

Our Mission: To build and maintain water delivery, sanitary sewer collection, and wastewater treatment systems that provide high-quality water and sewer services and products

SIGNIFICANT BUDGET CHANGES

The FY 2023 proposed expenditure budget for the Utilities Fund is \$92,813,804, a three percent increase from the FY 2022 adopted budget. The FY 2023 budget reflects:

- ↑ Personnel increases primarily due to the adjustments to salaries resulting from Engineering job family study (\$170,610), employee salary increases, one-time bonus of approximately \$1,000 (\$300,000), and slightly higher retirement contributions based on current actuarial projections.
- ↑ Non-personnel increases primarily due to one-time costs to perform a water service line material inventory (\$475,000), purchased water (\$250,000), adjustments to the annual expense for maintenance replacement of County vehicles (\$127,226), one-time cost to upgrade replacements in the County fleet to electric vehicles (EV) (\$120,792) and the one-time cost for an electric van and charging infrastructure at the Water Pollution Control Plant (\$68,000), partially offset by elimination of FY 2022 one-time expenses (\$305,800).
- → Debt service decreases due to refinancing and repayment of General Obligation Bonds for various Utilities Fund capital projects (\$1,188,629).
- ↑ Other expenses increase due to overhead charges (\$730,263).
- ↓ Intra-county revenue is transferred to water and sewer customer receipt revenue in FY 2023 due to changes implemented from the recently completed water-sewer rate study (\$900,000).
- ↑ Revenues increase due to the proposed water and sewer rate increase (\$2,127,578) and miscellaneous revenues (\$64,150), partially offset by a decrease in Lee Pumping Station lease agreements due to lease expiration (\$121,680).

PROGRAM FINANCIAL SUMMARY

	FY 2021 Actual	FY 2022 Adopted	FY 2023 Proposed	% Change '22 to '23
Personnel	\$24,284,957	\$26,397,224	\$27,543,420	4%
Non-Personnel	28,621,401	30,516,213	31,251,431	2%
Debt Service	29,708,838	29,195,241	28,006,612	-4%
Other	5,090,304	5,282,078	6,012,341	14%
Subtotal	87,705,500	91,390,756	92,813,804	2%
Intra-County Revenue	(796,091)	(900,000)	-	-100%
Total Operating Expenditures	86,909,409	90,490,756	92,813,804	3%
Revenues	98,612,085	106,038,756	108,108,804	2%
Total Revenues	98,612,085	106,038,756	108,108,804	2%
Transfer to Capital	12,155,000	15,548,000	15,295,000	-2%
Transfer to Auto Fund	-	-	-	-
Total Transfers Out (In)	\$12,155,000	\$15,548,000	\$15,295,000	-2%
Permanent FTEs	251.75	253.75	253.75	
Temporary FTEs	2.20	2.20	2.20	
Total Authorized FTEs	253.95	255.95	255.95	

Expenses & Revenues by Line of Business

	FY 2021 Actual	FY 2022 Adopted	FY 2023 Proposed	% Change '22	FY 2023 Proposed	FY 2023 Net Fee
	Expense	Expense	Expense	to '23	Revenue	Support
Water, Sewer, Streets Bureau	\$27,402,709	\$28,434,200	\$29,493,989	4%	\$1,588,120	\$27,905,869
Water Sewer Records	659,975	780,044	783,407	-	235,200	548,207
Customer Services Office	1,118,875	894,093	1,847,593	107%	101,987,764	(100,140,171)
Water Pollution Control Bureau	22,762,804	25,779,198	26,243,350	2%	4,297,720	21,945,630
Debt Service and Other	34,965,046	34,603,221	34,445,465	-	-	34,445,465
Transfers Out	12,155,000	15,548,000	15,295,000	-2%	-	15,295,000
Total	\$99,064,409	\$106,038,756	\$108,108,804	2%	\$108,108,804	\$ -

- The Utilities Fund is an enterprise fund, which is a self-supporting fund. All user fees must provide sufficient revenues to fund all activities.
- Water and sewer revenue, late fees, new account fees, turn-on fees, and interest are included in Customer Services Office revenue; however, they support the Utilities Fund overall.

Authorized FTEs by Line of Business

		FY 2023	FY 2023 Temporary	FY 2023 Total
	FY 2022 FTEs	Permanent FTEs	FTEs	FTEs
	Adopted	Proposed	Proposed	Proposed
Water, Sewer, Streets Bureau	134.00	135.00	0.60	135.60
Water Sewer Records	5.00	5.00	-	5.00
Customer Services Office	17.75	17.75	-	17.75
Water Pollution Control Bureau	94.00	94.00	1.60	95.60
Debt Service and Other	3.00	2.00	-	2.00
Total Authorized FTEs	253.75	253.75	2.20	255.95

