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Abstract: The Clean Water Act defines “discharge of a pollutant” as “any addition of any pollutant to navigable waters from a point source.” This Note examines National Wildlife Federation v. Consumers Power Co., in which the court held that an addition occurs only when a pollutant is introduced into water from the outside world. The Note argues that legislative history and the structure of the Clean Water Act demand an interpretation of “addition” which includes causing a pollutant to appear in water.

The Ludington Pumped Storage Plant, on the eastern shore of Lake Michigan, is one of the largest pumped storage facilities in the world. It generates electricity by pumping water from Lake Michigan into an elevated reservoir during low electrical demand hours, then releasing the water through turbines into the lake during peak demand hours. The plant is also the largest single fish killer in the Great Lakes. Fish are killed during both pumping and power generation, either by water pressure or by turbine blades. The result is the release of dead fish and fish parts into Lake Michigan.

In National Wildlife Federation v. Consumers Power Co., the Sixth Circuit held that the Ludington facility’s release of dead fish and fish parts did not violate the Clean Water Act (“CWA” or “Act”). The CWA prohibits the discharge of any pollutant into the waters of the United States without a permit from the Environmental Protection Agency (“EPA”). The Act defines “discharge” as “any addition of any pollutant to navigable waters from any point source.” In Consumers Power, the EPA admitted that dead fish were pollutants, but

2. Id.
4. 862 F.2d at 582.
5. Id. Some fish survive the power generating process. They too are released back into Lake Michigan. Id.
6. 862 F.2d 580 (6th Cir. 1980).
7. Id. at 581.
10. Id. § 1342(a)(l).
11. Id. § 1362(12) (emphasis added).
argued that a pollutant is added only when it is introduced into water from the outside world.11 Deferring to the EPA’s interpretation, the Sixth Circuit held that because the fish never left the water, the plant did not add a pollutant when it crushed the fish and released them into Lake Michigan.12

Prior to Consumers Power, the question of what constituted the addition of a pollutant under the CWA arose in two contexts, the first involving dams. In National Wildlife Federation v. Gorsuch,13 the District of Columbia Circuit held that dams did not add pollutants.14 The Gorsuch court deferred to the EPA’s determination that a dam adds a pollutant only if it physically introduces a pollutant into water from outside the water.15 The second context involved dredging, when vegetation or sediments native to a water body were moved or redeposited. In these cases, the courts held that “addition” could mean the movement or redeposit of a pollutant, and did not require the introduction of a pollutant from the outside world.16

This Note examines the conflicting interpretations of “addition” under the CWA and urges that the EPA interpretation used in Consumers Power is unsatisfactory. Part I discusses the legislative history of the CWA and relevant judicial interpretations of “addition.” Part II argues that the Consumers Power court erred in holding that the EPA’s interpretation of “addition” was reasonable. Specifically, the EPA definition of “addition” undermines the CWA’s broad remedial purpose and is inconsistent with legislative history. Part II also argues that Congress should correct the narrow EPA interpretation by explicitly defining “addition” as “introducing a pollutant into water or causing a pollutant to appear in water.”

11. Brief for the United States as Amicus Curiae in Support of Defendant-Appellant at 27–32, National Wildlife Fed’n v. Consumers Power Co., 862 F.2d 580 (6th Cir. 1988) (No. 87-1441) [hereinafter EPA Amicus Brief]; see also Consumers Power, 862 F.2d at 585. The phrase “introduced into water from the outside world,” as used by the EPA to define addition, means introduced into water from outside the water. See, e.g., Consumers Power, 862 F.2d at 588–90; National Wildlife Fed’n v. Gorsuch, 693 F.2d 156, 174–75 (D.C. Cir. 1982). Under the EPA definition, a pollutant which appears in water temporarily diverted from the main water body must still be introduced from outside the diverted water. See, e.g., Consumers Power, 862 F.2d at 589.

12. 862 F.2d at 585.

13. 693 F.2d 156 (D.C. Cir. 1982).

14. Id. at 175, 183.

15. Id. at 175. See infra note 52 (listing other dam pollution cases).

I. BACKGROUND

A. The Clean Water Act

The Clean Water Act assumed its present form in 1972. The Act's purpose is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The Act set goals of fishable and swimmable waters by 1983 and the elimination of all discharges by 1985. These ambitious statements are frequently used by courts as important tools in interpreting the Act's specific provisions. The Act attempts to achieve these goals by prohibiting "the discharge of any pollutant by any person." The CWA holds anyone violating this prohibition strictly liable.

The only way to avoid the Act's discharge prohibition is to obtain a permit authorizing the discharge. The National Pollutant Discharge Elimination System ("NPDES"), administered by the EPA, is the Act's primary permit program. The EPA uses NPDES permits to set maximum allowable levels of effluents which may be discharged from a particular source. The CWA authorizes citizen suits against any person who violates the terms of an NPDES permit or who discharges pollutants without a permit.

Despite the CWA's absolutist language, not all sources of pollution require an NPDES permit. The Act divides sources of pollution into

19. Id. § 1251(a)(2).
20. Id. § 1251(a)(1).
21. See, e.g., United States v. M.C.C. of Florida, Inc., 772 F.2d 1501, 1506 (11th Cir. 1985) (given the broad objectives of the CWA, "addition" may be understood to include "redeposit"), vacated on other grounds, 481 U.S. 1034 (1987). But see, e.g., National Wildlife Fed'n v. Gorsuch, 693 F.2d 156, 170-71 (D.C. Cir. 1982) (district court "paid too much attention to the broad stated purposes of the Act").
23. See, e.g., Sierra Club v. Abston Constr. Co., Inc., 620 F.2d 41, 46 (5th Cir. 1980) (unintentional discharges violate the CWA); United States v. Earth Sciences, Inc., 599 F.2d 368, 374 (10th Cir. 1979) (CWA was written without regard to intent, making the person responsible for a discharge strictly liable).
24. Id. § 1342(a). An authorized state agency also may assume responsibility for the NPDES program. Id. § 1342(b).
25. Id. §§ 1311-1312.
26. Id. § 1365(a)(1)(a).
27. Id. § 1365(f).
two categories: point source and nonpoint source. The NPDES program regulates discharges of pollutants from point sources. The CWA defines "discharge of a pollutant" as "any addition of any pollutant to navigable waters from any point source." Therefore, four elements must be present before an NPDES permit is required: (1) a pollutant must be (2) added (3) to navigable waters (4) from a point source. Where these four elements are identified, the pollution is called point source pollution and an NPDES permit is required.

