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The Clean Water Act’s Final Frontier: Taking on Nonpoint Source Pollution Using Mandatory TMDL Rules

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ABSTRACT

While the Clean Water Act, as it is currently structured, has few provisions that directly regulate nonpoint source pollution, the Ninth Circuit Court of Appeals, in the case Friends of Pinto Creek v. United States EPA, 504 F.3d 1007 (9th Cir. 2007), has recognized the Total Maximum Daily Load (TMDL) program as a tool that can be used by the EPA to indirectly compel states to regulate nonpoint source pollution in the nation’s impaired waters. In the context of the Ninth Circuit’s ruling, in 2010, the EPA made national headlines by pushing states to regulate nonpoint source pollution in the Chesapeake Bay Watershed through its implementation of the Chesapeake Bay TMDL Program. Focusing on these recent developments, this article analyzes the development of the TMDL program as a means through which to regulate nonpoint source pollution. Additionally, the Minnesota Clean Water Legacy Act is analyzed to examine a promising state-level nonpoint source regulatory program. This article concludes that states should be given the opportunity to address nonpoint source pollution at the local level, but if the states fail to do so, Congress should close the remaining nonpoint source regulatory gaps in the TMDL program to grant the EPA the tools needed to restore our nation’s impaired waters.

TABLE OF CONTENTS

I. INTRODUCTION..................................................................................................................2
II. TOTAL MAXIMUM DAILY LOAD PROGRAM.................................................................4
   a. Statutory Scheme........................................................................................................4
   b. A Slow Start to TMDLs and Judicially Forced Action.............................................8
III. TMDLS AS A TOOL TO ADDRESS NONPOINT SOURCE POLLUTION..............11
   a. The Problem of Nonpoint Sources Under the CWA............................................11
   b. Judicial Recognition of TMDLs as a Nonpoint Source Mitigation Tool...............14
      i. Prosolino v. Nastri..............................................................................................15
      ii. Friends of Pinto Creek v. United States EPA....................................................17
IV. TMDLS AND NONPOINT SOURCE POLLUTION IN THE CHESAPEAKE BAY......19
   a. Chesapeake Bay TMDL............................................................................................20
   b. Chesapeake Clean Water and Ecosystem Restoration Act of 2009......................28
V. MINNESOTA CLEAN WATER LEGACY ACT..............................................................30
VI. RECOMMENDATIONS FOR STRUCTURING A COMPREHENSIVE TMDL NONPOINT SOURCE REGULATORY REGIME.................................................................33
VII. CONCLUSION............................................................................................................34
I. INTRODUCTION

The Clean Water Act ("CWA"), as it is currently structured, was passed into law in 1972 with the purpose to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 1 Since the adoption of the modern CWA, regulation has been aimed primarily at reducing pollution from point source polluters, leaving nonpoint source polluters largely beyond the bounds of clean water regulation. In recent years, however, federal courts, the Environmental Protection Agency ("EPA"), and certain states have recognized the potential of using the CWA Total Maximum Daily Load ("TMDL") program as a tool through which to effectively reduce nonpoint source pollution in our nation’s impaired waters. This development has allowed state and federal regulators to cross into the “final frontier” of clean water regulation—the imposition of mandatory reductions of nonpoint source pollution.

In the instances in which the general provisions of the CWA are not sufficient to fulfill the CWA mission stated above, the CWA provides for the implementation of TMDL programs under which "impaired bodies of water" are assigned TMDLs of pollutants.2 The TMDL programs are to be designed to bring the impaired bodies of water into compliance with the designated water quality standards ("WQS") for those waters.3 TMDLs represent a more burdensome restriction on pollutant discharges than allowed under the general CWA National Pollutant Discharge Elimination System ("NPDES") program.

Because the central provisions of the CWA are focused primarily on point source pollution, the CWA, historically, has not been effective in directly mitigating nonpoint source pollution.

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1 33 U.S.C. § 1251(a).
2 33 U.S.C. § 1313(d)
3 Id.
pollution into our nation’s impaired waters. In 2010, however, the EPA made national headlines for its enforcement of a comprehensive TMDL program for the Chesapeake Bay—a program that not only sought to mitigate point source pollution, but that also imposed mandatory restrictions on nonpoint source pollution as well. In implementing what was called by one national news source, “part of the biggest shakeup in the 27-year history of the Chesapeake cleanup,” the EPA demonstrated a willingness to buck a historic pattern of lethargic TMDL implementation and to adopt a more vigorous approach, forcefully limiting pollution from both point and nonpoint sources into the Chesapeake Bay.

In the context of such recent developments in the CWA TMDL program, this article seeks to analyze the development of the TMDL program as a tool to be used by states and the EPA to address nonpoint source pollution in our nation’s impaired waters. The first half of this article analyzes the regulatory structure and background of the TMDL program; the statutory shortcomings of the CWA in addressing nonpoint source pollution; and landmark cases that recognized the TMDL program as a tool to address nonpoint source pollution.

The second half of this article focuses on recent developments in TMDL implementation, closely examining EPA implementation of the Chesapeake Bay TMDL, and how, in the face of inadequate action at the state level, EPA has used of the TMDL program to compel states in the Chesapeake Bay watershed to regulate nonpoint source pollution. Additionally, a state-level TMDL program, the Minnesota Clean Water Legacy Act (“CWLA”) is examined to provide a promising model from which states may draw when developing state-level TMDL programs.

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4 See infra Section III.a.
5 David A. Fahrenhold, EPA threatens states over Chesapeake Bay cleanup, Wash. Post, September 24, 2010 [hereinafter, Draft TMDL Story].
6 Id.
7 See infra Section II.b.
In the penultimate section of this article, recommendations are made as to how, going forward, the CWA TMDL program might be structured to cohesively and comprehensively address nonpoint source pollution, not only in the Chesapeake Bay, but in all of our nation’s impaired waters.

This paper concludes that states should be given the opportunity to restore waters that are impaired by point and nonpoint source polluters at the local level, but if the states fail to do so, Congress should not hesitate to close the final nonpoint source regulatory holes in the TMDL program, granting the EPA the tools needed to restore our nation’s impaired waters.

II. TOTAL MAXIMUM DAILY LOAD PROGRAM

a. Statutory Scheme

The CWA came into its current statutory form in 1972 when Congress amended earlier federal water pollution laws that had proven to be ineffective. Prior to 1972, Congress regulated water pollution by focusing on the achievement of WQS set by the states specifying the tolerable degree of pollution for particular bodies of water.\(^8\) The earlier laws were deemed to be inadequate because they failed to provide sufficient incentives to individual entities to pollute less. The early scheme focused on the tolerable effects rather than the preventable causes of pollution.\(^9\) If a body of water met a state’s standards, the amount of pollutants an entity could dump into a water could be ignored.\(^10\) After the enactment of the CWA in 1972, limits were placed on what an individual entity could discharge, regardless of whether it was dumping into an over-polluted body of water or not.\(^11\) The CWA, however, only banned discharges from point sources. Under the CWA “point sources” are defined as, “any discernible, confined and discrete

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\(^8\) Oregon Natural Desert Ass'n v. Dombeck, 172 F.3d 1092, 1096 (9th Cir. 1998).
\(^9\) Id.
\(^10\) Id.
\(^11\) Id.
conveyance, including but not limited to any pipe, ditch, channel, tunnel...[various other examples are given]...from which pollutants are or may be discharged.”

The discharge of pollutants from nonpoint sources such as runoff from most agricultural operations, silvicultural operations, or sediments from erosion from construction sites went unregulated.

