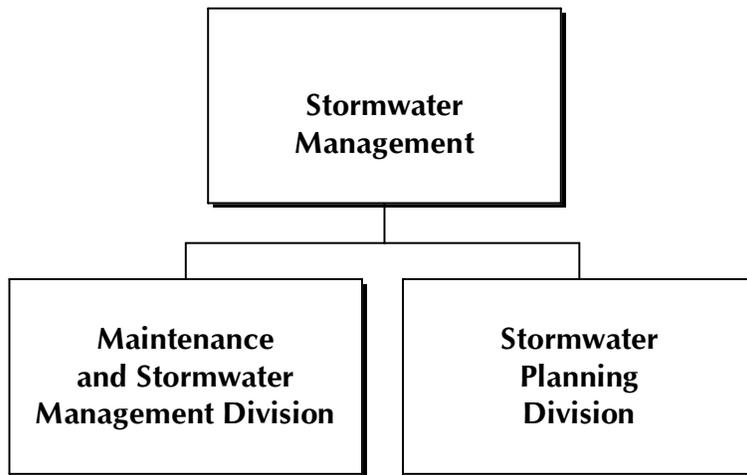


Stormwater Management



Mission

To develop and maintain a comprehensive watershed and infrastructure management program to protect property, health and safety; to enhance the quality of life; to preserve and improve the environment for the benefit of the public. To plan, design, construct, operate, maintain and inspect the infrastructure, and perform environmental assessments through coordinated stormwater and maintenance programs in compliance with all government regulations utilizing innovative techniques, customer feedback and program review; and to be responsive and sensitive to the needs of the residents, customers and public partners.

Focus

The Stormwater Management (SWM) business area consists of the Maintenance and Stormwater Management Division and the Stormwater Planning Division. The two divisions develop, promote and implement strategies that protect the County's stormwater infrastructure and preserve and improve the natural ecosystem. In addition, the agency has an intricate supporting role in emergency response to flooding and other designated emergencies, as well as supporting functions in ongoing transportation and commercial revitalization initiatives. Planning, designing and maintenance efforts are provided through a combination of in-house County staff and contracted services.

Proper management of stormwater is essential to protect public safety; preserve property values; ensure environmental sustainability; and support environmental mandates, such as those aimed at protecting the Chesapeake Bay and the water quality of other local waterways. The construction of flood walls and berms, stabilization and restoration of streams, rehabilitation of dams, implementation of new Low Impact Development techniques and regional detention ponds are some of the techniques used to manage stormwater. The County's stormwater system, which includes 1,400 miles of storm drainage conveyance systems, 45,000 stormwater drainage structures, 1,146 publicly maintained stormwater management ponds and 2,297 privately maintained stormwater management ponds, is strained by an aging infrastructure and rapid urbanization that has occurred over the last twenty years. This, in combination with higher water quality standards that must now be addressed by local governments, necessitates a more significant, multiyear investment in terms of funding and staff resources. In response to this challenge, as part of the FY 2006 Adopted Budget Plan the Board of Supervisors designated \$17.9 million in General Fund monies, or the approximate value of one penny from the County's Real Estate tax, to Fund 318, Stormwater Management Program. In FY 2007 the estimated value of one penny from the County's Real Estate tax, \$21.9 million, will

THINKING STRATEGICALLY

Strategic issues for the Department include:

- Prioritizing maintenance requirements to identify and address the most critical needs;
- Improving communication with all customers in the County; and
- Developing, implementing, and maintaining a comprehensive watershed management program to protect property and ensure environmental quality.

Stormwater Management

again be dedicated to the Stormwater Management Program. In FY 2007, staff will continue to assess the County's system, identify and prioritize projects, and accelerate work on projects already identified by the agency. As Watershed Management Plans are completed throughout the County, the list of stormwater control projects is updated. Implementation strategies and goals are developed on a watershed basis. As projects are implemented, revised funding requirements and strategies will be developed for the entire program.

Recognizing the growth in the Stormwater Management Program, and the projected growth in the number of construction projects generated from the completion of watershed management plans, an additional 3/3.0 SYE positions have been included in the FY 2007 operating budget for the Department of Public Works and Environmental Services (DPWES). One of these positions, an Engineer III, has been included in the Department of Stormwater Management's operating budget in FY 2007. This position will support the Watershed Projects Implementation Branch as a project manager for construction projects generated from the completion of watershed management plans. This position will serve as a project manager for the other two positions, an Engineer II, and a Right of Way Agent, added to the Department of Public Works and Environmental Services in the Construction Management Division and Land Acquisition Division in order to facilitate construction of the implementation projects.

