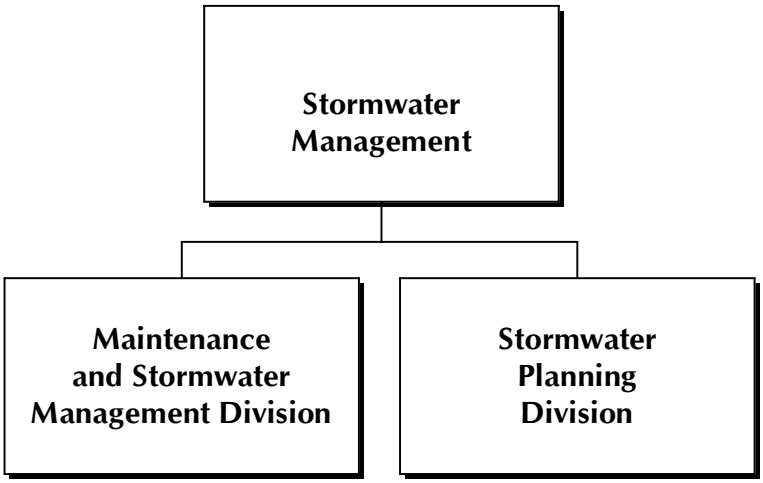
Stormwater Management



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

Stormwater Management (SWM) 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 1,800 miles of storm drainage conveyance systems, 45,000 stormwater drainage structures, 1,104 publicly maintained stormwater management ponds and 2,261 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, in FY 2006 the Board of Supervisors designated the approximate value of one penny from the County's Real Estate tax, to Fund 318, Stormwater Management Program. In FY 2008 the estimated value of one penny from the County's Real Estate tax, $22.7 million, will again be dedicated to the Stormwater Management Program. Program

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.

objectives in FY 2008 will continue to assess and make needed repairs and enhancements to the County's storm drainage and stormwater management systems. The program objectives for FY 2008 include identification and prioritization of stormwater projects, and provides for accelerated implementation on projects that have already been identified by Stormwater Management. As watershed management plans are completed throughout the County, the list of stormwater control projects is updated. Project implementation strategies and goals are developed on a watershed basis. As projects are identified, revised project implementation funding requirements and implementation strategies are adjusted in the overall stormwater program goals.

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, continued staffing and resource management needs require innovative project management between County staff and contracted services. The internal and external partnerships created through outsourced efforts are providing increased opportunity for direct community involvement, and an overall increased understanding of critical challenges and issues related to stormwater management. The responsibilities and overall objectives for each division follow.

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 2008 MSMD staff, with the assistance of contracted resources will continue the goal of digitally video inspecting, and video taping approximately 5 percent of the storm drainage systems for internal pipe joint separation, and pipe alignment failures. In addition to the internal pipe inspections, MSMD will physically walk and inspect 20 percent of the storm drainage inventory for external pipe system failures and deficiencies such as, cave-ins, blockages, and structural failures. MSMD will design and construct approximately 50 drainage rehabilitation projects that are identified by the storm drainage inspection and assessment program. The stormwater assessment and inspection program will continue to focus on data collection, and field verification of approximately 1,500 undocumented facility locations, as well as move toward a focused and aggressive contracted inspection program. The inspections focus on regulatory requisites for the five-year inspection cycle of privately maintained facilities. The five-year private inspection cycle involves inspection of 20 percent, or approximately 452 privately maintained facilities with private maintenance agreements annually. In addition to the private inspection program, and part of the regulatory inspection requirement, the entire inventory of public detention pond facilities will be inspected in FY 2008. The annual public facility inspection cycle includes approximately 1,104 publicly maintained stormwater detention facilities. The use of contracted field inspectors, and additional contracted technical research staff in this program will offset internal staffing shortfalls in the Stormwater assessment and inspection program. This outsourced effort will ensure compliance with regulatory requirements of the County's Municipal Separate Storm Sewer System (MS4) permit associated with the annual cycle of stormwater inspections. The stormwater assessment and inspection program is providing the identification and prioritization of needed facility retrofit and rehabilitation projects for the publicly maintained facilities, and 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 (ADA) code requirements when necessary, and landscaping services along transportation routes in commercial revitalization districts.

