What is a TMDL?

A **total maximum daily load** (TMDL) is the maximum amount of a specific pollutant that can be assimilated by a stream without causing impairment or violating water quality standards. The allowable amount takes into account all sources of that pollutant in a watershed, including point sources and non-point sources, and requires a portion to be set aside as a margin of safety.

Examples of point sources include discharges from sewage treatment plants and industrial facilities. Non-point sources include indirect sources of the pollutant, for example, overland runoff and deposition from the air.

The water quality standards are based on the federal Clean Water Act's minimum goals that all waters be "fishable" and "swimmable". To this end, the act requires states to assign a designated use (such as recreation, fishing, industrial, etc.) and corresponding water quality standards for each water body within its jurisdiction.

A TMDL is only for one pollutant. If a stream is impaired by three pollutants, three TM-DLs must be developed for that stream.

The process to determine which waterbody needs a TMDL begins with the USEPA requiring states to develop lists of impaired waters, those which do not meet water quality standards. These lists are known as 303 (d) lists, and they are used to determine which streams need TMDLs. States then prioritize which waters need TMDLs most, based on severity of pollution and designated use; they also decide which waters will have TMDLs developed over the next two years. This list is submitted to USEPA every two years (April 1 of even numbered years), and the states then begin to develop TMDLs. USEPA will then either approve or disapprove state lists and TMDLs within 30 days of final submission.

Though all streams and watersheds must be handled on a case-by-case basis, **there are several basic steps or processes that apply to developing a TMDL**. 1.) Data collection (pollutant load, sources, etc.) for impaired water bodies listed on a state's Clean Water Act § 303(d) list; 2.) Data analysis; 3.) TMDL development for impaired water bodies; 4.) Public review and comments; and 5.) EPA approval of the TMDL.

TMDLs do not, however, specify how pollutant loads are to be reduced within a stream or watershed. The TMDL method only determines the total amount of a specific pollutant that a watershed or stream can assimilate without causing impairment or violate water quality standards. TMDLs do not specify by what means a particular pollutant load is to be reduced. Rather, TMDLs allocate the maximum contribution a source category (urban stormwater, agriculture, or industrial, for example) can contribute to the total load. The actual point and non-point source allocations or reductions are implemented by the states through existing regulations and programs.

Key Points:

1. Water quality standards are based on the Clean Water Act's minimum goals that all waters be "fishable" and "swimmable".

 TMDLs specify a pollutant budget that must be achieved in order to meet state water quality standards.

3. TMDLs do not prescribe a method to reduce a given pollutant's concentration.

4. A TMDL is only for one pollutant. Multiple pollutants in a waterbody require multiple TMDLs.

For further information, please see the Toxics and PCB information page at www.drbc.net as well as the USEPA's Mid-Atlantic Water Division TMDL page at www.epa.gov/reg3wapd/ tmdl/pa_tmdl?delaware%20river/index.htm.