Nonpoint source pollution is defined by exclusion: where any one of the four elements necessary for NPDES regulation is missing, the pollution is deemed nonpoint source pollution. While the Act exalts the

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29. Id.
31. The CWA defines "pollutant" 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." Id. § 1362(6). Compare id. § 1362(6) with id. § 1362(19) ("pollution" means "the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of waters").
32. "Addition" is not defined in the Act.
33. The CWA defines "navigable waters" as "the waters of the United States, including the territorial seas." 33 U.S.C. § 1362(7).
34. The CWA defines "point source" as "any discernible, confined and discrete conveyance ... from which pollutants are or may be discharged. ..." Id. § 1362(14). While the definition of "point source" seems to suggest the picture of a pipeful of industrial wastes, the courts have interpreted the term liberally, finding, for example, that tractors and backhoes are "point sources." See, e.g., Avoyelles Sportsmen's League, Inc. v. Marsh, 715 F.2d 897, 922 (5th Cir. 1983) (bulldozers and backhoes are point sources); Sierra Club v. Abston Constr. Co., Inc., 620 F.2d 41, 45 (5th Cir. 1980) (mining scrap piles may be point sources even though material may not be carried directly to waters from the piles).
35. See National Wildlife Fed'n v. Gorsuch, 693 F.2d 156 (D.C. Cir. 1982), where the court used a five-part test, considering "from" "a point source" as two separate elements. Id. at 164–165.

The term "point source" is used in two different ways in case law and literature which sometimes results in confusion. "Point source" can mean the discrete conveyance by which pollution is introduced into a water body. See supra note 34 (describing statutory definition of point source). "Point source pollution" is the label used to describe pollution which is regulated under the NPDES program. See Gorsuch, 693 F.2d at 165 (describing EPA's view of the Act).
36. 693 F.2d at 166.
control of nonpoint source pollution as a national policy, its regulation is left to state and regional authorities. In practice, this usually means no regulation.

B. Judicial Interpretations of "Addition"

An addition of a pollutant is one of the four elements necessary to find a discharge requiring an NPDES permit. "Addition" is not defined in the Act, and courts have interpreted the term differently depending on the setting. In dredging cases, courts have broadly interpreted "addition," while in dam pollution cases, they have narrowly interpreted the term. Had the Consumers Power court used the reasoning of the dredging cases, the court would have concluded that the Ludington facility does discharge pollutants in violation of the CWA.

1. Dredging Cases

Two federal circuits have held that moving or redepositing natural sediment or materials in navigable waters constitutes the addition of a

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38. Id. § 1329.

The 1972 amendments established a procedure under which states or regional agencies were to develop nonpoint source control programs, id. § 1288, but this program largely has been labeled a failure. 2 W. RODGERS, ENVIRONMENTAL LAW: AIR AND WATER § 4.21, at 319 (1986). Rodgers contends that it is generally accepted that the 1972 nonpoint program failed because of the EPA’s poor administration and Congress’ failure to fund the program. Id.

The Water Quality Act of 1987 once again requires states to develop and implement nonpoint source control programs, and authorizes federal grants for up to 60% of implementation costs. 33 U.S.C.A. § 1329(b)(3) (West Supp. 1988). However, there is little to indicate that the 1987 nonpoint program’s fate will be any different than its predecessor’s. No funding was provided for the new nonpoint grant program in either fiscal year 1988 or 1989. See Department of Housing and Urban Development—Independent Agencies Appropriations Act, 1989, Pub. L. No. 100-404, 102 Stat. 1014 (1988); Continuing Appropriations, Fiscal Year 1988, Pub. L. No. 100-202, 101 Stat. 1329 (1987).


40. See supra notes 30–35 and accompanying text (describing the four elements of a discharge).
pollutant. In *Avoyelles Sportsmen's League, Inc. v. Marsh,* the Fifth Circuit held that cutting vegetation in a wetlands area and burying it there was the "redeposit" of a pollutant, a meaning reasonably within the definition of "addition." The Eleventh Circuit, in *United States v. M.C.C. of Florida, Inc.*, came to a similar conclusion. The *M.C.C.* court held that the defendant's tug boats discharged pollutants when their propellers cut into the bottom of a waterway, uprooting sea grass and depositing sediment on adjacent sea grass beds. The court, citing the broad objectives of the Clean Water Act and the *Avoyelles* decision, declared that "addition" could reasonably be understood to mean redeposit.

The broad interpretation of "addition" adopted in *Avoyelles* and *M.C.C.* is not limited to dredging cases. In *Association of Pacific Fisheries v. Environmental Protection Agency,* the Ninth Circuit affirmed an EPA regulation requiring NPDES permits for the discharge of fish parts into waters from which the fish were originally taken. In contrast to the broad interpretation of "addition" used in *Avoyelles, M.C.C.,* and *Association of Pacific Fisheries,* however, the circuit courts consistently have endorsed a narrow definition of "addition" in cases involving dams.

