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NEW LIFE FOR IMPAIRED WATERS: REALIZING THE GOAL TO “RESTORE” THE NATION’S WATERS UNDER THE CLEAN WATER ACT

Roger Flynn*

The Federal Water Pollution Control Act, commonly known as the Clean Water Act (CWA), is the primary statute regulating the quality of our nation’s waters.1 Among the many provisions of the CWA, one of the least understood, and least implemented, is the requirement to protect waters that do not meet water quality standards from further pollution—the impaired waters provision.2 That is changing.

The United States Court of Appeals for the Ninth Circuit recently reviewed this part of the CWA and issued a far-reaching decision interpreting the duties of federal and state agencies to prevent further pollution of impaired waters.3 In Friends of Pinto Creek v. United States E.P.A., the court overturned a water quality discharge permit issued by the federal Environmental Protection Agency (EPA) to a large copper mining project in Arizona.4 The critical issue in the case was whether a discharge permit could be issued that would add a pollutant to Pinto Creek, a water body that did not meet the applicable water quality standard for

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2 33 U.S.C. § 1313(d); see also 40 C.F.R. § 122.4(i) (2008).

3 Friends of Pinto Creek v. U.S. E.P.A. (Pinto Creek), 504 F.3d 1007 (9th Cir. 2007), cert. denied, 129 S. Ct. 896 (2009).

4 Id. at 1009.
that pollutant—in that case, dissolved copper. The court vacated and remanded the EPA-issued permit on the ground that such a discharge violated the impaired waters provision of the CWA.5

The *Pinto Creek* decision generated significant controversy among regulated industries and resulted in a petition for certiorari to the United States Supreme Court by the discharge permit applicant, the Carlota Copper Company.6 Carlota’s petition for certiorari was supported by six separate amicus briefs to the Supreme Court.7 The EPA filed a brief in opposition to Carlota’s certiorari petition.8 In January of 2009, the United States Supreme Court denied, without discussion, Carlota’s certiorari petition.9

*Pinto Creek* was the first federal appellate court decision to comprehensively review the CWA’s impaired waters provision, and due to the United States Supreme Court’s decision not to review the Ninth Circuit’s result, *Pinto Creek* has national implications. Impaired waters are a significant concern across the country. According to the EPA, there are 44,023 waters in the United States that do not comply with minimum water quality standards—i.e., that are impaired.10 According to the latest EPA National Water Quality Inventory, of the representative streams and rivers assessed,

44% were reported as impaired or not clean enough to support their designated uses, such as fishing and swimming. . . . Pathogens, habitat alterations, and organic enrichment/oxygen

5 *Id.* at 1011–15.


9 *Carlota*, 129 S. Ct. at 896.

depletion were cited as the leading causes of impairment in rivers and streams, and top sources of impairment included agricultural activities, hydrologic modifications (such as water diversions and channelization), and unknown/unspecified sources.11

For the assessed lakes and reservoirs, “64% were reported as impaired and 36% were fully supporting all assessed uses. Mercury, polychlorinated biphenyls (PCBs), and nutrients were cited as the leading causes of impairment in lakes.”12

Thus, the implications of Pinto Creek are significant, as the decision places substantial restrictions on the ability of states and the EPA to approve new water quality discharge permits for discharges into any of these 44,023 waters. This article will review the impaired waters provision of the CWA and the case law that has developed over the years interpreting that provision, with a focus on the Ninth Circuit’s Pinto Creek decision.

I. THE CLEAN WATER ACT AND IMPAIRED WATERS

A. Brief Summary of the Clean Water Act

Recognizing that previous attempts to regulate and control water pollution had been ineffective, Congress enacted the CWA in 1972.13 Prior to the CWA, previous federal water pollution laws relied on water quality standards specifying the acceptable levels of pollution in a State’s interstate navigable waters as the primary mechanism . . . for the control of water pollution . . . . This program based on water quality standards, which were to serve both to guide performance by polluters and to trigger legal action to abate pollution, proved ineffective.14

One significant problem with this approach was that these pre-1972 laws did not contain any specific direction as to how these state water quality standards would be met.15

12 Id. at 2.
14 Id.
15 Id. at 203.
Prior to 1972, Congress attempted to control water pollution by focusing regulatory efforts on achieving “water quality standards,” standards set by the states specifying the tolerable degree of pollution for particular waters. This scheme had two important flaws. First, the mechanism of enforcement was cumbersome. Regulators had to work backward from an overpolluted body of water and determine which entities were responsible; proving cause and effect was not always easy. Second, the scheme failed to provide adequate incentives to individual entities to pollute less; an entity’s dumping pollutants into a stream was ignored if the stream met the standards. The scheme focused on “the tolerable effects rather than the preventable causes” of pollution.16

In 1971, the Senate Committee on Public Works concluded that “the federal water pollution control program . . . has been inadequate in every vital aspect.”17 As a result, Congress enacted the CWA Amendments, declaring “the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985.”18 Another lofty goal established by Congress in 1972 was that “water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983.”19

Although these lofty goals were never achieved, the passage of the CWA was a “bold and sweeping legislative initiative” protecting water quality across the country.20 As the United States Supreme Court stated: “It is fair to characterize the Clean Water Act as watershed legislation. The statute endorsed fundamental changes in both the purpose and the scope of federal regulation of the Nation’s waters.”21

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18 33 U.S.C. § 1251(a)(1) (2006); see also Monongahela Power Co. v. Alexander, 809 F.2d 41, 45–46 (D.C. Cir. 1987) (marking the 1972 legislation as “the ascendancy of water-quality control to the status of a major national priority”); Sierra Club v. U.S. Army Corps of Eng’rs, 772 F.2d 1043, 1055 (2d Cir. 1985) (stating that Congress’s far-reaching statutory goals are based on “its belief that man and nature are so intimately connected that to significantly degrade the waters of [the United States] threatens not only the fish, but ultimately man as well”); Natural Res. Def. Council v. Costle, 568 F.2d 1369, 1371 (D.C. Cir. 1977) (stating that the Act was a “dramatic response to accelerating environmental degradation of rivers, lakes and streams in this country”).
20 Dubois v. U.S. Dep’t of Agric., 102 F.3d 1273, 1294 (1st Cir. 1996) (citing U.S. v. Commonwealth of Puerto Rico, 721 F.2d 832, 834 (1st Cir. 1983)).
With the passage of the CWA in 1972, Congress shifted the focus from the health of the receiving waters to the imposition of controls on the pollution being released into the nation’s waters.22

In 1972, Congress passed the Clean Water Act, which made important amendments to the water pollution laws. The amendments placed certain limits on what an individual firm could discharge, regardless of whether the stream into which it was dumping was overpolluted at the time . . . . The Act thus banned only discharges from point sources. The discharge of pollutants from nonpoint sources—for example, the runoff of pesticides from farmlands—was not directly prohibited. The Act focused on point source polluters presumably because they could be identified and regulated more easily than nonpoint source polluters.23

As the United States Court of Appeals for the Ninth Circuit has stated: “The Clean Water Act thus overhauled the regulation of water quality. Direct federal regulation now focuses on reducing the level of effluent that flows from point sources.”24 As the United States Supreme Court recognized, the shift to direct restrictions on discharges facilitated enforcement “by making it unnecessary to work backward from an over-polluted body of water to determine which point sources are responsible and which must be abated.”25

The CWA is designed “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”26 The CWA attempts to achieve these goals through a comprehensive regulatory scheme using permits, technology controls, and water quality-based pollution controls. The Supreme Court has outlined the main goals and provisions of the CWA:

The Federal Water Pollution Control Act, commonly known as the Clean Water Act . . . is a comprehensive water quality statute...

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22 Or. Natural Desert Assoc. v. Dombeck, 172 F.3d 1092, 1096 (9th Cir. 1998).
23 NRDC, 915 F.2d at 1316.
24 Dombeck, 172 F.3d at 1096.
26 33 U.S.C. § 1251(a). As one appellate court stated:

Dubois, 102 F.3d at 1294.
designed to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” The Act also seeks to attain “water quality which provides for the protection and propagation of fish, shellfish, and wildlife.”

To achieve these ambitious goals, the Clean Water Act establishes distinct roles for the Federal and State Governments. Under the Act, the Administrator of the Environmental Protection Agency (EPA) is required, among other things, to establish and enforce technology-based limitations on individual discharges into the country’s navigable waters from point sources. Section 303 of the Act also requires each State, subject to federal approval, to institute comprehensive water quality standards establishing water quality goals for all intrastate waters. These state water quality standards provide “a supplementary basis . . . so that numerous point sources, despite individual compliance with effluent limitations, may be further regulated to prevent water quality from falling below acceptable levels.”

The CWA expressly prohibits all discharges of pollutants from point sources into navigable waters, unless such discharges are authorized pursuant to a CWA permit. “Pollutants” are defined as “dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.” The term “discharge of any pollutant” is defined as “any addition of any pollutant to navigable waters from any point source.” A point source is defined under the CWA as any “discernable, confined, and discrete conveyance.” The CWA regulates point source discharges through the Section 402 National Pollutant Discharge Elimination System (NPDES) permit program, which applies to discharges of pollutants, and through the Section 404 permit program for discharges of dredged and fill materials.