UTILITIES FUND OPERATING STATEMENT

	FY 2021 ACTUAL	FY 2022 ADOPTED	FY 2022 RE-ESTIMATE	FY 2023 PROPOSED
BALANCE JULY 1	\$16,630,466	\$16,005,597	\$16,178,142	\$17,170,619
REVENUE				
Interest	10,216	75,000	70,000	75,000
Water/Sewer Billing	92,257,319	99,260,186	97,300,000	101,387,764
Water Service Connection Fee	870,946	1,360,000	1,360,000	1,360,000
Water Service Discontinuation	128,200	140,000	140,000	140,000
Meter Installation	34,100	25,000	25,000	25,000
Sewage Treatment Charges	4,346,253	4,100,000	4,100,000	4,100,000
Late Fee	9,689	410,000	205,000	410,000
New Account Fee	92,030	105,000	95,000	105,000
Turn-On Fee	5,623	10,000	8,000	10,000
Flow Test Fee	300	10,200	10,200	10,200
Pretreatment Fee	9,607	5,200	5,200	5,200
Utility Marking Fee	268,897	215,000	225,000	215,000
Hazardous Household Material Fee	5,947	8,000	7,000	8,000
Grant Revenue	232,515	-	408,942	-
Miscellaneous Revenue	340,443	315,170	298,570	257,640
TOTAL REVENUE	98,612,085	106,038,756	104,257,912	108,108,804
OPERATING EXPENSES				
Customer Services Office (net of intra-county billing	1,118,874	894,093	1,350,000	1,847,593
revenue) *				
WSS Operations	19,844,101	20,084,200	19,800,000	20,893,989
Water Purchase	7,558,609	8,350,000	7,932,500	8,600,000
Water/Sewer Records	659,975	780,044	715,000	783,407
Water Pollution Control	22,762,804	25,779,198	23,800,000	26,243,350
Debt Service	29,708,838	29,195,241	28,211,955	28,006,612
Other	5,256,208	5,407,980	5,907,980	6,438,853
TOTAL EXPENSES	86,909,409	90,490,756	87,717,435	92,813,804
BALANCE (SUBTOTAL)	28,333,142	31,553,597	32,718,619	32,465,619
TRANSFERS OUT	20,000,1.12	0.,000,001	52,110,010	02,100,010
Utility Construction (Fund 519)	12,155,000	15,548,000	15,548,000	15,295,000
TOTAL TRANSFERS	12,155,000	15,548,000	15,548,000	15,295,000
TOTAL EXPENSE AND TRANSFERS	99,064,409	106,038,756	103,265,435	108,108,804
BALANCE, JUNE 30	16,178,142	16,005,597	17,170,619	17,170,619
Board-adopted Three-month Operating Reserve (excludes debt service)	\$14,499,390	\$15,548,879	\$15,111,370	\$15,987,263

^{*} In FY 2023, intra-county billing revenues are accounted for within the Water-Sewer Billing Revenue, rather than as a reduction of the Customer Services Office expense.

	FY	2022	FY 2023
	Adopted: July 1, 2021– December 31, 2021	Adopted: January 1, 2022 – June 30, 2022	Proposed: July 1, 2022 – June 30, 2023
Water (\$/Thousand Gallons (TG))	4.91		
Sewer (\$/TG)	9.44		
Total	14.35		
Residential:			
Water Base (\$/Quarter)		13.26	13.76
Water - Volumetric:			
Tier 1: 0-9 TG (\$/TG)		3.71	3.98
Tier 2: >9 TG (\$/TG)		5.94	6.38
Sewer Base (\$/ Quarter)		10.76	11.09
Sewer – Volumetric – Average		9.61	9.61
Winter Quarter basis (\$/TG)			
Multi-Family:			
Water Base (\$/Month)		9.10	9.42
Water - Volumetric (\$/TG)		4.42	4.73
Sewer Base (\$/Month)		7.42	7.62
Sewer - Volumetric (\$/TG)		9.61	9.61
Commercial:	<u> </u>		
Water Base (\$/Month)		9.10	9.42
Water - Volumetric (\$/TG)		4.79	5.13
Sewer Base (\$/Month)		7.42	7.62
Sewer - Volumetric (\$/TG)	<u>-</u>	9.61	9.61

The following fees and other revenue are used to fund operating and capital costs for the Utilities Fund. The capital costs are reflected in the Pay-As-You-Go Capital portion of the budget.

Fund Balances from Prior Years: The County maintains a fund balance, consistent with the Board-adopted financial policy to maintain an operating reserve equal to three months of expenses, to cover emergency events that might impact water and sewer services. If utilized, the reserve will be replenished over a three-year period to the minimum reserve level.

Interest Earnings: Interest earned on the fund balance accrues to the Utilities Fund monthly.

Water/Sewer Billing: Charges for water/sewer service based on consumption of water as reflected by periodic readings of water meters serving the property. These charges generate approximately 94 percent of the income for the Utilities Fund. This category also includes sewer revenue from government facilities and authorities and other organizations (such as the Pentagon and Reagan National Airport) that use the County's sewage system but receive their drinking water from other sources. Set by County Code, Chapter 26; effective date July 1 each fiscal year.

- The rate structure effective January 1, 2022, includes:
 - o Customer classes: residential, multi-family, and commercial
 - o Base charge per billing cycle for each service (water and sewer)
 - Residential -
 - Tiered water usage:
 - Tier 1: Usage from 0-9 Thousand Gallons (TG per quarter)
 - Tier 2: Usage above 9 TG per quarter
 - Sewer Average Winter Quarter Billing for sewage consumption

Multi-family and Commercial water and sewer based on 100% on water meter readings.

Water Service Connection Charge: This fee is paid by new water users for a physical connection and meter installation to the water system. The fee recovers 100 percent of personnel, materials, and equipment rental costs. The fee ranges from \$4,350 for a 1-inch connection line with a ¾-inch meter up to \$6,600 for a 2-inch line with a 2-inch meter. Sizes 3-inch and above would be at cost based upon a quote per project. Set by County Code, Chapter 26; effective date July 1, 2021.

Meter Installation Charge: This fee is paid by developers which have established the water service connection to the system themselves and only require the County to install the meter. The fees range from \$150 for a ¾-inch meter up to \$5,525 for an 8-inch meter. Set by County Code, Chapter 26; effective July 1, 2021.

Sewage Treatment Charges: These charges are paid by neighboring jurisdictions (Fairfax County and the Cities of Falls Church and Alexandria). Consistent with memoranda of understanding that the County has signed with Fairfax County and the Cities of Falls Church and Alexandria, the neighboring jurisdictions are charged both for their share of costs associated with operating the County's sewage system as well as with making necessary capital improvements to it.