In FY 2006, under the direction of the Fairfax County Board of Supervisors, maintenance service levels for the County owned bus shelter program were increased. In conjunction with the increased service levels in the bus shelter program and beginning in FY 2007, a joint effort between MSMD and the Fairfax County Office of the Sheriff related to bus shelter maintenance in Fairfax County, increased resources to the maintenance program through added assistance and support provided by the Community Labor Force (CLF). This effort will continue in FY 2008 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 bus shelters.

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 Planning Division

The Stormwater Planning Division (SPD) provides stormwater planning, monitoring, and 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. The MS4 permit is a five-year permit that regulates the discharge of local stormwater entering the state waterways. Negotiations between the State and County staff are currently ongoing, with the expiration of the current permit in January 2007. The permit renewal is anticipated to include increased regulatory requirements.

The County is currently working with the Fairfax County Public Schools (FCPS) to assume the responsibility of the FCPS MS4 permit requirements. Additional staff and resources may be required to revise the County's current stormwater program and permit application process, complete the inventory of the School's facilities, and initiate joint contracting programs. It is anticipated that developing a consolidated program will result in more effective delivery of services. Specific resources requirements and workload will be determined during FY 2008.

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 bio-assessment and bacteria monitoring to identify and correct non-stormwater discharges (illegal discharge and improper dumping) to the state waters. The monitoring program is being expanded to provide statistical performance data for existing and new stormwater control structures. The statistical data will aid in future project design strategies, and project implementation. In addition to the monitoring activities, the division's ecology branch also performs physical stream assessments on an inventory that consists of over 800 miles of streams in support of planning efforts, and maintains the GIS hydrological layer of the stream network. This GIS layer was recently enhanced through the perennial stream identification project.

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, physical stream assessments, and implementation of the County's 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.

Stormwater Management

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 completing planning in the 30 watersheds located in the County. In FY 2006 the current watershed planning process was evaluated. The evaluation provided an in-depth review of existing watershed planning processes and provides recommendations for improvements to the internal procedures as well as, makes recommendations to improve external partnerships with public and special interest groups involved in the watershed planning efforts. In conjunction with the evaluation of the planning processes, an expedited planning schedule will begin in FY 2007. The result is that all 30 watersheds will be in an active planning stage by the end of FY 2007, and no additional funding for watershed planning is required as part of the FY 2008 budget recommendation. The benefit of the expedited schedule will ensure that Fairfax County meets its commitment to the Chesapeake Bay 2000 Agreement, by completing the watershed planning process by the year 2010. As watershed management plans throughout the County are completed, the project implementation strategies and goals for the project list are developed.

In FY 2007, and continuing in FY 2008, 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 the U.S. EPA's impaired waters list by the year 2010. These joint regional efforts assist in the management and reduction of 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), in an effort to define, monitor, and control the number of pollutants in streams that violate state water standards.

SPD also oversees and implements the County's Dam Safety program. Federal and state regulations provide inspections and engineering certification of dams to insure public safety. Currently there are 14 known water-impounding facilities (dams) in the County requiring state certification. There are 10 additional dams under consideration for state certification at this time. With increased funding for stormwater initiatives in FY 2008, SPD will continue to work toward bringing all state-regulated dams into compliance with state dam safety regulations. Additionally, in FY 2008 the effort to install electronic flood control signalization to the County's largest hazard dam facilities will continue. The signalization process will provide greater flood monitoring capabilities through instantaneous water level condition assessment. This public safety improvement will provide an enhanced warning system that will link to an automated notification system for down stream property owners in the event of a potential catastrophic dam failure. 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.

