

New Policies for Establishing and Implementing Total Maximum Daily Loads (TMDLs)

MEMORANDUM

DATE: August 8, 1997

SUBJECT: New Policies for Establishing and Implementing Total Maximum Daily Loads (TMDLs)

FROM: Robert Perciasepe Assistant Administrator (4101)

TO: Regional Administrators Regional Water Division Directors

Last August I issued a Healthy Watershed Strategy to advance the cause of clean water everywhere. A key component of the Strategy was to "rapidly increase the development and implementation of total maximum daily loads to manage water quality on a watershed scale." Thanks to hard work by State¹ and EPA managers and staffs, EPA now has received and taken action on all State lists required by section 303(d) of the Clean Water Act (CWA). It is now time to move towards the next stage of our strategy to achieve water quality standards -- to make sure that TMDLs are established for all listed waters, and that the load allocations established by TMDLs are implemented by point and nonpoint sources alike.

Almost 25 years after the passage of the CWA, the national water program is at a defining moment. We -- meaning each of you, each of our State, local, and Tribal partners, and all of us in the Office of Water -- are making the transition from a clean water program based primarily on technology-based controls to water quality-based controls implemented on a watershed basis. Technology-based controls, such as secondary treatment of sewage, effluent limitations guidelines for industrial sources, and management practices for some nonpoint sources, have dramatically reduced water pollution and laid the foundation for further progress.

We must continue to preserve and protect the foundation we have worked so hard to put in place. If we are to achieve clean water everywhere, though, we must continue to build capacity to identify remaining problem areas and fix each problem on a watershed-by-watershed basis. The TMDL program is crucial to success because it brings rigor, accountability, and statutory authority to the process. These are the reasons the Administrator and I so strongly support the TMDL program in States, Tribes, and EPA Regions.

We at EPA will progress most successfully to a water quality-based program -- and more rapidly solve the remaining water quality problems -- by working in full partnership with States and Tribes. Our Federal, county, city, and local partners all need to be enlisted and involved. Moreover, CWA programs such as TMDLs need to be meshed better with numerous other programs and authorities, such as local source water protection programs, the Federal Agriculture Improvement and Reform Act of 1996, and locally-led watershed protection efforts.

I intend the two new TMDL policies presented below in italics to advance the national water quality-based program. I ask each of you to work closely with each State in your Region to help the State water program director and staff fulfill the requirements of section 303(d) and EPA's implementing regulations, and successfully achieve the goals of the TMDL program. To the extent possible, the TMDL program, including the policies below, should be carried out in full partnership with the State, including incorporation of the TMDL program into an Environmental Performance Partnership Agreement.

The TMDL process, in essence, is the following: States identify specific waters where problems exist or are expected; States set priorities; States allocate pollutant loadings among point and nonpoint sources; and EPA approves State actions or acts in lieu of the State if necessary. Point and nonpoint sources then reduce pollutants to achieve the pollutant loadings established by the TMDL through a wide variety of Federal, State, Tribal, and local authorities, programs, and initiatives.

States have primary responsibility for developing lists and TMDLs under section 303(d). Section 303(d)(1)(A) and the implementing regulations (at 40 CFR 130.7(b)) provide States with latitude to determine their own priorities for developing and implementing TMDLs. In particular, the flexibility to States offered by the priority ranking process of section 303(d)(1)(A) is a good opportunity for incorporating rotating basin or other watershed approaches into the TMDL process.

If a State fails to meet its obligations under section 303(d), you will need to step in. However, it is my goal that every State will succeed in fully meeting the requirements of section 303(d) and taking the needed action to implement approved TMDLs. This goal underscores the importance of the EPA partnerships with States, which include providing needed technical assistance, training, and support.

The two new policies presented below in italics establish a nationally consistent approach for establishing and implementing TMDLs. These policies supplement existing regulations and guidance, and will remain in effect unless they are specifically changed by the Office of Water. They have been discussed with the Federal Advisory Committee on the TMDL program, and will be revisited in consultation with EPA and State managers after the Committee submits its report in mid-1998.

