

Plain Meaning, Precedent, and Metaphysics: Interpreting the “Point Source” Element of the Clean Water Act Offense

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Summary

This Article, the fourth in a series of five, examines the continuing struggles to define “point source” and “nonpoint source” under the Clean Water Act. State regulation of nonpoint sources is neither pervasive nor robust, and most continuing water pollution problems can be traced primarily to nonpoint sources. EPA should define nonpoint sources by regulation and begin to expand the definition of point source by incorporating established case law and Agency practice to bring more nonpoint sources into the point source definition.

I. Introduction

Clean Water Act (CWA)¹ §301(a) prohibits “the discharge of any pollutant by any person” unless in compliance with several listed sections.² The listed sections authorize the issuance of two types of CWA permits³ and specify their substantive requirements. Section 502(12) defines “discharge of a pollutant” to mean “any addition of any pollutant to navigable waters from any point source.”⁴ In sum, the subsection prohibits (1) any addition (2) of any pollutant (3) to navigable waters (4) from any point source (5) by any person except in compliance with a CWA permit.⁵ Justice Ruth Bader Ginsburg has called this the CWA’s “core command.”⁶

This Article, the fourth in a series of five, examines how the U.S. Environmental Protection Agency (EPA) and the courts have interpreted the meaning of the term “point source,” the fourth jurisdictional element of the water pollution control offense. In the CWA, “point source” is an artificial construct with a statutory definition, followed by lists of examples and exclusions. Disputes over the interpretations of the statutory term have produced a steady stream of reported decisions since the initial implementation of the statute in 1979. Even after four decades, many of these issues are unresolved and new issues continue to arise.

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1. 33 U.S.C. §§1251-1387, ELR STAT. FWPCA §§101-607. The basic contours of the statute were established in the Federal Water Pollution Control Act Amendments of 1972, Oct. 18, 1972, Pub. L. No. 92-500, 86 Stat. 816.
2. 33 U.S.C. §1311(a).
3. The U.S. Environmental Protection Agency (EPA) issues permits under CWA §402, 33 U.S.C. §1342, to regulate the discharge of pollutants; the U.S. Army Corps of Engineers (the Corps) issues permits under CWA §404, 33 U.S.C. §1344, to regulate the filling of wetlands.
4. 33 U.S.C. §1362(12).
5. Three earlier articles in *ELR News & Analysis* focused individually on the §301(a) water pollution control offense elements “addition,” “pollutant,” and “navigable waters.” See Jeffrey G. Miller, *Plain Meaning, Precedent, and Metaphysics: Interpreting the “Addition” Element of the Clean Water Act Offense*, 44 ELR 10770 (Sept. 2014); Jeffrey G. Miller, *Plain Meaning, Precedent, and Metaphysics: Interpreting the “Pollutant” Element of the Federal Water Pollution Offense*, 44 ELR 10960 (Nov. 2014); and Jeffrey G. Miller, *Plain Meaning, Precedent, and Metaphysics: Interpreting the “Navigable Waters” Element of the Clean Water Act Offense*, 45 ELR 10548 (June 2015).
6. *Coeur Alaska, Inc. v. Southeast Alaska Conservation Council*, 557 U.S. 261, 298, 39 ELR 20133 (2009). The author has elsewhere called it “the basic prohibition” of the CWA. JEFFREY G. MILLER ET AL., INTRODUCTION TO ENVIRONMENTAL LAW: CASES AND MATERIALS ON WATER POLLUTION CONTROL 141 (2008).

II. Congressional Action: The Statutory Definition and Legislative History of Point Source

A. Statutory Definition

Section 502(14) of the CWA provides that:

“[P]oint source” means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural discharges and return flows from irrigated agriculture.⁷

The definition of point source is the most grammatically complex of the elements’ statutory definitions. It has a compound structure beginning with the definition, a “discernible, confined and discrete conveyance”; followed by an inclusive list of 12 examples; and ending with two exceptions. The comparative structural complexity of the point source definition reflects that, unlike the other elements, it is a statutory construct with no meaning apart from its statutory definition. Before the enactment of the CWA, “addition” and “pollutant” each had plain meanings and “navigable waters” had both a plain and a legal meaning. However, while both “point” and “source” had plain meanings before enactment of the CWA, their combination into one term did not have a preexisting plain meaning. “Point” in its most pertinent definition means “a particular spot, place, or position in an area or on a map, object or surface”; and “source” in its most pertinent definition means “a place, person or thing from which something comes or can be obtained.”⁸ Significantly, these two words, alone or together, do not suggest a “discernible, confined and discrete conveyance,” the statutory definition of “point source.”

The other elements are on/off switches, determining whether a discharge is regulated by the CWA in one of its two permit programs. If a discharge lacks an “addition,” a “pollutant,” or a “navigable water,” the CWA does not regulate the discharge, regardless of whether it is through a “point source.” By contrast, “point source” is a switch that shuttles discharges between different CWA schemes. If a discharge meets the other elements and is through a “point source,” it is regulated by one of the CWA’s two permit programs. If a discharge meets the other elements but is not through a “point source,” it may be regulated by the CWA’s nonpoint source program. While the CWA does not mention non-additions, non-pollutants, or non-navigable waters, it does mention “nonpoint sources”⁹ and provides for programs regulating them. Despite the impor-

tance of nonpoint sources to the structure of the statute and to understanding the term point source, the statute does not define nonpoint source. Nor does EPA define nonpoint source in its permit program regulations, although it does so in informal documents.¹⁰

Although the U.S. Congress did not define “point” or “source” generally, it defined “source” for the limited purpose of CWA §306,¹¹ the section requiring EPA to establish technology-based standards for new sources.¹² Section 306(a)(3) defines a source as a building or facility from which pollutants originate. This “source” is a new manufacturing facility, not a point source—that is, a new discharge pipe leading from the facility to navigable water.¹³ This makes sense, for new sources are subject to higher levels of pollution control than are existing sources. It is easier and cheaper for new sources to design and build facilities with state-of-the-art pollution control than for existing sources to retrofit existing facilities with it, particularly since new facilities can often be designed to use less water and hazardous materials, thus generating less pollutants to treat. The same rationale would not apply if the newly constructed source was merely the pipe that carries pollutants from the facility to navigable water. Thus, “source” in both the dictionary definition and in the limited CWA definition of “new source” connotes the origin of pollutants. “Point source,” on the other hand, connotes the conveyance of pollutants from their origin to their addition to navigable water. In other words, point source is the place of the addition of pollutants to navigable water rather than the origin of the pollutants.¹⁴ When we interpret point source, we are not searching for the plain meaning of “point,” “source,” or “point source,” but for the plain meanings of “discernible,” “confined,” “discrete,” “conveyance,” “pipe,” “tunnel,” or other words used in the statutory definition of the term. Indeed, the plain meaning of “source” obscures the congressional definition of “point source.”

If the definition of point source was straightforward and clear, the statute’s failure to define point, source, and nonpoint source would pose no problems. Unfortunately, on close reading, the definition is far from clear. First, it defines a point source as a conveyance “from which pollutants are or may be discharged.” This makes the definition circular, because the CWA in turn defines “discharge” as any addition of any pollutant by any point source. Second, it defines point source as a conveyance, but lists a concentrated animal feeding operation (CAFO) as an example of a point source, although a CAFO is not a typical conveyance. Instead, a CAFO is an agricultural facility more like

7. 33 U.S.C. §1362(14).

8. OXFORD ENGLISH DICTIONARY, www.oxforddictionaries.com.

9. CWA §§105(d)(1), 201(c), 208(b)(2)(F), 319(a) & (b); 33 U.S.C. §§1255(d)(1), 1281(c), 1288(b)(2)(F), 1239(a) & (b).

10. 40 C.F.R. §122.2.

11. 33 U.S.C. §1316.

12. CWA §306(a)(3), 33 U.S.C. §1316(a)(3).

13. *Mahelona v. Hawaiian Elec. Co., Inc.*, 418 F. Supp. 1328, 1334-35, 7 ELR 20031 (D. Haw. 1976).

14. *South Fla. Water Mgmt. Dist. v. Miccosukee Tribe of Indians*, 541 U.S. 95, 105, 34 ELR 20021 (2004). The definition of point source “makes it plain that a point source need not be the original source of the pollutant”; it need only convey the pollutant to “navigable waters.” *Id.* See also *United States v. Lucas*, 516 F.3d 316, 332-33, 38 ELR 20041 (5th Cir. 2008); *Dague v. City of Burlington*, 935 F.2d 1343, 1354, 21 ELR 21133 (2d Cir. 1991).

an industrial facility than a conveyance. Third, the two statutory exceptions contained in the definition, “agricultural stormwater discharges” and “return flows from irrigated agriculture,” are not conveyances either; instead, they are liquids that are or may be conveyed. Without the exemptions, they would not be point sources. The internal inconsistencies suggest that: (1) Congress did not (and perhaps could not) clearly articulate the distinction between point source and nonpoint source; (2) Congress intended some agricultural discharges to be regulated by the CWA’s permit programs and intended other agricultural discharges not to be regulated by the permit programs; and (3) determining which agricultural discharges are point sources will be a major issue in interpreting “point source.”

