

Comment Response Document
Regarding the Total Maximum Daily Loads of Fecal Bacteria for the Non-Tidal Gwynns Falls Basin in Baltimore City and Baltimore County, MD

The Maryland Department of the Environment (MDE) has conducted a public review of the proposed Total Maximum Daily Loads (TMDLs) of Fecal Bacteria for the Non-Tidal Gwynns Falls Basin. The public comment period was open from August 4, 2006 through September 5, 2006. MDE received one set of written comments.

The table below identifies the author, his 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
Erik Jones	Gwynns Falls Watershed Association	September 7, 2006	1 through 6

Comments and Responses

1. The commentor states that generally speaking, the Gwynns Falls Watershed Association (GFWA) is disappointed with the Department's determination that a *"reduction of fecal bacteria loads from all sources including wildlife are beyond the maximum practicable reduction (MPR) targets ... [and that] the extent of the fecal bacteria load reductions required to meet water quality criteria in the watershed of Gwynns Falls are not feasible by effluent limitations or by implementing cost-effective and reasonable best management practices. Therefore, MDE cannot provide assurance that the TMDL allocations can be implemented"*.

Response: The statement as shown above and in the Public Review version of the report has been modified and now reads: *"... reduction of fecal bacteria loads from all sources including wildlife are beyond the maximum practicable reduction (MPR) targets. The extent of the fecal bacteria load reductions required to meet water quality criteria in the subwatersheds of the Gwynns Falls are not feasible by effluent limitations, nor by implementing cost-effective and reasonable best management practices. Therefore, MDE proposes a staged approach of implementation beginning with the MPR scenario, with regularly scheduled follow-up monitoring to assess the effectiveness of the implementation plan"*.

MDE's original statement commented upon is based on the acknowledgement of the physical and technical constraints in terms of the abilities of known management practices to effect such large reductions of bacterial loads. MDE does not suggest that counties or other entities do not work to implement all possible control measures. Rather, implementation will be initiated through an iterative, adaptive management based process, whereby the most cost effective and efficient control measures to be implemented first.

2. The commentor states that from the draft report, it appears that MDE is largely relying on a combination of the Baltimore City and Baltimore County consent decrees to provide the bulk of any remedy for addressing the serious problem of fecal bacteria in the Gwynns Falls watershed. With associated work related to these consent decrees not expected to be completed until 2016 in the City and 2020 in the County, the report seems to suggest a preference for delaying implementation of real solutions to address this problem.

Response: Under EPA regulation, the TMDL program is not required to include an implementation plan in a TMDL document. Therefore, MDE does not intend for this document to convey how implementation will occur. In addition to efforts by Baltimore City and Baltimore County to repair their sewer infrastructure preventing the overflow of sewage into the Gwynns Falls, an implementation plan will be developed for application of BMPs after approval of the TMDL. It is beyond the responsibility of the TMDL Development Program to develop this plan.

3. The commentor states that while MDE's report does speak of an intention to achieve reductions through "an iterative process that first addresses those sources with the largest impact on water quality and human health risk," the focus seems to be less on the most effective Best Management Practices (BMPs) available, instead choosing to emphasize strategies with "ease of implementation and cost". While the commentor understands the need to consider costs, GFWA would argue that the health concerns associated with fecal bacteria deserve to be addressed by stressing the true best practices available, not necessarily the cheapest.

Response: Please see the response to Comment 1.

4. The commentor states that the GFWA notes that the report speaks of "traditional" water quality modeling as "very expensive and time-consuming". Instead, MDE advocates a poorly described "analytical method" in its place. GFWA believes that water quality monitoring is the generally accepted best methodology and believes it is highly important to determining bacteria loads because of its incorporation of decay rates.

Response: As explained in the TMDL report, MDE acknowledges the inherent uncertainty in developing traditional water quality models for the calculation of bacteria TMDLs for the reasons explained in this section of the report. In addition, traditional water quality modeling not only is very expensive and time consuming but also, as identified, contains many potential uncertainties. There is no scientific proof that a traditional water quality model is more accurate in predicting bacteria loads due to significant variability in bacteria growth and decay. MDE believes traditional water quality models should be reserved for specific constituents and complex situations. In this TMDL, MDE applies an analytical method which, when combined with BST, appears to provide reasonable results, and allows addressing more impaired streams in the same time period than if using the traditional water quality modeling methods. This analytical method is supported by extensive water quality data from an ambient water quality and bacteria source tracking survey.

5. The commentor argues that the Margin of Safety incorporated into the Gwynns Falls TMDL is inadequate. The commentor believes that the 5 percent Margin of Safety reduction used by MDE is not sufficient to cover for the uncertainty that exists in the amount of bacteria in the loads.

Response: TMDLs are required to include a MOS to account for uncertainties in a manner that is conservative toward protecting the environment. There are no strict guidelines or methodologies provided by the EPA for selecting a MOS, except to suggest that a MOS may be an explicit value held aside or conservative assumptions built into the analysis. The margin of safety proposed in this TMDL analysis is based on other TMDLs approved by EPA and was adopted in consideration of built-in conservative assumptions of the analysis. The MOS for the TMDL was selected with the understanding that the analysis and the MOS may be revised in the future as better information comes available.

6. The commentor argues that there is a need for specifics in the report both in terms of approaches being advocated – *i.e.*, what specific methodologies is MDE considering implementing to address the TMDLs – and in terms of a timeline associated with activities to address the TMDLs.

Response: Neither the Clean Water Act nor 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 allow flexibility for those other government programs and stakeholders currently developing mechanisms to reduce bacteria loads to Gwynns Falls and other waters of the state.