Water/Sewer Late Fee: The County imposes a six percent (6%) fee on any water and sewer charges if, 30 days after the billing date, there is an outstanding balance on the account. Set by County Code, Chapter 26; effective date July 1, 1992. Late fees were waived during the COVID-19 Pandemic but were reintroduced November 2021.

New Account Fee: This \$25 fee is charged to new customers when they set up a new utilities account. Set by County Code, Chapter 26; effective date July 1, 1992.

Discontinuation Fee: Fee to discontinue a public way service. Fee is \$500. Set by County Code, Chapter 26; effective date July 1, 2008.

Reactivation Fee: This \$25 fee is charged when the County turns on a customer's water service after it had previously been shut off either at the customer's request or for non-payment. Set by County Code, Chapter 26; effective date July 1, 1992.

Flow Test Fee: This \$300 fee is charged when developers request fire flow information necessary to do sprinkler system design. Set by County Code, Chapter 26; effective date July 1, 2008.

DFU Credit Inspection Fee: This fee is charged when developers request an inspection to certify the existing drainage fixture units (DFUs) at properties that will be demolished. The credit offsets the Infrastructure Availability Fees (IAF) that a developer will be charged for new construction DFUs. The fee is \$175 for inspections of 1-24 fixtures: \$275 for 25 plus fixtures. Set by County Code, Chapter 26; effective date July 1, 2008.

Pretreatment Fee: This fee is assessed on certain businesses that introduce pollutants into the sewer system, or "Significant Industrial Users," to recover the costs of the industrial pretreatment program, which ensures compliance with state and federal standards. Annual fee of \$1,560 plus \$3,640 for each monitoring point. Set by County Code, Chapter 26; effective date October 2, 2004.

Utility Marking Fee: This fee is charged to developers to have utility lines marked before construction begins. \$45 fee. Set by County Code, Chapter 22; effective date July 1, 2013.

Hazardous Household Material Fee/ Appliance Fee: This fee is charged for the safe disposal of household waste products that contain cathode ray tubes (CRTs). Fee is \$20 per television and \$15 per monitor. Set by County Code, Chapter 10; effective date April 30, 2005.

Infrastructure Availability Fee: This fee is charged to developers for adding new demand on the water and sewer systems, based on the number of drainage fixtures units (DFUs) added to the system. DFUs are established by the Plumbing Code to service as a proxy for water usage and range from 5 DFUs for a full bathroom to ½ for a drinking fountain. For a renovation or tear-down, full credit is granted for any pre-existing DFUs. Revenues for this fee are accounted for in the Utilities Capital Pay-As-You-Go Fund. The fees are \$230 per DFU combined water and sewer service. For structures which have water-only service, it is \$95 per fixture. For structures with sewer-only service, it is \$135 per fixture. Set by County Code, Chapter 26; effective date July 1, 2021.

WATER, SEWER, STREETS BUREAU

PROGRAM MISSION

To protect the health and welfare of Arlington residents and visitors by efficiently providing safe water and sanitary sewer services.

- Purchases wholesale safe drinking water from the Army Corps of Engineers' Washington Aqueduct Division.
- Ensures adequate water flows and pressure.
- Reads, inspects, installs, and tests over 37,600 meters in the County (Water Meter Program).
- Monitors and operates the County's water system, investigates potential water leaks and water losses, and addresses resident concerns (Control Center).
- Maintains and repairs water mains, valves, fire hydrants, and other appurtenances; installs new water service connections and fire line valves; and relocates or adjusts water infrastructure in conjunction with street and utility construction (Water Construction and Maintenance Program).
- Conducts inspections and tests of valves and pumping stations, inspects and tests fire hydrants, and flushes water lines (Flushing and Inspection Program).
- Operates and maintains the County's sanitary sewer collection system (Sanitary Sewer Maintenance Program).
- Maintains, flushes, and cleans sanitary sewer lines (Sewer Flushing Program).
- Identifies deficiencies in the sewer system (TV Inspection Program).
- Installs new sewer mains, adjusts or replaces manhole frames and covers that have become worn, and makes spot repairs.
- Responds to sewer stoppages and other emergencies around the clock.

PERFORMANCE MEASURES

Critical Measures	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Estimate	FY 2023 Estimate
Total O&M Cost for Water Service (\$/MG)	\$2,767	\$2,720	\$2,703	\$2,902	\$2,931	\$2,959
Total O&M Cost for Water Service (\$/account)	\$571	\$575	\$553	\$567	\$582	\$598
Total O&M Cost for Sanitary Sewer Collection Service (\$/MG)	\$622	\$541	\$744	\$770	\$832	\$820
Total O&M Cost for Sanitary Sewer Collection Service (\$/account)	\$136	\$137	\$160	\$165	\$170	\$178
Meter function - residential (%)	N/A	N/A	95%	89%	95%	95%
Meter function - commercial (%)	N/A	N/A	91%	95%	95%	95%
Emergency repairs as a percent of total work orders	N/A	N/A	N/A	9%	9%	9%
Number of water system breaks (per 100 miles)	43.4	34.4	36.3	33.3	40.0	40.0
Public sanitary sewer backups	34	38	45	45	50	50

WATER, SEWER, STREETS BUREAU

- Water system breaks include water mains, valves, hydrants, and service lines. The number of water system breaks varies year to year based on temperature fluctuations and system conditions.
- Public sanitary sewer backups occur when there is a blockage in the line which causes discharge from a customer's floor drain or drain in a fixture. Common causes are grease buildup, root intrusion, or inflow and infiltration during rain events.