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. The challenge of the agency is to maintain existing systems, while enhancing and retrofitting the degraded systems to meet stormwater management regulations as the County moves toward a full urban development in which the aged stormwater systems are approaching expected life spans. The County continually seeks public outreach opportunities to inform the public of water quality matters and environmental effects of stormwater runoff through various educational venues, public notices, and community support functions. The educational opportunities provide an understanding of environmental impacts related to stormwater runoff, and are geared toward youth involvement. The increased funding for stormwater management has provided significant opportunities for Fairfax County to improve deficient drainage systems and complete innovative stormwater control systems.

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

Maintaining Safe and Caring Communities	Recent Success	FY 2008 Initiative
During the flooding that occurred in June 2006, Stormwater Management provided a significant amount of assistance to Fairfax County residents in the Huntington community in the initial flood mitigation period, as well as, provided extended flood response through out the County. The extended effort included response to approximately 870 drainage complaints County-wide. Of the 870 requests for assistance, approximately 200 properties sustained structural flooding to some extent. The 200-flooded structures have had initial evaluation of cause, with approximately 92 houses requiring a design and construction solution to prevent future flooding. In addition, throughout the storm mitigation period, maintenance staff provided continual assistance with pumping flooded basements, direct assistance to property owners, mitigation of flooding conditions, and staffed service centers in the Huntington community.	☑	
Beginning in FY 2007, and continuing into FY 2008, Stormwater Management partnered with the Office of the Sheriff to provide additional maintenance services, for the bus shelter maintenance program by providing additional program resources through the assistance of the Community Labor Force (CLF).	☑	☑
In FY 2006, the Maintenance and Stormwater Management Division responded to 1,983 resident's requests for maintenance. All of these requests were addressed and completed in FY 2006. These requests generated a total of 693 in-house maintenance work orders.	☑	
The Stormwater Planning Division is participating in the "Reverse 911" notification system. This new initiative improves public safety through an automated flood warning notification system.		☑
Practicing Environmental Stewardship	**Recent Success**	**FY 2008 Initiative**
In support of the Board of Supervisor's environmental plan, the Stormwater Planning Division has partnered with the Fairfax County Park Authority to install buffer restoration projects in critical Resource Protection Area (RPA) districts. In addition to these natural planting buffer projects, the division is continuing to expand the clean up of hazardous dump sites throughout the County.	☑	☑
In FY 2006 the Maintenance and Stormwater Management division, and the Stormwater Planning division received the award, "Cooperator of the Year," for collaborating with the Northern Virginia Soil and Water District on several stream renovation projects, and other stormwater control projects such as the implementation of an innovative-storm-water bio-retention project (Rain Garden) at the Providence District Supervisors Office.	☑	

Exercising Corporate Stewardship	Recent Success	FY 2008 Initiative
In January 2007, negotiations for renewal of the 5-year Municipal Separate Storm Sewer System (MS4) permit will be complete. Fairfax County successfully met the intent of the requirements for the preceding permit period (zero violations received). The MS4 permit renewal is anticipated to increase stormwater management regulatory requirements based on new defined standards that are being considered by the state of Virginia.	☑	☑
By the end of FY 2007, all 30 watersheds in Fairfax County will be in an active planning process. The enhanced schedule will ensure that the County meets their commitment to the 2000 Chesapeake Bay Agreement. Additionally, this increased planning effort will consolidate the watershed planning process, and allow for greater resource concentration towards project implementation and expedited efforts to improve water quality and stream protection projects in Fairfax County.	☑	☑

Budget and Staff Resources

Category	FY 2006 Actual	FY 2007 Adopted Budget Plan	FY 2007 Revised Budget Plan	FY 2008 Advertised Budget Plan
Authorized Positions/Staff Years				
Regular	130/ 130	131/ 131	131/ 131	131/ 131
Expenditures:				
Personnel Services	$6,298,376	$7,546,430	$7,546,430	$7,724,031
Operating Expenses	3,931,385	3,400,065	5,160,835	3,222,678
Capital Equipment	125,917	405,000	553,058	390,500
Subtotal	**$10,355,678**	**$11,351,495**	**$13,260,323**	**$11,337,209**
Less:				
Recovered Costs	($1,119,100)	($829,522)	($829,522)	($863,666)
Total Expenditures	**$9,236,578**	**$10,521,973**	**$12,430,801**	**$10,473,543**
Income:				
Street Sign Fabrication Fees	$3,400	$1,260	$3,400	$3,400
Miscellaneous Revenue	11,031	16,000	16,000	16,000
Total Income	**$14,431**	**$17,260**	**$19,400**	**$19,400**
Net Cost to the County	**$9,222,147**	**$10,504,713**	**$12,411,401**	**$10,454,143**

