

# Benthic TMDL Study for the North Fork Catoctin Creek Watershed

## *Response to Comments on the August 3, 2015 Public Meeting*

### **Introduction:**

The first public meeting for the North Fork Catoctin Creek Watershed Benthic TMDL project was held on August 3, 2015 at the Purcellville Library in Purcellville, Virginia. DEQ presented the results of the draft stressor analysis, which identified the most probable stressors (pollutants and non-pollutants) to the benthic communities in the North Fork Catoctin Creek watershed. The draft stressor analysis identified the pollutant stressor of sediment and recommended that this stressor be addressed by the development of a TMDL. The draft report also identified the non-pollutant stressor of low flow as contributing to the benthic impairments in the watershed. The public comment period started on August 3, 2015 and closed on September 2, 2015, allowing for a 30 day comment period for the materials presented at the meeting. Two comments were received during the comment period. The list of commenters, their affiliation, and the date comments were received is provided in the table below.

<b>Comments submitted following the August 3, 2015 Public Meeting</b>			
<b>Name</b>	<b>Affiliation</b>	<b>Date Submitted</b>	<b>Link to Comments</b>
Bob Ryan	Citizen	August 25, 2015	<a href="#">Comment</a>
David Ward	Loudoun County	September 2, 2015	<a href="#">Comment</a>

Each received comment is presented in its entirety. For each comment, the DEQ response follows the comment and is designated by italic text and a “DEQ Response” header.

**Organization: Citizen**  
**Contact: Bob Ryan**  
**Received on: August 25, 2015**

Thanks for your presentation. The meeting was very informative. I do have a few comments on the silt conclusion and formulating TMDL. You have identified silt as a major problem and cause. Before formulating a TMDL to improve the situation, wouldn't it be helpful to identify the source(s) of the silt? What is in the silt--where did it originate? I.e. Is it agricultural runoff, is it development runoff from construction sites, is it from stream bank erosion? Then the TMDL could be targeted at the source, and not just at removal of the results which is silt downstream.

### ***DEQ Response***

*Thank you for your attendance and participation at the public meeting.*

*The TMDL process to address the biological impairments is completed in two phases. The first phase is to determine the cause(s) of the impairments in the benthic community, or the stressor identification analysis. The second phase is the development of the TMDL, which is the total amount of a pollutant that a waterbody can receive and still meet water quality standards. The first phase of the North Fork Catoctin Creek project concluded with the stressor identification analysis identifying low flow as a stressor to both listed benthic impairments in the North Fork Catoctin Creek, and sediment as a stressor to the downstream benthic community. A TMDL will be developed for the sediment stressor.*

*During the TMDL development phase of the project, the source characterization for sediment will be conducted. Sediment loads originating from various sources will be estimated using land use and soil information. Sediment sources that will likely be considered during the development of this sediment TMDL include pervious and impervious surfaces, stream channels, land disturbing activities (construction stormwater permits), and domestic sewage point sources (domestic sewage general permits). The TMDL will identify the current sediment loads from these sources and determine reductions in sediment that are needed from each source for water quality standards to be met. The identification and targeting of specific sites is part of the strategy during TMDL implementation planning.*

**Organization: Loudoun County**  
**Contact: David Ward**  
**Received on: September 2, 2015**

Staff at Loudoun County Government have reviewed the July 31, 2015 Draft Stressor Analysis for the North Fork Catoctin Creek Benthic TMDL as posted at [http://www.deq.virginia.gov/Portals/0/DEQ/Water/TMDL/TMDLDocumentation/NFCatocctin/NFCatocctin\\_DraftSA\\_080315.pdf](http://www.deq.virginia.gov/Portals/0/DEQ/Water/TMDL/TMDLDocumentation/NFCatocctin/NFCatocctin_DraftSA_080315.pdf)

We understand that Section 303(d) of the Clean Water Act (CWA) and the United States Environmental Protection Agency's Water Quality Planning and Management Regulations (40 CFR Part 130) require states to develop total maximum daily loads (TMDLs) for water bodies that are exceeding water quality standards. Furthermore we understand that during TMDL development for North Fork Catoctin Creek, there was a need to identify the most probable stressor for the impaired water. The Stressor Analysis report, once finalized, will be submitted to EPA for approval and then listed at <http://www.deq.virginia.gov/Programs/Water/WaterQualityInformationTMDLs/TMDL/TMDLDevelopment/StressorAnalysisReports.aspx>

We find the report to be complete, comprehensive and accurate. Furthermore, we concur with the summary recommendations in Section 5.4 of the report:

*The upper NF Catoctin Creek (VAN-A02R\_NOC03A02) stream segment has a minor impairment to its aquatic life use primarily due to low-flow conditions. The upper NF Catoctin Creek may be affected by slightly elevated levels of nitrogen and phosphorus, but not sufficient to warrant a TMDL. It is recommended that this stream segment be re-classified as a Category 4C water, as the impairment is not caused by a pollutant, and, therefore, no TMDL is required.*

*The lower NF Catoctin Creek (VAN-A02R\_NOC01A00) stream segment has a slightly greater impairment to its aquatic life use that has been monitored over a longer period than the upstream site. In addition to stress brought on by extended no-flow conditions, the benthic community in the lower NF Catoctin Creek has been affected by other stressors over time, as shown by other periodic low VSCI scores during other flow regimes than no-flow periods. Sediment is the most probable additional stressor in the lower NF Catoctin Creek, although nutrients and organic matter may be additional minor sources of stress on the benthic community. Therefore, it is recommended that a TMDL be developed for sediment to address the aquatic life use impairment on the lower NF Catoctin Creek stream segment.*

Our review of the Draft Stressor Analysis Report is based on independent review of many of the data sources used in the analysis and attendance at two Technical Advisory Committee meetings.

Thank you for the opportunity to both review the report and be engaged in the TMDL development process.

#### ***DEQ Response***

*Thank you for your support of and participation in the North Fork Catoctin Creek TMDL project. It is noted that the final stressor analysis report will be posted on DEQ's Stressor Analysis website as noted in the comment, however the report does not need to be sent to EPA for approval since the stressor analysis recommendation is to proceed with TMDL development for sediment.*