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 2022 proposed expenditure budget for the Utilities Fund is \$90,490,756, a one percent decrease from the FY 2021 adopted budget. The FY 2022 budget reflects:

- ↑ 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).
 - The Design Engineer at the Water Pollution Control Bureau adds 1.0 FTE (\$118,174 personnel; \$956 ongoing and \$3,000 one-time non-personnel) to support the Plant's engineering program and the capital improvement plan (CIP). It is funded through a combination of contractual reductions (\$142,500 ongoing) and chargeback to the capital projects this FTE will support (\$59,000 ongoing), for a net savings of \$79,370. Prior to this position being added the functions were performed by a contractor.
 - The Services Assistant at the Customer Services Office adds 1.0 FTE (\$74,257 personnel; \$360 ongoing and \$2,800 one-time non-personnel) to support the billing activities.
- There were no significant changes in non-personnel expenses.
- → Debt service decreases due to repayment of General Obligation Bonds for various Utilities Fund capital projects (\$809,836).
- 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 (\$1,064,235) 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 proposed water and sewer rate increase (\$1,158,258), water service connection fees increase due to a proposed 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).
 - Infrastructure Availability Fees (IAF) are proposed to increase for FY 2022. These fees are directly credited to the Utilities Construction Fund, not the Operating Fund. However, they do directly impact the Operating Fund since the increased revenues offset the amount of the transfer required to fund the capital program and have the effect of lowering the water and sewer rate.

PROGRAM FINANCIAL SUMMARY

FY 2020	FY 2021	FY 2022	% Change
Actual	Adopted	Proposed	'21 to '22
\$23,524,699	\$25,236,410	\$25,950,989	3%
26,923,783	30,503,260	30,516,213	-
30,206,084	30,374,362	29,564,526	-3%
5,029,423	6,423,263	5,359,028	-17%
85,683,989	92,537,295	91,390,756	-1%
(1,010,306)	(1,025,000)	(900,000)	-12%
84,673,683	91,512,295	90,490,756	-1%
101,646,075	104,667,295	106,038,756	1%
101,646,075	104,667,295	106,038,756	1%
14,190,500	12,155,000	15,548,000	28%
47,000	-	-	-
\$14,237,500	\$12,155,000	\$15,548,000	28%
251.75	251.75	253.75	
2.20	2.20	2.20	
253.95	253.95	255.95	
	\$23,524,699 26,923,783 30,206,084 5,029,423 85,683,989 (1,010,306) 84,673,683 101,646,075 101,646,075 14,190,500 47,000 \$14,237,500	Actual Adopted \$23,524,699 \$25,236,410 26,923,783 30,503,260 30,206,084 30,374,362 5,029,423 6,423,263 85,683,989 92,537,295 (1,010,306) (1,025,000) 84,673,683 91,512,295 101,646,075 104,667,295 101,646,075 104,667,295 14,190,500 47,000 \$14,237,500 \$12,155,000 251.75 251.75 2.20 2.20	Actual Adopted Proposed \$23,524,699 \$25,236,410 \$25,950,989 26,923,783 30,503,260 30,516,213 30,206,084 30,374,362 29,564,526 5,029,423 6,423,263 5,359,028 85,683,989 92,537,295 91,390,756 (1,010,306) (1,025,000) (900,000) 84,673,683 91,512,295 90,490,756 101,646,075 104,667,295 106,038,756 101,646,075 104,667,295 106,038,756 14,190,500 12,155,000 15,548,000 47,000 - - \$14,237,500 \$12,155,000 \$15,548,000 251.75 251.75 253.75 2.20 2.20 2.20

