

Pronsolino v. Marcus

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Before Pronsolino v. Marcus, agricultural operations, timber companies, and other nonpoint source polluters were largely able to evade regulation under the Clean Water Act. As a result of this decision, all water bodies, even those polluted exclusively by nonpoint sources, now warrant Total Maximum Daily Loads (TMDLs), state-set caps on the maximum amount of pollutant loading a waterway can tolerate and still meet water quality standards. Nevertheless, the court's conclusion will likely have little effect on the condition of the nation's waters because the Environmental Protection Agency (EPA) lacks enforcement power over state TMDL programs, and state sovereignty issues preclude any efforts by EPA to compel TMDL implementation. To overcome these limitations, EPA must make the successful attainment of TMDLs a condition of federal grants to state nonpoint programs, and should prioritize funding based on a state's willingness to implement effluent trading programs or other innovative mechanisms for achieving nonpoint source reduction.

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INTRODUCTION

The Environmental Protection Agency (EPA) has spent nearly all of the twenty-nine-year history of the Clean Water Act (CWA) focusing on "point" sources—the pipes and drains attached to factories, municipal sewer districts, and other easy-to-spot polluters¹—while virtually ignoring logging operations, agriculture, and other "nonpoint" sources.² This strategy has certainly succeeded in reducing point source pollution. After nearly three decades of closely scrutinizing point sources by limiting allowable discharges,³ EPA has stopped billions of pounds of industrial pollutants from entering U.S. waters.⁴

Unfortunately, point source controls have reached the limits of their effectiveness, yet water quality remains ubiquitously substandard nationwide.⁵ While America's rivers and harbors no

1. The Act defines a point source as:

any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture.

33 U.S.C. § 1362(14) (2000).

2. See OLIVER A. HOUCK, *THE CLEAN WATER ACT TMDL PROGRAM: LAW, POLICY, AND IMPLEMENTATION* 3-5 (1999). The Act does not define nonpoint pollution sources, but they are usually described as sources of pollution that cannot be attributed to a point source. David Zaring, *Federal Legislative Solutions to Agricultural Nonpoint Source Pollution*, 26 ENVTL. L. REP. 10,128, 10,128 (1996).

3. 33 U.S.C. § 1342 (1994). EPA may issue National Pollution Discharge Elimination System (NPDES) permits to control point source discharges into navigable waters. 33 U.S.C. § 1311(b)(2)(A) (1994). Point source polluters must use best practicable control technology in order to limit discharges and fulfill the requirements of their NPDES permits. *Id.* This requirement is known as the "technology-based strategy" employed by the CWA to reduce effluent from point sources.

4. Env'tl. Prot. Agency, *Water Pollution Control: 25 Years of Progress and Challenges for the New Millennium*, EPA 833-F-98-003 (June 1998), available at <http://www.epa.gov/owpa/25prog.pdf>.

5. See HOUCK, *supra* note 2, at 4; Env'tl. Prot. Agency, *Fact Sheets on Nonpoint Source Pollution*, Pointer No. 1, EPA 841-F-96-004A, at <http://www.epa.gov/owow/nps/facts/point1.htm> (last visited Mar. 8, 2001) [hereinafter Pointer No. 1].

longer catch fire,⁶ thousands of waterways fail to meet water quality standards despite point source regulation.⁷ As a result, proponents of water quality protection, including fishers and environmental groups, have turned to a largely unimplemented provision of the CWA that calls for the establishment of Total Maximum Daily Loads (TMDLs). TMDLs are upper limits on the amount of daily pollution a river or other waterway can accommodate and still meet national water quality standards.⁸ Although the TMDL provisions do not grant EPA the power to control individual polluters, they facilitate states in allocating load limits among all pollution sources in a substandard waterway.⁹

The potential benefits of TMDLs have long been limited because, in accordance with the historical and traditional approach to water quality control in the United States, the CWA leaves regulation of nonpoint sources predominantly in state

6. See The Cuyahoga River Watershed, Restoring an American Heritage River, at <http://www.cleanwater.gov/success/cuyahoga.html> (last visited Mar. 8, 2001).

7. See Oliver A. Houck, *TMDLs IV: The Final Frontier*, 29 ENVTL. L. REP. 10,469, 10,470 (1999). Only nineteen percent of the nation's waterways have been assessed for pollution, and those assessments have only examined a limited number of contaminants. These data suggest that thirty percent of the nation's waters do not meet water quality standards, but Houck believes this number is low. *Id.* EPA estimates that forty percent of surveyed waterways (about forty percent of all waterways) are not clean enough to meet such basic uses as fishing and swimming. Pointer No. 1, *supra* note 5.

8. Env'tl. Prot. Agency, *Total Maximum Daily Load Program: Introduction to TMDLs*, at <http://www.epa.gov/owow/tmdl/intro.html> (last visited Mar. 8, 2001). The provision for TMDLs is Section 303 of the Clean Water Act, which states, "Each State shall identify those waters within its boundaries for which the effluent limitations required by section 1311(b)(1)(A) and section 1311(b)(1)(B) of this title are not stringent enough to implement any water quality standard applicable to such waters. The state shall establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters." 33 U.S.C. § 1313(d)(1)(A) (1994). The Section continues: "Each State shall establish for the waters identified in paragraph (1)(A) of this subsection, and in accordance with the priority ranking, the total maximum daily load, for those pollutants which the Administrator identifies under section 1314(a)(2) of this title as suitable for such calculation. Such load shall be established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality." 33 U.S.C. § 1313(d)(1)(C). Each state must submit TMDLs to EPA for approval. 33 U.S.C. § 1313(d)(2). Sections 1311(b)(1)(A) and (B) form the basis of point source control, requiring that point source polluters use best practicable control technology in order to limit discharges. This reference in Section 303(d) to the point source provisions has led many nonpoint source polluters to argue that Section 303(d) is only implicated on waterways that have a point source. See, e.g., *Pronsolino v. Marcus*, 91 F. Supp. 2d 1337, 1338 (N.D. Cal. 2000).

9. The term "substandard" as used in this Note refers to any waterway that does not meet state water quality standards.

hands. The CWA superimposed a federally mandated pollution control program onto an existing system of state water quality regulation. The TMDL provision, Section 303(d), is a relic of the previous strategy that calls for states to manage pollution loading into waterways that, despite point source regulation, do not meet water quality standards. With a few exceptions, the states have consistently bowed to political pressure and not established TMDLs. In addition, until a recent deluge of litigation, EPA had virtually ignored its mandate to evaluate state TMDLs¹⁰ and implement the TMDL requirements set forth in the CWA.¹¹ Further complicating the situation, Section 303(d) fails to elucidate whether the states must assign quantified pollution load reductions to nonpoint sources as well as point sources.¹² The agriculture and logging industries (the primary contributors of nonpoint source pollution) have steadfastly argued that Congress did not intend for states to establish TMDLs for waters polluted exclusively by nonpoint sources.¹³ This issue has quietly festered, allowing nonpoint sources to operate essentially unregulated for the twenty-nine years since enactment of the CWA.

The decision in *Pronsolino v. Marcus* culminates a decade of TMDL litigation and answers the final question left unresolved by other TMDL cases. The district court held that when a state fails to establish TMDLs for any body of water out of compliance with state water quality standards—including those polluted exclusively by nonpoint sources—then EPA must step in and do so.¹⁴ The *Pronsolino* court rejected the interpretation of Section 303(d)(1)(A) advanced by agricultural and timber interests that suggests the TMDL provision applies only where NPDES permits have failed to keep a body of water in compliance with water quality standards.¹⁵ As a result, after *Pronsolino*, any polluted body of navigable water, no matter what the source of its pollution, warrants a TMDL.

The *Pronsolino* decision will likely have little effect on the nation's waters, however. The court merely provided that state agencies must *establish* TMDLs. While the CWA and EPA's regulations require that states incorporate implementation measures into TMDLs, Section 303(d) does not mandate that the

10. HOUCK, *supra* note 2, at 49-51.

11. 33 U.S.C. § 1313(d).

12. *Id.*

13. HOUCK, *supra* note 2, at 61.

14. *Pronsolino v. Marcus*, 91 F. Supp. 2d 1337, 1356 (N.D. Cal. 2000).