CWA Section 301(a) sets forth that, “[e]xcept as in compliance with [the CWA], the discharge of any pollutant by any person shall be unlawful.” The phrase “discharge of any pollutant” is defined by CWA section 502 as, “any addition of any pollutant to navigable waters from any point source” (emphasis added). Section 301(b)(1)(A) subjects dischargers of pollution from conventional point sources to effluent limitations, and section 301(b)(2)(E) requires such effluent limitations to be calculated based on application of best conventional pollutant control technology. Sections 301(b)(2)(A) and (F) subject dischargers of pollutants identified as toxic and nonconventional, respectively, to effluent limitations calculated based on best available technology which will result in reasonable progress to the goal of eliminating the discharge of all pollutants. CWA section 502(11) defines “effluent limitations” as restrictions on pollutant discharges from point sources.

CWA section 402 establishes the NPDES through which entities can be issued a permit to discharge any pollutant, or combination of pollutants, notwithstanding Section 301(a). States may establish their own NPDES permitting programs subject to the approval of the

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13 Oregon Natural Desert Ass’n, 172 F.3d at 1096.
17 Id. at (b)(2)(E).
18 Except in the case of publically owned treatment works which CWA section 301(b)(1)(B) subjects to effluent limitations based upon secondary treatment. Id. at (b)(1)(B).
19 Id. at (b)(2)(A) and (F).
Administrator of the Environmental Protection Agency ("Administrator"). Section 402 provides that EPA-, or state-issued permits to dischargers must comply with the effluent limitations established by the EPA as calculated based on the best conventional technology or best available technology performance standards. Permits are to be granted for fixed terms not exceeding five years and may be terminated or modified for cause in instances such as violations of permit conditions or changes in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

CWA Section 303(c) sets forth that states are to adopt WQS that are to be approved by the Administrator and that “shall consist of the designated uses of the…waters involved and the water quality criteria for such uses.” Standards are to “protect health or welfare, enhance the quality of water…taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial and other purposes.” If states fail to adopt standards that receive approval by the Administrator, the Administrator is to promulgate standards for the state.

CWA section 303(d)(1)(A) sets forth that:

Each State shall identify those waters within its boundaries for which the effluent limitations required by section 301(b)(1)(A) and section 301(b)(1)(B) of this title are not stringent enough to implement any [WQS] 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.

The waters identified under section 303(d)(1)(A) are known as “impaired waters.”

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22 Id. at (b).
23 Id. at (a)(1)(A) and (b)(1)(A).
26 Id.
27 Id.
28 33 U.S.C. § 1313(c)(3).
29 Id. at (d)(1)(A).
States are then required to establish for the waters on the impaired waters list, in accordance with the priority ranking, TMDLs for pollutant discharges into those waters.\textsuperscript{30} TMDLs are to be “established at a level necessary to implement the WQS 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.”\textsuperscript{31} In other words, a TMDL is “the specified maximum amount of a pollutant that can be discharged or ‘loaded’ into the waters from all combined sources.”\textsuperscript{32} State TMDL programs are to be approved by the Administrator, and should a state fail to establish an adequate TMDL program, the Administrator is required to establish an impaired waters list and proper loads for such waters that then must be implemented by the state.\textsuperscript{33} CWA Section 303(e) sets forth that states are also required to implement a “continuing planning process,” subject to the approval of the Administrator, that includes the effluent limitations of section 301(b)(1)(A) and 301(b)(1)(B), and the TMDL program.\textsuperscript{34}

EPA regulations further elaborate on the statutory scheme. The regulations set forth that a “loading capacity” is the greatest amount of loading that a water can receive without violating [WQS].\textsuperscript{35} The regulations then break down a water’s loading capacity into a “load allocation,” (“LA”) which is “[t]he portion of a receiving water’s loading capacity that is attributed either to one of its existing or future nonpoint sources of pollution or to natural background sources,”\textsuperscript{36} and a “waste load allocation,” (“WLA”) which is the portion of a receiving water’s loading capacity that is allocated to one of its…point sources of pollution. WLAs constitute a type of

\textsuperscript{30} Id. at (d)(1)(C).
\textsuperscript{31} Id.
\textsuperscript{32} Dioxin/Organochlorine Center v. Clarke, 57 F.3d 1517, 1520 (9th Cir. 1995).
\textsuperscript{33} 33 U.S.C. § 1313(d)(2).
\textsuperscript{34} Id. at (e).
\textsuperscript{35} 40 C.F.R. § 130.2(f).
\textsuperscript{36} Id. at (g).
water quality-based effluent limitation.”37 The regulations then go on to explain that a TMDL is, “[t]he sum of the individual WLAs for point sources and LAs for nonpoint sources and natural background.”38 The regulations also point out that, if Best Management Practices or other nonpoint source pollution controls make more stringent [LA]s practicable, then [WLA]s can be made less stringent. Thus, the TMDL process provides for nonpoint source control tradeoffs.”39

**b. A Slow Start to TMDLs and Judicially Forced Action**

Although the 303(d) TMDL program was enacted as part of the in 1972 CWA, the program was not fully utilized until years later. As explained by Professor Houck:

> Following the passage of the [CWA], EPA was fully occupied, indeed overwhelmed, in promulgating technology standards for point sources under the CWA and defending them in court. The Agency had little inclination, and indeed saw little reason, to implement the “safety net” features of § 303(d) before the technology requirements were in place. After all, water quality upgrading was only required when polluted waters could not be brought up to standard through best available technology requirements. And those requirements were many years away.40

The TMDL program thus, was left undeveloped by the EPA for numerous years.

By 1981, however, Section 303(d), was given life by the case **Scott v. City of Hammond**, 741 F.2d 992 (7th Cir. 1981). In **Scott**, Illinois and Indiana did not submit TMDLs for impaired waters within 180 days after December 28, 1978—the date of the EPA’s publication of the first identified pollutants suitable for TMDLs41 — as required by CWA section 303(d)(2).42 The plaintiff then sued the EPA under the CWA’s citizen suit provision for failing to promulgate

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37 Id. at (h).
38 Id. at (i).
39 Id.
41 Pursuant to CWA section 304(a)(2)(D); 33 U.S.C. § 1314(a)(2)(D).
42 Scott v. City of Hammond 741 F.2d 992, 996 (7th Cir. 1981).
TMDLs for discharges of pollutants into Lake Michigan.\textsuperscript{43} The plaintiff cited language of Section 303(d)(2) requiring the Administrator to approve or disapprove of the state submissions of impaired waters lists and TMDLs, and the requirement that if the Administrator disapprove of the submissions, that he establish impaired waters lists and TMDLs.\textsuperscript{44}

The EPA asserted that there was no existence of a statutory duty for EPA to promulgate TMDLs following non-submission of TMDLs by states.\textsuperscript{45} The EPA argued that Congress did not intend that the EPA establish TMDL’s if the states chose not to act, and that unlike other provisions of the CWA which explicitly require the “EPA [to] intercede in the absence of state action,” section 303(d) did not, and thus, Congress by negative implication intended to rely exclusively on states to implement TMDLs, and not the EPA.\textsuperscript{46}

The Seventh Circuit found the EPA’s arguments uncompelling,\textsuperscript{47} and stated, “[w]e believe that, if a state fails over a long period of time to submit proposed TMDL’s, this prolonged failure may amount to the ‘constructive submission’ by that state of no TMDL’s.”\textsuperscript{48} The court pointed out that the EPA in 1978 had identified the pollutants for which TMDLs were suitable, triggering the requirement that states promulgate TMDLs for impaired waters within 180 days.\textsuperscript{49} The court explained that the inaction by the states and the lack of any implemented TMDLs raises the possibility that the states determined that no TMDLs were necessary, which would amount to a constructive submission of no TMDLs.\textsuperscript{50} The court further explained that when given a constructive submission, the Administrator must then approve or disapprove of the

