

Response to Comments Document

Opequon Creek Watershed TMDL Implementation Plan Frederick and Clarke Counties, Winchester Virginia June 19, 2006

Jay Banks, Urban Forester for the Town of Leesburg :

I just quickly scanned the document and failed to see any significant consideration for trees. Recent research for stream quality has found that an urban area needs 44.6% tree cover to maintain a "good" quality rating for a receiving stream.

***Response:** Although the document repeatedly refers to 'riparian buffers', it does not specify that these buffers are forested. The Implementation Plan will be revised to include the various removal efficiencies of different types of buffers and additional benefits of forested buffers and recommend forested buffers as the preferred option. Thank you for your comment.*

Jim Lawrence, The Opequon Watershed, Inc. and Lord Fairfax Soil and Water Conservation District:

Focusing on a small watershed with all the characteristics of Abrams and Opequon would serve as a good demonstration for implementing the strategies of the TMDL-IP (Clean Up Plan). Redbud Run would be ideal for this purpose. A number of resource protection efforts are underway in the lower portions of the watershed. A comprehensive approach to managing the entire watershed with its diverse land-use and potential for development in the upper sections should be pursued. Redbud Run has all the needed components to serve as a model watershed. There is good base line data on water quality and aquatic resources and those efforts will be increased through efforts of local community watershed organizations, VA DEQ and the Department of Game & Inland Fisheries. It will be possible to quantify the impacts from the upper watershed and hopefully tract the efficacy of low impact development techniques and innovative best management practices. The following describes the current efforts underway and how Redbud Run could illustrate the multiple benefits of watershed management planning.

This initiative is a multifaceted project involving a diverse group of partners. Winchester Trout Unlimited, The Opequon Watershed, Inc. (TOW), and Lord Fairfax Soil & Water Conservation District have worked with the City of Winchester and the Shenandoah Valley Battlefields Foundation to implement Conservation Reserve Enhancement Program (CREP) in the headwaters of the lower section of Redbud Run. CREP is a state and federal program that provides cost share, along with incentive and rental payments to exclude livestock from streams and restore riparian buffers by planting trees. The Virginia Department of Game & Inland Fisheries (DGIF) has reintroduced native brook trout to the stream as a result of this protection.

The Shenandoah Valley Battlefields Foundation and the Civil War Preservation Trust have permanently protected over 350 acres in the corridor, which covers five miles to the confluence with Opequon Creek. The Battlefields Foundation and Trout Unlimited negotiated with a developer to lessen the impact on the stream through best management practices (BMPs) and permanent land protection. As a result, 30 acres and three-quarters of a mile of stream from a 155-acre tract were donated to DGIF in late 2004.

The project partners are working closely with DGIF and Frederick County on the development of a management plan for the preservation parcel. The group is also working with the Frederick County Schools Administration to involve students from nearby Millbrook High and Redbud Elementary. A variety of opportunities exist on both the DGIF property and the adjoining Civil War Preservation Trust property. Trail design and construction, tree planting and control of invasive species, natural and historic interpretation, water quality monitoring, fish population surveys, and habitat assessment are some of the projects in which students can participate and receive instruction from volunteers and DGIF staff. Winchester Trout Unlimited also will sponsor the Trout in the Classroom program where students raise fingerlings to be released in Redbud Run.

***Response:** A model watershed concept can be included in Chapter 9, which outlines other watershed plans and programs that can be integrated with the Implementation Plan.*

Redbud Run and Opequon Creek are on the state's impaired waters list for excessive bacteria and inability to support aquatic life. A Total Maximum Daily Load Implementation Plan (TMDL-IP) to reduce pollutants to meet water quality standards has recently been completed. The next step for the TMDL-IP, also referred to as the "Clean-up Plan," is the formation of an Action Committee to educate and seek endorsement from citizens, riparian landowners, and decision makers in order to implement specific strategies of the plan. Also being considered is the formation of a regional Natural Resources Advisory Board, which was originally called for by the Winchester-Frederick Community Consensus Coalition in its Water Resources Management Position Paper. Such an advisory board would be a critical source for information to address natural resource conservation at a variety of levels in the local decision making processes. Studies are presently being done in Frederick County to review ordinances and zoning in both the rural areas and the Urban Development Area (UDA). The Natural Resources Advisory Board could serve as the mechanism to integrate strategies from the Clean-up Plan and the basic principles of Green Infrastructure into local ordinances and comprehensive plans.

***Response:** The Natural Resources Advisory Board could support the Opequon Action Team, which the Steering Committee recommended be developed to guide implementation of the plan. A member of the Action Team could be designated as liaison to the Board to keep them abreast of water quality issues in the watershed.*

The water quality challenge for Redbud will be in the upper watershed, which is within the Frederick County UDA. Water quality and aquatic life can be severely impacted by

storm flows from this rapidly urbanizing area. Development of the Redbud Run Greenway and the involvement of Frederick County schools will raise awareness about the pristine and unique qualities of lower Redbud Run. The project will serve as a demonstration highlighting the many benefits and facets of natural resource conservation. It is also a tangible connection that the public and decision makers can look to as support for current and future initiatives such as the Frederick County Easement Authority, funding for purchase of development rights, and the proposed Natural Resources Advisory Board.

Response: *Thank you for your comments.*

September 27, 2006

Jay Banks
Town of Leesburg
25 West Market Street
Leesburg, VA 20175

Dear Mr. Banks:

Thank you for your comments on the Opequon Creek Watershed Total Maximum Daily Load (TMDL) Implementation Plan. DEQ has responded to your comments and revised the final draft of the report appropriately. Your comments concerned the lack of significant consideration for trees in the draft document, although increased tree cover has a demonstrated positive relationship to stream health. Although riparian buffers are included as an essential piece of the plan, trees and their importance are not specifically mentioned. The document has been revised to detail bacterial and sediment removal efficiencies of different types of buffers, and recommend forested buffers as the preferred option for riparian buffers due to their added benefits. Please see the enclosed Response to Comments Document that details the responses to all comments made on the Implementation Plan.

Your interest and support of the TMDL and Implementation Plan process is greatly appreciated. Please feel free to contact me at (540) 574-7870 with further questions or concerns.

Sincerely,

A handwritten signature in black ink that reads "Tara L. Sieber". The signature is written in a cursive style with a long horizontal stroke at the beginning.

Tara Sieber
Regional TMDL Specialist

September 27, 2006


Jim Lawrence
The Opequon Watershed, Inc.
408 Marion Street
Winchester, VA 22601

Dear Mr. Lawrence:

Thank you for your comments on the Opequon Creek Watershed Total Maximum Daily Load (TMDL) Implementation Plan. DEQ has responded to your comments and revised the final draft of the plan appropriately. Your comments concerned the inclusion of a model watershed concept to showcase some of the recommended practices in the plan as well as the formation of a Natural Resources Advisory Board. The document has been revised to include the Redbud Run model watershed concept. The plan recommends the formation of an 'Opequon Action Team' to guide the implementation phase. The Natural Resources Advisory Board could support this Action Team and vice versa. Language to this effect was included in the document. Please see the enclosed Response to Comments Document that details the responses to all comments made on the Implementation Plan.

Your interest and support of the TMDL and Implementation Plan process is greatly appreciated. Please feel free to contact me at (540) 574-7870 with further questions or concerns.

Sincerely,



Tara Sieber
Regional TMDL Specialist