# **Wastewater Fund**

City of Fairfax, Virginia  FY 2021 Wastewater Fund  Budget Summary											
Revenues		FY 2019 <u>Actual</u>		FY 2020 <u>Budget</u>		FY 2020 Estimate		FY 2021 Adopted		ariance to Budget \$	Variance to Budget %
Operating Revenues	\$	8,099,883	\$	8,265,683	\$	8,100,000	\$	7,873,200	\$	(392,483)	-4.75%
Availability Charges		1,487,324		325,000		2,656,028		1,552,625		1,227,625	377.73%
Other Revenues											
Interest		180,713		80,000		150,000		150,000		70,000	87.50%
Miscellaneous / Financing		23,035		20,000		20,000		20,000		-	0.00%
Reimbursements		377,580		375,000		22,073		-		(375,000)	-100.00%
Subtotal Other Revenues		581,328		475,000		192,073		170,000		(305,000)	-64.21%
Other Financing Sources		-		7,857,000		2,600,000		5,482,128		(2,374,872)	-30.23%
Total Revenues	\$	10,168,535	\$	16,922,683	\$	13,548,101	\$	15,077,953	\$	(1,844,730)	-10.90%
Expenses											
Operating Expenses											
Annual Wastewater Treatment	\$	2,205,110	\$	2,499,192	\$	2,499,192	\$	2,749,111	\$	249,919	10.00%
CIP Payments - Fairfax County		- (450 505)		5,200,000		5,200,000		5,482,128		282,128	5.43%
Capital Projects		(159,505)		2,657,000		2,657,000		2,032,000		(625,000)	-23.52%
Line Maintenance		1,160,623		1,122,751		1,137,751		1,115,640		(7,112)	-0.63%
Administrative & Engineering  Subtotal Operating Costs		967,533 <b>4,173,761</b>		1,088,526 <b>12,567,469</b>		1,080,026 <b>12,573,969</b>		919,774 <b>12,298,653</b>		(168,752) (268,816)	-15.50% - <b>2.14%</b>
Other Expenses		4 254 224		4 000 044		4.000.044		4 457 004		(444.040)	22.020/
Debt Service		1,251,034		1,868,344		1,868,344		1,457,004		(411,340)	-22.02%
Subtotal Other Expenses		1,251,034		1,868,344		1,868,344		1,457,004		(411,340)	-22.02%
Total Expenses	\$	5,424,795	\$	14,435,813	\$	14,442,313	\$	13,755,657	\$	(680,156)	-4.71%
Cash Balance - June 30	\$	7,950,830	\$	14,408,403	\$	7,056,618	\$	8,378,915			
Total FTE		8.4		8.2		8.2		8.2			

**DEPARTMENT:** Utilities

DIVISION OR ACTIVITY: County Wastewater Treatment Contract

#### **BUDGET COMMENTS:**

An increase of \$532,047 (6.9%) from the FY 2020 Adopted Budget is necessary to fund the FY 2021 Adopted Budget. Notable changes are as follows:

#### Annual Wastewater Treatment

The contracted amount for the Wastewater treatment with Fairfax County is projected to increase by 10.0% in FY 2021 based on actual volume.

# • CIP Payments – Fairfax County

The Capital Improvement is based on the County's projections for the cost of the upgrades to the Noman M. Cole Wastewater Treatment plant. Major plant upgrades are required due to an EPA mandated nitrogen reduction program and plant renovations. The City's share of the total capital cost is 6.27 %, which equates to the percentage of total capacity that the City owns at the Noman M. Cole Wastewater Treatment Plant. Renovation and construction costs are contingent upon the final scope of work and construction change

Cost Center 435110: County Wastewater Treatment Contract												
Title		FY 2019 <u>Actual</u>		FY 2020 Budget		FY 2020 Estimate		FY 2021 Adopted	- '	ariance to Budget \$	Variance to Budget %	
County Charges - Operating	\$	2,205,110	\$	2,499,192	\$	2,499,192	\$	2,749,111	\$	249,919	10.00%	
County Charges - Capital		-		5,200,000		5,200,000		5,482,128		282,128	5.43%	
Total	\$	2,205,110	\$	7,699,192	\$	7,699,192	\$	8,231,239	\$	532,047	6.91%	

# **PROGRAM:**

Wastewater originating in the City's Wastewater system is treated by Fairfax County in its Noman M. Cole, Jr., Pollution Control Plant by a contractual agreement that provides a guaranteed treatment capacity for the City.

