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. Rich Eskin:

The U.S. Environmental Protection Agency (EPA), Region III, has reviewed the report *Water Quality Analysis of Eutrophication for the Potomac River Montgomery County Watershed, Montgomery and Frederick Counties, Maryland*, which was submitted by the Maryland Department of the Environment (MDE) for final review on September 28, 2011. The Potomac River Montgomery County watershed (MD-02140202) has been identified on Maryland's 2008 Section 303(d) list as impaired by nutrients (1996), sediments (1996), impacts to biological communities- 1st and 4th order streams (2006) and toxics: polychlorinated biphenyls (PCBs) in fish tissues- nontidal 8-digit watershed (2008). The 1996 nutrients listing was refined on Maryland's 2008 Section 303(d) list to indicate that phosphorus was identified as the specific impairing pollutant. Similarly, the suspended sediment listing was refined to a listing for total suspended sediments. This water quality analysis addresses only the nutrients/phosphorus impairment. The listing for sediments, impacts to biological communities, and PCBs in fish tissues will be addressed in a separate water quality analysis.

EPA agrees with MDE that current data indicates that a phosphorus Total Maximum Daily Load (TMDL) is not necessary for the Potomac River Montgomery County watershed. MDE recently used its biological stressor identification (BSID) methodology to identify the most probable cause(s) of impairment to aquatic life in the watershed based on readily available physical, chemical and land use data collected from 2000 through 2008. The BSID analysis identified sediment, instream habitat, and water chemistry (e.g., high chlorides, sulfates, conductivity) as potential biological stressors. The BSID identified neither nitrogen nor phosphorus as potential biological stressors.

Additionally, an analysis of the Maryland Department of Natural Resources' CORE/TREND biological monitoring data confirmed that observed dissolved oxygen levels, which can be an indicator of excessive nutrient levels, show no violation of Maryland's dissolved oxygen water quality criterion in the Potomac River mainstem. Therefore, the results of the BSID study, combined with the dissolved oxygen analysis, indicate that aquatic life in the Potomac River Montgomery County watershed is not impaired by nutrients, and that a phosphorus TMDL is not needed at this time.

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

Sincerely,

Signed

Jon M. Capacasa, Director
Water Protection Division

cc: Melissa Chatham, MDE-SSA