Expenses & Revenues by Line of Business

	FY 2020 Actual Expense	FY 2021 Adopted Expense	FY 2022 Proposed Expense	% Change '21	FY 2022 Proposed Revenue	FY 2022 Net Fee Support
Water, Sewer, Streets Bureau	\$26,104,466	\$27,351,743	\$28,184,987	3%	\$1,709,800	\$26,475,187
Water Sewer Records	793,733	773,473	766,916	-1%	235,200	531,716
Customer Services Office	630,016	704,537	862,739	22%	99,860,186	(98,997,447)
Water Pollution Control Bureau	21,692,730	25,672,921	25,632,268	-	4,233,570	21,398,698
Debt Service and Other	35,452,738	37,009,621	35,043,846	-5%	-	35,043,846
Transfers Out	14,237,500	12,155,000	15,548,000	28%	-	15,548,000
Total	\$98,911,183	\$103,667,295	\$106,038,756	2%	\$106,038,756	\$ -

- 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 2022	FY 2022 Temporary	FY 2022 Total
	FY 2021 FTEs	Permanent FTEs	FTEs	FTEs
	Adopted	Proposed	Proposed	Proposed
Water, Sewer, Streets Bureau	134.00	134.00	0.60	134.60
Water Sewer Records	5.00	5.00	-	5.00
Customer Services Office	16.75	17.75	-	17.75
Water Pollution Control Bureau	93.00	94.00	1.60	95.60
Debt Service and Other	3.00	3.00	-	3.00
Total Authorized FTEs	251.75	253.75	2.20	255.95

For the period July 1, 2021, through December 31, 2021, the total water/sewer rate increases \$0.15, from \$14.20 to \$14.35 per thousand gallons (TG). The water rate is maintained at \$4.91/TG and sewer rate increases \$0.15, from \$9.29/TG to \$9.44/TG. Based on the results of the Water and Wastewater Rate Study, the County is proposing to modify the water and sewer rate structure, as seen in the below table, beginning January 1, 2022. Overall, this is a one percent increase projected to produce \$1.2 million of additional revenue. Although the rate is increasing by one percent, due to the proposed rate structure change half-way through the fiscal year, customers will see various impacts upon their quarterly bills based upon their individual household consumption.

In FY 2022, the rate structure impact is mitigated by the mid-year implementation of the new rate structure. A residential customer with median usage of 48 TG annually and assumed average winter water usage of 9 TG per quarter, would see a decrease of \$14 per year, or two percent. Individual residential customer impacts will vary based on their quarterly water consumption and average winter quarter water usage. For residential customers, low-volume (0-36 TG annually) and year-round high-volume (more than 90 TG annually) water users could see the highest impacts of 10 percent or greater. Multi-family customers will likely have modest decreases of one to two percent. Commercial customers could experience increases of one percent or more depending on usage.

	FY 2021 Adopted: July 1, 2020 – June 30, 2021	FY 2022 Proposed: July 1 - December 31, 2021	FY 2022 Proposed: January 1, 2022
Water (\$/TG)	4.91	4.91	
Sewer (\$/TG)	9.29	9.44	
Total	14.20	14.35	
Residential:			
Water Base (\$/Quarter)			13.26
Water - Volumetric:			
Tier 1: 0-9 TG (\$/TG)			3.71
Tier 2: >9 TG (\$/TG)			5.94
Sewer Base (\$/ Quarter)			10.76
Sewer – Volumetric – Average Winter			9.61
Quarter basis (\$/TG)			
Multi-Family:			
Water Base (\$/Month)			9.10
Water - Volumetric (\$/TG)			4.42
Sewer Base (\$/Month)			7.42
Sewer - Volumetric (\$/TG)			9.61
Commercial:			
Water Base (\$/Month)			9.10
Water - Volumetric (\$/TG)			4.79
Sewer Base (\$/Month)			7.42
Sewer - Volumetric (\$/TG)			9.61