Maintenance and Stormwater Management Division

The Maintenance and Stormwater Management Division (MSMD) provides maintenance and rehabilitation services on existing stormwater infrastructure such as, stormwater pipes, catch basins, drainage channels, stormwater management facilities and dams. Stormwater maintenance services are provided in an effort to manage the conveyance of stormwater runoff, mitigate flooding and improve water quality entering water bodies as required by local ordinances and codes, as well as state and federal laws. MSMD provides inspection and oversight of privately maintained stormwater management facilities as required by the state and federal water quality permits.

In FY 2007 MSMD staff will digitally video tape approximately five percent of the storm drainage system, and physically inspect 20 percent. MSMD will also design and construct 50 storm drainage rehabilitation projects and complete the remaining half of the storm sewer GIS easement layer. In addition, the stormwater assessment program will focus primarily on data collection, and field verification of approximately 1,500 undocumented facility locations, as well as the contracted inspection of approximately 423 privately maintained facilities with private maintenance agreements, and approximately 304 (a quarter of the inventory) publicly maintained facilities. The assessment program will aid in the identification and prioritization of facility retrofit and rehabilitation projects, the documentation of stormwater easements and maintenance agreement data for privately maintained facilities.

Additionally, MSMD maintains transportation facilities such as, commuter rail stations, park-and-ride lots, bus transit stations, and roadway segments that have not been accepted into the Virginia Department of Transportation (VDOT). Other transportation operations maintenance services include: maintaining public street name signs, repairing trails and sidewalks, which are upgraded to meet American with Disabilities Act code requirements when necessary, and landscaping services along transportation routes in commercial revitalization districts.

In FY 2006 maintenance services for County bus shelters was enhanced. This effort will continue in FY 2007 with Fairfax County owned and operated bus shelters receiving more frequent trash removal, cleaning and maintenance services to provide cleaner and safer conditions for riders at these shelters. Bus shelters not built by Fairfax County, but within Fairfax County boundaries (i.e. shelters owned by Washington Metropolitan Transit Authority (WMATA), Virginia Department of Transportation (VDOT) and others), will receive a limited maintenance service level in an effort to improve the overall network of bus shelters throughout the County.

MSMD provides support during emergency response operations. The Division is responsible for snow removal from all County owned and maintained facilities including fire stations, police stations, mass transit facilities, government centers, libraries, health centers, and recreation centers. The Division also provides equipment, labor and technical support to the Fire and Rescue Department, Police Department, Health Department and other agencies in response to emergency conditions (e.g. hazardous material spills, demolition of unsafe structures, removal of hazardous trees, etc.).

Stormwater Management

Stormwater Planning Division

The Stormwater Planning Division (SPD) provides stormwater planning, monitoring, capital project design and floodplain management. This division administers the federally mandated National Pollutant Discharge Elimination System (NPDES) program, or the Municipal Separate Storm Sewer System (MS4) permit, and coordinates the work from various agencies in support of meeting the requirements of the permit. This division also coordinates state mandated dam safety operation and maintenance certificates, emergency action plans related to flooding, watershed management efforts, public education and awareness initiatives, stream monitoring and assessments and implementation of the County's master drainage plan.

SPD provides the design and general oversight of capital projects to correct drainage deficiencies, mitigate existing flooding conditions, rehabilitate failing storm drainage systems, retrofit older stormwater management facilities and stabilize eroding stream banks through innovative bioremediation methods.

SPD is responsible for the development and oversight of Fairfax County's Comprehensive Stormwater Management Program. The Division remains current with a multitude of state and federal regulatory stormwater management requirements. As part of the MS4 permit, the division is in the phased process of watershed planning efforts in the 30 watersheds located in the County. The watershed planning effort was reevaluated and enhanced with the additional dedication of funding in FY 2006. The 30 watersheds are currently grouped into 15 watershed planning projects. The Little Hunting Creek Watershed Management Plan was completed in FY 2005. The Popes Head Creek Watershed Management Plan was completed in FY 2006 and by the end of FY 2006 nine more should be completed including Cameron Run, Cub Run/Bull Run, Difficult Run, Pimmit Run, Bull Neck Run, Scotts Run, Dead Run, and Turkey Run. As Watershed Management Plans are completed throughout the County, the list of stormwater management projects is updated. Implementation strategies and goals are developed on a watershed basis. As projects are implemented, revised funding requirements and strategies will be developed for the entire program. In FY 2007, the implementation of watershed plan projects will be accelerated. This effort will assist in removing pollutants entering waterways through stormwater discharges in the County.

A component of the MS4 permit is to inspect and ensure effective maintenance of public and private stormwater facilities. As part of the MS4 permit, the division also conducts bioassessment and bacteria monitoring to identify and correct non-stormwater discharges (illegal discharge and improper dumping) to the state waters. The division performs physical stream assessments of over 800 miles of streams in support of watershed planning efforts, and maintains the hydrological layer of the stream network which was recently enhanced through the perennial stream identification project.