41. These cases were decided under the "dredge-and-fill" provisions of Section 404 of the Act, 33 U.S.C. § 1344 (1982). As a concession to the Army Corps of Engineers' traditional role in the dredging and maintenance of navigable channels and ports, Section 404 establishes a separate permit system for the discharge of dredged or fill material. Zener, *supra* note 17, at 741. The EPA Administrator, however, retains authority to restrict the use of a disposal site. 33 U.S.C. § 1344(c) (1982). A "discharge" is defined as an "addition" under either the NPDES or Corps permit programs. *See id.* § 1362(12).
42. 715 F.2d 897 (5th Cir. 1983).
43. *Id.* at 923.
44. 772 F.2d 1501 (11th Cir. 1985), vacated on other grounds, 481 U.S. 1034 (1987).
45. *Id.* at 1503.
46. *Id.* at 1506.
47. 615 F.2d 794 (9th Cir. 1980).
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2. Dam Cases

Dams pollute. Oxygen depletion, drastic temperature changes, and nitrogen supersaturation—all problems created by dams—have been responsible for tremendous fish kills in many rivers. Regardless of dams' harmful effects, federal circuit courts consistently have held that dam-induced water quality problems are exempt from NPDES permit requirements. The definitive case holding that dams are not point sources of pollution is National Wildlife Federation v. Gorsuch.

In Gorsuch, the plaintiffs sought a declaratory judgment that the EPA must regulate all dams under the NPDES program. The district court held that the EPA had violated the CWA by refusing to regulate dams as point sources of pollution. The District of Columbia Circuit reversed, upholding the EPA's interpretation of "discharge of a pollutant." The appellate court held that the district court should have deferred to the EPA because the agency's interpretation of the Act was sufficiently reasonable. The court also noted that the


53. 693 F.2d 156 (D.C. Cir. 1982). While the dams' pipes and spillways could be discrete conveyances, and thus point sources, id. at 165 n.22, they did not discharge pollutants, and therefore were not "point sources of pollution." Id. at 183.

54. 530 F. Supp. 1299-1302.

55. Id.

56. 693 F.2d at 174-75.

57. Id. at 171.

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CWA's legislative history did not mandate that dams be treated as point sources of pollution.\(^8\)

In *Gorsuch*, the EPA argued that dam-induced water quality changes were not discharges of a pollutant for two reasons. First, the water quality changes were not pollutants.\(^9\) Second, even if the water quality changes were pollutants, dams did not add them to the water.\(^6\) The agency asserted that an addition occurs "only if the point source itself physically introduces a pollutant into water from the outside world."\(^6\)

*Gorsuch* has been roundly criticized, both for the level of deference accorded the EPA and for the narrow definitions of "pollutant" and "addition" which it legitimized.\(^6\) Critics have focused on the result of *Gorsuch*—that dams are not regulated under the NPDES program. They also have raised the question of how the EPA's interpretation of the CWA might limit the reach of the NPDES program in the future. The question was answered when the *Consumers Power* court extended the application of EPA's definition of "addition" beyond the dams considered in *Gorsuch*.


*National Wildlife Federation v. Consumers Power Co.*\(^6\) presented the court with an opportunity to choose between the broad interpretation of "addition" developed in the dredging cases and the narrow interpretation articulated in *Gorsuch*. The National Wildlife Federation argued that the Ludington Pumped Storage Plant, operated by Consumers Power, was discharging a pollutant—dead fish and fish

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\(^8\) Id. at 177. The court recognized Section 304, 33 U.S.C. § 1314 (1982), which mentions dams as possible nonpoint sources of pollution, as only mild support for the EPA position that Congress did not intend dam-caused pollution to be regulated under the NPDES program. *Id.*; see *infra* notes 112–30 and accompanying text (discussing the meaning of Section 304).

\(^9\) 693 F.2d at 174. Finding the EPA determination reasonable, the court noted that low dissolved oxygen, cold, and supersaturation do not plainly fall within the statutory list of pollutants in 33 U.S.C. § 1362(6). *Id.* at 171. Instead, these dam-induced changes were "water conditions, not substances added to water." *Id.* (emphasis in original); see *supra* note 31 (discussing the definition of "pollutant").

\(^6\) 693 F.2d at 174–75.

\(^6\) *Id.* at 175.


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parts. Consumers Power urged that there was no addition of a pollutant because the fish were already in the water. The district court found that the EPA had not determined whether the Ludington facility, or pumped storage facilities in general, required an NPDES permit for power-generating water releases. Adopting the Gorsuch court's test for when an NPDES permit is required, the court held that an addition occurred when the Ludington facility "created" a pollutant in the process of discharging water into Lake Michigan. The district court ruled that the Ludington plant releases therefore required an NPDES permit.

The Sixth Circuit reversed. On appeal, the EPA argued that an addition occurs only when a point source physically introduces a pollutant from outside the water. The Sixth Circuit held that the EPA's definition of "addition" should be accepted unless unreasonable. Finding the EPA position reasonable, the appellate court concluded that the Ludington plant did not add pollutants because the fish never left the waters of the United States and the plant did not create the

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64. Id. at 1007-08; see supra notes 1-5 and accompanying text (describing the facility and its operation).
65. 657 F. Supp. at 1008.
66. Id. at 1004.
67. Id. at 1005. The Gorsuch court used a five-part test for when an NPDES permit was required: "(1) a pollutant must be (2) added (3) to navigable waters (4) from (5) a point source." Id. (quoting National Wildlife Fed'n v. Gorsuch, 693 F.2d 156, 165 (D.C. Cir. 1982) (emphasis in original)).
68. Id. at 1008. The district court recognized that Ludington arguably did not add a pollutant from the outside world. However, the court found the NWF interpretation of "addition" more in accord with the CWA's broad remedial purpose than was Consumers Power's position. It also concluded that the NWF's position was not in conflict with the EPA's interpretation of the Act in Gorsuch. The court commented that in Gorsuch the alleged pollutants were not added from the point source. Rather, the pollutants were added in the reservoir and downstream from the dam. Id.
69. Id. at 1009. The district court considered its holding consistent with United States ex rel. Tennessee Valley Auth. v. Tennessee Water Quality Control Bd., 717 F.2d 992 (6th Cir. 1983), cert. denied, 466 U.S. 937 (1984), in which the Sixth Circuit had held that a dam was not a point source of pollution. 657 F. Supp. at 1009. In Tennessee Valley Auth., the Sixth Circuit, citing Gorsuch, held that seepage from a dam sited in the Ocoee River was not a discharge in violation of the CWA. 717 F.2d at 998-99. The Sixth Circuit did not, however, specifically recognize the definition of "addition" used in Gorsuch which requires an introduction of a pollutant from outside the water. Id. It instead characterized the EPA definition as requiring that the pollutant be introduced from the point source. Id. at 998.
71. Id. at 584; see also supra note 11 and accompanying text (the EPA participated only on appeal, and as an amicus curiae).
72. 862 F.2d at 584.
73. The court held that the waters, although removed from the lake, remained navigable waters. Id. at 589.
fish. Thus, the release of dead fish did not require an NPDES permit. Furthermore, the appellate court found that Congress clearly had intended to exempt facilities like the Ludington plant from NPDES regulation.