# **GOAL:**

To ensure effective Wastewater services to city customers and to make sure treatment capacity is available for future use by administering the wastewater treatment contract with Fairfax County.

#### **OBJECTIVES:**

- To determine how much capacity is available for future use by measuring and monitoring city wastewater flows to Fairfax County's Noman M. Cole, Jr. Pollution Control Plant and make recommendations to purchase additional capacity if necessary.
- To monitor the city's payments to the county for treatment, capital improvement, operations and maintenance costs to ensure costs to city customers are accurate and properly prorated.

# **SERVICES AND PRODUCTS:**

• Wastewater metering stations, treatment and disposal of wastewater for City residents and businesses and to protect the Chesapeake Bay.

# FY 2021 Adopted Budget - City of Fairfax, Virginia

**FUNCTION:** Wastewater Services

**DEPARTMENT:** Utilities

DIVISION OR ACTIVITY: County Wastewater Treatment Contract

# **PERFORMANCE MEASURES:**

Indicators	FY 2019 Actual	FY 2020 Budget	FY 2020 Estimate	FY 2021 Adopted
<b>Output Measures</b>				
Rolling average daily flow (Millions Gallons Daily–MGD)	3.2	3.2	3.3	3.4
<b>Outcome Measures</b>				
% Utilization 4.2 MGD Avg Capacity	76%	76%	79%	81%

DEPARTMENT: Public Works

DIVISION OR ACTIVITY: Wastewater Line Maintenance

#### **BUDGET COMMENTS:**

The FY 2021 Adopted Budget reflects a reduction of \$632,112 (16.7%) from the FY 2020 Adopted Budget. Notable adjustments include:

# Capital Outlay, decrease of \$625,000 (23.5%)

The detail for Wastewater capital projects is provided in the Capital Budget Section G.

Cost Center 435120: Wastewater Line Maintenance											
Title		FY 2019 <u>Actual</u>		FY 2020 Budget		FY 2020 Estimate		FY 2021 Adopted		ariance to Budget \$	Variance to Budget %
Salaries	\$	584,488	\$	596,512	\$	596,512	\$	600,581	\$	4,069	0.68%
Fringe Benefits		300,057		221,860		221,860		225,889		4,029	1.82%
Purchased Services		48,112		67,500		82,500		72,500		5,000	7.41%
Internal Services		92,792		92,957		92,957		72,748		(20,209)	-21.74%
Other Charges		33,963		33,033		33,033		33,033		-	0.00%
Supplies & Materials		101,211		110,889		110,889		110,889		-	0.00%
Capital Outlay		(159,505)		2,657,000		2,657,000		2,032,000		(625,000)	-23.52%
Total	\$	1,001,118	\$	3,779,751	\$	3,794,751	\$	3,147,640	\$	(632,112)	-16.72%

# **PROGRAM:**

Wastewater conveyance pipelines and facilities are maintained and rehabilitated by the Wastewater Division of the Public Works Department.

#### **GOAL:**

To provide reliable wastewater service by inspecting, cleaning, repairing and rehabilitating the city's wastewater pumping and gravity conveyance network.

#### **OBJECTIVES:**

- To minimize the number of wastewater service line backups to less than two per fiscal year
- To minimize the number of wastewater overflows to the environment to less than two per fiscal year
- To reduce excessive inflow and infiltration (I/I) by ten percent from FY 2013, the base year.
- To perform preventive maintenance flushing of 50% of the wastewater system per year.
- To perform preventive maintenance video recording of 15% of the wastewater system per year.