The Division participates in several regional partnering efforts such as the Chesapeake Bay Preservation Area Designation and Management, and the 2000 Chesapeake Bay Agreement in support of removing the bay from U.S. EPA's impaired waters list by the year 2010. These efforts are employed to manage and reduce the nutrient and sediment loads to the Chesapeake Bay. The division oversees regulatory Clean Water Act requirements as they pertain to Total Maximum Daily Loads (TMDLs). This is an effort to define, monitor and control the number of pollutants in streams that violate state water standards.

SPD oversees and implements the County's Dam Safety program. State and federal regulations are designed to provide inspections and engineering certification of dams to insure public safety. The division is also responsible for coordination and providing assistance for floodplain management regulations pertaining to floodplain residential building requirements and national flood insurance standards. Currently there are an estimated 21 water impounding facilities in the County requiring state certification. Approximately 15 to 17 of these facilities require some measure of improvement to meet the current safety standards. With increased funding for stormwater initiatives in FY 2007, SPD will work towards bringing all state-regulated dams into compliance with state dam safety regulations.

Stormwater Management

To complete the regulatory and maintenance requirements of the agency, both divisions utilize the use of in-house County work forces and contracted services. In an effort to remain a leader in the stormwater management industry, the agency focuses on the increasing stormwater management requirements of an aging stormwater system inventory and the increased environmental performance requirements. As the County moves toward a full urban development, the aged stormwater systems are approaching expected life spans. The challenge of the agency is to maintain existing systems, while enhancing and retrofitting the degraded systems to meet stormwater management regulations and support the Board of Supervisor's Environmental Plan. The agency continually provides public outreach for opportunities to inform the public of water quality matters and environmental effects of stormwater runoff.

As mentioned above, increased funding for Stormwater management has provided a significant opportunity for the County to improve deficient and defective drainage systems and stormwater controls. Stormwater Management will place an increased emphasis on project implementation in FY 2007. It is anticipated that between 100 and 150 water quality projects will begin construction in FY 2007.

New Initiatives and Recent Accomplishments in Support of the Fairfax County Vision

 Maintaining Safe and Caring Communities	Recent Success	FY 2007 Initiative
Completed the Watershed Plans for Little Hunting Creek and Popes Head Creek. The plans identify approximately 300 water quality, storm drainage and flood control projects within each watershed. The Little Hunting Creek Watershed Management Plan was completed in FY 2005. The Popes Head Creek Watershed Management Plan was completed in FY 2006 and by the end of FY 2006 nine more should be completed including Cameron Run, Cub Run/Bull Run, Difficult Run, Pimmit Run, Bull Neck Run, Scotts Run, Dead Run, and Turkey Run. As Watershed Management Plans are completed throughout the County, the list of stormwater control projects is updated.	☑	☑
Initiated a program to provide maintenance to bus shelters owned and operated by WMATA, VDOT and others. These shelters now have weekly trash removal, and bus shelters are inspected, washed and repaired monthly. In addition, the maintenance service levels were increased for all County bus shelters. These shelters now have trash removal 3 times per week. This is an effort to provide cleaner facilities for mass transit patrons, and cleaner neighborhoods where bus shelters are located.	☑	☑
In FY 2005 the Maintenance and Stormwater Management Division responded to 1,800 citizen requests for maintenance. All of these requests were addressed and completed in FY 2005. These requests generated a total of 459 in-house maintenance work orders.	☑	

Stormwater Management

 Practicing Environmental Stewardship	Recent Success	FY 2007 Initiative
<p>The Stormwater Business Area completed 40 capital improvement projects in FY 2005 with an estimated total cost of approximately \$4 million. These projects were planned, designed and constructed by the Stormwater Management and ranged from storm drainage replacements, emergency house flood proofing, regional pond projects, dam repairs/retrofits, walkway/trail replacements and upgrades, to river dredging and parking lot sweeping.</p>	<input checked="" type="checkbox"/>	
<p>Started a watershed communication initiative that resulted in a regional media campaign for pollution prevention. Public Service Announcements ran on several area radio stations over several months. The County contributed over half of the funding for this effort, which was supplemented by several neighboring jurisdictions. This effort fulfilled requirements associated with the MS4 permit to conduct public outreach and education, and satisfied a requirement of the Four Mile Run TMDL implementation plan.</p>	<input checked="" type="checkbox"/>	
<p>Completed the digitized Geographic Information System (GIS) storm sewer mapping layer. The effort provides immediate access to inventory information and location of the storm drainage pip and channel network. Work will continue on the GIS layers for walkways and trails.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Cleaned up approximately 25 hazardous dump sites in Little Hunting Creek as part of the Board of Supervisor's Environmental Agenda.</p>	<input checked="" type="checkbox"/>	
<p>The agency, in partnership with other Fairfax County staff, the federal Department of Conservation and Recreation, and private companies, completed the design and implementation of an innovative storm water bio retention project (Rain Garden) at the Providence District Supervisors Office. This project gained local and national recognition.</p>	<input checked="" type="checkbox"/>	
 Exercising Corporate Stewardship	Recent Success	FY 2007 Initiative
<p>Completed the Watershed Community Needs Assessment and Funding Options study. The study addressed strategies to develop a funding plan for Stormwater management programs that reflects changing service levels, increased infrastructure inventory and unfunded mandates. The study was the first step toward positioning the County to meet strategic stormwater management needs.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Stormwater Management