Schedules for Establishing Final TMDLs

The regulatory schedule for each State to submit a list of impaired and threatened waters² under section 303(d) is April 1 of every even numbered year, i.e., the next list is due on April 1, 1998. Under EPA's regulations, State-submitted section 303(d) lists must identify which waters are targeted for TMDL development in the ensuing two years, and Regional Administrators and States are to determine a schedule for submission of TMDLs for these targeted waters. To achieve clean water everywhere, however, we need to do better than this; we need an overall plan for completing and approving TMDLs for all listed waters. A number of States and Regions have agreed upon comprehensive schedules for establishing TMDLs for all listed waters, but many have not yet done so.

Each EPA Region should secure a specific written agreement with each State in the Region establishing an appropriate schedule for the establishment of TMDLs for all waters on the most recent section 303(d) list, beginning with the 1998 list. Each State schedule should reflect the State's own priority ranking of the listed waters and be integrated with the Environmental Performance Partnership Agreement process. These State schedules should be expeditious and normally extend from eight to thirteen years in length, but could be shorter or slightly longer depending on State-specific factors. These factors may include:

- number of impaired segments;
- length of river miles, lakes, or other waterbodies for which TMDLs are needed;
- proximity of listed waters to each other within a watershed;
- number and relative complexity of the TMDLs;
- number and similarities or differences among the source categories to be allocated;
- availability of monitoring data or models; and
- relative significance of the environmental harm or threat.

I ask each of you to discuss with each State water program director the importance of an overall schedule and plan for establishing TMDLs for all listed waters, and to reach agreement by October 1, 1997 on the best process for developing appropriate schedules. After an opportunity for public discussion, the State should provide to EPA the comprehensive schedule for completing all TMDLs at the same time the State submits its 1998 list to EPA for approval (due on April 1, 1998). The State and EPA may subsequently agree to modify the comprehensive schedule to reflect changes in the final EPA-approved list of impaired waters, including changes made through the approval process. This April 1, 1998 deadline for submission of the State's 1998 list and comprehensive schedule is important; please make every effort to ensure that each State meets this date.³

In developing these comprehensive schedules for completing all TMDLs, Regions and States should keep in mind that waterbodies may be added or subtracted over time as new lists are developed. However, once a waterbody is put on a list and a time schedule is specified for completing the TMDLs for that waterbody, the TMDL for that waterbody should generally be

completed within that timeframe; the schedule should not be extended beyond that time frame simply because a new list is developed. For example, if a State lists a waterbody in March 1998 and provides a schedule of 10 years to complete the TMDLs for that waterbody, the State would not provide another schedule of 10 years to complete the same TMDLs when the next list is submitted in the year 2000.

This comprehensive and nationally consistent approach to establishing TMDLs for all listed waters will set the stage for implementing needed water quality-based pollution controls, and help accelerate the restoration and protection of this country's waters.

Implementation of TMDLs for Waters Impaired Solely or Primarily by Nonpoint Sources

A TMDL improves water quality when the pollutant allocations are implemented, not when a TMDL is established. When the State or EPA identifies a water quality impairment on a section 303(d) list and then establishes the TMDL, we begin a water quality-based process, not end one.

Section 303(d) does not establish any new implementation authorities beyond those that exist elsewhere in State, local, Tribal, or Federal law. Thus, point sources implement the wasteload allocations within TMDLs through enforceable water quality-based discharge limits in NPDES permits authorized under section 402 of the CWA. Nonpoint sources implement the load allocations within TMDLs through a wide variety of State, local, Tribal, and Federal programs (which may be regulatory, non-regulatory, or incentive-based, depending on the program), as well as voluntary action by committed citizens. These programs and efforts for control of nonpoint sources should be described in the State nonpoint source management program under section 319 of the CWA. Many States are now working to strengthen their nonpoint source programs in keeping with EPA's Nonpoint Source Program and Grants Guidance (May, 1996), including nine key program elements to achieve and maintain beneficial uses of water.

In the case of waters impaired by point sources only or by a blend of point and nonpoint sources in which point sources dominate, EPA regulations (at 40 CFR 122.44(d)(1)(vii)) require that effluent limits in NPDES permits for point sources be consistent with assumptions and requirements of wasteload allocations for the discharge contained in an EPA-approved TMDL. Our Guidance for Water Quality Decisions: The TMDL Process (April 1991) broadly describes the process for deriving wasteload allocations for point sources and incorporating these allocations into NPDES permits, and references several technical documents. This guidance document also describes ways that load allocations are to be set and implemented for nonpoint sources, using current programs and authorities such as Section 319 of the Clean Water Act.

