<u>\$ 404,791,853</u>	<u>\$ 259,580,723</u>
	RESERVES / RESTRICTIONS:						
35	Operating Reserve Target (150 Days)	\$ 57,613,723	\$ 58,641,851	\$ 60,600,848	\$ 62,594,045	\$ 64,675,329	\$ 66,587,479
36	Debt Reserve Balance						
37	Debt Proceeds						
38	Availability Charge Balance					90,741,664	
39	Sewer Construction Fund - 69300A [8]	48,609,470	48,609,470	69,813,243	69,813,243	-	90,741,664
40	Subtotal	<u>\$ 8,362,000,845,193</u>	<u>\$ 113,130,321,777,592,400</u>	<u>\$ 313,269,643</u>	<u>\$ 5,383,386,919,000</u>	<u>\$ 305,805,700</u>	<u>\$ 962,000</u>
41	<u>UNRESTRICTED ENDING BALANCE</u>	<u>\$ 2,60,005,564,182</u>	<u>\$ 0,000,87,405,706</u>	<u>\$ 262,132,339,819</u>	<u>\$ 117,942,859</u>	<u>\$ 789,707,98,986,153</u>	<u>\$ 164,348,262</u>
							8,053,952,34,461

Footnotes:

- [1] Reflects starting fund balance, but is exclusive of funds held in the debt service sinking fund.
- [2] Includes recommended rate adjustments as follows:

	Projected Fiscal Year Ending June 30,					
	2024	2025	2026	2027	2028	2029
	(Existing)	(Recommended)	(Recommended)	(Recommended)	(Recommended)	(Recommended)
Quarterly Base Charge	\$ 44.81	\$ 49.73	\$ 52.62	\$ 55.78	\$ 59.08	\$ 62.57
Flow Charge	\$ 8.46	\$ 8.81	\$ 9.33	\$ 9.88	\$ 10.46	\$ 11.08
Effective Rate Revenue Increase	n/a	5.9%	5.9%	5.9%	5.9%	5.9%
Effective Rate Revenue Increase	n/a	5.8%	5.9%	5.9%	5.9%	5.9%

- [3] Represents other operating revenues from lateral spur fees, connection charges, miscellaneous revenues, sale of property, etc.
- [4] Represents the proposed issuance of the Series 2024 UOSA Bonds, Series 2027 UOSA Bonds, and Series 2030 UOSA Bonds as well as the Series 2024 Bonds on or about July 1, 2023, the Series 2027 Bonds on or about July 1, 2026, and the Series 2030 Bonds on or about July 1, 2029. Terms assume 30 year level debt with proceeds to fund deposits to the debt service reserve fund.
- [5] Includes Interest Income on debt proceeds and availability charge fund balances.
- [6] Includes capital funding from rate revenues, E&I fund balances and operating reserves.
- [7] Represents additional debt service from UOSA issued bonds on behalf of the County.
- [8] Represents restricted funds held on balance within the SC Fund for line extensions.

**Table 13
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis**

Comparison of Typical Quarterly Residential Bills for Wastewater Service [1][2]

Line No.	Description	Billing Cycle	Residential Service for a 5/8" or 3/4" Meter											
			0 Gallons	2,000 Gallons	4,000 Gallons	5,000 Gallons	8,000 Gallons	10,000 Gallons	12,000 Gallons	16,000 Gallons	18,000 Gallons	20,000 Gallons	30,000 Gallons	40,000 Gallons
Fairfax County														
1	Existing Rates - FY24 [3]	Quarterly	\$44.81	\$61.73	\$78.65	\$87.11	\$112.49	\$129.41	\$146.33	\$180.17	\$197.09	\$214.01	\$298.61	\$383.21
2	Proposed Rates - FY25 [3]	Quarterly	49.73	67.35	84.97	93.78	120.21	137.83	155.45	190.69	208.31	225.93	314.03	402.13
<u>Other Neighboring Utilities:</u>														
3	City of Alexandria [3][4][5]	Monthly	41.55	70.19	98.83	113.15	156.11	184.75	213.39	270.67	299.31	327.95	471.15	614.35
4	Arlington County	Quarterly	13.52	32.74	51.96	61.57	90.40	109.62	128.84	167.28	186.50	205.72	301.82	397.92
5	DCWASA [4][6]	Monthly	77.21	109.56	141.91	158.08	206.61	238.96	271.31	336.01	368.36	400.71	562.46	724.21
6	Loudoun Water [4]	Quarterly	116.82	128.00	139.18	144.77	161.54	172.72	183.90	206.26	217.44	228.62	284.52	340.42
7	Prince William County S.A. [3][4]	Monthly	37.65	51.35	65.05	71.90	92.45	106.15	119.85	147.25	160.95	174.65	243.15	311.65
8	Washington Suburban Sanitary Commission [4][7]	Quarterly	30.39	47.73	65.07	73.74	107.43	126.69	145.95	223.83	248.01	272.19	509.49	669.19
9	Other Neighboring Virginia Utilities' Average		\$52.86	\$73.26	\$93.67	\$103.87	\$135.76	\$156.48	\$177.21	\$225.22	\$246.76	\$268.31	\$395.43	\$509.62

