STORMWATER FUND

FUNCTION: Stormwater Fund

DEPARTMENT:

DIVISION OR ACTIVITY:

Budget Comments:

The FY 2018 Adopted Budget increases the City's real estate tax rate dedicated for the Stormwater Fund from 2.25¢ to 2.50¢, generating approximately \$1,488,761 in revenues in FY 2018. These funds will be used to support of the City's plan to address aging infrastructure and regulations from the federal and state governments regarding stormwater management. A series of projects are scheduled to be funded by these monies and are noted in the accompanying pages of this section.

The FY 2018 Adopted Budget reflects a reduction of \$152,112 or 7.4% from the FY 2017 Adopted Budget. Notable adjustments include:

- Capital Projects decrease of \$160,000 or 8.1%
 - Capital Projects affecting the Stormwater Fund have decreased due to the combined decrease in State Revenue Sharing funds and an offsetting increase in Grant funds.

City of Fairfax, Virginia FY 2018 Stormwater Fund Budget Summary						
	FY 2016 <u>Actual</u>	FY 2017 Budget	FY 2017 <u>Estimate</u>	FY 2018 Adopted	Variance to Budget \$	Variance to Budget %
Fund Balance - Beginning	\$ 758,551	\$ 222,731	\$ 665,303	\$ 911,141		
Revenues						
Transfer From General Fund	1,187,098	1,321,090	1,388,678	1,488,761	167,671	12.69%
State Funding	392,749	450,000	450,000	-	(450,000)	-100.00%
VSMP Fees	(2,414)	-	-	-	-	0.00%
Daniels Run	22,970	-	-	-	-	0.00%
Grant Revenue	-	125,000	125,000	325,000	200,000	160.00%
Transfer from Wastewater Fund	75,000	-	-	-	-	0.00%
Total Revenues	\$ 1,675,403	\$ 1,896,090	\$ 1,963,678	\$ 1,813,761	\$ (82,329)	-4.34%
Expenses						
Capital Projects	1,768,651	1,975,000	1,635,000	1,815,000	(160,000)	-8.10%
Salaries - Full Time	-	55,965	58,679	61,357	5,392	9.63%
Fringe Benefits	-	22,768	24,161	25,264	2,496	10.96%
Total Expenses	\$ 1,768,651	\$ 2,053,733	\$ 1,717,840	\$ 1,901,621	\$ (152,112)	-7.41%
Committed Funds	-	-	-	(823,281)		
Fund Balance - Ending	\$ 665,303	\$ 65,088	\$ 911,141	\$ -		

Personnel	<u>Grade</u>	FY 2016	FY 2017	FY 2017	FY 2018
Classification		Actual	Budget	Estimate	Adopted
Stormwater Program Specialist	117	0.0	0.7	0.7	0.7

PROJECT INFORMATION Driveway Pipe Replacement Project Project Name: Comprehensive Plan Reference: PFS-2.2 (p. 84); CA-1.5 (p. 103) **Comprehensive Plan Element Public Service and Facilities Environment** Economy Housing Community Appearance **Transportation** Land Use Other City Plan/Policy Statement of Need: Picture: Residential galvanized driveway pipe in City right-of-ways has deteriorated. This project would allow new pipe installation and right-of-way rehabilitation for 15 to 20 property locations per year. Locations: Cobbdale subdivision Little River Hills subdivision Stratford Ave **Project Cost Purpose of Expenditure** Year Adopted 2017 30,000 Driveway storm pipe replacement and ditch line rehabilitation 2018 30,000 Driveway storm pipe replacement and ditch line rehabilitation 2019 50,000 Driveway storm pipe replacement and ditch line rehabilitation 2020 50,000 Driveway storm pipe replacement and ditch line rehabilitation 2021 50,000 Driveway storm pipe replacement and ditch line rehabilitation 2022 50,000 Driveway storm pipe replacement and ditch line rehabilitation Total \$ 230,000 >2022 50,000 Annually Funding Source(s) Operating Cost(s) Staffing Levels **Revenues Generated** Storm Change from Previous CIP **Origin of Project** City Council No Change **Board/Commission** Increase in Amount Citizen/Civic Association **Decrease in Amount** Staff New Project Other: Other:

