



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 9 2011

Dear Dr. Eskin:

The U.S. Environmental Protection Agency (EPA), Region III, has reviewed the report *Water Quality Analysis of Nutrients (Phosphorus) in the Deep Creek Lake and Deep Creek Watershed, Garrett County, Maryland*, which was submitted by the Maryland Department of the Environment (MDE) for final review on December 3, 2010.

EPA agrees with MDE that current data show that a nutrient Total Maximum Daily Load (TMDL) is not necessary for the Deep Creek Lake and the Deep Creek Watershed. MDE has identified the waters of the Deep Creek Lake and Deep Creek Watershed (basin code MD-05-02-02-03) as two listings on the Section 303(d) List as impaired by the following: total phosphorus (watershed-1996, impoundment-1998); low pH (Cherry Creek-1996); impacts to biological communities (1<sup>st</sup> through 4<sup>th</sup> order streams-2002); methylmercury (impoundment-2002), and fecal coliform (watershed-2006). A TMDL to address the low pH in Cherry Creek was approved by EPA in 2003, and a TMDL to address the mercury impairment of Deep Creek Lake was approved by EPA in 2004. This Water Quality Analysis (WQA) addresses only the nutrients (phosphorus) impairment.

The monitoring data collected demonstrated that the Deep Creek Lake and Deep Creek Watershed have met all water quality standards for nutrient loadings. Since nutrients can be implicated in the cause of biological impairments, an analysis using Maryland's biological stressor identification (BSID) methodology was performed in the Deep Creek Lake watershed. The BSID found no evidence that nutrients are potential stressors associated with biological impairments, and it identified sediment and pH as possible biological stressors.

Although the Deep Creek Lake impoundment is meeting water quality standards, observations reported by stakeholders during the public comment period of this WQA indicate that nutrients may be causing excess algal and macrophyte growth in localized areas in some near-shore coves. MDE has begun a water quality monitoring study, consisting of nutrient-related physical and chemical analysis including chlorophyll to determine the geographic extent of any localized eutrophication problems and to quantify their impacts. The water quality monitoring is planned for July, August, and September in both 2010 and 2011. Also, MDE plans a dye study in 2011. MDE has stated that it may place localized areas of Deep Creek Lake as Category 5 waters impaired by nutrients at a 12-digit scale or smaller, and to develop a formal

TMDL for those areas in the future, to address any local nutrient impacts identified during the course of the monitoring. EPA looks forward to the results of this monitoring and to discussions regarding future decisions with respect to the Deep Creek Lake.

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,

S/n

Jon M. Capacasa, Director  
Water Protection Division

cc: Melissa Chatham, MDE-TARSA

SEP 16 2007