

URBAN RUNOFF ACTION TEAM PROGRESS REPORT

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Environmental Problem: Urban runoff is the third leading cause of stream impairment in Region 3, just behind agriculture and resource extraction, with over 4400 miles of streams impaired. Nationally, urban runoff is identified as a leading cause of stream impairment, with every state affected and almost 35,000 miles impaired. With growth and development, this issue will only become more important in the future. More cost effective and sustainable techniques of dealing with urban runoff are needed. In particular, preventative approaches (e.g. low impact development) are needed so that future growth does not cause additional water quality impairments.

Municipal Separate Storm Sewer System Operators (MS4s) are required under the National Pollutant Discharge Elimination System (NPDES) regulations to develop and implement storm water management plans that protect water quality and, where applicable, meet Total Maximum Daily Load (TMDL) Waste Load Allocation (WLA) requirements for discharges to impaired streams. This project is intended to help MS4s develop, select and implement a storm water management plan that effectively addresses TMDL requirements and achieves water quality improvement.

Technology Challenges: Many small MS4s have questions concerning how to best achieve their NPDES requirements to develop and implement storm water management plans that protect water quality. The "real world" performance of many commonly used BMPs is not known. This project will attempt to answer some of those questions by performing the following three study phases:

(1)conduct a national assessment of well performing municipal storm water management Best Management Practice (BMP) programs in impaired urban watersheds.

(2) select one of the case study sites and conduct a field pilot project to enhance existing BMPs to improve water quality.

(3)Show environmental results by conducting in stream water quality monitoring and conduct outreach to Municipal Separate Storm Sewer System Operators (MS4s) and States about performance.

Items (1), (2) and the stream monitoring activity of item(3) were completed in 2007. Stream monitoring results have not shown any measurable response to the 1800 foot streambank restoration that was implemented. It has been concluded that additional BMPs need to be implemented before an in-stream response is expected. As a result, the focus of this project during 2008 and beyond is on the acceleration of implementation of BMPs and then to monitor their in-stream effectiveness.

Stakeholder & Partner Involvement: Stakeholder involvement has been significantly expanded with the establishment of the Accotink Creek Implementation Committee (see below).

FY'08 Objectives: During FY08, the goal is to accelerate implementation of management practices through the establishment of an "Accotink Creek Implementation Committee" that includes the City and County of Fairfax, the Virginia Department of Environmental Quality, EPA R3, and other interested stakeholders.

FY'08 Accomplishments:

The first meeting of the Accotink Creek Implementation Committee was held April 23, 2008. The role of the "Committee" is to accelerate the implementation of management practices as well as to monitor the effectiveness of those practices in restoring Accotink Creek. In addition to the Implementation Committee, a Monitoring Ad-hoc Committee and an Education and Outreach Ad-hoc Committee were established. Committee participants include EPA R3, EPA-ORD, EPA HQ-OW, Fairfax City, Fairfax County, VA DEQ, VA DCR, USGS, George Mason University, and Friends of the Accotink. Additional participants will be added as needed.

Current Funding & Additional Resources Required: No funding is currently allocated to this project. The cost to implement additional management practices is substantial (exceeding \$500,000), and depends on the specific practices to be implemented. Continuation of the monitoring of Accotink Creek over a two year period to document the effectiveness of restoration activities is estimated to cost \$125,000.

Issues: The most pressing issue is identifying and securing funding to implement the restoration recommendations. EPA Region 3 will work with the City and State and the other Implementation Committee stakeholders to try to address the issue.

Performance Measures: The number and type of management practices implemented along with Accotink Creek monitoring data (water quality, biological and physical condition indicators)

Lessons Learned: As expected, there is a need for substantial funding support and time to implement management practices and to monitor the stream response to implementation. A lack of dedicated funding to support these activities has inhibited progress.