TMDLs: White Knight or Bureaucratic Nightmare?

Eric E. Huber

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Introduction

Will the total maximum daily load (TMDL) process bring non-point source water pollution under control? Or is it just another level of planning that will not result in cleaner water? Unless the state and federal water pollution control agencies change their positions and embrace the TMDL process, the latter seems a more likely scenario. It is therefore incumbent upon these agencies and on environmentalists to ensure that the TMDLs are actually "implemented," that is, to see real improvement in the water results.

I. Statement of the Problem

The Clean Water Act (CWA) section 303(d), 33 U.S.C section 1313(d), requires the States (or Environmental Protection Agency (EPA) in their stead) to: (1) identify all waterbodies and the corresponding pollutants that

* The author is an attorney with Earthjustice, a nationwide non-profit environmental law firm. He has practiced Clean Water Act litigation for 16 years, and represented the Sierra Club and others in several successful statewide TMDL lawsuits, including on-going litigation over TMDL implementation.
fail to meet State ambient water quality standards; (2) prioritize these waters; (3) determine the maximum amount of pollution which can be discharged without causing the quality of the receiving water to fall below water quality standards, i.e., determine the TMDL for the pollutant causing the violation of water quality standards; and (4) allocate pollutant loads for every polluter on the waterbody from the established total load permissible.¹

Simply put, the TMDL process is the Act’s safety net. All waterbodies that were not fishable or swimmable after technology-based point source controls were in place were to have their TMDLs calculated by 1979.² The programs for point source and non-point source controls were then to have been revised to achieve the TMDLs, i.e., the TMDLs would be implemented - so as to achieve the desired standards of water quality.

The problem is that the TMDLs were not developed by 1979, and even today, after dozens of lawsuits, tens of thousands of them remain undeveloped. Furthermore, where they have been developed they have not been implemented. The result is that approximately forty percent of waters surveyed nationwide still do not meet CWA standards.³ The health of Americans continues to be threatened by exposure to harmful organisms in our waters; consumption of fish from many of our waters presents a threat to the most vulnerable among us; and polluted runoff continues to have a degenerative effect on the country’s watersheds and wetlands.⁴ Cleaning up the water, not just establishing another level of planning, is supposed to be the ultimate outcome of the process.⁵


². For discussion of the due date as of 1979, see, inter alia, the Scott and Hankinson I cases, supra note 1.


⁴. Id.

⁵. The objective of the Clean Water Act is “restor[ing] and maintain[ing] the chemical, physical, and biological integrity of the Nation’s waters.” In order to achieve that objective, Congress declared as a “national goal” that “the discharge of [all] pollutants into the navigable waters be eliminated by 1985,” and “water quality which provides for the protection and propagation of fish, shellfish, and wildlife” be attained by July 1, 1983. Congress further stated that “[i]t is the national policy that the discharge of pollutants in toxic amounts be prohibited.” And, “it is the national policy
II. TMDL IMPLEMENTATION AND NON-POINT SOURCE POLLUTION CONTROL

A. Existing Law and Possible Future Regulations

TMDLs are not “self-implementing.” They do not impose pollution control themselves, but rather TMDLs are the basis of controls under the various pollution control programs established under CWA sections 208, 402, 303(e), 304, and 319. Largely because of the historical failure of those programs to control non-point source pollution, the EPA followed a Federal Advisory Committee recommendation to revise and clarify its regulations to require “implementation plans” as part of TMDLs. Those regulations were issued on July 13, 2000. 

Opposition to the new TMDL regulations was vociferous. Congress refused to fund the proposed regulations, keeping them ineffective until October 1, 2001. Meanwhile, lawsuits by the American Farm Bureau and others were filed to invalidate them. Before the October 1, 2001 date could be reached, the Bush administration caused the regulations to be suspended for review and revision, thus further icing them. The regulations are now scheduled to be effective, with any changes to be made in them, on April 30, 2003. The expectation in the environmental community is that the new regulations will be seriously weakened if not eliminated altogether through this process.

Because the new regulations are in limbo at best, and delayed for years in any event, implementation of TMDLs must occur - if it is to occur at all - under the existing statutory and regulatory scheme. The existing scheme is primarily under sections 303(e) and 319 of the CWA, EPA’s interpretation that programs for the control of non-point sources of pollution be developed and implemented in an expeditious manner so as to enable the goals of this chapter to be met through the control of both point and non-point sources of pollution.” CWA § 101(a)(1), (2), (3) and (7), 33 U.S.C. § 1251(a)(1), (2), (3), and (7).

7. Id.
9. Am. Farm Bureau Fed. v. Browner, No. 00-1320 (D.C. Cir 2000); consolidated with Case Nos. 1341, 1353, 1384, 1468, 1475, 1478, 1491 and 1496, the petitioners in which were, inter alia, National Corn Growers, National Chicken Council, American Forest and Paper Associations, Inc., American Crop Protection Association, National Park Producers Council, National Cattleman’s Beef Association, The Fertilizer Institute, Metropolitan Sewerage Agencies, Utility Water Act Group, TMDL Coalition and National Cotton Council of America.
11. Id.
of which is stated in its 1991 TMDL Guidance Document and August 8, 1997 Policy Memorandum.