15. See 33 U.S.C. § 1313(d)(1)(A).

federal government compel states to enforce those measures. TMDL implementation instead depends wholly on federal grants that reward states for instituting "effective mechanisms" to control nonpoint sources through statewide management programs.¹⁶ Nearly thirty years of state inactivity in identifying impaired waterways and establishing TMDLs for those waterways verifies the insufficiency of these monetary incentives and indicates the need for something better.

This Note investigates the significance of *Pronsolino* within the context of earlier TMDL litigation and examines the inherent shortcomings of Section 303 that render the holding relatively powerless. In addition, this Note explores the limitations imposed by cumbersome issues of state sovereignty on the nonpoint source provisions of the CWA and criticizes the federal government's approach to fostering state implementation of TMDLs. It concludes that given these limitations and the deficiencies of command and control regulation, federal funding incentives should encourage the development of market-based nonpoint source reduction programs to improve the quality of the nation's waterways.

I

BACKGROUND

A. *The Clean Water Act*

The Federal Water Pollution Control Act Amendments of 1972, commonly known as the Clean Water Act, created a comprehensive program to clean up the nation's waters.¹⁷ The

16. See 33 U.S.C. § 1329(b)-(h) (1994). The state nonpoint source management programs must identify best management practices and measures to reduce nonpoint source pollution, identify programs to achieve best management practices, and contain a schedule of annual goals. 33 U.S.C. § 1329(b)(2). The grant program gives priority to "effective mechanisms" for reducing nonpoint source pollution "which will control particularly difficult or serious nonpoint source pollution problems . . . ; implement innovative methods or practices for controlling nonpoint sources of pollution . . . , control interstate nonpoint source pollution problems; or carry out ground water quality protection activities." 33 U.S.C. § 1329(h)(5)(A)-(D). While the CWA does not define Best Management Practices (BMPs), EPA defines them as

methods, measures or practices selected by an agency to meet its nonpoint source control needs. BMPs include but are not limited to structural and nonstructural controls and operation and maintenance procedures. BMPs can be applied before, during and after pollution-producing activities to reduce or eliminate the introduction of pollutants into receiving waters.

40 C.F.R. § 130.2(m) (2000).

17. *Milwaukee v. Illinois*, 451 U.S. 304, 318-19 (1981).

hallmark of the CWA is the National Pollution Discharge Elimination System (NPDES), through which EPA places effluent limitations on all point source pollution using a technology-based strategy.¹⁸ The Act also maintained a pre-existing system by which states oversee the water quality of all navigable waters within their boundaries.¹⁹ Congress "contemplated that nonpoint sources would be remedied through state regulation and required the states to develop programs to do so."²⁰ Additionally, the Act expressly mandated that state water quality standards provide for the protection and propagation of fish, shellfish, and wildlife.²¹

In the years following passage of the CWA, EPA has focused on enforcing point source technology standards through NPDES permits, and has largely neglected the administration of state water quality programs.²² The Act entrusts several important programs to the states. Section 303 requires states to identify waters with inadequate effluent limitations,²³ create a priority ranking for those waters,²⁴ and establish a TMDL—an upper limit of pollutants that assures the viability of fish and wildlife.²⁵ TMDLs define the amount of daily pollutant loading that a body

18. 33 U.S.C. § 1342; *Pronsolino*, 91 F. Supp. 2d at 1341. See *supra* notes 1 and 3 for additional information.

19. 33 U.S.C. § 1313(d); *Pronsolino*, 91 F. Supp. 2d at 1341-42.

20. *Pronsolino*, 91 F. Supp. 2d at 1343.

21. 33 U.S.C. § 1313(d)(1)(D).

22. See Oliver A. Houck, *TMDLs, Are We There Yet?: The Long Road Toward Water Quality-Based Regulation Under the Clean Water Act*, 27 ENVTL. L. REP. 10,391, 10,392 (1997).

23. Section 303 specifically provides that: "Each state shall identify those waters . . . for which the effluent limitations required by Section 1311(b)(1)(A) and Section 1311(b)(1)(B) of this title are not stringent enough to implement any water quality standard applicable to such waters." The Act does not define "effluent limitation," as used in Section 303(d)(1)(A), but implies that the term refers to limitations imposed by NPDES permits on effluent coming from point sources. 33 U.S.C. § 1313(d)(1)(A).

24. Section 303 specifically requires each state to "establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters." 33 U.S.C. § 1313(d)(1)(A).

25. Section 303 states that:

Each State shall establish for waters identified in paragraph (1)(A) of this subsection, and in accordance with the priority ranking, the total maximum daily load, for those pollutants which the Administrator identifies under section 1314(a)(2) of this title as suitable for such calculation. Such load shall be established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality.

33 U.S.C. § 1313(d)(1)(C). Each state must submit TMDLs to EPA for approval. 33 U.S.C. § 1313(d)(2).

of water can tolerate while still meeting relevant water quality standards.²⁶ If states fail to comply or submit inadequate TMDLs, EPA must set the limits.²⁷ In addition, each state must present a "proposed continuing planning process" for EPA approval.²⁸

The CWA's enforcement mandate explicitly encompasses violations of the point source provisions while blatantly ignoring pollution from nonpoint sources. Specifically, Section 309(a)(3) of the Act provides:

Whenever . . . the Administrator finds that any person is in violation of section 1311, 1312, 1316, 1317, 1318, 1328, or 1345 of this title . . . , he shall issue an order requiring such person to comply with such section or requirement, or he shall bring a civil action in accordance with . . . this section.²⁹

Section 1313 (CWA § 303(d)), the section covering water quality standards and TMDLs, is a conspicuous omission from this list. The incorporation of numerous sections of the Act within the scope of the enforcement provision implies that Congress purposely excluded Section 303 from EPA's reach. With no statutory basis for compelling states to enforce TMDLs, pollution from nonpoint sources has increased since the Act was passed while pollution from point sources has fallen dramatically.³⁰

In 1987, Congress amended the CWA and explicitly added nonpoint source pollution control to its objectives, stating that:

[I]t is the national policy that programs for the control of nonpoint sources of pollution be developed and implemented in an expeditious manner so as to enable the goals of this Act to be met through the control of both point and nonpoint sources of pollution.³¹

The amendment created Section 319, which requires states to produce an assessment report identifying both navigable waters that cannot maintain water quality standards without further nonpoint source control, and nonpoint sources that harm water quality.³² Moreover, states must identify methods to reduce

26. *Envtl. Prot. Agency*, *supra* note 8.

27. 33 U.S.C. § 1313(d)(2).

28. The continuing planning process must address plans for all navigable waters within a state and include effluent limitations and schedules for compliance with water quality standards, area-wide waste management plans, TMDLs, implementation of water quality standards, and controls for disposing of residual waste from water treatment processing. *See* 33 U.S.C. § 1313(e).

29. 33 U.S.C. § 1319(a)(3).

30. *See* HOUCK, *supra* note 2, at 60-61.

31. 33 U.S.C. § 1251(a)(7).

32. 33 U.S.C. § 1329(a)(1)(A)-(B).

nonpoint sources "to the maximum extent practicable."³³ The section also requires states to submit to EPA management programs that identify best management practices (BMPs), programs to implement BMPs, and a schedule for implementation.³⁴

Despite this clear Congressional statement, states have failed to establish effective nonpoint source control. This failure is due, in large part, to the fact that the Act is devoid of enforcement measures and the federal grant program to states lacks meaningful financial incentives.³⁵ Section 319's incentive structure rewards states for instituting "effective mechanisms" to control nonpoint sources,³⁶ but these measures have failed to entice states into compliance because federal funds do not meet the costs of TMDL implementation, interest group pressures often overwhelm state legislatures, and inconsistencies in Congressional funding from year to year undermine any meaningful state efforts.³⁷ Because the costs of continued monitoring and the implementation of stricter controls over activities impacting waterbodies could reach \$1 billion in any given state,³⁸ federal funding is a critical component of the TMDL

33. 33 U.S.C. § 1329(a)(1)(C).

34. 33 U.S.C. § 1329(b)(2).