In watersheds impaired by a blend of point and nonpoint sources, this TMDL Process guidance document provides that where any wasteload load allocation to a point source is increased based on an assumption that loads from nonpoint sources will be reduced, the State must provide "reasonable assurances" that the nonpoint source load allocations will in fact be achieved. Our current regulations, guidance, and policies remain unchanged regarding implementation of TMDLs for those waters impaired by point sources or by a blend of point and nonpoint sources in which point sources dominate.

EPA's guidance on implementation of TMDLs is incomplete because it does not yet address implementation of TMDLs for waters impaired only by nonpoint sources or by a blend of point and nonpoint sources in which nonpoint sources dominate. Implementation of load allocations for nonpoint sources in these waters is essential if we are to maintain steady progress toward clean water goals.

For 303(d)-listed waters impaired solely or primarily by nonpoint sources, TMDL implementation may involve individual landowners and public or private enterprises engaged in agriculture, forestry, or urban development. The primary implementation mechanism will generally be the State section 319 nonpoint source management program coupled with State, local, and Federal land management programs and authorities.

For example, voluntary, incentive-based approaches at the State and local level can be used to implement management practices for controlling nonpoint source pollution. In addition, local regulations or ordinances related to zoning, land use, and storm water runoff are often used to abate polluted runoff. Federal land management agencies have responsibilities to resolve nonpoint source problems on Federally owned and managed lands. A Federal agency with such responsibilities may establish a memorandum of understanding with the State water quality agency to accomplish implementation of nonpoint source controls necessary to meet water quality standards, and implement practices through Federal licenses and permits.

For all section 303(d)-listed waters impaired solely or primarily by nonpoint sources, each EPA Region should work in partnership with each State to achieve TMDL load allocations for nonpoint sources. All available Federal, State, and local programs and authorities should be used, including non-regulatory, regulatory, or incentive-based programs authorized by Federal, State, or local law.

For all section 303(d)-listed waters impaired solely or primarily by nonpoint sources, each State should describe its plan for implementing load allocations for nonpoint sources. The State implementation plan may describe how load allocations will be achieved by nonpoint sources for individual waters, for several waters within a watershed, or for all affected waters in the State. Through the Environmental Performance Partnership Agreement or other similar process, each EPA Region and State should agree upon the best strategy for mutual support.

States may submit implementation plans to EPA as revisions to State water quality management plans, coupled with a proposed TMDL, or as part of an equivalent watershed or geographic planning process. At a minimum, each State implementation plan should include:

*Reasonable assurances that the nonpoint source load allocations established in TMDLs (for waters impaired solely or primarily by nonpoint sources) will in fact be achieved. These assurances may be non-regulatory, regulatory, or incentive-based, consistent with applicable laws and programs. In the case of Federal lands, these specific assurances should reflect applicable Memoranda of Agreement or other mechanisms to achieve implementation of needed management practices; and
A public participation process; and
Appropriate recognition of other relevant watershed management processes, such as local source water protection programs, urban storm water management programs, State section 319 management programs, or State section 303(e) continuing planning processes.*

The continuing planning process established by section 303(e) of the CWA provides a good framework for implementing TMDLs, especially the nonpoint source load allocations. Under the section 303(e) process, States develop and update State-wide plans that include TMDL development and adequate implementation of new and revised water quality standards, among other components. The water quality management regulations at 40 CFR 130.6 require States to maintain water quality management plans that are used to direct implementation of key elements of the continuing planning process, including TMDLs, effluent limitations, and nonpoint source management controls. These State water quality management plans are another way for States to describe how they will achieve TMDL load allocations for nonpoint sources.

Other planning approaches may guide the implementation of TMDLs. Increasing numbers of States are adopting watershed approaches that focus activities and resources geographically. Some States are adopting rotating basin approaches which focus and sequence activities on groups of watersheds located together. In addition, plans designed to deal with problems in specific geographic areas may also facilitate TMDL implementation, e.g., remedial action plans in the Great Lakes, habitat conservation plans, and State coastal nonpoint programs.