Supporting Measures	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Estimate	FY 2023 Estimate
Commercial meters inspected	473	502	216	396	480	481
Small valves inspected/ exercised	4,455/ 3,681	5,014/ 4,002	2,899/ 2,114	1,611/ 1,177	4,500/ 4,000	4,500/ 4,000
Large valves inspected	N/A	N/A	N/A	430	250	250
Water service installations	348	280	302	226	320	320
Hydrants inspected	2,934	2,865	2,322	3,181	3,700	3,700
Fire hydrants out of service per day (%)	0.4%	0.2%	0.5%	0.2%	0.5%	0.5%
Sanitary sewer flushing (segments)	3,376	4,252	4,222	5,098	4,100	4,100
Miles of sewer pipe inspected	47.1	79.4	62.6	52.7	60.0	60.0
Sewer overflows to environment (million gallons (MG))	N/A	0.025	0.027	4.600	0	0
Formal training (hours)	4,841	4,043	8,183	6,410	7,000	7,000
Electrical usage at water pumping stations (Kilowatt hour (kWh))	1,908,756	1,864,741	1,892,274	1,706,726	2,000,000	2,000,000

- Measures for commercial meters inspected and small valves inspected, that were negatively impacted by COVID, are expected to be back up to normal levels in FY 2022 and FY 2023.
- Small valves are those valves that are twelve (12) inches and smaller. Inspection is defined as the crew making an assessment of the valve and recording its attributes. Valves exercised is defined as each valve being operated through a full cycle and returned to its normal position. Not all valves which are inspected can be exercised; those not being able to be exercised require maintenance, rehabilitation, or replacement to restore proper operation.
- Large valves are those valves that are larger than 12 inches. In FY 2021 and FY 2022 funding was provided for a two-year pilot program to inspect the system's approximately 500 large valves and air release valves (ARVs). In FY 2021 County hired contractors to do the initial round of inspection of these valves over two years cycle and after this round County staffs will do the regular inspection over a longer cycle. Rehabilitation of the valves is funded in the Capital Improvement Plan (CIP).
- Fire hydrants out of service is calculated by the total number of days hydrants were out of services divided by number of total hydrants divided by 365 days per year. In FY 2021, for every 1,000 hydrants, there were 2 out of service. The County has just under 4,000 hydrants and the goal is to inspect 3,700 per fiscal year.
- Sewer overflows to the environment occurs when untreated sewage is discharged from a sanitary sewer line into the environment prior to treatment. These are typically reportable to the Department of Environmental Quality (DEQ). In FY 2021 a power outage at the WPCP caused a large overflow at Glebe Road.
- Formal training hours increased in FY 2022 due to the newly implemented career development matrix at Water, Sewer, Streets Bureau, which requires safety and technical training for field staff to maintain and progress through the career ladder.

WATER SEWER RECORDS

PROGRAM MISSION

To preserve the integrity of Arlington's water and sewer infrastructure.

- Maintain and disseminate up-to-date and accurate records of Arlington's water distribution and sewer collection system infrastructure. These records ensure that proposed construction or repair work within Arlington County does not compromise the County's utilities infrastructure.
- Automate water and sewer records for incorporation into Geographic Information System (GIS) maps.
- Review building and utility permits, compute service connection fees, initiate water service installations, and administer the fire hydrant permit program.

CUSTOMER SERVICES OFFICE

PROGRAM MISSION

To provide our ratepayers with excellent customer service through timely and accurately billing and effectively processing their related service requests.

- Efficiently generate accurate, customer-oriented billings for approximately 37,600 water, sewer, and refuse accounts.
- Respond to more than 60,000 customer service inquiries annually.
- Ensure that utilities payments are posted to customers' accounts promptly and accurately.
- Administer leak adjustment and cut off programs.

PERFORMANCE MEASURES

Critical Measures	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Estimate	
Customer service cost per account (\$/ account)	\$41	\$40	\$45	\$45	\$45	\$47
Combined water-wastewater service affordability	0.59%	0.58%	0.56%	0.57%	0.58%	0.59%
Domestic per capita consumption (gallons/person/day)	22.3	21.4	23.2	22.2	22.3	21.9
Non-revenue water: percent of purchased water	11%	11%	8%	10%	10%	10%
Estimated bills (%)	1.3%	1.6%	1.4%	2.0%	1.3%	1.2%
Billing accuracy (adjustments/ 10,000 bills generated)	5.3	2.5	6.2	4.4	3.0	2.7
Average calls per Call Center Representative	10,068	10,314	10,483	18,063	11,100	11,300
Call abandon rate	11%	7%	13%	9%	6%	5%
Percent of calls answered within service goal of 60 seconds (goal is 80%)	54%	56%	48%	60%	74%	80%

- Water-sewer service affordability is measured as the cost of water and sewer service as a percentage of the median household income. Industry guidelines classify under 1 percent as a low economic impact or burden, between 1-2 percent as a mid-range economic impact, and high impact for 2 percent and over.
- Higher numbers of estimated bills were incurred in FY 2019 due to seasonal main breaks which had a substantive impact on the ability to timely generate readings for winter billings. In FY 2021, estimated bills increased due to the reprioritization of meter reader workload due to pandemic staffing issues. Estimates were utilized so bills could be sent out on time to customers; estimates of consumption are done by billing staff and based on historical account information for a billing period.
- Billing adjustments vary from estimates. Adjustments result from billing errors made on original bills, which would include meter reads, data entry, and billing system errors. Estimated bills occur when meter readers are unable to access meters (due to weather or other unforeseen circumstances); billing office personnel use historical account information to estimate consumption for a billing period.
- Call abandon rate is the percent of people hanging up before being connected with a customer service representative. In FY 2020 and FY 2021, the abandon rate increased due to additional demands placed on the call center due to calls related to the County's response to COVID-19.

