Wastewater Fund

	FY 2017 W									
Revenues	FY 2015 Actual		FY 2016 Budget		FY 2016 Estimate		FY 2017 Adopted		ariance to Budget\$	Variance to Budget %
	F 207 004		F 670 420		F 670 420		C 00F 740		425 202	7 500/
Operating Revenues	\$ 5,297,081	Þ	5,670,428	þ	5,670,428	Þ	6,095,710	Þ	425,282	7.50%
Availability Charges	387,954		325,000		325,000		325,000		-	0.00%
Other Revenues										
Interest	24,836		15,000		24,000		24,000		9,000	60.00%
Miscellaneous / Financing	13,396		-		-		-		-	0.00%
Reimbursements	 373,949		403,397		373,966		373,966		(29,431)	-7.30%
Subtotal Other Revenues	412,181		418,397		397,966		397,966		(20,431)	-4.88%
Other Financing Sources	-		4,795,000		4,795,000		5,799,000		1,004,000	20.94%
Total Revenues	\$ 6,097,216	\$	11,208,825	\$	11,188,394	\$	12,617,676	\$	1,408,851	12.57%
Expenses										
Operating Expenses										
Annual Wastewater Treatment	\$ 1,648,895	\$	2,100,000	\$	2,100,000	\$	2,100,000	\$	-	0.00%
CIP Payments - Fairfax County	-		3,370,000		3,370,000		4,019,000		649,000	19.26%
Capital Projects	169,298		1,425,000		1,425,000		1,780,000		355,000	24.91%
Line Maintenance	815,049		928,858		989,186		1,038,546		109,688	11.81%
Administrative & Engineering	 946,979		933,688		924,942		913,164		(20,524)	-2.20%
Subtotal Operating Costs	3,580,221		8,757,546		8,809,127		9,850,710		1,093,164	12.48%
Other Expenses										
Debt Service	 1,374,096		1,866,494		1,866,494		1,866,949		455	0.02%
Subtotal Other Expenses	 1,374,096		1,866,494		1,866,494		1,866,949		455	0.02%
Total Expenses	\$ 4,954,317	\$	10,624,040	\$	10,675,621	\$	11,717,659	\$	1,093,619	10.29%
Cash Balance - June 30	\$ 15,022,728	\$	9,473,295	\$	15,535,501	\$	16,435,518			
Total FTE	8.2		9.2		8.4		8.4			

DEPARTMENT: Utilities

DIVISION OR ACTIVITY: County Wastewater Treatment Contract

BUDGET COMMENTS:

An increase of \$649,000, or 11.9 % from the FY 2016 Adopted Budget is necessary to fund the FY 2017 Adopted Budget. Notable adjustments include:

Annual Wastewater Treatment

The contracted amount for the Wastewater treatment with Fairfax County is projected to remain flat.

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 when finalized will be about 6.0 %, 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 orders over a projected 16 year period.

Cost Center 435110: County Wastewater Treatment Contract												
Title		FY 2015 <u>Actual</u>	FY 2016 Budget		Y 2016 stimate		FY 2017 Adopted	Variance to Budget \$	Variance to Budget %			
County Charges - Operating	\$	1,648,895	\$ 2,100,000	\$	2,100,000	\$	2,100,000	\$ -	0.00%			
County Charges - Capital		-	3,370,000		3,370,000		4,019,000	649,000	19.26%			
Total	\$	1,648,895	\$ 5,470,000	\$	5,470,000	\$	6,119,000	\$ 649,000	11.86%			

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.

FUNCTION: Wastewater Services

DEPARTMENT: Utilities

DIVISION OR ACTIVITY: County Wastewater Treatment Contract

Performance Measures:

Indicators	FY 2015 Actual	FY 2016 Budget	FY 2016 Estimate	FY 2017 Adopted
Output Measures				
Rolling average daily flow (Millions Gallons Daily–MGD)	3.2	3.2	3.3	3.4
Outcome Measures				
% Utilization 4.2 MGD Avg Capacity	76%	76%	79%	81%

DEPARTMENT: Public Works

DIVISION OR ACTIVITY: Wastewater Line Maintenance

BUDGET COMMENTS:

An increase of \$464,688 or 19.7% from the FY 2016 Adopted Budget is necessary to fund the FY 2017 Adopted Budget. Notable adjustments include:

Purchased Services, increase of \$14,000 or 13.9%

- Additional Eleven Oaks Pump Station.
- Replace TV Camera Unit to inspect sewer mains.