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31 33 U.S.C. § 1362(14). The term point source is also defined broadly. United States v. Earth Sci., Inc., 599 F.2d 368, 370 (10th Cir. 1979); see also Trustees for Alaska v. E.P.A., 749 F.2d 549, 557–58 (9th Cir. 1984) (adopting Earth Science’s broad interpretation of point source).
Although the EPA is the primary agency responsible for administering the CWA, the CWA allows states to assume the authority for issuing NPDES permits, upon approval of the state’s permitting program by EPA. The EPA also “retains authority to review operation of a State’s permit program. . . . [and] in addition to this review authority, after notice and opportunity to take action, the EPA may withdraw approval of a state permit program which is not being administered in compliance with [Section] 402.”

B. The Role of Water Quality Standards and TMDLs in “Restoring and Maintaining” the Integrity of the Nations’ Waters

Despite Congress’s change in focus from the health of the receiving water body to the control of effluent from point source discharges into those waters, the CWA contained significant provisions aimed at protecting the nation’s waters, based on the quality and uses of those waters.

Congress decidedly did not in 1972 give up on the broader goal of attaining acceptable water quality. Rather, the new statute recognized that even with the application of the mandated technological controls on point source discharges, water bodies still might not meet state-set water quality standards. The 1972 statute therefore put in place mechanisms other than direct federal regulation of point sources, designed to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

The primary CWA provision focused on the water bodies themselves is Section 303, entitled “Water Quality Standards and Implementation Plans.” This section establishes water quality standards in cooperation with the states: “The states are required to set water quality standards for all waters within their boundaries regardless of the sources of pollution entering the waters.” Water quality standards establish, and then protect, the desired conditions of each

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34 State Water Res. Control Bd., 426 U.S. at 208 (citing 33 U.S.C. § 1342(c)).


37 Pronolino, 291 F.3d at 1127 (emphasis in original).
waterway within the state's regulatory jurisdiction. "Water quality standards are retained as a supplementary basis for effluent limitations, however, so that numerous point sources, despite individual compliance with effluent limitations, may be further regulated to prevent water quality from falling below acceptable levels."  

Section 303 mandates three specific components of a state's water quality program. First, a state establishes the "designated uses" of its waters. Second, a state promulgates "water quality criteria," both numeric and narrative, specifying the water quality conditions, such as maximum pollutant levels, that are necessary to protect the designated uses. Third, a state adopts and implements an "antidegradation" policy to prevent any further degradation of water quality. These three components of a state water quality program are independent and separately enforceable requirements of federal law.

States are responsible for the development of water quality standards applicable to water bodies within their borders. A state-developed water quality standard, however, does not become effective until the EPA approves the standard or policy. If a state does not set water quality standards, or if the EPA determines that the state standards do not meet the requirements of the CWA and EPA regulations, then the EPA promulgates standards for the state.

Water quality standards establish the water quality goals for a waterbody as a whole. They are the benchmarks by which the quality of a waterbody is measured: waterbodies that do not meet these benchmarks are deemed "water

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38 According to the statute:

[A] water quality standard shall consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based on such uses. Such standards shall be such as to protect the public health and welfare, enhance the quality of the water and serve the purposes of this chapter. Such standards shall be established taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, and also taking into consideration their use and value for navigation.


41 Id.


43 PUD No. 1, 511 U.S. at 705.

44 33 U.S.C. § 1313(c)(1), (3).

45 33 U.S.C. § 1313(c)(3); see also 40 C.F.R. § 131.21(c) (2008).

46 Pronolino, 291 F.3d at 1127 (citing 33 U.S.C. § 1313(b), (c)(3)-(4)).

quality-limited” or “impaired” and placed on the list for such waters in each state prepared pursuant to CWA Section 303(d), known as the “303(d) list.” Section 303(d) requires that:

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. 49

For impaired waters identified on each state’s 303(d) list, the states must develop total maximum daily loads (TMDLs) in order to bring these waterbodies back into compliance with applicable water quality standards. 50 According to the CWA:

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 [EPA] 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. 51

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50 33 U.S.C. § 1313(d)(1)(C). If a state fails to establish a TMDL for an impaired water, the EPA may do so. Pinto Creek, 504 F.3d at 1010 (noting that the EPA developed the TMDL after the conservation groups filed their initial administrative appeal of the EPA-issued NPDES permit).
“A TMDL defines the specified maximum amount of a pollutant which can be discharged or ‘loaded’ into the waters at issue from all combined sources.” The CWA, however, never defined the term “total maximum daily load.”

Each state must submit its 303(d) list to EPA for approval. If EPA approves the state’s list, the state then incorporates the list and any TMDLs done for these waters into the state’s “continuing planning process” established pursuant to CWA Section 303(e). A state’s continuing planning process is aimed at achieving compliance with water quality standards if the point source effluent limitations are not sufficient. The continuing planning process incorporates a variety of water quality protection tools, such as individual point source permit effluent limitations, TMDLs, and area wide waste management plans for nonpoint sources.

The TMDL process includes identification of existing sources of pollution that have caused or contributed to the degraded water quality, then establishment of “wasteload allocations” (for point sources of pollution) and “load allocations” (for nonpoint sources of pollution) for those sources which have caused or contributed to the degraded water. The final TMDL represents a ratcheting

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52 Dioxin/Organochlorine Ctr. v. Clarke, 57 F.3d 1517, 1520 (9th Cir. 1995); Pronsolino, 291 F.3d at 1127–28.

53 Friends of the Earth, Inc. v. E.P.A., 446 F.3d 140, 144–48 (D.C. Cir. 2006). The United States Court of Appeals for the District of Columbia held that, in developing TMDLs, EPA and the states must set daily limits on pollutant levels—rejecting EPA’s argument that the agencies could base TMDLs on monthly or seasonal levels. Id. at 140. For an analysis of this issue, see Matthew Chalker, Friends of the Earth, Inc. v. Environmental Protection Agency: The U.S. Court of Appeals for the D.C. Circuit Holds That ‘Daily’ Within the Context of the Clean Water Act, Unambiguously Requires Daily Loads, 14 U. BALT. J. ENVTL. L. 201 (2007) (discussing daily limits on pollutant levels).


56 33 U.S.C. § 1313(e).


58 40 C.F.R. § 130.2(g), (h). See also Pronsolino, 291 F.3d at 1128 (discussing the structure of TMDLs).
down of the pollution sources via their respective pollutant loading allocations. If TMDLs are properly adhered to, then the result would be restoration of the stream to water quality standards. The TMDL reflects an impaired waterbody’s capacity to tolerate point source, nonpoint source, and natural background pollution, with a margin of error, while still meeting state water quality standards.59

Thus, the load and wasteload allocations and loading reductions detailed in a TMDL serve a purpose—getting the impaired waterbody back to health. The basic purpose for which TMDLs are established is the eventual attainment of water quality standards.60 The TMDL specifies the maximum amount of a particular pollutant that can pass through a waterbody each day without water quality standards being violated.61 Two of the leading TMDL decisions have been issued by the United States Courts of Appeal for the Ninth and Eleventh Circuits: Pronsolino v. Nastri, and Sierra Club v. Meiburg.62 These cases discussed how TMDLs are established, with the goal of reducing both point and non-point source loadings to the level at which stream standards can be achieved.63

Regarding individual discharges into an impaired water body, the Meiburg court explained the following CWA requirements:

that individual-discharge permits will be adjusted and other measures taken [such as reducing non-point source loadings] so that the sum of that pollutant in the waterbody is reduced to the level specified by the TMDL. As should be apparent, TMDLs are central to the Clean Water Act’s water-quality scheme because . . . “they tie together point-source and nonpoint-source pollution issues in a manner that addresses the whole health of the water.”

. . . .