II. ANALYSIS

A. Standard of Review

The Sixth Circuit invoked impressive authority for its decision to give the EPA broad deference in *Consumers Power*. The court cited the Supreme Court decision in *Chevron, U.S.A. v. Natural Resources Defense Council* for the rule that when a statute is silent or ambiguous on a specific question, a reviewing court must defer to any reasonable construction of the statute by the administering agency. The *Consumers Power* court also discussed *Gorsuch* as specific authority for deference in the CWA context. As the dissent in *Consumers Power* recognized, however, even under the limited review used in *Consumers Power*, the EPA’s interpretation should have been found unreasonable.

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74. *Id.* at 586. In *dicta*, the appellate court also stated that fish were pollutants, whether dead or alive, and that the facts of *Consumers Power* could not be distinguished from cases where a point source merely passed on pollutants already in the water. *Id.* at 585 ("[i]f the district court decision were upheld, [an NPDES] permit would be required even for a dam which released alive all fish passing through it").

75. *Id.* at 586. The court cited Section 304 of the Act as authority for the exemption. *Id.; see infra* notes 112–130 (discussing the meaning of Section 304).

76. *Id.* at 581.

77. *Id.* at 586. The court cited Section 304 of the Act as authority for the exemption. *Id.; see infra* notes 112–130 (discussing the meaning of Section 304).

78. 862 F.2d at 585.


80. *Id.*

81. *See id.* at 590–91 (Jones, J., concurring in part and dissenting in part).

Whether the *Consumers Power* court was correct in according the EPA broad deference in its interpretation of “addition” is beyond the scope of this Note. Regardless of the seemingly clear language of decisions like *Chevron*, courts continue to find exceptions to the rule of deference. *See e.g.*, Natural Resources Defense Council, Inc. v. U.S. Envtl. Protection Agency, 790 F.2d 289, 296–298 (3d Cir. 1986) (although an agency interpretation is usually accorded a high level of deference, the EPA rule regarding removal credits was invalid because it was inconsistent with other provisions of CWA), *cert. denied*, 479 U.S. 1084 (1987).
B. Reasonableness of the EPA Interpretation of “Addition”

In *Consumers Power*, the district court and the EPA definitions of “addition” represent two distinct theories of liability. The district court held that addition of a pollutant could mean “creating” a pollutant, and did not require the introduction of a pollutant from the outside world. This is essentially a “but-for” definition of “addition”: but for the Ludington facility, the pollutant would not have appeared in the water. In contrast, the EPA definition of “addition” endorsed by the Sixth Circuit has been characterized as a “trespass” theory because the CWA is violated only when a pollutant is physically introduced from outside the water.

The Sixth Circuit in *Consumers Power* gave little attention to Congress' intended meaning of the term “addition.” Instead, the court focused on whether Congress would have required an NPDES permit for the Ludington plant. Section 1 below considers the relative merits of the EPA definition of “addition” and the interpretation used by the district court in *Consumers Power*. The EPA's definition is unreasonable because it undermines the CWA's broad remedial purpose and is inconsistent with specific provisions of the Act. Section 2 concludes that the *Consumers Power* court erred in finding that Congress clearly intended to exempt facilities like the Ludington plant from the NPDES permit program. Section 3 concludes that the court also erred by failing to distinguish between the Ludington facility and the dams considered in *Gorsuch*.

83. It is true that the fish, if not harvested, would eventually die and decompose in the lake. However, they would not die at one time in the same place, producing a concentration of decomposing biological material. See NWF Summary Judgment Brief, supra note 3, at 25-26.
84. The EPA admits that the discharge of dead fish and their remains from dams causes water quality problems. *DAM WATER QUALITY STUDY*, supra note 49, at II-8. If dead fish and fish remains are discharged in significant quantities, the dissolved oxygen demands of their decomposition may depress available oxygen. *Id.*
85. 2 W. RODGERS, supra note 38, § 4.10, at 157–62. Professor Rodgers, discussing *Gorsuch*, writes:

The textual compulsion for the trespass theory is said to turn on the inescapable reality that a “pollutant” is something that is “discharged,” that a “point source” is something from which a pollutant is “discharged,” and that a “discharge of a pollutant” occurs only when there is an “addition” of a pollutant to the water. While this “addition” language underscores the dominant congressional image of a pipeful of “bads” running into the stream, there is little to suggest a congressional indifference had the members been alerted to sleight-of-hand technologies by which the “goods” (e.g., the dissolved oxygen, low turbidity, and so on) could be withdrawn through subterranean pipes to the detriment of water quality. Under this view the statutory condition that a pollutant be “added” to the stream is met if the source is the cause of the appearance of the pollutant regardless of the mechanism. *Id.* at 158 (footnotes omitted).
I. “Addition” Should Include Causing a Pollutant to Appear