UTILITIES FUND OPERATING STATEMENT

	FY 2020 ACTUAL	FY 2021 ADOPTED	FY 2021 RE-ESTIMATE	FY 2022 PROPOSED
BALANCE JULY 1	\$13,895,574	\$14,127,555	\$16,630,466	\$16,005,597
REVENUE				
Interest	30,722	125,000	50,000	75,000
Water/Sewer Billing	95,630,015	98,101,928	94,177,851	99,260,186
Water Service Connection Fee	968,275	1,100,000	1,100,000	1,360,000
Water Service Discontinuation	141,200	140,000	140,000	140,000
Meter Installation	26,400	25,000	25,000	25,000
Sewage Treatment Charges	3,736,847	4,100,000	4,100,000	4,100,000
Late Fee	383,993	410,000	150,000	410,000
New Account Fee	115,225	105,000	105,000	105,000
Turn-On Fee	1,450	10,000	10,000	10,000
Flow Test Fee	4,300	10,200	10,200	10,200
Pretreatment Fee	5,200	5,200	5,200	5,200
Utility Marking Fee	241,749	215,000	215,000	215,000
Hazardous Household Material Fee	6,185	8,000	8,000	8,000
Miscellaneous Revenue	354,514	311,967	311,967	315,170
TOTAL REVENUE	101,646,075	104,667,295	100,408,218	106,038,756
OPERATING EXPENSES				
Customer Services Office (net of intra-county billing	630,016	704,537	975,000	862,739
revenue)	000,010	704,557	373,000	002,703
WSS Operations	18,047,367	19,251,743	18,674,191	19,834,987
Water Purchase	8,057,099	8,100,000	8,150,000	8,350,000
Water/Sewer Records	793,733	773,473	780,000	766,916
Water Pollution Control	21,692,730	25,672,921	24,389,275	25,632,268
Debt Service	30,206,084	30,374,362	30,374,362	29,564,526
Other	5,246,654	6,635,259	5,535,259	5,479,320
TOTAL EXPENSES	84,673,683	91,512,295	88,878,087	90,490,756
			/	
BALANCE (SUBTOTAL)	30,867,966	27,282,555	28,160,597	31,553,597
TRANSFERS OUT	44.44			
Utility Construction (Fund 519) Auto Fund	14,190,500 47.000	12,155,000	12,155,000	15,548,000
TOTAL TRANSFERS	14,237,500	12,155,000	12,155,000	15,548,000
TOTAL EXPENSE AND TRANSFERS	98,911,183	103,667,295	101,033,087	106,038,756
BALANCE, JUNE 30	16,630,466	15,127,555	16,005,597	16,005,597
Board-adopted Three-month Operating Reserve (excludes debt service)	\$13,869,476	\$15,540,733	\$14,832,181	\$15,456,558
Water/Sewer Rate per 1,000 gallons	\$13.80	\$14.20	\$14.20	\$14.35

Note: Fund balance fell below the 90-day operating reserve at the end of FY 2019; therefore, the FY 2021 adopted budget planned to add \$1m to the reserve to begin to restore reserve levels per policy. However, the reserve exceeded the 90-day level at the end of FY 2020. Late fees and delinquent cut-offs were suspended during the pandemic starting Spring 2021 through current, so revenues are projected at less than budget.

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, found in Tab E.

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 93 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 new rate structure proposed effective January 1, 2022, includes:
 - Customer classes: residential, multi-family, and commercial
 - Base charge per billing cycle for each service (water and sewer)
 - o 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 percent 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 is proposed to increase for FY 2022. The current fee varies by meter size, ranging from \$3,200 for a 1" connection line with a ¾" meter up to \$25,300 for an 8" line with an 8" meter. Set by County Code, Chapter 26; effective date July 1, 2008. The proposed fee ranges from \$4,350 for a one-inch connection line with a ¾-inch meter up to \$6,600 for an two-inch line with an two-inch meter. Sizes three-inch and above would be at cost based upon a quote per project. If adopted, the proposed fees would have an effective date of 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. This proposed amendment also increases the meter installation charges based on the meter size. Existing fees range from \$100 for a ¾-inch meter up to \$3,000 for an eight-inch meter. Proposed fees range from \$150 for a ¾-inch meter up to \$5,525 for an eight-inch meter.

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.

