



Chesapeake Bay Program
A Watershed Partnership

Backgrounder

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CHESAPEAKE BAY TMDL (TOTAL MAXIMUM DAILY LOAD)

What is a TMDL?

TMDL – or Total Maximum Daily Load – represents the maximum amount of a pollutant allowed to enter a waterbody so that it will meet the legal water quality standards for that particular pollutant. In other words, a TMDL is a “pollution budget” that identifies the maximum pollutant loadings that will be allowed.

Why is a TMDL being developed for the Chesapeake Bay?

The primary driver for the Chesapeake Bay TMDL is the Virginia TMDL Consent Decree settlement. The Chesapeake Bay was listed in the 1998 Section 303(d) list of impaired waters for Virginia, Maryland and the District of Columbia. This list is required to be submitted by the states under the Clean Water Act. The pollutants causing the impairments are nitrogen, phosphorus and sediment.

Under the Virginia Consent Decree, the final deadline for the development of TMDLs from waters listed on the 1998 list is May 1, 2010, if the state develops the TMDL and May 1, 2011, if EPA develops the TMDL. Since the Chesapeake Bay and its tidal tributaries remain on the 2008 Section 303(d) list of impaired waters for Virginia, Maryland and the District of Columbia, under the Virginia Consent Decree, a TMDL covering the listed and impaired tidal waters will need to be completed by May 1, 2011.

In addition, the Potomac River is listed on the District of Columbia Section 303(d) impaired waters list. This listing was for pH, however, the water quality standards exceedences are the result of algal impacts from excess nutrients. Since the Potomac pH TMDL is directly linked to the Chesapeake Bay TMDL (both related to nutrient controls), EPA received a formal extension of the District Consent Decree to complete the Potomac TMDL under the same schedule as the Chesapeake Bay TMDL.

When will the Chesapeake Bay TMDL be completed?

Under the Virginia Consent Decree, the Chesapeake Bay TMDL must be established by no later than May 1, 2011. The Chesapeake Bay Program partners requested an accelerated schedule to complete the TMDL by December 31, 2010. EPA has committed to the new target date, but its first priority is to develop a TMDL that fulfills all necessary legal requirements and is an effective tool to accelerate Bay restoration.

Who is developing the Bay TMDL?

EPA Region III Water Protection Division has primary responsibility for the completion of the Bay TMDL. The Chesapeake Bay Program Office’s modeling and water quality expertise is prominent in the development process.

Furthermore, the Chesapeake Bay Program’s Water Quality Steering Committee provides the forum for EPA to engage all of the state partners in the development of the TMDL. The Program’s Principals’ Staff Committee will also review and recommend major policy decisions, but ultimately EPA will be the final decision maker.

What is the scope of the Bay TMDL?

The Chesapeake Bay TMDL will address all segments of the Chesapeake Bay and its tidal tributaries that are impaired from the discharge of nitrogen, phosphorus and sediments and listed on the states’ 2008 Section 303(d) list of impaired waters. The TMDL will allocate loadings of nutrients and sediments to all jurisdictions in the Bay watershed including New York, Pennsylvania, West Virginia, Delaware, Maryland, Virginia and the District of Columbia.

What will be included in the Chesapeake Bay TMDL?

As with all TMDLs, a maximum pollutant loading for nitrogen, phosphorus and sediment, necessary to restore the Chesapeake Bay, will be identified. This loading will be further divided among the Bay watershed states and major tributary basins. Also, maximum allowable point and non-point loadings will be identified. When completed, the Chesapeake Bay TMDL will be the largest, most complex TMDL in the country and will cover 64,000 square miles in six states and the District of Columbia.

How will the TMDL promote nitrogen, phosphorus and sediment controls?

Under the Clean Water Act, the TMDL is intended to establish the allowable pollution budget. However, other provisions of the Clean Water Act are intended to implement the TMDL.

The National Pollutant Discharge Elimination System (NPDES) program issues permits to point sources (pollutant discharges through a pipe, such as a municipal wastewater treatment plant) restricting the pollutants in their discharge. Under the Clean Water Act, these NPDES permits must be written consistent with the issued TMDL. Thus, there are direct regulatory provisions for implementing TMDLs for point sources.

Under the Clean Water Act, non-point sources (runoff that comes from diffuse sources when rain or snowmelt moves across the ground) are generally not regulated, but instead conservation best management practices are promoted through a grant program. There is not, however, enough grant money to cover all non-point discharges. EPA is working with its Bay Program partners, and others, to develop innovative approaches to promoting nonpoint source nutrient and sediment controls.

EPA is planning to work with its Bay Program partner states to develop implementation plans that will accompany the TMDL. These plans will identify specific actions needed to achieve the loading reductions in the TMDL. The states will also provide commitments every two years for actions to be taken to reduce nitrogen, phosphorus and sediments. Lastly, EPA is working with the states on measures that would be taken if a state did not achieve the two-year commitments.