Public Works - Street Division

PROJECT INFORMATION Replacement Of Failing Galvanized Storm Drainage Systems Project Name: Comprehensive Plan Reference: PFS-2.2 (p. 84) **Comprehensive Plan Element Public Service and Facilities Environment** Housing Economy **Community Appearance Transportation** Land Use Other City Plan/Policy Statement of Need: Picture: This project provides for the replacement of the City's galvanized storm drain systems. Failed storm sewer mains create sinkholes and hazards. The failing systems would be replaced with HDPE pipe and new structures. Locations: Brookwood Dr Shiloh St Sager Ave **Project Cost Purpose of Expenditure** Year Adopted 2017 50,000 Replace galvanized storm drain 100,000 Replace galvanized storm drain 2018 2019 110,000 Replace galvanized storm drain 2020 110,000 Replace galvanized storm drain 2021 110,000 Replace galvanized storm drain 2022 110,000 Replace galvanized storm drain Total \$ 540,000 110,000 Annually >2022 Funding Source(s) Operating Cost(s) Staffing Levels **Revenues Generated** Storm Change from Previous CIP **Origin of Project** City Council No Change **Board/Commission** Increase in Amount **Decrease in Amount** Citizen/Civic Association Staff New Project

Public Works - Street Division

Other:

Other:

PROJECT INFORMATION Project Name: **Storm Drainage Maintenance** Comprehensive Plan Reference: PFS-2.2 (p. 84); CA-1.5 (p. 103) **Comprehensive Plan Element Public Service and Facilities Environment** Economy Housing Community Appearance **Transportation** Land Use Other City Plan/Policy Statement of Need: Picture: The City maintains 1,800 structures and 300,000 linear feet of storm pipe. This project provides for contract maintenance and repair of the City's storm drainage system to ensure these facilities function properly. Maintenance consists of flushing storm pipes, cleaning out and re-purging drainage structures, repairing the tops of the drainage structures, blockage removal of trees and debris, and reconstruction of concrete and asphalt ditch lines. **Project Cost Purpose of Expenditure** Year Adopted 2017 80,000 Storm drainage maintenance 2018 110,000 Storm drainage maintenance 2019 120,000 Storm drainage maintenance 2020 120,000 Storm drainage maintenance 150,000 Storm drainage maintenance 2021 2022 150,000 Storm drainage maintenance Total \$ 650,000 >2022 150,000 Annually Funding Source(s) Staffing Levels Operating Cost(s) **Revenues Generated** Storm Change from Previous CIP **Origin of Project** City Council No Change **Board/Commission** Increase in Amount Citizen/Civic Association **Decrease in Amount**

Public Works - Street Division

New Project

Other:

Staff

User/Coordinating Departments:

PROJECT INFORMATION **Storm Drainage Outfall Maintenance & Repair** Project Name: Comprehensive Plan Reference: PFS-2.2 (p. 84) **Comprehensive Plan Element Public Service and Facilities** Environment Economy Housing Community Appearance **Transportation** Land Use Other City Plan/Policy Statement of Need: Picture: This project provides for reconstruction of the storm drainage outfalls to ensure these facilities drain properly. Construction typically consists of outfall rebuilding, creek/slope stabilization, blockage removal of trees and debris, and reconstruction of concrete ditch lines. There are 149 outfalls in the City. The object for the project is to rebuild 100 percent of the inventory over a 30 year period. Location: Mosby Woods **Project Cost Purpose of Expenditure** Year Adopted 2017 70,000 Ditch line, outfall and tributary system maintenance 100,000 Ditch line, outfall and tributary system maintenance 2018 100,000 Ditch line, outfall and tributary system maintenance 2019 2020 100,000 Ditch line, outfall and tributary system maintenance 2021 100,000 Ditch line, outfall and tributary system maintenance 2022 100,000 Ditch line, outfall and tributary system maintenance Total \$ 500,000 100,000 Annually >2022 Funding Source(s) Operating Cost(s) Staffing Levels **Revenues Generated** Storm Change from Previous CIP **Origin of Project** City Council No Change **Board/Commission** Increase in Amount Citizen/Civic Association **Decrease in Amount** Staff New Project