The failure of Congress to define nonpoint sources¹⁵ is particularly troublesome because its apparent meaning is anything other than a point source. But does that mean a nonconveyance or a conveyance that is indiscernible, unconfined, and indiscrete? As used in the legislative history of the CWA, and as commonly used when discussing water pollution, nonpoint sources are discharges of stormwater. The two are not synonymous, however. Stormwater may be collected and channeled by human activity, in which case it is discharged by a point source.¹⁶ On the other hand, there are nonpoint sources that have nothing to do with stormwater.¹⁷

These inconsistencies help explain the difficulties that courts and EPA have encountered in construing point source and the frequent conflation by the courts, EPA, and litigants of that element with other elements of the CWA offense¹⁸ and even with other CWA terms that are

not elements of the offense.¹⁹ Conflation also results from the fact that the elements (all nouns) are all linked by prepositions. Some courts have even treated the prepositions as elements.²⁰

B. Legislative History of Point Source

The U.S. House of Representatives and the U.S. Senate bills both used “point source” in the definition of “discharge of a pollutant” and defined point source identically, except that the House version included “from which there is or may be a thermal discharge.”²¹ The omission of thermal discharges from the enacted “point source” definition is of no significance, however, because §502(6) defines “pollutant” to include “heat.” Moreover, CWA §316(a)²² provides specific regulation for thermal discharges in the §402 permit program. Nothing in the House, Senate, or Conference Reports further explains the meanings of point source, nonpoint source, the differences between the two terms, or why the permit programs are limited to point sources. Some comments made during the floor debates address these issues, but the comments are no less confusing than the statutory definition of point source.

Sen. Edmund Muskie (D-Me.), the chief sponsor of the Senate bill, on which most of the statute is based, attempted to illuminate the distinction between point source and nonpoint source:

The discharge standard applies to point source control. Agricultural runoff is one form of agricultural activity that is a nonpoint source. It is a runoff into water that occurs perhaps miles away from the land that adjoins it. There is no effective way, as yet other than land use control, by which you can intercept that runoff and control it in the way that you do a point source. We have not yet developed technology to deal with that kind of problem. We need to find ways to deal with it, because a great quantity of pollutants is discharged by runoff, not only from agriculture but from construction sites, from streets, from parking lots, and so on, and we have to be concerned with developing controls for them.²³

element, “point source,” because person is already included in the fifth element, “by any person”).

15. *Cordiano v. Metacon Gun Club, Inc.*, 575 F.3d 199, 219 (2d Cir. 2009).
16. EPA’s definition of “discharge of pollutants,” for instance, specifically includes stormwater that is collected and channeled by man. 40 C.F.R. §122.2.
17. Examples held to be nonpoint sources that have nothing to do with stormwater include, for example, people and animals.
18. For conflation with “addition,” see, e.g., *National Cotton Council, v. U.S. EPA*, 553 F.3d 927, 938-39, 39 ELR 20006 (6th Cir. 2009) (EPA erroneously argued that a pesticide spray bar cannot be a point source because it did not add pollutants to water, i.e., it did not spray excess pesticides); *Peconic Baykeeper, Inc. v. Suffolk Cnty.*, 600 F.3d 180, 188, 40 ELR 20098 (2d Cir. 2010) (district court erroneously held spray bar was not a point source because it added pesticide to air rather than to water); *Dague*, 935 F.2d at 1354 (the losing party erroneously argued that a culvert could not be a point source because it did not add a pollutant to navigable water for the first time); *National Wildlife Fed’n v. Gorsuch*, 693 F.2d 156, 165, 13 ELR 20015 (D.C. Cir. 1982) (EPA erroneously argued that a dam was not a point source because it did not add pollutants from the outside world). For conflation with “navigable waters,” see, e.g., *Rapanos v. United States*, 547 U.S. 715, 735, 36 ELR 20116 (2006) (ditches may sometimes, but not often, be both point sources and navigable waters); *National Ass’n of Home Builders v. U.S. Army Corps of Eng’rs*, 699 F. Supp. 2d 209, 215-17, 40 ELR 20104 (D.D.C. 2010) (the losing party erroneously argued that a ditch cannot be navigable water because it is a point source). For conflation with “pollutant,” see, e.g., *National Cotton Council*, 553 F.3d at 938-39 (EPA erroneously argued that a pesticide spray bar was not a point source because it did not spray pollutants, but instead only a consumer product: pesticides); *United States v. West Indies Transp., Inc.*, 127 F.3d 299, 309, 28 ELR 20202 (3d Cir. 1997) (the defendant erroneously argued that a barge could not be a point source because the barge was a pollutant when parts of it were torn off and thrown into the water). For conflation with “by any person,” see, e.g., *United States v. Plaza Health Labs., Inc.*, 3 F.3d 643, 647, 23 ELR 21526 (2d Cir. 1993) (a person cannot be included in the fourth

19. It is relatively common for courts, EPA, and commentators to distinguish between point source pollution and nonpoint source pollution. See, e.g., *League of Wilderness Defenders/Blue Mountains Biodiversity Project v. Forsgren*, 309 F.3d 1181, 1184 (9th Cir. 2002) (“The issue before us is whether spraying insecticide from an aircraft . . . is point source pollution or nonpoint source pollution.”); *Gorsuch*, 693 F.2d at 156 (“the point or nonpoint character of pollution is established when the pollutant first enters navigable water”). This conflates point source with pollution. Although “pollution” is defined in §502(19), 33 U.S.C. §1362(19), it is not an element of the CWA §301(a) offense. Indeed, it is quite distinguishable from “pollutant,” which is an element.
20. “From” was treated as an element or close to it in *Peconic Baykeeper*, 600 F.3d at 188-90; *Gorsuch*, 693 F.2d at 174-75.
21. H.R. 11896, §502(15), H. REP. NO. 92-911, Nov. 19, 1971. See also S. 2770, §502(p), S. REP. NO. 92-414, Oct. 28, 1971.
22. 33 U.S.C. §1316(a).
23. 117 CONG. REC. 38805 (Nov. 2, 1971), reprinted in 2 A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972 [hereinafter 2 LEGIS. HISTORY], available at <http://catalog.hathitrust.org/>

The “discharge standard” to which Senator Muskie referred is the set of uniform national technology-based standards that the CWA required EPA to promulgate for industrial and municipal point sources under §§301(b), 304(b)-(d), and 306.²⁴ His statement does not draw a crisp line between point sources and nonpoint sources and does not define nonpoint sources. Nevertheless, it makes several suggestions that may be useful in dealing with the point source/nonpoint source distinction. First, point sources typically are susceptible to pollution control by end-of-pipe technology using uniform national standards, while nonpoint sources typically are not.²⁵ Instead, nonpoint sources are usually susceptible to land use and management controls, which are typically site-specific.²⁶ Second, nonpoint sources are associated with stormwater runoff. Third, agricultural stormwater runoff is typically nonpoint source-related. Fourth, nonpoint sources are to a great extent from agriculture, construction sites, streets, and parking lots. Finally, when Senator Muskie stated that we have “not yet” developed technologies to control nonpoint sources and “need to,” he suggested that as we gradually develop such technologies for different categories of nonpoint sources, those categories should become point sources and be regulated by the CWA’s permit program.²⁷

Senator Muskie’s statement raises as many questions as it answers. Why cannot runoff be effectively intercepted and controlled? We routinely intercept and convey it with ditches. Moreover, we can also treat it to remove pollutants. The problem is that the great volume of stormwater often makes treatment not cost effective. His assertion that nonpoint sources are associated with runoff reminds us that flows are not conveyances, the exceptions in the definition of point source notwithstanding. His assertion that nonpoint sources are specifically associated with agricultural runoff is inconsistent with the definition’s inclusion of CAFOs in its list of examples of point sources. What does the third sentence mean? Stormwater runoff will not flow uncounted miles to a stream. Instead, it will percolate into the ground, evaporate into the air, or flow into the closest

remote tributary of the stream. Perhaps, the senator had in mind the suggestion by Rep. Teno Roncalio (D-Wyo.) in the context of irrigation return flows, rather than stormwater, that “[i]t is virtually impossible to trace pollutants to specific irrigation lands, making these pollutants a nonpoint source in most cases.”²⁸ Irrigation canals often flow for miles between many irrigated farms, accumulating silt, fertilizer, pesticides, and other pollutants from all of them, so that when the much-reused irrigation water is eventually discharged to navigable water, it is difficult if not impossible to trace specific pollutants in the discharge back to particular farms. But Representative Roncalio’s statement is not particularly helpful either; the definition of point source does not mention or suggest traceability.²⁹ Moreover, while it may be impossible to determine from a sample taken at the discharge of an irrigation ditch or canal what pollutants particular farms contributed to the discharge, it is quite possible to make that determination by sampling where the irrigation water is diverted to and discharged from each farm. It may also be possible to identify fertilizers and pesticides in a discharge by chemically fingerprinting them to fertilizers and pesticides used on particular farms.

Sen. Robert Dole (R-Kan.) reiterated the nonpoint nature of agricultural pollution. “Very simply,” he stated (unknowingly ironic, as we shall see below), a nonpoint source of pollution is one that “does not confine its polluting discharge to one fairly specific location, such as a sewer pipe, a drainage ditch, or a conduit. In the area of agricultural pollution, a feedlot would generally be considered to be a nonpoint source as would pesticide and fertilizer runoff and accumulation.”³⁰ It is not clear whether he is making a distinction based on the difference between point sources and nonpoint sources or on the difference between agricultural pollutants, such as pesticide and fertilizer runoff, and other pollutants. His observation that feedlots are nonpoint sources is demonstratively incorrect. CAFOs are included in the §502(14) list of examples of point sources. Perhaps, Senator Dole was alluding to smaller CAFOs. Senator Muskie commented that natural runoff from small CAFOs is not a point source, unless either the CAFO raises more than specified numbers of animals or is traversed by a stream.³¹ If the CAFO is traversed by a stream, it is easy to understand how it conveys animal waste to the stream and it therefore could be a point source. If, however, a stream does not traverse the CAFO,

Record/001515679 (statement of Senator Muskie also available at <http://abacus.bates.edu/muskie-archives/ajcr/1971/CWA%20Beall%20Query.shtml>).