# **SERVICES AND PRODUCTS:**

- Provide well-maintained and unobstructed wastewater conveyance pipelines
- Minimize backups and overflows
- Inspect and resolve wastewater pipelines exhibiting grease and blockage
- Respond to and resolve odor control issues

DEPARTMENT: Public Works

DIVISION OR ACTIVITY: Wastewater Line Maintenance

## **PERFORMANCE MEASURES:**

	FY 2019	FY 2020	FY 2021
Indicators	Actual	Estimate	Projected
Output Measures			
Sanitary Sewer Lining – 10" & under (If)	12,400	12,000	12,000
Sanitary Sewer Lining – over 10" (If)	6,970	6,900	6,900
Manholes Rehabilitated (If)	690	650	650
Sewer Lines TV'd (If)	84,050	84,000	84,000
Sewer Lines Flushed (If)	314,050	314,000	314,000
Miss Utility tickets marked	3,048	3,050	3,050

# **Performance Measurement Results:**

- Daily/Weekly preventive maintenance of the five pump stations
- 24/7 alarm monitoring of the five pump stations
- Assist with TV inspection of new development
- Oversight of CIP wastewater lining contractors
- Mowed and maintained sewer easements
- Oversight of CIP wastewater repair and replacement
- Schedule repair and maintenance on ten pump motors
- Schedule repair and maintenance on five generators (1 on each pump house)
- Respond to Emergency Miss Utility Tickets 24/7
- Grounds and building maintenance of five pump station facilities
- Replacement of manhole frame and covers

Personnel Classification	Grade	FY 2019 <u>Actual</u>	FY 2020 Budget	FY 2020 Estimate	FY 2021 Adopted
Superintendent	S02	0.25	0.25	0.25	0.25
Crew Supervisor	117	1.00	1.00	1.00	1.00
Assistant Crew Supervisor	114	-	-	-	1.00
Utility Worker III	112	1.00	1.00	1.00	-
Wastewater Equipment Operator	111	1.00	1.00	1.00	1.00
Utility Line Technician	110	1.00	1.00	1.00	1.00
Utility Technician III	110	1.00	1.00	1.00	1.00
Utility Worker II	109	1.00	1.00	1.00	1.00
Utility Technician II	109	1.00	1.00	1.00	1.00
Total FTE		7.25	7.25	7.25	7.25

**DEPARTMENT:** Utilities

DIVISION OR ACTIVITY: Wastewater Administration

#### **BUDGET COMMENTS:**

The FY 2021 Adopted Budget reflects a reduction of \$168,752 (15.5%) from the FY 2020 Adopted Budget. Notable adjustments include:

# Salaries, decrease of \$39,363 (31.6%)

 Decrease due to change in allocations from Public Works (\$38.8k), partially offset by reductions in FT Salaries (\$2.3k COVID Reserve).

# • Fringe Benefits, decrease of \$18,511 (31.8%)

 Decrease due changes in allocations from Public Works and reduction in FT Salaries (\$17.8k & \$0.7k COVID Reserve), partially offset by higher costs in retirement plan contributions.

# Internal Services, decrease of \$104,327 (16.8%)

• The allocation of motor pool expenses from the Fleet Maintenance was updated based on the actual usage statistics; as a result, motor pool expenses allocated to this division decreased.

Cost Center 435130: Wastewater Administration & Engineering											
Title		FY 2019 Actual		FY 2020 Budget		FY 2020 Estimate		FY 2021 Adopted		ariance to Budget \$	Variance to Budget %
Salaries	\$	96,517	\$	124,733	\$	124,733	\$	85,370	\$	(39,363)	-31.56%
Fringe Benefits		36,765		58,148		58,148		39,637		(18,511)	-31.83%
Purchased Services		12,714		16,250		16,250		17,800		1,550	9.54%
Internal Services (Motor Pool)		570,941		619,845		619,845		515,517		(104,327)	-16.83%
Other Charges		250,596		268,500		260,000		260,000		(8,500)	-3.17%
Supplies & Materials		-		1,050		1,050		1,450		400	38.10%
Capital Outlay		-		-		-		-		-	0.00%
Total	\$	967,533	\$	1,088,526	\$	1,080,026	\$	919,774	\$	(168,752)	-15.50%

# PROGRAM:

Wastewater service management and administration are provided by the Department of Public Works but no longer include utility billing. Customer service, customer issue resolution, general administration, and engineering review are to be provided by Public Works as an in-kind service.