. . . Point-source discharges are regulated through the federal permit regime, with TMDLs incorporated into the effluent and technological-based limitations.64

In addition to the federal appellate court opinions in Pronsolino and Meiburg, federal district courts have also recognized the connection between the loading

59 Pronsolino, 291 F.3d at 1128.
60 Id. at 1137.
61 Sierra Club v. Meiburg, 296 F.3d 1021, 1025 (11th Cir. 2002).
62 Pronsolino, 291 F.3d at 1127–29 (holding that TMDLs apply to nonpoint sources); Meiburg, 296 F.3d at 1025–26 (holding that TMDLs are to be established even on streams that have only nonpoint source loadings).
63 Pronsolino, 291 F.3d at 1127–29; Meiburg, 296 F.3d at 1025–26.
64 Meiburg, 296 F.3d at 1025 (citations omitted).
restrictions established in the TMDL and restrictions on new or renewed NPDES permits. In *Friends of the Wild Swan, Inc. v. United States E.P.A.*, the court prohibited EPA and the State of Montana from issuing any new NPDES permits “until all necessary TMDLs are established for a particular WQLS [water quality limited stream].”65 In *Sierra Club v. Hankinson*, the court ordered that:

To ensure that the TMDLs are used to improve water quality, EPA shall implement . . . TMDLs through the NPDES permitting program. This includes the following:

(a) Once the TMDL is established, EPA shall . . . cause the modification, revocation and reissuance, or termination of permits where appropriate as necessary to implement the TMDLs . . . ;

(b) EPA shall . . . comply with 40 CFR § 122.4(i) regarding the prohibition on new sources or new dischargers that will cause or contribute to a violation of water quality standards, requiring new permittees or new dischargers to demonstrate that there are sufficient load allocations to allow for the discharge and requiring that the existing dischargers into that segment are subject to compliance schedules designed to bring the WQLS into compliance with applicable water quality standards.66

Although these decisions focused on TMDLs, the primary means of protecting water quality and achieving water quality standards is through the establishment of effluent limitations for point sources, implemented through NPDES permits.67

In the 1980s and 1990s, there was a flurry of litigation aimed at requiring EPA and the states to promulgate TMDLs for water quality limited (impaired) waters.68 Conservation groups were largely successful in getting the federal courts to force EPA and the states to act.69 According to the EPA’s latest analysis, there

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67 See supra notes 22–32 and accompanying text.
are 40,275 TMDLs that have been prepared on water bodies across the country. However, the conservationists’ subsequent attempts to use Section 303 and the promulgation of TMDLs to actually force reductions in pollutant discharges into impaired waters were not successful.

This was because it was held that the promulgation of a TMDL does not, by itself, require EPA or the states to reduce pollutant loadings into an impaired water. In other words, neither EPA nor the states are independently required to implement the loading restrictions contained in the TMDL. Rather, TMDLs are to be used as part of a state’s continuing planning process to control nonpoint source pollution, and as part of individual NPDES permits, to bring impaired waters back to the point where they are no longer impaired—that is, until the waters meet water quality standards. However, according to one commentator, there has been an “abject failure of the CPP [continuing planning process established in CWA Section 303(e)] to lead to the clean up of non-point source impaired waters.”

This failure of the Section 303(e) continuing planning process to restore impaired waters, coupled with the lack of any mechanism to enforce or implement the loading restrictions of the TMDL, implies that TMDLs are the proverbial toothless tigers when it comes to actually “restoring” impaired waters. When viewed in isolation, that may be the case, as TMDLs are not self-implementing. However, when viewed in conjunction with the NPDES permitting program and its implementing regulations—particularly the requirement that all new permits ensure that discharges do not “cause or contribute” to a violation of water quality standards in the receiving waters—the load reductions contained in the TMDL can become the driving force in restricting or preventing new discharges into impaired waters. It is to this issue we now turn.


71 See supra note 68 and accompanying text.

72 Meiburg, 296 F.3d at 1034.

73 Id.

74 Id. (discussing CWA Section 303(e) codified at 33 U.S.C. § 1313(e)).

75 Eric Huber, TMDLs: White Knight or Bureaucratic Nightmare, 4 VT. J. ENVTL. L. 1, 14 (2003).

76 For a further discussion of the problems with the lack of “self-implementation” of TMDLs, see id.

C. The EPA NPDES Permitting Regime for New Sources in Impaired Waters

When EPA (or a state that has been delegated the Section 402 permitting program) issues an NPDES permit, the agency must comply “with the applicable water quality requirements of all affected states.”78 Moreover, the EPA or state permitting agency is prohibited from issuing an NPDES permit “when the conditions of the permit do not provide for compliance with the applicable requirements of CWA, or regulations promulgated under CWA,” or “when the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected states.”79

EPA’s long-standing regulations prohibit the issuance of an NPDES permit for a new discharge where the discharge may “cause or contribute to the violation of water quality standards”:

§ 122.4 Prohibitions. 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 water quality standards.80

This is a flat-out prohibition against any new discharge that would cause or contribute to a violation of a water quality standard.

This EPA regulation allows for one limited exception—contained in 40 C.F.R. § 122.4(i)(1) and (2)—to this prohibition of discharges into impaired waters that already are violating the standard. In order for a discharge of the pollutant in question to be allowed, the EPA regulations require strict assurances that (1) the stream can handle the new discharge and still meet the standard and (2) that specific plans are in place to ensure that the stream will be brought back to health—i.e., achieve the applicable water quality standard for that waterbody.81 Specifically, the EPA regulations require that:

The owner or operator of a new source or new discharger proposing to discharge into a water segment which does not meet applicable water quality standards or is not expected to meet those standards even after the application of the effluent limitations required by sections 301(b)(1)(A) and 301(b)(1)(B)

78 40 C.F.R. § 122.4(d).
79 40 C.F.R. § 122.4(a), (d).
80 40 C.F.R. § 122.4(i).
81 Id.
of CWA and for which the State or interstate agency has performed a pollutants load allocation for the pollutant to be discharged, must demonstrate, before the close of the [NPDES permit] public comment period, that:

(1) There are sufficient remaining pollutant load allocations 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 water quality standards.82

Thus, the permit applicant has the dual burden of demonstrating that “there are sufficient pollutant load allocations to allow for the discharge” and that “existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable water quality standards.”83

Prior to the Ninth Circuit’s decision in Pinto Creek, very few courts dealt with 40 C.F.R. § 122.4(i). In Friends of the Wild Swan, the Ninth Circuit upheld a Montana federal district court’s stay of the issuance of NPDES permits for new sources or discharges to impaired waters pending completion of TMDLs.84 The district court’s action was taken pursuant to 40 C.F.R. § 122.4(i) and was set forth as a remedy to compel the state of Montana to complete TMDLs for a number of impaired waters.85

In Ohio Valley Environmental Coalition v. Horinko, San Francisco Baykeeper v. Browner, and Sierra Club v. Hankinson, the regulation was raised, but was not the primary issue in the litigation.86 In these cases, each court noted the language of 40 C.F.R. § 122.4(i) and appeared to read it similar to the interpretation argued by the conservation groups in Pinto Creek, but did not address the language in detail.87 In Horinko, the court noted that EPA agreed with the plaintiff’s statement that 40 C.F.R. § 122.4(i) prohibited further discharges into an impaired water,
unless strict controls under 40 C.F.R. § 122.4(i) were in place.\footnote{Horinko, 279 F. Supp. 2d at 774–75.} In \textit{San Francisco Baykeeper}, the court cited 40 C.F.R. § 122.4(i) and held that “there cannot be a new source or a new discharger if the waterbody is a WQLS \textit{[water quality limited segment]} impaired waterway \textit{unless} the state completes a TMDL for that WQLS beforehand.”\footnote{San Francisco Baykeeper, 147 F. Supp. 2d at 995.} Finally, in \textit{Hankinson}, the court required TMDL development and ordered:

\begin{quote}
EPA shall (or ensure that the State shall) comply with 40 C.F.R. § 122.4(i) regarding the prohibition on new sources or new dischargers that will cause or contribute to a violation of water quality standards, requiring new permittees or new dischargers to demonstrate that there are sufficient load allocations to allow for the discharge and requiring that the existing dischargers into that segment are subject to compliance schedules . . . .\footnote{Hankinson, 939 F. Supp. at 874.}
\end{quote}

In one state case, \textit{Crutchfield v. State Water Control Board}, the Virginia Court of Appeals interpreted a state regulation essentially identical to 40 C.F.R. § 122.4(i) and approved the state’s issuance of an NPDES permit into an impaired water.\footnote{Crutchfield v. State Water Control Bd., 612 S.E.2d 249, 251 (Va. Ct. App. 2005). The Virginia regulation, 9 V.A. ADMIN. CODE § 25-31-50(C)(9) (2009), contains identical language to that found in the EPA regulation, 40 C.F.R. § 122.4(i); see also \textit{Crutchfield}, 612 S.E.2d at 255.} \textit{Crutchfield} held that since the level of pollutant of concern in the discharge, dissolved oxygen, would be less than the level of that pollutant in the receiving water, the new discharge would not cause or contribute to a violation of the dissolved oxygen standard.\footnote{Crutchfield, 612 S.E.2d at 255.} Notably, however, \textit{Crutchfield} addressed only the first sentence of 40 C.F.R. § 122.4(i), holding that the second sentence of the regulation was inapplicable to the facts, because there was no TMDL at issue—unlike the situation in \textit{Pinto Creek}.\footnote{\textit{Id.} at 258.}

Thus, faced with little consistent guidance or precedent regarding the application of 40 C.F.R. § 122.4(i) and the protection of impaired waters, the court in \textit{Pinto Creek} was faced with the task of deciding these issues on essentially first impression.\footnote{See Jeffrey M. Gaba, \textit{New Sources, New Growth and the Clean Water Act.} 55 ALA. L. REV. 651, 664–71 (2004) (discussing the confusion surrounding TMDLs and § 122.4(i) prior to \textit{Pinto Creek}).}
II. **Pinto Creek and the Duty to Protect Impaired Waters**

