

3 Internal Environment

A scan of the internal environment consists of an analysis of organizational strengths and weaknesses, an accounting of current programs, and overview of funding and resource allocation trends. Strengths and weaknesses are found in Table 1.1 at the beginning of this report. Internal issues critical to the future of the STW include the kind of program the County wants to have in the next 10 to 20 years and what type of organizational model the County wants to adopt (e.g., loose confederation of collaborators, or a strong centralized program). Currently, the internal mission of the STW is:

“To develop and maintain a comprehensive watershed and infrastructure management program to protect property, health, and safety, to enhance the quality of life, and 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. To be responsive and sensitive to the needs of the residents, customers, and public partners.”

3.1 County Goals

Long-range County goals affecting the STW are found in the *2002 Edition of the Policy Plan Element of the Fairfax County Comprehensive Plan* and the *Stream Protection Strategy Baseline Study*. Short and mid-range goals are found in the FY 2004 advertised budget. In addition, the *Fairfax County Park Authority Policy Plan* contains policies that affect the STW in general and regional ponds more specifically.

Comprehensive Plan

Goals and policies relating to the STW from the Comprehensive Plan are found in the Environment, Transportation, and Revitalization elements. Major objectives relating to the STW are outlined below. A full listing of objectives and policies is found in Appendix D.

- Environment, Objective 2 “Prevent and reduce pollution of surface and groundwater resources. Protect and restore the ecological integrity of streams in Fairfax County.”
- Transportation, Objective 1 “Fairfax County should provide for both through and local movement of people and goods through a multi-modal transportation system that places the maximum practical emphasis on alternatives to the single-occupant vehicle.”
- Transportation, Objective 2. “Fairfax County should seek to increase the number of commuters using non-motorized transportation and public transportation (i.e., rail, bus, carpooling, and vanpooling) so that by the year 2000, 60% of County commuters to the metropolitan core, 20% of the commuters to the Tysons Corner Urban Center, 15% of the commuters to Suburban Center and Transit Station Areas and 5% of other County commuting work trips will use public transportation, and 3% of all trips will be made by non-motorized (pedestrian and bicycle) transportation.”
- Transportation, Objective 4. “A comprehensive network of trails and sidewalks should be provided as an integral element of the overall transportation network.”
- Transportation, Objective 8. “Public safety should be ensured both for users of transportation facilities and services and for the general public.”
- Revitalization, Objective 2. “Fairfax County should address long term infrastructure financing needs in designated Revitalization Areas recognizing that additional tax revenues are generated by revitalization projects.”

Stream Protection Strategy

As part of the Stream Protection Strategy program development, the Stormwater Planning Division developed a set of long-range goals. An important aspect of these goals is that they were stakeholder developed. These goals include the following:

- Provide comprehensive baseline information on stream conditions through an assessment of biological, chemical, physical, and habitat parameters within the County's watersheds.
- Provide a basis for continual/long term monitoring and assessment of water quality in County streams.
- Evaluate the progress and effectiveness of implemented measures.
- Develop strategies for stream restoration and protection.
- Promote inter-jurisdictional cooperation to restore and maintain the quality of shared watersheds.
- Recommend changes to County ordinances as necessary to achieve and enhance water quality goals.
- Conform to past, present, and future goals of the County.

FY 2004 Advertised Budget Performance Measures

The FY 2004 advertised budget contains a number of specific short and mid-term performance measures. These include:

- To inspect at least 20% of the County's storm drainage system and 100% of the stormwater management facilities.
- To inspect and maintain at least 40% of the County's walkways and trails.
- To inspect 100% of all STW maintained Commuter Rail and Park-and-Ride facilities monthly.
- To increase the completion of improvement designs on schedule and within budget by 10 percentage points, from 50 to 60%.
- To inspect and sample at least 200 stormwater outfalls.
- To review and process at least 75% of waiver requests and rezoning applications within established deadlines.

FCPA Policy Plan

Although there are other County agencies that have policies and objectives affecting STW objectives, Fairfax County Park Authority goals and objectives are particularly relevant given that many of the County's trails and stormwater management facilities are located, or planned to be located, in stream valley corridors. An existing conflict between STW and FCPA goals is found in FCPA Policy #304, which discourages the siting of regional stormwater ponds on parklands. Most planned regional ponds are located along the main stems of streams. The FCPA owns and operates many of the County's streams and their adjacent parks. In this case, the FCPA's concern with potential adverse impacts of cultural and ecological resources conflicts with STW concerns with protecting downstream areas from flooding and water quality degradation.¹⁴

¹⁴ The Role of Regional Ponds in Fairfax County's Watershed Management, March 3, 2003.

