



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029  
12/27/2006

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

Dear Dr. Eskin:

The U.S. Environmental Protection Agency (EPA) Region III, has reviewed the report, "Water Quality Analyses of Sediment for Town Creek, Allegheny County, Maryland," which was submitted by the Maryland Department of the Environment (MDE) for final Agency review on October 3, 2006.

EPA agrees with MDE's determination that the recent data show that a sediment Total Maximum Daily Load (TMDL) is not necessary for the Town Creek Watershed. Town Creek (basin code 02140512) was first identified on Maryland's 1996 Section 303(d) list of water quality-limited segments as impaired by nutrients and sediments with listings of impacts to biological communities added in 2002 and 2004. The WQA addresses only the sediment impairment in Town Creek. A WQA to address the nutrient impairment is currently in progress. The listings for impacts to biological communities will be addressed separately at a future date.

The WQA of the Town Creek Watershed evaluates whether the watershed's sediment load is above a level to support aquatic life. Maryland currently does not have specific numeric criteria to quantify the impact of sediment on the aquatic health of non-tidal stream systems. Therefore, MDE determined the assimilative capacity of the Town Creek Watershed by using a reference watershed approach that resulted in the establishment of a sediment loading threshold. This threshold is based on a detailed analysis of sediment loads from watersheds identified as supporting aquatic life based on Maryland's biocriteria. The sediment loading threshold was determined to be approximately 3.3 times the sediment load of an all forested watershed. This value is representative of watersheds in the Highland and Piedmont physiographic regions with land use distributions within the range of the reference watersheds.

The Town Creek Watershed was evaluated using the Chesapeake Bay Program Phase V (CBP P5) model and resulted in two TMDL analysis segments which include loads from both Maryland and Pennsylvania. TMDL Segment 1 represents the sediment loads transported from Pennsylvania to the Maryland state line via the Town Creek mainstem, and includes a small section of Maryland in the southeast corner of the watershed. TMDL Segment 2 represents



the majority of the sediment loads generated in Maryland and includes the sediment loads from Pennsylvania that flow into Maryland in the northwest portion of the watershed. The Town Creek Watershed forest normalized sediment load is estimated as 2.0 and 2.1 for TMDL Segments 1 and 2, respectively, which are well below the sediment loading threshold of 3.3. This analysis indicates that sediment loads do not exceed levels that support aquatic health and confirms that the Town Creek Watershed is not impaired by elevated sediment loads to the stream system.

If future evidence suggests that sediment deriving from the Town Creek Watershed is contributing to water-quality problems, then MDE will need to readdress the sediment impairment.

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

Sincerely,

Signed

Jon M. Capacasa, Director  
Water Protection Division

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