FY 2008 Funding Adjustments

The following funding adjustments from the FY 2007 Revised Budget Plan are necessary to support the FY 2008 program:

- **Employee Compensation** **$334,430**
  An increase of $334,430 associated with salary adjustments necessary to support the County's compensation program.

- **Personnel Services Reduction** **($156,829)**
  A decrease of $156,829 in Personnel Services as part of an across-the-board reduction to meet budget limitations based on available revenues as a result of a flattening residential real estate market.

- **Operating Expenses** **($1,980,350)**
  A decrease of $1,980,350 is due to the carryover of one-time Operating Expenses associated with the *FY 2006 Carryover Review*.

- **Intergovernmental Charges** **$28,243**
  An increase of $28,243 for Department of Vehicle Services charges based on anticipated charges for fuel, vehicle replacement and maintenance costs.

- **PC Replacement Program** **$10,500**
  A net increase of $10,500 in the PC Replacement Program based on the number of PCs scheduled to be replaced in FY 2008, according to the four-year replacement cycle.

- **PSTOC Stormwater Management** **$3,450**
  An increase of $3,450 for detention pond maintenance at the Public Safety and Transportation Operations Center (PSTOC) site, scheduled to open in Spring/Summer 2008.

- **Replacement of Capital Equipment** **$390,500**
  Funding of $390,500 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 $189,000 for a track excavator, $52,500 for two small backhoes, $90,000 for two slope mowers, $9,975 for a 'Gator' utility vehicle, $31,825 for a skid loader, and $17,200 for two chemical spreaders.

- **Recovered Costs** **($34,144)**
  An increase of $34,144 in Recovered Costs based on projected salary and operating requirements.

Changes to FY 2007 Adopted Budget Plan

The following funding adjustments reflect all approved changes in the FY 2007 Revised Budget Plan since passage of the FY 2007 Adopted Budget Plan. Included are all adjustments made as part of the FY 2006 Carryover Review and all other approved changes through December 31, 2006:

- **Encumbered Carryover Adjustments** **$813,981**
  As part of the *FY 2006 Carryover Review*, the Board of Supervisors approved encumbered carryover of $665,923 in Operating Expenses and $148,058 in Capital Equipment.