35. See *supra* note 16 for an explanation of the federal nonpoint source grant program.

36. 33 U.S.C. § 1329(h). In fiscal year 2001, Congress appropriated \$238 million to states, territories, and tribes to help them implement nonpoint source management programs required under Section 319. This is an increase of \$38 million over the previous year. States may use up to twenty percent of Section 319 funds to develop Watershed Restoration Action Strategies and TMDLs, but the remainder must be used for implementation activities targeted toward solving identified nonpoint source pollution problems. Env'tl. Prot. Agency, *Supplemental Guidelines for the Award of Section 319 Nonpoint Source Grants in FY 2001*, at <http://www.epa.gov/owow/nps/Section319/fy2001.html> (last visited Jan. 29, 2001). EPA uses a set formula that weighs factors such as state population, cropland acreage, pasture and rangeland acreage, forest harvest acreage, wellhead protection areas, aquatic habitat area, pesticide use, and mining to determine the amount of funding a state will receive. Env'tl. Prot. Agency, *Nonpoint Source Program and Grants Guidance for Fiscal Year 1997 and Future Years*, Appendix G (May 1996), at <http://www.epa.gov/owow/nps/appg.html>.

37. From 1987-89, the federal government appropriated only \$3.8 million for the Section 319 program. Between 1990 and 1993, funding never exceeded \$50 million per year, though the 1987 CWA amendments provided for as much as \$130 million per year by 1991. These appropriations lag seriously behind funding for point source pollution controls such as sewage treatment, even though nonpoint sources contribute more pollution. Zaring, *supra* note 2, at 10,133. But see Env'tl. Prot. Agency, *Supplemental Guidelines for the Award of Section 319 Nonpoint Source Grants in FY 2001*, *supra* note 36, for details on current funding levels.

38. Dianne K. Conway, *TMDL Litigation: So Now What?*, 17 VA. ENVTL. L.J. 83, 119 (1997).

implementation equation. Self-policing by states has not resulted in adequate implementation of TMDLs. This is evidenced by the fact that by 1989, seventeen years after enactment of the CWA, EPA had received only a handful of TMDLs from states for validation.³⁹

B. History of TMDL Litigation

After years of state failure to establish TMDLs, in the early 1980s, citizen groups began filing suit to force EPA to comply with its responsibilities under the CWA. Early suits were unsuccessful because courts found that EPA had not yet had an opportunity to evaluate state TMDL submissions or had not found that the pollutants at issue warranted TMDLs.⁴⁰ In 1984, however, the Seventh Circuit held in *Scott v. City of Hammond* that a state's failure to take any steps to develop TMDLs amounted to a constructive submission of no TMDLs.⁴¹ In other words, a state's refusal to establish TMDLs activated EPA's statutory duty⁴² to evaluate the state's "submission." Absent any data for EPA to assess, the court held that EPA must disapprove of the state's submission and establish its own TMDLs for the impaired water bodies.⁴³ Based on the same constructive submission theory, a later suit in Oregon resulted in a pre-trial settlement that set a time limit before which EPA and the state had to set TMDLs for several contested waters.⁴⁴

Despite these successes, a number of courts repudiated the constructive submission theory where states had engaged in even minimal implementation of the CWA's TMDL requirements. Even if the state's submissions had been rejected by EPA or the state had submitted TMDLs for only a fraction of its impaired waters, several courts refused to conclude that these states had constructively submitted no TMDLs.⁴⁵ For example, the plaintiffs

39. In 1989, EPA Region X had received and approved only one TMDL for 602 waterways listed as not meeting water quality standards, and Region II had approved only four of 168. Houck, *supra* note 22, at 10,395.

40. See *Envtl. Defense Fund v. Costle*, 657 F.2d 275 (D.C. Cir. 1981); *Homestake Mining Co. v. EPA*, 477 F. Supp. 1279 (D.S.D. 1979).

41. *Scott v. City of Hammond*, 741 F.2d 992, 998 (7th Cir. 1984).

42. See 33 U.S.C. § 1313(d)(2).

43. *Scott*, 741 F.2d at 998.

44. *Conway*, *supra* note 38, at 94 (citing *Northwest Envtl. Defense Ctr. v. Thomas*, No. 86-1578 (D. Or. June 3, 1987) (consent decree)).

45. A number of federal courts have rejected the constructive submission argument in these circumstances: (1) Minnesota was working on TMDL development, even though EPA had not approved the state's list of water quality limited waterways (*Sierra Club v. Browner*, 843 F. Supp. 1304, 1313-14 (D. Minn. 1993)); (2) Idaho had

in *Scott* eventually failed on remand because the district court found that Lake Michigan states had presented *some* TMDLs to EPA for approval.⁴⁶

More recent cases addressing EPA's administrative duties have been less deferential, construing the TMDL requirements of the CWA more broadly. After EPA and the state of Idaho agreed to a twenty-five year schedule for the state to develop TMDLs for 962 impaired waterbodies, for example, a reviewing court found the agreement to be an abuse of EPA's discretion, stating that "nothing in the law could justify so glacial a pace."⁴⁷ The court ordered EPA to reevaluate the schedule, suggesting that five years was a reasonable timeframe for TMDL development.⁴⁸ A similar action in Georgia⁴⁹ resulted in a consent decree and settlement agreement⁵⁰ forcing EPA to abandon a schedule for TMDL establishment that would have taken over 100 years to complete.⁵¹ The agreement gave the state and EPA eight years to establish TMDLs for those waterbodies already identified as failing to meet water quality standards.⁵² These successful actions have instigated a flood of similar TMDL litigation.⁵³

From early cases based on a constructive submission theory, to later cases that eroded the concept of judicial deference to an administrative agency, courts have progressively forced EPA to address the nonpoint source provisions of the CWA. After nearly thirty years of ignoring its mandate to evaluate state TMDLs and sidestepping its responsibilities by granting states grossly

submitted only two TMDLs because it was continuing development of only twenty-nine others (*Idaho Sportsmen's Coalition v. Browner*, No. C93-943, 25 *Env'tl. L. Rep.* 10,441 (D. Idaho May 19, 1995)); and (3) Georgia had made some TMDL submissions even though the court determined they were "totally inadequate" (*Sierra Club v. Hankinson*, 939 F. Supp. 865, 872 n.6 (N.D. Ga. 1996)).

46. *Nat'l Wildlife Fed. v. Adamkus*, No. 87-C-4196, 1991 WL 47374, at *5 (N.D. Ill. Mar. 28, 1991) (holding that, because EPA presented the Great Lakes States' TMDL submissions made in 1985 in support of its motion for dismissal of the suit, the plaintiffs must fail on a constructive submission theory as a matter of law).

47. *Idaho Sportsmen's Coalition v. Browner*, 951 F. Supp. 962, 967 (W.D. Wash. 1996).

48. *Id.* at 969.

49. *Hankinson*, 939 F. Supp. at 867.

50. *Sierra Club v. EPA*, No. 1: 94-CV-2501-MHS (N.D. Ga. July 17, 1997) (consent decree); *Sierra Club v. Hankinson*, No. 1: 94-CV-2501-MHS (N.D. Ga. July 17, 1997) (settlement agreement).

51. *Conway*, *supra* note 38, at 96.

52. *Sierra Club v. EPA*, No. 1: 94-CV-2501-MHS, at 10-14 (N.D. Ga. July 17, 1997) (consent decree).

53. *See Conway*, *supra* note 38, at 97; *see also* *Env'tl. Prot. Agency, Total Maximum Daily Load Program: TMDL Lawsuit Information*, at <http://www.epa.gov/owow/tmdl/lawsuit.html> (last visited Mar. 18, 2001) (suggesting five years as a reasonable time frame for TMDL development).

indulgent timeframes for establishing TMDLs, EPA is now being put to the task of ensuring that states establish TMDLs for water bodies that do not meet water quality standards.

These recent cases suggest that the courts will interpret Section 303 to require states to list impaired waters and establish TMDLs for those waters within a reasonable period of time.⁵⁴ They did not, however, clarify whether all impaired waters, no matter what their source of pollution, are subject to TMDLs. This ambiguity in the scope of Section 303 originates in Section 303(d)(1)(A), which directs states to list and establish TMDLs for those waters "for which the effluent limitations required by section 1311(b)(1)(A) and section 1311(b)(1)(B) . . . are not stringent enough to implement any water quality standard applicable to such waters."⁵⁵ This section could imply that Congress ordered TMDLs only for those water bodies where point source controls have failed, not those polluted exclusively by nonpoint sources.⁵⁶ Producers of nonpoint source pollution, such as the agriculture and timber industries, have resolutely advanced this argument. They claim that waters polluted solely by nonpoint sources should be listed under the voluntary and informational provisions of Section 303(d)(3) and Section 319.⁵⁷ Further, they assert that if TMDLs are required for all impaired water bodies, then the 1987 amendment that added Section 319⁵⁸ would be superfluous because it created nonpoint source pollution management programs where Section 303 should have been adequate.