The EPA trespass interpretation of “addition” is unreasonable for two reasons. First, the EPA definition undermines the CWA’s broad remedial purpose by ignoring environmental effects. The EPA interpretation naively ignores an activity’s effect on the environment, while the but-for interpretation reflects a better understanding of delicately balanced aquatic ecosystems. Second, the EPA definition of “addition” is unreasonable because it conflicts with the Act’s definition of “pollutant.”

a. The EPA Definition of “Addition” Undermines the Clean Water Act’s Remedial Purpose

In Consumers Power the Sixth Circuit admonished the district court for giving too much weight to the CWA’s broad remedial purpose. The Act’s remedial nature, however, is one of the primary bases on which two other courts have rejected a trespass interpretation of “addition.” In Avoyelles Sportsmen’s League, Inc. v. Marsh and United States v. M.C.C. of Florida, Inc. the pollutants that were discharged in violation of the Act were natural sediment and vegetation dredged and redeposited in the same water body. Both the Avoyelles and M.C.C. courts used the CWA’s broad remedial objectives to reject any requirement that the pollutant originate from outside the water.

Avoyelles involved the redeposit of vegetation and sediment in a wetlands area. The facts of Avoyelles may appear distinguishable from the facts of Consumers Power, but the differences do not bear on the analysis of the term “addition.” First, although Avoyelles was a dredge-and-fill case rather than an NPDES case, this distinction did not play a role in the Avoyelles court’s analysis of “addition.”

85. 862 F.2d 580, 584–85 (6th Cir. 1988); see also National Wildlife Fed’n v. Gorsuch, 693 F.2d 156, 179–81 (D.C. Cir. 1983).
86. 715 F.2d 897 (5th Cir. 1983).
87. 772 F.2d 1501 (11th Cir. 1985), vacated on other grounds, 481 U.S. 1034 (1987).
88. See supra notes 41–46 and accompanying text (discussing the facts of the dredging cases).
89. Avoyelles, 715 F.2d at 923 (that an “addition” can mean “redeposit” is consistent with both the purposes and legislative history of the Act); M.C.C., 772 F.2d at 1506 (given the broad objectives of the CWA, “addition” can mean “redeposit”).
90. 715 F.2d at 901.
91. Id. at 922.
93. See supra note 41 (discussing identical definitions of “discharge” under the § 402 and § 404 permit programs).

The Avoyelles court did, however, state that the case was distinguishable from Gorsuch because the pollutant was dredged or fill material. 715 F.2d at 924 n.43. See infra notes 106–111 and accompanying text (discussing the definition of “pollutant”). The court in Avoyelles also
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Second, the facts of *Avoyelles* leave open the question whether vegetation was actually removed from the water before its burial. If the vegetation was first removed, *Consumers Power* can be distinguished because the Ludington plant never removed the fish from the water.\(^9\) In light of the Act's avowed purpose to restore the integrity of the nation's waters, however, such a distinction is absurd. A pollutant is not less harmful because it is briefly removed from the water and then redeposited.\(^9\) Despite the absurdity, in *Consumers Power*, the EPA insisted that the Ludington plant could not have added a pollutant unless it first removed the dead fish from the water before redepositing them.\(^9\)

*United States v. M.C. C. of Florida, Inc.*\(^9\) stands for the proposition that an addition does not require the removal and reintroduction of a pollutant that originates in a water body.\(^9\) The pollutants, uprooted seagrass and sediment, were never removed from the water, and would not have appeared but for the defendant's tug boats.\(^9\) Thus, *M.C. C.* implicitly endorsed the but-for definition of "addition"—the same definition used by the district court in *Consumers Power* when it held that the Ludington facility had created a pollutant.

*Avoyelles* and *M.C. C.* recognize what the EPA trespass interpretation ignores: that inserting an "eggbeater" into an ecosystem can be as harmful as the introduction of a substance from outside. The EPA definition of "addition" ignores the effect of activities like the operation of the Ludington facility. There was no question that the Ludington facility killed fish and that the decomposing remains would pollute the lake. Similarly, in *Gorsuch* there was no question that dams cause serious pollution problems in rivers. Despite the obvious

\(^94\) 862 F.2d at 585.
\(^95\) On appeal, the EPA in fact argued that if the fish were removed from the lake, then reintroduced from a point source, a permit would be required. EPA Amicus Brief, supra note 11, at 27. If anything, the requirement that a pollutant must be redeposited before the EPA will recognize a CWA violation implies that the EPA is concerned with the polluter's purpose to use the waters for waste disposal. See infra notes 128–130 and accompanying text (discussing CWA's strict liability character).

\(^96\) 862 F.2d at 585.
\(^97\) 772 F.2d 1501 (11th Cir. 1985), vacated on other grounds, 481 U.S. 1034 (1987).
\(^98\) Id. at 1506 (the redepositing of spoil dredged up by the tug's propellers onto the adjacent sea grass beds was the addition of a pollutant).

\(^99\) Id.
adverse effects dams or pumped storage plants can have on water quality, the EPA trespass interpretation allows these identifiable polluters to avoid responsibility.

Although a showing of harmful effect is not necessary to prove a discharge in violation of the CWA, harmful effect is relevant to whether an interpretation of "addition" plainly frustrates the Act’s remedial purposes. The court in *M.C.C.* showed an acute sensitivity to environmental effect by implying that the court was as concerned with the damage caused by the uprooting of sea grass and sediment as with its redeposit of the pollutant onto adjacent sea grass beds.100 Similarly, the district court in *Consumers Power* demonstrated sensitivity to the integrity of the Lake Michigan ecosystem.