\textsuperscript{43} Scott, 741 F.2d 992 at 996.
\textsuperscript{44} Id. at 966.
\textsuperscript{45} Id. at 996-997.
\textsuperscript{46} Id. at 997-998.
\textsuperscript{47} Id. at 997.
\textsuperscript{48} Id. at 996.
\textsuperscript{49} Id.
\textsuperscript{50} Id. at 996-997.
constructively submitted TMDL. If the Administrator disapproves of the constructive submission, he “then presumably would be under a mandatory duty to issue [his] own TMDL’s,”51 and the EPA’s failure to do so “would amount to failure to perform a nondiscretionary duty.”52 After the court’s holding in Scott, a series of other cases soon followed in which other federal courts upheld the constructive TMDL submission theory, thus, forcing states and EPA to begin acting on TMDLs.53

In 1989, however, despite the successful citizen suits forcing TMDL action, the Government Accountability Office54 issued a report entitled, “More Action Needed to Improve the Quality of Heavily Polluted Waters,” which highlighted numerous EPA failings in regards to the TMDL program.55

By the mid and late nineties, citizen suits were being brought against the EPA not only for determinations of constructive submissions,56 but also for EPA approvals of state TMDLs that citizen plaintiffs thought were inadequate under the requirements of the CWA. In one example, Idaho Sportsmen’s Coalition v. Browner, 951 F.Supp. 962 (W.D.Wash. 1996), a federal court overruled the EPA’s approval of Idaho’s TMDL program submission for, among other reasons, the plan’s, “extreme slowness.”57 In declaring the EPA’s approval Idaho’s TMDLs invalid under the CWA the court explained, “the schedule sets only ‘expected’ times and ‘targets,’ not firm dates,”58 the court went on:

51 Id. at 997.
52 Id. at 998.
53 See Houck note 40 supra at 52-53 for a description of the cases following the Scott decision.
54 Known at that time as the General Accounting Office.
55 Id. at 53-54.
58 Id. at 966.
Under the proposed schedule at least twenty-five more years would go by before the remaining TMDLs were developed. The net result would be to put off for another generation a step that Congress required be taken years ago. And even the twenty-five-year marker could well be missed...at Idaho's proposed submission rate the twenty-five years could easily turn into fifty or seventy-five...nothing in the law could justify so glacial a pace.59

Thus, with heavy prodding by the courts, by 1997, forty-seven states had submitted impaired waters lists. Twenty-five years after the passage of Section 303(d), regular implementation of the TMDL program had finally begun.60

III. TMDLS AS A TOOL TO ADDRESS NONPOINT SOURCE POLLUTION

a. The Problem of Nonpoint Sources Under the CWA

While pollution from point sources is directly regulated by the CWA through effluent limitations and the NDPES program, nonpoint sources are not directly regulated. As a result, firms that contribute to a water body’s loading capacity have a great incentive to be characterized as a nonpoint source to avoid being subject to NDPES permitting obligations, effluent limitations, and the limiting implications of the TMDL program.61 Nonetheless, the CWA is not silent on nonpoint sources. Two provisions of the CWA provide for federal grants to states that establish programs addressing nonpoint sources.

CWA section 20862 requires states to identify areas within each state which, as a result of urban-industrial concentrations or other factors, have substantial water quality control

59 Id.  
60 Houck supra note 40 at 56.  
61 See e.g., Concerned Area Residents for the Env’t v. Southview Farm, 34 F.3d 114 (2nd Cir. 1994) (Court deciding issue of whether liquid manure from a dairy farm collected in a swale and then flowing into a stream was a point source. Court decided the farm was a point source, as were vehicles used to spread liquid manure from the dairy farm).  
problems, and implement for those areas area-wide waste treatment management plans. The plans are to include the “identification of treatment works necessary to meet the anticipated municipal and industrial waste treatment needs of the area over a twenty-year period. The plans are also to establish processes to identify agriculturally and silviculturally related nonpoint sources of pollution, mine-related sources of pollution including, new, current and abandoned surface and underground mine runoff, and construction activity related sources of pollution, and to set forth procedures and methods to control the such sources. Federal grants are then made to pay for the reasonable costs of developing and operating continuing area-wide waste treatment management planning processes.

Additionally, CWA section 319 sets forth that each state is to submit to the Administrator a report which, “identifies those navigable waters within the State, which without additional action to control nonpoint sources of pollution, cannot be expected to attain or maintain applicable [WQS] or such goals and requirements.” The report is also to identify the nonpoint sources that add significant pollution to such waters that contribute to the nonattainment of the WQS, and include a process for identifying best management practices and measures to control nonpoint sources to reduce, to the maximum extent possible, the pollution from those sources. The report is to further identify and describe state and local programs for controlling pollution from nonpoint sources. States are then to submit to the Administrator

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63 Id. at (a)(1)(2).  
64 Id. at (b)(1)(A).  
65 Id. at (b)(2)(A).  
66 Id. at (b)(2)(F), (G), (H).  
67 Id. at (f).  
69 Id. at (a)(1)(A).  
70 Id. at (a)(1)(B), (C).  
71 Id. at (a)(1)(D).
state management programs for controlling pollution added from nonpoint sources.\textsuperscript{72} Federal grants are provided to assist states in implementing their management plans.\textsuperscript{73}

Although nonpoint sources are currently the leading cause of water pollution in America,\textsuperscript{74} Sections 208 and 319 have not resulted in adequate mitigation of nonpoint source pollution. Section 208 has been characterized as having an ineffective system of incentives.\textsuperscript{75} Even though section 208 sets forth that governor of each state “shall designate” a representative organization capable of developing effective area wide waste treatment management plans for areas with water quality control problems,\textsuperscript{76} section 208 continues, “[i]f the Governor does not act…the chief elected officials of governments within an area may designate a representative organization…”\textsuperscript{77}(emphasis added). Thus, it becomes apparent that action under section 208 is not strictly required by states, and if states do not act, the only consequence is that they do not receive federal grants to cover the costs of the developed and unimplemented plans. Moreover, if plans are implemented by states, nonpoint source management procedures need only be set forth “to the extent feasible,”\textsuperscript{78} a low standard requiring very limited pollution regulation.\textsuperscript{79} Additionally, because of the controversy that would attach to an attempt to regulate nonpoint sources—from the agriculture industry in particular—the Section 208 plans were largely subject to voluntary compliance rather than mandatory nonpoint source pollution controls.\textsuperscript{80}

\begin{thebibliography}{99}
\bibitem{72} Id. at (b)(1).
\bibitem{73} Id. at (h).
\bibitem{76} 33 U.S.C. § 1288(a)(2).
\bibitem{77} Id.
\bibitem{78} Id. at (b)(2)(F).
\bibitem{79} See Zerring supra, note 75 at 523-524.
\bibitem{80} Id.
\end{thebibliography}
Section 319, likewise, has proven insufficient to address nonpoint source pollution because of slow and inadequate funding, inadequate oversight by the EPA, and the EPA’s focus of resources and funds on point source pollution. Moreover, states have lacked the will to robustly regulate nonpoint source dischargers. Many have implemented nonpoint source management programs requiring only voluntary compliance by nonpoint source dischargers that have proven ineffective. As a result, Section 319 has been characterized as “not enough carrot, not enough stick” and has largely failed to adequately mitigate nonpoint source pollution.

b. Judicial Recognition of TMDLs as a Nonpoint Source Mitigation Tool

CWA sections 208 and 319 are focused on management planning and are built around the “carrot” provisions of federal grants. They lack any “stick” provisions such as discharge limitations or enforcement mechanisms. This lack of enforcement of nonpoint sources has created a disparity between the regulatory burden placed on point source polluters and nonpoint source polluters.