The CWA itself does not clearly address the question of whether Section 303 applies to water bodies polluted exclusively by nonpoint sources. EPA has, however, unequivocally indicated

54. See *Sierra Club v. Hankinson*, No. 1: 94-CV-2501-MHS, at 8, 10 (N.D. Ga. July 17, 1997) (creating an eight-year schedule for the state to establish TMDLs for listed waters); *Idaho Sportsmen's Coalition v. Browner*, 951 F. Supp. 962, 967 (W.D. Wash. 1996).

55. 33 U.S.C. § 1313(d)(1)(A). 33 U.S.C. § 1311(b)(1)(A) mandates the establishment of effluent limitations for point sources (excluding publicly owned treatment works) which require the application of best practicable control technology. 33 U.S.C. § 1311(b)(1)(B) mandates the establishment of effluent limitations for publicly owned treatment works based upon EPA definitions of secondary treatment.

56. See Oliver A. Houck, *TMDLs III: A New Framework for the CWA's Ambient Standards Program*, 28 ENVTL. L. REP. 10,415, 10,421-22 (1988) (describing a meeting of a Federal Advisory Committee Act (FACA) committee formed by EPA to guide the direction of the TMDL program at which timber and agriculture representatives argued that water impaired primarily or entirely by nonpoint sources should not be listed under Section 303(d)(1)).

57. *Id.*; *Pronsolino v. Marcus*, 91 F. Supp. 2d 1337, 1346 (N.D. Cal. 2000); see HOUCK, *supra* note 2, at 61.

58. See *supra* text accompanying note 29.

that state lists of impaired waterbodies should include "waterbodies that are impaired by point sources only, nonpoint sources only, or by a combination of point and nonpoint sources."⁵⁹ The *Pronsolino* court was forced to address the conflict inherent in these two positions.

II

DESCRIPTION OF THE CASE

A. Facts

Plaintiffs Guido and Betty Pronsolino owned forestland along the Garcia River in Northern California, from which they sought to harvest timber.⁶⁰ The river, once a prolific spawning ground for salmon and anadromous trout, has been adversely affected by sedimentation from logging practices.⁶¹ Although Section 303(d) of the CWA requires California to identify substandard waters, by 1992, the state had yet to establish a TMDL for the Garcia River.⁶² In that year, EPA required California to add the river to its list of substandard waters.⁶³ In 1997, EPA, environmental groups, and fishers reached a settlement decree that forced EPA to fulfill its duties under Section 303(d).⁶⁴ Accordingly, the agency set a deadline of March 16, 1998 for California to establish a TMDL for the Garcia River.⁶⁵ When the state failed to meet the deadline, EPA released its own TMDL immediately thereafter.⁶⁶

59. 40 C.F.R. § 130.25(a)(3) (2000).

60. *Pronsolino*, 91 F. Supp. 2d at 1338.

61. *Id.* at 1338-39.

62. *Id.*

63. *Id.*

64. A group of fishers and environmental groups sued EPA, alleging that the then-recent addition of the Garcia River and sixteen other water segments to California's list of substandard waters meant that California and/or EPA had to prepare TMDLs for the rivers. That case ended in a consent decree in March 1997 requiring TMDLs for all of the rivers. Consent Decree, Pacific Coast Fed'n of Fishermen's Ass'n v. Marcus, et al., No. 95-4474 MHP (Mar. 6, 1997).

65. *Id.*

66. *Id.* EPA established the TMDL for sediment in the Garcia River watershed at 552 tons/mi²/year. This number is a sixty percent reduction from the average historic sediment load of 1,380 tons/mi²/year over the forty-five year period from 1952-1997. This TMDL accounts for mass wasting from roads and timbering, run-off from road surfaces, trails, and gullies, and natural mass wasting. Env'tl. Prot. Agency Region IX, *Garcia River Sediment Total Maximum Daily Load* (Mar. 16, 1998) at 37-38, available at http://www.swrcb.ca.gov/rwqcb1/Program_Information/tmdl/GarciaRiverWatershedStatus.html. The term "mass wasting" refers to the "downslope movement of soil mass under force of gravity— often used synonymously with 'landslide.'" *Id.* at 49.

When the Pronsolinos obtained a permit to harvest timber, the California Department of Forestry (CDF)⁶⁷ imposed certain restrictions on timber harvesting designed to reduce soil erosion into the Garcia River and ensure California's compliance with the new TMDL set by EPA.⁶⁸ The Pronsolinos found the cost of these restrictions to be prohibitive and sought redress from the court.⁶⁹ Joined by the local, state, and national branches of the Farm Bureau Federation, the Pronsolinos argued that EPA had no authority to establish a TMDL for a waterway polluted exclusively by nonpoint sources, such as silviculture and agricultural run-off. The plaintiffs claimed that Section 303(d) of the CWA applies only to rivers polluted either exclusively by point sources of pollution or by both point and nonpoint sources.⁷⁰ Relying on the construction and express language of Section 303(d), which makes no mention of nonpoint sources, the plaintiffs argued that a water body polluted solely by logging and agricultural run-off should be outside the scope of the statute.⁷¹ Unless the Garcia River had at least one point source, the plaintiffs argued, it should not have been listed as a

67. The CDF oversees timber harvesting on all non-federal lands under the California Forest Practice Act (FPA). The FPA requires that Timber Harvesting Plans (THPs) be submitted to the CDF for commercial timber harvest to insure compliance with the Act, rules adopted by the State Board of Forestry and Fire Protection, and other state and federal laws protecting watersheds and wildlife. THPs must be prepared by Registered Professional Foresters and harvesting operations must be carried out by timber operators licensed by CDF. Resource Management and Forestry, at <http://www.fire.ca.gov/ResourceManagement/ForestPractice.asp> (last visited Mar. 12, 2001).

68. *Pronsolino*, 91 F. Supp. 2d at 1338. The restrictions required that the Pronsolinos:

- (a) inventory controllable sediment sources from all roads, landings, skid trails, and agricultural facilities by June 1, 2002;
- (b) mitigate ninety percent of the controllable sediment at 'road related' inventoried sites by June 1, 2012;
- (c) prevent sediment loading caused by road construction;
- (d) retain five conifer trees greater than thirty-two inches in diameter at breast height ('dbh') per 100 feet of all Class I and Class II watercourses (if the site lacks enough trees to comply, the five largest trees per 100 feet must be retained);
- (e) harvest only during dry, rainless periods between May 1 and October 15;
- (f) refrain from constructing or using skid trails on slopes greater than forty percent within 200 feet of a watercourse; and
- (g) forbear removing trees from certain unstable areas which have a potential to deliver sediment to a watercourse.

Id. at 1338. The Pronsolinos' forester estimated that it would cost them over \$750,000 to comply with these requirements. *Id.* at 1340.

69. *Id.* at 1338.

70. *Id.* at 1346.

71. *Id.*

substandard waterway and EPA should not have established a TMDL.⁷²

B. Federal District Court's Analysis

The Federal District Court for the Northern District of California rejected the plaintiffs' claims. The court disagreed with the plaintiffs' narrow construction of the statute, emphasizing that Congress intended the CWA to be a comprehensive program to protect the nation's waterways and the fish, shellfish, and wildlife that depend on them.⁷³ The court first concluded that TMDLs would be useless if they were limited only to waters polluted by some point source. The court emphasized that while Congress meant for states to establish TMDLs where NPDES effluent limitations failed to ensure that a water body met water quality standards, TMDLs were also intended to help states develop and evaluate land use practices to mitigate nonpoint source pollution.⁷⁴ In reaching this conclusion, the court focused on the incorporation of TMDLs into the continuing planning process that each state must submit to EPA.⁷⁵ Because the continuing planning process applies to all navigable waters, the court resolved that excluding nonpoint sources from TMDLs would make it impossible for states to implement water quality standards and would frustrate the comprehensive approach adopted by the CWA.⁷⁶

Second, the court noted that Section 303(d) must apply to waters polluted wholly by nonpoint sources because the provision applies to all navigable waters within a state's boundaries.⁷⁷ Noting that Section 303 is entitled "Water Quality Standards and Implementation Plans," and that the CWA mandates water quality standards for all navigable waters,⁷⁸ the court determined that all substandard waters fall within the ambit of the TMDL requirement.⁷⁹ Only if the technological controls on point sources within a watershed are adequate to raise the quality of water above the prescribed standard, the court found, is a TMDL no longer necessary for that body of

72. *Id.*

73. *Id.* at 1346-47.

