



Loudoun Watershed Watch

Protecting the Water Resources of Loudoun County

Catoclin TMDL Community Outreach and Education Plan

Submitted by:
Loudoun Watershed Watch

Introduction

Cleaning up the Catoclin Creek watershed and preventing further degradation from nonpoint pollution will have high costs as well as huge public benefits. Educating county officials and the public about these benefits will be a key step to getting community support for TMDL implementation. Reducing nonpoint pollution loads by installing BMP is voluntary on the part of landowners, and motivation based upon a sense of community responsibility will be a key factor. The cost of cleanup still represents only a fraction of the benefits the public will receive. Cleanup means that stream corridors will be protected with best stormwater management practices and best agriculture practices. These practices will recharge our ground water aquifers, make our streams and rivers safe for public use, and support enhanced aquatic life. Water is our most precious resource, and the benefit of clean water is life itself.

Educational Strategy

The Council of State Governments in their Fall 2003, quarterly publication, "the environmental communiqué of the states," provides ten suggestions for creating effective stream TMDLs. One suggestion deals with stakeholder education. The report argues that "peer pressure produces results faster than state edicts." It also argues that when implementation is delegated to local interests, it is important to "place a premium on local sociology to effect change." Providing information within the community on the effectiveness of BMPs, relative costs of participation, and the importance of good faith local efforts "seems more effective to induce changes in the status quo than correspondence from state agencies."

This Community Outreach and Education Plan proposed by Loudoun Watershed Watch adopts this strategy by focusing on building a community sense of value in the Catoclin stream resources. Once the resource has value to the community, then a community expectation can develop that the stream should be protected and made safe for

community use. Peer pressure can then develop within the community regarding the responsibilities of those individuals whose use of the streams degrades the water quality.

This is not the only educational initiative needed to effect changes. Educational efforts are also need to target landowners who need to provide the BMPs that will keep nonpoint pollution out of the streams and restore the water quality. This is a separate although concurrent educational component that will be undertaken by the Loudoun County Soil and Water Conservation Service and other agricultural organizations. These landowner-targeted initiatives are not covered in this document.

Community Benefits From Clean Water

An example of the ways the community benefits from clean water was recently discussed in a paper titled, "Paving Our Way to Water Shortages: How Sprawl Aggravates the Effects of Drought," prepared by American Rivers, the Natural Resource Defense Council, and Smart Growth America. They report that:

The EPA has found that changes to the hydrology of rivers are second only to the effects of agriculture in the degradation of river systems. The long-term needs of rivers and the long-term demands of humans are best served by a continual supply of healthy, clean water. Freshwater and its associated fish, wildlife, plants, and habitats provide many goods and services to humanity. The benefits fall into three broad categories: (1) direct use by humans for drinking, and other household needs, irrigation, and industrial processes; (2) benefits themselves dependent on freshwater such as fish, shellfish, waterfowl, and other wildlife; and (3) "in place" benefits, such as recreation, transportation, hydropower, flood control, water quality control, and the enjoyment of the outdoors.

While the value of all services provided by freshwater systems on earth is difficult at best to quantify, studies suggest that it ranges around several trillions of dollars annually, a significant proportion of the gross world product. For instances, American anglers alone spend roughly \$24 billion annually on their sport, generating \$69 billion for the nation's economy. . . But while we can calculate some of the benefits of freshwater systems to people, the value of clean and healthy drinking water to humanity is inestimable. (p. 16-17)

Community Education that Focuses on Benefits -- Catoctin Creek is already a scenic river because of its spectacular scenery. Unfortunately, this has not been emphasized in the County, and few citizens know of the beauty of the creek. The Catoctin TMDL IP should include a proactive community outreach and educational initiative organized by local watershed groups that emphasize the scenic attributes and public recreational opportunities in the Catoctin Creek watershed. DCR and DEQ should work with LWW to develop such an education program that advises the public of these benefits.

Community Outreach and Education Activities

The specific outreach and educational activities recommended include the following.