Public Works - Street Division

Other:

Other:

PROJECT INFORMATION Project Name: Storm Drainage Repair for Paving Schedule Comprehensive Plan Reference: PFS-2.2 (p. 84); CA-1.5 (p. 103) Comprehensive Plan Element ✓ Public Service and Facilities ✓ Environment Economy ✓ Community Appearance Land Use Other City Plan/Policy

Picture:

Statement of Need:

This project is to address all storm drainage infrastructure issues prior to road overlay paving construction. Work would include storm pipe replacement and structure reconstruction.

- Storm pipe replacement
- Storm pipe lining
- · Throat reconstruction
- · Storm top reconstruction
- · Manhole rehab

As paving quantities increase, additional funds are needed to address storm drainage infrastructure.



Year	Project Cost	Purpose of Expenditure					
Adopted							
2017	\$ 50,000	Pipe replacement &	Pipe replacement & structure repair/replacement prior to paving				
2018	100,000	Pipe replacement &	Pipe replacement & structure repair/replacement prior to paving				
2019	100,000	Pipe replacement & structure repair/replacement prior to paving					
2020	100,000	Pipe replacement & structure repair/replacement prior to paving					
2021	100,000	Pipe replacement & structure repair/replacement prior to paving					
2022	100,000	Pipe replacement & structure repair/replacement prior to paving					
Total	\$ 500,000						
>2022	100,000	Annually					
Fundin	g Source(s) Or	erating Cost(s)	Staffing Levels	Revenues Generated			
				*			

Funding	y Source(s)	Operating Cost(s)	Stailing Levels		Revenues Generated	
5	Storm	-	- \$		-	
Origin of Project				Change from Previous CIP		
	City Council				No Change	
	Board/Commission			✓	Increase in Amount	
Citizen/Civic Association					Decrease in Amount	
✓	✓ Staff				New Project	
	Other:				Other:	
Heav/Coardinating Departments Dublic Works Ctreat Division						

User/Coordinating Departments: Public Works - Street Division

PROJECT INFORMATION Storm Pipe Lining Rehabilitation Project Name: Comprehensive Plan Reference: ENV-2.1 (p. 34); PFS-2.2 (p. 84) **Comprehensive Plan Element Public Service and Facilities Environment** Economy Housing **Community Appearance Transportation** Land Use Other City Plan/Policy Statement of Need: Picture: This project is necessary to extend the life of the storm pipe lines. As concrete storm pipe linings age and deteriorate, sections can collapse and lose capacity. To prevent this, a plastic liner is installed on the inside wall of the pipe. Project includes mobilization, pre TV inspection, heavy cleaning, post TV inspection, and linear installation. FY18 - Beaumont Court **Project Cost Purpose of Expenditure** Year Adopted 2017 110,000 Reline storm pipes 2018 100,000 Reline storm pipes 2019 110,000 Reline storm pipes 2020 110,000 Reline storm pipes 2021 110,000 Reline storm pipes 2022 110,000 | Reline storm pipes Total \$ 540,000 >2022 110,000 Annually Funding Source(s) Operating Cost(s) Staffing Levels **Revenues Generated** Storm Change from Previous CIP **Origin of Project** City Council No Change **Board/Commission** Increase in Amount Citizen/Civic Association **Decrease in Amount**

Public Works - Street Division

New Project

Other:

Staff

User/Coordinating Departments:

PROJECT INFORMATION Storm Water Pipe Deficiencies Identified by Inspections Project Name: Comprehensive Plan Reference: PFS-2.2 (p. 84) **Comprehensive Plan Element Public Service and Facilities Environment** Economy Housing **Community Appearance Transportation** Land Use Other City Plan/Policy Statement of Need: Picture: Funds are requested to address storm water system defects identified in the storm system condition assessment done by the City's consultant. The City has been divided into numerous basins. Basins are collection system zones that drain storm water from a large area and move it to one location. FY18 - Beaumont Court **Project Cost Purpose of Expenditure** Year Adopted 2017 80,000 Pipe replacements to Basin 2 determined by 2014 video inspection 2018 120,000 Pipe replacements to Basin 2 determined by 2014 video inspection 2019 120,000 Pipe replacements to Basin 3 determined by 2016 video inspection 2020 130,000 Pipe replacements to Basin 4 determined by 2016 video inspection 2021 130,000 Pipe replacements to Basin 5 determined by 2018 video inspection 2022 130,000 Pipe replacements to Basin 6 determined by 2019 video inspection Total \$ 630,000 >2022 130,000 Annually Funding Source(s) Operating Cost(s) Staffing Levels **Revenues Generated** Storm Change from Previous CIP **Origin of Project City Council** No Change **Board/Commission** Increase in Amount Citizen/Civic Association **Decrease in Amount** Staff New Project Other: Other: User/Coordinating Departments: **Public Works - Street Division**

PROJECT INFORMATION Project Name: **Neighborhood Drainage Projects** Comprehensive Plan Reference: PFS 2.2 (p. 84); CA-1.5 (p. 103); T-7.3.2 (p. 134) **Comprehensive Plan Element √ Public Service and Facilities Environment** Housing Economy **Community Appearance Transportation** Land Use Other City Plan/Policy Statement of Need: Picture: These projects provide for stormwater improvements in residential neighborhoods to alleviate existing drainage problems. The projects have been requested by residents and City staff, and represent the projects recommended for design and construction. Design work has been completed for the following projects: Roberts Road and Forest Avenue, Scott Drive, McLean Avenue and Center Street. **Project Cost** Year Purpose of Expenditure Adopted 2017 150,000 | Construction Costs for Scott Drive 150,000 Construction Costs for McLean Ave. \$150K 2018 380,000 Construction Costs for Center St. \$100K, Roberts Rd. and Forest Ave. \$280K 2019 100,000 Estimated Design Costs for Winston Pl. \$50K, Roberts Rd. \$50K 2020 200,000 Construction Costs for Winston Pl. \$100K, Roberts Rd. \$100K 2021 2022 50,000 Design Cost for Orchard Dr. and Forest Ave. \$50K Total \$ 880,000 >2022 Funding Source(s) Operating Cost(s) Staffing Levels **Revenues Generated** Storm Change from Previous CIP Origin of Project City Council No Change **Board/Commission** Increase in Amount Citizen/Civic Association **Decrease in Amount**

Public Works - Administration & Engineering

New Project

Other:

Staff

User/Coordinating Departments:

PROJECT INFORMATION Chesapeake Bay TMDL Action Plan Project Name: Comprehensive Plan Reference: ENV-4.1(pg35); PFS-2.2(pg84) **Comprehensive Plan Element Public Service and Facilities Environment** Housing **Economy Community Appearance Transportation** Land Use Other City Plan/Policy Statement of Need: Picture: This project is needed to comply with the annual milestone requirements of the Municipal Separate Storm Sewer System (MS4) permit and state mandated TMDL allocations for waterways located within the regional watershed. A Chesapeake Bay Total Maximum Daily Load (TMDL) action plan was completed in July 2015, as well as 9 additional TMDLs allocated to the City. Each action plan outlines what the pollutant of concern (POC) loads and required reductions are for the City to meet the permit requirements, and how the City will achieve them. We met our Chesapeake Bay TMDL 5% reduction requirements for 2018. The Chesapeake Bay TMDL requires that the City hit a 5% pollutant reduction goal to meet the permit requirements by 2018, 40% pollutant reduction goal to meet the permit requirements by 2023, and 100% pollutant reduction goal to meet the permit requirements 2028. All grant opportunities will be explored. Additional TMDL's are anticipated in the near future. **Project Cost** Purpose of Expenditure Year Adopted 2017 70,000 Addition of Required Action Plans 2018 90,000 Milestone Action Plan for the Chesapeake Bay 40% TMDL, additional TMDL 2019 450,000 Design and Construction projects for 40% requirements 2020 500,000 Design and Construction projects for 40% requirements 2021 500,000 Design and construction projects for 40% requirements 2022 500,000 Design and construction projects for 40% requirements Total \$ 2,040,000 >2022 Funding Source(s) Operating Cost(s) Staffing Levels **Revenues Generated** Storm Change from Previous CIP **Origin of Project City Council** No Change **Board/Commission** Increase in Amount Citizen/Civic Association **Decrease in Amount**