Footnotes:

[1] Unless otherwise noted, amounts shown reflect residential rates in effect October, 2023 and are exclusive of taxes or franchise fees, if any, and do not include any surcharges for service rendered outside the corporate limits of the local jurisdiction, for specific capital improvements or for any other purpose. All rates are as reported by the respective utility. This comparison is intended to show comparable charges for similar service for comparison purposes only and is not intended to be a complete listing of all rates and charges offered by each listed utility.

[2] It should be noted that utilities may differ as to the term of billing period (e.g., monthly billing) and units of measurement (e.g., ccf) used in order to determine the respective utility customer's wastewater bill. For purposes of this comparison, all bills shown have been adjusted to match bills rendered on a monthly basis and recognized in units of gallons.

[3] Unless otherwise noted, utilities shown cap the wastewater user charge based on a customers metered water use during the winter months (referred to as a "billing cap"). While the billing cap may vary by customer and by utility, for comparison purposes the billing cap was not reflected in order to present the potential wastewater bill for residential customers that may have higher use than the typical residential customer.

[4] Utilities shown bill a fixed cost or base charge per billing period per respective account or meter.

[5] Alexandria Renew Enterprises provides wastewater treatment services, while the City provides wastewater collection services. Alexandria Renew Enterprises incorporates a sewer billing cap, however the City does not and no cap was applied in calculation of the City's charges for this comparison.

[6] Amounts shown assumes: i) the Clean Rivers Impervious Area Charge of \$21.86 per month associated with runoff entering the sewer system; ii) a 50% allocation of the \$7.75 metering fee; iii) a 50% allocation of the a Right-of-Way fee to the District of Columbia of \$0.25 per 1,000 gallons; iv) 50% allocation of the PILOT fee charged to water and wastewater customers of \$0.82 per 1,000 gallons; and v) the residential wastewater flow charge of \$15.64 per 1,000 gallons.

[7] The Washington Suburban Sanitary Commission ("WSSC") bills customers of the utility by calculating the respective customer's average daily flow of use, which is in turn used to determine the variable rate charged to the customer. The calculated bill assumes 5,333 gallons per month or approximately 175 gallons per day. Amounts shown assume a 50% allocation of the quarterly Account Maintenance fee of \$18.23 and a \$12.54 infrastructure fee. Amounts shown also include a Bay Restoration Fee of \$5.00 per month.