Budget and Staff Resources

Agency Summary					
Category	FY 2005 Actual	FY 2006 Adopted Budget Plan	FY 2006 Revised Budget Plan	FY 2007 Advertised Budget Plan	FY 2007 Adopted Budget Plan
Authorized Positions/Staff Years					
Regular	125/ 125	128/ 128	130/ 130	131/ 131	131/ 131
Expenditures:					
Personnel Services	\$5,892,919	\$6,834,546	\$6,755,897	\$7,546,430	\$7,546,430
Operating Expenses	2,360,477	3,212,831	4,397,565	3,400,065	3,400,065
Capital Equipment	379,131	255,300	323,624	405,000	405,000
Subtotal	\$8,632,527	\$10,302,677	\$11,477,086	\$11,351,495	\$11,351,495
Less:					
Recovered Costs	(\$736,669)	(\$797,749)	(\$1,119,100)	(\$829,522)	(\$829,522)
Total Expenditures	\$7,895,858	\$9,504,928	\$10,357,986	\$10,521,973	\$10,521,973
Income:					
Street Sign Fabrication Fees	\$1,260	\$3,000	\$1,260	\$1,260	\$1,260
Miscellaneous Revenue	7,197	16,000	16,000	16,000	16,000
Total Income	\$8,457	\$19,000	\$17,260	\$17,260	\$17,260
Net Cost to the County	\$7,887,401	\$9,485,928	\$10,340,726	\$10,504,713	\$10,504,713

FY 2007 Funding Adjustments

The following funding adjustments from the FY 2006 Revised Budget Plan are necessary to support the FY 2007 program:

- ◆ **Employee Compensation** **\$319,563**
 An increase of \$319,563 associated with salary adjustments necessary to support the County's compensation program.
- ◆ **New Positions** **\$70,970**
 An increase of \$70,970 in Personnel Services is associated with 1/1.0 SYE Engineer III to support the Watershed Projects Implementation Branch. The watershed planning process is anticipated to initiate an average of 300 water quality, storm drainage and flood control projects in each of the 30 watersheds. This position will be a project manager for a portion of these projects. In order to facilitate construction of the projects, an Engineer II, and a Right of Way Agent have also been added to the Department of Public Works and Environmental Services in the Construction Management Division and Land Acquisition Division. These positions will specifically support construction projects under the direction of the Engineer III. In addition, it should be noted that the FY 2007 net cost to fund the addition of these positions is \$89,772. The net cost includes \$18,802 in fringe benefits funding, which is included in Agency 89, Employee Benefits. For further information on fringe benefits, please refer to the Agency 89, Employee Benefits, narrative in the Nondepartmental program area section of Volume 1.

Stormwater Management

- ◆ **Various Operating Expenses** **(\$644,108)**
A net decrease of \$644,108 in Operating Expenses includes a decrease of \$853,058 associated with encumbered, one-time expenses carried over in to FY 2006, offset by an increase of \$208,950. This increase is primarily attributed to an increase in contracted maintenance services due to inventory increases. Specifically, an additional 37 bus shelters will be added to the Fairfax County Bus Shelter Program resulting in increased costs of \$84,542, and an increase of \$14,700 is required for the inspection and maintenance of 31 new water retention ponds which are primarily developer donated. An additional increase of \$41,384 is necessary for contract escalation increases associated with two maintenance service contracts, the Commuter Rail and Park-and-Ride facilities, and the bus shelter and grounds maintenance at the New Alexandria Pump Station. Both contracts are scheduled to expire and will be renegotiated.

- ◆ **Intergovernmental Charges** **\$46,608**
An increase of \$46,608 is due to intergovernmental charges. Of this total, an increase of \$6,048 for Information Technology charges is based on the agency's historic usage, and an increase of \$40,560 is for the Department of Vehicle Services charges based on anticipated charges for fuel, vehicle replacement, and maintenance costs.

