

A Guide to the TMDL Process

Spring/Summer 2003

Central Coast Regional Water Quality Control Board



What is a TMDL ?

TMDL stands for a *Total Maximum Daily Load*. This is the amount of a particular material that a waterbody can assimilate on a regular basis and still remain at levels that protect beneficial uses designated for that waterbody.

A TMDL is approved by the Regional Water Quality Control Board, the State Water Resources Control Board and the US Environmental Protection Agency. Once approved, it establishes 1) an allowable amount of a pollutant to a waterbody, 2) proportional responsibility for controlling the pollutant, 3) numeric indicators of water quality, and 4) implementation to achieve the allowable amount of pollutant loading. The process to derive a TMDL and prepare the report that documents this process and recommends implementation, typically takes at least one year, and may take several years, to complete.

How do TMDLs Work ?

TMDLs are developed by analyzing data and information provided by existing or commissioned studies, and/or by stakeholders interested in the waterbody or conditions being investigated. Development results in a clear definition of water quality problems in a waterbody or watershed, a numeric value for the TMDL, and an implementation plan that identifies how the problems will be solved and the TMDL achieved. The implementation plans identify new requirements, based on existing regulations, in conjunction with other existing water quality management activities. The implementation plans identify which requirements or activities (via voluntary or regulatory programs) apply to which agencies, landowners, resource managers, and/or the public. Typically, TMDLs and their implementation plans will be approved by adoption into the Regional Board's Basin Plan.

How are TMDLs Developed ?

Just as each waterbody is unique, each TMDL will be developed with its own

individual character and process reflecting the watershed, the water quality problem, and local stakeholders. However, the following common components will be found in most TMDL Reports:

Problem statement - Describes the water body, impaired beneficial uses, and pollutant(s) causing the impairment; compares data and information about the waterbody to water quality objectives or other environmental indicators and thresholds.

Numeric Targets - Measurable indicators of watershed health. Numeric targets can be either a numeric water quality objective from the Basin Plan, or a numeric indicator associated with a narrative objective of the Basin Plan.

Source Analysis - Assesses the relative contributions of different pollutant sources or causes and the extent of necessary reduction/controls.

TMDL or Loading Capacity - An estimate of how much of a pollutant can reach the waterbody daily, monthly or annually and still remain at levels that protect beneficial uses designated for that waterbody. Common ways of determining the TMDL or loading capacity are: 1) estimating historic loading, 2) estimating loading to a similar (reference) waterbody, or, 3) modeling a watershed's conditions under a scenario in which beneficial uses are protected.

Load Allocations and Margin of Safety - The load allocation describes how much of the TMDL should be attributed to the different sources. Load allocations may be estimated for each land use type, geographic sub-area of a watershed, or responsible agencies or persons (e.g. businesses or landowners). The margin of safety summarizes how the final load allocations account for any uncertainty in the data, or seasonal variations in

watershed conditions. The sum of the load allocations plus a margin of safety equals the waterbody's TMDL or loading capacity.

Implementation Plan - Each TMDL report will include a plan detailing how the allowable load or load reductions will be achieved and what monitoring will be conducted to document that water quality objectives are being met. Typical plans may include elements from California's non-point source pollution control plan, revisions to existing discharge permit requirements at the next permit renewal, issuance of new permits, and initiatives undertaken by local and regional governments. The implementation plans will identify the schedule for implementing the requirements and actions and a completion date for achieving the allowable load.

How can I be Involved in the TMDL Process ?

Because we all share the same waters, public participation is a vital part of the process of developing a TMDL. There are many ways for you to be involved in TMDL activities in your watershed. These include:

Public Participation Approaches -

The Central Coast Region tries to foster public participation during all phases of TMDL development to address as many technical and social issues as possible early in the process. Each TMDL project will have a unique approach to public participation depending on factors such as the size of the watershed, the nature of the problem, or how many interested parties or stakeholders emerge. We invite you to get to know TMDL and Non-Point Source Program staff working with your watershed. These staff are always eager to find any scientific data or historical information you have which may help them understand the watershed.

Public Input Opportunities - There are informal and on-going ways to provide input to a TMDL. Public participation will typically

take one or more of these forms: occasional public workshops; regularly scheduled advisory committee meetings; Regional Board staff presentations at another organization's meetings; or, written requests for comments sent to an interested party mailing list.

Legal Public Comment – TMDLs that result in amendments to the Basin Plan, or other regulatory actions that are based on a new TMDL (such as establishment of a new permit), must be publicly announced for a formal public comment period and approved at a public hearing. Typically, this is conducted as part of one of the Regional Board's regular public meetings and is published in the agenda for that meeting. This provides an opportunity for *written* public comment on Draft TMDLs prior to Regional Board Meetings and an additional opportunity for *verbal* comment at a Regional Board Meeting before a TMDL is approved or implemented.

For More Information

Our website contains more information on TMDLs and a list of links to public participation opportunities for TMDLs in progress in Region 3.

For more information on activities in the watersheds, you may contact:

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About the Central Coast Regional Water Quality Control Board:

Located in San Luis Obispo, we're part of the California Environmental Protection Agency (Cal/EPA). Our mission is to preserve, enhance, and restore the quality of the Central Coast Region's water resources for the benefit of present and future generations. You can contact us by telephone at (805)– 549- 3147.

Visit us on the web at: www.swrcb.ca.gov/rwqcb3/