

US EPA ARCHIVE DOCUMENT



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COMMENTS ON PROPOSED TOTAL MAXIMUM DAILY LOADS FOR NUTRIENTS IN THE MALIBU CREEK WATERSHED

The following are the comments of the City of Westlake Village concerning the proposed Total Maximum Daily Loads (TMDLs) for nutrients in the Malibu Creek Watershed (TMDLs Document).

- We are very concerned that this TMDL vastly oversimplifies the complex dynamic behind algal growth in receiving waters and falls short of establishing a sound basis for establishing the proposed numeric limits. Specific issues include:
 - The absence of any discussion of limiting sources other than nutrients. Sunlight intensity, water temperature, dissolved oxygen, water depth and flow rate all contribute to the potential for algal growth in water bodies.
 - No consideration of limiting nutrients for algal growth. EPA has designated 0.1 mg/L as a standard for total P based on a 1970s study and designated a total N value of 1 mg/L assuming a 10:1 nitrogen to phosphorus (N:P) ratio, notwithstanding that the TMDL document acknowledges that there is uncertainty about types of nutrients that control algal growth in the Malibu Creek watershed.
 - No Consideration of Available Forms of Nutrients for Algal Growth The TMDL document uses total N and total P rather than forms of N and P available for algal growth. Using total N and P could lead to the control of N and P loads that do not support algal growth.
 - The absence of site-specific evaluation of algal growth. We believe that the nutrient assimilative capacity of a water body should be based on site-specific evaluations considering the water body's eutrophic response to site-specific factors such as environmental

variables and background nutrient concentrations. As noted above, the eutrophication process depends on many variables that cannot be generalized among water bodies.

- o Lack of specific information in the source assessment and load allocations. These elements do not provide sufficient guidance for implementation of the TMDL. For example, Tables 29 and 30 of the TMDL document state that the summer nutrient loading from residential and commercial areas should be reduced by 90% without specifying the sources and their associated nutrient load reductions within the developed areas. Such a situation would constitute a challenge for municipalities due to the lack of necessary source identification and pollution reduction quantification for efficient reduction of pollution.

Therefore, we request that EPA delete its implementation recommendations, as they are neither required nor appropriate to be included at this time. If EPA believes that the recommendations should be contained as an informational item in the TMDLs document, it should so explicitly indicate. Further, the RWQCB must be given clear guidance that it is not required to implement this TMDLs Document, so long as it timely develops its own TMDL program and that program meets the requirements of the Clean Water Act.

EPA Response: *The targets developed in this TMDL are based on values in EPA guidance that have been supported by the scientific literature and are consistent with background conditions in the watershed. The targets are based on narrative water quality objectives and do not constitute numeric water quality standards. While recognizing the complexity of algal dynamics, it is appropriate to make certain simplifying assumptions in the development of the nutrient TMDL. Algae cannot grow without nitrogen or phosphorous, and actions to control nutrients will help control algal growth. We understand that other factors in addition to nutrient levels may also affect algae. However, we believe the available evidence indicates nutrient controls are necessary to reduce algal growth. We are aware that the form of nitrogen or phosphorous may be important, however many studies have indicated that TN and TP are better predictors of algal growth than species such as nitrate and phosphate. Furthermore, nitrogen and phosphorous may be transformed through biological processes, necessitating the focus on TN and TP for TMDLs. We have reviewed all the literature on algal dynamics in Malibu Creek watershed and are aware of ongoing studies in the watershed. There is no data at this time to justify development of a site-specific nutrient value. We believe that there is sufficient information in the TMDL to identify the major sources of nutrients to the system for the implementing agencies to begin targeting sources for reduction.*

If the Regional Board establishes its own TMDL for these pollutants, EPA will review that TMDL to determine if it meets the requirements of the Clean Water Act. If EPA approves a Regional Board TMDL, then that TMDL will supercede EPA's. If no Regional Board TMDL is established, however, EPA expects the Regional Board to develop implementation measures for the EPA TMDL.

- We are concerned about the lack of independent peer review with respect to the scientific analyses used to develop this TMDL.

EPA Response: *The HSPF model has been reviewed extensively in the scientific literature. The only portion of the TMDL that might benefit from a peer review would be the assumptions used in the application of this model to the Malibu Creek watershed to estimate source loadings and recommend load reductions. The assumptions made in this TMDL regarding sources were based on information provided to EPA and Tetra Tech by the Regional Board. If more complete or accurate information is available we recommend that this information be provided to the Regional Board for consideration in future TMDL analyses. There is no requirement that EPA TMDLs be peer reviewed.*

- We strongly support L.A. County Department of Public Works' comments on the TMDL document and incorporate them by reference.

We appreciate the opportunity to make these comments, and wish to thank EPA for providing an opportunity for stakeholders to discuss with the agency some of their concerns. We look forward to working with EPA, the RWQCB and other stakeholders in developing appropriate and implementable bacteria TMDLs for the Malibu Creek watershed.

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