In *Consumers Power*, the Sixth Circuit not only ignored the effect of the Ludington plant’s operation on the Lake Michigan ecosystem, but it also misunderstood the district court’s but-for rule. The appellate court discounted the district court’s position because “live fish would be just as much a pollutant as a mixture of live and dead fish.”101 The appellate court reasoned that Consumers Power would, therefore, need a permit for the release of living as well as dead fish.102 The court’s reasoning is incorrect. The Ludington facility does not cause the appearance of living fish, but it does cause the appearance of dead fish and fish parts. Therefore, Consumers Power would be held responsible only for the discharge of dead fish.103

The *Consumers Power* court did not rule on the merits of the district court’s but-for interpretation of “addition.” It simply held that the EPA’s trespass theory was a permissible interpretation.104 The foregoing analysis, however, shows that the but-for interpretation is vastly preferable in light of the CWA’s broad remedial purpose.105

100. As support for a broad reading of “addition,” the *M.C.C.* court cited the following House report language: “Any change induced by man which overtaxes the ability of nature to restore conditions to ‘natural’ or ‘original’ is an unacceptable perturbation.” *Id.* at 1506 (quoting H. REP. NO. 92-911, 92d Cong., 2d Sess. 76–77 (1972), reprinted in 1 LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, 753, 763–64 (1973)).

101. 862 F.2d at 585.

102. *Id.*

103. See *Consumers Power*, 657 F. Supp. 989, 1008 (W.D. Mich. 1987), rev’d, 862 F.2d 580 (6th Cir. 1988); accord Appalachian Power Co. v. Train, 545 F.2d 1351, 1377 (4th Cir. 1976) (the EPA may not require an industrial discharger to remove pollutants which enter a plant through its intake stream).

104. 862 F.2d at 585.

105. The *Gorsuch* court stated that the CWA’s purpose section should not be given too much weight because Congress could not seriously have expected to achieve such grandiose results as complete restoration of the Nation’s waters. 693 F.2d 156, 180–181 (D.C. Cir. 1982). The fact that Congress recognized that it might not achieve its goal should not, however, diminish the
b. The EPA Definition of “Addition” is Inconsistent with the Clean Water Act's Definition of “Pollutant”

Carried to its logical end, the EPA trespass interpretation of “addition” would effectively deregulate some pollutant discharges. The CWA’s definition of “pollutant” includes substances or conditions which by definition may not originate outside a water body. For example, a requirement that all pollutants must come from outside the water would effectively eviscerate the CWA’s dredge-and-fill provision because dredged material usually originates in the water in which it is finally discharged. Heat is also a pollutant under the Act; applied energy causes the addition of a pollutant—heat—but no substance is necessarily introduced. The statute’s definition of “pollutant” does not treat heat or dredged spoil differently from any of the other named pollutants. Congress’ inclusion of dredged spoil and heat in the CWA’s list of regulated pollutants therefore suggests that Congress did not intend that a pollutant must be introduced from outside the water before it qualifies as a regulated discharge.

107. See Avoyelles Sportsmen’s League v. Marsh, 715 F.2d 897, 924 n.43 (5th Cir. 1983). The Corps of Engineers defines “dredged material” as “material that is excavated or dredged from waters of the United States.” 33 C.F.R. § 323.2(c) (1988). Although it is theoretically possible for dredged material to originate outside a water body, in practice it is improbable.
109. The EPA regulates steam electric power generating facilities which divert waters for cooling purposes. See 40 C.F.R. § 423.10 (1988). In Consumers Power, the EPA argued that steam electric plants added heat because the heat was produced outside the water then later absorbed by the water. EPA Amicus Brief, supra note 11, at 31 n.24. It is difficult to believe that Congress would exempt an electric facility from the Act’s discharge prohibition if it were somehow able to site its operations within the water, thus producing heat within the water body.
111. Dredged spoil and heat might be considered special cases because other portions of the Act deal separately with the two pollutants. See 33 U.S.C. § 1344 (dredge-and-fill permits); id. § 1326 (thermal discharges). However, the separate treatment is not explained solely by special physical qualities of the pollutants. The dredge-and-fill provisions were necessary to retain the Corps of Engineers traditional role with such activities. Zener, supra note 17, at 741. The thermal discharges section was necessary to accommodate special needs of the power industry. 2 W. RODGERS, supra note 38, § 4.38, at 574; cf. Zener, supra note 17, at 714 (heat is treated differently, in part, because it readily dissipates). Despite the Act’s separate provisions for heat and dredged spoil, the definition of “discharge” is the same as for any other pollutant. See 33 U.S.C. § 1311(a) (general discharge prohibition); id. § 1326(a) (thermal discharges); id. § 1342(a) (discharges under the NPDES program); id. § 1344(a) (discharges under the Corps of Engineers program); id. § 1362(12) (the Act’s only definition of “discharge”).
2. The Clean Water Act Does Not Clearly Exempt Facilities Like the Ludington Plant from NPDES Regulation

The Consumers Power court found that Congress clearly intended to exempt flow diversion facilities like the Ludington plant from NPDES regulation. The court reasoned that the EPA's definition of "addition" and the agency's decision not to regulate the Ludington plant were reasonable. An examination of the CWA shows, however, that Congress did not mandate that the EPA exempt dams or pumped storage facilities from NPDES regulation. Instead, the structure of the Act and legislative history suggest that Congress intended that sources of pollution should be regulated under the NPDES program whenever feasible.

The appellate court in Consumers Power inferred congressional intent to exempt facilities like the Ludington plant from Section 304 of the CWA. Section 304 requires the EPA to issue information on guidelines for identifying, and procedures for controlling, nonpoint source pollution. Section 304 mentions several types of nonpoint source pollution, including pollution resulting from "changes in the movement, flow or circulation of any navigable waters or ground waters, including changes caused by the construction of dams, levees, channels causeways, or flow diversion facilities." From Section 304, the court concluded that any pollution which is incidental to the manipulation of waters by a dam or diversion facility would be exempt from NPDES regulation.