74. *Id.*

75. *Id.* See *supra* note 28.

76. *Pronsolino*, 91 F. Supp. 2d at 1346-47.

77. *Id.* at 1347.

78. 33 U.S.C. § 1313.

79. *Pronsolino*, 91 F. Supp. 2d at 1347.

water.⁸⁰ What remains under the purview of Section 303, the court concluded, are all bodies of water that do not meet water quality standards, whether polluted by point sources, nonpoint sources, or both.⁸¹ As a result, the Garcia River warranted a TMDL.

Third, the court concluded that nonpoint sources were not expressly mentioned in Section 303(d) because Congress, by superimposing the NPDES approach onto an existing system of water quality standards established by states, directly spoke to the exact question at issue.⁸² With the 1972 Act, Congress wrestled the bulk of water quality management authority away from the states and delegated it to EPA.⁸³ The technology standards required by the federal government represented a marked shift in the way the nation addressed impaired waterways.⁸⁴ As a compromise, Congress included Section 303, which left management of nonpoint source pollution to the states.⁸⁵ Accordingly, the court determined, Congress did not explicitly include nonpoint sources in the language of Section 303 because the provision simply preserved the extant scheme by which states oversaw nonpoint source management.⁸⁶ Congress did not intend the water quality standards that preceded the CWA to be excluded once the Amendments were enacted. Leaving waterways solely polluted by nonpoint sources outside the scope of the Act would create a discontinuity in the comprehensive program envisioned by Congress.⁸⁷

Finally, to support its judgment, the district court cited numerous Ninth Circuit decisions confirming that the TMDL process includes both nonpoint and point sources of pollution.⁸⁸

80. *Id.*

81. *Id.*

82. *Id.*

83. HOUCK, *supra* note 2, at 14-24.

84. *Id.*

85. *Id.*

86. *See Pronsolino*, 91 F. Supp. 2d at 1347.

87. *Id.*

88. *Id.* at 1347-49 (citing *Trustees for Alaska v. EPA*, 749 F.2d 549, 557-58 (9th Cir. 1984), *Oregon Natural Resources Council v. United States Forest Svc.*, 834 F.2d 842 (9th Cir. 1987), *Alaska Ctr. for the Env't v. Browner*, 20 F.3d 981 (9th Cir. 1994), and *Dioxin/Organochlorine Ctr. v. Clarke*, 57 F.3d 1517 (9th Cir. 1995)). The *Pronsolino* court acknowledged that *Oregon Natural Resources Council* did not address Section 303(d) or TMDLs specifically, but noted that it did recognize that the 1972 Act "comprehended nonpoint source regulations through state areawide waste treatment management plans." *Pronsolino*, 91 F. Supp. 2d at 1348; *see also Alaska Ctr.*, 20 F.3d at 985 (affirming a District Court decision ordering EPA to issue TMDLs for Alaskan waters after the state had failed to and stating, "Congress and the EPA have already determined that establishing TMDLs is an effective tool for achieving

The court noted that the Ninth Circuit has already stated that TMDLs are an "effective tool for achieving water quality standards in waters impacted by non-point source pollution"⁸⁹ and that "(a) TMDL defines the specified amount of a pollutant which can be discharged or loaded into the waters at issue from all combined sources."⁹⁰ Finally, the District Court reviewed the legislative history of Section 303(d) to conclude that the Congressional committee recognized that mitigation of nonpoint sources would be required to meet water quality standards.⁹¹ The *Pronsolinos* did not appeal this decision.⁹²

III

ANALYSIS

A. *Pronsolino* Within the Scheme of TMDL Litigation

The *Pronsolino* decision significantly augmented existing TMDL jurisprudence in two distinct ways. First, the decision substantially expanded the scope of waterways for which TMDLs must be established. Previous TMDL litigation had focused only on the quality of state submissions under Section 303(d) and the adequacy of EPA's response. *Pronsolino* is the first case to hold that any body of water not meeting water quality standards sanctions a TMDL. Second, *Pronsolino* is one of the first cases in which EPA's implementation of the TMDL program has been challenged by landowners rather than environmental interests. After years of defending its slothfulness in advancing the TMDL provisions, EPA was actually forced to defend the broad reach it

water quality standards in waters impacted by nonpoint source pollution."); *Dioxin/Organochlorine Ctr.*, 57 F.3d at 1520 (treating TMDLs as applicable to nonpoint sources).

89. *Pronsolino*, 91 F. Supp. 2d at 1349 (quoting *Alaska Ctr.*, 20 F.3d at 985).

90. *Id.* (quoting *Dioxin/Organochlorine Ctr.*, 57 F.3d at 1520).

91. *Id.* at 1349-51. The court quoted from the House Committee report that emphasized more stringent industrial and municipal effluent limitations would not, by themselves, ensure that receiving waters met water quality standards. The Committee recognized the contribution of nonpoint source pollution to water quality problems. *Pronsolino*, 91 F. Supp. 2d at 1349-50 (citing H.R. Rep. No. 92-911, at 105-06 (1972)).

92. The district court concluded by outlining other avenues of redress available to the plaintiffs. *Id.* at 1355 (suggesting that the *Pronsolinos* could appeal unreasonable or unauthorized restrictions within the state administrative system, or challenge a TMDL or Section 303(d) listing as arbitrary, capricious, unsupported by substantial evidence, or an abuse of discretion under the Administrative Procedure Act). Because the landowners did not proceed on these alternative theories, the court based its decision solely on the plaintiff's argument that EPA had no authority to set a TMDL. *Id.*

had defined for those provisions.⁹³ This shift in the agency's role indicates how far TMDL litigation has come in compelling the requirements of Section 303(d).

Although the *Pronsolino* court resolved a legal issue, the conflict was essentially political. Despite the ambiguity in the language of Section 303(d), it is difficult to imagine a result contrary to *Pronsolino*. The legal question in *Pronsolino* was fairly straightforward, simply because excluding from the CWA rivers polluted exclusively by nonpoint sources would lead to absurd outcomes.⁹⁴ Those industries that eluded the grasp of the point source provisions, such as agriculture and forestry, however, argue emphatically that nonpoint sources are not governed by TMDLs because load restrictions regulate polluters more strictly than do management practices. While in 1972 there clearly was no political will to include these industries among the polluters subjected to NPDES permits,⁹⁵ there is no indication that they were exempted from Section 303(d) as well. Nonetheless, continued political pressure from nonpoint source interests, and states' demands for control over water quality regulation have allowed Section 303(d) to wallow in its ambiguity.

Pronsolino is an important step toward creating some accountability for nonpoint source polluters under the CWA. Although Section 303(d) is silent on whether it applies to only point, only nonpoint, or to both point and nonpoint sources,⁹⁶ the court logically concluded that the provision's requirements would be impossible to carry out if nonpoint sources were excluded. Had the *Pronsolino* plaintiffs won, the states would be unable to bring substandard waters into CWA compliance because they would lack the authority to regulate nonpoint sources. It is difficult to believe that Congress could have intended this result when the legislative record indicates that members of the House Committee on Public Works were fully aware of the nonpoint source pollution problems.⁹⁷ Accordingly,

93. See 40 C.F.R. § 130.25.

94. Houck, *supra* note 22, at 10,400; HOUCK, *supra* note 2, at 61.

95. The CWA explicitly excludes agricultural stormwater discharges and irrigation return flows from the definition of point sources. 33 U.S.C. § 1362(14). As a result, the agriculture industry does not have to apply best available control technology or restrict such effluent to limitations imposed by a NPDES permit. See 33 U.S.C. §§ 1311(a)-(b)(1)(A), 1342(a).