The United States Court of Appeals for the Ninth Circuit’s decision in *Pinto Creek* was the first federal court decision that squarely addressed the interconnection between CWA Section 303(d), TMDLs, the NPDES permitting program, and EPA’s 40 C.F.R. § 122.4(i) impaired waters regulation. The decision was the result of over ten years of agency review, administrative appeals, and federal court litigation—all triggered by the NPDES permit application submitted by the Carlota Copper Company to EPA.95

**A. The Road to Pinto Creek**

*Pinto Creek* involved EPA’s issuance of an NPDES permit which authorized discharges from the Carlota Copper Mine. The Mine would cover an area of over 3,000 acres and mine an estimated 100 million tons of ore from four open pits.96 The Mine would be located on a mixture of public and private lands near the small town of Miami, Arizona, situated in the mountains approximately 100 miles east of Phoenix.97 The challenged permit authorized Carlota to discharge a number of pollutants, including dissolved copper, into Pinto Creek from its mine facilities. As described by the EPA’s Environmental Appeals Board (EAB) in its decision rejecting the conservation groups’ administrative appeal of the NPDES permit:

Carlota plans to use five separate areas for waste rock disposal. . . . Carlota will build seven storm water and sediment retention basins, or retention ponds, to capture storm water runoff and sediment from the slopes of the waste rock dumps. The basins will contain outlet structures to release storm water if a storm event exceeds the design criteria. These outlets, where discharges could occur during large precipitation events, are outfalls that require an NPDES permit.98

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95 Carlota Copper Company submitted its NPDES permit application to EPA, as the permitting agency for NPDES permits in Arizona at the time (1998). Since that time, EPA has approved the delegation of the NPDES permitting program to the State of Arizona. This delegation was approved by the United States Supreme Court, which rejected a challenge to the delegation by conservation groups. See Nat’l Ass’n of Home Builders v. Defenders of Wildlife, 551 U.S. 644 (2007). The delegation of permitting authority to Arizona during the pendency of *Pinto Creek* did not alter the Ninth Circuit’s decision, since the NPDES permit had been issued by EPA.

96 Friends of Pinto Creek v. U.S. E.P.A. (*Pinto Creek*), 504 F.3d 1007, 1009 (9th Cir. 2007), cert. denied, 129 S. Ct. 896 (2009).


98 Id. at 703–04.
Carlota also would divert approximately 5,300 feet (over one mile) of Pinto Creek around the largest of the open pits, redirecting the stream into a concrete channel.\textsuperscript{99} The mine's operation would also require a sulfuric acid leach pad, with a capacity of 100 million tons, to be located directly in what is now Powers Gulch.\textsuperscript{100} Approximately 7,300 feet of Powers Gulch would also be diverted around the leach pad and redirected through a concrete channel.\textsuperscript{101} The operation plan also includes buried cut-off walls to direct groundwater into the surface diversion channels and away from the mine.\textsuperscript{102} These diversion channels would also discharge copper and other pollutants into Pinto Creek.\textsuperscript{103}

The State of Arizona had classified both Pinto Creek and Powers Gulch for the designated uses of a warm water fishery, recreation, and fish consumption and agricultural uses.\textsuperscript{104} The Pinto Creek watershed contains a number of active, inactive, and abandoned copper mines that release copper into the stream.\textsuperscript{105} As a result of this copper contamination, Pinto Creek is included on Arizona's Section 303(d) list of impaired waters due to non-attainment of water quality standards for dissolved copper.\textsuperscript{106}

EPA originally issued a Draft NPDES Permit for the Carlota Copper Mine in 1998.\textsuperscript{107} After receiving public comment on the draft permit, on July 24, 2000, EPA issued a Final Permit (Permit) for the discharges from the Carlota Mine.\textsuperscript{108} On August 24, 2000, a coalition of conservation groups appealed that Permit with the EAB, the EPA's internal administrative review body.\textsuperscript{109} In that appeal,
Petitioners argued that EPA had violated the substantive provisions of the Clean Water Act and failed to adequately provide for public notice and comment on the Permit.110

Instead of responding to that original appeal, EPA withdrew the challenged NPDES permit.111 In April of 2001, in response to the appeal, EPA issued its TMDL for Pinto Creek, entitled “Total Maximum Daily Load for Copper in Pinto Creek, Arizona” which established allowable pollutant loadings for Pinto Creek designed to restore Pinto Creek to a condition in which it would comply with designated water quality standards (2001 TMDL).112 In May of 2001, EPA issued its Supplemental Environmental Assessment, prepared pursuant to the National Environmental Policy Act (NEPA) for the NPDES permit.113

On February 27, 2002, EPA reissued the Final NPDES permit, along with the Amended Record of Decision and Finding of No Significant Impact.114 The conservation groups again filed an appeal of the new Final Permit with the EAB on March 29, 2002.115 After briefing and argument, the EAB issued its Order Denying Review on September 30, 2004.116 The conservation groups then appealed the EAB’s decision to the United States Court of Appeals for the Ninth Circuit in San Francisco in February 2005.

The EPA’s position at the center of the dispute in Pinto Creek—involving the interpretation of 40 C.F.R. § 122.4(i)—was summarized by the EAB’s decision:

110 See generally Pinto Creek, 504 F.3d 1007. The conservation group petitioners before the EAB were: Friends of Pinto Creek, the National Wildlife Federation, the Arizona Wildlife Federation, Grand Canyon Chapter of the Sierra Club, Mineral Policy Center, Maricopa Audubon Society, and Citizens for the Preservation of Powers Gulch and Pinto Creek.

111 See In re Carlota, 11 E.A.D. at 702 (discussing the procedural aspects of the case before the EAB); see also Pinto Creek, 504 F.3d at 1010.


113 “NEPA [42 U.S.C. §§ 4321 et seq.] requires [federal] agencies to examine potential environmental effects of any proposed action, and to inform the public of its studies and resulting concerns.” Pinto Creek, 504 F.3d at 1016–17. In Pinto Creek, the conservation groups argued that EPA failed to conduct the proper NEPA review in its issuance of the NPDES permit, particularly EPA’s failure to consider the environmental impacts from the pollutants, including copper, discharged into Pinto Creek from the diversion channels. Id. at 1017. The Ninth Circuit held that the EAB decision had improperly ruled that the groups had not sufficiently raised their NEPA concerns during the administrative process. Id. Regarding other NEPA issues raised by the groups, the Ninth Circuit declined to rule on these because of its finding that the permit violated the CWA. Id. This article does not discuss these NEPA issues.

114 Pinto Creek, 504 F.3d at 1010.

115 Id.

116 In re Carlota, 11 E.A.D. at 692.
Petitioners further contend that the Region cannot allow new copper discharges into any segment of Pinto Creek prior to the implementation of the Pinto Creek TMDL and restoration of the water body. There is nothing in the statute, the cases Petitioners cite, or 40 C.F.R. section 122.4(i) providing that an impaired water segment needs to be restored prior to allowing new source discharges into the water body. The Board declines to endorse Petitioners’ interpretation because to do so would perpetrate the very outcome the Supreme Court in *Arkansas v. Oklahoma* sought to avoid (adoption of a rigid approach that might frustrate the construction of new facilities that would improve existing conditions). The Board finds no clear error in the Region’s determination that Carlota’s discharges will not “cause or contribute” to a violation of water quality standards, but rather, Carlota will improve existing conditions because the reductions that will result from its activities are greater than the projected discharges. In addition, the Region did not clearly err in determining that “there are sufficient remaining pollutant load allocations to allow for Carlota’s discharges.” The Pinto Creek TMDL specifically provides pollutant load allocations for Carlota, and the Board has no reason to disregard the TMDL findings, especially because the TMDL has not been challenged in the proper forum. Moreover, contrary to Petitioners’ assertions, the requirements in section 122.4(i)(2) can only apply to point sources. Under the CWA the Agency only has authority to promulgate regulations for point sources, and by section 122.4(i)(2)’s use of the term “compliance schedules,” the Agency has signaled its intention that the requirements apply to existing “permit holders,” as opposed to all dischargers (permitted and unpermitted) as Petitioners propose.  

According to the EAB, the fact that EPA required Carlota to “offset” its proposed new copper discharges by “improv[ing] existing conditions because the reductions that will result from its activities are greater than the projected discharges” was the critical factor in the EAB’s decision—and set the stage for the Ninth Circuit’s ruling in *Pinto Creek*.

**B. The Heart of the Dispute: EPA’s “Offset” Theory**

As a result of the first appeal of the 2000 Permit to the EAB, EPA completed its TMDL for Pinto Creek.  

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117 *Id.* at 695 (citations omitted).

118 See *Pinto Creek*, 504 F.3d at 1010 (describing the permitting and appeal process).
to bring Pinto Creek back to a condition in which it would meet the copper standard. The sources of copper loading to be reduced included an active copper mine and numerous inactive mines.

The challenged NPDES permit authorized Carlota to discharge additional copper into the stretch of Pinto Creek that was listed on Arizona’s 303(d) list as impaired for copper. EPA’s proposed solution to the copper loading at the Carlota Mine site was to “offset” this new copper loading by requiring Carlota to reduce copper loadings in upper Pinto Creek by partially cleaning up a small inactive copper mine over five miles upstream—the Gibson Mine. The Gibson Mine is just one of the numerous sources of copper loading covered by the TMDL.