24. 33 U.S.C. §§1311(b), 1314(b)-(d).

25. Pollutants discharged from nonpoint sources can be controlled by end-of-pipe technology. The polluted water flowing from many nonpoint sources can be collected and treated, such as stormwater runoff in municipal storm sewers. But such collection and treatment may be very expensive because of the large volumes involved. For the same reason, treatment of stormwaters to the same levels as treatment of municipal sewage may not be economically feasible. Management techniques may lower pollutant levels at less cost, such as street sweeping, retention ponds for parking lot runoff, green roofs, minimizing paved-over areas, and making paving less impervious.

26. Permits for point sources generally incorporate effluent limitations reflecting technology-based standards or water quality standards, rather than land use or management controls. Nonetheless, they may use best management practices to control runoff from factories, spills, and raw material storage areas. CWA §304(e). Moreover, industries must control runoff from areas where it comes into contact with industrial pollutants. CWA §402(p).

27. One court declared it clear from the legislative history that Congress “would have regulated so-called nonpoint sources if a workable method could have been derived.” *United States v. Earth Sciences, Inc.*, 599 F.2d 368, 373, 9 ELR 20542 (10th Cir. 1979).

28. 118 CONG. REC. 10765 (Mar. 29, 1972), reprinted in 1 A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972 [hereinafter 1 LEGIS. HISTORY], available at <http://catalog.hathitrust.org/Record/001515679>.

29. *But see* League of Wilderness Defenders/Blue Mountain Biodiversity Project v. Forsgren, 309 F.3d 1181, 1187 (9th Cir. 2002) (nonpoint sources “are identified by three characteristics,” including “(2) The pollutants discharged are not traceable to any distinct or identifiable facility. . .”).

30. 2 LEGIS. HISTORY 1294; also included in his supplemental views published with S. REP. NO. 92-404, pp. 98-99 (1971), reprinted in 2 LEGIS. HISTORY 1513-14.

31. 2 LEGIS. HISTORY 1299. “1,000 beef cattle; 700 dairy cows; 290,000 broiler chickens; 180,000 laying hens, etc.” In its regulatory definition of a CAFO, EPA copied this “poop equivalency table.” 40 C.F.R. §122.23.

it is more difficult to understand how the CAFO is a conveyance of the waste, as opposed to the source of the waste. In either event, the statute does not distinguish between small and large CAFOs, although EPA's regulations do.³² So much for Senator Dole's "very simply."

Senators Dole and Muskie entered into a colloquy on the Senate floor that reiterated many of these points. Senator Dole asked "to what sort of guidance are we to look for further clarification of the terms 'point source' and 'non-point source'—especially as related to agriculture?" Senator Muskie replied that such guidance

will be provided in regulations and guidelines of the [EPA] Administrator. The present policy with respect to the identification of agricultural point sources is generally as follows:

First. If a man-made drainage ditch, flushing system or other such device is involved and if measurable waste results and is discharged into water, it is considered a "point source."

Second. Natural runoff from confined livestock and poultry operations are not considered a "point source" unless the following concentrations of animals are exceeded . . .

Third. Any feedlot operation which results in the direct discharge of wastes into a stream which traverses the feedlot are considered point sources without regard to the number of animals involved.³³

C. The CWA's Structure: Point Source/Nonpoint Source Distinction

One court has commented that the "disparate treatment of discharges from point sources and nonpoint sources is an organizational paradigm" of the CWA.³⁴ Examination of the CWA's point source and nonpoint source programs may help to better frame the distinction between point sources and nonpoint sources.

I. Regulation of Point Sources

Point sources may not add pollutants to navigable waters without a §402 or §404 permit. EPA issues §402 permits and must approve submitted state programs for permit issuance if they are comparable to the federal program. Section 402 permits contain effluent limitations based on technology-based standards³⁵ and water quality standards.³⁶ The U.S. Army Corps of Engineers (the Corps) issues §404 permits, although EPA must approve submitted state programs

comparable to the federal program for permit issuance in all but traditionally navigable waters. Section 404 permits authorize the filling of wetlands, with limitations on how much of a wetland may be filled and perhaps requiring mitigation, such as providing replacement wetlands. EPA oversees state administration of §402 programs, may veto proposed state permits if they are not in compliance with federal requirements, may enforce against violations of state-issued permits, and may withdraw approval of state §402 programs. EPA similarly oversees Corps and state administration of §404 programs. (For brevity, this Article refers to EPA actions in developing, issuing, and enforcing permits, although such actions may be taken by the Corps or by states with EPA-approved programs.)

The most important condition in a §402 permit is that the point source cannot discharge pollutants in excess of the permit's effluent limitations (usually expressed numerically) for each pollutant it regulates. All effluent limitations must require the pollution reduction accomplished by the best technology for the particular type of facility at issue.³⁷ EPA regulations establish effluent guidelines on an industry-by-industry basis that permit writers can easily translate into effluent limitations for each regulated facility. The effluent guideline regulations are based on the best-performing pollution reduction technologies used or capable of being used by each category or subcategory of industry. However, if that pollution reduction is insufficient to ensure attainment or maintenance of concentrations or other criteria for pollutants necessary to achieve the state designated use of the receiving water, then the permit must require greater pollution reduction to achieve such water quality standards.³⁸ Permit holders must sample and analyze their effluents to determine whether they comply with the effluent limitations in the permits and must report the results to EPA and the state, where the reports are public information.³⁹ EPA, the state, and private citizens may enforce against violations.⁴⁰

2. Regulation of Nonpoint Sources

As discussed below, EPA acknowledges that nonpoint sources have long been the leading cause of water quality problems. Sections 208 and later 319⁴¹ encouraged states

32. 40 C.F.R. §122.23. CAFOs are discussed in greater detail below.

33. 1971 CONG. REC. 38816 (Nov. 2, 1971), *reprinted in* 2 LEGIS. HISTORY 1298-99; also available at <http://abacus.bates.edu/muskie-archives/ajcr/1971/CWA%20Dole%20Query.shtml>.

34. Oregon Natural Desert Ass'n v. U.S. Forest Serv., 550 F.3d 778, 780, 39 ELR 20297 (9th Cir. 2008) (*quoted in* Friends of the Everglades v. South Fla. Water Mgmt. Dist. 570 F.3d 1210, 1227, 39 ELR 20118 (11th Cir. 2009)).

35. CWA §§301(b)(2) & 304(b); 33 U.S.C. §§1311(b)(2) & 1314(b).

36. CWA §§303 & 304(a); 33 U.S.C. §§1313 & 1314(a).

37. CWA §301(a) specifies criteria for industrial best available control technology for toxic pollutants, best available control technology for conventional pollutants, and best available control technology for other pollutants. Section 306 also specifies criteria for best available control technology for new sources. EPA uses these criteria to promulgate regulations by industrial categories (for example, the organic chemicals and canning industries) and subcategories (such as particular fruits and vegetables in the canning industry) under §§301(b)(2) and 304(b). EPA separately established technology-based standards to be met by publicly owned treatment works (POTWs), as municipal sewage treatment plants are known among water pollution control cognoscenti, §§301(b)(1)(B) and 304(d)(1). These are performance-based standards. They do not require permittees to install particular technologies, only to remove pollutants comparable to the removal achieved by the best control technologies.

38. CWA §§301(b)(1)(B) & 304(d)(1).

39. *Id.* §308.

40. *Id.* §§309 & 505.

41. 33 U.S.C. §§1288 & 1329.

to establish programs and requirements for controlling nonpoint sources and provided initial funding for them to do so, but neither section defined nonpoint sources. Section 208 primarily required regional planning authorities to ensure that federal grant funds were spent on construction of wastewater treatment plants whose locations and capacities were efficient and reflected expected regional growth. Secondly, §208 encouraged regional planning authorities to develop best management plans and state and local enforcement mechanisms to control pollution from the nonpoint sources for which EPA was to develop best management practices under §304(f). Section 208, however, lacked the structural mechanisms necessary for long-term effectiveness. It provided no mechanism for EPA to approve the adequacy of nonpoint programs developed by regional authorities or states. It provided no mechanism for EPA or citizens to force an uncooperative state to develop nonpoint source programs. It provided no mechanism for EPA or citizens to enforce against violations of a nonpoint source plan. It provided no mechanism for requiring EPA to develop a nonpoint source plan if a state does not. Finally, it did not provide for long-term funding for the state nonpoint source control programs. On top of these structural deficiencies, the regional planning organizations envisioned by §208 often were not parts of the state water pollution control authorities that the CWA expected to implement the statutes' permitting and publicly owned treatment works (POTWs) construction grant programs. Many of the state authorities viewed the regional planning organizations as potential rivals for power and funding and sought to undercut them. The combination of structural shortcomings and political feuding sounded the death knell of the program.

