

Mission: To implement a comprehensive stormwater management program that balances the following goals: 1) to reduce the potential for stormwater threats to public health, safety, and property; 2) to reduce the impacts of new and existing urban development on Arlington streams, the Potomac River, and the Chesapeake Bay; and, 3) to comply with State and federal stormwater, water quality, and floodplain management regulations

STORMWATER MANAGEMENT PROGRAM OBJECTIVES

- Integrate traditional stormwater infrastructure needs with watershed management and environmental protection objectives and regulatory compliance requirements, including those of the County's Municipal Separate Storm Sewer System (MS4) permit, issued in June 2013.
- Implement critical infrastructure and environmental quality projects, consistent with the goals and strategies in the Stormwater Master Plan that was adopted as an element of the County's Comprehensive Plan in September 2014.
- Support routine preventive maintenance of the County's stormwater infrastructure assets, as well as emergency repair or replacement actions that may be needed.
- Perform floodplain analyses with updated flow data, topography and hydraulic analyses.

ACCOMPLISHMENTS

Since the adoption of a dedicated funding source for stormwater management in April 2008, steady progress continues on the design and construction of several significant stormwater projects. Examples of work completed or currently underway include the following projects:

Environmental Quality

- Multiple watershed retrofit projects have been constructed, including: Trades Center, Patrick Henry Drive medians, North Albemarle Street, Pentagon City, 8th Street South, 11th Street Park, and Northside leaf mulch facility.
- Construction of several major watershed retrofit and stream restoration projects is scheduled to begin between FY 2017 and FY 2019, including:
 - Four Mile Run Tidal Restoration Project (construction started September 2016)
 - Williamsburg Boulevard median I and II watershed retrofit
 - John Marshall Drive median/North Kensington Street watershed retrofit (construction started September 2016)
 - Ballston Pond retrofit project
 - Windy Run stream restoration project
 - Donaldson Run Tributary B stream restoration project

Stormwater Infrastructure

- Sycamore at 24th Street North (construction started September 2016).
- West Little Pimmit Run (construction started September 2016).
- Lower Long Branch Flood Risk Reduction Project (alternatives being developed).
- 9th Street North between North Liberty Street and North Livingston Street (gas main relocation and bid package completed, construction anticipated in spring 2017).

- Woodmont Swale (between the 2400 block of North Kenmore Street and the 2900 block of 24th Road North; design currently underway, with construction anticipated in FY 2017).
- Donaldson Run Outfall & Channel Repair at 24th Road North (currently under design, construction anticipated FY 2018).
- Stormwater infrastructure maintenance projects:
 - Ten projects to install 2,176 feet of storm sewer in the public right of way or public easements to address local drainage issues were completed in FY 2016.
 - Approximately 1,500 linear feet of storm sewers will be constructed in FY 2017.
 - Eight projects to install 1,830 linear feet of underdrains to address drainage issues associated with groundwater and sump pump water in the public right of way were constructed in FY 2016. Similar levels of storm sewer and underdrain construction are anticipated in FY 2018.
 - An analysis of Lower Long Branch was performed, and a Letter of Map Revision (LOMR) was obtained from the Federal Emergency Management Agency (FEMA). The updated hydraulic analysis in the LOMR reduced the extent of the regulated floodplain, resulting in the removal of approximately 40 homes from the floodplain.
 - A stormwater model of Torreyson Run was completed and capacity issues identified.
 - Ongoing stormwater capacity modeling analyses are continuing for the following basins: Lower Long Branch, Arlington Branch, Gulf Branch, Little Pimmit Run, and Donaldson Run.

SIGNIFICANT BUDGET CHANGES

The FY 2018 proposed expenditure budget for the Stormwater Management Fund is \$10,159,660, a four percent increase from the FY 2017 adopted budget. The FY 2018 proposed budget reflects:

- ↑ Personnel increases due to employee salary increases, an increase in the County's cost for employee health insurance, and retirement contributions based on current actuarial projections.
- ↑ Non-personnel increases for inter-departmental charges for overhead (\$24,100), operating supplies (\$60,331), and operating maintenance costs for DES and DPR stormwater facilities (\$265,130), offset by the elimination of one-time costs for the purchase of a new vehicle (\$24,100) and adjustments to the annual expense for maintenance and replacement of County vehicles (\$8,776).
- ↓ Capital cost decreases due to an increase in the operating budget for personnel and non-personnel expenses (\$262,719).
- ↑ Revenue increases due to the increase in the CY 2017 real estate assessment tax base (\$258,190) and an increase in sediment and erosion control plan revenue (\$100,000).
- Due to the impact of the MS4 permit, the Chesapeake Bay Total Maximum Daily Load (TDML), and capital related requirements, an increase in the stormwater tax rate will likely be required in the next two to four years.

