#### Comment Response Document Regarding the Total Maximum Daily Load (TMDL) of Sediment for the Potomac River Montgomery County Watershed, Montgomery County, Maryland

The Maryland Department of the Environment (MDE) has conducted a public review of the proposed TMDL of sediment for the Potomac River Montgomery County Watershed. The public comment period was open from June 23, 2011 through July 22, 2011. MDE received two sets of written comments.

The commentors, their affiliations, the date comments were submitted, and the numbered references to the comments submitted are identified below. In the pages that follow, comments are summarized and listed with MDE's response.

Author	Affiliation	Date	Comment Number
Meosotis Curtis	Montgomery County Department of Environmental Protection	July 21, 2011	1 – 6
George	District of Columbia Department of the	July	7
Onyullo	Environment	26,2011	/

# **List of Commentors**

# **Comments and Responses**

 The commentor agrees with the approach used by MDE to develop a TMDL for the Potomac River Montgomery County Maryland 8-Digit (MD 8-Digit) watershed that is specifically related to the support of aquatic life. The commentor states that, similar to MDE's Biological Stressor Identification (BSID) analysis for the watershed, Montgomery County's stream resource condition monitoring has also identified flow and associated sediment as one of the causes of the biological impairment in the non-tidal Potomac River Montgomery County MD 8-Digit watershed. The county is currently using the results of their stream resource condition monitoring to set priorities for retrofit and restoration project inventories to reduce flow and pollutants being carried downstream.

**Response**: MDE is pleased to learn that the county's biological monitoring data and subsequent stressor identification analysis are in agreement with the Department's analyses.

2. The commentor points out MDE's reference to Montgomery County's third-round Phase I municipal separate storm sewer system (MS4) Permit [MDE permit #: 06-DP-3320; National Pollutant Discharge Elimination System (NPDES) permit #: MD0068349] in Section 5.0, the Assurance of Implementation, of the main TMDL report and in the point source technical memorandum. This revised permit was issued in February, 2010, with the requirement that Montgomery County submit implementation plans to meet assigned NPDES Regulated Stormwater Wasteload Allocations (WLAs) for US Environmental Protection Agency (EPA)

### FINAL

approved TMDLs within one year after issuance. The commentor goes on to state that a draft Countywide Coordinated Implementation Strategy was submitted on February 16, 2011, and is available on-line at:

http://www.montgomerycountymd.gov/dectmpl.asp?url=/content/dep/water/wris.asp#CCIS.

The county says that the Strategy provides an inventory of best management practices (BMPs), costs, associated impervious acres, and pollutant load reductions, as well as timelines to address pollutants, such as bacteria, nutrient, sediment, and trash, being discharged through the County's storm drain system. The county is awaiting MDE's comments on the approach, assumptions, and projects for compliance with MS4 permit requirements. They will then be able to move forward with this approach for additional TMDLs as they are approved by EPA and associated NPDES Regulated Stormwater WLAs are provided to the county.

**Response**: MDE is pleased to learn that the county has completed this draft implementation plan. MDE's Science Service Administration (SSA) has had the opportunity to review this document and provided comments to MDE's Water Management Administration (WMA). The county should contact WMA directly for feedback on these comments.

3. The commentor says that the Assurance of Implementation (Section 5) of the TMDL does not accurately describe the County's MS4 permit requirements for watershed restoration. The permit does not require "the jurisdiction to retrofit 20% of its existing urban land area every permit cycle." The actual language in Section III. G. of the permit issued by MDE states that the County "complete the implementation of restoration in a watershed, or combination of watersheds, to restore an additional twenty percent of the County's impervious surface area that is not restored to the Maximum Extent Practicable (MEP)." There is a significant difference in total urban land, as per the TMDL language, compared to impervious surface area, as per the revised MS4 permit.

**Response**: The commentor is correct, and the language in the Assurance of Implementation Section of the TMDL has been revised appropriately. Thus, when referencing the exact requirements of the revised Montgomery County Phase I MS4 permit, the TMDL now explicitly states that the retrofit requirement is strictly for existing impervious area with failing, minimal, or no stormwater management. Based on guidance from MDE's Stormwater Program, however, any retrofitting activity meant to treat existing urban impervious lands, by default, also treats adjacent urban pervious lands within its drainage area. Thus, constant reductions from both pervious and impervious urban land are accounted for within the TMDL's corollary analysis, which estimates how much of the existing total urban area (i.e., urban areas developed prior to 1985) would need to be retrofit to achieve the required urban land use sediment load reductions.

4. The commentor states that the 20% retrofit requirement in the county's revised MS4 permit is a countywide requirement. Thus, it is very likely that some watersheds will have greater than 20% of the impervious surface area with stormwater management, and other watersheds

will have less than 20%, perhaps significantly less than 20%, of the impervious surface area with stormwater management. The commentor continues and says that the county will set priorities for implementation to meet the 20% impervious retrofit goal based on a combination of factors, including cost-effectiveness and ease of implementation. Additionally, although they are not readily correlated with impervious surface area in the contributing watershed, the county intends to implement stream restoration projects in areas where streambank and channel stabilization is a high priority. The county expects that these projects will provide significant reductions in sediment loadings, as well as other pollutants.