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 the capital costs associated with 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 fee is proposed to increase for FY 2022. Current fees are \$200 per DFU combined water and sewer service. For structures which have water-only service, it is \$85 per fixture. For structures with sewer-only service, it is \$115 per fixture. Set by County Code, Chapter 26; effective date July 1, 2013. Proposed fees are \$230 per DFU combined water and sewer service. For structures which have water-only service, it is proposed at \$95 per fixture. For structures with sewer-only service, it is proposed at \$135 per fixture. If adopted, the proposed fees would have an effective date of 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 37,400 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

FY 2020 Performance Measure reflect COVID-19 impacts to services in the final months of the fiscal year while FY 2021 and FY 2022 estimates are based on current conditions and anticipated impacts on the performance measures. Additionally, FY 2022 estimates do not incorporate the impact of proposed budget reductions; the impact of those reductions are included in the impact statements shown in the Department Budget Summary.

Critical Measures	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual			FY 2022 Estimate
Number of water system breaks (per 100 miles)	35.0	43.4	34.4	36.3	40.0	40.0
Public sanitary sewer backups	53	34	38	45	50	50

- 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.

WATER, SEWER, STREETS BUREAU

Supporting Measures	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Estimate	FY 2022 Estimate
Commercial meters inspected	81	473	502	216	480	480
Small valves inspected/ exercised	3,258/ N/A	4,455/ 3,681	5,014/ 4,002	2,899/ 2,114		4,500/ 4,001
Large valves inspected	N/A	N/A	N/A	N/A	100	250
Water service installations	309	348	280	302	320	320
Hydrants inspected	1,039	2,934	2,865	2,322	3,700	3,700
Fire hydrants out of service per day (%)	N/A	0.4%	0.2%	0.5%	0.5%	0.5%
Sanitary sewer flushing (segments)	3,491	3,376	4,252	4,222	4,100	4,100
Miles of sewer pipe inspected	11.8	47.1	79.4	62.6	60.0	60.0
Sewer overflows to environment (gallons)	N/A	N/A	25,000	26,807	0	0
Formal training (hours)	N/A	4,841	4,043	8,183	8,000	8,000
Electrical usage at water pumping stations (Kilowatt hour; kWh)	2,126,548	1,908,756	1,864,741	1,892,274	2,000,000	2,000,000

- Several measures, including commercial meters inspected, small valves inspected/ exercised, and hydrants inspected, were affected adversely by COVID-19 due to protocols regarding modified staff/ crew scheduling and required staff/ crew quarantine after positive contacts. Due to limited staffing, priority was placed on certain activities and those measures remained materially unaffected, including water system breaks, water system installations, and sanitary sewer flushing.
- 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 sixteen inches or greater. 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). 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 the number of total hydrants divided by 365 days per year. In FY 2020, for every 1000 hydrants, there were 5 out of service. The County has just under 4,000 hydrants.
- 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).
- Formal training hours increased in FY 2020 due to the newly implemented career development matrix at WSS, 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 37,400 water, sewer, and refuse accounts.
- Respond to more than 50,000 customer services inquiries annually.
- Ensure that utilities payments are posted to customers' accounts promptly and accurately.
- Administer leak adjustment and cut off programs.

PERFORMANCE MEASURES

FY 2020 Performance Measure reflect COVID-19 impacts to services in the final months of the fiscal year while FY 2021 and FY 2022 estimates are based on current conditions and anticipated impacts on the performance measures. Additionally, FY 2022 estimates do not incorporate the impact of proposed budget reductions; the impact of those reductions are included in the impact statements shown in the Department Budget Summary.

Critical Measures	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual		FY 2021 Estimate	FY 2022 Estimate
Non-revenue water: percent of purchased water	10%	11%	11%	8%	10%	10%
Percent of bills which were estimated	0.9%	1.3%	1.6%	1.6%	1.5%	1.5%
Call abandon rate	5%	11%	7%	13%	6%	4%
Percent of calls answered within service goal of 60 seconds (goal is 80%)	N/A	54%	56%	48%	72%	80%

 Call abandon rate is the percent of people hanging up before being connected with a customer service representative. In FY 2020, 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.