PROGRAM FINANCIAL SUMMARY

	FY 2016 Actual	FY 2017 Adopted	FY 2018 Proposed	% Change '17 to '18
Personnel	\$4,460,579	\$4,530,665	\$4,834,889	7%
Non-Personnel	2,163,667	2,870,805	3,187,490	11%
Capital	1,805,826	2,400,000	2,137,281	-11%
Total Expenditures	8,430,072	9,801,470	10,159,660	4%
Total Revenues	9,185,040	\$9,801,470	\$10,159,660	4%
Change in Fund Balance	\$754,968	-	-	-
Permanent FTEs	37.00	42.00	42.00	
Temporary FTEs	-	-	-	
Total Authorized FTEs	37.00	42.00	42.00	

CAPITAL PROJECTS SUMMARY

Stormwater Management - FY 2018		
Environmental Quality Projects *		
1. Four Mile Run Tidal Restoration Project		\$647,934
2. 11th Street Park watershed retrofit		12,228
3. Patrick Henry Drive/20th St N watershed retrofit		43,918
4. John Marshall Drive/N Kensington St watershed retrofit		139,711
5. Northside Leaf Storage watershed retrofit		22,350
6. Williamsburg Blvd median I watershed retrofit		149,184
7. Williamsburg Blvd median II watershed retrofit		53,316
Environmental Quality Projects subtotal =		\$1,068,641
Infrastructure Projects		
1. Lower Long Branch flood risk reduction project		281,220
2. Sycamore at 24 th Street North		496,906
3. Maintenance Capital: Storm Sewer rehabilitation/replacement		290,514
Infrastructure Projects subtotal =		\$1,068,640
TOTAL =		\$2,137,281
Revenue		
Sanitary District Tax**		2,137,281
Total Estimated Revenue		\$2,137,281
Net with Revenues		-

* The Virginia Department of Environmental Quality issued the County's current MS4 permit in June 2013. This permit is significantly more stringent than the previous permit and includes quantitative pollution reduction requirements for the Chesapeake Bay Total Maximum Daily Load (TMDL) — a pollution budget for the Bay. The 'Environmental Quality' projects in the Capital Improvement Program (CIP) are key components of the County's strategy to comply with the pollution reduction requirements for the Chesapeake Bay TMDL.

** The current Sanitary District Tax of \$0.013 per \$100 of assessed real property value is not proposed to increase. For CY 2018, it is estimated to generate a total of \$9,609,660 in revenue, of which \$2,137,281 represents the portion of the annual revenue directed towards capital projects in the budget.

PERFORMANCE MEASURES

Critical Measures	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2017 Estimate	FY 2018 Estimate
Cumulative number of acres treated by public retrofit projects	9.0	12.2	13.1	13.1	16.1	24.1
Number of illicit discharge investigations completed	76	94	104	115	105	105
Number of new water quality facilities constructed to meet stormwater ordinance requirements	202	435	424	607	500	500
Number of public outreach events/ estimated number of participants	31/ 3,425	17/ 4,061	46/ 4,512	46/ 4,693	40/ 4,000	40/ 4,000
Number of private water quality facilities inspected	230	344	661	1,077	1,500	2,000
Linear feet of large diameter storm sewers constructed	430	0	0	0	2,026	0
Major storm sewer network capital repair projects	0	0	0	1	1	1

Supporting Measures	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2017 Estimate	FY 2018 Estimate
Catch basins cleaned	796	2,885	2,938	1,200	500	500
Linear feet of storm sewers inspected	116,770	7,910	99,411	57,057	130,500	130,500
Lane miles swept/tons collected	8,536/ 1,887	9,662/ 2,646	11,210/ 2,347	11,404/ 1,891	9,000/ 1,500	9,000/ 1,500
Number of stormwater training events/employees participating	33/ 780	15/ 984	20/ 788	18/ 1,273	20/ 800	20/ 800
Number of StormwaterWise retrofit projects on private property*	43	44	0	39	40	40
Linear feet of small storm sewer installed to address local drainage issues	N/A	N/A	640	2,176	1,500	1,500
Linear feet of corrugated metal pipe replaced with reinforced concrete pipe	N/A	N/A	1,900	0	1,500	1,500
Letters of Map Revision submitted to FEMA	N/A	N/A	2	1	2	2

*Note that StormwaterWise program year runs from January 1 to June 30 of the following year.