**Table 14
Fairfax County Wastewater Management
Fiscal Year 2024 Availability Charge Study**

Calculation of Weighted Cost by Treatment Facility per MGD of Reserved Capacity

Line No.	Description	Treatment by Contract						Total
		Upper Occoquan Service Authority (UOSA)	Blue Plains Advanced Wastewater Treatment Plant - DC Water (Blue Plains)	Alexandria Renew Enterprises (ARE)	Arlington County Water Pollution Control Plant (Arlington)	Loudon County Sanitation Authority	Noman Cole (Fairfax County)	
WASTEWATER TREATMENT								
1	Gross Fixed Capacity Rights / Assets [1]	\$341,231,346	\$343,412,799	\$406,346,261	\$53,324,936	\$20,942,294	\$850,527,547	\$2,015,785,184
2	Less Fixed Asset Allocation to SOS Customers (Dont Direct Pay C	(15,440,332)	n/a	n/a	n/a	n/a	(50,777,764)	(66,218,096)
3	Less Donated Assets	n/a	n/a	n/a	n/a	n/a	(24,837)	(24,837)
4	Plus 10 Year CIP CIP (Inflated) [3]	268,718,050	248,904,226	299,148,963	19,381,000	0	392,637,881	1,228,790,120
5	Less Allowance for Retirements for CIP	n/a	n/a	n/a	n/a	n/a	(145,276,016)	(145,276,016)
6	Plus Land, Easements, and CWIP	n/a	n/a	n/a	n/a	n/a	171,146,361	171,146,361
7	Total	\$594,509,064	\$592,317,025	\$705,495,224	\$72,705,936	\$20,942,294	\$1,218,233,173	\$3,204,202,716
8	Total Reserved Capacity (MGD)	22.10	31.00	32.40	3.00	1.00	67.00	156.50
9	Sales of Service Reservations (MGD) [4]	(1.00)	(4.80)	(1.00)	0.00	0.00	(9.45)	(16.25)
10	Net Retail Reservations	21.10	26.20	31.40	3.00	1.00	57.55	140.25
11	Less Reserved Capacity for Reliability (MGD)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Net Reliable Retail Capacity (MGD)	21.10	26.20	31.40	3.00	1.00	57.55	140.25
13	Cost per GPD of Reliable Capacity (Line 7 / \$1,000,000 / Line 12)	\$28.18	\$22.61	\$22.47	\$24.24	\$20.94	\$21.17	\$139.60
14	Other Adjustments [5]	(\$5.29)	0.00	0.00	0.00	0.00	0.00	(5.29)
15	Adjusted Cost per GPD of Reliable Capacity	\$22.89	\$22.61	\$22.47	\$24.24	\$20.94	\$21.17	\$134.31
16	Retail Customers Annual Treated Flows (10yr Max kgal) [6]	5,270,965	9,750,610	7,447,460	854,830	0	13,317,755	36,641,620
17	Retail Customers Annual Treated Flows (ADF-MGD)	14.44	26.71	20.40	2.34	0.00	36.49	100.39
18	Remaining Reliable Retail Capacity (MGD) (Line 12 - Line 17)	6.66	0.00	11.00	0.66	1.00	21.06	40.38
19	Capacity as % of Total Remaining Capacity	16.49%	0.00%	27.23%	1.63%	2.48%	52.17%	100.00%
20	Weighted cost of Reliable Capacity for Retail Customers	\$3.77	\$0.00	\$6.12	\$0.39	\$0.52	\$11.04	\$21.84
WASTEWATER NON-TREATMENT								
21	Gross Fixed Capacity Rights / Assets [1]	\$4,434,649	\$0	\$5,893,325	\$0	\$0	\$978,642,147	\$988,970,121
22	Less Donated Assets	n/a	n/a	n/a	n/a	n/a	(234,124,715)	(234,124,715)
23	Less Grants	n/a	n/a	n/a	n/a	n/a	0	0
24	Plus 10 Year CIP CIP (Inflated) [3]	0	0	0	0	0	1,760,564,575	1,760,564,575
25	Less Allowance for Retirements for CIP	n/a	n/a	n/a	n/a	n/a	(651,408,893)	(651,408,893)
26	Plus Land, Easements, and CWIP	n/a	n/a	n/a	n/a	n/a	83,966,605	83,966,605
27	Total	\$4,434,649	\$0	\$5,893,325	\$0	\$0	\$1,937,639,719	\$1,947,967,693
28	Net Reliable Retail Reservations (MGD)							140.25
29	Cost per MGD of Capacity							\$13.89
30	Treatment and Transmission Cost per MGD of Capacity							\$35.73

Footnotes:

- [1] Amounts shown provided by the County and are booked net of the Sale of Service customers that make direct capital contributions.
- [2] Reflects adjustment to remove SOS customer allocations that do not make direct capital contribution payments to the County (i.e., paid via rates)
- [3] Amounts shown reflect the County's most recent CIP and include treatment and transmission projects only.
- [4] Amounts shown represent reserved capacity for Sale of Service customers
- [5] The adjustment shown is the to show the most recent cost of capacity as calculated by UOSA using an incremental approach while all other costs were calculated using the buy in method.
- [6] The flows shown above are the 10 year max treated flows.

Table 15

**Fairfax County Wastewater Management
Fiscal Year 2024 Availability Charge Study**

Summary of Calculated and Existing Availability Fees

Line No.	Description	Fee
<u>Existing Availability Fee:</u>		
<u>LOS GPD Basis</u>		
1	Fee (\$ per GPD)	\$31.64
2	Level of Service (per GPD)	280
3	Fee (\$ per ERC)	<u>\$8,860.00</u>
<u>Fixture Unit Basis</u>		
4	Fixture Units	20.00
5	Fee per fixture Unit	<u>\$443.00</u>
6	Existing Fee	<u>\$8,860.00</u>
<u>Calculated Availability Fee:</u>		
7	Net Assets / CIP (\$ per GPD)	\$35.73
8	Level of Service (per GPD)	280
9	Fee (\$ per ERC)	<u>\$10,004.19</u>
<u>Carrying Costs:</u>		
10	Years of Carry Cost	5.0
11	Current Weighted Cost of Capital	4.29%
12	Carry Cost (\$ per ERC)	<u>\$2,147.32</u>
13	Carry Cost (\$ per GPD)	\$7.67
<u>Total Calculated Fee</u>		
14	Per ERC	<u>\$12,151.51</u>
15	Per GPD	\$43.40
<u>Total Calculated Fee (Rounded Down)</u>		
16	Per ERC	<u>\$12,150.00</u>
17	Per GPD	\$43.39
18	Per Fixture Unit	<u>\$607.50</u>
<u>Difference to Existing Fee:</u>		
19	Change in Fee per GPD - Amount	<u>\$11.75</u>
20	Change in Fee per GPD - Percent	37.13%
21	Change in Fee per Fixture Unit - Amount	\$164.50
22	Change in Fee per Fixture Unit - Percent	37.13%
23	Change in LOS (per GPD) - Amount	0
24	Change in LOS (per GPD) - Percent	0.00%
25	Change in Fee per ERC - Amount	\$3,290.00
26	Change in Fee per ERC - Percent	<u>37.13%</u>