# **GOAL:**

To provide effective leadership, managerial, administrative and engineering support to the Wastewater line maintenance division in order to enhance department performance. To strengthen environmental sustainability and meet the City's goal of providing unsurpassed user-friendly, customer-focused business practices.

**DEPARTMENT:** Utilities

DIVISION OR ACTIVITY: Wastewater Administration

#### **OBJECTIVES:**

- To monitor and ensure efficient utility billing for Wastewater customers by Fairfax Water the City's out source for these services.
- To review site plans submitted by developers within 7 business days of submittal
- To manage new connections to the wastewater system
- To provide "Capacity Management" via managing wastewater conveyance to Fairfax County and a life-cycle cost basis for the wastewater Capital Improvement Program
- To have a strong safety program resulting in zero "lost time" accidents for the Department

#### **SERVICES AND PRODUCTS:**

- Administrative services for Wastewater Services Section
- Monitoring Utility Billing Quality and cost effectiveness
- Wastewater emergency response assistance
- Wastewater conveyance and service connection Information Management
- Asset Management support via GIS
- Records Management

#### **PERFORMANCE MEASURES:**

Indicators		FY 2019 Actual	FY 2	2020 Budget	FY 2020 Estimate	FY 2	021 Projected
Output Measures							
Site Plans reviewed		37		33	33		30
Personnel		FY 2019		FY 2020	FY 2020		FY 2021
Classification	Grade	<u>Actual</u>		<u>Budget</u>	<u>Estimate</u>		<u>Adopted</u>
Director of Dublic Works	**		0.10	0.4	10 0	10	0.10
Director of Public Works			0.10	0.1		.10	0.10
City Engineer	S01		0.10	0.:		.10	0.10
Stormwater Res Engineer	121		0.10	0.3		.10	0.10
Assistant Stormwater Res Engineer	117		0.30	0.3	30 0	.30	0.30
Administrative Assistant IV	112		0.50	0.3	30 0	.30	0.30
Total FTE			1.10	0.9	90 0	.90	0.90

**DEPARTMENT:** Utilities

DIVISION OR ACTIVITY: Wastewater Debt Service

#### **BUDGET COMMENTS:**

The FY 2021 Adopted Budget reflects a reduction of \$411,340 (22.0%) from the FY 2020 Adopted Budget. Notable adjustments include:

# Debt Service, decrease of \$411,340 (22.0%)

Decrease due to 2020 refunding of debt.

	Cost Center 435710: Wastewater Debt Service											
Title		FY 2019 Actual		FY 2020 Budget		FY 2020 Estimate		FY 2021 Adopted		ariance to Budget \$	Variance to Budget %	
Debt Service	\$	1,134,007	\$	1,868,344	\$	1,868,344	\$	1,457,004	\$	(411,340)	-22.02%	
Total	\$	1,134,007	\$	1,868,344	\$	1,868,344	\$	1,457,004	\$	(411,340)	-22.02%	

#### **PROGRAM:**

General revenue bonds and resulting debt service are required, after City Council approval, for projects too large to be funded by current user fee revenues. Such capitalized projects will have a long-term public benefit and ensure adequate capacity for current and future customers.

# **GOAL:**

To ensure an adequate and efficient wastewater conveyance system, that is financially secure, by paying principal and interest (debt service) for bond proceeds issued by the VRA to the City to pay for completed treatment improvements upgrades at Noman Cole, Jr., Pollution Control Plant and the City's pumping and collection service area.

# **OBJECTIVE:**

Retire Debt

# **SERVICES AND PRODUCTS:**

Payment of principal and interest on debt to bond holders.