The 1972 statute required state water quality standards to be achieved by 1977.⁴² Because the CWA included no enforceable program to control nonpoint source pollution, it is unsurprising that many segments of navigable waters had not achieved state-established water quality standards by that date or subsequently,⁴³ despite the fact that most industries and municipalities achieved the first required levels of their technology-based standards by that date or shortly thereafter.⁴⁴ In 1987, Congress responded to the failure to achieve water quality standards by adding §319 to the statute. The new section required states to sub-

mit reports identifying both segments of navigable waters unable to achieve water quality standards without controls on nonpoint sources and what types of nonpoint sources must be controlled to achieve water quality standards.⁴⁵ It also required states to establish programs imposing best management practices on nonpoint sources to achieve water quality standards in those segments.⁴⁶ If a state fails to submit the initial report, EPA must develop a report.⁴⁷ But if the state fails to submit the ultimate nonpoint source control program, the section provides the Agency with no authority to do so. The section does not provide either EPA or citizens with authority to force states to develop best management practices plans for nonpoint sources. While §319 goes beyond §308 in focusing on nonpoint sources, it too lacks the structural mechanism for long-term effectiveness.⁴⁸

Section 304(f) mentions nonpoint sources in its title, but not in its text. The text directed EPA to develop best management practices for several categories of activities: agricultural and silvicultural activities, including runoff from fields and forests; mining activities, including runoff from active and abandoned mines; construction activities, including runoff; deep well injection and subsurface disposal of wastes⁴⁹; salt water intrusion⁵⁰; and changes in water movement caused by dams, flow diversions, and other such structures.⁵¹ Although some of these categories of activities center on nonpoint sources, others involve what could be either point sources or nonpoint sources, and some involve only point sources. Deep well injection, subsurface waste disposal, and salt water intrusion all use wells, and wells are on the statutory list of point source examples. These activities, however, usually inject pollutants into groundwater, which is generally not considered to be navigable. Salt water intrusion results from withdrawal of freshwater in coastal areas and usually does not involve a discharge to surface water. Dams are usually

42. CWA §301(b)(1)(C).

43. According to EPA's 2004 report to Congress on water quality: about 44% of assessed stream miles, 64% of assessed lake acres, and 30% of assessed bay and estuarine square miles were not clean enough to support such uses as fishing and swimming. Leading causes for impairment included pathogens, mercury, nutrients, and organic enrichment/low dissolved oxygen. Top sources of impairment included atmospheric deposition, agriculture, hydrologic modifications and unknown or unspecified sources.

The report is available at http://water.epa.gov/lawsregs/guidance/cwa/309_cl_22_305b_2004report-factsheet2004305b.pdf.

44. Of the approximately 4,000 major industrial point sources, all except approximately 860 achieved their first level of pollution control by 1979, although only one-half of the 4,000 major POTWs did so. See Testimony of Marvin Durning, U.S. EPA Assistant Administrator for Enforcement, Before the Subcommittee on Environmental Pollution of the Committee on Environment and Public Works, May 24, 1979, Serial No. 96-H16.

45. CWA §319(a).

46. *Id.* §319(b).

47. *Id.* §319(d).

48. OLIVER A. HOUCK, *THE CLEAN WATER ACT TMDL PROGRAM: LAW, POLICY & IMPLEMENTATION* (2d ed. 2000.) For the latest round of total maximum daily load (TMDL) litigation, see *American Farm Bureau Fed'n v. U.S. EPA*, No. 13-4079, 2015 WL 4069224, 45 ELR 20129 (3d Cir. July 6, 2015).

49. Deep well injection and injection into subsurface areas are waste disposal methods regulated by the Safe Drinking Water Act (SDWA), 42 U.S.C. §§300f to 300j-26, ELR STAT. SDWA §§1401-1465, and the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§6901-6992k, ELR STAT. RCRA §§1001-11011. Since these methods dispose of wastes through a well, which is included as an example of a point source in the CWA's definition of the term, it is odd to categorize them as nonpoint sources. Despite some initial uncertainty, they are not regulated by the CWA because they discharge to groundwater, which is not navigable water under either the statute or common understanding of that term. See Jeffrey G. Miller, *Plain Meaning, Precedent, and Metaphysics: Interpreting the "Navigable Waters" Element of the Clean Water Act Offense*, 45 ELR 10548, 10573-78 (June 2015).

50. Excessive withdrawal of groundwater from aquifers near the seacoast allows salt water to replace the freshwater withdrawn, contaminating the remaining freshwater aquifer.

51. This Article examines dams, concluding they are point sources. Flow diversions are not subject to §402 regulation because they add nothing to navigable waters, but withdraw water from navigable waters for use elsewhere. When the used water is later returned to navigable water, it may be subject to §402 regulation.

point sources, as are the pipes, pumps, and ditches that accomplish water diversions.

This subsection does not define nonpoint sources, but reflects Congress' desire to have EPA focus on these particular pollution sources and develop solutions to them without creating serious new federal regulatory programs. Congress did not attempt in the subsection to draw distinctions between point and nonpoint sources. Indeed, the subsection overlaps to some extent with the regulatory programs Congress developed for point sources. The U.S. Supreme Court recognized in *South Florida Water Management District v. Miccosukee Tribe of Indians of Florida* that by addressing flow diversion facilities, §304(f) did not make them nonpoint sources, "if they *also* fall within the 'point source' definition."⁵² In conclusion, this subsection again suggests Congress did not or could not articulate a strict line between point sources and nonpoint sources, but recognized that water quality could not be protected without moving beyond the regulation of point sources.

The CWA does not disregard nonpoint source discharges. But while its regulation of point sources is robust, uniform, and effective, its regulation of nonpoint sources is hortatory, haphazard, and of dubious effectiveness. That difference in regulatory effectiveness does not mirror the relative importance of point and nonpoint sources to the quality of the nation's water: Nonpoint sources discharge more pollutants than point sources. The CWA's failure to deal effectively with nonpoint sources is its most significant failure and the primary reason we have not achieved water quality standards 40 years after enactment of the statute. EPA could ameliorate this difficulty by amending its definition of "point source" from time to time to include former categories of nonpoint sources for which technology-based treatment standards had become available.

3. Regulation of Stormwater and Storm Sewers

After the enactment of the CWA, EPA and states with approved §402 programs were faced with the enormous task of issuing permits to more than 60,000 point source permit applicants within a fairly short period.⁵³ They lacked

the time or resources to address stormwater and many minor point sources.⁵⁴ At the same time, EPA was making grants to cities and towns across the country to build secondary treatment plants,⁵⁵ often providing sewage treatment for the first time. The Agency's construction grant program did not want to spend its limited resources making grants to deal with municipal storm sewers until all cities had secondary treatment. Thus, EPA's two largest water programs and their state counterparts were united in not wanting to address municipal storm sewers or runoff at all, or at least not until sometime in the indefinite future. As a result, EPA promulgated a regulation exempting stormwater flows and sewers from the §402 permit program, an exemption soon reversed as beyond EPA's authority, discussed in greater detail in Section III, below.

In 1987, Congress entered the fray by amending the CWA to add in §402(p) a program for gradually permitting municipal and industrial storm sewers. The provision began with a curiously worded statement in §402(p)(1) that "[p]rior to October 1, 1994, the Administrator . . . shall not require a permit under this section for discharges composed entirely of stormwater." Under §301(a), it is the CWA, not the Administrator, that requires a permit for a "discharge of any pollutant." And what is a discharge "composed entirely of stormwater"? Does that include only dischargers of stormwater carrying pollutants? If so, §301(a) already forbids it, except for the agricultural stormwater flow exemption in §502(14). If not, then the provision is meaningless, for a discharge without a permit of pollutant-free water does not violate §301(a). The provision in §402(p)(2) exempts from the temporary exemption several categories of "stormwater discharges," including discharges "associated with industrial activity" and from "municipal separate stormwater sewer systems" serving specified populations. Interpreted together, §402(p)(1) and (2) appear to require industrial stormwater dischargers and municipal separate sewer dischargers to apply for and secure permits on schedules established in §402(p)(4) and to exempt them from the requirement of having a permit in the meantime. Those subsections also appear to exempt other discharges of stormwater with pollutants from the requirement to have a permit until October 1, 1994, but not thereafter. The Court in *Decker v. Northwest Environmental Defense Center*,⁵⁶ however, seems to read "[p]rior

52. 541 U.S. 95, 106, 34 ELR 20021 (2004). Courts earlier had rejected arguments by industry that designation of an activity for development of nonpoint source best management practices in §304(f) exempted the activity from regulation of a point source under §402. *United States v. Earth Sciences, Inc.*, 599 F.2d 368, 372, 23 ELR 21526 (10th Cir. 1979).

53. Congress enacted the CWA in October, 1972. It provided in §301(a) that the discharge of pollutants without a permit was illegal, but granted immunity until the end of 1974 to permit applicants for whom permits had not yet been issued. See §402(k). Thus, the statute indicates that Congress contemplated EPA would issue all permits by that date. EPA had not previously undertaken a task of this magnitude. The effluent guidelines that were to help permit writers devise effluent limitations for industrial sources were not yet promulgated; once they were, those guidelines were subjected to judicial review. Once permits were issued, many permit holders appealed their terms. EPA concentrated on issuing permits to applicants it classified as "major" point sources, that is, 15% of the applicants EPA considered to be discharging the vast majority of pollutants from point sources, based on the amounts of pollutant discharges reported in permit applications and on state evaluations of their adverse impact on local water quality. As of the end of 1975, EPA reported that of the 62,118 point sources requiring §402 permits, 9,259 were "major sources." U.S. EPA, *EPA Enforcement: A*

Progress Report December 1974 to December 1975 89-90 (1976). By the end of 1975, EPA and states with approved §402 permit programs had issued permits to all but 671 of the major sources and most of the remainder were either new additions to the list of major sources, or had §402 permits issued by states with approved programs, but which those states deemed not to be final until outstanding appeals were resolved. *Id.* EPA permit writers simply did not have the resources or time to address the far more numerous stormwater point sources, few if any of which discharged as many pollutants as major sources.