3.2 Implementation Mechanisms

Major regulatory tools that can be used to implement objectives and policies include the County Code (including the Zoning Ordinance, Erosion and Sediment Control Ordinance, and the Chesapeake Bay Preservation Ordinance) and the Public Facilities Manual. In some respects, these tools are external factors in that they are adopted by bodies outside of the STW. However, they are internal factors in that they have an immediate affect on the way that the STW performs business. In addition, the STW has considerable control over what, if any, changes are made to these implementation mechanisms.

The Public Facilities Manual is a particularly important implementation mechanisms and is cited both positively and negatively by external and internal stakeholders. The PFM sets forth the guidelines for the design of all public facilities constructed to serve new development. This includes stormwater management infrastructure, sidewalks, and trails. An Engineering Standards Review Committee (ESRC) is responsible for studying and reviewing technical components of the PFM and making recommendations for revisions to the Board of Supervisors. The ESRC consists of representatives from the citizenry at-large, the engineering and development community, civic associations, environmental organizations, VDOT, etc.

3.3 Organization

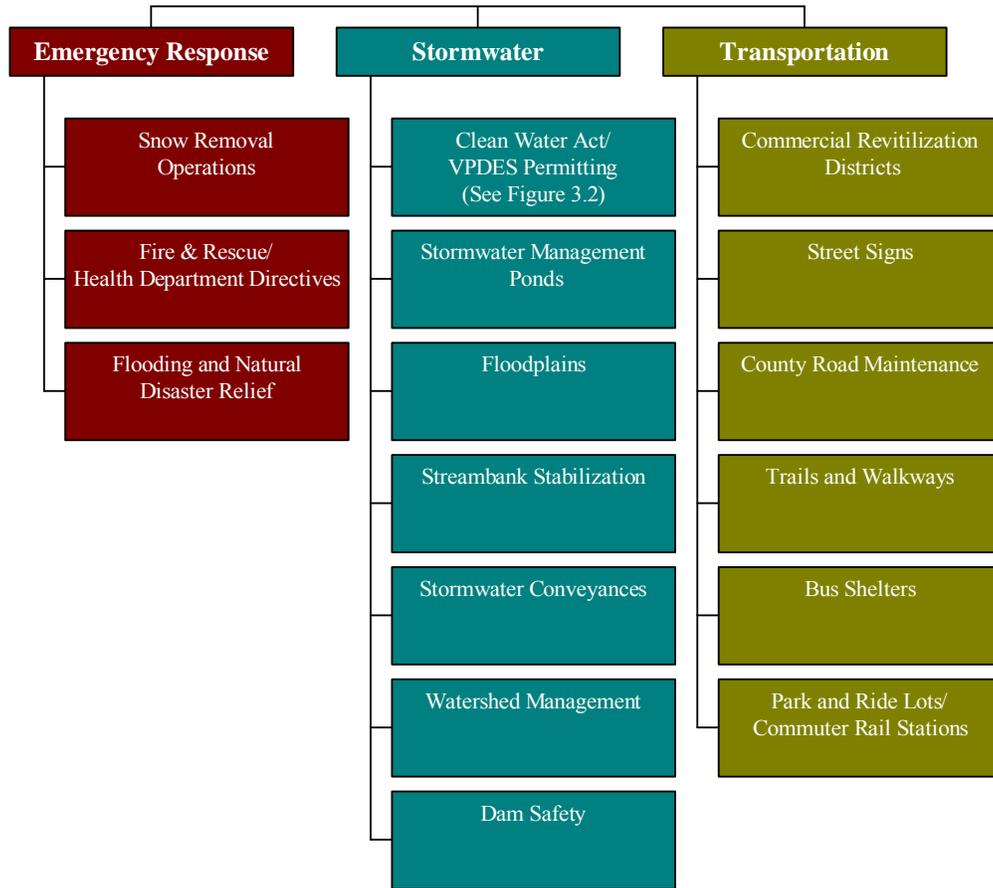
The STW consists of the Maintenance and Stormwater Management Division and the Stormwater Planning Division. The STW was established in conjunction with a DPWES reorganization in FY 2000 in order to place new emphasis on environmental stewardship within the stormwater management areas. This reorganization consolidated key functions such as development and implementation of master plan efforts, inventory identification and assessment, stormwater regulation, capital construction, and performance of critical maintenance activities.¹⁵

The Maintenance and Stormwater Management Division provides for in-house and contracted maintenance services for the County's vast inventory of stormwater facilities, walkways, roadways, commercial revitalization, park and ride commuter rail facilities, public street name signs, and other related infrastructure. Additionally, this MSMD provides snow removal and other emergency support services for designated facilities and agencies County-wide.