**Purpose:** Financing capital improvements to the Wastewater System

Principal Amount: Original: \$24,080,000; Refunding \$19,205,000

**Date of Issue:** November 2010; Refunding April 2019

**Collateral:** Wastewater Fund reserves

# 2019A VRA Refund of 2010C Bonds Lease Financing for Utility Improvements Principal and Interest, 10-1; Interest, 4-1

# **Payments During Year**

YEAR ENDING  JUNE 30	PRINCIPAL	NET INTEREST	TOTAL REQUIREMENT
2021	660,000	797,004	1,457,004
2022	600,000	764,469	1,364,469
2023	630,000	732,950	1,362,950
2024	665,000	699,766	1,364,766
2025	695,000	664,916	1,359,916
2026	735,000	628,272	1,363,272
2027	775,000	589,578	1,364,578
2028	815,000	548,834	1,363,834
2029	850,000	506,169	1,356,169
2030	900,000	461,325	1,361,325
2031	945,000	414,047	1,359,047
2032	990,000	364,463	1,354,463
2033	1,040,000	315,594	1,355,594
2034	1,080,000	276,634	1,356,634
2035	1,110,000	244,806	1,354,806
2036	1,140,000	211,125	1,351,125
2037	1,175,000	175,969	1,350,969
2038	1,210,000	139,219	1,349,219
2039	1,245,000	100,859	1,345,859
2040	1,280,000	61,406	1,341,406
2041	1,325,000	20,703	1,345,703
Total	\$ 19,865,000	\$ 8,718,108	\$ 28,583,108

		Wastewater F	und Expense D	etail			
		FY 2019	FY 2020	FY 2020	FY 2021	Variance to	Variance to
Account	Account Title	Actual	Budget	Estimate	Adopted	Budget \$	Budget %
County Wa	stewater Treatment Contract (435110)						
530835	City-County Contracts - O&M	\$ 2,205,110	\$ 2,499,192	\$ 2,499,192	\$ 2,749,111	\$ 249,919	10.00%
530835	City-County Contracts - CIP	-	5,200,000	5,200,000	5,482,128	282,128	5.43%
	Subtotal	2,205,110	7,699,192	7,699,192	8,231,239	532,047	6.91%
Wastewate	er Line Maintenance (435120)						
511105	Salaries - Full Time	425,788	451,512	451,512	455,581	4,069	0.90%
511115	Salaries - Overtime	122,712	112,000	112,000	112,000	-	0.00%
511125	Temporary Help	4,716	6,000	6,000	6,000	-	0.00%
511130	On Call Pay	24,960	27,000	27,000	27,000	-	0.00%
511165	Annual Accrual	6,121	-	-	-	-	0.00%
511170	MLR Kaiser Rebate	191	-	-	-	-	0.00%
512110	Fringe Benefits	300,057	221,860	221,860	225,889	4,029	1.82%
530113	Contract Services	20,464	29,000	44,000	29,000	-	0.00%
530350	Building Maintenance	-	5,000	5,000	5,000	-	0.00%
530351	Equipment Maintenance	27,648	33,500	33,500	38,500	5,000	14.93%
540102	Motor Pool Charges	92,792	92,957	92,957	72,748	(20,209)	-21.74%
550110	Utilities Expense	18,086	17,533	17,533	17,533	-	0.00%
550430	Equipment Rental	14,427	11,500	11,500	11,500	-	0.00%
550501	Travel & Training	1,450	4,000	4,000	4,000	-	0.00%
560110	Office Supplies	833	1,000	1,000	1,000	-	0.00%
560416	Uniforms	3,719	4,389	4,389	4,389	-	0.00%
560420	Operating Supplies	13,792	11,500	11,500	11,500	-	0.00%
560430	Operating Materials	14,230	29,000	29,000	29,000	-	0.00%
560501	Chemicals - Other	68,637	65,000	65,000	65,000	-	0.00%
580428	Sewage Pump Station Rehab	5,100	30,000	30,000	30,000	-	0.00%
580440	Sewer Trunk Lining-pipes over 10 in	(148,669)	875,000	875,000	600,000	(275,000)	-31.43%
580441	Sewer Lining	(169,730)	470,000	470,000	480,000	10,000	2.13%
580442	Manhole Rehab	-	122,000	122,000	125,000	3,000	2.46%
580443	Sewer Trunk Line Evaluation	-	300,000	300,000	200,000	(100,000)	-33.33%
580448	Geographical Information System	-	130,000	130,000	-	(130,000)	-100.00%
580449	Collection System Repair & Replacement	62,731	112,000	112,000	114,000	2,000	1.79%
580450	Pump Station Containment	-	50,000	50,000	-	(50,000)	-100.00%
580451	Stream Easement Encasement Project	48,770	153,000	153,000	156,000	3,000	1.96%
580453	SS Line & Replace @ Main St & West St	21,210	-	-	-	-	0.00%
580454	Wastewater Vehicle Replacement	21,083	415,000	415,000	327,000	(88,000)	-21.20%
	Subtotal	1,001,118	3,779,751	3,794,751	3,147,640	(632,112)	-16.72%
Δdministra	tion & Engineering (435130)						
	Salaries - Full Time	94,731	124,533	124,533	83,470	(41,063)	-32.97%
511105	Salaries - Over Time	383	200	200	400	200	100.00%
511125	Temporary Help	1,399	-	-	1,500	1,500	0.00%
511170	MLR Kaiser Rebate	4	_	_	-	-	0.00%
512110	Fringe Benefits	36,765	58,148	58,148	39,637	(18,511)	
530113	Contract Services	12,714	16,250	16,250	17,800	1,550	9.54%
540060	Management Fee	570,941	619,845	619,845	515,517	(104,327)	
550806	Other Services	250,596	268,500	260,000	260,000	(8,500)	
560110	Office Supplies	230,330	850	850	1,250	400	47.06%
560416	Uniforms		200	200	200	400	0.00%
300410	Subtotal	967,533	1,088,526	1,080,026	919,774	(168,752)	
Debt Service	•						_
590105	Principal	-	625,000	625,000	660,000	35,000	5.60%
590110	Interest Subtotal	1,134,007 <b>1,134,007</b>	1,243,344 1,868,344	1,243,344 1,868,344	797,004 <b>1,457,004</b>	(446,340) ( <b>411,340</b> )	
		_,,007	_,000,044	_,000,044	_,-37,004	(411,540)	0/0
	nce Costs (491711)	44= 55=					
590120	Bond Issuance Costs Subtotal	117,027 <b>117,027</b>	-	-	-	-	0.00% <b>0.00</b> %
							0.00%
Total Waste	ewater Fund	\$ 5,424,795	\$ 14,435,813	\$14,442,313	\$13,755,657	\$ (680,156)	-4.71%