Table 16
Fairfax County, Virginia
Comparison of Availability Fee Charges for Equivalent Residential Unit [1]

Line No.	Description	Residential 5/8" x 3/4" Meter Wastewater
Fairfax County		
1	Existing Availability Fee	\$8,860
2	Recommended Availability Fee	\$9,038
<u>Other Surveyed Virginia Utilities:</u>		
3	City of Alexandria	\$9,446
4	Arlington County [2]	\$3,720
5	DCWASA	\$2,809
6	Loudoun Water	\$9,241
7	Prince William County S.A.	\$11,200
8	Washington Suburban Sanitary Commission [3]	\$14,500
9	Washington Suburban Sanitary Commission (Unimproved) [3]	\$6,500
10	Other Surveyed Virginia Utilities' Average	<u>\$8,202</u>

Footnotes:

- [1] Unless otherwise noted, amounts shown reflect residential rates in effect October 2023 and are exclusive of taxes or franchise fees, if any, and reflect rates charged for inside the city service. All rates are as reported by the respective utility. This comparison is intended to show comparable charges for comparison purposes only.
- [2] Impact Fee for Arlington County assumes 24 fixture units (DFU's) per Single Family Residential Unit at a cost of \$155/DFU.
- [3] WSSC charges a separate availability fees for areas designated as unimproved or "improved".

APPENDIX A

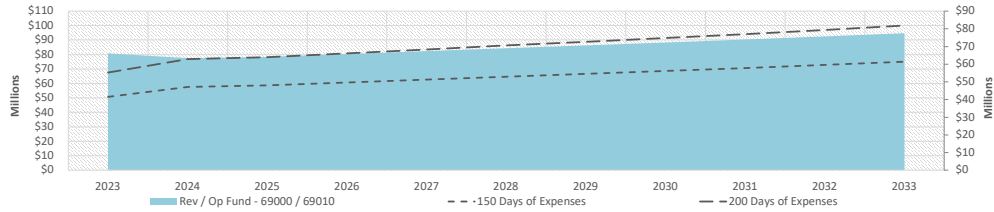
WASTEWATER REVENUE SUFFICIENCY AND RATE ANALYSIS MODEL OUTPUT – MANAGEMENT DASHBOARD

Chart No.	Description
1	<p>Operating Cash Reserves / Liquidity</p> <ul style="list-style-type: none"> ▪ Identifies the forecast of projected and targeted operating cash reserves, which are used by the utility to maintain working capital for cash flow and to provide a reserve for contingencies such as unexpected increases in expenses or reductions in revenues all to ensure the utility can fund the near-term requirements of the system.
2	<p>Revenue Sufficiency</p> <ul style="list-style-type: none"> ▪ Provides an indication of the annual expenditures funded from revenues by category or type of expenditure and whether existing or recommended rates are sufficient to fund such requirements to essentially determine the sufficiency of the forecast revenues.
3	<p>Capital Reinvestment from Rates</p> <ul style="list-style-type: none"> ▪ Primarily identifies the transfers in and out of capital-related funds for capital investment. Provides an indication of the level or amount of capital reinvestment as a percent of depreciation.
4	<p>Net Revenue Margin (No ACs)</p> <ul style="list-style-type: none"> ▪ Is a ratio calculated as: i) the Gross revenues (excluding ACs) less operating expenses = net revenues (excluding ACs); divided by ii) gross revenues (excluding ACs). Indicates how much net revenue as a percent (%) is available to fund other expenditures above the cost of operation and maintenance. Higher ratios (above 40%) generally indicate more funds available for capital reinvestment.
5	<p>Capital Cash Reserves / Liquidity</p> <ul style="list-style-type: none"> ▪ In addition to operating reserves, the utility should maintain capital-related funds to finance future capital projects and to provide funds for unexpected capital needs (e.g., a major line break). The forecast of such cash by fund provides an indication of the amount of funds available for unexpected capital improvements or cost increases. This also aids in identifying trends, such as declining reserve balances, which may not be sustainable.
6	<p>Projected Capital Funding Program</p> <ul style="list-style-type: none"> ▪ Identifies the annual capital funding (excluding UOSA capital projects) by source (e.g., internal sources such as rate revenues, availability charges, existing reserves, or debt proceeds)
7	<p>Free Cash Flow to Depreciation Ratio</p> <ul style="list-style-type: none"> ▪ Is a ratio to determine the annual cash flow available for capital reinvestment expressed as a percent of depreciation. Free cash is determined as the Gross Revenues less operating expenses and annual debt service payments. Amounts shown are expressed with and without availability charges.