Supporting Measures	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Estimate	FY 2022 Estimate
Number of bills issued	175,168	175,287	175,720	175,500	175,350	175,280
Number of estimated bills issued	1,624	2,200	2,813	2,448	2,646	2,200
Volume of non-revenue water (million gallons)	778.08	876.66	871.19	613.96	700.00	700.00
Volume of water billed to customers (million gallons)	6,972.44	7,265.24	6,989.64	6,856.56	7,000.00	7,000.00
Number of inbound calls: non-emergency	57,762	60,410	61,881	76,466	71,480	67,100
Number of inbound calls: emergency	N/A	N/A	N/A	7,399	7,500	7,550
Average call time (minutes: seconds)	2:27	2:21	2:57	2:26	2:44	2:45

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. The five-year average is 10 percent.

CUSTOMER SERVICES OFFICE

- 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. Estimates were utilized so bills could be sent out on time to customers.
- 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.). The 10 year average is 6,956 million gallons billed annually.
- 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 our utilities and refuse customers to access the customer services that the Customer Service Office provides. 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. These calls are estimated to increase based on the hours of operation of the Call Center expanding by three hours per day. The FY 2020 and FY 2021 call numbers are exclusive of calls related to COVID-19.

WATER POLLUTION CONTROL BUREAU

PROGRAM MISSION

To protect public health and the environment through the safe and cost-effective treatment and reclamation 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

FY 2020 Performance Measure reflect COVID-19 impacts to services in the final months of the fiscal year while FY 2021 and FY 2022 estimates are based on current conditions and anticipated impacts on the performance measures. Additionally, FY 2022 estimates do not incorporate the impact of proposed budget reductions; the impact of those reductions are included in the impact statements shown in the Department Budget Summary.

Critical Measures	FY 2017 Actual	FY 2018 Actual				FY 2022 Estimate
Treatment cost per million gallons per day (MGD) of actual flow	\$2,781	\$2,988	\$2,568	\$2,690	\$2,884	\$2,907

• The cost per million gallons of actual total average flow is net of the payment that the County makes to Fairfax County for the transmission to and processing of a portion of Arlington's wastewater at the District of Columbia Water and Sewer Authority's Blue Plains facility.

Supporting Measures	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Estimate	FY 2022 Estimate
Average daily biological oxygen demand load (pounds/day)	62,000	67,000	63,450	55,841	60,000	64,000
Chemical volume per million gallons (MG) treated (pounds)	N/A	1,855	1,720	1,906	1,931	1,849
Energy used at the Plant (kilowatt hour/ Million Gallons per Day (MGD))	3,700	3,355	3,120	3,675	3,600	3,500
Household hazardous material received (pounds)	523,492	510,379	530,781	396,387	446,530	503,020
Lost time - safety (days)	0	0	0	0	0	0
Preventive maintenance completed on time (percent)	86%	86%	87%	87%	95%	95%
Total average flow (MGD: million gallons per day)	21.6	22.0	25.6	21.3	22.5	23.5

WATER POLLUTION CONTROL BUREAU

Supporting Measures				FY 2020 Actual		
Formal training hours	N/A	2,600	2,440	1,439	2,750	2,800

- A few measures, including household hazardous material received, preventative maintenance completed on time, and formal training hours, were affected adversely by COVID-19 due to protocols regarding modified staff/ crew scheduling and required staff/ crew quarantine after positive contacts. Due to limited staffing, priority was placed on certain activities and those measures remained materially unaffected.
- 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.