# FY 2021 Adopted Budget - City of Fairfax, Virginia

Function: Wastewater Services

Department: Public Works

Division or Activity: Wastewater Lateral Repair and Replacement Program

# **Program:**

The Code of the City of Fairfax, Virginia requires wastewater customers to be responsible for wastewater laterals all the way to the main. In all cases, repair or replacement of the lateral within the Right-of-Way is expensive and urgent. As a first step toward establishing assistance within the Right-of-Way the Wastewater Utility established, effective March 2017, a reimbursement program for corrective repairs and replacements as well as preventive replacements using open trench or trenchless technologies. The program provides a new charge entitled Wastewater lateral repair and replacement charge.

A dedicated escrow account has been established under this Utility Fund for the wastewater lateral repair and replacement program. The program is to be self-sustaining.

City of Fairfax, Virginia FY 2020 Lateral Repair and Replacement Program Budget Summary											
FY 2019 FY 2020 FY 2021 Variance to Variance Actual Budget Estimate Adopted Budget \$ Budge											
Cash Balance - Beginning		293,006		-		109,603		109,603			
Revenues Lateral R & R Charge	\$	(183,403)	\$	160,000	\$	160,000	\$	160,000	\$	-	0.00%
Total Revenues	\$	(183,403)	\$	160,000	\$	160,000	\$	160,000	\$	-	0.00%
Expenses Lateral R & R Expense	\$		\$	160,000	\$	160,000	\$	160,000	\$	-	0.00%
Total Expenses	\$	-	\$	160,000	\$	160,000	\$	160,000	\$	-	0.00%
Cash Balance - 6/30	\$	109,603	\$		\$	109,603	\$	109,603			