Although the reduction of copper loadings from the Gibson Mine partial cleanup would reduce overall copper loadings to Pinto Creek, without additional reductions Pinto Creek would still not achieve the required copper standard. Thus, once the Carlota Mine commenced its discharge of additional copper into Pinto Creek, the stream would still exceed the copper standard and still be classified as an impaired water.

EPA and Carlota argued that under this “offset,” the total amount of copper in the entire reach of Pinto Creek would be reduced, even with the additional copper discharges from the new mine. Thus, according to EPA and Carlota, due to this “offset,” the new copper discharges from the Mine would not “cause or contribute” to a violation of the copper standard. The conservation groups argued, in contrast, that the upstream “offset” was but one part of the larger need to reduce all of the copper loadings into Pinto Creek so that Carlota’s new discharge would not “cause or contribute” to the violation of the copper standard at the point of discharge.

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120 Id.
121 Id. at 1009.
122 Id. at 1012.
124 Id. at 16.
125 Id.
126 Id. at 1012.
127 Id. at 1011–12.
The Pinto Creek case was the first federal court decision to review the legality of EPA’s “offset” policy, which EPA had been developing for a number of years.\footnote{128} In 1999, as part of a rulemaking which dealt with TMDLs, EPA proposed the use of offsets as a means to meet overall water quality standards in a watershed.\footnote{129} After four years of congressional and administrative disputes over the rules, EPA formally revoked the proposal.\footnote{130} However, also, in 2003, EPA published its Water Quality Trading Policy, which approved the use of “offsets” for discharges into impaired waters.\footnote{131} As EPA stated in the promulgation of its Trading Policy:

Water quality trading is a voluntary, incentive-based approach that can offer greater efficiency in restoring or protecting water bodies. Trading allows a source to meet its regulatory obligations by using pollutant reductions created by another party with lower pollution control costs. EPA’s final Water Quality Trading Policy offers guidance to states and tribes on developing and implementing water quality trading programs.\footnote{132}

According to EPA’s Trading Policy, new dischargers could “[o]ffset[] new or increased discharges resulting from growth in order to maintain levels of water
quality that support all designated uses.”

Under the Trading Policy, “EPA interprets 40 CFR [§] 122.4(i) to allow for a new source or a new discharger to compensate for its entire increased load through trading.”

In its briefing to the Ninth Circuit in *Pinto Creek*, EPA argued that its offset and trading policy, as implemented in Carlota’s NPDES permit, satisfied the CWA and, more specifically, the requirement in 40 C.F.R. § 122.4(i) that a new discharge not “cause or contribute” to a violation of any water quality standard:

> As the EAB held, the record establishes that “the copper loadings into Pinto Creek attributable to the Gibson Mine exceed Carlota’s projected loadings and that the . . . Gibson Mine [remediation] will offset any discharges [by] Carlota[]. . . .” Thus, “rather than ‘causing or contributing’ a degradation, Carlota will be improving Pinto Creek’s water quality, or at the very least maintaining water quality.”

The conservation groups did not challenge the fact that, on paper, the projected reductions in copper loading from the remediation of the upstream Gibson Mine exceeded the amount of copper loading from the new permitted outfalls at the downstream Carlota copper mine. Rather, the groups argued that, at the point of discharge at the new mine site, the copper standard would still be exceeded by the new discharges, regardless of the upstream copper reductions. According to the conservation groups, the Gibson “offset” was just one of the many pollutant load reductions described in EPA’s TMDL and without a plan to implement all of the watershed-wide reductions detailed in the TMDL, the copper standard would never be achieved. The conservation groups summarized this argument in the following passage from their brief to the Ninth Circuit:

> EPA and Carlota defend the EPA’s permitting decisions based on an “offset” theory and ignore the fundamental requirement of the Clean Water Act . . . —that new pollution discharges cannot violate established water quality standards . . . . In EPA/Carlota’s view, the company’s proposal to reduce some of the copper loadings to Pinto Creek from another source (the Gibson Mine) allows EPA to overlook the undisputed fact that Carlota’s new discharges will exceed the allowable amount of copper in the stream at the point of discharge.

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133 *Id.* at 1610.


135 *Brief for Respondents, Pinto Creek*, 504 F.3d 1007 (9th Cir. 2007) (No. 05-70785), 2005 WL 6269928, at *23 (citations omitted).
Such a scheme violates the CWA and its implementing regulations. In fact, the EPA’s TMDL, . . . completed for Pinto Creek shows that even with the Gibson partial remediation, the additional pollution from Carlota will cause the load allocations and WQS [water quality standards] in Pinto Creek to be exceeded.

Overall, the key focus is at the point of the new discharge—will the discharge cause or contribute to a violation of WQS? Here, the undisputed answer is Yes. The fact that upstream copper levels may decrease somewhat—a very laudable goal—does not mean that the new discharge complies with the CWA.136

Faced with these conflicting interpretations of the CWA, 40 C.F.R. § 122.4(i), and the ability to “offset” or “trade” pollutant loading within a watershed, the stage was set for the Ninth Circuit to issue its ruling.137

Complicating this dispute were a pair of decisions by the Minnesota courts that were issued during the Pinto Creek litigation. In the first case, In re the Cities of Annandale and Maple Lake NPDES/SDS Permit Issuance for Discharge of Treated Wastewater, the Minnesota State Court of Appeals overturned the state agency’s issuance of an NPDES permit based on a similar “offset” defense.138 In Annandale, the Minnesota Pollution Control Agency issued an NPDES permit for a proposed wastewater treatment plant that would discharge phosphorus into a waterbody listed as impaired for phosphorus.139 The appeals court rejected the

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136 Reply Brief for Petitioners, Pinto Creek, 504 F.3d 1007 (No. 05-70785), 2005 WL 4220331, at *1.
137 In previous analysis of this issue, some commentators had presented essentially the same argument as that asserted by the conservation groups in Pinto Creek:

The regulations [§ 122.4(i)] prohibit the issuance of an NPDES permit to a new source if the source’s pollution “will cause or contribute to the violation of water quality standards.” A new pollutant source cannot help but “contribute” to a violation of the applicable standards for that pollutant in a waterbody that was listed because of violations of those same standards, even if pollutant loading from the new source will be offset by an equivalent load reduction from an existing source.

Michael M. Wenig, How ‘Total’ Are ‘Total Maximum Daily Loads’?—Legal Issues Regarding the Scope of Watershed-Based Pollution Control Under the Clean Water Act, 12 TUL. ENVTL. L.J. 87, 120–21 (1998) (citations omitted); see also Diane K. Conway, TMDL Litigation: So Now What?, 17 VA. ENVTL. L.J. 83, 118 (1997) (“While this regulation has been on the books for close to twenty years, the EPA has never enforced it.”); Houck, TMDLs III, supra note 51, at 10,420.

138 In re Cities of Annandale and Maple Lake (In re Annandale I), 702 N.W.2d 768, 774 (Minn. Ct. App. 2005).
139 Id. at 769–70.
“offset” defense: “This reduced discharge from other sources, . . . does not rectify the violation of water-quality standards.”

The Minnesota Supreme Court, in a split decision, overturned the lower court decision and reinstated the NPDES permit. The Minnesota Supreme Court held that, due to the proposed “offset” from reduced pollutant loadings from other sources, the pollutant loading from the new discharge would therefore not “cause or contribute” to a violation of water quality standards.

Notably, despite the seeming conflict between the Minnesota Supreme Court’s decision in Annandale and the Ninth Circuit’s eventual decision in Pinto Creek, the Ninth Circuit did not discuss Annandale. EPA had argued to the Ninth Circuit that the Minnesota Supreme Court’s decision supported EPA’s “offset” theory and its issuance of the NPDES permit to Carlota.

Annandale, however involved a different factual scenario and focused on a different part of the applicable regulation. In Annandale, unlike the situation in Pinto Creek, the water body did not have a TMDL—a critical distinction between the cases. Thus, there was no need for the Annandale court to apply the second sentence of 40 C.F.R. § 122.4(i)—the sentence that was a key part of the Ninth Circuit’s decision in Pinto Creek. Instead, Annandale focused extensively on interpretation of the phrase “cause or contribute to the violation of water quality standards” in the first sentence of the regulation, and never reached the interpretation of the second sentence (due in large part to the lack of any TMDL in that case).