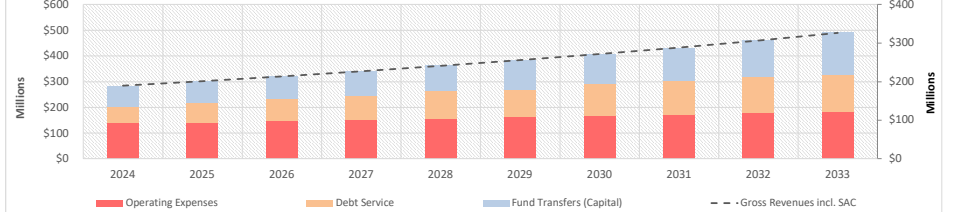
**Appendix A
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis**

	Adopted Fiscal Year Ending June 30,										Projected Fiscal Year Ending June 30,										
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	
Adopted Rate Adj (%):																					
Quarterly Base Charge	11.6%	11.0%	5.8%	5.3%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%	11.33%	10.81%	5.66%	5.84%	5.75%	5.75%	5.76%	5.76%	5.76%	5.76%	5.76%
Quarterly Billing Charge	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Quarterly Billing Charge Flow Charge	4.6%	4.1%	5.9%	5.4%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%	4.16%	3.97%	5.66%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%
Incremental Rate Adj (%):																					
Base Line - Qnty. Base Charge											0.30%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%
Base Line - Qnty. Billing Charge											0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Base Line - Flow Charge											0.30%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%
Over sizing - Qnty. Base Charge											0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Over sizing - Qnty. Billing Charge											0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Over sizing - Flow Charge											0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Quarterly Base Charge											11.63%	10.96%	5.81%	5.99%	5.90%	5.90%	5.91%	5.91%	5.91%	5.91%	5.91%
Quarterly Billing Charge											0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Flow Charge											4.46%	4.12%	5.81%	5.90%	5.90%	5.90%	5.90%	5.90%	5.90%	5.90%	5.90%
Weighted Increase - Effective											N/A	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%
Weighted Increase - Annualized											N/A	5.8%	5.9%	5.9%	5.9%	5.9%	5.9%	6.0%	5.9%	5.9%	5.9%
Adopted Rates:																					
Quarterly Base Charge	\$ 44.81	\$ 49.73	\$ 52.62	\$ 55.41	\$ 58.35	\$ 58.35	\$ 58.35	\$ 58.35	\$ 58.35	\$ 58.35	\$44.81	\$49.73	\$52.62	\$55.78	\$59.08	\$62.57	\$66.27	\$70.19	\$74.34	\$78.74	
Quarterly Billing Charge	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Flow Charge	\$ 8.46	\$ 8.81	\$ 9.33	\$ 9.83	\$ 10.35	\$ 10.35	\$ 10.35	\$ 10.35	\$ 10.35	\$ 10.35	\$8.46	\$8.81	\$9.33	\$9.88	\$10.46	\$11.08	\$11.74	\$12.44	\$13.18	\$13.96	
Quarterly Bill	\$ 197.09	\$ 208.31	\$ 220.56	\$ 232.25	\$ 244.65	\$ 244.65	\$ 244.65	\$ 244.65	\$ 244.65	\$ 244.65	\$ 197.09	\$ 208.31	\$ 220.56	\$ 233.62	\$ 247.36	\$ 262.01	\$ 277.59	\$ 294.11	\$ 311.58	\$ 330.02	
Change - Quarterly (18kgal)		\$ 11.22	\$ 12.25	\$ 11.79	\$ 12.30	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00		\$ 11.22	\$ 12.25	\$ 13.06	\$ 14.65	\$ 15.58	\$ 16.52	\$ 17.47	\$ 18.44	\$ 18.44	
Change - Monthly (6kgal)		\$ 3.74	\$ 4.08	\$ 3.93	\$ 4.10	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00		\$ 3.74	\$ 4.08	\$ 4.35	\$ 4.88	\$ 5.19	\$ 5.51	\$ 5.82	\$ 5.82	\$ 5.82	
Proposed Rates:																					
Quarterly Base Charge											\$44.81	\$49.73	\$52.62	\$55.78	\$59.08	\$62.57	\$66.27	\$70.19	\$74.34	\$78.74	
Quarterly Billing Charge											\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Flow Charge											\$8.46	\$8.81	\$9.33	\$9.88	\$10.46	\$11.08	\$11.74	\$12.44	\$13.18	\$13.96	
Quarterly Bill											\$ 197.09	\$ 208.31	\$ 220.56	\$ 233.62	\$ 247.36	\$ 262.01	\$ 277.59	\$ 294.11	\$ 311.58	\$ 330.02	
Change - Quarterly (18kgal)												\$ 11.22	\$ 12.25	\$ 13.06	\$ 14.65	\$ 15.58	\$ 16.52	\$ 17.47	\$ 18.44	\$ 18.44	
Change - Monthly (6kgal)												\$ 3.74	\$ 4.08	\$ 4.35	\$ 4.88	\$ 5.19	\$ 5.51	\$ 5.82	\$ 5.82	\$ 5.82	