CUSTOMER SERVICES OFFICE

Non-revenue water includes unbilled uses of water, including water main breaks, water line and hydrant flushing, fire suppression activities, and water leaks. The volume of unbilled water is derived by deducting the billed amount of water from the amount of purchased water.

Supporting Measures	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Estimate	FY 2023 Estimate
Number of bills issued	175,287	175,720	175,500	163,855	165,252	166,650
Number of estimated bills issued	2,200	2,813	2,448	3,235	2,200	2,000
Volume of non-revenue water (million gallons (MG))	876.7	871.2	614.0	761.0	747.0	760.0
Volume of water billed to customers (million gallons (MG))	6,989.6	6,903.2	6,856.6	6,580.0	6,725.0	6,840.0
Number of inbound calls: non-emergency	60,410	61,881	76,466	135,170	80,098	65,000
Number of inbound calls: emergency	N/A	N/A	7,399	9,330	9,000	9,050
Average call time (minutes: seconds)	2:21	2:57	2:26	4:12	3:35	3:12

- The estimate for number of bills issued for FY 2023 is still lower compared to the pre COVID years as many places were still shuttered and not using water due to the pandemic. The County does not generate bills for zero consumption.
- Volume of water billed to customers varies due to a variety of factors that affect consumption, including weather, household leaks, irrigation, and installation of water saving devices (shower, toilets, etc.).
- In FY 2020, the Call Center expanded its hours from 8am 5pm to 7am 7pm to handle emergency calls on behalf of the Water, Sewer, Streets (WSS) Control Center, and in so doing, provide more convenient hours for customers to access the Customer Service Office. Calls from the WSS Control Center are considered emergency calls and consist of issues including water main break, frozen meters, water pressure and quality concerns, and other infrastructure failures. Non-emergency calls are those calls which are related to billing issues and other County issues and concerns. Non-emergency calls increased in FY 2020 and FY 2021 due to calls related to the County's response to COVID-19. Non-emergency calls are anticipated to be above average in FY 2022 due to the introduction of the new rate structure.

WATER POLLUTION CONTROL BUREAU

PROGRAM MISSION

To protect public health and the environment through the safe and cost-effective treatment of wastewater generated in Arlington County.

- The Water Pollution Control Bureau (WPCB) treats wastewater generated in Arlington County at the Water Pollution Control Plant (WPCP).
- The WPCB also treats a portion of the wastewater from Fairfax County and the Cities of Falls Church and Alexandria.
- The WPCB also operates a Household Hazardous Material (HHM) Program that provides for the safe collection and disposal of household waste products that contain hazardous materials and require special waste management to minimize environmental impacts.
- Virginia's Departments of Environmental Quality (DEQ), Health (VDH), and Occupational Safety and Health (VOSH), and the U.S. Environmental Protection Agency (EPA) regulate the activities of the Water Pollution Control Plant.

PERFORMANCE MEASURES

Critical Measures	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Estimate	FY 2023 Estimate
Total O&M cost for Wastewater Service (\$/MG)	\$2,875	\$2,463	\$2,615	\$2,678	\$2,968	\$3,090
Total O&M cost for Wastewater Service (\$/account)	\$549	\$564	\$494	\$512	\$536	\$598
Percent of treatment capacity available for growth	45%	36%	47%	46%	48%	45%

■ The O&M cost per MG and per account are regardless of location where the Arlington County generated wastewater is treated (WPCP or DCWater's Blue Plains). Treatment flows and associated costs for Fairfax County and the Cities of Falls Church and Alexandria are excluded.

Supporting Measures	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Estimate	FY 2023 Estimate
Average daily biological oxygen demand load (pounds/day)	67,000	63,450	55,841	50,839	58,000	60,000
Chemicals used at the plant (pounds//MGD)	1,855	1,720	1,906	1,779	1,973	2,000
Energy used at the Plant (kilowatt hour/ Million Gallons per Day (MGD))	3,355	3,120	3,675	3,334	3,100	3,500
Household hazardous material received (pounds)	510,379	530,781	396,387	514,003	535,000	560,000
Lost time - safety (days)	2	1	0	1	1	1
Preventive maintenance completed on time (percent)	86%	87%	87%	91%	93%	95%
Total average flow at WPCP (MGD)	22.0	25.6	21.3	21.7	20.7	22.0
Formal training hours	2,600	2,440	1,439	887	2,800	2,800

WATER POLLUTION CONTROL BUREAU

During FY 2019, historically high rainfall resulted in significantly higher flows to the WPCP. These high flows skewed the performance measures values (lower) for some measures tracked on a unit per gallon (or MGD) basis.

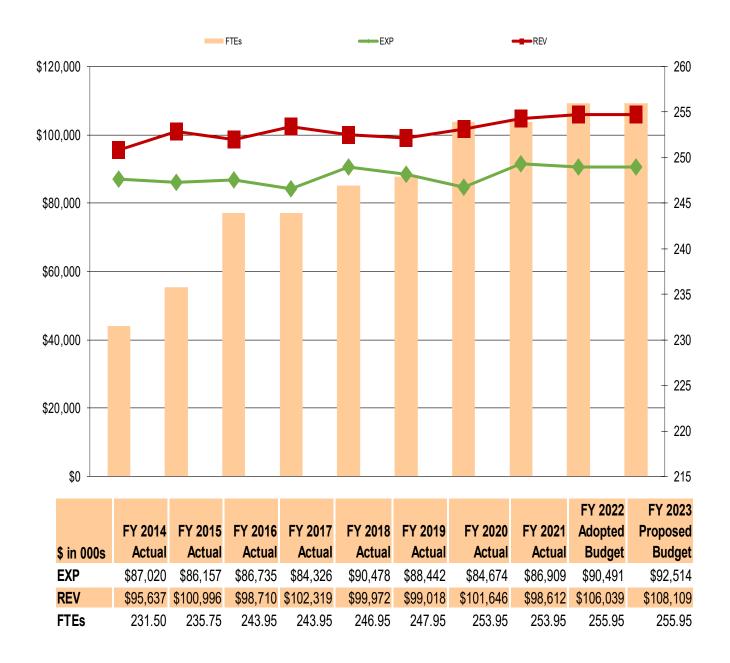
DEBT SERVICE AND OTHER

PROGRAM MISSION

This line of business captures:

- Debt service for the repayment of bonds and loans used to finance capital improvements to the water distribution system, sanitary sewer collection system, and the Water Pollution Control Plant (WPCP).
- Fund-wide and miscellaneous expenditures, such as support personnel, utility rate study consultants, contingency for compensation study results, and state-mandated payments to the Virginia Waterworks Fund.
- The Utilities Fund's allocated share of overhead charges for work performed by both the Department of Environmental Services (DES) and non-DES General Fund agencies.

EXPENDITURE, REVENUE, AND FULL-TIME EQUIVALENT TRENDS



Fiscal Year	Description	FTEs
FY 2014	 Personnel includes two new positions, a Construction Manager and a Sanitary Sewer Engineer (\$799,040). Non-personnel increases include \$639,400 for maintenance supplies at the Water Pollution Control Plant (WPCP), \$400,000 in consulting for various studies and ongoing capital project support at the Water Sewer Street Bureau (WSS), \$476,141 for electricity, Contracted Services and the apprenticeship and succession planning programs at the WPCP, \$100,000 for wholesale water purchases from the Washington Aqueduct, the addition of \$52,000 for the replacement of an existing server for the Utility Services Office (USO), \$30,419 for operating supplies and \$7,725 for landfill charges at WSS, \$22,000 to purchase a vehicle for the new Construction Manager at WSS, the addition of \$10,000 for automation of real estate agreement records, \$7,662 for printing and mailing of utility bills, \$2,037 for charges from the County's print shop to USO, and \$1,000 for the utilities share of base map maintenance. Non-personnel expenses decrease by \$498,440 for generator fuel at the WPCP, decrease for the transfer of Water / Sanitary Sewer Frames and Covers to the Utilities PAYG budget (\$400,000), solids hauling (\$295,497), chemicals at the WPCP (\$154,274), based on updated volume and pricing assumptions, gas at the WPCP (\$40,500), based on an anticipated price decrease, water at the WPCP (\$40,500), based on an anticipated price decrease, water at the WPCP (\$40,500), County vehicle charges (\$26,710), and elimination of the Telecom & Communications budget for Water Sewer Records (\$2,773). Debt service decreased by \$590,424 for repayment of general obligation bonds for various Utilities capital projects. Total revenues include revenue from Inter-jurisdictional Partners (\$624,433), revenue from the County's participation in Dominion Virginia Power's Demand Side Management program (\$68,985), Utility Marking revenue (\$50,000), and Lee Pumping Station lease revenue (\$5,725). The Infrastruct	2.00
FY 2015	 Added a Chief Engineer, a Control Systems Engineer, an Electrical Power Technician, and a Control Systems Technician (\$580,648). Increased a Records Assistant position from 0.50 to 0.75 FTE (\$12,458). Reduced generator fuel expenses based on lower than anticipated use (\$394,200). Eliminated sixteen over-strength positions (\$391,020). Non-personnel decreases include equipment repair expenses (\$165,910), payments for leased equipment (\$31,911), and wholesale water purchases from the Washington Aqueduct (\$200,000). Non-personnel decreases are partially offset by increases in maintenance supplies (\$446,796), contracted services (\$92,775), insurance claims 	4.00 0.25

Description FTEs Year (\$31,464), operating equipment and supplies (\$61,854), inspection and repair of water valves (\$350,000), and adjustment to the annual expense for maintenance and replacement of County vehicles (\$6,389). Debt service decreased due to repayment of General Obligation Bonds for various Utilities Fund capital projects (\$644,644) and repayment of funds borrowed through the Virginia Wastewater Revolving Loan Fund for the Master Plan 2001 project at the WPCP (\$81,507). Other expenses increased include higher overhead charges based on FY 2015 projections (\$230,863), funding for over-strength positions to meet succession planning and other needs (\$150,000), and the annual payment to the Virginia Waterworks Fund (\$35,631). Increased the water/sewer rate by \$0.43, from \$12.61 to \$13.04 per thousand gallons (TG). Revenue increased due to water consumption estimates and the adopted rate increase (\$3,091,257). Revenue increases also include water service connections (\$100,000), water service discontinuations (\$20,000), meter installations (\$10,000), pretreatment revenue (\$340), and the Lee Pumping Station lease agreements with Sprint and Omnipoint (\$4,425). Revenue increases were partially offset by decrease in interest (\$100,000), a decrease in household hazardous material revenue (\$5,000), and the County's participation in Dominion Virginia Power's (DVP) Demand Side Management program (\$394,200). FY 2016 Transfer in of a Management and Budget Specialist from the Facilities 0.20 Design and Construction Bureau in the General Fund to increase from 0.80 to 1.0 FTE (\$25,696, 0.20 FTE). Added a Capital Projects Engineer (\$113,533, 1.0 FTE), a Large Water 8.00 Meter Service Team (\$165,921, 3.0 FTEs), and a Valve Exercise Team (\$221,228, 4.0 FTEs) replacing contractors for budget savings. Non-personnel increased primarily due to increases in maintenance supplies (\$71,066), contracted services (\$51,762), chemicals (\$36,572), redundant (wireless) SCADA service at lift stations (\$30,688), security system monitoring (\$30,000), adjustments to the annual expense for maintenance and replacement of County vehicles (\$26,609), one-time expenses for the Utility Billing System replacement project management (\$99,842), one-time equipment expenses for the new FTEs (\$63,000), and operating expenses for the new FTEs (\$32,902). Non-personnel decreased due to the elimination of contractual valve work (\$350,000). Debt service decreased due to repayment of General Obligation Bonds for various Utilities Fund capital projects (\$736,502) and repayment and refinancing of a portion of funds borrowed through the Virginia Wastewater Revolving Loan Fund for the Master Plan 2001 project at the WPCP (\$293,746). Other expenses increased due to higher overhead charges based on FY 2016 projections (\$75,594).