B. EPA Guidance and Policy on Implementation

EPA explains at length in its 1991 TMDL Guidance how TMDLs are an appropriate tool to control non-point sources of pollution. The TMDL Guidance provides a comprehensive discussion of how TMDLs must be utilized in the development and implementation of non-point source controls at the federal, state, and local levels. Generally, non-point source controls are established by implementing Best Management Practices (BMPs) that are identified in the Guidance document. BMPs are to be based on TMDLs so that they lead to the attainment of water quality standards. Indeed, as the Guidance document notes, the TMDL process includes “implementation” of “nonpoint source controls” and the achievement of water quality standards as the end of the process.

An unfortunate example of the lengths to which the state and federal agencies will go to avoid non-point source regulation is in their interpretation of the 1991 Guidance document. It stated that where there is a mix of point source and non-point source pollution in the watershed, a TMDL must contain “reasonable assurance that nonpoint source controls will be implemented and maintained or that nonpoint source reductions are demonstrated through an effective monitoring program.” "Where there are not reasonable assurances, under the CWA, the entire load reduction must be assigned to the point sources.” Read literally, however, this “reasonable assurance” requirement did not apply to waters impaired solely by non-point source pollution. This led to TMDLs that consisted of mere load calculations with little or no provision for how the non-point source load reductions would be achieved.

To address this problem, on August 8, 1997 the EPA issued an official policy statement extending the “reasonable assurance” requirement to waters impaired solely or predominately by non-point source pollution. It directs implementation of TMDLs for non-point source impaired waters by calling for State Implementation Plans for non-point source TMDLs. In addition, it directs EPA action to implement TMDLs for non-point sources via EPA approval or disapproval of State water quality management plans.

13. Id.
14. Id. at 24.
15. Id. at 15.
16. Memorandum from Deputy Administrator Bob Persciappe (EPA) to Regional Administrators 4-7 (Aug. 8, 1997).
under section 303(e) of the CWA, and via federal funding restrictions for State non-point management plans under section 319 of the CWA. The August 8, 1997 memorandum requires “reasonable assurances that the non-point source load allocations established in TMDLs ... will in fact be achieved.” Time will tell if EPA will hold the States to this, or if the 1997 policy statement will be (as it appears to be thus far) a mere paper tiger.

C. CWA Section 303(e)

CWA section 303(e) requires each State to have a Continuing Planning Process (CPP) that is approved by EPA. Among other things, the CPP must contain the “total maximum daily load for pollutants” and provision for “adequate implementation, including schedules of compliance, for revised or new water quality standards.” The CPP is to result in plans, the contents of which are specified in the existing federal regulations.

State section 303(e) plans must be consistent with the CWA. The EPA must review the State’s plan from time to time to ensure it is “at all times consistent with the [CWA].” Adequate implementation, including schedules of compliance” is required by section 303(e)(3)(F). In addition, the Plan must “direct implementation” and identify “implementation measures necessary to carry out the plan,” e.g., financing, time, etc., as required by 40 C.F.R. section 130.6(c)(6).

The regulations further provide that Water Quality Management (WQM) Plans are to “focus annually on priority and geographic areas and on the development of water quality controls leading to implementation measures.” WQM Plans are used to direct implementation ... [to] identify priority point and nonpoint water quality problems, consider alternative solutions and recommend control measures.” The WQM plan

17. 33 U.S.C. § 1313(e).
18. See Persciappes Memorandum, supra note 17.
19. Id.
20. § 1313(e).
21. 33 U.S.C. § 1313(e)(3)(C) and (F).
22. See 40 C.F.R. § 130.6(a) on “Water Quality Management (WQM) Plans,” also known as the “303(e) Plans.”
23. 33 U.S.C. § 1313(e)(1); 40 C.F.R. § 130.5.
25. 40 C.F.R. § 130.6(a).
26. Id.
27. § 130.6(b).
is to make specific provisions for “nonpoint source management and control.”

The plan shall describe the regulatory and non-regulatory programs, activities, and Best Management Practices (BMPs) which the agency has selected as the means to control nonpoint source pollution . . . [and there shall be] a continuing process of identifying control needs and evaluating and modifying the BMPs as necessary to achieve water quality goals.

Nevertheless, there has been an abject failure of the CPP process to lead to the clean up of non-point source impaired waters, which is the result of several factors. For starters, under the statutory scheme of CWA section 303, the TMDLs were supposed to precede the CPPs and WQM Plans. Because the TMDLs were not developed in a timely fashion, and in most cases remain undeveloped, they were not taken into account in the CPPs and WQM Plans. Indeed, TMDLs could not be taken into account because they did not exist when the CPPs and WQM Plans were approved. Nevertheless, the EPA has not required that they be re-submitted or updated after TMDLs are developed. It has vigorously (and thus far successfully) opposed lawsuits attempting to rectify this situation. The end result is a systemic failure by EPA and the state agencies to solve the problems of non-point source pollution.