54. *Decker v. Northwest Env'tl. Def. Ctr.*, 133 S. Ct. 1326, 1331-21, 43 ELR 20062 (2013).

55. Secondary treatment was the preferred treatment for municipal sewage. It constituted primary treatment by settling and secondary treatment by biological methods, usually followed by chlorination or another treatment for pathogens. Such facilities normally removed 85% of settleable solids and biological oxygen demand.

56. 133 S. Ct. 1326, 43 ELR 20062 (2013).

to October 1, 1994” out of the provision, perhaps because EPA extended the exemption in the absence of a finding that the discharge must be controlled to meet water quality standards, although the decision did not mention this regulation.⁵⁷ This issue will be discussed further below.

4. Point Source/Nonpoint Source Distinction Left Unclear

The statutory definition of point source, the structure of the statute, and the legislative history of the statute, separately or collectively, do not draw a bright line between point sources and nonpoint sources. EPA has not helped to clarify the distinction by regulation and may have muddled the waters further. We are left with a few hypotheses from the above material. Industrial and municipal waste water discharges are typically by point sources, while agricultural discharges are typically by nonpoint sources. Stormwater runoff is presumed to be discharged by nonpoint sources, but may be discharged through point sources if it is collected and channeled by man. Pollution from point sources is susceptible to end-of-pipe technology for pollution control, while pollution from nonpoint source pollution is more appropriately dealt with by land use controls or management practices. This is a rationale for subjecting point source pollution to the permit programs with nationally uniform technology-based standards and nonpoint sources to site-specific best management practices with no permit program. A corollary is that as end-of-pipe technology becomes available for particular categories of nonpoint sources, it would be appropriate to include those categories within the definition of point source to be regulated by the statute's permit systems.

None of these distinctions is entirely satisfactory. Stormwater runoff can be collected and be treated with end-of-pipe technology. Indeed, CWA §402(p) subjects much municipal and industrial stormwater runoff to the §402 point source permit program to do just that.⁵⁸ Moreover, agricultural runoff can be point source pollution. CAFOs, for instance, are included in the statutory definition of point sources. While it may be assumed that there is a clear divide between point source discharges and nonpoint stormwater runoff, that clarity is deceiving. When stormwater is collected and channeled by human activities, it is discharged from point sources and may be regulated by §402 permits.⁵⁹ Finally, many nonpoint sources, such as people and animals, have nothing to do with runoff.

III. Administrative Interpretations of Point Source

EPA's national pollutant discharge elimination system (NPDES) regulations in Title 40 of the *Code of Federal Regulations* define point source almost identically with

the CWA's definition of the term. EPA's definition adds “landfill leachate collection system” at the end of the list of examples of point sources. And, in the exemption, it reverses “return flows from irrigated agriculture” and “agricultural stormwater discharges” and substitutes “runoff” for “discharges,” making the exception read “return flows from irrigated agriculture and agricultural stormwater runoff.” EPA probably made the last change because “point source” is an element of “discharge,” making the inclusion of “discharge” as part of a listed exception to “point source” circular. Why EPA added only “landfill leachate collection system” to the list of point source examples is a mystery, for there are many other conveyances that could be added to the list. Moreover, discharges from leachate collection systems would probably be from point sources without the addition.⁶⁰ EPA's definition ends with “(See 122.3),” a phrase Congress could not have included in its definition of “point source.” Section 122.3 is entitled “Exclusions” and excludes a number of large categories of discharges⁶¹ from the requirement to secure §402 permits, even though they otherwise would constitute additions of pollutants to navigable waters from point sources. This is a curious provision.

EPA's definition of point source is augmented by the last portion of its definition of “discharge of a pollutant” in §122.2, which includes “surface runoff which is collected or channeled by man.”⁶² EPA's implementing regulations at 40 C.F.R. §122.26 also require treatment of industrial storm sewers carrying stormwater that comes into contact with industrial wastes and lesser, phased requirements for municipal storm sewers.

Early in its implementation of the §402 permit program, EPA promulgated a rule exempting several categories of point sources from the requirement of securing permits:

60. If a leachate collection system was discharging directly to navigable water, it would in all probability be through a pipe, already defined as a point source. If it was pumped to a tank truck for disposal elsewhere, tank trucks are held to be point sources.

61. Discharges of (a) sewage from vessels; (b) dredged and fill material regulated under CWA §404; (c) sewage and other pollutants into POTWs by indirect dischargers; (d) material in compliance with instructions of On-Scene Coordinators under 40 C.F.R. pt. 300; (e) pollutants from nonpoint source agricultural and silvicultural activities except as otherwise provided; (f) return flows from irrigated agriculture; (g) waste from privately owned treatment works, and (h) material from water transfers. This list of exclusions is vastly oversimplified, for most of the exclusions are significantly qualified. The exclusion for agricultural and silvicultural activities, for example, includes storm water runoff from orchards, cultivated crops, pastures, range lands, and forest lands, but not discharges from concentrated animal feeding operations as defined in §122.23, discharges from concentrated aquatic animal production facilities as defined in §122.24, discharges to aquacultural projects as defined in §122.25, and discharges from silvicultural point sources as defined in §122.27.

62. It also includes “discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers or other conveyances leading into privately owned treatment works,” but not discharges by indirect dischargers into POTWs. It then defines an “indirect discharger” as a “nondomestic discharger” introducing “pollutants” to a “publicly owned treatment works.” In the preamble, EPA stated its intent to incorporate the “broadest possible definition of point source consistent with the legislative intent.” 55 Fed. Reg. 47990 (Nov. 16, 1990), *quoted in* *Washington Wilderness Coal. v. Hecla Mining Co.*, 870 F. Supp. 983, 988, 25 ELR 20661 (E.D. Wash. 1994).

57. 40 C.F.R. §122.6(a)(9)(i).

58. 33 U.S.C. §342(p).

59. 40 C.F.R. §122.2 (definition of “discharge of a pollutant”).

all silvicultural point sources; all confined animal feeding operations below a certain size; all irrigation return flows areas less than 3,000 contiguous acres or 3,000 noncontiguous acres that use the same drainage system; all nonfeedlot, nonirrigated agricultural point sources; and separate storm sewers containing only storm water uncontaminated by any industrial or commercial activity.⁶³

Environmentalists challenged EPA's regulation as beyond the Agency's statutory authority. The U.S. Court of Appeals for the District of Columbia (D.C.) Circuit agreed, holding in *Natural Resources Defense Council, Inc. v. Costle* that EPA had no authority to exempt point sources discharging pollutants to navigable waters from the permit program.⁶⁴ The court did suggest, however, that the Agency had authority to define point sources, and subsequent courts have agreed.⁶⁵ EPA followed the court's suggestion by promulgating rules defining storm-water flow point sources,⁶⁶ CAFO point sources,⁶⁷ silviculture point sources,⁶⁸ and aquacultural point sources.⁶⁹ The new definition did not include many of the discharges exempted by the overturned rule and therefore remain excluded from the §402 program. Courts have held, however, that the rules are valid exercises of EPA's definitional authority rather than invalid attempts to exempt point source discharges from the permit program.⁷⁰ Thus, *Costle* was a pyrrhic victory for the environmental plaintiffs.

EPA made no attempt in its permit program regulations to define nonpoint source. The Agency has made some attempt to do so elsewhere, however. In its web page on nonpoint source, EPA states that "nonpoint source pollution generally results from land runoff, precipitation, drainage, seepage or hydrologic modification. The term 'nonpoint source' is defined to mean any source of water pollution that does not meet the legal definition of 'point source' in section 502(14) of the Clean Water Act."⁷¹ The Agency continues:

Nonpoint source (NPS) pollution, unlike pollution from industrial and sewage treatment plants, comes from many diffuse sources. NPS pollution is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and

human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters and ground waters.⁷²

IV. Judicial Interpretations of Point Source

A. Preliminary Matters

It should be emphasized at the outset that the CWA does not authorize EPA to regulate a point source, but only to regulate the discharge of any pollutant, of which "point source" is one of several elements. The Agency made the mistake of promulgating regulations requiring CAFO point sources to apply for CWA §402 permits regardless of whether the CAFOs discharged pollutants. In *National Pork Producers Council v. U.S. EPA*, the U.S. Court of Appeals for the Fifth Circuit struck this regulation as beyond the Agency's authority.⁷³ Moreover, not all point sources require §402 permits, even if they add pollutants to navigable water. For example, industries that discharge pollutants to POTWs for treatment before discharge to navigable waters are held to be point sources,⁷⁴ but EPA's regulations define them as "indirect sources" and have exempted them from the §402 permit program, subject instead to regulation under the CWA §307(b) pretreatment program.⁷⁵ Courts are also in broad agreement that EPA has substantial authority to define point sources.⁷⁶ Perhaps, there is not as much need for a broad interpretation for point sources as for the other elements of the offense, however, because if the other ele-

63. *Natural Res. Def. Council, Inc. v. Costle*, 568 F.2d 1369, 1372-73, 8 ELR 20028 (D.C. Cir. 1977). The regulation is found at 40 C.F.R. §125.4 (1975).

64. 568 F.2d 1369, 8 ELR 20028 (D.C. Cir. 1977).