Apart from the provisions of section 208 and 319, however, the Section 303(d) TMDL program has provided incentives for states and industry to address nonpoint source pollution. As mentioned above, the TMDL regulations note, “[i]f Best Management Practices or other nonpoint source pollution controls make more stringent [LA]s practicable, then [WLA]s can be made less stringent. Thus, the TMDL process provides for nonpoint source control tradeoffs.” A look at two relatively recent cases clearly demonstrates the practical implications of this

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81 See Byrne supra, note 74.
82 Id.
83 See Zerring supra, note 75.
84 See Byrne supra, note 74.
85 Supra text accompanying note 39.
program design and provides important insight into the current state of the law concerning TMDLs and nonpoint source regulation.

i. **Prosolino v. Nastri**

In *Prosolino v. Nastri*, 291 F.3d 1123, 1129 (9th Cir. 2002)\(^86\) the Garcia River in California, which was polluted only by nonpoint sources, was placed on a section 303(d)(1)(A) impaired waters list. As a result, in 1998, after California failed to submit a Garcia River TMDL in a timely manner, the EPA established a TMDL of 552 tons per square mile per year for sediments.\(^87\) The TMDL amounted to a sixty percent reduction from historical loadings.\(^88\) The TMDL allocated portions of the load between the nonpoint source pollution categories of: a) “mass wasting” associated with roads; b) “mass wasting” associated with timber-harvesting; c) erosion related to road surfaces; and d) erosion related to road and skid trail crossings.\(^89\)

Later that year, Betty and Guido Prosnolino applied for harvesting permits for timberland they owned in the Garcia River watershed. To comply with the TMDL, the California Department of Forestry and the Regional Water Quality Control Board placed the conditions on the harvesting permit that: 1) the Proslinos mitigate 90% of controllable road-related sediment run-off; 2) prohibited removing certain trees; and 3) restricted harvesting between October and May. Estimating that the restrictions would cost them $750,000, the Proslinos challenged the EPA’s authority to impose TMDLs on rivers polluted only by nonpoint sources.

\(^86\) *Prosolino v. Nastri*, 291 F.3d 1123, 1129 (9th Cir. 2002).
\(^87\) Id.
\(^88\) Id.
\(^89\) Id., at 1129.
In its analysis, the Ninth Circuit reviewed the EPA TMDL regulations, and in doing so noted that the LA regulation advises that, if possible, “natural and nonpoint source load should be distinguished.”\(^90\) The Court further explained:

No reason appears why, under this TMDL definition, the amount of either point source loads or nonpoint source loads cannot be zero. If the [WLA] is zero, then the TMDL would cover only the nonpoint sources and natural background sources. So read, the regulation provides that a TMDL can apply where there is no [WLA] for point source pollution.\(^91\)

Thus, according to the regulations, TMDLs will apply if a body of water is polluted by point sources only, nonpoint sources only, or a combination of the two.\(^92\)

After describing the regulatory scheme as complained of by the Prosolinos, the court reviewed the EPA’s interpretation of the CWA under the Administrative Procedure Act giving “substantial Skidmore\(^93\) deference at the very least,”\(^94\) and upheld the regulations as promulgated under a reasonable interpretation of the CWA. Thus, the Ninth Circuit has affirmed that nonpoint sources can be regulated through the TMDL program, even if the impaired waters are polluted only by nonpoint source polluters.

While *Prosolino* appears to be a large step forward in curbing nonpoint source pollution, it does not take on nonpoint source pollution as aggressively as it first appears. Since states can choose how they will implement TMDLs, and can choose not to implement them at all, there is no guarantee that TMDL plans, once established, will actually be implemented.\(^95\) Even if the EPA establishes TMDLs for states, it is the states that ultimately decide how to implement the

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\(^90\) *Id.* at 1132 (quoting 40. C.F.R. § 130.2(g)).

\(^91\) *Id.*

\(^92\) *Id.* at 1132-1133.


\(^94\) *Prosolino* 291 F.3d at 1134-1135.

\(^95\) See *Byrne supra*, note 74 at 151.
TMDLs, incorporate them into the states’ CWA Section 303(e) plans, and incorporate them into their NPDES program. Thus, states have much discretion to set forth limited efforts in implementing the TMDLs.

In 2000 the EPA promulgated rules requiring states to include implementations plans with their submissions of TMDLs. This rule, however, was delayed by Congress which prohibited, by law, the use of funds to implement the new rules in 2000 or 2001. The EPA, later pushed back the implementation date of the rules until 2003, and withdrew the rules before they could be implemented. Thus, for the first few years of the millennium, the law under Prosolino represented the limit of EPA’s ability to regulate nonpoint sources through the TMDL program.

ii. Friends of Pinto Creek v. United States EPA

While Prosolino only takes nonpoint source regulation so far, a more recent Ninth Circuit case enhances the potential of nonpoint sources regulation under the TMDL program. In Friends of Pinto Creek v. United States EPA, 504 F.3d 1007 (9th Cir. 2007), the Carlota Copper Company (“Carlota”) sought from the EPA an NPDES permit to discharge mining related copper into Arizona’s Pinto Creek, a river considered, “one of the country’s most endangered rivers due to threats from proposed mining operations.” Pinto Creek was included on Arizona’s list of Section 303(d) impaired waters due to non-attainment of water quality standards for dissolved

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96 See Sierra Club v. Meiburg, 296 F.3d 1021, 1034 (11th Cir. 2002) (explaining that even though the establishment of TMDLs may be completed by the EPA, the incorporation of TMDLs into a state’s CWA section 303(e) clean water planning process, the incorporation of TMDLs into NPDES permits, and the implementation of non-point source pollution controls are all responsibilities of the state, over which the EPA only plays a supervisory role).
97 See Byrne supra, note 74 at 151-152.
98 Id.
99 Id.
100 Friends of Pinto Creek v. United States EPA, 504 F.3d 1007, 1009 (9th Cir. 2007).
copper. As a result of Arizona’s failure to implement one, the EPA promulgated the Pinto Creek TMDL.  

After the EPA had granted Carlota a NDPES permit to discharge copper into Pinto Creek, the environmental plaintiffs challenged the permit under EPA NPDES regulation, 40 C.F.R. § 124(i) which sets forth:

No permit may be issued:

... 
(i) To a new source or a new discharger if the discharge from its construction or operation will cause or contribute to the violation of [WQS]. The owner or operator of a new source or new discharger proposing to discharge into a water segment which does not meet applicable [WQS] ... and for which the State or interstate agency has performed a pollutants [LA] for the pollutant to be discharged, must demonstrate, before the close of the public comment period, that:

(1) There are sufficient remaining pollutant [LAs] to allow for the discharge; and

(2) The existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable [WQS].

In vacating the NDPES permit, the Ninth Circuit dismissed Carlota’s contention that partial remediation of the copper discharges from its mining activity would offset the pollution. The Court pointed out, “there is nothing in the [CWA] or the regulation that provides an exception when the waters remain impaired and the new source is discharging pollution into that impaired water.”

