



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

Richard Eskin, Ph.D., Director  
Science Services Administration  
Maryland Department of the Environment  
1800 Washington Blvd., Suite 540  
Baltimore, Maryland 21230-1718

MAY 18 2012

Dear Dr. <sup>Rich</sup>Eskin:

The U.S. Environmental Protection Agency (EPA), Region III, has reviewed the report *Water Quality Analysis of Sediment in Potomac River Lower North Branch, Allegany County, Maryland*, which was submitted by the Maryland Department of the Environment (MDE) for final Agency review on September 28, 2011. The Potomac River Lower North Branch (LNB) watershed (MD-02141001) was identified on Maryland's 2010 Section 303(d) list as impaired by sediments (1996); nutrients--phosphorus (1996); methylmercury (2002); metals--cadmium (1996); low pH (1996), and impacts to biological communities (2002). This water quality analysis (WQA) addresses only the sediment impairment in the watershed. A WQA for nutrients was submitted to EPA concurrently with the submittal of this sediment WQA. A WQA for cadmium to address the metals listing was approved by EPA in 2006, and a WQA for low pH was approved by EPA in 2005. The watershed was delisted for methylmercury in the 2010 Integrated Report.

MDE conducted a BSID analysis to evaluate the Section 303(d) sediment listing in the 1<sup>st</sup> through 4<sup>th</sup> order streams of the Potomac River LNB watershed. The results of the BSID analysis did not identify sediment as a potential stressor to aquatic life, nor did it indicate any significant association between current sediment stressors and impaired biological communities within the watershed. Rather, the BSID concluded that the biological impairment in the watershed may be caused by the rainshadow effect, making the Potomac River LNB watershed more drought sensitive than surrounding highland watersheds. MDE also analyzed total suspended solids and benthic macroinvertebrate data at CORE/TREND stations to evaluate the aquatic life of the mainstem. An additional assessment was utilized in the mainstem Potomac River LNB watershed since the BSID analysis is only applicable to 1<sup>st</sup> through 4<sup>th</sup> order streams. The analysis indicated that the observations in the Potomac River LNB watershed are well within the range of observed concentrations at stations assessed as having "Good" or better water quality.

The analyses presented by MDE show that a TMDL for sediment is not necessary in the Potomac River LNB watershed since it was not shown to be impacting the aquatic life of the watershed. Barring the receipt of contradictory data, the *Water Quality Analysis of Sediment in*

*Potomac River Lower North Branch, Allegany County, Maryland*, will be used to support a revision of the Integrated Report sediment listing in the Potomac River LNB watershed from Category 5 (waterbody is impaired, does not attain the water quality standard, and a TMDL is required); to Category 2 (waterbody is meeting some water quality standards, but with insufficient data to assess all impairments) when MDE proposes the revision of the Integrated Report.

Thank you for the opportunity to review the Water Quality Analysis. If you should have any questions, please contact Ms. Helene Drago, TMDL Program Manager, at 215-814-5796.

Sincerely,

A handwritten signature in black ink, appearing to read "Jon M. Capacasa". The signature is written in a cursive style with a large initial "J" and a long horizontal flourish at the end.

Jon M. Capacasa, Director  
Water Protection Division

cc: Melissa Chatham, MDE-SSA