The Stormwater Planning Division (SWPD) provides stormwater planning, monitoring, and capital project design services. The SWPD maintains the County's federally mandated stormwater discharge permit, National Pollutant Discharge Elimination (NPDES) permit. The SWPD also coordinates State mandated dam operation and maintenance certificates, watershed management efforts, floodplain and FEMA Community Rating System efforts, public education and awareness initiatives, stream monitoring and assessments, and implementation of the County's master drainage plan. Engineering design and contract administration services for storm drainage improvement projects are also provided. From a functional standpoint, the STW can be divided into three areas as shown in Figure 3.1.

¹⁵ From FY 2004 Preliminary Budget.

Figure 3.1: STW Functional Areas



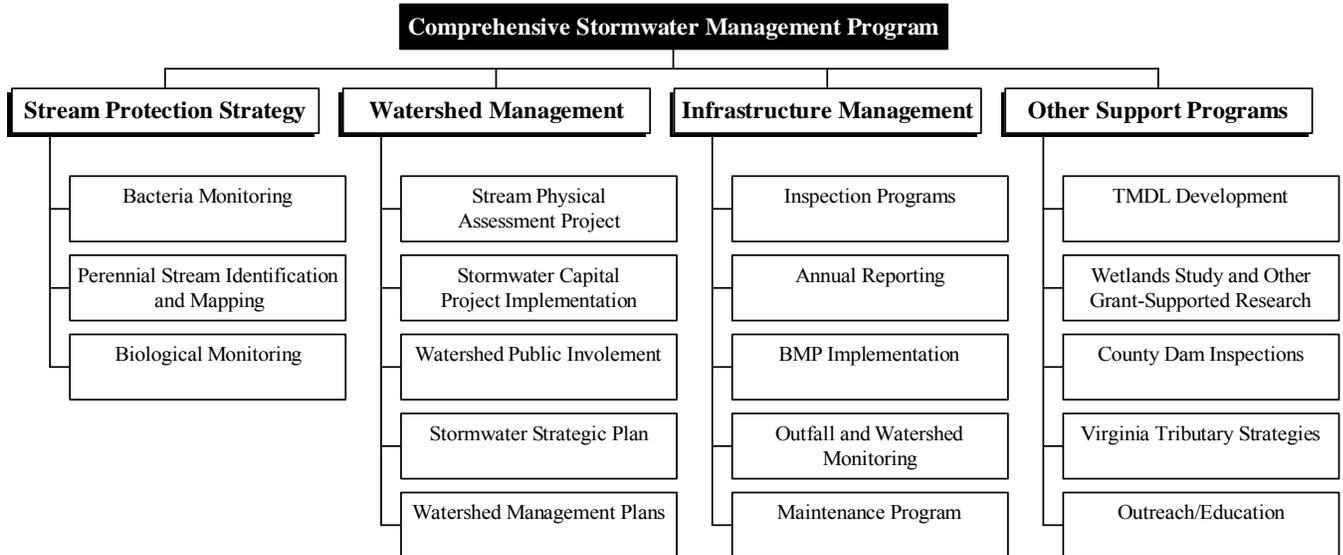
3.4 Programs

The STW has a great variety of programs that support its mission. Most of these programs are organized around various federal and State mandates. This is especially true with respect to the County’s VPDES permit (see Figure 3.2). During the SWOT process, staff noted particular pride in its emergency response system and its ability to address a great variety of tasks and programs. Key STW accomplishments as summarized in the FY 2004 advertised budget include the following.

- Initiated Watershed Management Planning efforts for the entire County.
- Successfully negotiated with the Virginia DEQ the renewal of the NPDES permit for the next 5 years.
- Developed County web pages on watersheds to support the need to provide continual information and public outreach relating to Watershed Management Planning.
- Initiated a special task force to evaluate the current Regional Stormwater Management Pond program and to make recommendations for possible changes.
- Developed a protocol for identifying perennial streams and conducted a pilot project to test the protocols. Commenced a 3-year project to field identify additional perennial streams countywide.

