# Comment Response Document Regarding the CBOD and NBOD TMDLs for Georges Creek Allegany and Garrett Counties, Maryland

## Introduction

The Maryland Department of the Environment (MDE) has conducted a public review of the proposed Total Maximum Daily Loads (TMDLs) for carbonaceous biochemical oxygen demand (CBOD) and nitrogenous biochemical oxygen demand (NBOD) loadings in Georges Creek. The public comment period was open from October 29, 2001 to November 26, 2001. MDE received one set of written comments.

Below is a list of commentors, their affiliation, the date comments were submitted, and the numbered references to the comments submitted. In the pages that follow, comments are summarized and listed with MDE's response.

## **List of Commentors**

Author	Affiliation	Date	Comment
			Number
James Stuhltrager &	Mid-Atlantic Environmental Law	November 21,	1 through 4
Taryn B. Kindred	Center, on behalf of the	2001	
	Maryland Chapter of the Sierra		
	Club, the American Littoral		
	Society, and the American Canoe		
	Association		

## **Comments and Responses**

1. The commentor stated that the proposed TMDL violates Maryland's Antidegradation Policy by not demonstrating the change in dissolved oxygen is justifiable as a result of necessary social and economic development.

**Response:** The Department is considering whether Georges Creek will be designated as a Tier II waterbody for dissolved oxygen pursuant to Maryland's Antidegradation Policy (COMAR §26.08.02.04). The proposed TMDL uses 25% of the remaining assimilative capacity between current water quality criteria (5.0 mg/dissolved oxygen) and the average observed value (9.2 mg/l dissolved oxygen) in the computation for the expected minimum dissolved oxygen concentration. The computed 7.5 mg/l minimum dissolved oxygen for Georges Creek will be maintained under the State's Antidegradation Policy. Pending development of regulations providing specific implementation of the policy, MDE considers the TMDL sufficient to maintain high water quality.

2. The commentor stated that the proposed TMDL fails to consider seasonal variations.

**Response:** The Clean Water Act, Section 303(d)(1)(C) states that the TMDL load "... shall be established at a level necessary to implement the applicable water quality standards with

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seasonal variations..." This TMDL establishes a maximum load that meets water quality standards during all seasons of the year. If exceedances of the relevant water quality standards occur, they should occur almost exclusively in the summer season, when increased water temperatures and low flows are most conducive to lower dissolved oxygen levels. The water quality standard thresholds were established with this critical season in mind. However, the TMDL analysis does not focus solely on the summer season.

To rule out winter/spring and combined sewer overflow (CSO) events as critical periods, the TMDL analysis also considers the average high-flow water quality data collected during January to August period, and an average stream discharge of 81.2 cfs to compute the expected dissolved oxygen values under conditions of higher water flow along with higher non-point source loads plus CSO loads, which have the potential to affect water quality.

In summary, the analysis considers both low-flow and wet weather conditions. The seasonal aspects of the water quality endpoint (standards) and the seasonal aspects of the loads and their resultant fate in the water body system are considered by this analysis. Thus, the analysis is comprehensive with regard to consideration of seasonal variations.

3. The commentor stated that the proposed TMDL inadequately considers critical conditions.

**Response:** See response to Comment 2 above.

4. The commentor stated that the proposed TMDL fails to address implementation.

Response: Maryland has several well-established programs that will be drawn upon as part of the future implementation effort. These include the State Water Quality Improvement Act of 1988 and the federal Clean Water Action Plan framework. Also, Maryland has adopted a cyclic monitoring strategy to assure that future evaluations are conducted for all TMDLs that are established. Although formal implementation planning is currently beyond the scope of the TMDL development process, Maryland is committed to enforcing applicable laws and supporting voluntary initiatives necessary to implement this and other TMDLs. The technical memorandum provides information that is intended to facilitate future stakeholder dialogue on implementation planning. Neither the Clean Water Act nor current EPA regulations require states to develop a detailed implementation plan as part of the TMDL development and approval process. Maryland's rationale for not including a detailed implementation plan within the TMDL documentation is to preserve flexibility for those other government programs and stakeholders currently developing mechanisms to reduce non-point source loads to Georges Creek and other waters of the state.

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# References

Code of Federal Regulations, 40 CFR 130.2(i) Code of Maryland Regulations, 26.08.02.04