96. Houck, *supra* note 22, at 10,399.

97. *Id.*; *Pronsolino*, 91 F. Supp. 2d at 1349-50. The report of the Committee on Public Works states:

[The point source effluent limitations] should not be interpreted to mean that such more stringent industrial and municipal effluent limitations will,

EPA has included nonpoint sources within the ambit of its Section 303(d) regulations and guidelines since 1975.⁹⁸

In addition, if agriculture and logging operations were exempted from the TMDL program when they are the sole sources of pollution in a watershed, point sources would shoulder a disproportionate burden for cleaning up the nation's waters. These industries (and the Department of Agriculture)⁹⁹ have consistently argued that Congress wrote Section 303(d) with point sources in mind¹⁰⁰ and only intended to require nonpoint sources to voluntarily apply best management practices under the incentives provided by Section 319.¹⁰¹ This interpretation would place the entire brunt of the CWA on point sources, however. On impaired water bodies polluted by both point and nonpoint sources, nonpoint sources could pollute without restraint while the point sources would not only have to comply with the requirements of their NPDES permits, but would also be solely responsible for implementing any additional reductions imposed by the state to meet the waterway's TMDL. Allowing farmers and loggers to follow pollution control measures on a voluntary basis would thus not only undermine the overall scheme of the CWA and incapacitate any effective state control over water quality, but would also unfairly "doubly" burden point sources. It is unlikely that Congress intended this outcome.

B. *Inherent Limitations in TMDL Implementation and Enforcement*

Despite the importance of *Pronsolino* within the scheme of TMDL litigation, ultimately, it will likely have little effect on the push to implement TMDLs for all waterways polluted by nonpoint sources. The mere establishment of TMDLs is unlikely

in themselves, bring about a meeting of water quality standards for receiving waters. The Committee clearly recognized that non-point sources of pollution are a major contributor to water quality problems.

H.R. Rep. No. 92-911, at 105-06 (1972).

98. *Pronsolino*, 91 F. Supp. 2d at 1349-50; 40 C.F.R. § 130.25.

99. On April 27, 1997, the U.S. Forest Service (part of the Department of Agriculture) wrote EPA to protest the application of Section 303(d) to nonpoint sources. The Forest Service urged that Section 303(d) was written with point sources in mind. The agency warned that EPA's interpretation of Section 303(d) for nonpoint sources would expose federal and state agencies to burdensome litigation over nonpoint source controls. Houck, *supra* note 22, at 10,400.

100. *Id.*

101. *Id.*; 33 U.S.C. § 1329.

to overcome the Act's lax implementation structure and nonexistent enforcement mechanisms.

Sections 303 and 319 of the Act contain provisions that outline the implementation schemes intended by Congress.¹⁰² Section 303 requires states to create a continuing planning process that contains methods for establishing TMDLs and implementing revised or new water quality standards (including schedules for compliance).¹⁰³ Section 319 requires states to create programs that use BMPs to control nonpoint source pollution.¹⁰⁴ Ultimately, however, these provisions are voluntary; the legal authority to impose regulatory controls on nonpoint sources must originate in the states' own water quality laws.¹⁰⁵ While some courts have ordered implementation schedules¹⁰⁶ or included them in consent decrees,¹⁰⁷ the implementation of nonpoint source controls in individual states has produced inconsistent results.¹⁰⁸

Although EPA has strengthened the TMDL implementation requirements imposed on states through new regulations, these provisions add no enforcement mechanisms to the existing implementation schemes.¹⁰⁹ The new regulations require that a TMDL include an implementation plan that incorporates specific steps and a defined schedule for restoring polluted waters.¹¹⁰ These implementation plans must only provide a "reasonable assurance . . . that load allocations will be implemented and achieve the assigned load reductions."¹¹¹ Although the new regulations appear to ameliorate existing implementation problems, the lack of any mechanism to meaningfully enforce the "reasonable assurance" requirement impedes the agency's ability to ensure state compliance.

The deficiencies in TMDL implementation stem from the fact that Congress omitted the TMDL process from Section 309 and

102. 33 U.S.C. §§ 1313, 1329.

103. 33 U.S.C. § 1313(e)(3)(C) & (F).

104. 33 U.S.C. § 1329(b)(2)(A).

105. See Houck, *supra* note 56, at 10,435; Houck, *supra* note 22, at 10,399; Zaring, *supra* note 2, at 10,135.

106. See *Sierra Club v. Hankinson*, 939 F. Supp. 872, 873 (N.D. Ga. 1996).

107. See *Defenders of Wildlife v. Browner*, No. CIV93-234-TUC-ACM (D. Ariz. Apr. 22, 1997) (consent decree).

108. Conway, *supra* note 38, at 114.

109. Env'tl. Prot. Agency, *Total Maximum Daily Load Program: Expected Changes to the New TMDL Regulations Compared to the Current Regulations*, at <http://www.epa.gov/owow/tmdl/fact12pts.html> (June 27, 2000) (accessible through <http://www.epa.gov/owow/tmdl/newold.html>); 40 C.F.R. § 130.32.

110. 40 C.F.R. § 130.32.

111. 40 C.F.R. § 130.32(c)(2)(ii).

the CWA's enforcement mechanisms. Section 309 excludes Section 303 from the scope of compliance orders and civil suits designed to enforce violations of point source pollution permits.¹¹² In addition, neither Section 303 nor 319, the provisions of the CWA that apply to nonpoint sources, contain specific enforcement language that litigants could use to ensure state adherence to TMDL limits.¹¹³ These sections imply that Congress did not intend to allow citizens to sue for violations of water quality standards.¹¹⁴ While a citizen suit based on an alleged violation of water quality standards could succeed if compliance with those standards were a condition of a polluter's NPDES permit,¹¹⁵ citizen suits to enforce TMDL limits on nonpoint sources are virtually impossible.¹¹⁶ The limited legal tools for enforcing TMDLs have provided noncompliant states with a license to ignore TMDLs after establishing them.¹¹⁷

As the *Pronsolino* court correctly recognized, when EPA established a TMDL for the Garcia River, the agency was guiding California by offering grant money rather than regulating state land-use practices.¹¹⁸ In the end, TMDLs are simply a means by which EPA can provide data to assist states in meeting water quality standards.¹¹⁹ Although EPA can wield significant power over states, by establishing TMDLs for states that fail to do so on their own, states remain "free to moderate or modify the TMDL reductions, or even refuse to implement them."¹²⁰ Ultimately, the court's determination that TMDLs apply to waterways polluted exclusively by nonpoint sources has effect in California only because the relevant state agencies have responded to federal funding initiatives. The *Pronsolino* decision is of little consequence in states that have not yielded to Congressional incentives.

112. 33 U.S.C. § 1319(a)(1).

113. 33 U.S.C. §§ 1313, 1329.

114. *See id.*; Oregon Natural Resources Council v. United States Forest Svc., 834 F.2d 842, 849 (9th Cir. 1987).

115. *See* 33 U.S.C. § 1365(a)(1), (f) (1994); Northwest Env'tl. Advocate v. Portland, 74 F.3d 945 (9th Cir. 1996) (O'Scannlain, J., dissenting from order rejecting suggestion for rehearing en banc).

116. Michael P. Healy, *Still Dirty After Twenty-Five Years: Water Quality Standard Enforcement and the Availability of Citizen Suits*, 24 *ECOLOGY L.Q.* 393, 442 (1997).

117. Conway, *supra* note 38, at 114.

118. *Pronsolino v. Marcus*, 91 F. Supp. 2d 1337, 1355 (N.D. Cal. 2000).

119. *Id.*

120. *Id.*

C. State Sovereignty Constraints

Because of constitutional limitations designed to protect state sovereignty from overintrusive federal power, a court would likely overturn any EPA effort to directly mandate that states enforce the TMDL provisions of the CWA. Congress superimposed the TMDL program onto an existing system of water quality standards enforced by the states—not by EPA. States do nearly all the substantive work under Section 303: they list threatened waters, establish TMDLs, and implement the TMDLs they establish.¹²¹ Although Congress has mandated that EPA intervene when a state fails to establish TMDLs, it has not delegated power to the agency to enforce a state's failure to implement the established load limits.¹²² In contrast, point source enforcement originates from a management structure that puts authority over the NPDES permit system in federal hands. The statute explicitly provides that "the Administrator may . . . issue a permit for the discharge of any pollutant, or combination of pollutants."¹²³ While the states themselves can volunteer to issue permits,¹²⁴ Congress contemplated that the NPDES permit program would be enforced by the federal agency.¹²⁵

Since the management structure for nonpoint source pollution gives TMDL enforcement authority to the states, the Tenth Amendment precludes EPA from compelling states to implement TMDLs. The Tenth Amendment limits the ability of the executive branch to regulate states by reserving for the states those powers not granted by the Constitution to the federal government.¹²⁶ Because Congress has not expressly granted EPA authority over the provisions of Sections 303 and 319, the agency is confined to a very limited role in nonpoint source enforcement. The very nature of the nonpoint source provisions—water quality standards that states set and TMDLs that states establish and implement through voluntary mechanisms—restricts the ability of a federal agency to ensure compliance. Any action by EPA to compel states to execute the requirements of the CWA would undoubtedly be within the ambit of federal activities that the Supreme Court has deemed

121. See 33 U.S.C. § 1313(a), (d-e).

122. See 33 U.S.C. § 1313(d)(2); Conway, *supra* note 38, at 114.

123. 33 U.S.C. § 1342(a)(1).