Fiscal

Fiscal **Description FTEs** Year Intra-county revenues increase based on historic trend analysis of water revenue from county departments (\$57,600). Revenues increased due to the adopted water and sewer rate increase (\$974,847), sewage treatment charges from neighboring jurisdictions (\$325,531), late fees (\$100,000), interest earnings (\$50,000), water service connections (\$50,000), water service discontinuations (\$10,000), utility marking fees (\$10,000), meter installations (\$7,000), turn on fees (\$6,000), fire flow test fees (\$4,000), pretreatment revenue (\$3,550), and Lee Pumping Station lease agreements with Sprint and Omnipoint (\$2,832).FY 2017 Non-personnel increased due to the addition of costs for licensing and operating costs for asset management software (\$229,950), mobile meter management software (\$35,000), and capital project tracking software (\$27,093), redundant (wireless) SCADA service at pumping stations (\$22,320), offset by adjustments to the annual expense for maintenance and replacement of County vehicles (\$26,739). Debt service decreased due to repayment of General Obligation Bonds for various Utilities Fund capital projects (\$261,145) and repayment and refinancing of a portion of funds borrowed through the Virginia Wastewater Revolving Loan Fund for the Master Plan 2001 project at the WPCP (\$176,147). Other expenses increased are due to higher overhead charges based on FY 2017 projections (\$418,512). Revenues decreased due to lower pretreatment revenue (\$10,650) and appliance fees (\$7,500), offset by an increase in Lee Pumping Station lease agreements with Sprint and Omnipoint (\$4,643). 3.00 FY 2018 Added a Contract Specialist (\$119,466), Engineering Technician (\$63,476), and a Trades Worker (\$59,743). Non-personnel decreased due to the elimination of contractual equipment rental and operation (\$200,000), elimination of FY 2017 one-time expenses (\$134,842), decreased operating costs associated with asset management software (\$127,989), adjustments to the annual expense for the maintenance and replacement of County vehicles (\$15,927), partially offset by one-time equipment for new FTEs (\$37,999), operating expenses associated with new FTEs (\$35,414), increases due to Security Information and Event Management (SIEM) (\$7,000), and insurance claims (\$3,536). Debt service decreased due to repayment of General Obligation Bonds for various Utilities Fund capital projects (\$577,747) and repayment and refinancing of a portion of funds borrowed through the Virginia Wastewater Revolving Loan Fund for the Master Plan 2001 project at the Water Pollution Control Plant (WPCP) (\$64,000).

 Other expenses increased due to the higher overhead charges based on FY 2018 projections (\$23,284) and Courthouse Plaza rent (\$5,133).

Fiscal Year	Description	FTEs
	• Revenues increased due to the increase in the water and sewer rate (\$2,443,503), water discontinuation fees (\$10,000), meter installation fees (\$8,000), Lee Pumping Station lease agreements (\$4,180), inspections (\$7,000), and miscellaneous revenue (\$3,720), offset by decreases in sewage treatment charges from neighboring jurisdictions (\$311,269), water service connections (\$50,000), late fees (\$35,000), appliance fees (\$2,500), utility marking fees (\$15,000), and fire flow test fees (\$6,500).	
FY 2019	 Added a Public Engagement Specialist (\$127,381). 	1.00
	■ Non-personnel decreased due to the reduction for purchased water (\$800,000) and elimination of FY 2018 one-time expenses (\$37,999), partially offset by sewer preventative maintenance equipment funding (\$144,000), Trades Center optimization study funding (\$100,000), and adjustments to the annual expense for the maintenance and replacement of County vehicles (\$18,301).	
	 Debt service decreased due to repayment of General Obligation Bonds for various Utilities Fund Capital projects and the repayment of a portion of funds borrowed through the Virginia Wastewater Revolving Loan Fund for the Master Plan 2001 project at the Water Pollution Control Plant (WPCP) (\$613,007). 	
	 Other expenses increased due to higher overhead charges based on FY 2019 projections (\$343,061). 	
	 Revenue decreased due to a projected decrease in sewage treatment charges from neighboring jurisdictions (\$454,147), offset by increases for Lee Pumping Station lease agreements (\$5,495) and the interest income (\$25,000). 	
	 Fund Balance Utilized increased from the prior year by \$598,448 and reflects the planned drawdown of fund balance, consistent with the County's financial policies. 	
	■ Transfer in of three employees from the Solid Waste Bureau to support the consolidated Customer Service Office now budgeted within the Utilities Fund (\$285,154), offset by an increase in interdepartmental charges to the Solid Waste Bureau (DES-General Fund) to support the call center consolidation (\$289,110).	3.00
	 Transfer in of a utility underground program coordinator position from the General Fund (\$165,956). 	1.00
	 Added a Heating Ventilation and Air Conditioning (HVAC) Technician at the Plant (\$129,563). 	1.00
	 Added two employees to expand Call Center hours (\$139,198). 	2.00

(1.00)