Section 304 does not, however, exempt the activities it mentions from regulation as point sources of pollution under the NPDES program. As even the Gorsuch court observed, Section 304 does not mandate that all dam-induced water pollution be treated as nonpoint source pollution. Instead, the section simply recognizes that there

112. 862 F.2d 580, 586 (6th Cir. 1988).
113. Id. at 586-88.
115. 862 F.2d at 587-88.
117. Id. § 1314(f)(2)(F).
118. 862 F.2d at 586-88. The court found that its conclusion that Congress intended to exempt dams from regulation was further supported by Congress' failure to specifically include dams as point sources of pollution in the 1987 amendments. Id. at 588.
may be some nonpoint source pollution associated with dams or diversion facilities.\textsuperscript{120} Congress' recognition that dams or diversion facilities sometimes would be nonpoint sources does not preclude their being treated as point sources of pollution at other times. This position is supported by the holdings in \textit{United States v. Earth Sciences, Inc.}\textsuperscript{121} and \textit{Sierra Club v. Abston Construction Co., Inc.}\textsuperscript{122} Although Section 304 mentions nonpoint source pollution from mining activities,\textsuperscript{123} the \textit{Earth Sciences} and \textit{Abston Construction} courts refused to read Section 304 as exempting mining activities from the NPDES program.\textsuperscript{124} As the \textit{Earth Sciences} court implicitly recognized, when Congress wanted to exempt a pollution source from the NPDES program, it has said so clearly.\textsuperscript{125} Rather than straining to infer an exemption from Section 304, the \textit{Earth Sciences} court looked to the structure of the Act and concluded that Congress intended the NPDES program to be used whenever feasible.\textsuperscript{126} Based on the reasoning of \textit{Earth Sciences}, the Ludington plant should be regulated under the NPDES program because control at the point source is feasible.\textsuperscript{127}

\textsuperscript{120} 693 F.2d at 177. The NWF admitted that even under its construction of “addition” dams could cause nonpoint source pollution. \textit{Id.} (downstream bank erosion, saltwater intrusion, pollution to the reservoir).

\textsuperscript{121} 599 F.2d 368, 373 (10th Cir. 1979).

\textsuperscript{122} 620 F.2d 41 (5th Cir. 1980).


\textsuperscript{124} \textit{Abston Constr.}, 620 F.2d at 44 (mining activities may embrace nonpoint and point source pollution); \textit{Earth Sciences}, 599 F.2d at 373 (“we hold the district court erred interpreting 33 U.S.C. § 1314(f) as enumerating nonpoint source exemptions from [CWA] enforcement regulations”). Congress has since exempted stormwater runoff from mining activities. \textit{See infra} note 125.

\textsuperscript{125} \textit{See Earth Sciences}, 599 F.2d at 372–73. The Act explicitly exempts from the “point source” definition agricultural stormwater discharges and return flows from irrigated agriculture. 33 U.S.C.A. § 1362(14) (West Supp. 1988). The Act also exempts stormwater runoff from oil, gas, and mining operations from the NPDES permit requirements. \textit{Id.} § 1342(l)(2); \textit{see also} Natural Resources Defense Council, Inc. v. Costle, 568 F.2d 1369, 1377 (D.C. Cir. 1977) (the EPA may not categorically exempt any point source from the NPDES permit requirements).

\textsuperscript{126} 599 F.2d at 373 (“Congress would have regulated so-called nonpoint sources if a workable method could have been derived”). Many commentators commend feasibility of control as the best explanation for Congress’ purpose in distinguishing between point and nonpoint sources of pollution. \textit{See, e.g.}, 2 W. RODGERS, \textit{supra} note 38, § 4.10, at 150–52; Van Putten & Jackson, \textit{The Dilution of the Clean Water Act}, 19 J. OF L. REFORM 863, 878 (1986). \textit{But see, e.g.}, National Wildlife Fed’n v. Gorsuch, 693 F.2d 156, 176 (point-nonpoint division cannot be explained solely by feasibility of control; Congress was also concerned with federalism issues).

\textsuperscript{127} In 1987, the Federal Energy Regulatory Commission (“FERC”), which licenses hydroelectric facilities, ordered Consumers Power to install a barrier net to prevent the entrainment and extrainment of fish at the Ludington facility. \textit{National Wildlife Fed’n v. Consumers Power Co.} 862 F.2d 580, 590 (6th Cir. 1988). As of February 1989, the net had not been installed. Telephone interview with Robert Fineman, attorney for Consumers Power Company, Honigman
The EPA also argued that Section 304 excluded flow diversion facilities from the NPDES program when the facility is operated without a purpose to use the waters for waste disposal.\textsuperscript{128} Thus, the Ludington facility's release of dead fish could be distinguished from a seafood processor's discharge of fish parts because the latter uses the waters with the purpose of disposing of waste.\textsuperscript{129} This distinction, however, is inimical to a strict liability statute like the CWA\textsuperscript{130} and again infers an exemption from Section 304 where none was intended.

3. \textit{The Consumers Power Court Failed to Distinguish Between the Dams in Gorsuch and the Ludington Facility}

The \textit{Consumers Power} court refused to recognize differences between the Ludington facility and the dams already held exempt from the NPDES program.\textsuperscript{131} The differences provide a principled basis for limiting the EPA's trespass definition of "addition" to the dam cases. In \textit{Gorsuch}, the court recognized policy considerations unique to dams sited in rivers.\textsuperscript{132} These considerations buttressed the EPA's interpretation and application of the term "addition."\textsuperscript{133} The \textit{Consumers Power} court failed to see, however, that these same policy considerations do not apply to the Ludington facility.