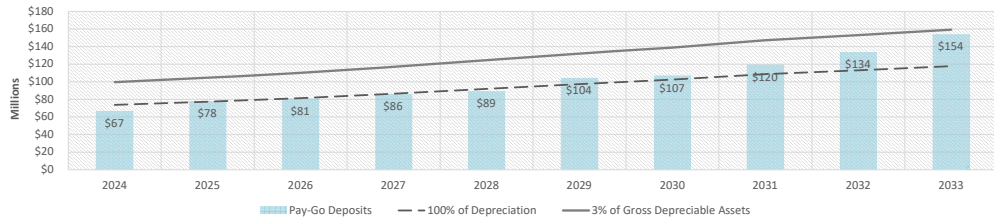
1) Operating Cash Reserves / Liquidity. Ending Balance



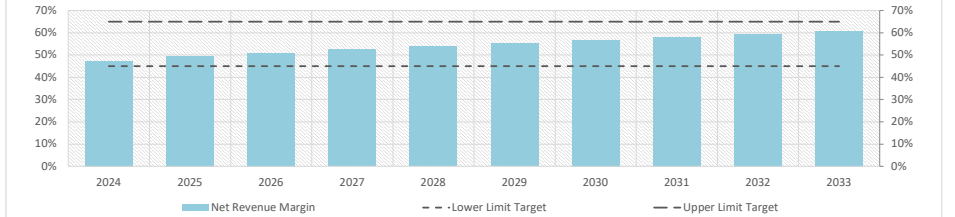
2) Revenue Sufficiency



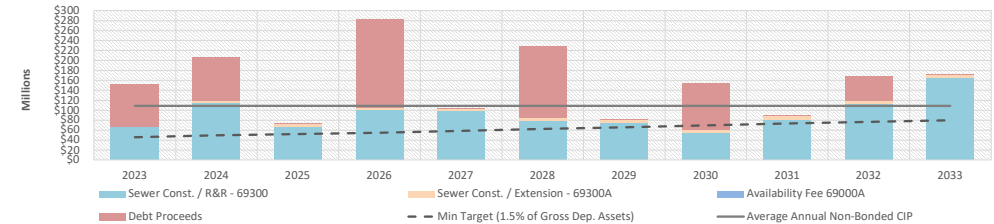
3) Capital Reinvestment from Rates (Pay-Go)



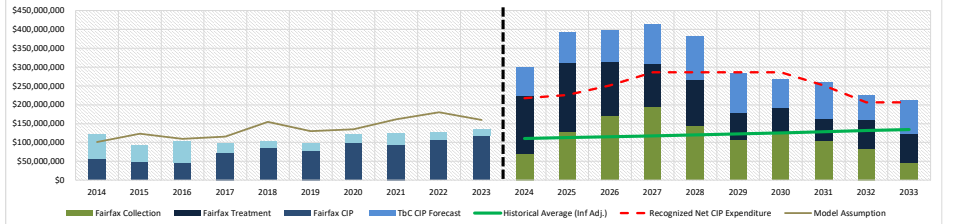
4) Net Revenue Margin (No SACs)



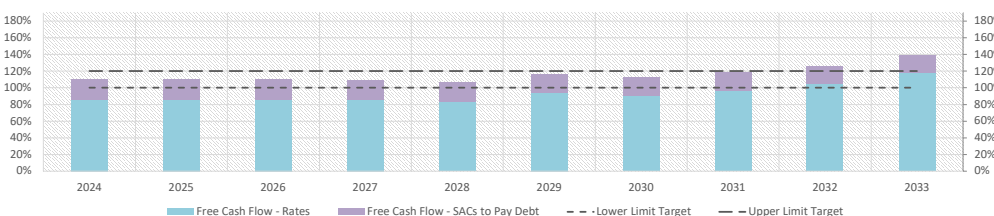
5) Capital Cash Reserves / Liquidity. Ending Balance



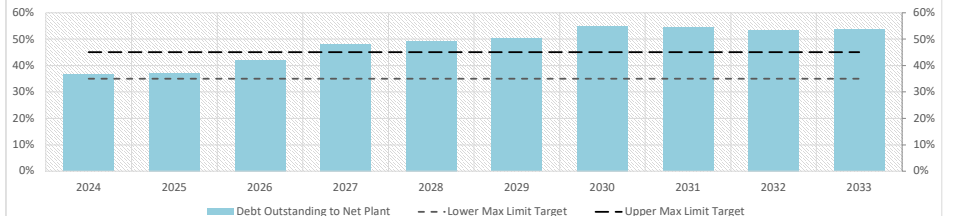
6) Historical and Projected Capital Spending