- With projects and programs implemented to date, Arlington County has already met the 5% Bay TMDL pollution reduction requirement for this permit cycle. The pollutant reductions achieved so far are: nitrogen—6.1%; phosphorus—17.6%; and sediment—14.1%. It is important to exceed the 5% requirement during this permit cycle to stay on pace to meet the full requirement in three permit cycles—rather than following the progressively steep implementation curve (5%, 35%, 60%). It should also be noted that EPA will be evaluating overall Bay restoration progress in 2017, and it is anticipated that there may be changes to the pollutant reduction requirements for local governments across Virginia and the Bay watershed. More reductions may be required.
- The number of reported illicit discharge incidents increased beginning in FY 2014. With greater community awareness and more stringent inspection requirements under Arlington's MS4 permit, it is expected that this workload will continue to remain high but return to normal levels in FY 2017 and FY 2018.
- New stormwater management regulations for development (required by State Law) that took effect in FY 2015, along with the increased inspection requirements in the County's new MS4 permit, have resulted in a substantial increase in the number of stormwater management facilities and associated inspection requirements.
- The spike in linear feet of small storm sewer installed to address local drainage issues in FY 2016 include improvements to 6th Street South and Monroe Street and a myriad of other local drainage issues that were identified and resolved.
- Fluctuations in the number of catch basins cleaned and the linear feet of storm sewers inspected is due to the impact of weather events on the Water, Sewer and Streets crews, as well as the number of capital projects funded in a given year. These figures also reflect the relative priority of inspection versus cleaning activities, as this impacts the workload and availability of the crews.
- The linear feet of storm sewers inspected was very low in FY 2014 because the first few months of FY 2014 were dedicated to catch basin inspections and cleaning. More time was dedicated toward storm sewer inspection in FY 2015.
- The spike in linear feet of large diameter storm sewers constructed in FY 2017 are due to the storm sewer upgrades at West Little Pimmit Run and North Rockingham Street.
- The StormwaterWise program was temporarily suspended in FY 2015 in response to a ruling by the IRS that such incentive payments to homeowners are now considered taxable income. This required a redesign of the program to ensure appropriate administrative mechanisms were in place to issue the required tax forms to homeowners through the County's non-profit partner for this program, Arlingtonians for a Clean Environment. The program resumed in FY 2016.