Pointing to the plain language of the regulation, the Court explained that, “[i]n Calota’s case, there are no plans or compliance schedules to bring the Pinto Creek segment ‘into compliance with applicable [WQS]’ as required by § 124(i)(2).” The Court continued, “[t]he error of both the EPA and Carlota is that the objective of that section is not simply to show a

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101 Id. at 1010.
102 Id. at 1012.
103 Id. at 1014.
lessening of pollution, but to show how the [WQS] will be met if Carlota is allowed to discharge pollutants into the impaired waters.”

The Court went on to discuss the ramifications of their decision:

If point sources, other than the permitted point source, are necessary to be scheduled in order to achieve the water quality standard, then the EPA must locate any such point sources and establish compliance schedules to meet the [WQS] before issuing a permit. If there are not adequate point sources to do so, then a permit cannot be issued unless the state or Carlota agrees to establish a schedule to limit pollution from a nonpoint source or sources sufficient to achieve [WQS] (emphasis added). 104

Thus, the Court recognized a significant “stick” which the EPA could use to regulate nonpoint source pollution indirectly: the prohibition against the issuance of NDPES permits for impaired bodies of water subject to TMDLs absent a proper demonstration that, 1) there are sufficient remaining pollutant LAs to allow for the discharge, and 2) existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable WQS.

To a certain extent, the Pinto Creek decision gave teeth to the TMDL program which had previously been implemented voluntarily by the states with limited noncompliance consequences from the federal government. As stated by one commentator, “the loading reductions in TMDLs are now essentially implemented via Pinto Creek’s prohibition against new dischargers that fail to contain compliance plans and loading reductions found in the TMDL.” 105

IV. TMDLS AND NONPOINT SOURCE POLLUTION IN THE CHESAPEAKE BAY

In 2009 and 2010, the EPA began implementation of a multi-state, region-wide TMDL for the Chesapeake Bay. Through its implementation, the EPA has demonstrated recognition of

104 Id.

105 Roger Flynn, New Life for Impaired Waters: Realizing the Goal to “Restore” the Nation’s Waters Under the Clean Water Act, 10 Wyo. L. Rev. 35, 64-64 (2010).
the new compulsory authority granted to it under *Pinto Creek* and a willingness to use that authority. Given EPA’s history of implementing of the TMDL program in a manner that could often be referred to as reluctant, the Chesapeake Bay TMDL represents a significant development in the EPA’s willingness to regulate nonpoint source pollution using the TMDL program.

a. **Chesapeake Bay TMDL**

In 2000, recognizing that the Chesapeake Bay (“Bay”) is North America’s largest and most biologically diverse estuary and home to more than 3,600 species of plants, fish, and animals, Virginia, Maryland, Pennsylvania, the District of Columbia (“District”), and the United States EPA, along with the Chesapeake Bay Commission entered into a voluntary agreement, *Chesapeake 2000*, in which they committed to “nurture and sustain a Chesapeake Bay Watershed Partnership” through which “the restoration and protection of the Chesapeake Bay will be ensured for generations to come.”

The *Chesapeake 2000* agreement built upon previous agreements: the *Chesapeake Bay Agreement of 1983*, which established the Chesapeake Bay Program and created the Chesapeake Bay Commission; the *1987 Chesapeake Bay Agreement* under which the signatories agreed to reduce nitrogen and phosphorus loading into the Bay by forty percent using 1985 point and nonpoint source loading measurements as a baseline; and

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the *Chesapeake Bay Agreement: 1992 Amendments* which reaffirmed the forty percent reduction and deadline.\(^{109}\)

Under *Chesapeake 2000*, the Chesapeake Bay Program Signatories committed to restoring and protecting living resources, protecting and restoring vital habitat, protecting and restoring water quality, implementing sound land use, and stewardship and community engagement.\(^{110}\) One provision of the agreement specifically set forth the goal to, ”by 2010, correct the nutrient- and sediment-related problems in the Chesapeake Bay and its tidal tributaries sufficiently to remove the Bay and the tidal portions of its tributaries from the list of impaired waters under the [CWA].”\(^{111}\)

Later that year, Congress amended the CWA, adding Section 117\(^{112}\) which sets forth:

The Administrator, in coordination with the [signatories of the Chesapeake Bay Agreement], shall ensure that management plans are developed and implemented… to achieve and maintain—

(A) the nutrient goals of the Chesapeake Bay Agreement for the quantity of nitrogen and phosphorus entering the Chesapeake Bay and its watershed;

(B) the water quality requirements necessary to restore living resources in the Chesapeake Bay ecosystem;

(C) the Chesapeake Bay Basinwide Toxins Reduction and Prevention Strategy goal of reducing or eliminating the input of chemical contaminants from all controllable sources to levels that result in no toxic or bioaccumulative impact on the living resources of the Chesapeake Bay ecosystem or on human health;

(D) habitat restoration, protection, creation, and enhancement goals established by Chesapeake Bay Agreement signatories for wetlands, riparian


\(^{110}\) Id., generally.

\(^{111}\) Id. at 6.

\(^{112}\) 33 U.S.C. § 1267
forests, and other types of habitat associated with the Chesapeake Bay ecosystem; and

(E) the restoration, protection, creation, and enhancement goals established by the Chesapeake Bay Agreement signatories for living resources associated with the Chesapeake Bay ecosystem.113

Section 117 also provided a number of grants and different forms of technical assistance to the agreement signatories to meet their goals.114 By June of 2008, however, it had become clear that the signatories’ goal of to removing the Bay and the tidal portions of its tributaries from the list of impaired waters would not be met, and that as a result, a Bay TMDL would have to be implemented.115

In May of 2009, President Obama issued an executive order providing a federal accountability framework focusing federal efforts on restoring the Bay with the support of local governments and the private sector.116 By late 2009—pursuant to consent decrees with Virginia, and the District and request by Maryland—the EPA had begun the process of creating the Bay TMDL program with a scope including, “nutrient and sediment loads delivered to the Bay from all sources throughout the watershed as well as atmospheric deposition of nitrogen to the watershed and tidal waters from air emission sources within and outside the watershed.”117

The EPA noted that New York, Delaware, and West Virginia, the three watershed states that are not signatories to the Chesapeake Bay Agreement, are not subject to CWA Section 117

113 Id., at (g)
114 33 U.S.C. § 1267
115 Karl Blankenship, TMDLs are coming, like it or not, Chesapeake Bay Journal, June 2008.
and thus, are not required to ensure that management plans are developed in pursuance to the Agreement.\footnote{Id. at 2.} The EPA explained, however:

The signatories and non-signatory states committed to participate fully in achieving the nutrient and sediment reductions necessary to achieve the water quality goals of the \textit{Chesapeake 2000} agreement by executing 2000 and 2002 Memoranda of Understanding with EPA…all six states and the District adopted the first set of two-year milestones and committed that necessary restoration measures would be in place by no later than 2025.\footnote{Id. at 7.}

Thus, all Bay states and the District are subject to the EPA’s Bay TMDL implementation requirements.