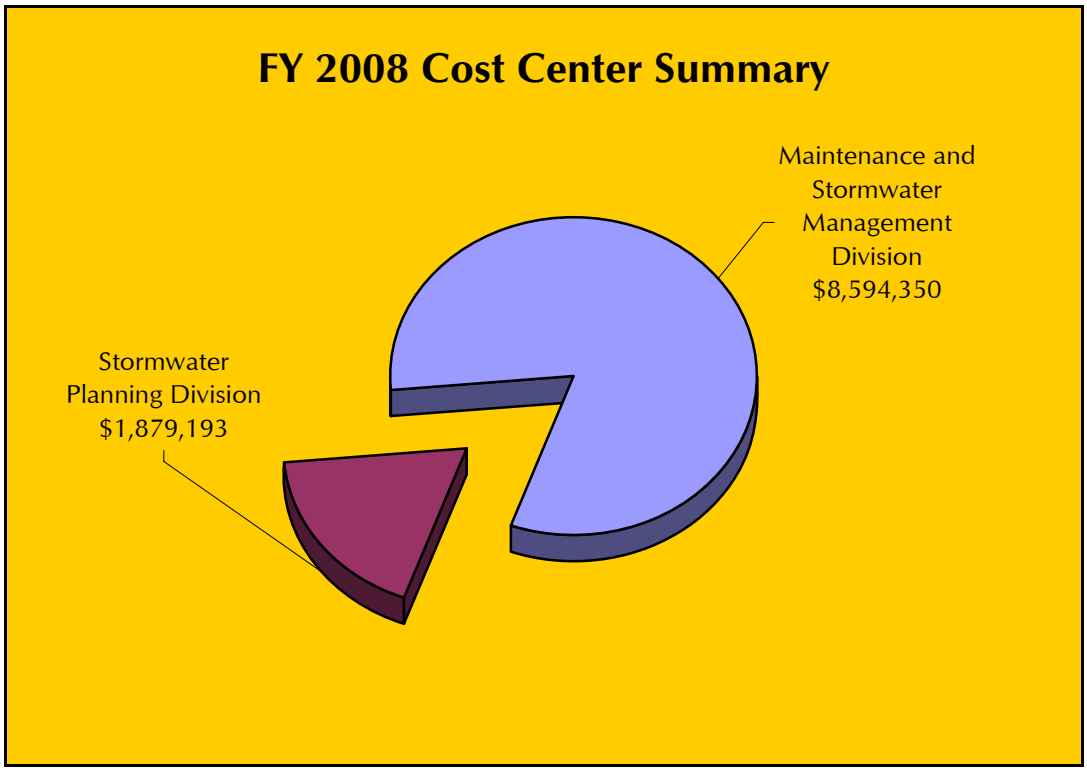
- **Flood Emergency/Other Operating** **$324,427**
  Funding in the amount of $307,427 was required to support the agency's response to flood emergencies, as well as to provide support with citizen response efforts and flood inspection services. In addition, $17,000 was approved to support the impact of higher fuel prices.

- **Huntington Community Flooding Study** **$1,000,000**
  The Board of Supervisors approved funding in the amount of $1,000,000 toward developing a solution to the flooding problems in the Huntington community. The Huntington Community experienced flooding of approximately 160 homes, a community center and vehicle damage in the area. The scope of the study includes planning (project management, design and technical management, plan formulation and evaluation, and public involvement), technical services (social analysis, cultural resource analysis, environmental analysis, economic analysis, real estate studies, water resources engineering, geotechnical investigations and design, structural design, civil design, cost engineering, and survey and mapping), and final report preparation.

- **Bus Shelter Program** **($229,580)**
  A decrease of $229,580 associated with the transfer of responsibilities from the Department of Public Works and Environmental Services' Stormwater Management Division to the Office of Sheriff Community Labor Force to support required equipment and supervision associated within the Bus Shelter Program.

Cost Centers

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



Maintenance and Stormwater Management Division

Funding Summary				
Category	FY 2006 Actual	FY 2007 Adopted Budget Plan	FY 2007 Revised Budget Plan	FY 2008 Advertised Budget Plan
Authorized Positions/Staff Years				
Regular	101/ 101	101/ 101	101/ 101	101/ 101
Total Expenditure	**$7,930,181**	**$8,672,723**	**$10,577,431**	**$8,594,350**

Position Summary

MAINTENANCE AND STORMWATER MANAGEMENT DIVISION

Administration

1 Assistant Director
1 Director
2 Engineers IV
1 Safety Analyst
1 Management Analyst II
1 Public Information Officer II
1 Network/Telecom Analyst I
1 Administrative Assistant IV
4 Administrative Assistants II

Contracting Services

1 Management Analyst III
1 Engineering Technician III
1 Engineering Technician II

MAINTENANCE AND SERVICES

Field Operations

1 Facilities Support Supervisor
4 Senior Maintenance Supervisors
2 Maintenance Supervisors
9 Maintenance Crew Chiefs
16 Senior Maintenance Workers
6 Maintenance Workers
8 Heavy Equipment Operators
9 Motor Equipment Operators
4 Masons I

Maintenance Inspections

1 Engineer II
1 Senior Maintenance Supervisor
3 Engineering Technicians III
3 Engineering Technicians I

Engineering/Technical Support

2 Engineers III
2 Engineers II
2 Engineering Technicians III
1 Engineering Technician II
1 GIS Analyst I
1 GIS Technician

