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# ENVIRO MATTERS

## Budgeting the Pollutant Load: TMDLs and Tributary Strategies

Every program, every organization requires a budget to limit overspending. Total Maximum Daily Loads (TMDLs) allow Maryland to set pollution budgets for each tributary contributing to Maryland's waters. Using TMDLs as a tool to guide pollutant reductions is key to protecting water quality. Maryland's Draft Statewide Tributary Strategy Implementation Plan identifies programs and policies currently underway and new initiatives to reduce nutrients to meet that budget. Water quality standards in streams and the Maryland portion of the Chesapeake Bay watershed set the goal for the budget.

### Impaired Watersheds

Maryland's current list of waterbodies identifies 134 impaired watersheds. Various combinations of waterbodies and pollutants result in over 655 potential TMDLs statewide.

### What are TMDLs?

Maryland Department of the Environment (MDE) technicians, using science and modeling, establish the maximum amount of pollutants that various segments of a waterbody can handle and still meet water quality standards. TMDLs are based on the relationship between pollution sources and in-stream water quality conditions. TMDLs are developed for a single pollutant or stressor for each waterbody. TMDLs are used on a smaller scale than the Maryland's Tributary Strategies to address local water quality problems.

### What is the Tributary Strategy Implementation Plan?

The plan informs us of current Chesapeake Bay Restoration programs and policies already in place. It also details the best management practices needed to remove the Bay from the U.S. Environmental Protection Agency's (EPA) list of impaired waters. Progress will be evaluated regularly and new programmatic, policy and fiscal measures suggested, to ensure that Maryland continues on a steady course. The plan is currently available for public comment at: [www.dnr.state.md.us/bay/tribstrat/implementation\\_plan.html](http://www.dnr.state.md.us/bay/tribstrat/implementation_plan.html).

### How do these Programs Work Together?

The Chesapeake Bay Program, EPA and the states, use a computer model to create the pollution budget for the entire Bay Watershed. The budgeted pollution is then assigned to states and subdivided to watersheds. This allowable amount is called the nutrient allocation. The nutrient allocation for the Bay, is compared to the TMDL to meet local water quality standards. The more stringent of the two is then applied. The Tributary Strategies are implementation plans to meet the the more stringent allocation determined for the Bay, as well as the pollution budget for both the Bay and local waters. If the local TMDL is more stringent, then more best management practices will apply to that watershed.

### Land Use Planning: Critical to the Health of the Bay

Responsible land use planning is a key to ensuring water quality is attained and sustained. Thorough, timely planning can prevent conflicting uses that may limit how a community functions. By taking water quality into account when planning communities, fewer problems arise in maintaining useable water and reducing future degradation. By minimizing sprawl and impervious surfaces during development and keeping conservation programs to restore forest, pasture, or wetlands, communities can foster their economy while protecting water quality. Ongoing programs that incorporate TMDLs into Tributary Strategies are key to the success of restoring water quality in Maryland.



Robert L. Ehrlich, Jr., Governor  
Michael S. Steele, Lt. Governor



Kend P. Philbrick, Secretary  
Jonas A. Jacobson, Deputy Secretary

**Maryland Department of the Environment**  
1800 Washington Boulevard • Baltimore, Maryland 21230  
[www.mde.state.md.us](http://www.mde.state.md.us) • 800.633.3101