In structuring the Bay TMDL, the EPA has “divided the tidal portions of the Chesapeake Bay, its tidal tributaries, and embayments into 92 segments for identification purposes under section 303(d).”\footnote{Id. at 7-8.} The ninety-two segments together comprise the entire Bay watershed, and the EPA intends to establish WLAs and LAs for point and nonpoint sources within the drainage area of each segment, including segments that are not listed as impaired, “but whose nutrient and sediment loads are causing or contributing to the water quality impairment of other tidal segments.”\footnote{Id. at 13.}

Watershed states and the District are required to develop watershed implementation plans (“WIP”) for each of the ninety-two segments of the Bay and to submit them to the EPA to inform the EPA’s final establishment of the final TMDL.\footnote{Id. at 13.} The purpose of the WIPs are to “provide a roadmap for how the States and the District, in partnership with federal and local governments, will achieve and maintain the Bay TMDL nitrogen, phosphorus, and sediment allocations

\footnote{Id. at 2.} \footnote{Id. at 15.} \footnote{Id. at 7.} \footnote{Id. at 7-8.} \footnote{Id. at 13.}
necessary to meet the States’ and the District’s Bay [WQS].” 123 The WIPS are expected to implement point and nonpoint source pollution allocations in the Bay TMDL. 124 The plans are then to be followed up with two-year milestones and follow-up progress reports. 125

The EPA has divided the TMDL implementation process into three phases at the end of which, states will be required file submissions. 126 Final drafts of WIPs were to be submitted at the end of Phase I, ending November 29, 2010. 127 By December 31, 2010, “EPA will establish the Bay TMDL and will include final allocations that achieve attainment of all [WQS] as well as interim allocations reflecting the need to have practices in place by 2017 to meet 60% of the necessary nutrient and sediment load reductions.” 128

Updated WIPs are to be submitted at the end of Phase II, ending November 1, 2011, 129 after which point the EPA expects to modify the Bay TMDL, if necessary, by December 15, 2011. 130 Phase III WIPS are to be submitted by 2017 that refine implementation efforts to take place between 2018 and 2025. 131 EPA expects to modify the Bay TMDL once more by December 15, 2017. 132 Between 2012 and 2025, two-year milestone reports are also expected. 133

In describing how nonpoint-sources will be addressed in the Bay TMDL, EPA explains that Section 303(d) requires that a TMDL be “established at a level necessary to implement the

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123 Id. at 2.
124 Id.
125 Id.
126 Id. at 13.
128 Id.
129 WIP Letter supra note 117 at 13.
130 TMDL Schedule Letter supra note 127 at 3.
131 WIP Letter supra note 117 at 13.
132 TMDL Schedule Letter supra note 127 at 4.
133 WIP Letter supra note 117 at 13.
applicable [WQS].” Therefore, in deciding whether to establish or approve a TMDL that allocates pollutant loads to both point and nonpoint sources, EPA will determine whether there is a “reasonable assurance” that the nonpoint source load allocations will in fact be achieved and WQS attained.\(^{134}\)

The EPA further explained that Phase I WIPs were expected to include the following nonpoint source loadings categories of: non-concentrated animal feeding operation\(^ {135}\) agriculture; storm water not covered by NPDES permits; onsite systems; and forests.\(^ {136}\) In Phase II WIPs states are expected to “divide final nonpoint source and aggregate point source target loads for the 92 303(d) segment drainage areas using a finer geographic scale such as counties, conservation districts, sub-watersheds, or, where applicable, individual sources or facilities.”\(^ {137}\) Phase II WIPs are also to include full descriptions of specific nutrient and sediment target loads from point and nonpoint sources within each local area, and where applicable, states are to identify nonpoint source loads that come from specific operations as well.\(^ {138}\)

Should states fail to develop and implement appropriate WIPs; attain appropriate two-year milestones of progress; or provide timely and complete information to an effective accountability system for monitoring pollutant reductions, the EPA has set forth the following list of actions it may take as a consequence:

- **Expand NPDES permit coverage to currently unregulated sources** - For example, utilizing “Residual Designation Authority” to increase the number of sources, operations and/or communities regulated under the NPDES permit program;

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\(^{134}\) Id. at 15.

\(^{135}\) Concentrated animal feeding operations are point sources, subject to NPDES permitting requirements. 40 C.F.R. § 122.23

\(^{136}\) WIP Letter \textit{supra} note 117 at 17.

\(^{137}\) \textit{Id.} at 18.

\(^{138}\) \textit{Id.}
Object to NPDES permits and increase program oversight - Pursuant to EPA Jurisdiction NPDES program agreements, expanding EPA oversight review of draft permits (major and minor) in the Bay watershed and objecting to inadequate permits that do not meet the requirements of the Clean Water Act (including but not limited to NPDES effluent limits that are not consistent with the Bay TMDL’s wasteload allocations);

Require net improvement offsets - For new or increased point source discharges, requiring net improvement offsets that do more than merely replace the new or expanding source’s anticipated new or increased loadings;

Establish finer scale wasteload and load allocations in the Bay TMDL - Establishing more specific allocations in the final December 2010 Bay TMDL than those proposed by the States and the District;

Require additional reductions of loadings from point sources - Revising the final December 2010 Bay TMDL to reallocate additional load reductions from non-point to point sources of nutrient and sediment pollution, such as wastewater treatment plants;

Increase and target federal enforcement and compliance assurance in the watershed - This could include both air and water sources of nutrients and sediment;

Condition or redirect EPA grants - Conditioning or redirecting federal grants; incorporating criteria into future Requests for Proposals based on demonstrated progress in meeting Watershed Implementation Plans and/or in an effort to yield higher nutrient or sediment load reductions; and

Federal promulgation of local nutrient water quality standards - Initiating promulgation of federal standards where the State or the District water quality standards do not contain criteria that protect designated uses locally or downstream.  

From the list of actions—what the EPA refers to as “federal backstops actions” it seems clear that the EPA, in the case of the Chesapeake Bay TMDL program has recognized the compulsory authority granted to it in Pinto Creek regarding its ability to deny NDPPES permits, as well as various other regulatory tools available to induce states to attain WQS. Indeed, on September 24, 2010, the EPA made national news when it

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released its Draft Bay TMDL.\textsuperscript{141} After states submitted draft WIPs on September 1, 2010,\textsuperscript{142} EPA determined that the draft WIPs submitted by the Bay States and the District included significant deficiencies.\textsuperscript{143} EPA concluded that, “none of the seven WIPs submitted by the Bay States provided sufficient reasonable assurance that pollution controls identified could actually be implemented to achieve the nitrogen, phosphorus and sediment reductions targets by 2017 or 2025.”\textsuperscript{144} EPA noted that the draft WIPs submitted by Maryland and the District included “some deficiencies,” while the other five Bay States’ draft WIPs included “serious deficiencies.”\textsuperscript{145}

In response to the draft WIP submissions, EPA’s draft TMDL drew from the adequate parts of the submitted draft WIPs while merging into the draft TMDL varying degrees of federal “backstop allocations.”\textsuperscript{146} EPA reiterated its willingness to implement “federal backstop actions” if jurisdictions fail to meet milestones on schedule.\textsuperscript{147}

In the case of the Chesapeake Bay TMDL, EPA has demonstrated, early on, a willingness to flex its regulatory muscle in applying its recognized power under Section 303(d). This willingness, which has been met by a certain amount of controversy,\textsuperscript{148} demonstrates a departure from the EPA’s past reluctance to aggressively regulate under that section.\textsuperscript{149}