- ◆ **Recovered Costs** **\$289,578**
A decrease of \$289,578 in Recovered Costs based on projected salary and operating requirements.

- ◆ **Replacement of Equipment** **\$405,000**
Funding of \$405,000 is included for Capital Equipment requirements associated with replacement equipment that has outlived its useful life and is not cost effective to repair. The equipment includes \$170,000 for a road grader, \$90,000 for a rubber tire loader/backhoe, \$40,500 for a trailer mounted flusher, \$27,000 for a small tractor rubber tire loader/backhoe, \$9,600 for a 'Gator' utility vehicle, \$25,000 for a bobcat skid loader, \$18,900 for two chemical spreaders, \$15,000 for a portable water tank/pump, and \$9,000 for a walk-behind asphalt roller.

Board of Supervisors' Adjustments

The following funding adjustments reflect all changes to the FY 2007 Advertised Budget Plan, as approved by the Board of Supervisors on May 1, 2006:

- ◆ The Board of Supervisors made no adjustments to this agency.

Stormwater Management

Changes to FY 2006 Adopted Budget Plan

The following funding adjustments reflect all approved changes in the FY 2006 Revised Budget Plan since passage of the FY 2006 Adopted Budget Plan. Included are all adjustments made as part of the FY 2005 Carryover Review and all other approved changes through December 31, 2005:

- ◆ **Carryover Adjustments** **\$853,058**
As part of the FY 2005 Carryover Review, the Board of Supervisors approved encumbered carryover of \$853,058 for one-time Operating Expenses.

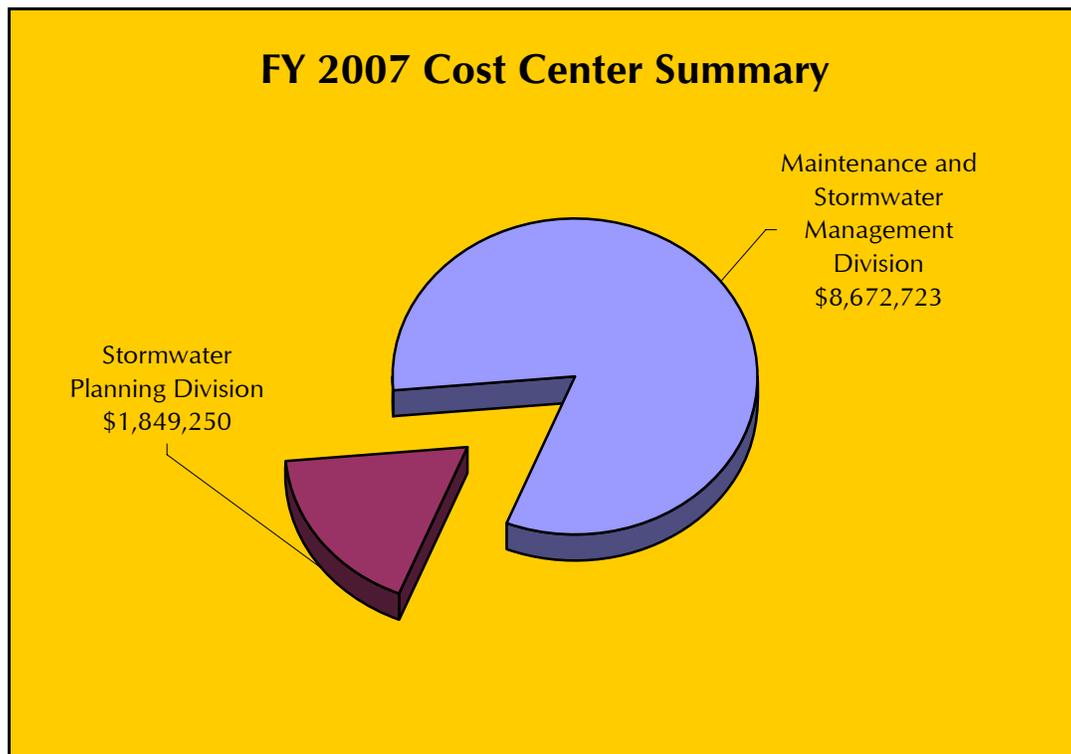
- ◆ **Other Personnel-Related Actions** **\$0**
In FY 2006, the County Executive approved the redirection of 2/2.0 SYE positions from Fund 401, Sewer Operation and Maintenance to establish 1/1.0 SYE Engineer III position in Capital Facilities Construction Management Division to oversee the contracting of construction services for the stormwater projects, and to establish 1/1.0 SYE Public Information Officer position in Stormwater Planning to assist with the necessary public outreach activities required to implement the watershed management plans. The County Executive also approved the redirection of 1/1.0 SYE position from Land Development Services to establish a Deputy Assistant Director of Public Works and Environmental Services, accounted for within the Maintenance and Stormwater Division.