C. The Ninth Circuit Rejects the “Offset” Theory and Prohibits New Discharges Until Compliance Plans Are in Place to Bring the Impaired Water Back to Health

In Pinto Creek, the Ninth Circuit framed the fundamental issue in the case as: “Whether the issuance of the permit to discharge a pollutant, dissolved copper, into Pinto Creek, which already exceeded the amount of dissolved copper allowed...
under the Section 303(d) Water Quality Standard, is in violation of the Clean Water Act and applicable regulations.\textsuperscript{147} The Ninth Circuit’s decision squarely rejected the “offset” defense raised by EPA and Carlota.\textsuperscript{148}

The court started with its interpretation of the first sentence of 40 C.F.R. § 122.4(i). That sentence reads: “Prohibitions. 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 water quality standards.”\textsuperscript{149} Relying on the stated objective of the CWA “to restore and maintain the chemical, physical, and biological integrity of the nation’s waters,” the court held that “[t]he plain language of the first sentence of the regulation is very clear that no permit may be issued to a new discharger if the discharge will contribute to the violation of water quality standards.”\textsuperscript{150}

Regarding EPA and Carlota’s “offset” defense, the court held that: “[T]here is nothing in the Clean Water Act or the regulation that provides an exception for an offset when the waters remain impaired and the new source is discharging pollution into that impaired water.”\textsuperscript{151} The court noted that 40 C.F.R. § 122.4(i) allows for an exception to this strict rule when a TMDL has been completed.\textsuperscript{152} However, this exception does not apply unless the new source can demonstrate that, under the TMDL, a plan is designed to bring the water into compliance with applicable water quality standards.\textsuperscript{153}

The court noted that, in addition to the requirement that a TMDL be performed, the discharger must demonstrate that two conditions are met. These two conditions are contained in the two numbered clauses in 40 C.F.R. § 122.4(i):

\begin{enumerate}
\item There are sufficient remaining pollutant load allocations to allow for the discharge; and
\end{enumerate}

\begin{footnotes}
\textsuperscript{147} Pinto Creek, 504 F.3d at 1009.
\textsuperscript{148} Id. at 1012.
\textsuperscript{149} 40 C.F.R. § 122.4(i).
\textsuperscript{150} Pinto Creek, 504 F.3d at 1012.
\textsuperscript{151} Id. In contrast, the federal Clean Air Act specifically allows new air pollutant dischargers to obtain a permit by offsetting their emissions. 42 U.S.C. § 7503(a)(1)(A) (2006). That Act allows the permitting of new air emission sources if “sufficient offsetting emissions reductions have been obtained, such that total allowable emissions from existing sources in the region, from new or modified sources which are not major emitting facilities, and from the proposed source will be sufficiently less than total emissions from existing sources.” Id.
\textsuperscript{152} Pinto Creek, 504 F.3d at 1012.
\textsuperscript{153} Id.
\end{footnotes}
(2) The existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable water quality standards.\footnote{40 C.F.R. § 122.4(i). The Ninth Circuit specifically held that, in order for the “exception” to the prohibition of new discharges into impaired waters to apply, both clauses needed to met by the permit applicant. \textit{Pinto Creek}, 504 F.3d at 1013.}

In \textit{Pinto Creek}, EPA had argued that the first clause is satisfied because the “TMDL provides a method by which the [pollutant load] allocations could be established to allow for the discharge.”\footnote{\textit{Pinto Creek}, 504 F.3d at 1012.} EPA relied upon its previous NPDES and proposed TMDL regulations, which provided that the establishment of the load reductions contained in the TMDL, by themselves, established the necessary “remaining pollutant load allocations to allow for the discharge.”\footnote{Amendments to Streamline the NPDES Program Regulations: Round Two, 65 Fed. Reg. 30,886, 30,888 (May 15, 2000); see also Revisions to the Water Quality Planning and Management Regulation and Revisions to the NPDES Program in Support of Revisions to the Water Quality Planning and Management Regulation, 65 Fed. Reg. 43,586, 43,588 (July 13, 2000) (discussing implementation of TMDL findings and load reductions). These regulations were never made effective. \textit{See supra} note 57.}

A new source or new discharger may, however, obtain a permit for discharge into a water segment which does not meet applicable water quality standards by submitting information demonstrating that there is sufficient loading capacity remaining in waste load allocations (WLAs) for the stream segment to accommodate the new discharge and that existing dischargers to that segment are subject to compliance schedules designed to bring the segment into compliance with the applicable water quality standards.\footnote{Amendments to Streamline the NPDES Program Regulations: Round Two, 65 Fed. Reg. at 30,888.}

The Ninth Circuit disagreed, noting that the TMDL only set targets for the eventual load reductions along Pinto Creek that would need to be met before the stream met the copper standard. The court explained that the “TMDL merely provides for the manner in which Pinto Creek could meet the water quality standards if all of the load allocations in the TMDL were met, not that there are sufficient remaining pollutant load allocations under existing circumstances.”\footnote{\textit{Pinto Creek}, 504 F.3d at 1012 (emphasis in original).}

Of critical importance to the court’s decision in \textit{Pinto Creek} was the fact that the EPA’s TMDL found that a number of existing sources of copper loading into Pinto Creek needed to reduce their copper discharges before the stream
would achieve the copper standard.\textsuperscript{159} The upstream Gibson Mine that was to be remediated was only one of these existing sources. These additional sources include a mixture of point and nonpoint sources such as another active copper mine, inactive mines, abandoned mines, as well as the Gibson Mine and the proposed discharges from the new Carlota Mine.\textsuperscript{160} In other words, even with the Gibson “cleanup”—due to the lack of any plan or schedule to deal with the other sources—there still would not be enough assimilative capacity in Pinto Creek to handle Carlota’s new copper discharges.

Before the Ninth Circuit in \textit{Pinto Creek}, EPA took the position that as long as the TMDL “pollutant load allocations” are produced on paper (i.e., in the TMDL document), this document satisfies 40 C.F.R. §122.4(i)(1)’s requirement that “there are sufficient remaining pollutant load allocations to allow for the discharge.”\textsuperscript{161} The critical issue in complying with 40 C.F.R. § 122.4(i) is whether there will be sufficient capacity in the receiving stream to handle the new discharge of the pollutant initially responsible for the stream being impaired. The key is to reduce these loadings “so that the sum of that pollutant in the waterbody is reduced to the level specified by the TMDL.”\textsuperscript{162}

In other words, a critical focus of review is the stream reach receiving the new discharge. Any “offset” occurring prior to the new discharge is relevant only if the “offset” is of such magnitude that the stream will still achieve standards, even after the new loadings.\textsuperscript{163} Even if the new permittee is allowed to discharge prior to the achievement of the applicable standard, 40 C.F.R. §122.4(i) requires that plans and schedules are in place so that the standard will be achieved according to the TMDL stream restoration plan—even with the addition of the new copper loadings from the new source.\textsuperscript{164}

In \textit{Pinto Creek}, the TMDL’s load allocation for the new Carlota copper discharge was based on the assumption that all the other sources were also meeting their allocations.\textsuperscript{165} The TMDL concluded that Pinto Creek could accommodate Carlota’s new discharges only if all of the other sources were meeting their reduced allocations, not just the Gibson Mine. Thus, only upon implementation of all of

\textsuperscript{159} Id.; see also U.S. E.P.A., \textit{Total Maximum Daily Load for Copper in Pinto Creek, Arizona} (2001), available at http://www.epa.gov/waters/tmdldocs/1170_11700.pdf.


\textsuperscript{161} Brief for Respondents, \textit{supra} note 135, at 21–22.

\textsuperscript{162} Sierra Club v. Meiburg, 296 F.3d 1021, 1025 (11th Cir. 2002).

\textsuperscript{163} \textit{Pinto Creek}, 504 F.3d at 1012.

\textsuperscript{164} Id. at 1013.

the wasteload and load allocations prescribed in the TMDL would Pinto Creek meet water quality standards. There was, however, no plan in place for the remediation of any sources other than the Gibson Mine. The Ninth Circuit correctly noted that “[t]he only step the EPA or Carlota has taken to meet the requirements of [40 C.F.R.] § 122.4(i) is the partial remediation of the Gibson Mine discharge.” The lack of any plan to reduce the copper sources identified in the TMDL was critical to the Ninth Circuit’s findings regarding 40 C.F.R. § 122.4(i)(2), which required that the NPDES permit applicant demonstrate that: “the existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable water quality standards.”

The court required that these plans must not only show what pollutant load reductions are needed to bring a water body back to health, but also actually how these reductions will be achieved.

The error of both the EPA and Carlota is that the objective of . . . [40 C.F.R. § 122.4(i)(2)] is not simply to show a lessening of pollution, but to show how the water quality standards will be met if Carlota is allowed to discharge pollutants into the impaired waters.