Capital Outlay, increase of \$355,000 or 24.9%

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

	Cost Center 435120: Wastewater Line Maintenance											
Title		FY 2015 <u>Actual</u>		FY 2016 Budget		FY 2016 Estimate		FY 2017 Adopted	Variance to Budget \$	Variance to Budget %		
Salaries	\$	483,776	\$	494,989	\$	500,838	\$	538,021	\$ 43,032	8.69%		
Fringe Benefits		172,603		187,869		187,869		183,360	(4,509)	-2.40%		
Purchased Services		47,960		101,000		101,000		115,000	14,000	13.86%		
Internal Services		-		-		54,478		55,166	55,166	0.00%		
Other Charges		23,595		26,500		26,500		28,500	2,000	7.55%		
Supplies & Materials		87,115		118,500		118,500		118,500	-	0.00%		
Capital Outlay		169,298		1,425,000		1,425,000		1,780,000	355,000	24.91%		
Total	\$	984,347	\$	2,353,858	\$	2,414,186	\$	2,818,546	\$ 464,688	19.74%		

PROGRAM:

Wastewater conveyance pipelines and facilities are maintained and rehabilitated by the Wastewater Support Services Division (WSSD) 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 25% of the wastewater system per year.

DEPARTMENT: Public Works

DIVISION OR ACTIVITY: Wastewater Line Maintenance

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

PERFORMANCE MEASURES:

Indicators	FY 2015 Actual	FY 2016 Estimated	FY 2017 Projected
Output Measures			
Sanitary Sewer Lining – 10" & under (If)	2,000	5,000	6,000
Sanitary Sewer Lining – over 10" (If)	0	1,200	1,000
Manholes Rehabilitated (If)	0	1,300	650
Number of wastewater overflows	1	0	0
Number of wastewater service line backups	0	0	0

Performance Measurement Results:

- Daily/Weekly preventive maintenance of the five pump stations
- 24/7 alarm monitoring of the five pump stations
- TV'd 84,046 linear ft of wastewater pipe
- Flushed 466,224 linear ft of wastewater pipe
- Marked 2,568 Miss Utility tickets
- 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

FUNCTION: Wastewater Services

DEPARTMENT: Public Works

DIVISION OR ACTIVITY: Wastewater Line Maintenance

Personnel Classification	Grade	FY 2015 <u>Actual</u>	FY 2016 Budget	FY 2016 Estimate	FY 2017 Adopted
Superintendent	25	0.50	0.50	0.25	0.25
Crew Supervisor	18	1.00	1.00	1.00	1.00
Utility Worker III	13	1.00	1.00	1.00	1.00
Utility Line Technician	13	1.00	1.00	1.00	1.00
Wastewater Equipment Operator	12	-	1.00	1.00	1.00
Utility Technician	11	-	1.00	1.00	1.00
Utility Worker II	10	1.00	1.00	1.00	1.00
Utility Technician	9	1.00	1.00	1.00	1.00
Utility Worker I	9	1.00	-	-	-
Total FTE		6.50	7.50	7.25	7.25

DEPARTMENT: Utilities

DIVISION OR ACTIVITY: Wastewater Administration

BUDGET COMMENTS:

The FY 2017 Adopted Budget reflects a reduction of \$20,524 or 2.2% from the FY 2016 Adopted Budget. Notable adjustments include:

- Salaries, decrease of \$42,439 or 40.8%
 - Staffing has been reduced by .25 FTE.
- Fringe Benefits, decrease of \$16,956 or 40.3%
 - Staffing has been reduced by .25 FTE.
- Other Charges, increase of \$49,750 or 24.8%
 - Reflective of historical costs.

	Cost Center 435	130: Wastewater	Admi	inistration &	Eng	ineering			
Title		FY 2015 <u>Actual</u>		FY 2016 Budget		FY 2016 Estimate	FY 2017 Adopted	 riance to udget \$	Variance to Budget %
Salaries	\$	47,015	\$	104,106	\$	104,106	\$ 61,667	\$ (42,439)	-40.77%
Fringe Benefits		15,241		42,044		33,298	25,088	(16,956)	-40.33%
Purchased Services		6,327		13,000		13,000	11,404	(1,596)	-12.28%
Internal Services (Motor Pool)		629,315		572,238		572,238	563,855	(8,383)	-1.46%
Other Charges		248,800		200,550		200,550	250,300	49,750	24.81%
Supplies & Materials		281		1,750		1,750	850	(900)	-51.43%
Capital Outlay		-		-		-	-	-	0.00%
Total	\$	946,979	\$	933,688	\$	924,942	\$ 913,164	\$ (20,524)	-2.20%

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 2014 Actual	FY 2016 Budget	FY 2016 Estimate	FY 2017 Projected
Output Measures				
Output Medsures				
Site Plans reviewed	37	3	3 33	30