65. *Id.* at 1372. Subsequent courts agreeing include *United States v. Earth Sciences, Inc.*, 599 F.2d 368, 372, 23 ELR 21526 (10th Cir. 1979); *Wild Fish Conservancy v. Quilcene Nat'l Fish Hatchery*, 2009 WL 3380655 (W.D. Wash. 2009); and *U.S. Public Interest Research Grp. v. Atlantic Salmon of Maine, Inc., LLC*, 215 F. Supp. 2d 239, 249, 32 ELR 20535 (D. Me. 2002).

66. 40 C.F.R. §122.26(b)(14).

67. *Id.* §122.23(c).

68. *Id.* §122.27.

69. *Id.* §122.24 & .25.

70. *Earth Sciences, Inc.*, 599 F.2d 368; *Wild Fish Conservancy*, 2009 WL 3380655.

71. See EPA's web page, <http://water.epa.gov/polwaste/nps/whatis.cfm>.

72. See EPA's web page, <http://water.epa.gov/polwaste/nps/index.cfm>. Also useful are several EPA guidance documents quoted or cited in *Cordiano v. Metacoon Gun Club, Inc.*, 575 F.3d 199, 220-21 (2d Cir. 2009).

73. 635 F.3d 738, 749-53, 41 ELR 20115 (5th Cir. 2011). See also *Service Oil Inc. v. EPA*, 590 F.3d 545, 550, 40 ELR 20002 (8th Cir. 2009); *Waterkeeper Alliance v. U.S. EPA*, 399 F.3d 486, 504, 35 ELR 20049 (2d Cir. 2005).

74. *RSR Corp. v. Browner*, 924 F. Supp. 504, 511, 26 ELR 21353 (S.D.N.Y. 1996), *aff'd*, No. 96-6186, 1997 WL 134413 (2d Cir. Mar. 26, 1997); *affirmance vacated without explanation*, No. 96-6186 (2d Cir. Apr. 17, 1997) (defendant subject to EPA's information demand authority over point sources under CWA §308, 33 U.S.C. §1318, even though it was an indirect discharger to a POTW). See also *U.S. EPA v. Green Forest, Ark.*, 921 F.2d 1394, 1398, 21 ELR 20610 (8th Cir. 1990); *United States v. Velsicol Chem. Corp.*, 438 F. Supp. 945, 946-47 (W.D. Tenn. 1976).

75. Assuming, that is, the discharge is into a municipal system providing treatment rather than into a storm sewer. Title 40 C.F.R. §122.2 defines "discharge of a pollutant" to exclude addition of pollutants by an "indirect discharger," which it in turn defines as a nondomestic discharger introducing pollutants to a "publicly owned treatment works." See also 40 C.F.R. §122.3(c), which excludes indirect dischargers from the requirement to secure a §402 permit. The reason EPA excludes indirect dischargers from the permit program is that CWA §307(b) requires indirect dischargers to pretreat their wastes before discharging them to POTWs to prevent them from interfering with the POTWs or to allow the indirect sources' wastes to pass through the POTW untreated. The section also requires indirect sources to treat their wastes meeting technology-based standards to remove toxic pollutants. Finally, CWA §402(b)(8) and (9) contemplate that POTWs will regulate indirect discharges by permits or other means to require compliance with both the interference and pass-through prohibitions and the toxic pollutant pretreatment standards. See also EPA's pretreatment program regulations at 40 C.F.R. pt. 403.

76. This was first recognized by *Natural Res. Def. Council, Inc. v. Costle*, 568 F.2d 1369, 1377, 8 ELR 20028 (D.C. Cir. 1978), which held that EPA could not exempt point sources adding pollutants to navigable water from the §402 permit program, but had broad discretion to define point source. See also *United States v. Earth Sciences, Inc.*, 599 F.2d 368, 372, 23 ELR 21526 (10th Cir. 1979).

ments are not met, then the discharge escapes CWA jurisdiction altogether, but if the point source element is not met, then the discharge may still be under CWA jurisdiction as a nonpoint source.

Finally, a number of courts have held that conveyances are point sources only if they are the origins of the pollutants, that is, they convey the pollutants from their point of origin. This idea was first espoused by EPA in *National Wildlife Federation v. Gorsuch*, where the Agency argued that there is an addition of a pollutant from a point source “only if the point source itself physically introduces a pollutant into water from the outside world.”⁷⁷ The D.C. Circuit gave deference to EPA’s interpretation. Although the interpretation in that case concerned the meaning of “addition,” it could just as well have been an interpretation of “point source” as the first conveyance to introduce the pollutant into water or at least into navigable water. The Supreme Court decisively rejected this notion in *Miccosukee Tribe*, in which it held that “a point source need not be the original source of the pollutant: it need only convey the pollutant to navigable water.”⁷⁸ Since *Miccosukee Tribe*, courts have rejected the notion, as many did earlier.

B. Held to Be Point Sources

Courts have held the following to be point sources: airplanes dropping bombs or spraying pesticides⁷⁹; aquacultural facilities⁸⁰; barges⁸¹; breaks in berms⁸²; bulldozers, cranes, dump trucks, loaders, plows, tractors, and other construction and earth-moving equipment⁸³; canals,

pumps, and levees⁸⁴; collection pond and tank cracks, leaks, bypasses, and overflows⁸⁵; CAFOs⁸⁶; construction sites⁸⁷; dams⁸⁸; ditches⁸⁹; entire facilities or industrial plants⁹⁰; facilities discharging to POTWs⁹¹; fields overflowing with applied manure⁹²; human beings⁹³; manure spreaders⁹⁴; mine adits, shafts, pits, and tunnels⁹⁵; mushroom-growing facilities⁹⁶; overflowing collection and tailings ponds and lagoons⁹⁷; piles of debris, material, and waste rock⁹⁸;

77. 693 F.2d 156, 175, 13 ELR 20015 (D.C. Cir. 1982), *North Carolina Shellfish Growers Ass’n v. Holly Ridge Assocs., LLC*, 278 F. Supp. 2d 654, 680 (E.D.N.C. 2003) (although CWA violations cannot result from purely passive developments on a defendant’s property, the active moving of land is sufficient to trigger liability under the Act). *Contra* *Sierra Club v. El Paso Gold Mines, Inc.*, 421 F.3d 1133, 1145, 35 ELR 20175 (10th Cir. 2005) (“This is a case where if you own the leaky ‘faucet,’ you are responsible for its ‘drips.’”); *Dague v. City of Burlington*, 935 F.2d 1343, 1354-55, 21 ELR 21133 (2d Cir. 1991).
78. *South Fla. Water Mgmt. Dist. v. Miccosukee Tribe of Indians of Fla.*, 541 U.S. 95, 105, 34 ELR 20021 (2004).
79. *Romero-Barcelo v. Brown*, 478 F. Supp. 646, 664 (D.P.R. 1979), *rev’d on other grounds sub nom.* *Weinberger v. Romero-Barcelo*, 643 F.2d 835, 11 ELR 20391 (1st Cir. 1981), *rev’d on other grounds*, 456 U.S. 305, 12 ELR 20538 (1982); *Peconic Baykeeper, Inc. v. Suffolk Cnty.*, 600 F.3d 180, 188-89, 40 ELR 20098 (2d Cir. 2010); *League of Wilderness Defenders v. Forsgren*, 309 F.3d 1181, 1183-85 (9th Cir. 2002).
80. U.S. Public Interest Research Grp. v. Atlantic Salmon of Maine, LLC, 215 F. Supp. 2d 239, 32 ELR 20535 (D. Me. 2002).
81. *United States v. West Indies Transportation, Inc.*, 127 F.3d 299, 308-09, 28 ELR 20202 (3d Cir. 1997).
82. *Reynolds v. Rick’s Mushroom Serv., Inc.*, 246 F. Supp. 2d 449 (E.D. Pa. 2003); *O’Leary v. Moyer’s Landfill, Inc.*, 523 F. Supp. 642, 655, 12 ELR 20239 (E.D. Pa. 1981); *United States v. Oxford Royal Mushroom Prods., Inc.*, 487 F. Supp. 852, 954, 10 ELR 20549 (E.D. Pa. 1980).
83. *Parker v. Scrap Metal Processors, Inc.*, 386 F.3d 993, 1009, 34 ELR 20104 (11th Cir. 2004); *Borden Ranch P’ship v. U.S. Army Corps of Eng’rs*, 261 F.3d 810, 814, 32 ELR 20011 (9th Cir. 2001), *aff’d*, 537 U.S. 99 (2002); *United States v. Pozsgai*, 999 F.2d 719, 726 n.6, 23 ELR 21012 (3d Cir. 1993); *Avoyelles Sportsmen’s League, Inc. v. Marsh*, 715 F.2d 897, 922, 13 ELR 20942 (5th Cir. 1983); *United States v. Lambert*, 915 F. Supp. 797, 26 ELR 21116 (S.D. W. Va. 1996); *United States v. Sinclair Oil*, 767 F. Supp. 200, 21 ELR 21323 (D. Mont. 1990); *United States v. Weisman*, 489 F. Supp. 1331, 1336-37, 10 ELR 20698 (M.D. Fla. 1980); *United States v. Holland*, 373 F. Supp. 665, 668, 4 ELR 20710 (M.D. Fla. 1074).