- Provided support to the State in completion of Total Maximum Daily Loads (TMDLs) for Accotink Creek and Four Mile Run impaired stream segments.
- Continued annual biological assessment to determine trends in stream water quality for 20 percent to 25 percent of the County under the Stream Protection Strategy (SPS) program.
- Designed and provided contract assistance/oversight for the maintenance rehabilitation of 43 sidewalks, trails, roadways, storm drainage and stormwater management facilities.
- Designed and constructed shallow wetlands marshes in 12 community stormwater management facilities to improve water quality and provide enhanced wildlife habitat.
- Initiated a new process to implement smaller house flooding repair projects arising from backups of the County’s storm drain network.

Figure 3.2: Fairfax County Comprehensive Stormwater Management Program to Meet VPDES Permit Requirements



3.5 Revenue Sources

The primary source of revenue for the STW is the County’s General Fund, which covers staff resources, small pay-as-you-go capital improvements, and most maintenance activities. The County’s Capital Improvement Fund and General Obligation Bonds provide revenue for larger capital improvements. The County’s Pro-Rata Share Program is also a source of revenue but does not come close to covering basic programmatic costs. In addition, the Pro-Rata Share Program started relatively late during the urbanization of the County and is now diminishing each year as the build-out approaches. The County estimates total additional revenue from the program through build-out to be between \$41 and \$47 million.

In addition to revenue collected by the County, many homeowners associations (HOAs) and other organizations perform their own stormwater facility maintenance through the assessment of fees. Table 3.1 provides an overview of primary and secondary funding mechanisms actually used by the County.

Table 3.1: Stormwater Management Funding Sources Used by Fairfax County

Primary Funding Methods	Secondary Funding Methods
<ul style="list-style-type: none"> • General Fund • General Obligation and Revenue Bonding • Pro-Rata Share Program 	<ul style="list-style-type: none"> • Special Assessments • Watershed Improvement Districts • Federal and State Funding/Grants

3.6 Resource Allocation - Funding

Fairfax County’s advertised FY 2004 budget contains General Fund Revenue of \$2.59 billion, which reflects an increase of 6.03% from the FY 2003 Revised Budget Plan. Advertised budget facts include:

- Real-Estate Tax Rate reduced from \$1.21 to \$1.19 per assessed value.
- School Board Transfer of \$1.24 billion represents approximately 48% of the total budget.
- General Property Taxes comprise 77.6% of the General Fund Receipts.
- Assessed Value for General Property Taxes rose 12.48% on average.
- Sewer Service Rate remains constant at \$3.03 per 1,000 gallons of water consumption.
- Authorized Positions decreased by 49 positions compared to FY 2003.

The Department of Public Works and Environmental Services proposed FY 2004 expenditures total \$52,923,070, or slightly less than 6% of all General Fund Direct Expenditures. The STW comprises approximately 15% of the DPWES budget at \$7,934,339, or approximately 0.8% of all General Fund Direct Expenditures. Table 3.2 provides a cost summary of the STW from FY 2002 through proposed FY 2004.

While there is a published budget for the current year, DPWES must revise its budget and faces difficulty with longer-term planning efforts because the funding may not be available in the future. Competition among County programs is high, and the STW programs are not among the most visible, especially in relationship to transportation, public safety, and education. Finally, unplanned high profile initiatives (West Nile Virus, emergency preparedness, etc.) create high emotional stress among the population and the staff who have to incorporate those efforts into an already strained budget.

Table 3.2: STW Agency Cost Summary¹⁶

Agency Summary				
Category	FY 2002 Actual	FY 2003 Adopted	FY 2003 Revised	FY 2004 Advertised
Authorized Positions/Staff Years Regular	125/125	123/123	123/123	120/120
Expenditures				
Personnel Services	\$ 5,199,745	\$ 6,007,822	\$ 6,007,822	\$ 6,185,362
Operating Expenses	\$ 2,466,965	\$ 2,749,669	\$ 2,980,131	\$ 2,442,407
Capital Equipment	\$ 479,306	\$ 241,397	\$ 358,988	\$ 51,000
Subtotal	\$ 8,146,016	\$ 8,998,888	\$ 9,346,941	\$ 8,678,769
Less:				
Recovered Costs	\$ (722,323)	\$ (708,595)	\$ (708,595)	\$ (744,430)
Total Expenditures	\$ 7,423,693	\$ 8,290,293	\$ 8,638,346	\$ 7,934,339
Income:				
Street Sign Fabrication Fees	\$ 6,055	\$ 5,170	\$ 5,170	\$ 4,648
Miscellaneous Income	\$ 22,561	\$ 14,027	\$ 16,000	\$ 16,000
Total Income	\$ 28,616	\$ 19,197	\$ 21,170	\$ 20,648
Net Cost to the County	\$ 7,395,077	\$ 8,271,096	\$ 8,617,176	\$ 7,913,691
Cost Center Summary				
Category	FY 2002 Actual	FY 2003 Adopted	FY 2003 Revised	FY 2004 Advertised
Maintenance and Stormwater Management				
Division	\$ 6,592,503	\$ 7,214,135	\$ 7,617,420	\$ 6,800,890
Stormwater Planning Division	\$ 831,190	\$ 1,076,158	\$ 1,020,926	\$ 1,133,449
Total Expenditures	\$ 7,423,693	\$ 8,290,293	\$ 8,638,346	\$ 7,934,339