FUNCTION: Wastewater Services

DEPARTMENT: Utilities

DIVISION OR ACTIVITY: Wastewater Administration

Personnel Classification	Grade	FY 2015 <u>Actual</u>	FY 2016 Budget	FY 2016 Estimate	FY 2017 Adopted
Director of Public Works	**	0.10	0.10	0.10	0.10
Director of Utilities	**	-	-	-	-
City Engineer	26	0.10	0.10	0.10	0.10
Assistant Director of Utilities	24	-	-	-	-
Stormwater Res Engineer	23	0.30	0.30	0.10	0.10
Assistant Stormwater Res Engineer		0.30	0.30	0.30	0.30
Util. Const. Projects Coord.	18	-	-	-	-
Facilities Inspectors	17	0.40	0.40	-	-
Utility Billing & System Spec.	15	-	-	-	-
Administrative Assistant IV	14	0.50	0.50	0.50	0.50
Utility Billing Clerk	13	-	-	-	-
Total FTE		1.70	1.70	1.10	1.10

FUNCTION: Wastewater Services

DEPARTMENT: Utilities

DIVISION OR ACTIVITY: Wastewater Debt Service

BUDGET COMMENTS:

There are no material budget adjustments from the FY 2016 Adopted Budget for the FY 2017 Adopted Budget.

Cost Center 435710: Wastewater Debt Service											
Title		FY 2015 <u>Actual</u>		FY 2016 Budget		FY 2016 Estimate		FY 2017 Adopted		ariance to Budget \$	Variance to Budget %
Debt Service	\$	1,374,096	\$	1,866,494	\$	1,866,494	\$	1,866,949	\$	455	0.02%
Total	\$	1,374,096	\$	1,866,494	\$	1,866,494	\$	1,866,949	\$	455	0.02%

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.

<u>Lease Financing for Utility Improvements</u> Principal and Interest, 10-1; Interest, 4-1

Payments During Year

YEAR ENDING <u>JUNE 30</u>	PRINCIPAL	NET INTEREST	TOTAL REQUIREMENT
2017	535,000	1,331,949	1,866,949
2018	565,000	1,305,224	1,870,224
2019	595,000	1,275,064	1,870,064
2020	625,000	1,243,344	1,868,344
2021	660,000	1,209,934	1,869,934
2022	685,000	1,176,552	1,861,552
2023	705,000	1,142,904	1,847,904
2024	730,000	1,106,770	1,836,770
2025	755,000	1,068,073	1,823,073
2026	785,000	1,026,710	1,811,710
2027	815,000	980,721	1,795,721
2028	850,000	930,437	1,780,437
2029	880,000	878,189	1,758,189
2030	920,000	823,829	1,743,829
2031	955,000	767,197	1,722,197
2032	995,000	707,797	1,702,797
2033	1,035,000	645,474	1,680,474
2034	1,080,000	580,542	1,660,542
2035	1,125,000	512,852	1,637,852
2036	1,170,000	442,392	1,612,392
2037	1,220,000	369,012	1,589,012
2038	1,270,000	292,574	1,562,574
2039	1,320,000	213,066	1,533,066
2040	1,375,000	130,325	1,505,325
2041	 1,435,000	44,053	1,479,053
Total	\$ 23,085,000	\$ 20,204,980	\$ 43,289,980