84. *South Fla. Water Mgmt. Dist. v. Miccosukee Tribe of Indians of Fla.*, 541 U.S. 95, 34 ELR 20021 (2004); *Friends of the Everglades v. South Fla. Water Mgmt. Dist.*, 570 F.3d 1210, 39 ELR 20118 (11th Cir. 2009).
85. *Moyer’s Landfill* 523 F. Supp. at 655.
86. *National Pork Producers’ Council v. U.S. EPA*, 635 F.3d 738, 41 ELR 20115 (5th Cir. 2010); *Concerned Area Residents for Env’t v. Southview Farm*, 34 F.3d 114, 123, 24 ELR 21480 (3d Cir. 1994); *Community Ass’n for Restoration of Env’t v. Henry Bosma Dairy, Inc.*, 305 F.3d 943, 955 (9th Cir. 2002); *Carr v. Alta Verde Industries, Inc.*, 931 F.2d 1055, 21 ELR 21005 (5th Cir. 1991); *Assateague Coastkeeper v. Hudson Farm*, 727 F. Supp. 2d 433, 439-40, 40 ELR 20208 (D. Md. 2010).
87. *North Carolina Shellfish Growers Ass’n v. Holly Ridge Assocs.*, 278 F. Supp. 2d 654, 679 (E.D.N.C. 2003); *Molokai Chamber of Commerce v. Kukui*, 891 F. Supp. 1389, 1401, 26 ELR 20303 (D. Haw. 1995).
88. *S.D. Warren Co. v. Maine Bd. of Envtl. Prot.*, 547 U.S. 370, 36 ELR 20089 (2006); *Oregon Natural Desert Ass’n v. U.S. Forest Serv.*, 550 F.3d 778, 787 n.4, 39 ELR 20297 (9th Cir. 2008); *Greenfield Mills, Inc. v. Macklin*, 361 F.3d 934, 34 ELR 20022 (7th Cir. 2004); *Committee to Save Mokelumne River v. East Bay Mun. Util. Dist.*, 13 F.3d 305, 24 ELR 20225 (9th Cir. 1993); *National Wildlife Fed’n v. Gorsuch*, 693 F.2d 156, 165, 13 ELR 20015 (D.C. Cir. 1982); *North Carolina Shellfish Growers*, 278 F. Supp. 2d at 679; *South Carolina Wildlife Fed’n v. Alexander*, 457 F. Supp. 118, 126, 8 ELR 20757 (D.S.C. 1978); *Del-Aware Unlimited v. Commissioner, Dep’t of Envtl. Res.*, 96 Pa. Cmwlth. 361, 381-82 (Pa. 1986).
89. *Henry Bosma Dairy*, 305 F.3d at 955; *National Ass’n of Home Builders v. U.S. Army Corps of Eng’rs*, 699 F. Supp. 2d 209, 215-16, 40 ELR 20104 (D.D.C. 2010), *vacated on other grounds*, 663 F.3d 470 (D.C. Cir. 2011); *North Carolina Shellfish Growers*, 278 F. Supp. 2d at 679; *Environmental Prot. Info. Ctr. v. Pacific Lumber Co.*, 469 F. Supp. 2d 803, 821, 37 ELR 20012 (N.D. Cal. 2007).
90. *United States v. Earth Sciences, Inc.*, 599 F.2d 368, 23 ELR 21526 (10th Cir. 1979); *North Carolina Shellfish Growers*, 278 F. Supp. 2d 654; *Reynolds v. Rick’s Mushroom Serv., Inc.*, 246 F. Supp. 2d 449 (E.D. Pa. 2003); *Williams Pipeline Co. v. Bayer Corp.*, 964 F. Supp. 1300, 1318-20 (S.D. Iowa 1997).
91. *RSR Corp. v. Browner*, 924 F. Supp. 504, 511, 26 ELR 21353 (S.D.N.Y. 1996).
92. *Concerned Area Residents for Env’t v. Southview Farm*, 34 F.3d 114, 118-19, 24 ELR 21480 (3d Cir. 1994) (3d Cir. 2004); *Henry Bosma Dairy*, 305 F.3d at 955; *Rick’s Mushroom Serv.*, 246 F. Supp. 2d at 456-57; *United States v. Oxford Royal Mushroom Prods., Inc.*, 487 F. Supp. 852, 854, 10 ELR 20549 (E.D. Pa. 1980).
93. *United States v. Villegas*, 784 F. Supp. 6, 8-11, 22 ELR 21027 (E.D.N.Y. 1991), *rev’d sub nom.* *United States v. Plaza Health Labs., Inc.*, 3 F.3d 643, 23 ELR 21526 (2d Cir. 1991).
94. *League of Wilderness Defenders v. Forsgren*, 309 F.3d at 1184; *Concerned Area Residents*, 34 F.3d 114 at 24; *Henry Bosma Dairy*, 305 F.3d at 955.
95. *Sierra Club v. El Paso Gold Mines, Inc.*, 421 F.3d 1133, 1441, 35 ELR 20175 (10th Cir. 2005); *West Virginia Highlands Conservancy v. Huffman*, 588 F. Supp. 2d 678, 39 ELR 20201 (S.D. W. Va. 2009), *aff’d*, 625 F.3d 159 (4th Cir. 2010); *Beartooth Alliance v. Crown Butte Mines*, 904 F. Supp. 1168, 1173-74, 26 ELR 20639 (D. Mont. 1995).
96. *Reynolds v. Rick’s Mushroom Serv., Inc.*, 246 F. Supp. 2d 449 (E.D. Pa. 2003); *Oxford Royal Mushroom Prods., Inc.*, 487 F. Supp. 852, 10 ELR 20549 (E.D. Pa. 1980).
97. *Washington Wilderness Coal. v. Hecla Mining Co.*, 870 F. Supp. 983, 988, 25 ELR 20661 (E.D. Wash. 1994); *Fishel v. Westinghouse Elec. Corp.*, 640 F. Supp. 442, 446, 16 ELR 20634 (M.D. Pa. 1986); *O’Leary v. Moyer’s Landfill, Inc.*, 523 F. Supp. 642, 655, 12 ELR 20239 (E.D. Pa. 1981).
98. *Parker v. Scrap Metals Processors, Inc.*, 386 F.3d 993, 1009, 34 ELR 20104 (11th Cir. 2004); *Bravos v. EPA*, 324 F.3d 1166 (10th Cir. 2003); *Trustees for Alaska v. EPA*, 749 F.2d 549, 558, 15 ELR 20146 (9th Cir. 1984); *Sierra Club v. Abston Constr. Co., Inc.*, 620 F.2d 41, 45, 10 ELR 20552 (5th Cir. 1980); *United States v. Earth Sciences, Inc.*, 599 F.2d 368, 9 ELR 20542 (10th Cir. 1979); *Washington Wilderness Coal.*, 870 F. Supp. at 988.

pipes and hoses⁹⁹; railway culverts¹⁰⁰; rifle ranges¹⁰¹; septic systems¹⁰²; sluice boxes¹⁰³; spray apparatuses attached to trucks and helicopters¹⁰⁴; sump overflows¹⁰⁵; systems for circulating, channeling, or draining stormwater runoff¹⁰⁶; toilets connected to storm sewers¹⁰⁷; tank trucks¹⁰⁸; trucks with attached spreaders or sprayers¹⁰⁹; and turbines.¹¹⁰

C. Held Not to Be Point Sources

Courts have held the following not to be point sources: agricultural runoff from farms and CAFO fields¹¹¹; aquacultural facilities¹¹²; buildings storing trash¹¹³; cattle¹¹⁴; dams¹¹⁵; human beings¹¹⁶; piles of coal and rock¹¹⁷; rifle

ranges¹¹⁸; seeps from a swamp into groundwater¹¹⁹; silvicultural runoff¹²⁰; toll booth stations on bridges¹²¹; and waste pits with covers to minimize precipitation intrusion.¹²²

D. Easy Decisions, Difficult Decisions

The definition of “point source” as a “discernible, confined and discrete conveyance” is a straightforward concept that is easy to apply in most factual situations. Its list of examples is long and inclusive, creating a large set of per se point sources. That set of point sources and conveyances analogous to them cover most obvious conveyances of pollutants to navigable waters. Not surprisingly, more than one-half of the courts interpreting point source reached their decisions easily, based on two or fewer interpretive devices or two or fewer precedents.¹²³ Few decisions conduct an in-depth interpretation of point source because “any identifiable conveyance” will suffice.¹²⁴ That is not the end of the inquiry, however, since even clear point sources may be subject to a statutory or regulatory exemption, such as the exemption for “agricultural stormwater discharges.”¹²⁵ The difficult cases are signaled when judicial decisions hold similar discharges to be both point sources and nonpoint sources, and when decisions use five or more interpretive devices or cite five or more precedents to decide.¹²⁶

The difficult decisions fall into two general categories. One category involves whether human activity sufficiently collects and channels pollutants in stormwater runoff for the conveyance to be considered a point source; for example, runoff from rock and coal piles.¹²⁷ The statutory history describes nonpoint sources solely in terms of runoff. Therefore, under the legislative history, all conveyances of pollutants would be point sources in the absence of stormwater runoff. But while a large number of decisions fall into this first category, examining whether a conveyance of runoff is a point source, most decisions fall into the second category, examining whether a conveyance is a point source in cases where there is no runoff. In the latter cases,

