



## **Loudoun Strategic Watershed Management Solutions (SWMS)**

### **Loudoun Watershed Watch Commitments** **May 1, 2006**

Loudoun Watershed Watch (LWW) fully supports the Loudoun Strategic Watershed Management Solutions (SWMS) initiative to coordinate existing watershed planning efforts and affect a shared vision for watershed activities in Loudoun County. Loudoun County is in direr needs of watershed management planning. All Loudoun streams are impacted to some degree by human activities. Several are degraded to the degree that they do not meet both Federal Clean Water Act and Virginia Water Quality Standards for recreational use and aquatic life. These streams have been designated as **impaired** by the state. They include: Catoctin Creek and its tributaries, Goose Creek and its tributaries, Little River, Limestone Branch, Piney Run, Broad Run, and Sugarland Run.

State water pollution reports (i.e., Total Maximum Daily Load or TMDL reports) Loudoun streams establish that agricultural sources of nonpoint pollution are the major cause of fecal bacteria pollution in Loudoun streams. Past initiatives to encourage landowners to voluntarily install BMPs, such as fencing-off streams to livestock, have had limited success. All major Loudoun watersheds are impacted by pollution from agricultural activities. In addition, TMDL reports for Goose Creek and Little River document that sediment from stream bank erosion and wash off from pastureland are a major cause of stream degradation. DEQ estimates that 68,000 tons of sediment is flowing into the Potomac River from Goose Creek every year. Further, DEQ estimates that a 6% increase in developed land will increase sediment loads from stream bank erosion another 36%.

Yet, Loudoun County water resource programs are divided between a variety of County authorities, and there is little community and citizen investment. There are no countywide or watershed based plans to manage, protect, or restore degraded water resources. Rather programs are administered on a case-by-case, site-specific basis. Resources are used inefficiently, results are ineffective, and damages to private property are increasing. The SWMS initiative provides the opportunity to engage in countywide planning that will improve water quality and public health, provide economic opportunities for agriculture and tourism, protect the health of streams for aquatic life and riparian buffers for wildlife, promote the conservation of natural resources, and create additional recreational opportunities for all citizens. These benefits can be achieved in a cost-effective manner through phasing planning activities, establishing priorities for protection and restoration projects, and better integrating water resource protection with county policies, codes, and ordinances.

Loudoun Watershed Watch commits to supporting the SWMS initiative in four ways:

1. **SWMS Initiative** -- LWW is one of many stakeholders in Loudoun that support watershed management planning and the Total Maximum Daily Load (TMDL)

- Implementation Planning initiatives. These stakeholders only lack a County-sanctioned authority that can organize and lead a collaborative County-Stakeholder initiative to compile and analyze water resource data and develop watershed management plans that address the objectives of the larger Potomac River and Chesapeake Bay watersheds initiatives. LWW also recognizes that subwatersheds provide homogeneous management areas and are probably the best units to use to develop effective management plans. Small subwatersheds will also facilitate timely monitoring, mapping, and other management tasks.
- a. A representative of LWW will continue to work with SWMS and the Loudoun County authority with responsibility for implementing a workable watershed management planning process and developing watershed management plans.
  - b. LWW will continue to provide technical and management advice and support for the initiative as needed.
  - c. LWW will continue to encourage and organize citizen involvement in the SWMS initiative by promoting citizen participation, contribution of volunteer resources, and citizen support for water resource conservation policies and practices.
2. **Stream Monitoring** -- Effective watershed management planning depends upon good water resource and water quality data collected from both probabilistic stations and trend stations. These data need to be collected using a sampling protocol that will ensure that future monitoring data will be fully compatible with existing baseline data and state data. Data collected under these guidelines can provide timely feedback on how stream habitats and biological communities are responding to the management practices outlined in the watershed plans.
- a. LWW will provide technical expertise and collaborate to develop and maintain stream monitoring and habitat assessment protocols that meet the SWMS initiative goals.
  - b. LWW will provide technical expertise and collaborate to develop a comprehensive surface water monitoring plan that includes both probabilistic and trend monitoring.
  - c. LWW will continue to work in partnership with Loudoun Wildlife Conservancy to monitor the quality and health of streams.
  - d. LWW will continue to make public its water quality monitoring data, analyses, and assessment reports on Loudoun streams.
3. **Community Outreach and Education** -- Successful watershed management planning in Loudoun County also depends on people valuing clean water and healthy streams, and contributing to the watershed plan implementation activities needed to protect and restore the County's water resources. LWW supports the SWMS planning process that involves citizens and other stakeholders in the development of the Watershed Management Plans in order to enhance the plan's value to citizens.

- a. LWW will collaborate with County authorities and other stakeholder groups to continue to develop educational materials on the conservation of water resources in Loudoun County.
  - b. LWW will collaborate with County authorities and other stakeholder groups to continue to organize community outreach and stewardship projects to engage citizens and communities in water quality protection and restoration activities.
  - c. LWW will continue to provide a website that offers educational materials on water resources protection and restoration to Loudoun County citizens.
4. **Program Evaluation and Adaptive Management** – The effectiveness of a watershed management planning initiative for Loudoun County will be measured by the degree to which good quality streams are protected and poor quality streams are restored. Policy and management approaches and strategies to accomplish this will need to adapt to changing conditions over time and to periodic assessments of accomplishments.
- a. LWW will collaborate with County authorities and other stakeholder groups to collect and analyze data that can be used to assess progress under the watershed management planning initiative to protect and restore our water resources.
  - b. LWW will work with the Steering Committee and provide management expertise to County authorities to make adaptations in the SWMS process and watershed plan as needed.