The following funding adjustments reflect all approved changes to the FY 2006 Revised Budget Plan from January 1, 2006 through April 24, 2006. Included are all adjustments made as part of the FY 2006 Third Quarter Review:

- ◆ The Board of Supervisors made no adjustments to this agency.

Cost Centers

Stormwater Management consists of two cost centers, Maintenance and Stormwater Management and Stormwater Planning.



Stormwater Management

Maintenance and Stormwater Management Division

Funding Summary					
Category	FY 2005 Actual	FY 2006 Adopted Budget Plan	FY 2006 Revised Budget Plan	FY 2007 Advertised Budget Plan	FY 2007 Adopted Budget Plan
Authorized Positions/Staff Years					
Regular	99/ 99	99/ 99	101/ 101	101/ 101	101/ 101
Total Expenditure	\$6,741,564	\$8,127,241	\$9,149,686	\$8,672,723	\$8,672,723

Position Summary		
<p><u>MAINTENANCE AND STORMWATER MANAGEMENT DIVISION</u></p> <p><u>Administration</u></p> <p>1 Assistant Director</p> <p>1 Director</p> <p>1 Engineer IV</p> <p>1 Safety Analyst</p> <p>1 Management Analyst II</p> <p>1 Public Information Officer II</p> <p>1 Network/Telecom Analyst I</p> <p>1 Administrative Assistant IV</p> <p>4 Administrative Assistants II</p> <p><u>Contracting Services</u></p> <p>1 Management Analyst III</p> <p>1 Engineering Technician III</p> <p>1 Engineering Technician II</p>	<p><u>MAINTENANCE AND SERVICES</u></p> <p><u>Field Operations</u></p> <p>1 Facilities Support Supervisor</p> <p>4 Senior Maintenance Supervisors</p> <p>2 Maintenance Supervisors</p> <p>9 Maintenance Crew Leaders</p> <p>17 Senior Maintenance Workers</p> <p>6 Maintenance Workers</p> <p>8 Heavy Equipment Operators</p> <p>9 Motor Equipment Operators</p> <p>4 Masons</p> <p><u>Maintenance Inspections</u></p> <p>1 Engineer II</p> <p>1 Senior Maintenance Supervisor</p> <p>3 Engineering Technicians III</p> <p>3 Engineering Technicians I</p>	<p><u>Engineering/Technical Support</u></p> <p>2 Engineers III</p> <p>2 Engineers II</p> <p>2 Engineering Technicians III</p> <p>1 Engineering Technician II</p> <p>1 GIS Analyst I</p> <p>1 GIS Technician</p> <p><u>Equipment/Specialty Trades</u></p> <p>1 Vehicle Maintenance Coordinator</p> <p>1 Heavy Equipment Operator</p> <p>1 Carpenter I</p> <p>1 Equipment Repairer</p> <p>1 Welder II</p> <p><u>SIGN SERVICES AND MATERIAL SUPPORT</u></p> <p>1 Warehouse Supervisor</p> <p>1 Warehouse Specialist</p> <p>1 Engineering Aide</p> <p>1 Motor Equipment Operator</p>
<p><u>TOTAL POSITIONS</u></p> <p>101 Positions / 101.0 Staff Years</p>		

Key Performance Measures

Goal

To maintain the County's storm drainage systems, stormwater management facilities, walkways/trails, commuter rail and park-and-ride facilities, and public street name signs, in addition to provide snow removal for essential County facilities, responding to health and safety directives, and providing support for other public safety emergencies as requested.

Objectives

- ◆ To ensure zero violations in order to maintain compliance with the terms of the federally mandated Municipal Separate Storm Sewer System (MS-4) Permit, as part of the comprehensive Stormwater Management Program.
- ◆ To ensure that 100 percent of Emergency Action plans are updated and operational to minimize impact to Fairfax County citizens, as well as protect property from weather events and other emergency situations.
- ◆ To ensure that 100 percent of the Commuter Rail, Park-and-Ride and Bus Transit facilities maintained by the County are functional 365 days per year in support of Fairfax County alternative transportation initiatives in order to reduce air pollution.