\textsuperscript{141} Draft TMDL Story \textit{supra} note 5.
\textsuperscript{142} Chesapeake Bay TMDL Executive Summary at 7 (September 24, 2010) available at http://www.epa.gov/reg3wapd/pdf/pdf_chesbay/ExecutiveSummary.pdf.
\textsuperscript{143} Id.
\textsuperscript{144} Id.
\textsuperscript{145} Id.
\textsuperscript{146} Id.
\textsuperscript{147} Id.
\textsuperscript{148} Draft TMDL Story \textit{supra} note 5. “In an era when environmentalism seems to be losing steam, it is betting that residents of the Chesapeake region actually care enough to pay the full cost of saving the bay. ‘I’m a little concerned that EPA could do something to damage that goodwill’ toward the bay, said John Hanger, secretary of Pennsylvania’s Department of Environmental Protection. Hanger said that he believed EPA’s plans were too fast-moving, too draconian.”
\textsuperscript{149} See \textit{supra} at II.b.
b. Chesapeake Clean Water and Ecosystem Restoration Act of 2009

As section 303(d) is currently being implemented, states face differing levels of federal intervention from the TMDL program. States that effectively regulate nonpoint source pollution may face little or no federal intervention beyond the requirements set forth in sections 303(d) and 319. States that fail to adequately regulate nonpoint source pollution are subject to EPA intervention through the authority recognized in Pinto Creek and may be subject to “backstop” measures similar those forth in the Chesapeake Bay TMDL. Even assuming that the tools available to the EPA post-Pinto Creek are effective in addressing nonpoint source pollution, however, a problem lies with impaired waters that are polluted only by nonpoint sources. In such a case, the EPA is deprived of its most effectual tool, the ability to object to NPDES permits for new point source dischargers. It is this regulatory gap that must be filled if the task of restoring our nation’s impaired waters is to be accomplished.

In October 2009, a bill was proposed in Congress by Senator Cardin that would close this regulatory gap in the Chesapeake Bay TMDL. The Chesapeake Clean Water and Ecosystem Restoration Act of 2009 (“Restoration Act”) would codify much of the current Chesapeake Bay TMDL program being implemented by the EPA, and provide the EPA additional authority and tools not provided under the current CWA TMDL statutory and administrative scheme. The Restoration Act expressly states that the Bay TMDL could not be established or approved “unless the TMDL includes enforceable or otherwise binding [LAs] for all nonpoint sources.” The Restoration Act would require WIPs to “establish reduction targets, key actions, and schedules for reducing, to levels that will attain [WQS], the loads, [of pollutants] from

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150 S. 1816 (to be codified at 33 U.S.C. §§ 1267 et. seq.).
151 Id. at §3(i).
agricultural runoff; point sources…; nonpoint source stormwater runoff and septic systems and other onsite sewage disposal systems”¹⁵² (emphasis added).

The Restoration Act would further require Bay states’ WIPs to include implementation of management measures, regulations, consent decrees, and other enforceable or binding measures, enforcement mechanisms and penalty structures, and voluntary programs to achieve reduction from pollution sources.¹⁵³ If a Bay state submits a WIP that fails to meet minimum criteria established by the EPA, or fails to submit a WIP to the EPA for approval, the EPA would be required to develop and administer a WIP for that state,¹⁵⁴ and to promulgate regulations or to issue permits necessary to meet the goals defined in the EPA WIP.¹⁵⁵ Additionally, the EPA would be required to withhold funding to the state, and require the implementation of net-improvement offsets through NDPES permits.¹⁵⁶ Under the Restoration Act, should a state fail to submit a WIP or biennial progress report to the EPA, or should the EPA fail to act as required by the statute, either would be subject to the CWA’s citizen suit provision.¹⁵⁷ The Restoration Act also provides for a nitrogen and phosphorus discharge trading program to be implemented through the NPDES permitting system.¹⁵⁸ This bill would thus, give the EPA direct express authority to regulate nonpoint source pollution—express authority that would extend even to waters polluted only by nonpoint sources.

The Restoration Act did not become law in the 2009-2010 Congressional Session, thus, the TMDL program under Pinto Creek represents the current outer limit of the EPA’s ability to

¹⁵² Id. at §3(j)(1)(A)(ii).
¹⁵³ Id. at §3(j)(1)(A)(iv).
¹⁵⁴ Id. at §3(k)(1)-(5).
¹⁵⁵ Id. at §3(k)(5).
¹⁵⁶ Id. at §3(o).
¹⁵⁷ Id. at §3(k)(6).
regulate nonpoint source pollution, a limit that includes the regulatory gap in which the EPA has limited power to address impaired waters polluted only by nonpoint source pollution.

V. MINNESOTA CLEAN WATER LEGACY ACT

In 2006, the Minnesota Legislature passed the CWLA\(^{159}\) which provides a promising model for states that wish to avoid federal intervention through implementation of effective state-level point and nonpoint source programs. The CWLA’s stated purpose is to, “protect, restore, and preserve the quality of Minnesota’s surface waters by providing authority, direction, and resources to achieve and maintain [WQS] for surface waters as required by section 303(d) of the federal Clean Water Act.”\(^{160}\)

The CWLA reflects the Minnesota legislature’s reluctance to aggressively mandate compulsory regulatory controls over nonpoint source dischargers into impaired waters. The Findings section of the CWLA sets forth, “achieving the state’s water quality goals will require long-term commitment and cooperation by all state and local agencies, and other public and private organizations and individuals, with responsibility and authority for water management, planning, and protection.”\(^{161}\) The act continues, “all persons and organizations whose activities affect the quality of waters, including point and nonpoint sources of pollution, have a responsibility to participate in and support efforts to achieve the state’s water quality goals.”

The CWLA goes on:

In implementing this chapter, public agencies and private entities shall take into consideration the relevant provision so local and other applicable water management, conservation, land use, land management, and development plans and programs…[P]ublic agencies shall endeavor to engage the cooperation of

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\(^{159}\) Minn. Stat. §§ 114D.05 – 114D.45.
\(^{160}\) Minn. Stat. § 114D.10 subd. 1.
\(^{161}\) Id. at subd. 2(2).
organizations and individuals whose activities affect the water quality surface waters, including point and nonpoint sources of pollution, and who have the authority and responsibility for water management, planning, and protection (emphasis added).\textsuperscript{162}

It is apparent that the provisions of the CWLA emphasize voluntary cooperation between state agencies and public and private organizations and individuals. Absent from the CWLA is any statutory scheme for the enforcement of LA into impaired waters.\textsuperscript{163}

Given Section 303(d)’s history of stunted development,\textsuperscript{164} without a robust enforcement mechanism, one might expect the CWLA to be ineffectual in attaining WQS in Minnesota’s impaired waters. An EPA Region V TMDL report, however, has noted that “Minnesota’s Clean Water Legacy Act, through policy direction and funding incentives, has been a driving force behind the preparation of plans for all Minnesota TMDLs.”\textsuperscript{165} The report further noted that the CWLA has provided for substantial funding for the TMDL program in Minnesota, providing more than $70 million between 2006 and 2009.\textsuperscript{166} The analysis also noted that CWLA funded TMDL projects generally have higher funding levels than Section 319 projects in the state.\textsuperscript{167} The report explains that in Minnesota, “[i]mplementation projects include education and technical assistance to small feedlot owners, homeowners served by on-site septic systems, and landowners targeted for improved pasture management practices…The philosophy is that pollutant sources are often spread across the watershed and that solutions will require efforts that go beyond site-specific approaches.”\textsuperscript{168}