D. CWA Section 319

CWA section 319 provides another means to address non-point source pollution, namely, the State Non-point Source Management Program. Section 319 requires each State to submit to EPA a management plan for controlling non-point source pollution. The plan must cover the four fiscal years after its submission and must (1) identify Best Management Practices

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28. § 130.6(c)(4).
29. § 130.6(c)(4)(i).
30. See, e.g., the cases cited is note 2 supra discussing how TMDLs were originally due in 1979 but 10-20 years later they still had not been established in most (if not all) states. The fact that they still have not been established is demonstrated by the long-term schedules of numerous states to do so in the future, referenced for example in Idaho Sportman’s Coalition v. Browner, 951 F. Supp. 962 (W.D. Wash 1996); Kingman Park Civic Ass’n v. EPA, 84 F. Supp.2d (D.D.C. 1999); and American Canoe Ass’n, Inc. v. U.S.E.P.A., 54 F. Supp. 2d 621, 624 (E.D. Va. 1999).
(BMPs) and measures to reduce non-point source pollution, (2) identify programs for implementation of BMPs, and (3) provide an implementation schedule containing annual milestones.\textsuperscript{33} The section also indicates that States shall develop programs separately for each watershed, to the maximum extent possible.\textsuperscript{34} In addition, section 319 requires the State to certify that the State’s law provides adequate authority to implement the State’s management plan or, if not, that the State will seek the necessary authority.\textsuperscript{35}

The Act requires EPA to approve or disapprove the section 319 plan, and if it is approved, make grants to the States to carry out the plan.\textsuperscript{36} Under section 319(h)(1), no grant may be made in any fiscal year to a State, which in the preceding fiscal year received a section 319 grant, unless EPA determines that such State made satisfactory progress in meeting the implementation schedule referenced above.\textsuperscript{37} Under the August 8, 1997 policy, EPA regions are to grant section 319 funds to those States with approved, updated non-point source management plans, and, conversely, to not fund those States with inadequate plans.\textsuperscript{38} Thus the federal role, as defined by section 319, consists of attempting to induce the States to take effective action by providing - or withholding - financing to the States. The direct consequence of a State’s failure to develop and implement effective non-point source pollution controls is the denial of federal implementation funds.

In spite of EPA’s 1997 policy statement, the TMDL process is still failing to result in the reduction of non-point source pollution. The states’ section 303(d) lists are full of waters impaired by non-point sources. Nevertheless, some states are arguing that their existing section 319 plans, which are based entirely on the existing BMPs, provide the “reasonable assurances” of non-point reductions that are called for in the 1997 policy statement (like they were in the 1991 Guidance before it).\textsuperscript{39} This is the position taken, for example, by the Louisiana Department of Environmental Quality in numerous TMDLs that have been approved by EPA Region 6.\textsuperscript{40}

\begin{itemize}
\item \textsuperscript{33} § 1329(a), (b).
\item \textsuperscript{34} § 1329(b)(4).
\item \textsuperscript{35} § 1329(b)(2)(D).
\item \textsuperscript{36} § 1329(h)(1).
\item \textsuperscript{37} § 1329(h)(8).
\item \textsuperscript{38} See, Persciappe Memorandum, supra note 17.
\item \textsuperscript{39} This is demonstrated by scores of non-point source TMDLs submitted by the States of Georgia, Mississippi and Louisiana to EPA in 1997-2001, which have been approved by EPA. In the § on “implementation” these TMDLs routinely just refer to the State’s § 319 plan.
\item \textsuperscript{40} Id.
\end{itemize}
The problem with relying on the State’s section 319 plans to address non-point source pollution echoes the problems with the section 303(e) plans. Namely that, contrary to the statutory scheme, the section 319 plans pre-date the TMDLs. When EPA approved those plans (generally in the late 1980’s or early 1990’s), there were no TMDLs. The BMPs were not based on TMDLs and could not be based on them since none existed. And the states have not updated their plans since the TMDLs have been developed. As a result, state non-point source management plans, and the BMPs upon which they are based, may or may not happen to reduce non-point source runoff to levels below the TMDL, i.e., to levels necessary to actually attain water quality standards. In sum, even where the voluntary BMPs are used, they may not be effective, and, considering the continuing, widespread failure of rivers and streams to meet standards, they are a priori ineffective.

CONCLUSION

As a result of a decade of litigation and numerous Consent Decrees around the country, thousands of TMDLs have finally been established by the States and EPA. Nevertheless, for the most, part these have not translated into real improvements in water quality. That is because the State’s CWA section 303(e) Water Quality Management Plans and section 319 Non-point Source Management Plans have not been revised to account for TMDLs. There has been no change in practices to actually achieve the TMDLs. The only solution appears to be for these plans generally, and the BMPs in particular, to be reconsidered and revised on a regular basis to achieve the TMDLs. That is the only approach consistent with CWA sections 319 and 303(e). Until this is accomplished, the lack of coordination between the TMDL program and the point and non-point source controls will continue. As will the water pollution.