



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

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

SEP 24 2009

Dear Dr. Eskin:

The U.S. Environmental Protection Agency (EPA), Region III, has reviewed the report *Water Quality Analysis of Eutrophication for the Lower North Branch Patapsco River Basin in Anne Arundel, Baltimore, Carroll, and Howard Counties, and Baltimore City, Maryland*, which was submitted by the Maryland Department of the Environment (MDE) for final review on July 22, 2009.

EPA agrees with MDE that current data show that a nutrient Total Maximum Daily Load (TMDL) is not necessary for the Lower North Branch Patapsco River (Patapsco LNB) watershed (MD 02130906). The Patapsco LNB watershed was listed by Maryland on the Section 303(d) List as impaired by nutrients (1996), sediments (1996), and heavy metals (1996), fecal coliform and impact to biological communities (2002); and polychlorinated biphenyls in fish tissue (2008). The Patapsco LNB was delisted for heavy metals in 2005 based on MDE's analysis which showed no heavy metals impairment, except for Herbert Run, where data on copper and lead was inconclusive. Based on subsequent water quality analyses of copper and lead for Herbert Run, the listings for Herbert Run were removed.

The monitoring data collected demonstrated that the Patapsco LNB watershed has met all water quality standards for nutrient loadings. The data presented clearly shows that chlorophyll *a* levels and Dissolved Oxygen concentrations are meeting water quality criteria. Also, results of a Patapsco LNB Biological Stressor Identification analysis did not identify nutrients as a potential stressor or indicate any significant association between current nutrient levels and the degraded biological conditions.

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,

Jon M. Capacasa, Director  
Water Protection Division

cc: Melissa Chatham, MDE-TARSA

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**SUBJECT:** Approval of the Water Quality Analysis (WQA) of Eutrophication for the Lower North Branch Patapsco River Basin in Baltimore City and Anne Arundel, Baltimore, Carroll, and Howard Counties, Maryland.

**FROM:** Helene Drago, TMDL Program Manager *Helene Drago*  
Office of Standards, Assessment and TMDLs (3WP30)

**TO:** Jon M. Capacasa, Director  
Water Protection Division (3WP00)

**THRU:** Larry Merrill, Acting Associate Director *Larry Merrill 9/23/09*  
Office of Standards, Assessment and TMDLs (3WP30)

1. The Water Quality Analysis (WQA) for the Lower North Branch Patapsco River (Patapsco LNB) Basin documented that the impairment of nutrients no longer exists. As such, TMDLs for this impairment are no longer necessary.
2. The WQA for Patapsco LNB Basin (MD 02130906) documented that the nutrient impairment no longer exists since the watershed does not show signs of excessive algal growth. Also, results of a Patapsco LNB Biological Stressor Identification analysis did not identify nutrients as a potential stressor or indicate any significant association between current nutrient levels and the degraded biological conditions.
3. Maryland Department of the Environment received two comments during the public comment period from the Baltimore County Department of Environmental Protection and Resource Management. The comments were appropriately addressed by MDE.