Public Works - Administration & Engineering

New Project

Other:

Staff

User/Coordinating Departments:

City of Fairfax, Virginia - Adopted Capital Improvement Program FY 2018 to 2022 PROJECT INFORMATION Municipal Separate Storm Sewer System (MS4) Project Name: Comprehensive Plan Reference: ENV 2.1 (p. 34), ENV 4.1 (p. 35), PFS 2.2 (p. 84) **Comprehensive Plan Element Public Service and Facilities Environment** Housing Economy **Community Appearance Transportation** Land Use Other City Plan/Policy Statement of Need: Picture: This project is required to comply with the new MS4 permit requirements. The new permit has new significant milestones the City has to meet each year of the 5 year permit term. 12&24 Month Milestones: Other TMDL action plans, Public Outreach, Illicit discharge procedures, SWPPP locations, Nutrient Management Plan locations, training programs, MS4 annual permit • 36 Month: Additional TMDLs and MS4 annual permit • 48 Month: Outfall Map and MS4 annual permit • 60 month: Nutrient Management Plan implementation, SWPPP implementation and MS4 annual permit. A new 5 year permit will come out in 2017 with anticipated added requirements. 02/27/2012 03:06 **Project Cost** Year **Purpose of Expenditure** Adopted 2017 45,000 Consultant fees 48 month milestones 2018 75,000 Consultant fees 60 month milestones 75,000 Consultant fees 12 and 24 month milestones requirements 2019 75,000 Consultant fees 36 Month milestones 2020 2021 75,000 Consultant fees 48 Month milestones 2022 75,000 Consultant fees 60 Month milestones Total \$ 375,000 >2022 Funding Source(s) Operating Cost(s) Staffing Levels **Revenues Generated** Storm Change from Previous CIP **Origin of Project** City Council No Change **Board/Commission** Increase in Amount Citizen/Civic Association **Decrease in Amount**

Public Works - Administration & Engineering

New Project

Other:

Staff

User/Coordinating Departments:

PROJECT INFORMATION Project Name: **Private BMP/SWM Inspection** Comprehensive Plan Reference: ENV-2.1 (p. 34); PFS-2.2 (p. 84) **Comprehensive Plan Element Public Service and Facilities Environment** Housing **Economy Community Appearance Transportation** Land Use Other City Plan/Policy Statement of Need: Picture: This project provides for the annual inspection of all the private Management Practice/Storm Water Management (BMP/SWM) systems throughout the City. Currently there are 314 private facilities inspected annually. The State requires annual inspection of these facilities under the Virginia Pollution Discharge Elimination System (VPDES) and Phase II-Municipal Separate Storm Sewer System (MS4) annually. We expect these numbers to increase in the future as new BMPs come online. Year **Project Cost Purpose of Expenditure** Adopted 2017 70,000 Inspection of all private BMP/SWM facilities 100,000 Inspection of all private BMP/SWM facilities 2018 2019 120,000 Inspection of all private BMP/SWM facilities 135,000 Inspection of all private BMP/SWM facilities 2020 145,000 Inspection of all private BMP/SWM facilities 2021 155,000 Inspection of all private BMP/SWM facilities 2022 Total \$ 655,000 >2022 165,000 Annually Funding Source(s) Operating Cost(s) Staffing Levels **Revenues Generated** Storm Change from Previous CIP Origin of Project City Council No Change **Board/Commission** Increase in Amount Citizen/Civic Association **Decrease in Amount** Staff New Project