The Pinto Creek court further found that “compliance schedules” must be established for all “existing dischargers” into Pinto Creek, so that the stream could accommodate the new and increased copper discharges from the Carlota Mine. The court held that all point sources must be subject to these compliance schedules (i.e., plans designed to reduce the pollutant loading from each source so the stream segment would be brought into compliance with water quality standards). The court specifically rejected EPA’s argument that only currently permitted point source discharges were subject to the “compliance schedule” requirement. The Pinto Creek court established the basic procedure that must be followed before a new NPDES permit is issued for a discharge into an impaired water:

If point sources, other than the permitted point source, are necessary to be scheduled in order to achieve the water quality standard, then EPA must locate any such point sources and

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166 Id.
167 Pinto Creek, 504 F.3d at 1014 n.2.
168 40 C.F.R. § 122.4(i).
169 Pinto Creek, 504 F.3d at 1014.
170 Id. at 1012–13.
171 Id.
172 Id. at 1013.
establish compliance schedules to meet the water quality standard before issuing a permit. If there are not adequate point sources to do so, then a permit cannot be issued unless the state or [the discharge permit applicant] agrees to establish a schedule to limit pollution from a nonpoint source or sources sufficient to achieve water quality standards.173

On this point, EPA had correctly argued that nothing in the CWA compelled it to act against other dischargers. However, the Pinto Creek court noted that its ruling did not force EPA to take any action requiring existing discharges to reduce their pollutant loadings. Rather, “[t]he EPA remains free to establish its priorities; it just cannot issue a permit to a new discharger until it has complied with [40 C.F.R.] § 122.4(i).”174

Lastly, the Pinto Creek court noted that its ruling does not require that the remediation of all the existing discharges into the impaired stream segment (in order to achieve the water quality standards) be actually completed prior to the issuance of a new NPDES permit pursuant to 40 C.F.R. § 122.4(i).175 Rather, Pinto Creek required that the compliance schedules mandated by 40 C.F.R. § 122.4(i)(2) and the court’s own ruling be established for all the discharges prior to issuance of the new permit.176 The problem with the NPDES permit in Pinto Creek was that—except for the partial remediation of the old Gibson mine—none of the other copper sources discharging into Pinto Creek had any schedules established to reduce the overall copper loadings into the stream to the point where the stream would achieve the copper standard.177

Therefore, although EPA and the states are not required to “implement” the TMDL and its loading reductions for a particular pollutant, neither EPA nor a state permitting agency can issue a new NPDES permit for discharges into that impaired waterbody without the necessary compliance plans in place. Pinto Creek thus closes the loophole that had developed in the CWA § 303 and TMDL program, as a result of the cases that held that TMDLs were not “self-implementing.”178 While TMDLs may continue to be “paper tigers” standing alone, after Pinto Creek the loading reductions contained in the TMDL are now the critical factors in restoring the health of impaired waters. In other words, the loading reductions in the TMDL are now essentially implemented via Pinto

173 Id. at 1014.
174 Id. at 1015.
175 Id. at 1013.
176 Id.
177 Id.
178 See supra notes 68–77 and accompanying text.
Creek’s prohibition against new discharges that fail to contain compliance plans and loading reductions found in the TMDL.

D. The Lack of a Conflict Between Pinto Creek and the Supreme Court’s Decision in Arkansas v. Oklahoma

EPA and Carlota argued that the conservation groups’ interpretation of the CWA and 40 C.F.R. § 122.4(i) in Pinto Creek conflicted with the United States Supreme Court’s decision in Arkansas v. Oklahoma. In Arkansas, the state of Oklahoma challenged EPA’s issuance of an NPDES permit to a sewage treatment plant in Arkansas which discharged into a river flowing into Oklahoma. Oklahoma argued that EPA could not issue such a permit because the discharge into an impaired river would violate the strict water quality standards of the river as it entered Oklahoma.

The United States Court of Appeals for the Tenth Circuit overturned the EPA permit on the grounds that such discharges into impaired waters were categorically prohibited. The United States Supreme Court reversed the Tenth Circuit, stating: “The Court of Appeals construed the Clean Water Act to prohibit any discharge of effluent that would reach waters already in violation of existing water quality standards. We find nothing in the Act to support this reading.” The Court then discussed the relationship between discharges and the attainment of water quality standards in that water body.

Although the Act contains several provisions directing compliance with state water quality standards, the parties have pointed to nothing that mandates a complete ban on discharges into a waterway that is in violation of those standards. The statute does, however, contain provisions designed to remedy existing water quality violations and to allocate the burden of reducing undesirable discharges between existing sources and new sources. Thus, rather than establishing the categorical ban announced by the Court of Appeals—which might frustrate the construction of new plants that would improve existing conditions—the Clean Water Act vests in the EPA and the States broad authority to develop long-range, area-wide programs to alleviate and eliminate existing pollution.

180 Id. at 95.
181 Id.
183 Arkansas, 503 U.S. at 107.
184 Id. at 108 (citations omitted).
In briefing to the Ninth Circuit in *Pinto Creek*, EPA and Carlota portrayed the conservation groups’ argument as tantamount to the “categorical ban” rejected by the Supreme Court in *Arkansas*. In the conservation groups’ administrative appeal to the EAB, the EAB held that the groups’ interpretation of 40 C.F.R. § 122.4(i) “would perpetrate the very outcome [that] the Supreme Court in *Arkansas* sought to avoid (adoption of a rigid approach that might frustrate the construction of new facilities that would *improve existing conditions*).” The EAB reasoned that “to agree with Petitioners would set in motion a ‘Catch-22’ whereby [Pinto Creek] cannot get cleaner because it cannot become pristine enough for Carlota to begin the [Gibson remediation].”

The Ninth Circuit disagreed and reversed the EAB decision, finding no conflict with *Arkansas*. *Arkansas* is distinguishable from *Pinto Creek* in several ways. *Arkansas* did not involve new discharges and never mentioned 40 C.F.R. §122.4(i). Further, restricting the issuance of new discharge permits into impaired waters pending completion of a plan to remediate excess pollution, as discussed in *Pinto Creek*, is not the type of “categorical ban” discussed in *Arkansas*.

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186 *Id*.
187 *Pinto Creek*, 504 F.3d at 1013–15.
188 At least one commentator had recognized the potential connections between §122.4(i) and its prohibitions against dischargers into impaired waters and the Supreme Court’s decision in *Arkansas*.

The EPA’s regulation [§ 122.4(i)]... provide[s] a reasonably strong argument that a water’s 303(d) listing precludes new or revised NPDES permits that allow additional pollution, although it is unclear what facts need to be demonstrated to support the argument in any given case. However, the Supreme Court’s 1991 decision in *Arkansas v. Oklahoma* may suggest that this preclusionary rule is inapplicable in any circumstance. In that decision, the Court rejected a circuit court conclusion that the Act “prohibit[ed] any discharge of effluent that would reach waters already in violation of existing water quality standards.” The Court concluded that the Act lacked any such prohibition. However, the Court did not discuss or acknowledge the prohibition contained in 40 C.F.R. [§]122.4(i), or the implied statutory prohibition underlying that regulation.


189 As another commentator noted: “Among other things, the case dealt with ‘antidegradation’ requirements; the Supreme Court never mentioned, let alone discussed, the role of TMDLs and section 122.4(i).” Jeffrey M. Gaba, *New Sources, New Growth and the Clean Water Act*, 55 ALA. L. REV. 651, 668 n.101 (2004).
Arkansas also involved very different facts than Pinto Creek. In Arkansas, the new pollution was so minimal that it could not even be measured—the discharge "would not lead to a detectable change in water quality."\footnote{Arkansas, 503 U.S. at 112; see also id. at 95–96 (noting that the proposed discharge would not affect downstream water quality standards).} Because the discharge in Arkansas would not affect water quality, the Court was reluctant to overturn the EPA permit which allowed that discharge. Thus, the Court was correct in ruling against "establishing a categorical ban" on such \textit{de minimis} discharges.\footnote{Id. at 108.} The Court's statement against "frustrat[ing] the construction of new plants that would improve existing conditions," thus makes sense when viewed against the facts of that case.\footnote{Id.}

In Pinto Creek, the situation at Carlota was markedly different. There, Carlota proposed to discharge measurable and significant amounts of copper into Pinto Creek. Indeed, the TMDL was established to account for Carlota's new copper discharges.\footnote{See generally U.S. E.P.A., TOTAL MAXIMUM DAILY LOAD FOR COPPER IN PINTO CREEK, ARIZONA, at 16 (2001), available at http://www.epa.gov/waters/tmdldocs/11700_11700.pdf.} This is different from the undetectable and unmeasurable discharges in Arkansas. In Pinto Creek, the Ninth Circuit held that requiring a new discharger to meet the procedural requirements of 40 C.F.R. §122.4(i) is not a "ban."\footnote{Pinto Creek, 504 F.3d at 1015.} "This is not a complete ban but a requirement of schedules to meet the objective of the Clean Water Act."\footnote{Id. at 1013.} The Ninth Circuit held that without a plan to achieve water quality standards, EPA cannot allow new discharges that will exacerbate the violations.\footnote{Id. at 1012.} However, if such a plan is developed, the discharge may occur. The Ninth Circuit's decision requires EPA to review proposed discharges on a case-by-case basis, focusing on the existing quality of the stream, the pollution levels in the proposed discharge, and whether a plan exists to achieve the water quality standards based on other pollution sources in the stream.\footnote{Id. at 1012–13.}

\textbf{E. Carlota’s Post-Merits Efforts to Overturn Pinto Creek and the EPA’s Attempt to Avoid the Ramifications of the Ninth Circuit’s Decision}

After the Ninth Circuit’s decision on the merits, Carlota filed a petition for en banc review. The EPA did not join in that petition, and the Ninth Circuit, without discussion, denied the petition. Carlota then filed a petition for certiorari with
the United States Supreme Court. 199 This time, EPA actively opposed Carlota’s certiorari petition. 200 Six separate amicus briefs were submitted in support of Carlota’s petition. 201

In its certiorari petition, Carlota argued that the Ninth Circuit’s decision conflicted with the United States Supreme Court’s decision in Arkansas, as well as the Minnesota Supreme Court’s decision in Annandale. 202 Carlota argued that the Ninth Circuit’s decision amounted to the “categorical ban” on discharges into impaired waters rejected by the United States Supreme Court in Arkansas. 203 Carlota also focused on the language in Arkansas that noted the EPA’s and States’ “broad authority to develop long-range, area-wide programs to alleviate and eliminate existing pollution.” 204

By focusing on the “long-range, area-wide programs,” Carlota was essentially arguing that Arkansas validated the type of “offset” approach that had been at issue in Pinto Creek. However, there was no mention of any “offset” in Arkansas, and the issue of pollutant trading within a watershed never arose in that case.