The \textit{Gorsuch} court was sympathetic to two policy arguments offered in favor of excluding dams from the NPDES program. First, dams can be a major component of state water resource management, providing water storage, irrigation, and flood protection.\textsuperscript{134} The CWA expresses a policy of noninterference with states' authority to allocate waters within their jurisdiction.\textsuperscript{135} While this argument was persuasive in \textit{Gorsuch}, it is patently unpersuasive when applied to the Ludington

Miller Schwartz and Cohn, Detroit, Michigan (Feb. 14, 1989) (notes on file with \textit{Washington Law Review}). For the view that FERC is not equipped to ensure fishery protection, see Bodi & Erdheim, \textit{Swimming Upstream: FERC's Failure to Protect Anadromous Fish}, 13 ECOLOGY L.Q. 7 (1986).

\begin{itemize}
  \item \textsuperscript{128} EPA \textit{Amicus Brief}, supra note 11, at 27–28 n.21.
  \item \textsuperscript{129} Id.
  \item \textsuperscript{130} Strict liability, by definition, means that purpose or intent are irrelevant to whether a person has violated the Act. \textit{See supra} note 23 and accompanying text (discussing the CWA's strict liability character).
  \item \textsuperscript{131} 862 F.2d at 589–90 (the Ludington facility is a dam because it impounds water). It was the majority's refusal to recognize differences between the Ludington facility and the dams in \textit{Gorsuch} that the dissent found most troublesome. \textit{Id.} at 591 ("because I disagree with the majority's conclusion that the Ludington facility merely changes the movement, flow, or circulation of navigable waters, I cannot accept the majority's reliance on \textit{Gorsuch}").
  \item \textsuperscript{132} 693 F.2d 156, 182 (D.C. Cir. 1982).
  \item \textsuperscript{133} Id.
  \item \textsuperscript{134} Id.
  \item \textsuperscript{135} 33 U.S.C. § 1251(g) (1982).
\end{itemize}
facility, which serves no storage, irrigation, or flood control purpose. Second, the Gorsuch court found that the severity of dam-caused pollution and the cost of its control was highly site-specific. The EPA would therefore have difficulty creating national uniform standards. Again, this argument carries no weight when the issue is whether a single pumped storage facility should be regulated. In Gorsuch, these policy arguments supported a holding that the EPA's interpretation and application of "addition" was reasonable. The Sixth Circuit failed to recognize that these policy arguments did not support a similar holding in Consumers Power.

C. Recommendation

Congress should correct the short-sighted EPA interpretation of "addition." "Addition" could be defined as "introducing a pollutant into water or causing a pollutant to appear in water." This definition would embrace both stereotypical industrial polluters and less typical polluters like the Ludington plant.

A legislative expansion of the term "addition" is supported by seventeen years' experience with pollution control under the CWA. Although Congress has tried to recognize the importance of controlling nonpoint source pollution, attempts to abate nonpoint source pollution largely have failed. The failure to develop effective nonpoint source pollution controls suggests that narrow interpretations of the Act's terms should not be allowed to increase the nation's reliance on nonpoint programs. By making it more difficult to prove a discharge in violation of the CWA, Consumers Power increases reliance on nonpoint source programs by shifting some polluters from the point source to the nonpoint source category. In Consumers Power, the narrow definition meant that the National Wildlife Federation was unable to prevent the Ludington facility from releasing dead fish into Lake

136. 693 F.2d at 182.
137. Id.
138. Even if the EPA were required to regulate all pumped storage facilities, there was no evidence that the pollution from fish entrainment or that the cost of pollution reduction was highly site specific. Instead, Consumers Power argued that the district court's holding would not be limited to pumped storage facilities, but would require NPDES permits for hydro-electric facilities sited in rivers which entrain and extrain fish. Reply Brief for Defendant/Appellant Consumers Power Company at 10, National Wildlife Fed'n v. Consumers Power Co., 862 F.2d 580 (6th Cir. 1988) (No. 87-1441). However, it is possible that these dams would still be exempted from the NPDES program based on the Act's policy of noninterference with states' authority to allocate water resources. See supra note 135 and accompanying text.
139. See supra note 38 and accompanying text (discussing Congress' treatment of nonpoint source pollution).
In the future, the EPA's narrow definition may prevent citizens from enjoining activities which plainly degrade water quality but introduce no foreign pollutant.

Unlike the EPA trespass interpretation, the but-for definition of "addition" would bring the Ludington facility under NPDES regulation. It might also require regulation of any hydro-electric dam which killed fish in its power generating process.141 Where the dam-induced water quality problems were of the type considered in Gorsuch, however, regulation would not be required because the water conditions were not within the definition of "pollutant." Given continuing problems with dam-induced water quality degradation,142 Congress would do well to consider expressly requiring NPDES regulation of all dams and diversion facilities. However, if Congress does not want dams or pumped storage facilities to be regulated under the NPDES program,143 Congress should expressly exempt them from NPDES regulation. Express legislative action is preferable to agency exemption through tortured interpretations of the Clean Water Act and its broad remedial purposes.144

III. CONCLUSION

Consumers Power's immediate effect is that the Ludington plant will continue to release thousands of pounds of dead fish into Lake Michigan. A major purpose of the Clean Water Act is the preservation of fishery resources. It is therefore ironic that the National Wildlife Federation was unable to prevent tremendous fish kills using the Clean Water Act. The implications for the future are of greater concern. As our understanding of aquatic ecosystems becomes more sophisticated, we see the damage that can be caused by activities which previously appeared harmless. A definition of "addition" which requires the physical introduction of a pollutant into water from the outside world reflects a naive understanding of environmental problems and unnecessarily limits the CWA as an effective weapon in the water pollution battle.

140. See supra note 127 (discussing FERC's failure to enforce fish mortality mitigation plans at the Ludington facility).
141. See supra note 138 (discussing policy arguments which might justify excluding from the NPDES program hydro-electric dams sited in rivers which entrain and extrain fish).
142. See supra notes 49-50 and accompanying text (discussing dam-induced water quality problems).
143. Congress did not take the opportunity to include dams within the ambit of NPDES regulation when it adopted the Water Quality Amendments of 1987.
144. See Note, Dam-induced Pollution, supra note 62, at 536.
“Discharge” Under the Clean Water Act

The NPDES program is Congress' chosen method of dealing with water pollution problems, and it can be used effectively and fairly as a weapon against sources of pollution other than the stereotypical industrial polluter. Congress should correct the EPA’s short-sightedness by explicitly defining the term “addition” as “introducing a pollutant into water or causing a pollutant to appear in water.” This definition would help to give the NPDES program an appropriately broad scope.

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