

# 2005 Fairfax County Stormwater Status Report on the Municipal Separate Storm Sewer System for Fairfax County, Virginia

In compliance with the  
Authorization to Discharge  
under the  
Virginia Pollutant Discharge Elimination System  
Permit No. VA0088587  
and the  
Virginia State Water Control Law  
Clean Water Act

Report prepared and compiled by:  
Stormwater Planning Division  
Department of Public Works and Environmental Services  
Fairfax County, Virginia  
March 9, 2005



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# 2005 Fairfax County Stormwater Status Report

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## Executive Summary

This report describes Fairfax County's successes in executing the Fairfax County Board of Supervisors' Environmental Agenda elements of maintaining safe and caring communities, protecting the environment, and promoting environmental stewardship. This report discusses the efforts to comply with the Virginia Pollutant Discharge Elimination System Permit ([Appendix A](#)) for the period of Jan. 1, 2005, through Dec. 31, 2005, as well as the many challenges we face and the partnerships we've forged to meet them. Although the Fairfax Department of Public Works and Environmental Services compiled the data for this report, information was gathered from the many different organizations and agencies working in partnership.

This report helps tell the story about some of the challenges facing Fairfax County that impact outdoor recreation, wildlife habitat, stream banks, the Chesapeake Bay, and our sources of drinking water. It describes the projects and programs the county operates that address streamside vegetation buffers, streambank erosion, flooding, aging stormwater infrastructure, and stream water quality.

The following pages provide a more in-depth look into stormwater management in Fairfax County under the following categories:

- I. **Watershed Management Planning:** Two watershed management plans have been completed and are being implemented. Four additional plans are being drafted with completion slated for 2006. Combined, these six plans will cover more than 50 percent of the land area in the county. Within the next few years, watershed management plans will be completed for the entire county to provide an assessment of stormwater conditions, recommend protection strategies and improvement projects, and encourage public involvement.
- II. **Capital Improvements and Infrastructure Retrofit:** Fairfax County completed more than 30 stormwater management projects in 2005. Projects mitigated house flooding, stabilized streams, rehabilitated dams, and improved the water quality of stormwater runoff. Fairfax County and its partners constructed demonstration projects to encourage the use of low impact development concepts and techniques.
- III. **Maintenance and Operation:** Fairfax County maintains more than 1,000 stormwater management facilities; 1,400 miles of pipe; and 45,000 drainage structures designed to protect 850 miles of perennial streams.
- IV. **Strategic Initiatives, Policy, Management, and Emergency Response:** Fairfax County completed a quality assurance review of the perennial streams and Resource Protection Areas that resulted in identifying an additional 5.5 miles of perennial streams. The Fairfax County Board of Supervisors committed additional financial resources to stormwater management and watershed protection through the commitment of a dedicated penny of the real-estate tax.
- V. **Monitoring and Assessment:** Watershed monitoring included dry and wet weather screening, bacteria monitoring, biological monitoring, and storm event water quality monitoring. The county is also using data collected from more than 400 volunteer monitors and 500 students to track stream conditions.
- VI. **Public Outreach and Education:** Fairfax County conducted presentations and booths at 27 community meetings events to raise awareness about non-point source pollutants and actions residents can take to help protect streams. Fairfax County partnered with numerous local

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agencies to promote environmental stewardship such as the stream cleanups in 2005 that mobilized more than 1,000 volunteers. The county also partnered with various organizations to host a high school science program, a middle school teacher training program, stream buffer restoration projects, and a regional pollution prevention radio campaign.