Equipment/Specialty Trades

1 Vehicle Maintenance Coordinator
1 Heavy Equipment Operator
1 Carpenter I
1 Equipment Repairer
1 Welder II

SIGN SERVICES AND MATERIAL SUPPORT

1 Warehouse Supervisor
1 Warehouse Specialist
1 Engineering Aide
1 Motor Equipment Operator

TOTAL POSITIONS
101 Positions / 101.0 Staff Years

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 providing 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 (MS4) 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 FY 2004 Actual	FY 2005 Actual	FY 2006 Estimate/Actual	Current Estimate FY 2007	Future Estimate FY 2008
Output:					
Annual private stormwater management facility inventory (1)	NA	463	2,238 / 2,261	2,320	2,379
Public stormwater management facilities inspected and maintained annually	NA	1,146	1,184 / 1,104	1,136	1,168
Emergency Action plans updated	NA	13	10 / 9	16	16
Average weekly private vehicle trips into maintained facilities	NA	23,525	23,525 / 22,795	22,065	21,335
Average weekly commuter bus trips into maintained facilities	NA	6,085	6,440 / 9,365	12,645	15,925
Average weekly train trips into maintained facilities	NA	285	285 / 265	245	225
Efficiency:					
Annual cost per private stormwater management facility (1)	NA	$272	$68 / $82	$95	$101
Cost of inspection and maintenance per public stormwater management facility	NA	$1,025	$1,027 / $988	$1,143	$1,221
Cost of Emergency Response program per 100,000 population	NA	$66,120	$78,653 / $69,180	$81,609	$89,533
Cost per transit trip	NA	$0.28	$0.44 / $0.39	$0.43	$0.44
Service Quality:					
Percent of private facilities inspected within the fiscal year	NA	20%	20% / 3%	20%	20%
Percent of public facilities inspected and maintained within the fiscal year	NA	100%	100% / 46%	100%	100%
Dollar loss per 100,000 population for claims paid as a result of an inappropriate response to an emergency event	NA	$4,308	$3,253 / $2,483	$2,994	$2,956
Annual commuter facilities complaints received	NA	41	50 / 36	50	55
Outcome:					
MS4 permit violations received	NA	0	0 / 0	0	0
Percent of Emergency Action Plans current	NA	93%	100% / 64%	100%	100%
Percent of commuter facilities available 365 days per year	NA	100%	100% / 100%	100%	100%

(1) The actual regulatory reporting period for the inspection cycle of "Private" and "Public" stormwater management facilities is on a calendar basis. The performance measure for the stormwater inspection and maintenance objective is on a fiscal basis. While the "Service Quality" indicator for actual inspections completed in FY 2006 indicates that the goal was not met in FY 2006, the regulatory requirement of inspecting 100% of the "Public" facilities, and 20% of the "Private" facilities will be met within the 2006 regulatory calendar year requirement.

Stormwater Planning Division

Funding Summary				
Category	FY 2006 Actual	FY 2007 Adopted Budget Plan	FY 2007 Revised Budget Plan	FY 2008 Advertised Budget Plan
Authorized Positions/Staff Years				
Regular	29/ 29	30/ 30	30/ 30	30/ 30
Total Expenditure	**$1,306,397**	**$1,849,250**	**$1,853,370**	**$1,879,193**

Position Summary					
1	Director	8	Engineers II	2	Ecologists III
3	Engineers IV	1	Landscape Architect III	7	Ecologists II
5	Engineers III	1	Engineering Technician I	1	Administrative Assistant III
1	Project Coordinator				
TOTAL POSITIONS					
30 Positions/ 30.0 Staff Years					

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 support the MS4 permit and 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 2004 Actual	FY 2005 Actual	FY 2006 Estimate/Actual	FY 2007	FY 2008
Output:					
Watershed Plans completed	NA	1	10 / 1	9	10
Efficiency:					
Average cost per square mile to develop watershed plans	NA	$67,800	$38,600 / $41,635	$37,600	$37,600
Service Quality:					
Cumulative percent of watershed plans completed based on drainage area	NA	2.8%	49.0% / 7.6%	48.6%	74.3%
Outcome:					
Annual percent of watershed plans completed	NA	50.0%	100.0% / 25.0%	100.0%	100.0%