Fiscal Pescription FTEs

- Eliminated an Instrumentation supervisory position due to the consolidation of the Electrical and Instrumentation division at the Plant (\$135,195).
- Reduced overtime and standby pay for tank cleaning efforts at the Water Pollution Control Plant (\$429,160).
- Eliminated FY 2019 one-time expenses (\$105,220).
- Elimination of HVAC preventative maintenance contractual activities (\$456,099), contractual changes for utility markings (\$94,000), budget reductions and reallocations as identified based on historical spending and operational needs (\$263,225), elimination of the lease payment budget due to equipment having been paid off (\$34,412), and adjustments to the annual expense for maintenance and replacement of County vehicles (\$55,174).
- Increased funding for new positions (\$22,005 one-time, \$62,549 ongoing), meter replacements (\$346,362), annual maintenance costs for the newly implemented billing information system (\$146,238), contractual increases (\$325,141), and an increase in various overhead line items which were transferred from the Solid Waste Bureau to support the consolidation of the call center (\$36,551).
- Debt service decreased due to repayment of General Obligation Bonds for various Utilities Fund capital projects (\$517,970) and the repayment of a portion of funds borrowed through the Virginia Wastewater Revolving Loan Fund for the Master Plan 2001 project at the Water Pollution Control Plant (WPCP) (\$272,437).
- Other expenses increased are due to higher overhead charges based on FY 2020 projections (\$483,729), offset by a decrease of Bozman Government Center rent (\$74,401).
- Intra-county revenue increased based on historic trend analysis of water and sewer revenue from county departments and the increase in the water and sewer rate (\$75,000).
- Revenues increased due to the adopted water and sewer rate increase (\$973,399), sewage treatment charges from neighboring jurisdictions (\$529,147), increases for Lee Pumping Station lease agreements (\$5,040), and miscellaneous revenues (\$14,500); partially offset by a decrease in hazardous household material fees (\$2,000).
- Fund Balance Utilized decreased from the prior year by \$1,579,039 and reflects the continued drawdown of fund balance, as planned, and consistent with the County's financial policies.

FY 2021

Personnel increases due to employee salary increases, retirement contributions decreased based on current actuarial projections, decreased charge-backs to capital, adjustments to salaries resulting from job family studies for trades and planners (\$738,518, partially offset by a decrease in the County's cost for employee health insurance and an increase in

Fiscal Year

Description

FTEs

charges to the Solid Waste Bureau (DES-General Fund) to pay their pro-rata share of the Customer Services Office (\$13,754).

- Non-personnel increases due to purchased water (\$900,000), non-discretionary contractual increases for chemicals (\$201,150), biosolids hauling (\$78,315), and various contracts (\$16,130), projected demand for utility markings (\$30,000), budget reallocations as identified based on historical spending and operational needs (\$20,866), operating expenses associated with the new position (\$2,550 one-time and \$1,360 ongoing), and one-time funding for large valve inspections (\$300,000), partially offset by the elimination of FY 2020 one-time expenses (\$22,005), elimination of annual maintenance costs for the decommissioned billing information system (\$32,425), budget reductions and reallocations as identified based on historical spending and operational needs (\$5,700), and adjustments to the annual expense for maintenance and replacement of County vehicles (\$30,796).
- Debt service decreases due to repayment of General Obligation Bonds for various Utilities Fund capital projects (\$31,211).
- Other expenses increase for the contingency due to the reclassification of positions identified to be substantially below comparative pay studies (\$414,117), fund-wide benefit changes (\$14,095), higher overhead charges based on FY 2021 projections (\$176,181), and consultant funding (\$18,110), partially offset by the elimination of Bozman Government Center rent due to relocation of the Customer Services Office (\$59,059).
- Intra-county revenue increases based on historic trend analysis of water and sewer revenue from county departments and the increase in the water and sewer rate (\$100,000).
- Revenues increase due to the adopted water and sewer rate increase (\$1,521,958), sewage treatment charges from neighboring jurisdictions (\$100,000), interest income (\$50,000), projected demand for utility marking fees (\$20,000), increases for Lee Pumping Station lease agreements (\$5,280), miscellaneous revenues (\$31,512), and historic trend analysis of water-sewer engineering fees (\$2,500) and flow test fees (\$2,200); partially offset by a decrease in turn-on fees (\$3,000).
- Fund balance utilized decreases from the prior year by \$520,961 and reflects the current deficit in the 90-day operating reserve. There is a planned addition to the reserve of \$1,000,000 in FY 2021.

FY 2022

- The County Board added funding for a one percent merit pay adjustment, a five percent increase in the range, and an increase to the one-time bonus for staff from \$500 to approximately \$900.
- Personnel increases primarily due to the adjustments to salaries resulting from job family studies, the addition of a Design Engineer at the Water Pollution Control Bureau (\$118,174; 1.0 FTE), and the addition of a Service Assistant at the Customer Services Office (\$74,257; 1.0 FTE).
- Debt service decreases due to repayment of General Obligation Bonds for various Utilities Fund capital projects (\$809,836) and the refinancing of VRA loans (\$369,285).

2.00

Fiscal Pescription FTEs

- Other expenses decrease due to the reclassification of positions identified to be substantially below comparative pay studies being allocated out to the personnel of affected lines of business from the contingent account (\$1,106,331) and slightly lower overhead charges based on FY 2022 projections (\$34,854).
- Intra-county revenue decreases based on the current trend of lower County facility occupancy and water consumption (\$125,000).
- Revenues increase due to the adopted water and sewer rate increase (\$1,158,258), water service connection fees increase due to an adopted fee increase (\$260,000), increases for Lee Pumping Station lease agreements (\$5,400), partially offset by a decrease in interest income (\$50,000), and miscellaneous revenues (\$2,197).