124. 33 U.S.C. § 1342(b).

125. See 33 U.S.C. § 1319(a)(1-3).

126. U.S. CONST. amend. X; *Printz v. United States*, 521 U.S. 898, 919 (1997).

unconstitutional.¹²⁷ While Congress could give EPA the power to enforce state TMDL implementation (as it has done with the point source program), it has not. As a result, EPA's activities are strictly curtailed by constitutional limitations.

Recent Supreme Court decisions precluding the federal government from enlisting states to administer federal laws underscore the constitutional limits EPA faces in carrying out the new TMDL regulations. The Court's decisions preserving state sovereignty in the face of overreaching federal regulation suggest that, despite cases such as *Pronsolino* that require states to create TMDLs or accept TMDLs that EPA creates for them, any efforts to force states to implement those TMDLs will be declared unconstitutional.¹²⁸ In *New York v. United States*, the Court declared that "[t]he Federal Government may not compel the States to enact or administer a federal regulatory program."¹²⁹ Similarly, in *Printz v. United States*, the Court emphasized that forcing a sovereign state to carry out federal directives jeopardizes the structure of separate powers and undermines the authority of state government.¹³⁰

The success of the CWA's nonpoint source abatement program therefore depends largely on state-directed implementation and enforcement. While some states have adopted their own TMDLs, implementation schemes for those load limits, and adequate enforcement measures,¹³¹ other states continue to dodge TMDL enforcement.¹³² Recent decisions

127. See *Printz*, 521 U.S. at 898; *New York v. United States*, 505 U.S. 144, 188 (1992); Larry D. Kramer, *Putting the Politics Back into the Political Safeguards of Federalism*, 100 COLUM. L. REV. 215, 227, 288 (2000); Andrew S. Gold, *Formalism and State Sovereignty in Printz v. United States: Cooperation by Consent*, 22 HARV. J. L. PUB. POL'Y 247, 249-50 (1998); Evan H. Caminker, *Printz, State Sovereignty, and the Limits of Formalism*, 1997 SUP. CT. REV. 199, 200-01 (1997). The Court emphasized that a federal mandate to a sovereign state to carry out a federal law unconstitutionally concentrates power in the federal government at the expense of the states. *Printz*, 521 U.S. at 922.

128. See *Printz*, 521 U.S. at 935; *New York*, 505 U.S. at 188; Kramer, *supra* note 127, at 227.

129. *New York*, 505 U.S. at 188.

130. *Printz*, 521 U.S. at 922, 928.

131. See, e.g., CAL. WATER CODE § 13369 (2000). Oregon has also been a strong proponent of the TMDL program. HOUCK, *supra* note 2, at 128, nn. 294 & 295. For a review of state general discharge prohibitions in water pollution laws, see Environmental Law Institute, *Enforceable State Mechanisms for the Control of Nonpoint Source Water Pollution*, available at <http://www.epa.gov/owow/NPS/elistudy>. For links to information on state TMDL programs, see <http://www.epa.gov/owow/tmdl/links.html> (last visited Feb. 25, 2001).

132. See Houck, *supra* note 56, at 10,435; James McElfish, Jr., *State Enforcement Authorities for Polluted Runoff*, 28 ENVTL. L. REP. 10,181 (1998). One commentator

upholding state sovereignty create little inducement for states to step up enforcement, thus effectively undermining the Act's nonpoint source provisions and EPA's new TMDL regulations. Circumventing these state sovereignty issues would require a major restructuring of the nonpoint source provisions in the CWA, which is an unlikely prospect in the near future.¹³³ The political will to regulate the agriculture and timber industries under the CWA has been minimal to nonexistent in the past, and under the current political make-up of Congress (supported by a President who disfavors federal environmental regulation), revamping the CWA is not a Congressional priority. As a result, to protect our nation's waters, EPA needs to more effectively exercise existing CWA provisions.

D: A Streamlined Financial Incentive Structure

Given the current limits on EPA enforcement, the agency should use TMDLs to more effectively mesh the existing framework or federal funding with the essentially voluntary nonpoint source provisions of the CWA in order to increase state pollution prevention efforts. The Act authorizes grants to states for implementing their nonpoint source management programs.¹³⁴ Under Section 319(h), EPA can give priority to state programs that implement "innovative methods or practices for controlling nonpoint sources of pollution."¹³⁵ Persistent pollution problems in the nation's waterways from nonpoint sources attest to the grant program's failure to provide adequate incentives for state compliance.¹³⁶ However, because the language of the statute provides EPA with considerable flexibility in awarding

has been particularly critical of Virginia's TMDL efforts. HOUCK, *supra* note 2, at 128, n. 295.

133. However, in the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) to the Coastal Zone Management Act (CZMA) (16 U.S.C. §§ 1451-1465), Congress included an enforcement mechanism for nonpoint source pollution control that the CWA lacked. CZARA "required states and territories with approved coastal zone management programs to adopt enforceable mechanisms to implement management measures, as identified by . . . EPA, to control nonpoint source pollution in their coastal zones in order to retain eligibility for grant funding under both CZMA and § 319" of the CWA. McElfish, *supra* note 132, at 10,182. At least for coastal states, Congress did mandate enforcement of implementation measures for nonpoint source pollution, but limited resources make that enforcement power difficult to carry out. *Id.*

134. 33 U.S.C. § 1329(h).

135. 33 U.S.C. § 1329(h)(5)(B).

136. Zaring, *supra* note 2, at 10,133.

money to states,¹³⁷ the agency can choose state programs that will provide the most clean-up bang for every federal buck spent.

Innovative financial incentive structures, such as the pollution allowance trading incorporated into the Clean Air Act,¹³⁸ may address the state sovereignty and funding limitations encountered in nonpoint source regulation. Effluent trading allows polluters to transfer the responsibility of reducing discharges to that polluter who can most cheaply achieve the reductions.¹³⁹ In the context of nonpoint source pollution control, this type of program would encourage the implementation of BMPs or similar controls by those landowners who can do so most economically.¹⁴⁰ Dischargers who cannot efficiently meet their TMDL allocation could buy pollution allowances from others who are able to reduce nonpoint loading.¹⁴¹ This type of trading system requires that a TMDL be established from which load allowances can be calculated for each user in the watershed.¹⁴² The TMDL provides the "cap" that limits the total amount of loading that can occur in the basin. If EPA gives its grant money only to those states that meet this upper limit, rather than to those states that simply encourage watershed users to implement BMPs, the agency will get a greater return on its investment. Effluent trading is a promising way for states to meet pollution reduction goals established by TMDLs.

While the diversity of sources causing nonpoint source pollution make the application of an effluent trading program particularly challenging, those characteristics exist under any nonpoint management scheme. Difficulties in monitoring and enforcement are inherent in any nonpoint source control program, whether it is based on a command and control or

137. 33 U.S.C. § 1329(h)(5) (stating that "the Administrator *may* give priority in making grants under this subsection, and shall give *consideration* . . . to States which have implemented or are proposing to implement management programs which will . . . implement innovative methods or practices for controlling nonpoint sources of pollution, including regulatory programs *where the Administrator deems appropriate.*" (emphasis added)).

138. See Clean Air Act § 403(b), 42 U.S.C. § 7651b(b) (1994).

139. See Kurt Stephenson, Leonard Shabman & L. Leon Geyera, *Toward an Effective Watershed-Based Effluent Allowance Trading System: Identifying the Statutory and Regulatory Barriers to Implementation*, 5 ENVTL. L. 775, 781-82 (1999).

