

Water Quality Board Policy & Philosophy in the
Development of Total Maximum Daily Loads
May 18, 2011

Introduction & Purpose

This document is intended to provide direction to the Division of Water Quality (DWQ) in the development of Total Maximum Daily Loads (TMDLs). TMDL development is a required activity under the federal Clean Water Act and has been delegated to the DWQ by the Environmental Protection Agency (EPA). Depending on the nature of the water quality impairment, the number of point and nonpoint sources that contribute to the impairment, and the complexity of the science needed to adequately determine causes and solutions, TMDL development can be a very resource-intensive process. Accordingly, this document is provided to guide the DWQ in this process, recognizing that each TMDL is often unique.

Stakeholder Involvement

It is the Water Quality Board's (WQB's) intent that TMDLs be developed in a very open and transparent fashion with rigorous stakeholder involvement. DWQ will utilize a Technical Advisory Committee in the development of each TMDL. Effort and concern will be given to encourage representation from all interested parties in an attempt to assure key stakeholders are involved. The Division will make every effort utilizing the best mix of the following methods to assure optimal stakeholder involvement in a TMDL: newspaper articles and notices, letters, emails, and public meetings. If DWQ feels it is unable to attract the attention of key stakeholders, then the WQB should be so advised as early in the process as possible.

Preliminary Board Briefing

The Division shall brief the Water Quality Board when undertaking a new or revised TMDL. Issues such as verification of the impairment listing, beneficial uses of the waterbody including those that are deemed impaired, data adequacy and proposed timeframes for the major steps in the upcoming TMDL shall be included in the Board briefing.

Third Party Review

The WQB recognizes that in the field of engineering and science, there is rarely a perfect conclusion that all parties agree on. In the process of stakeholder involvement there will inevitably be individuals or groups that

do not agree with DWQ's direction or findings on a given TMDL or aspect of a TMDL. This can often happen when a particular stakeholder stands to bear a significant portion of the implementation costs of a TMDL or there is a particular matter that is the focus of some group or individual. It is the WQB's desire to assure that all parties involved with or who may be impacted by a TMDL have a fair opportunity to communicate their views and perspectives to the WQB in addition to opportunities provided in the normal stakeholder process. This may require the involvement of an independent third party to review the stakeholder perspective(s) and DWQ's direction or finding. Accordingly, the WQB will address this situation as follows:

1. Individuals or parties taking issue with DWQ's direction or finding on a TMDL may request a third party review of all or parts of a TMDL by presenting their concerns at a regularly scheduled WQB meeting. It is the Board's preference that this request be made after a draft TMDL has been compiled but prior to the formal 30 day public notice period required by the Division of Administrative Rules (DAR) process (see attached flow diagram). It is the desire of the Board that the stakeholder process involving a technical advisory committee (TAC) be fully utilized to exhaust all possible remedies for aggrieved parties prior to any 3rd party review authorized by the Board. The Board also recognizes that an aggrieved party may petition the Board for relief at any time during the TMDL process.

Whenever an aggrieved party petitions the Board for relief, DWQ will also present its perspective on the issue(s) in question at the same WQB meeting. The WQB will consider the merits of the issues presented and determine if a third party review is warranted.

2. If the WQB determines that a third party review is warranted, it may select an independent third party reviewer in accordance with State Purchasing requirements. The WQB may bear the costs of having the third party review performed or based on a Board decision, require the 3rd party to financially support a review.
3. The WQB will consider the results of the third party review and provide direction to DWQ as to any needed modifications the TMDL in question may require.

Addressing Uncertainty

Recognizing that virtually all engineering and scientific work includes some uncertainty, particularly when dealing with natural ecological systems, a reasonable method must be undertaken to account for uncertainty yet stay within reasonable bounds to arrive at an achievable goal. Uncertainty is often addressed using a margin of safety (MOS) to account for less than perfect data, modeling, understanding of linkages, etc.

A margin of safety can be either implicit, meaning included in conservative assumptions in the analysis or modeling, and/or explicit, e.g., adding on a certain percentage to an endpoint or reductions in loading to help insure the desired endpoint is achieved. Since the endpoint or target selected for any TMDL may result in significant implementation costs, it is important that the MOS be appropriately balanced between addressing uncertainty and the increased cost of implementation.

It is the WQB's direction to DWQ that margins of safety be carefully selected or identified and explained. Typically the explicit MOS values should fall between 5% to 10% depending on uncertainty and the cost of TMDL implementation. The rationale for selecting the explicit MOS, as well as a description of the implicit MOS, should be clearly identified in the TMDL.

DWQ is also directed to include a description of the significant assumptions incorporated into the development of the TMDL. It is expected that DWQ engage stakeholders in the selection of any MOS to be incorporated in a TMDL prior to the final draft document being brought to the WQB for initiation of the public comment period.

TMDL Approval Process