\textsuperscript{162} Minn. Stat. § 114D.20 subd. 1.
\textsuperscript{163} There is, however, on provision that sets forth, “The following policies must guide the implementation of this chapter…monitor and enforce cost-sharing contracts and impose monetary damages in an amount up to 150 percent of the financial assistance received for failure to comply. Minn. Stat. § 114D.20 subd. (2)(8).
\textsuperscript{164} See supra section II.b.
\textsuperscript{165} USEPA, Analysis of TMDL Implementation Rates in EPA Region 5: Final Report. #EPA841-R-005 at 33 (2009).
\textsuperscript{166} Id.
\textsuperscript{167} Id. at 19.
\textsuperscript{168} Id. at 34.
In addition, Minnesota’s 2008 Clean Water, Land and Legacy Amendment\textsuperscript{169} to the state’s constitution raised the state’s sales tax three-eighths of one percent to raise funds to protect drinking water sources; to protect, enhance, and restore wetlands, prairies, forests, and fish, game, and wildlife habitat; to preserve arts and cultural heritage; to support parks and trails; and to protect, enhance, and restore lakes, rivers, streams, and groundwater. A significant portion of the revenue will provide additional funding for the state’s TMDL program.\textsuperscript{170}

The Minnesota CWLA, unlike the Chesapeake Bay TMDL program being implemented by the EPA, thus relies on public-private partnerships rather than the threat of government coercion. In comparing the two programs, it is worth noting that the CWLA was signed into law, on June 2, 2006,\textsuperscript{171} over a year before the \textit{Pinto Creek} was decided on October 4, 2007. The CWLA was thus, enacted in a context before which there was a specter of heightened federal intervention should state’s implementation of TMDLs fail. Nonetheless, even without that specter, Minnesotans, faced with the “not enough carrot, not enough stick”\textsuperscript{172} CWA Section 319 provision, determined to comply with Section 303(d) by adding more state-level carrot.

\section*{VI. RECOMMENDATIONS FOR STRUCTURING A COMPREHENSIVE TMDL NONPOINT SOURCE REGULATORY REGIME}

In order to successfully achieve the goal of restoring America’s impaired waters, states must take the lead in addressing the issue of nonpoint source pollution. Minnesota’s CLWA

\begin{footnotesize}
\begin{enumerate}
\item[\textsuperscript{169}] Minn. Const. art. XI, section 15.
\item[\textsuperscript{170}] Twin Cities Metropolitan Council, Dedicated funding accelerates water assessment, restoration (Aug. 2009) \url{http://www.metrocouncil.org/directions/water/water2009/TMDLAug09.htm}.
\item[\textsuperscript{171}] Governor Pawlenty’s Clean Water Initiative, 2006 \textit{Clean Water Legacy Act Fact Sheet}, at 1 (August 23, 2006) (available at \url{http://cwc.state.mn.us/documents/CWLA%20fact%20sheet%208-14-06aa.pdf}).
\item[\textsuperscript{172}] supra text accompanying note 83.
\end{enumerate}
\end{footnotesize}
provides one model for states to use in addressing this issue. Prosolino provides an example of how states can address the specific problem of waters polluted only by nonpoint source polluters. In Prosolino, California sought to reduce nonpoint source pollution by attaching silvicultural run-off mitigation conditions to harvesting permits, thus tying a land use management program to LAs. Such programs, in a sense, begin to treat nonpoint source polluters like point source polluters that are subject to conditions in their NPDES permits. Should a state’s voluntary programs prove an insufficient means of reducing nonpoint source pollution, the state could implement similar measures, conditioning land use and building permits on the implementation of specific runoff mitigation measures or requirements of best management practice. States could also balance the burden of pollution reduction between point and nonpoint sources by simply designating more polluters as point sources for state-implemented NPDES permitting purposes.

States should enjoy the opportunity to adopt their own laws that effectively reduce nonpoint source pollution with limited intervention from the federal government. Should states, however, fail to adopt effective regulatory programs, or chose not to act at all, Congress should ensure that the EPA has authority to step in where states fall short. Using the Restoration Act as a model, Congress should give the EPA a nondiscretionary duty to step in, establish, implement, and enforce nonpoint source regulatory programs in the face of inadequate state action. Given the EPA’s historical reluctance to implement the TMDL program, or to aggressively address nonpoint source pollution in general, this nondiscretionary duty should be enforced under a citizen suit provision. A new EPA rule or statutory addition to the CWA requiring states to

\[^{173}\text{See supra at V.}\]
\[^{174}\text{See supra at III.b.i.}\]
\[^{175}\text{See supra at IV.b.}\]
\[^{176}\text{See supra at II.b; supra at III.b.ii.}\]
include implementation plans in the establishment TMDLs\textsuperscript{177} could provide greater systemic momentum towards state adoption of TMDL programs while necessitating less EPA intervention.

The Restoration Act’s nitrogen and phosphorus discharge trading program implemented through the NPDES permitting system could be adopted to best allocate the burden imposed by the new regulations among polluters.\textsuperscript{178}

Drawing from the successful nonpoint source pollution reduction programs already in place in various parts of the country, and other proposed rules and bills that have been proposed but not implemented, these recommendations would effectively close the nonpoint source regulatory gap and would begin to address, on a national scale, the last great obstacle to restoring our nation’s impaired waters.

\textbf{VII. CONCLUSION}

In restoring America’s impaired waters, effectively addressing nonpoint source pollution remains one of the nation’s greatest challenges. In its latest National Water Quality Inventory, the EPA reported that forty-four percent of streams and rivers accessed were impaired or not clean enough to support their designated use such as fishing or swimming.\textsuperscript{179} Moreover, nonpoint sources remain the leading cause of WQS nonattainment in American waters.\textsuperscript{180}

Given the state of the American waters and the problem presented by nonpoint source pollution, federal, state, and local governments need to overcome their historical reluctance to

\textsuperscript{177} Supra text accompanying note 97.
\textsuperscript{178} See supra at IV.b.
\textsuperscript{180} Houck supra note 40 at 60.
take on nonpoint source pollution. The non-regulation of nonpoint sources under the CWA has long been justified using three rationales: 1) because of the great number and variety of nonpoint sources; 2) because of the site-specific nature of the pollution; and 3) because of the lack of known control technology.\(^{181}\) As pointed out by Professor Houck, however, upon reflection these arguments are not very convincing because: 1) there are a great number and variety of point sources as well (several hundred major industrial categories and subcategories); 2) each industrial discharge also has site-specific effects on its receiving water (effects that are irrelevant to the setting of technology based guidelines); and 3) control technologies for nonpoint sources (e.g., shelter-belts, nutrient caps, retention ponds) are anything but unknown, complex, technologically difficult, or even costly.\(^{182}\)

Up until this point, the CWA Section 303(d) TMDL program has come a long way. After thirty years of reluctance by the EPA to implement the program as applied to point sources, with judicial prodding, by the mid 1990s the EPA started its implementation. Again, with the help of judicial prodding in Pinto Creek, in the case of the Chesapeake Bay, the EPA has demonstrated a willingness to energetically regulate nonpoint source pollution.

While the heretofore unregulated industries may protest the notion of such regulation, the Minnesota CWLA demonstrates that in states where there is good-faith cooperation from interested parties and a certain amount of political willingness on the part of state-level law makers, nonpoint source reductions programs can be effectively implemented to restore impaired waters while not overburdening industry, and not requiring EPA implementation of actions similar to the “federal backstop actions” identified in the Bay TMDL.

\(^{181}\) Houck supra note 40 at 87.
\(^{182}\) Id.
Despite EPA’s demonstrated recent willingness to utilize its federal backstop actions, there still remains a regulatory gap in regards to waters polluted only by nonpoint sources. States should be given the opportunity to restore waters impaired by nonpoint source pollution at the local level, but if the states fail to do so, Congress should not hesitate to close the final nonpoint source regulatory gap in the TMDL program, granting the EPA the tools needed to restore our nation’s impaired waters.