7) Free Cash Flow to Depreciation Ratio



8) Debt to Net Plant Investment (Equity)



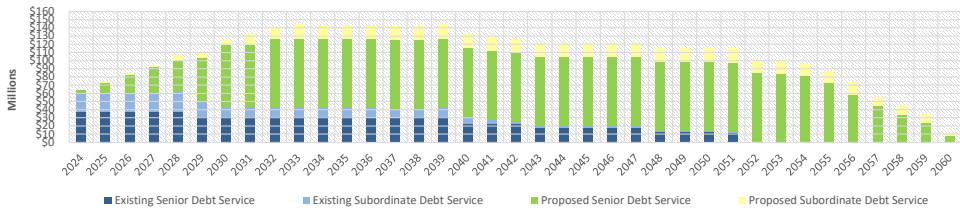


Appendix A
Fairfax County, Virginia
Wastewater Revenue Sufficiency and Rate Analysis

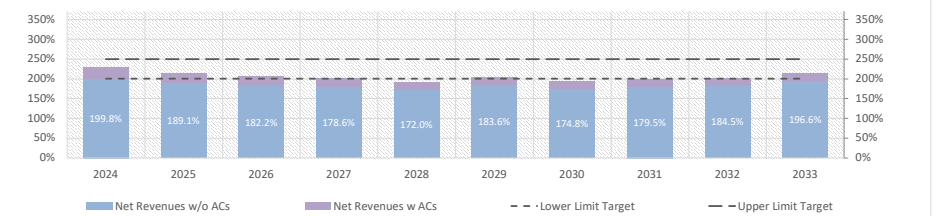
	Adopted Fiscal Year Ending June 30,									
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Adopted Rate Adj (%):										
Quarterly Base Charge	11.6%	11.0%	5.8%	5.3%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Quarterly Billing Charge	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Flow Charge	4.6%	4.1%	5.9%	5.4%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Weighted Increase - Effective	6.2%	5.9%	5.9%	5.5%	5.3%	1.3%	0.0%	0.0%	0.0%	0.0%
Weighted Increase - Annualized	6.2%	5.8%	5.9%	5.3%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Adopted Rates:										
Quarterly Base Charge	\$ 44.81	\$ 49.73	\$ 52.62	\$ 55.41	\$ 58.35	\$ 58.35	\$ 58.35	\$ 58.35	\$ 58.35	\$ 58.35
Quarterly Billing Charge	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
Flow Charge	\$ 8.46	\$ 8.81	\$ 9.33	\$ 9.83	\$ 10.35	\$ 10.35	\$ 10.35	\$ 10.35	\$ 10.35	\$ 10.35
Quarterly Bill	\$ 197.09	\$ 208.31	\$ 220.56	\$ 232.35	\$ 244.65	\$ 244.65	\$ 244.65	\$ 244.65	\$ 244.65	\$ 244.65
Change - Quarterly (18kgal)	\$ 11.22	\$ 12.25	\$ 12.25	\$ 11.79	\$ 12.30	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
Change - Monthly (6kgal)	\$ 3.74	\$ 4.08	\$ 4.08	\$ 3.93	\$ 4.10	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

	Projected Fiscal Year Ending June 30,									
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Incremental Rate Adj (%):										
Base Line - Qly. Base Charge	11.33%	10.81%	5.66%	5.84%	5.75%	5.75%	5.76%	5.76%	5.76%	5.76%
Base Line - Qly. Billing Charge	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Base Line - Flow Charge	4.16%	3.97%	5.66%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%
Upsizing - Qly. Base Charge	0.30%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%
Upsizing - Qly. Billing Charge	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Upsizing - Flow Charge	0.30%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%
Quarterly Base Charge	11.63%	10.96%	5.81%	5.99%	5.90%	5.90%	5.91%	5.91%	5.91%	5.91%
Quarterly Billing Charge	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Flow Charge	4.46%	4.12%	5.81%	5.90%	5.90%	5.90%	5.90%	5.90%	5.90%	5.90%
Weighted Increase - Effective	N/A	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%
Weighted Increase - Annualized	N/A	5.8%	5.9%	5.9%	5.9%	5.9%	6.0%	5.9%	5.9%	5.9%
Proposed Rates:										
Quarterly Base Charge	\$44.81	\$49.73	\$52.62	\$55.78	\$59.08	\$62.57	\$66.27	\$70.19	\$74.34	\$78.74
Quarterly Billing Charge	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Flow Charge	\$8.46	\$8.81	\$9.33	\$9.88	\$10.46	\$11.08	\$11.74	\$12.44	\$13.18	\$13.96
Quarterly Bill	\$ 197.09	\$ 208.31	\$ 220.56	\$ 233.62	\$ 247.36	\$ 262.01	\$ 277.59	\$ 294.11	\$ 311.58	\$ 330.02
Change - Quarterly (18kgal)	\$ 11.22	\$ 12.25	\$ 13.06	\$ 13.06	\$ 13.74	\$ 14.65	\$ 15.58	\$ 16.52	\$ 17.47	\$ 18.44
Change - Monthly (6kgal)	\$ 3.74	\$ 4.08	\$ 4.35	\$ 4.58	\$ 4.88	\$ 5.19	\$ 5.51	\$ 5.82	\$ 6.15	\$ 6.15