The EPA’s opposition to Carlota’s certiorari petition refutes the notion that Pinto Creek conflicts with Arkansas. In its response brief to the United States Supreme Court, EPA concluded that “the decision [in Pinto Creek] does not virtually or categorically prohibit the permitting of new sources or new dischargers to impaired water bodies under the CWA, and there is no conflict with Arkansas.” 205

Instead, EPA focused on the Ninth Circuit’s reliance on the need for plans to remediate existing pollution in impaired waters. According to EPA, Pinto Creek “affirmatively noted that EPA can use its broad discretion to establish priorities among point sources and it can issue permits for new discharges, so long as there are compliance schedules.” 206

EPA’s response to Carlota’s claim that Pinto Creek conflicted with Annandale, however, is more ambiguous and appears to signal EPA’s attempt to minimize the Ninth Circuit’s rejection of the agency’s “offset” defense in Pinto Creek. In its

199 Petition for Writ of Certiorari, supra note 6.
200 Brief for Federal Respondent, supra note 8, at *21.
201 See supra note 7.
202 Petition for Writ of Certiorari, supra note 6, at *13–14.
203 Id.
204 Id. at *13 (quoting Arkansas, 503 U.S. at 108).
205 Brief for Federal Respondent, supra note 8, at *18.
206 Id. at *17.
response to Carlota’s certiorari petition, EPA argued that the reason there was no conflict with Annandale was because the Ninth Circuit’s decision “expressly turned on the second sentence of the regulation [40 C.F.R. § 122.4(i)], which became relevant because a TMDL had already been established for Pinto Creek.”

Here, EPA attempted to downplay the Ninth Circuit’s holding that “[T]here is nothing in the Clean Water Act or the regulation that provides an exception for an offset when the waters remain impaired and the new source is discharging pollution into that impaired water.” EPA argued that this holding was just a “passing statement” regarding the Ninth Circuit’s interpretation of the first sentence of 40 C.F.R. § 122.4(i), and that the Ninth Circuit’s holding was “itself ambiguous.” The first sentence of 40 C.F.R. § 122.4(i) states that “No permit may be issued . . . To a new source or a new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards.”

In an effort to defend its interpretation of its “offset” defense, EPA argued that the Ninth Circuit did not rule on whether a new discharger could avoid the prohibition against “causing or contributing” to a violation of a water quality standard by creating an “offset” somewhere in the same watershed. EPA stated:

The Ninth Circuit’s passing observation that the CWA and regulations do not contain an “exception for an offset” is itself ambiguous. The court may simply have meant that there is no express provision in the CWA or regulations that in terms provides an “exception” in situations involving an “offset.” If so, the court’s conclusion was correct but ultimately irrelevant. Whether the phrase that does appear in the first sentence of Section 122.4(i) (i.e., “will cause or contribute to the violation of water quality standards”) is properly construed to be met where there will be an offset is a different question, which the Ninth Circuit did not address. Indeed, elsewhere in its decision the court appeared to contemplate that any offset created by remediation of the Gibson Mine could be taken into account.

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207 Id. at *14 n.4. EPA noted that a TMDL had not been established for the receiving waters in Annandale.
208 Pinto Creek, 504 F.3d at 1012.
209 Brief for Federal Respondent, supra note 8, at *15 n.4.
210 40 C.F.R. § 122.4(i).
211 Brief for Federal Respondent, supra note 8, at *15 n.4.
212 Id. (citing Pinto Creek, 504 F.3d at 1016).
Notably, in its reply brief to the United States Supreme Court in support of its certiorari petition, Carlota strongly disagreed with EPA, stating that: “Contrary to the [EPA]’s argument, the Ninth Circuit held that the first sentence of the regulation prohibits discharges subject to offset conditions, and its analysis, although terse, was a holding and not dictum.”

Despite the clear language from the Ninth Circuit, EPA’s argument to the United States Supreme Court indicated the agency’s attempt to keep alive its “offset” and trading policy that it has been trying to implement for over a decade. However, such an open-ended policy cannot survive Pinto Creek. Indeed, in its reply brief in support of its petition for certiorari, Carlota acknowledged that the EPA’s “offset” policy does not comport with the court’s decision. “[T]he court plainly rejected the EPAs’ contention that Carlota’s discharge does not ‘contribute to’ violations because of the ‘offset’ condition, stating that the first sentence of 40 C.F.R. § 122.4(i) contains no ‘exception’ for an offset.”

Although it is understandable that EPA would want to continue to defend its “offset” and trading policies, such a defense does not comport with the rule established in Pinto Creek. As noted above, EPA argued that, based on the “offset” from the partial remediation of the upstream Gibson mine, the new permit’s copper discharges (which were, on paper, less than the amount of copper to be removed from the watershed by the Gibson mine cleanup) did not “cause or contribute” to a violation of the copper standard at the new Carlota site. Both EPA and Carlota had argued, and the EPA’s Environmental Appeals Board had held, that the first sentence of 40 C.F.R. § 122.4(i)’s prohibition against “causing or contributing” could be satisfied by an “offset.” The EAB paraphrased EPA’s argument:

In [EPA]’s view Carlota will not cause or contribute to the violation of water quality standards but rather will improve existing conditions because the reductions that will result from its activities are greater than the projected discharges [from the new Carlota mine]. According to [EPA], Carlota’s permit would result in a net condition in the total load of copper delivered to Pinto Creek and that suffices to meet the first sentence of section 122.4(i).

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214 See supra notes 128–34 and accompanying text (regarding EPA’s trading and offset policies).
215 Petitioner’s Reply Brief, supra note 213, at *3.
216 See supra note 135 and accompanying text.
217 In re Carlota, 11 E.A.D. at 767.
The EAB ratified this argument, agreeing with the EPA permit writers that the requirement of an “offset” in the NPDES permit satisfies the first sentence of 40 C.F.R. § 122.4(i).\textsuperscript{218}

However, as detailed above, the Ninth Circuit flatly rejected this assertion.\textsuperscript{219} Pinto Creek holds that the presence of an “offset” of the pollutant loading from the new source, absent a plan (i.e., compliance schedules) to bring the other sources of pollutant-loading down to the level at which the stream will achieve water quality standards, does not satisfy the strict requirements of 40 C.F.R. § 122.4(i).\textsuperscript{220}

This means that in addition to requiring a plan for the “offset” or “trade” of the pollutant loading to be discharged by the new source, the new discharger must show there is a plan in place to reduce the pollutant loading from all the water pollution discharges into that impaired water body. Depending on the size of the watershed and the number and scope of the discharges contributing to the impairment of the water body, meeting this requirement may prove very difficult.

**Conclusion**

The United States Court of Appeals for the Ninth Circuit’s decision in Pinto Creek has broad ramifications for the regulation of pollution discharges into the nation’s waters. The Clean Water Act’s recognition of the need to protect impaired waters, and indeed “restore” their health, had long been a neglected and overlooked requirement. This is no longer the case, as the directive from Pinto Creek is clear. New pollutant discharges into impaired waters are no longer allowed, absent a specific plan to lower the pollutant loading from all the existing sources, so that the stream may achieve its water quality standards.

Until Pinto Creek, the establishment of TMDLs for impaired waters—while sometimes a useful tool for analyzing potential means to reduce pollutant loadings—was essentially a non-enforceable exercise in water quality planning. Pinto Creek has changed the calculus of TMDLs. No longer are TMDLs “paper tigers.” After the court’s decision in Pinto Creek, EPA and the states must now ensure that the loading reductions contained in TMDLs become part and parcel of any new discharge permits into that watershed. While the loading reductions contained in TMDLs are still not “self-implementing,” EPA and the states cannot issue new discharge permits for impaired waters without a plan in place to bring that impaired water back to health.

\textsuperscript{218} Id. at 767–68.

\textsuperscript{219} Pinto Creek, 504 F.3d at 1012.

\textsuperscript{220} Id.
Although the implementation of the rule established in *Pinto Creek* may be initially resisted by EPA and the states (as evidenced by EPA's briefing to the Supreme Court in the case) in the long run, *Pinto Creek* represents an important step towards fulfilling Congress’ goal in enacting the modern Clean Water Act in 1972—to “restore and maintain . . . the integrity of the nation’s waters.”

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