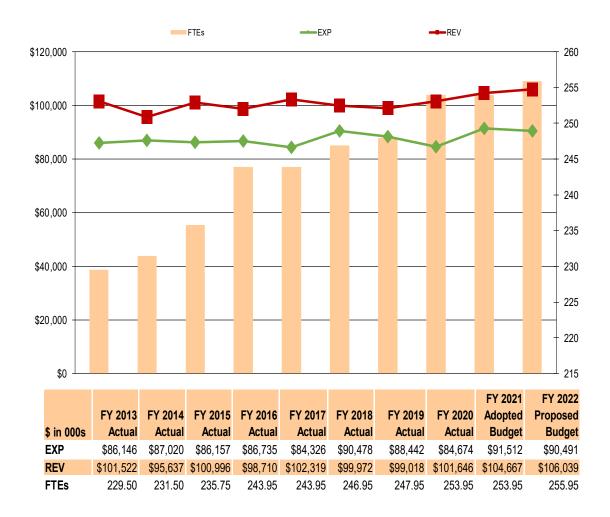
DEBT SERVICE AND OTHER

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 2013	■ The total water/sewer rate increases \$0.42 to a total of \$12.61 per thousand gallons (TG), a 3.4% increase, which will produce \$5.0 million of additional revenue. The water rate increases by \$0.30/TG to \$3.98/TG. The sewer rate will increase by \$0.12/TG to \$8.63/TG.	
	 Personnel includes seven new FTE's (a water quality engineer and a new six-person water maintenance crew). 	7.0
	 A partial FTE is transferred to the Department of Environmental Services General Fund budget. 	(0.2)
	 Non-personnel expenditures increased \$861,100 for chemicals, supplies, and contractual services for the process control system at the Water Pollution Control Plant. 	
	 County vehicle charges increase \$161,392 for new equipment approved in the FY 2011 closeout process and for the new vehicles and equipment for the new water maintenance crew. The transfer to the Auto Fund increases \$502,500 for the purchase of vehicles and equipment for the new Water Maintenance Crew. 	
	Utilities increase by \$144,200 for water and electricity at the WPCP. • Wholesale water purchases from the Washington Aqueduct increase by	
	\$100,000.	
	 Other WPCP increases include \$100,000 for safety consulting at the plant and \$80,651 for increased level of security guards required during continued construction at the WPCP. 	
	 Debt service increases \$635,758 for repayment of General Obligation bonds and VRA bonds for various Utilities Fund capital projects. 	
	 The transfer to PAYG capital decreases \$897,282, based on the planned FY 2013 maintenance capital program. 	
FY 2014	 Personnel includes two new positions, a Construction Manager and a Sanitary Sewer Engineer (\$799,040). 	2.0
	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 (\$29,050), County vehicle charges	

Fiscal Year	Description	FTEs
	 (\$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 Infrastructure Availability Fee (IAF) increases by \$18 per drainage fixture unit (DFU) to a total of \$200 per DFU, a 10 percent increase. The water IAF increases by \$13/DFU to \$85/DFU. The sewer IAF increases by \$5/DFU to \$115/DFU. The transfer to the Auto Fund decreased to zero. 	
FY 2015	 Added a Chief Engineer, a Control Systems Engineer, an Electrical Power 	4.0
	 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 (\$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). 	0.25
	 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 	

Fiscal Year	Description	FTEs
	(DVP) Demand Side Management program (\$394,200).	
FY 2016	Transfer in of a Management and Budget Specialist from the Facilities Design and Construction Bureau in the General Fund to increase from 0.80 to 1.0 FTE (\$25,696, 0.20 FTE)	0.2
	 Added a Capital Projects Engineer (\$113,533, 1.0 FTE), a Large Water Meter Service Team (\$165,921, 3.0 FTEs), and a Valve Exercise Team (\$221,228, 4.0 FTEs) replacing contractors for budget savings. 	8.0
	• 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).	
	 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). 	

Fiscal **Description FTEs** Year 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). Added a Contract Specialist (\$119,466), 3.0 FY 2018 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). 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 1.0 Added a Public Engagement Specialist (\$127,381). 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).

Fiscal Year	Description	FTEs
	 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.	
FY 2020	■ 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).	3.0
	 Transfer in of a utility underground program coordinator position from the General Fund (\$165,956). 	1.0
	 Added a Heating Ventilation and Air Conditioning (HVAC) Technician at the Plant (\$129,563). 	1.0
	 Added two employees to expand Call Center hours (\$139,198). 	2.0
	Eliminated an Instrumentation supervisory position due to the consolidation of the Electrical and Instrumentation division at the Plant (\$135,195).	(1.0)
	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). 	

Fiscal Description FTEs

- 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 charges to the Solid Waste Bureau (DES-General Fund) to pay their prorata 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).

Fiscal	Description	ETE
Year	Description	FTEs

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.