Stormwater Management

Indicator	Prior Year Actuals			Current Estimate	Future Estimate
	FY 2003 Actual	FY 2004 Actual	FY 2005 Estimate/Actual	FY 2006	FY 2007
Output:					
Annual private stormwater management facility inventory (1)	NA	NA	460 / 463	2,238	2,297
Public stormwater management facilities inspected and maintained annually	NA	NA	1,163 / 1,146	1,184	1,215
Emergency Action plans updated	NA	NA	14 / 13	10	14
Average weekly private vehicle trips	NA	NA	23,355 / 23,525	23,525	23,955
Average weekly commuter bus trips	NA	NA	7,882 / 6,085	6,440	6,795
Average weekly train trips	NA	NA	280 / 285	285	285
Efficiency:					
Annual cost per private stormwater management facility (1)	NA	NA	\$322 / \$272	\$68	\$68
Cost of inspection and maintenance per public stormwater management facility	NA	NA	\$880 / \$1,025	\$1,027	\$1,005
Cost of Emergency Response program per 100,000 population	NA	NA	\$99,175 / \$66,120	\$78,653	\$89,967
Cost per transit trip	NA	NA	\$0.35 / \$0.28	\$0.44	\$0.49
Service Quality:					
Percent of private facilities inspected within the fiscal year	NA	NA	20% / 20%	20%	20%
Percent of public facilities inspected and maintained within the fiscal year	NA	NA	100% / 100%	100%	100%
Dollar loss per 100,000 population for claims paid as a result of an inappropriate response to an emergency event	NA	NA	\$2,397 / \$4,308	\$3,253	\$3,243
Annual commuter facilities complaints received	NA	NA	30 / 41	50	55
Outcome:					
MS-4 permit violations received	NA	NA	0 / 0	0	0
Percent of Emergency Action Plans current	NA	NA	100% / 93%	100%	100%
Percent of commuter facilities available 365 days per year	NA	NA	100% / 100%	100%	100%

(1) The efficiency indicator for cost of inspected "private" stormwater management facilities has been changed to the cost of all "private" stormwater facilities. The change will allow the annual program cost to be applied to the entire inventory of facilities, and provide the facility cost to include, inspections, research and enforcement services. The original indicator applied the annual program cost to only the 20% of facilities that are inspected annually, and did not accurately reflect the cost of research and enforcement services.

Stormwater Management

Stormwater Planning Division

Funding Summary					
Category	FY 2005 Actual	FY 2006 Adopted Budget Plan	FY 2006 Revised Budget Plan	FY 2007 Advertised Budget Plan	FY 2007 Adopted Budget Plan
Authorized Positions/Staff Years					
Regular	26/ 26	29/ 29	29/ 29	30/ 30	30/ 30
Total Expenditure	\$1,154,294	\$1,377,687	\$1,208,300	\$1,849,250	\$1,849,250

Position Summary					
1 Director	8 Engineers II	1 Ecologist III			
3 Engineers IV	1 Landscape Architect III	7 Ecologists II			
7 Engineers III (1)	1 Engineering Technician I	1 Administrative Assistant III			
TOTAL POSITIONS					
30 Positions / 30.0 Staff Years			() Denotes New Positions		

Key Performance Measures

Goal

To develop and implement the planning and design of stormwater systems to promote, preserve and improve the natural ecosystems in order to enhance the quality of life within the community.

Objectives

- ◆ To incrementally initiate and complete development of Fairfax County's 30 watershed management plans in order to meet Fairfax County's commitment of the Chesapeake Bay 2000 Agreement, and contribute to the removal of the Bay from the "Impaired Water" list by the year 2010.

Indicator	Prior Year Actuals			Current Estimate	Future Estimate
	FY 2003 Actual	FY 2004 Actual	FY 2005 Estimate/Actual	FY 2006	FY 2007
Output:					
Watershed Plans completed	NA	NA	2 / 1	10	2
Efficiency:					
Average cost per square mile to develop watershed plans	NA	NA	\$51,240 / \$67,800	\$38,600	\$37,600
Service Quality:					
Annual percent of watershed plans completed based on drainage area (1)	NA	NA	13.0% / 2.8%	49.0%	54.5%
Outcome:					
Annual percent of watershed plans completed	NA	NA	100.0% / 50.0%	100.0%	100.0%

(1) The service quality indicator for watershed master planning has been changed to show the cumulative percentage of square miles of watershed completed, toward the completion of entire Fairfax County drainage area. The prior indicator was reporting a cumulative percent of watershed plans completed toward the goal of completing 30 required watershed master plans. The new indicator will provide a greater understanding of how many square miles of drainage area watershed planning have been completed.

Stormwater Management

Performance Measurement Results

The Stormwater Management Business Area completed its strategic plan to identify and address the long term needs and requirements of the business. Parallel with the effort, the FY 2005 performance measures were enhanced to reflect the core functions of the Business Area and aligned with the strategic plan as they relate to Fairfax County's Vision elements. In FY 2005, new performance measures were adopted to measure and track critical program requirements of the business area. The first year of tracking the new performance measurements ended with mixed results.