140. See Env'tl. Prot. Agency, *Draft Framework for Watershed-Based Trading*, at <http://www.epa.gov/OWOW/watershed/summary.html> (last visited Oct. 18, 2000) [hereinafter *Draft Framework*]; Env'tl. Prot. Agency, *TMDL Case Study: Tar-Pamlico Basin, North Carolina*, at <http://www.epa.gov/OWOW/tmdl/cs10/cs10.htm> (last visited Oct. 18, 2000) [hereinafter *Tar-Pamlico Case Study*].

141. *Draft Framework*, *supra* note 140.

142. *Id.*

market-based model. The trading programs, however, provide a flexible means by which an overall TMDL goal can be achieved. By decentralizing nonpoint source control, effluent trading accommodates different efficiency levels within a facility or farm, as well as varying degrees of effectiveness by which landowners can implement BMPs.¹⁴³ In addition, once dischargers have been allocated their load limits, it is up to the polluters themselves to find the cheapest means of reducing pollutant loading; no part of the actual load reduction is dependent on federal funding.

Examples of watersheds in which dischargers have experimented with effluent trading have primarily focused on point/point and point/nonpoint allowance trading. An oft-cited example is the Tar-Pamlico Basin in North Carolina.¹⁴⁴ There, the state Division of Environmental Management developed strict nitrogen and phosphorus standards for dischargers in the basin.¹⁴⁵ In response, a coalition of point source dischargers proposed a nutrient trading framework whereby they could pay upstream farmers to develop BMPs at a lower cost than meeting their own load allocations, while still reducing the overall nutrient load in the basin.¹⁴⁶

While this arrangement allowed the Tar-Pamlico basin to meet its TMDL, important limitations in the program's structure could restrict its application to other regions. First, the impetus for the Tar-Pamlico program was a state-imposed limit on nutrient loading. As discussed earlier, nothing in the CWA requires a state to impose regulations using this type of creative solution. EPA's limitations in this domain could be circumvented, however, if federal incentives reward states that create trading programs and enforce TMDL caps on the effluent market.

Moreover, although the North Carolina Division of Environmental Management recognized that both point and nonpoint sources contributed to nutrient loading in the Tar-Pamlico basin, the agency's strategy aimed to halt point source

143. See Chelsea H. Congdon, Terry F. Young & Brian E. Gray, *Economic Incentives and Nonpoint Source Pollution: A Case Study of California's Grassland's Region*, 2 HASTINGS W.-NW. J. ENVTL. L. & POL'Y 185 (1995).

144. See Tar-Pamlico Case Study, *supra* note 140; Stephenson, Shabman & Geyera, *supra* note 139, at 804-06; Elise M. Fulstone, *Effluent Trading: Legal Constraints on the Implementation of Market-Based Effluent Trading Programs Under the Clean Water Act*, 1 ENVTL. L. 459, 467 n.36 (1995); David Letson, *Point/Nonpoint Source Pollution Reduction Trading: An Interpretive Survey*, 32 NAT. RESOURCES J. 219, 220 (1992).

145. Tar-Pamlico Case Study, *supra* note 140.

146. *Id.*

increases until it could design and implement an overall nutrient reduction plan for the watershed.¹⁴⁷ As a result, the point source dischargers feared they would be unable to pay the high costs of constructing new facilities to meet the nutrient control goals,¹⁴⁸ while the upstream agricultural operations had no such concerns. Rather than trying to further reduce their own discharges, the point source polluters actually initiated the program to improve upstream BMPs.¹⁴⁹ In essence, to reduce the basin's nutrient load, the point source polluters had to pay while the nonpoint source contributors got paid. Had the initial burden to reduce loading not been on the industrial point source polluters, there would have been no impetus for trading. The inherent inequity of this system substantiates claims that point source polluters will ultimately shoulder the burden of TMDL enforcement unless more equitable load allocations are placed on polluters throughout an entire watershed.¹⁵⁰

Finally, the Tar-Pamlico program and others like it¹⁵¹ have succeeded because the basins experimenting with trading contain both point and nonpoint sources of pollution. Without point source polluters bearing the initial responsibility of load reduction, there is no incentive for trading to occur, nor is there a source of funding for implementing BMPs. In a watershed such as the Garcia River, where there are no point source dischargers, the Tar-Pamlico model would have little effect because there is no group of polluters that could pay the Pronsolinos to invoke the management practices required by the CDF. A viable trading market could be created, however, if federal funding incentives encouraged states to use TMDLs to allocate load limits among individual nonpoint source polluters. The CWA grant program must tie monetary awards to a state's willingness to not only set TMDLs and encourage BMPs, but also to hold landowners to their load limits and to meet basin-wide effluent caps. In this

147. *See id.*

148. *See id.*

149. *Id.*

150. *See* Melissa Thorne, *Clean Water Act Section 305(B): A Potential Vehicle for Incorporating Economics into the "TMDL" and Water Quality Standards-Setting Processes*, 13 TUL. ENVTL. L.J. 71, 73-74 (1999).

151. *See* Draft Framework, *supra* note 140 (citing examples from Florida, Maryland, and Colorado). *See also* Terry F. Young & Joe Karkowski, *Green Evolution: Are Economic Incentives the Next Step in Nonpoint Source Pollution Control?*, 2 WATER POL'Y 151, 153 (2000), describing an effluent trading program to reduce selenium discharges from farms in California's Central Valley. In that program, because a metering system measures discharges from an entire irrigation district at discernable points, a method for calculating loads from individual farmers (based on irrigated acreage) is readily available.

way, by minimally augmenting its standards for allocating CWA grant monies, EPA could exponentially increase the effectiveness of the nonpoint source provisions.

Although trading systems still depend on state rather than federal implementation, they offer creative mechanisms for nonpoint source reduction towards which the federal government can funnel grant money. While the structure of existing programs may be difficult to apply ubiquitously and there are no large-scale examples of truly nonpoint-to-nonpoint trading programs, these initiatives demonstrate the kind of innovations that EPA should advance. States should continue to experiment with tradeable allowances despite the current difficulties in the widespread application of trading programs and the inherent limitations within the structure of the CWA that may handicap the effective implementation of effluent trading.¹⁵² Successful implementation of TMDLs in every watershed will require innovative incentive programs and a willingness by EPA to stop funding states that adopt impotent voluntary measures. It is only when EPA holds states to their TMDLs as a prerequisite for receiving federal funds that the goals for nonpoint source pollution reduction set forth in the CWA will be achieved.

CONCLUSION

The decision in *Pronsolino v. Marcus* establishes that states or EPA must establish TMDLs for all navigable bodies of water that do not meet state water quality standards, including those that are polluted exclusively by nonpoint sources. However, the lack of any effective enforcement mechanisms by which EPA can oversee state implementation of TMDLs severely limits the efficacy of the nonpoint provisions. Even if a court compels a state to establish TMDLs, the authority to ensure that the TMDL is implemented rests exclusively with the states.

Similarly, while EPA's new TMDL regulations tighten the implementation requirements, issues of state sovereignty preclude EPA from requiring states to carry out the mandates of a federal statute. Under the Supreme Court's prevailing Tenth Amendment analysis, the federal government cannot enlist states to administer federal laws. As a result, unless a state

152. See Stephenson, Shabman & Geyera, *supra* note 139, at 801-03 (emphasizing that the CWA does not provide polluters sufficient flexibility. Anti-backsliding requirements in the Act cause polluters not to deviate from suggested technologies for fear that if they decrease their discharges, EPA will raise the standards).

enforces TMDLs for its waterways by imposing mandatory BMPs, nonpoint source polluters will be allowed to dodge responsibility for meeting water quality standards.

To overcome these limitations, EPA must make the successful attainment of TMDLs a condition of federal grants to state nonpoint source programs. Unless states are truly willing to cap pollution loads, the nonpoint source goals of the CWA will continue to languish in their current state of neglect. If EPA prioritizes its funding based on a state's willingness to implement effluent trading programs, every federal dollar spent could reach further toward achieving nonpoint source reduction. Once EPA has funded a watershed-wide program on the condition that it meets the established TMDL, the inherent structure of effluent trading will shift costs to those responsible for discharges. Ultimately, with minimal manipulation of federal funding priorities, EPA's efforts could result in widespread TMDL compliance. While existing efforts to superimpose trading programs on nonpoint sources may be difficult to apply on a large scale, they are a promising trend. The actual increase in pollution from nonpoint sources since the enactment of the CWA indicates that a little creativity, coupled with stricter funding standards, could go a long way in cleaning up the nation's waterways.