Public Works - Administration & Engineering

Other:

Other:

PROJECT INFORMATION **Public BMP/SWM Inspection and Maintenance** Project Name: Comprehensive Plan Reference: ENV-2.1 (p. 34); PFS-2.2 (p. 84) **Comprehensive Plan Element Public Service and Facilities Environment** Housing **Economy Community Appearance Transportation** Land Use Other City Plan/Policy Statement of Need: Picture: This project provides for the annual inspection and maintenance of all the public Best Management Practice/Storm Water Management (BMP/SWM) systems throughout the City. Currently there are 31 City owned and maintained facilities that are inspected annually. The State requires annual inspection of these facilities under the Virginia Pollution Discharge Elimination System (VPDES) and Phase II-Municipal Separate Storm Sewer System (MS4) annually. We expect these numbers to increase in the future as new BMPs come online. **Purpose of Expenditure** Year **Project Cost** Adopted 2017 \$ 20,000 Inspection and Maintenance of public facilities 2018 90,000 Inspection and Maintenance of public facilities 2019 110,000 Inspection and Maintenance of public facilities 120,000 Inspection and Maintenance of public facilities 2020 130,000 Inspection and Maintenance of public facilities 2021 2022 135,000 Inspection and Maintenance of public facilities Total \$ 585.000 140,000 Annually >2022 Funding Source(s) Operating Cost(s) Staffing Levels **Revenues Generated** Storm Change from Previous CIP Origin of Project **City Council** No Change **Board/Commission** Increase in Amount Citizen/Civic Association **Decrease in Amount** Staff New Project

Public Works - Administration & Engineering

Other:

Other:

City of Fairfax, Virginia - Adopted Capital Improvement Program FY 2018 to 2022 **PROJECT INFORMATION Stream Evaluation and Restoration Project Name:** Comprehensive Plan Reference: ENV-2.1 (p. 34); PFS-2.2 (p. 84); T-7.3.3 (p. 134) **Comprehensive Plan Element Public Service and Facilities** Environment **Economy** Housing Community Appearance **Transportation** Other City Plan/Policy Land Use Statement of Need: Picture: This project provides for the design and phased construction of approximately 1,900 LF of full stream restoration of Accotink Creek, located along Keith Street east to Chain Bridge Rd. This stretch has been identified as having high Bank Erosion Hazard Index's (BEHI) in the Accotink Creek Stream Stability Assessment and Prioritization Plan. This project is downstream from the Oak St. drainage improvement project, and may be impacted after the project is complete due to relieving of flooding upstream. Additionally approximately 130 pounds of phosphorus removal will be credited to the City's Chesapeake Bay Total Maximum Load (TMDL) compliance requirements. Future stream restoration will be assessed based on need. The current proposed Stream Restoration List based on need includes: additional sections of Daniels Run downstream from Farrcroft Pond and beyond Daniels Run Elem. to Army Navy Country Club, Dale Lestina Park and Spring Lake Terrace. ** The City has been awarded a SLAF grant in the total amount of \$1.3 Mil for this phased project, with \$650,000 of matching funds to date.

Year	Project Cost	Purpose of Expenditure
Adopted		
2017		Project design and construction Ph II (\$125,000 SLAF Grant)
2018		Project design and construction Ph III (\$650,000 SLAF Grant)
2019		Feasibility and Grant Application for Project
2020		Design and Construction Phase I
2021		Design and Construction Phase II
2022	975,000	Design and Construction Phase III
Total	\$ 4,375,000	
>2022	-	

Fund	ling Source(s)	Operating Cost(s)	Starring Levels		Revenues Generated	
G	Grant,Storm	-	-		-	
	Origin of Project			Change from Previous CIP		
	City Council				No Change	
	Board/Commission			✓	Increase in Amount	
	Citizen/Civic Association				Decrease in Amount	
\checkmark	Staff				New Project	
	Other:				Other:	
User/Coordinating Departments: Public Works - Administration & Engineering						