The objective to ensure 100 percent of the Emergency Action Plans (EAP) are updated and operational to minimize impact to Fairfax County citizens, as well as protect property from weather events and other emergency situations, was not met. Stormwater Management estimated 14 emergency action plans would be updated in FY 2005. However, only 13 plans were updated because one stormwater management facility the division believed required an Emergency Action Plan, did not, and was removed from the program. As a result, 93 percent of the EAPs were updated. The cost of the Emergency Response program, an amount of \$66,120, was less than the estimated cost of \$99,175. However, claims paid as a result of an inappropriate response to an emergency event were greater than anticipated. The dollar loss per 100,000 population was \$1,911 greater than the FY 2005 estimate.

The results for the objective, 'To ensure that 100 percent of the Commuter Rail, Park-and-Ride and Bus Transit facilities maintained by the County are functional 365 days per year in support of Fairfax County alternative transportation initiatives in order to reduce air pollution' were much more favorable. More patrons used the mass transit facilities than were estimated to do so in FY 2005. The estimated \$.35 maintenance cost per transit trip, was actually \$.28 per transit trip, allowing the Business Area to comfortably meet this goal. Additionally, all facilities were open and operating for 365 days. The only performance indicator that did not meet the FY 2005 estimate was the number of annual commuter facilities complaints received with a total of 41 complaints being received, which was 11 more complaints than estimated.

The objective to ensure zero violations of the Municipal Separate Storm Sewer System (MS-4) Permit was met. Fairfax County did not receive any violations for the inspection programs, and met the intent of the MS4 permit pertaining to the inspection and maintenance of private and public stormwater management facilities. The Business Area was also able to meet the goals of the annual inspection cycles for both private and publicly maintained stormwater management facilities. However, the number of inspections of public stormwater management facilities did not meet the FY 2005 estimate. This was because the public facility inventory (facilities released from developer bonds) did not increase as anticipated in FY 2005. The estimated cost to inspect and maintain a public facility was higher than expected primarily due to higher than anticipated maintenance costs, and the projected cost of the private inspection per facility cost, was lower than anticipated. It should be noted that beginning in FY 2006 the output measure for the number of private stormwater facilities in the inventory will accurately represent the total number of facilities, and not just the portion of facilities that are required to be inspected. This change is necessary because the efficiency indicator for the cost of inspecting private facilities has been changed to the cost of all private stormwater facilities. The change will allow the annual program cost to be applied to the entire inventory of facilities, and include overall program costs previously not captured such as research and enforcement services. The original indicator applied the annual program cost to only the 20 percent of facilities that are inspected annually, and did not accurately reflect the cost of research and enforcement services.

Stormwater Management

One of the key components of the Stormwater Management Program is to develop watershed plans for the entire drainage area within Fairfax County. An important part of this is the commitment made to improve the quality of water entering the Chesapeake Bay by the year 2010. When the performance measures were adopted in FY 2005, the schedule for development of watershed plans was set up to meet the 2010 commitment. The Business Area assumed that the first year of the planning process would progress at a slower pace to work out all of the details needed in the planning effort. The FY 2005 goal was set to develop 2 watershed plans. However, only 1, Little Hunting Creek, was completed in FY 2005. Based on the increased funding adopted in the FY 2006 budget, and the large investment needed in the watershed planning effort, it was determined the responsible course of action would be to have an outside evaluation to validate the process and planning effort at an earlier point in the watershed planning process. This new approach resulted in an approximate 8 to 9 month delay in the planning process. As a result only one watershed plan was completed in FY 2005. However the new approach will expedite planning in the future. The Popes Head Creek Watershed Management Plan was completed in FY 2006, and by the end of FY 2006 nine more should be completed including Cameron Run, Cub Run/Bull Run, Difficult Run, Pimmit Run, Bull Neck Run, Scotts Run, Dead Run, and Turkey Run. Stormwater Management also estimates 2 plans will be completed in FY 2007, and the remaining plans will be completed in FY 2008 and FY 2009, allowing the goal of having all the plans finished by 2010 to be met.

In FY 2005 the average cost per square mile to develop a watershed management plan was \$67,800. This cost is anticipated to drop significantly in FY 2006 and future years for several reasons. The watershed management plan completed in FY 2005, Little Hunting Creek, was for a relatively small area (11 square miles) in contrast to other watershed plans that are currently in progress, or will begin in subsequent years. These plans will cover a range from 19 square miles for the Popes Head Creek watershed management plan, to 63 square miles for the Cub Run/Bull Run watershed management plan. In addition, the Stormwater Planning division expects to increase efficiency as staff gains experience in this process moving forward.