STORMWATER MANAGEMENT FUND
FUND STATEMENT

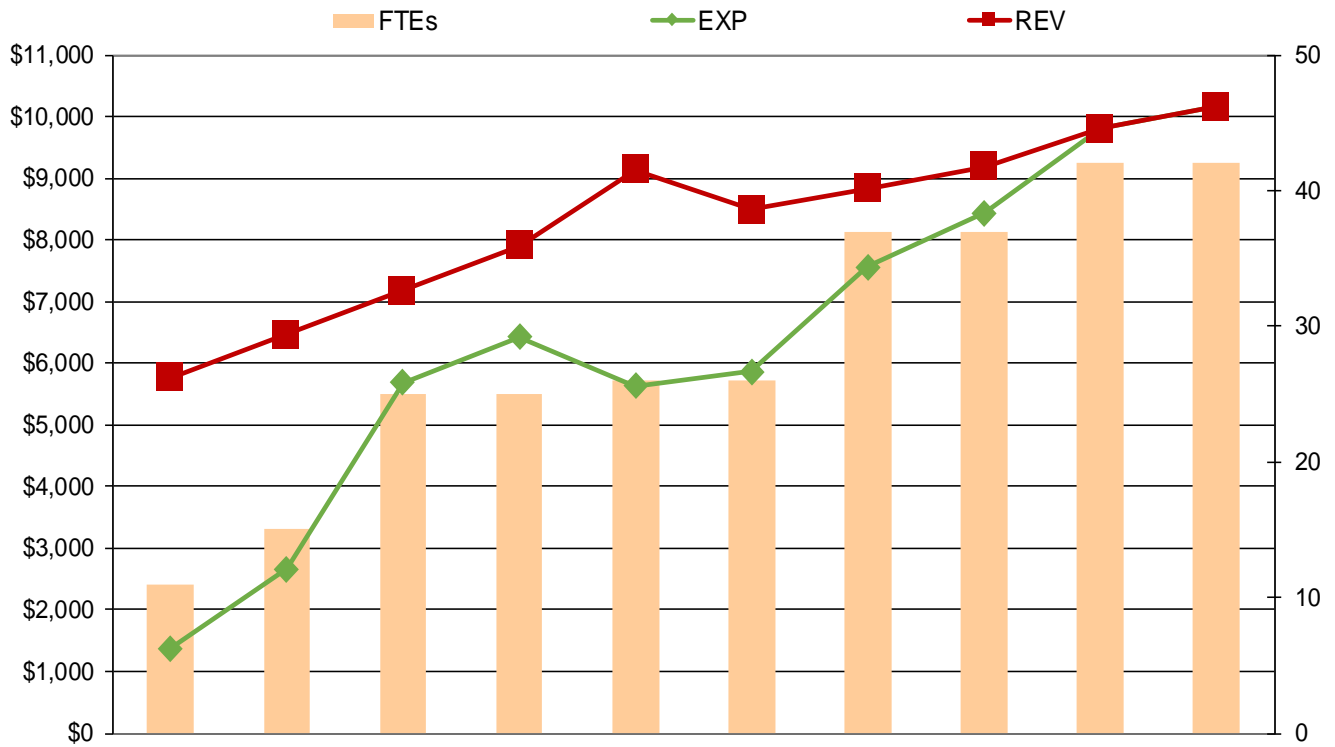
	FY 2016 ACTUAL	FY 2017 ADOPTED	FY 2017 RE-ESTIMATE	FY 2018 PROPOSED
ADJUSTED BALANCE, JULY 1				
Reserve	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000
Capital Reserve	19,849,762	18,817,018	20,604,730	15,044,966
TOTAL BALANCE	21,349,762	20,317,018	22,104,730	16,544,966
REVENUE				
Sanitary District Tax (\$0.013 real estate tax)	9,013,936	9,351,470	9,368,260	9,609,660
Grants	31,295	-	-	-
Fines & Fees	139,809	450,000	450,000	550,000
TOTAL REVENUE	9,185,040	9,801,470	9,818,260	10,159,660
TOTAL REVENUE & BALANCE	30,534,802	30,118,488	31,922,990	26,704,626
EXPENSES				
Operating and Maintenance	6,624,246	7,377,370	6,353,924	8,022,379
Capital Projects	1,805,826	2,400,000	9,000,000	2,137,281
Transfer to Other Funds	-	24,100	24,100	-
TOTAL EXPENSES	8,430,072	9,801,470	15,378,024	10,159,660
BALANCE, JUNE 30	22,104,730	20,317,018	16,544,966	16,544,966
Reserve	1,500,000	1,500,000	1,500,000	1,500,000
Capital Reserve	20,604,730	18,817,018	15,044,966	15,044,966
TOTAL BALANCE	\$22,104,730	\$20,317,018	\$16,544,966	\$16,544,966

Notes:

(1) The FY 2017 re-estimate is the current projection of expenses and revenues.

(2) The change in Fund Balance from FY 2016 to FY 2017 re-estimate is due to anticipated expenditures and/or encumbrances of funds for ongoing capital projects.

EXPENDITURE, REVENUE, AND FULL-TIME EQUIVALENT TRENDS



\$ in 000s	FY 2009 Actual	FY 2010 Actual	FY 2011 Actual	FY 2012 Actual	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2017 Adopted Budget	FY 2018 Proposed Budget
EXP	\$1,378	\$2,661	\$5,685	\$6,427	\$5,627	\$5,868	\$7,557	\$8,430	\$9,801	\$10,160
REV	\$5,764	\$6,458	\$7,173	\$7,896	\$9,136	\$8,492	\$8,833	\$9,185	\$9,801	\$10,160
FTEs	11.00	15.00	25.00	25.00	26.00	26.00	37.00	37.00	42.00	42.00

- The Stormwater Management Fund was established by the County Board in CY 2008 by adopting a Sanitary District Tax of \$0.01 per \$100 of assessed real property value. In CY 2010 the Sanitary District tax rate was increased to \$0.013 per \$100 of assessed real property value.