- **Friends of Catoctin Creek** – LWW will work with community groups and individuals to organize a Friends of Catoctin Creek citizen group. There is already much interest in the community because of the activities of the Keep Loudoun Beautiful organization and scouts. Such a citizen's group can help initiate stream restoration projects, participate in stream monitoring, develop educational materials, and support stream clean-up projects.
- **Catoctin Watershed Day** – LWW will work with streamside property owners, various community groups, and regional organizations to organize a program to take place annually in late April at Taylorstown Bridge on the lower Catoctin Creek. The event will coordinate with the annual stream trash clean up by the local Boy Scout troop and the Keep Loudoun Beautiful organization. Department of Game and Inland Fisheries (DGIF) will be invited to give a fish shocking demonstration and to stock the stream with bass. The local Trout Unlimited chapter will be invited to give a demonstration on fly-fishing for bass. DEQ will be invited to provide a demonstration of water quality monitoring and the public health of recreational water use. A regional canoe group will be invited to have a canoeing and kayaking event on the river (perhaps the 1st Annual Catoctin Canoe Race). Loudoun County Soil and Water Conservation District will be invited to set up a display of agricultural BMPs and conduct a tour of BMP's on nearby riverside properties. Loudoun Wildlife Conservancy will be invited to provide a demonstration of stream monitoring and benthic macroinvertebrates. Audubon Naturalist Society will be invited to conduct a stream walk highlighting what needs to be done to protect water quality. There will also be a barbecue lunch and music for participants.
- **Catoctin Watershed Web Page** – LWW will develop a Catoctin TMDL web page as part of the LWW website. The page will include educational materials on the TMDL and the implementation plan, stream monitoring results, and how stakeholders can get involved in cleaning up Catoctin Creek.
- **Catoctin Watershed Email Newsletter** – LWW will provide a monthly email newsletter to stakeholders that includes materials relevant to water pollution and stream restoration.
- **Catoctin Clean Water Poster** – LWW will work with DCR, Loudoun Parks and Recreation, and a local graphic arts designer to develop a poster about clean water and Catoctin Creek that can be displayed in local business establishments to promote clean water for this scenic river and provided to stakeholders at local events.
- **Report of the Water Quality of the Catoctin Watershed** – LWW will prepare an annual report for stakeholders that profiles the water quality in the Catoctin watershed. The report will include information from the Catoctin TMDL and the IP,

as well as graphic analyses of water quality data. The report will be updated yearly using monitoring data from the TMDL IP.

- **Watershed Display at Local Events** – LWW will provide a display at local fairs and events promoting clean water and recreation uses in the Catoctin Watershed. This will include the development of handout materials on the TMDL IP, and information on how citizens can support the restoration of good water quality.

Projected Costs for a Community Outreach and Educational Program

Funding is need for a community focused outreach and educational program if the Catoctin TMDL IP is to be successful. LWW is the only local watershed organization prepared to commit to providing an outreach and educational program to support the TMDL IP. The program will need to include a part-time paid coordinator to develop educational materials, and provide organization and technical support for the educational activities because of the needed scope of the program. **Table 1** provides a summary of projected costs.

Table 1. Projected Costs for Education Program Provided by Loudoun Watershed Watch.

Year	Educational Materials	Program Coordination	Annual Cost
1	\$7,000	\$5,000	\$12,000
2	\$2,000	\$5,000	\$7,000
3	\$2,000	\$5,000	\$7,000
4	\$2,000	\$5,000	\$7,000
5	\$2,000	\$5,000	\$7,000
Total	\$15,000	\$25,000	\$40,000

Cost Assumptions:

- **Educational Materials:** Includes printing educational materials, yearly report on water quality, Catoctin Stream Poster (@ \$5000) during 1st year, educational handouts, Annual Catoctin Stream Day Event, Catoctin Watershed Website materials (\$65/hr for website maintenance and updates), monthly email newsletter, and display materials for public events.
- **Program Coordination:** Based upon \$25/hour, 8 hours/week, 25 weeks/year.