Performance Measurement Results

The FY 2006 performance measures related to stormwater management are representative of a program that is currently undergoing many program adjustments in which priorities and staffing resources are being realigned to manage new program strategies. Examples of this are evident in the performance measure for the inspection and maintenance of the private and public stormwater management facilities, as well as, the results of the performance measure to monitor the watershed planning effort.

The "Output" indicator for the inspection and maintenance of the private and public stormwater management facilities exceeded the anticipated inventory growth for private facilities, and did not meet the expected inventory growth for the public facilities. The "Efficiency" indicator for annual cost of the inspection of private facilities was higher than anticipated, and the per facility cost for the maintenance and inspection of the public facilities was lower than expected. A more significant concern with this measure is the "Service Quality" indicator. The inspection cycle for both the private and public facilities is well below the required inspection rate. The shortfall in the inspection program is attributed to many relevant issues that have evolved in this program to include limited in-house staffing, as well as inspection procedural issues from safety concerns with confined space entry. It is important to note that the performance measurement process is on a fiscal cycle, and the inspection cycle requirements for the MS4 permit are on an annual cycle, with 6 months left to meet the intent of the inspection cycle requirements. The MS4 permit inspection cycle requirement to inspect 20 percent of the private facilities and 100 percent of the public facilities will be achieved in the 2006 calendar year.

None of the performance measure indicators for the watershed planning process were met in FY 2006. The failure to meet the anticipated goals of the measure is attributed to an interim evaluation of the watershed planning process. While the "Objective" of the performance measure is to monitor and ensure the planning process of all 30 watersheds by the year 2010 to meet the commitment of the Chesapeake Bay 2000 agreement, the performance indicators are established to monitor the schedule of the watershed planning process. The original anticipated schedule was negatively impacted by the interim evaluation. The evaluation was required to assess the current process and identify better processes for the planning effort. The evaluation reviewed several key components of the current process, and made recommendations to improve the process. While the interim evaluation negatively affected the schedule of anticipated watershed plans in FY 2006, the schedule was modified so that all 30 watersheds will be in an active planning phase in FY 2007, with completion of all 30 watersheds currently scheduled for FY 2009. This will support the commitment to complete all watersheds planning by the year 2010.

The results of the Commuter Rail and Park-and-Ride maintenance programs performance measurement were positive. The "Output" indicator that projects the average weekly trips of vehicles, buses, and trains into the facilities was higher than anticipated. The "Efficiency" indicator shows a $0.39 cent maintenance cost per trip, which is lower than the anticipated $0.44 cents per maintenance trip. The "Service Quality" indicator for complaints received was lower than projected, while the "Outcome" indicator shows that all facilities were open and functional for 365 days in FY 2006.

The "Output" indicator for updating 10 Emergency Action Plans (EAP) was not met. Nine of the projected 10 EAP's were updated. Failure to achieve the goal to update the projected 10 EAP's is based on the fact that one of the originally scheduled facilities requiring an updated EAP was removed from the schedule due to the facility not meeting the states criteria for requiring certification. In addition, the "Outcome" indicator for both FY 2007, and FY 2008 have been changed to reflect the new criteria of updating all 16 EAP's each year due to criteria changes for updating EAP's every two years being increased to require the update every year. The "Efficiency" indicator shows that the cost of the emergency response program per 100,000 Fairfax County residents was lower than projected. The "Service Quality" indicator shows that the dollar loss per 100,000 residents was lower than anticipated. The "Outcome" indicator shows that the goal to have 100 percent of the required EAP's currently was not accomplished. This is a result of a change in the states requirements pertaining to EAP's on state certified dams. When the "Outcome" indicator was originally estimated, the state required that the EAP for these facilities be updated every two years. The state has since indicated that the EAP must be updated every year.