Fiscal Year	Description	FTEs
FY 2009	<ul style="list-style-type: none"> ▪ Stormwater Fund was established for the FY 2009 budget by increasing the real estate tax by \$0.01 in CY 2008, generating \$5,764,396 in FY 2009. Since the ad valorem tax applied to the June 2008 real estate payment, an additional \$2,881,938 in revenue was generated in FY 2008 for the Stormwater Management Fund. Any unspent balances in FY 2008 were carried over to FY 2009 in the form of fund balance. ▪ Seven new positions were added to the Stormwater Fund in FY 2009, in addition to the 4.0 FTE added in FY 2008 as part of a supplemental appropriation. ▪ Non-personnel expenditures increased to reflect increased operating expenses to support the seven new FTEs (\$1,253,606), and proposed capital expenses (\$3,674,000) increased in accordance with the County Board approved Stormwater Management Plan. 	7.0
FY 2010	<ul style="list-style-type: none"> ▪ Personnel budget includes the addition of 3.0 FTEs – a Planner, a Program Coordinator and a Construction Management Specialist. In addition, a Planner position (1.0 FTE) was transferred from the General Fund to the Stormwater Management Fund. ▪ Non-personnel operating decreases (\$414,883) due to the elimination of one-time costs that were included in the FY 2009 budget. 	4.0
FY 2011	<ul style="list-style-type: none"> ▪ The County Board adopted a \$0.003 tax increase (\$1,643,114) to the Stormwater Fund to cover the transfer of Stormwater costs in the General Fund to the Stormwater Fund. The increase in expenditures covers the General Fund related personnel and operating costs (10.0 FTEs, \$1,346,963) with the balance of expenditures being allocated to Stormwater Capital expenses and reserves (\$296,151). 	10.0
FY 2012	<ul style="list-style-type: none"> ▪ Non-personnel expenses increase to cover maintenance of stormwater quality retrofits (\$203,886). ▪ Funding for capital projects increases (\$335,837) in FY 2012 as a result of a projected increase in revenue due to higher real estate assessments. ▪ Revenue increases due to higher real estate assessments (\$541,764). 	
FY 2013	<ul style="list-style-type: none"> ▪ Added an Environmental Planner to address the increased stormwater site plan reviews and workload related to the County’s MS4 stormwater permit (1.0 FTE; \$107,537). ▪ Non-personnel expenses increase to cover maintenance for stream restoration projects (\$20,000), creation of a stream and storm sewer monitoring network (\$100,000), and an increase in the operating contingent (\$107,615). ▪ Funding for capital projects increases (\$45,556) as a result of a projected increase in revenue due to higher real estate assessments. ▪ Revenue increases due to higher real estate assessments (\$456,488). 	1.0

Fiscal Year	Description	FTEs
FY 2014	<ul style="list-style-type: none"> ▪ Non-personnel expenses increase based on higher contract costs anticipated with the new MS4 permit (\$89,726), an adjustment to the annual expense for the maintenance and replacement of County vehicles (\$6,019), funding the County’s share of the Northern Virginia Regional Commission’s work on Four Mile Run (\$60,156) which was previously funded by the General Fund, higher administrative overhead contributions to the General Fund based on prior years’ actual (\$100,000), and other changes itemized below. This is partially offset by a reduction in operating contingency (\$130,824). ▪ Funding for capital projects decrease (\$461,035) in FY 2014 as a result of higher operating expenses and transfer of projects previously supported in the General Fund. ▪ Revenues increase (\$2,000) due to a slight increase in the projected real estate assessments. ▪ Increase Inter-Department Charges for the reimbursement to the General Fund for a portion of the street sweeping program costs (\$240,000). ▪ Transfer of the contribution to Arlingtonians for a Clean Environment (ACE) from the General Fund (\$69,705). 	
FY 2015	<ul style="list-style-type: none"> ▪ Added personnel for stormwater management regulations. The 11 positions are a critical foundational step for stormwater program delivery and compliance. ▪ Non-personnel increases primarily due to an increase in inter-departmental charges for overhead (\$60,364), operating expenses related to the new FTEs (\$67,643), and reimbursement of a portion of the street sweeping program costs (\$50,896), which is partially offset by an adjustment to the annual expense for maintenance and replacement of County vehicles (\$64,059). ▪ Funding for capital projects decrease (\$1,022,970) in FY 2015 as a result of adding 11.0 FTEs and other personnel expense increases. ▪ Revenues increase due to a projected increase in real estate assessment values (\$569,200). 	11.0
FY 2016	<ul style="list-style-type: none"> ▪ Non-personnel increases primarily due to an increase in inter-departmental charges for overhead (\$20,714) and an adjustment to the annual expense for maintenance and replacement of County vehicles (\$89,070). ▪ Revenues increase due to a projected increase in real estate assessment values (\$450,750) and fees from site plan review (\$250,000). 	
FY 2017	<ul style="list-style-type: none"> ▪ Added personnel for stormwater management regulations. The five positions (\$628,983) are a critical foundational step for stormwater program delivery and compliance. ▪ Non-personnel increases due to the transfer of the responsibility of new tree planting from DRP to the Stormwater Management Fund (\$205,000). ▪ Revenues increase due to a projected increase in real estate assessment values (\$329,520) and fees from sediment/erosion control plan review (\$200,000). 	5.0