**Response**: MDE recognizes that the 20% retrofit requirement to its existing impervious area with failing, minimal, or no stormwater management, as per the county's revised MS4 permit, is a countywide requirement. The language within the TMDL does not state that this requirement is per watershed, but rather the report states that it is countywide. Furthermore, MDE recognizes that the amount of impervious area lacking sufficient stormwater management within the county varies among different watersheds, primarily based on age of development.

Based on the current Montgomery County Phase I MS4 permit requirements and the theoretical extension of these requirements to all urban stormwater sources, MDE anticipates that the urban sediment load reductions necessary to achieve the TMDL will be achieved by retrofitting impervious areas within the watershed that were developed prior to 1985 (i.e., approximate areas with failing, minimal, or no stormwater management), or an equivalent reduction in sediment loads from other types of stormwater retrofits is necessary. This equivalent reduction in sediment loads can be achieved by methods such as stream restoration, as referenced by the commentor, or other practices, examples of which are listed in Section 5.0, the Assurance of Implementation, of the main TMDL report.

5. The commentor says that on June 15, 2011, MDE distributed draft guidance for NPDES stormwater and restoration goal accounting, which is available on-line at <a href="http://www.mde.state.md.us/programs/Water/StormwaterManagementProgram/Documents/N">http://www.mde.state.md.us/programs/Water/StormwaterManagementProgram/Documents/N</a> <a href="http://www.mde.state-ndf.">http://www.mde.state-ndf.</a>

The commentor continues and says that in the draft guidance, MDE indicates that tracking should occur on a Maryland 12-digit (MD 12-Digit) watershed scale. This is not consistent with the existing MS4 permit, which is based on the MD 8-digit watershed scale, nor is it consistent with the scale used for developing TMDLs. The TMDL NPDES Regulated Stormwater WLAs will be provided at the MD 8-digit watershed scale, and the MS4 permit requires that we develop implementation plans to meet the WLAs from those TMDLs. Watershed scale for tracking required by the MS4 permit should be the same as that used for developing the TMDLs.

**Response**: The commentor is correct that Appendix B of the draft guidance for NPDES stormwater and restoration goal accounting, which lists the required fields for Maryland's urban BMP database when the county is submitting their data, as per Maryland's current

# FINAL

Phase I MS4 permits, does specify that the MD 12-Digit watershed should be reported in the watershed field. The next round of Phase I MS4 permits, however, will allow the jurisdictions to report the MD 8-Digit or 12-Digit watershed code when submitting BMP information. Regardless, this information is required to be tracked in Geographic Information Systems (GIS) format. Therefore, since the data should be geographically explicit and the geographic coordinates are supposed to be reported to MDE as well, it should not matter the watershed scale that is reported to MDE relative to tracking restoration to meet NPDES Regulated Stormwater WLAs.

6. The commentor says that the county is advocating that the TMDLs, whenever possible, address all existing impairments identified within a given watershed. The MS4 permit requires the development of implementation plans within one year after EPA approval. The MS4 permittee faces the likely possibility of having to complete an implementation plan to address one impairment in one watershed in one year and then have to repeat that same effort a few years later when a TMDL for another impairment within the same watershed has been approved. Given the number of watersheds with multiple EPA-approved TMDLs, MDE should consider developing TMDLs for all existing listed impairments by watershed. This would significantly ease the duplication factor for local jurisdictions facing a parameter by parameter approach.

**Response**: MDE understands the county's concerns regarding the time and effort that are put into preparing implementation plans. MDE is currently exploring the possibility of preparing watershed based TMDLS in the future, based on EPA's 2008 draft guidance, *Handbook for Developing Watershed TMDLs*, which is available at <a href="http://www.epa.gov/owow/tmdl/pdf/draft\_handbook.pdf">http://www.epa.gov/owow/tmdl/pdf/draft\_handbook.pdf</a>.

7. The commentor says that the District of Columbia (DC) is interested in how it will be impacted by the TMDL, particularly in the northwest portion of the District.

**Response**: MDE appreciates the District's interest in this sediment TMDL and its impacts on DC. As stated in the TMDL, there is a small portion of the watershed (approximately 1,350 acres) in DC that drains to the watershed's 1<sup>st</sup> through 4<sup>th</sup> order tributaries in Maryland. These 1<sup>st</sup> through 4<sup>th</sup> order tributaries within Maryland have been identified as impaired by sediment impacts to aquatic life. The TMDL was therefore developed for the 1<sup>st</sup> through 4<sup>th</sup> order tributaries, and in order to achieve the TMDL and correct the impairment to aquatic life caused by sediment stressors, a reduction is required from upstream DC loads. However, as stated within the Assurance of Implementation section of the main TMDL report, implementation actions in this area of the watershed are beyond the jurisdictional and regulatory authority of MDE. The Department looks forward to working with the District of Columbia and the EPA to ensure that the Upstream Load Allocations (LAs) presented in this document are achieved to meet Maryland's downstream water quality standards.