3.7 Resource Allocation - Staffing

The STW does its work through a combination of regular positions filled by full-time employees and a number of Limited Term Exempt (LTE) employees who receive no benefits and work 11 months at a time. Of the 11 employees of the Stormwater Management Branch of SWPD, four are LTEs. In addition, two STW inspectors from MSMD are LTE employees. The number of LTEs create structural problems in scheduling, loss of historic information, and morale problems as the employee base changes with employees going in and out of the system.

Although the STW has taken on a number of new State and federal mandates and is maintaining a growing infrastructure to support population increases, general staffing has decreased in recent years (Table 3.2). An example of how the STW is taking on increasing responsibilities using existing resources is the current plan to combine the stream monitoring activities of the Health Department with those of the SWPD by July 2003. As a result, the SWPD will take complete responsibility for a comprehensive water quality monitoring program.

¹⁶ Advertised Fairfax County FY 2004 Budget.

3.8 Public Outreach

With a citizenry highly interested in environmental affairs, the STW has tried to develop a public outreach program, but the efforts do not create a lasting impression. Funding limitations and a variety of programs to be highlighted make it difficult to generate the public support needed. As a result, citizens lack enough information to understand the STW's programs and initiatives, and in many cases have overly high expectations of what can be accomplished with existing resources.

3.9 Internal Organizational Climate

All internal and external factors eventually coalesce to affect the internal organizational climate of the STW. During the SWOT process, several issues were noted that affect organizational climate, including:

- issues surrounding Limited Term Exempt (LTE) employees;
- cuts to the STW budget;
- physical facility limitations;
- lack of a unified vision;
- high expectations from outside stakeholders; and,
- poor communication and collaboration with other County agencies.

An organization's internal climate affects productivity, innovation, retention, and a number of other factors. Table 3.3 provides an overview of how external stakeholders perceive the STW's organizational climate. Figure 3.3 provides the same information, in graphical form, from the perspective of STW internal stakeholders.

Input from STW staff on what needs to change, what needs to continue, and what needs to stop was varied, but can be roughly broken into:

- need to enhance communication between leadership and staff;
- need for additional hires and to make LTEs into full time employees; and,
- need for more flexibility in meeting solutions presented to the STW.

A more detailed assessment and analysis of the entire SWOT process will be used as part of the STW's Strategic Plan process.

Table 3.3: External Perception of STW’s Organizational Climate

Staff Level	
Conflict	<ul style="list-style-type: none"> • Haven't seen any real conflict among staff. There does seem to be a line between younger staff and old-line thinking. • Stress of change. Introduction of Core Values seems to have created some internal strife. All together, strategizing and organizing can get overwhelming. • Significant stress between STW and Office of Site Development Services.
Good/Improving	<ul style="list-style-type: none"> • Have always been very responsive to requests. • The climate has improved from very negative in terms of accepting new ideas.
Leadership	<ul style="list-style-type: none"> • Can't figure out who is in charge. Can't figure out the relationships between the different players and divisions. • Bureaucratic. View that the County feels that its employees need to be better empowered.
Management Level	
Leadership	<ul style="list-style-type: none"> • Need to follow through more. Many issues start with a bang, but then don't come to any cohesive conclusion. • Don't know if there is buy-in at all levels of management. • Management must recognize that this is not a static area. It must be dealt with aggressively or it will get much worse.
Decision-Making	<ul style="list-style-type: none"> • There seems to be a divide between the County and the developers. • Somewhere between division level and department level, go from technical to policy. The County's political leadership tends to impose sub-optimal solutions.
Innovation	<ul style="list-style-type: none"> • Some managers lack creativity and a willingness to tackle forward thinking solutions.

Figure 3.3: Summary of Internal Perception of STW’s Organizational Climate