To help support cooperative efforts with States to achieve TMDL load allocations for nonpoint sources, I ask each of you to continue your efforts to:

Provide needed technical assistance, tool development, and training to States, local authorities, and Tribes;
Clarify TMDL program requirements, as necessary; and
Focus Federal agency resources and programs to solve nonpoint source pollution problems, especially on Federal lands.

In addition, we at EPA need to provide additional resources to States to move more rapidly towards a water quality-based clean water program. In the President's 1998 Budget, we have

requested substantial increases in resources to help States succeed in implementing the TMDL program, including:

- An increase of \$5 million in CWA section 106 grants to States;
- An increase of \$8 million in internal resources for technical assistance and tool development; and
- An increase of \$5 million in internal resources supporting nonpoint source activities.

I intend to commit a substantial part of these resources to resolving nonpoint source problems in 303(d)- listed waterbodies, to the extent that the funds are appropriated.

I am optimistic that this cooperative approach with States will help accelerate the implementation of TMDLs in waters impaired solely or primarily by nonpoint sources. Where a State does not develop a plan for achieving TMDL load allocations for nonpoint sources, I ask you to engage that State by no later than the beginning of FY 1999 in a constructive and focussed discussion of needed actions by State and Federal environmental managers. If necessary, however, you should take additional steps promptly thereafter, including any or all of the following:

- Require the State to update its State water quality management plan under 40 CFR 130.6, or incorporate into the plan additional implementation measures on a State-wide or specific watershed basis.
- Focus substantial grant dollars (including Performance Partnership grants and grants under sections 319, 106, 604(b), and 104(b)(3)) toward those States that are providing reasonable assurances that nonpoint source load allocations established in TMDLs will in fact be achieved.
- Initiate source-by-source reviews of, and where necessary object to, NPDES permits (including minors) in the watershed and in upstream and downstream watersheds, where the NPDES permit regulates the same pollutant covered by the TMDL and further reductions at the point source will speed progress towards achieving water quality standards.
- Deny or revoke a State's enhanced benefits status under the new section 319 nonpoint source guidance and revert to a more intense, project-by-project oversight process on annual section 319 grants.

While I am pleased with the progress of many States, we still have a long way to go before we achieve clean water everywhere. The Healthy Watershed Strategy strives to advance that goal through a watershed approach to pollution control. The two new policies I am establishing today for developing and implementing TMDLs are another step towards the goal of clean water everywhere. It is crucial that EPA managers, together with our Federal, State, local, and Tribal partners, take every step we can to make sure that the TMDL program is carried out effectively and quickly.

I have not fully addressed TMDL requirements for Indian Tribes in this memorandum because circumstances are different from those of most States. I believe, however, that new policies and guidance for developing and implementing TMDLs are needed for waters on Tribal lands. I have asked Kathy Gorospe, Director of the American Indian Environmental Office, and Bob

Wayland, Director of the Office of Wetlands, Oceans and Watersheds, to work together to develop these needed policies and guidance.

Thank you for your support. If you have any questions, please call me or contact Bob Wayland at (202) 260-7166 or Geoff Grubbs, Director of the Assessment and Watershed Protection Division, at (202) 260-7040.

cc: State Water Program Directors
Dale Givens, ASIWPCA
Mary Gade, ECOS
All Members, TMDL FACA Committee
OW Office Directors
Susan Lepow, OGC

Notes:

1. For ease of reference, I am including Territories within the term "States" throughout this memorandum.
2. EPA's regulations, at 40 CFR 130.2(j), define "water quality-limited segment" as "any segment where it is known that water quality does not meet applicable water quality standards, *and/or is not expected to meet* applicable water quality standards, even after the application of the technology-based effluent limitations required by sections 301(b) and 306 of the Act" (emphasis added). Therefore, for the 1998 listing cycle States should consider both impaired and threatened waters for inclusion on their 1998 section 303(d) lists. For ease of reference, the phrase "impaired waters" as used in this memorandum refers to both impaired and threatened waters, consistent with EPA's regulations.
3. The State's comprehensive schedule will not be subject to formal EPA approval pursuant to Section 303(d)(2) and 40 CFR 130.7.