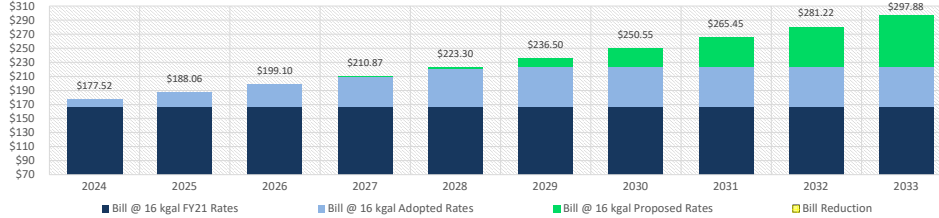
9) Annual Debt Service Payments



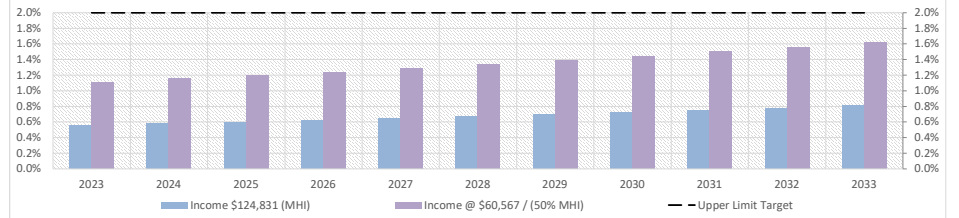
10) All-In Debt Service Coverage Ratio (Net Revenue / Annual Debt Service)



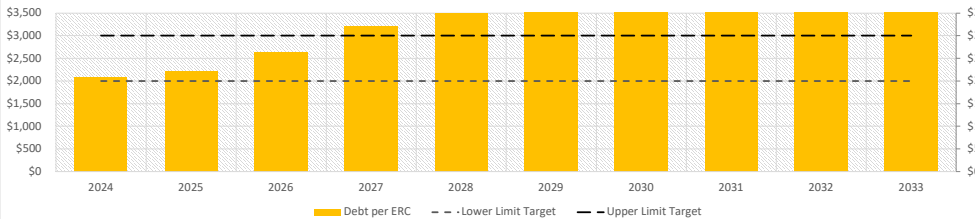
11) Single-Family Residential Customer Quarterly Bill



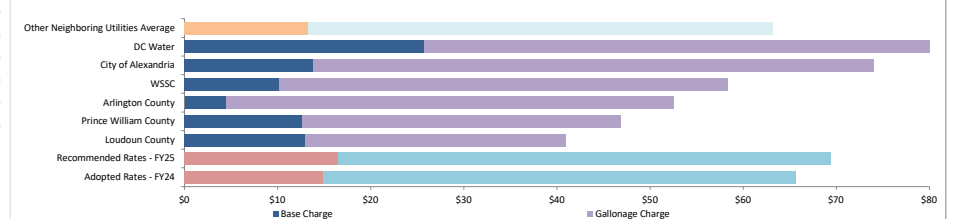
12) Rate Affordability - Residential Bill as a % of MHI



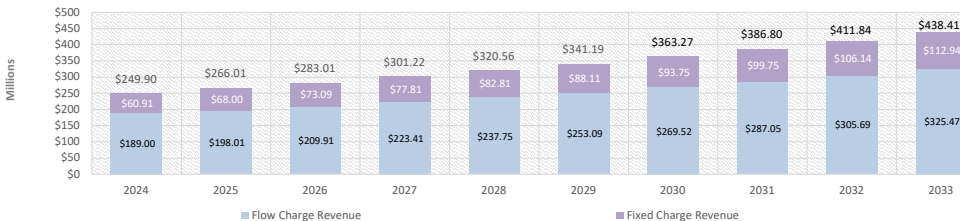
13) Outstanding Debt Per ERU



14) Monthly Residential Wastewater Bill Comparison at 6,000 Gallons



15) Proposed Rate Revenues (Retail). Fixed vs Variable (\$ Millions)



16) Proposed Retail Rate Revenue. Fixed vs Variable (%)

