

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III

1650 Arch Street Philadelphia, Pennsylvania 19103-2029

Dr. Richard Eskin, Ph.D., Director Technical and Regulatory Services Administration Maryland Department of the Environment 1800 Washington Boulevard, Suite 450 Baltimore, MD 21230

AUG 1 0 2006

Dear Dr. Eskin:

The U.S. Environmental Protection Agency (EPA) Region III has reviewed the report, "Water Quality Analysis of Eutrophication for the Upper North Branch Potomac River, Garrett County, Maryland," which was submitted by the Maryland Department of the Environment (MDE) for final Agency review on July 17, 2006.

EPA agrees with MDE's determination that the recent data show that a nutrient Total Maximum Daily Load (TMDL) is not necessary for the Upper North Branch Potomac River. The Upper North Branch Potomac River (basin code 02-14-10-05) was first listed by Maryland on its 1996 Section 303(d) list of water quality-limited segments as impaired by metals, sediments, nutrients, and low pH. Evidence of biological impacts to the river resulted in 2002 and 2004 listings. This water quality analysis addresses only the nutrient impairment. TMDLs to address mercury, pH, and impacts to biological community impairments will be addressed at a future date.

Although Maryland's water quality standards do not impose a limit on the concentration of nutrients in the water column, its general water quality criteria prohibit water pollutants in amounts that create nuisance or interfere with designated uses. Therefore, elevated chlorophyll a and low dissolved oxygen (DO) are used as indirect indicators of nutrient impairment. For this WQA, MDE used routine monitoring data collected over from June 2000 to June 2002 compared it to the DO criteria of 5mg/L and assessed chlorophyll a, phosphorus, and nitrogen concentration levels. The monitoring data demonstrated that DO concentrations in North Branch Potomac River are within Maryland's standards. The observed DO concentrations did not fall below 7mg/l. Phosphorus, nitrogen, and chlorophyll levels also indicated that they do not cause eutrophication-related water quality impairments. Since the DO quality criteria applicable to the designated use is being met in North Branch Potomac River, a TMDL for nutrients is not necessary to achieve water quality standards in this watershed. If future evidence suggests that DO concentrations in the North Branch Potomac River are contributing to water-quality problems, then MDE will need to readdress the nutrient impairment.



If you have any questions or comments regarding this report, please contact Mr. Thomas Henry, TMDL Program Manager, at (215) 814-5752.

Sincerely,

Jon M. Capacasa, Director

Water Protection Division

Melissa Chatham, MDE-TARSA cc: Nauth Panday, MDE-TARSA