Purpose: Financing capital improvements to the Wastewater System

Principal Amount: \$24,080,000

Date of Issue: November 2010

Collateral: Wastewater Fund reserves

		Wastewater I	Fund Expense D)etail			
		FY 2015	FY 2016	FY 2016	FY 2017	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	\$ 1,648,895	\$ 2,100,000	\$ 2,100,000	\$ 2,100,000	\$ -	0.00%
530835	City-County Contracts - CIP	7 1,040,033	3,370,000	3,370,000	4,019,000	649,000	19.26%
330033	Subtotal	1,648,895	5,470,000	5,470,000	6,119,000	649,000	11.86%
	Subtotal	1,040,033	3,470,000	3,470,000	0,113,000	043,000	11.0070
Wastewate	er Line Maintenance (435120)						
511105	Salaries - Full Time	370,039	456,451	417,300	430,483	(25,968)	-5.69%
511115	Salaries - Overtime	79,190	25,000	60,000	79,000	54,000	216.00%
511130	On Call Pay	27,211	12,000	22,000	27,000	15,000	125.00%
511135	Holiday Worked	135	1,538	1,538	1,538	-	0.00%
511160	Incentive Awards	-	-	-	-	-	0.00%
511165	Annual Accrual	7,201	-	-	-	-	0.00%
511180	Salary Reimbursement	(2,999)	-	-	-	-	0.00%
512110	Fringe Benefits	172,603	187,869	187,869	183,360	(4,509)	-2.40%
530113	Contract Services	21,299	25,000	25,000	39,000	14,000	56.00%
530350	Building Maintenance	643	2,500	2,500	2,500	-	0.00%
530351	Equipment Maintenance	26,018	73,500	73,500	73,500	-	0.00%
540102	Motor Pool Charges	-	-	54,478	55,166	55,166	0.00%
550110	Utilities Expense	14,423	14,000	14,000	14,000	-	0.00%
550430	Equipment Rental	8,147	10,500	10,500	10,500	-	0.00%
550501	Travel & Training	1,025	2,000	2,000	4,000	2,000	100.00%
550731	Employee Awards	-	-	-	-	-	0.00%
560110	Office Supplies	105	1,000	1,000	1,000	-	0.00%
560420	Operating Supplies	22,539	28,500	28,500	28,500	-	0.00%
560430	Operating Materials	21,043	24,000	24,000	24,000	-	0.00%
560501	Chemicals - Other	43,428	65,000	65,000	65,000	-	0.00%
580105	Vehicle Replacement	-	-	-	-	-	0.00%
580108	OT Drainage Improvements	-	75,000	75,000	-	(75,000)	-100.00%
580410	Utility Engineering	-	-	-	-	-	0.00%
580428	Sewage Pump Station Rehab	48,715	40,000	40,000	30,000	(10,000)	-25.00%
580429	Sewer Rehab at Creek Cross.	-	-	-	-	-	0.00%
580441	Sewer Lining	848	450,000	450,000	460,000	10,000	2.22%
580440	Sewer Trunk Lining-pipes over 10 in	-	250,000	250,000	500,000	250,000	100.00%
580442	Manhole Rehab	-	90,000	90,000	120,000	30,000	33.33%
580443	Sewer Trunk Line Evaluation	37,644	300,000	300,000	300,000	-	0.00%
580444	SCADA	-	-	-	-	-	0.00%
580448	Geographical Information System	-	120,000	120,000	120,000	-	0.00%
580449	Collection System Repair & Replacement	82,091	100,000	100,000	100,000	-	0.00%
580450	Pump Station Containment	-	-	-	50,000	50,000	0.00%
580451	Stream Easment Encasement Project	-	-	-	50,000	50,000	0.00%
580452	Mobilized Video Camera Equipment	-	-	-	50,000	50,000	0.00%
	Subtotal	981,348	2,353,858	2,414,186	2,818,546	464,688	19.74%

Wastewater Fund Expense Detail							
Account	Account Title	FY 2015 Actual	FY 2016 Budget	FY 2016 Estimate	FY 2017 Adopted	Variance to Budget \$	Variance to Budget %
Administra	tion & Engineering (435130)						
511105	Salaries - Full Time	46,947	104,106	104,106	61,667	(42,439)	-40.77%
511115	Salaries - Overtime	68	-	-	-	-	0.00%
511125	Tempoary Help	-	-	-	-	-	0.00%
511160	Incentive Awards	-	-	-	-	-	0.00%
511198	Salary Vacancy Factor	-	-	-	-	-	0.00%
512110	Fringe Benefits	15,241	42,044	33,298	25,088	(16,956)	-40.33%
530113	Contract Services	6,327	13,000	13,000	11,404	(1,596)	-12.28%
540060	Management Fee	579,964	559,675	559,675	561,972	2,297	0.41%
540102	Motor Pool Charges	49,351	12,563	12,563	1,883	(10,680)	-85.01%
550501	Travel & Training	-	550	550	300	(250)	-45.45%
550806	Other Services	248,800	200,000	200,000	250,000	50,000	25.00%
550820	Dues & Subscriptions	-	150	150	-	(150)	-100.00%
560110	Office Supplies	281	1,600	1,600	850	(750)	-46.88%
580410	Utility Engineering		-	-	-	-	0.00%
	Subtotal	946,979	933,688	924,942	913,164	(20,524)	-2.20%
Debt Service	re (435710)						
590105	Principal	-	510,000	510,000	535,000	25,000	4.90%
590110	Interest	1,374,096	1,356,494	1,356,494	1,331,949	(24,546)	-1.81%
	Subtotal	1,374,096	1,866,494	1,866,494	1,866,949	455	0.02%
Total Wastewater Fund		\$4,951,318	\$10,624,040	\$10,675,621	\$11,717,659	\$ 1,093,619	10.29%