99. *United States v. Lippold*, 2007 WL 3232483 at **2-3 (C.D. Ill. 2007) (uncontested).
100. *Dague v. City of Burlington*, 935 F.2d 1343, 1355, 21 ELR 21133 (2d Cir. 1991).
101. *Stone v. Naperville Park Dist.*, 38 F. Supp. 2d 651, 655 (N.D. Ill. 1999); *Long Island Soundkeeper Fund, Inc. v. New York Athletic Club*, 1996 WL 131863 (S.D.N.Y. 1996).
102. *United States v. Agosto-Vega*, 617 F.3d 541, 40 ELR 20222 (1st Cir. 2010); *United States v. Lucas*, 516 F.3d 316, 332, 38 ELR 20041 (5th Cir. 2008); *Friends of the Sakonnet v. Dutra*, 738 F. Supp. 623, 629-30, 21 ELR 20055 (D.R.I. 1990).
103. *Trustees*, 749 F.2d at 558.
104. *Peconic Baykeeper, Inc. v. Suffolk Cnty.*, 600 F.3d 180, 188-89, 40 ELR 20098 (2d Cir. 2010); *National Cotton Council of Am. v. U.S. EPA*, 553 F.3d 927, 39 ELR 20006 (6th Cir. 2009); *League of Wilderness Defenders/Blue Mountain Biodiversity Project v. Forsgren*, 309 F.3d 1181 (9th Cir. 2002).
105. *United States v. Earth Sciences*, 599 F.2d 368, 374, 23 ELR 21526 (10th Cir. 1979); *Washington Wilderness Coal. v. Hecla Mining Co.*, 870 F. Supp. 983, 987-89, 25 ELR 20661 (E.D. Wash. 1994).
106. *Northwest Env'tl. Def. Ctr. v. Brown*, 640 F.3d 1063, 1069-73, 41 ELR 20178 (9th Cir. 2011); *Greater Yellowstone Coal. v. Lewis*, 638 F.3d 1143, 41 ELR 20059 (9th Cir. 2010); *Carr v. Alta Verde Indust., Inc.*, 931 F.2d 1055, 21 ELR 21005 (5th Cir. 1991); *Sierra Club v. Abston Constr. Co., Inc.*, 620 F.2d 41, 10 ELR 20552 (5th Cir. 1980); *Sierra Club v. El Paso Gold Mines, Inc.*, 421 F.3d 1133, 35 ELR 20175 (10th Cir. 2005); *Environmental Prot. Info. Ctr. v. Pacific Lumber Co.*, 469 F. Supp. 2d 803, 37 ELR 20012 (N.D. Cal. 2007); *North Carolina Shellfish Growers Ass'n v. Holly Ridge Assocs.*, 278 F. Supp. 2d 654 (E.D.N.C. 2003).
107. *United States v. Ortiz*, 427 F.3d 1278, 35 ELR 20220 (10th Cir. 2005).
108. *United States v. Agosto-Vega*, 617 F.3d 541, 40 ELR 20222 (1st Cir. 2010) (uncontested); *Concerned Area Residents for Env't v. Southview Farm*, 34 F.3d 114, 24 ELR 21480 (3d Cir. 1994); *United States v. Lippold*, 2007 WL 3232483 at **2-3 (C.D. Ill. 2007) (uncontested).
109. *League of Wilderness Defenders v. Forsgren*, 309 F.3d 1181, 1184 (9th Cir. 2002).
110. *S.D. Warren Co. v. Maine Bd. of Env'tl. Prot.*, 547 U.S. 370, 36 ELR 20089 (2006); *South Carolina Wildlife Fed'n v. Alexander*, 457 F. Supp. 118, 126-27, 8 ELR 20757 (D.S.C. 1978).
111. *National Pork Producers' Council v. U.S. EPA*, 635 F.3d 738, 41 ELR 20115 (5th Cir. 2011).
112. *Association to Protect Hammersly, Eld, & Totten Inlets v. Taylor Res., Inc.*, 299 F.3d 1007, 1018-19 (9th Cir. 2002); *Wild Fish Conservancy v. Quilcene Natural Fish Hatchery*, 2009 WL 3380655 (W.D. Wash. 2009).
113. *Hudson Riverkeeper Fund, Inc. v. Harbor at Hastings Assocs.*, 917 F. Supp. 251, 257, 26 ELR 21120 (S.D.N.Y. 1996).
114. *Oregon Natural Desert Ass'n v. U.S. Forest Serv.*, 550 F.3d 788, 39 ELR 20297 (9th Cir. 2008).
115. *Froebel v. Meyer*, 217 F.3d 928, 30 ELR 20746 (7th Cir. 2000); *National Wildlife Fed'n v. Gorsuch*, 693 F.2d 156, 13 ELR 20015 (D.C. Cir. 1982) (dams may be point sources, but they do not add pollutants to downstream flows).
116. *United States v. Plaza Health Labs., Inc.*, 3 F.3d 643, 646, 23 ELR 21526 (2d Cir. 1993).
117. *Appalachian Power Co. v. Train*, 545 F.2d 1351, 6 ELR 20732 (4th Cir. 1976).

118. *Cordiano v. Metacon Gun Club, Inc.*, 575 F.3d 199 (2d Cir. 2009) (insufficient proof to support allegations).
119. *Williams Pipeline Co., v. Bayer Corp.*, 964 F. Supp. 1300, 1326 (S.D. Iowa 1997).
120. *Decker v. Northwest Env'tl. Def. Ctr.*, 133 U.S. 1326, 43 ELR 20062 (2013).
121. *U.S. EPA ex rel. McKeown v. Port Auth. of N.Y. & N.J.*, 162 F. Supp. 2d 173, 188-89 (S.D.N.Y. 2001), *aff'd sub nom. McKeown v. Delaware Bridge Auth.*, 23 F. App'x 81 (2d Cir. 2001).
122. *Greater Yellowstone Coal. v. Lewis*, 638 F.3d 1143, 1153, 41 ELR 20059 (9th Cir. 2010) (some discharges were point sources and others nonpoint sources).
123. *See infra* tbl. B.
124. *Peconic Baykeeper, Inc. v. Suffolk Cnty.*, 600 F.3d 180, 188, 40 ELR 20098 (2d Cir. 2010) (*citing* *Cordiano v. Metacon Gun Club, Inc.*, 575 F.3d 199, 219 (2d Cir. 2009)). Only about 10% of the decisions interpreting point source use five or more canons of statutory construction and only about 20% use five or more precedents. *See infra* tbl. B.
125. CWA §502(14).
126. *See infra* tbl. B.
127. *See, e.g., Sierra Club v. Abston Constr. Co., Inc.*, 620 F.2d 41, 44-47, 10 ELR 20552 (5th Cir. 1980) (may be point sources). *But see* *Appalachian Power v. Train*, 545 F.2d 1351, 1372-74, 6 ELR 20732 (4th Cir. 1976) (may not be point sources).

statutory history gives us no guidance beyond its general admonition to interpret the statute broadly.

Most of the earliest opinions at both the federal district court and circuit courts of appeal levels interpreting point source were decided using a plain meaning analysis. As soon as there were reported decisions on the issue, however, precedent became the most commonly used interpretive device. The third most commonly used interpretive device was to interpret statutes broadly to effectuate the statutory purpose. In all, 16 canons were used interpreting point source.¹²⁸ More than one-half of the decisions used only one or two interpretive devices, usually precedent and plain meaning or sometimes broad interpretation. These were easy decisions. The U.S. Court of Appeals for the Tenth Circuit decision in *United States v. Earth Sciences, Inc.* claimed a particularly broad reach for the term to embrace “the broadest possible definition of any identifiable conveyance from which pollutants might enter the waters of the United States,”¹²⁹ which many decisions since have quoted.¹³⁰ And another court noted that EPA, in its promulgation of the regulations for stormwater flow, “has stated its intent ‘to embrace the broadest possible definition of point source consistent with the legislative intent of the CWA.’”¹³¹ Of course, there are bounds to broad interpretation, especially when Congress itself has articulated them, as it did in the CWA by providing for nonpoint sources.¹³²

The Article will analyze in turn the first category of difficult decisions, those involving precipitation runoff; the second category of point source decisions, those having nothing to do with runoff; and then suggest regulatory definitions of point source and nonpoint source.

E. Stormwater Runoff Decisions

I. Runoff

Stormwater runoff is better described as precipitation runoff because it consists of the natural flow of both rain after it hits the ground and the flow of snow, sleet, or ice after they melt on the ground. Senator Muskie in his above-quoted statement said that agricultural runoff “is a nonpoint source.” Courts have also called runoff “nonpoint pollution.”¹³³ Both statements are inaccurate in terms of statutory language and can confuse the interpretive anal-

ysis. For runoff to be a “nonpoint source,” stormwater would have to be a non-conveyance or an indiscernible, unconfined, and indiscrete conveyance. For runoff to be “a nonpoint pollutant,” stormwater would have to be a “pollutant.” The statutory definitions of point source and pollutant, however, do not include stormwater itself; rather, it is something that may be conveyed by a point source and a medium in which a pollutant may be suspended and carried. Some courts have told us that roads are the prototypical nonpoint sources:

The most common example of nonpoint source pollution is the residue left on roadways by automobiles. Small amounts of rubber are worn off of the tires of millions of cars and deposited as a thin film on highways: minute particles of copper dust from brake linings are spread across roads and parking lots each time a driver applies the brakes; drips and drabs of oil and gas ubiquitously stain driveways and streets. When it rains, the rubber particles and copper dust and gas and oil wash off of the street and are carried along by runoff in a polluted soup, winding up in creeks, rivers, bays, and the ocean.¹³⁴

Notice the U.S. Court of Appeals for the Ninth Circuit is discussing nonpoint source pollution. The precipitation here is natural. The road is not natural, nor are the pollutants. Is the road a conveyance? Vehicles traveling the road are conveyances of passengers and goods. Does the road in turn convey the vehicles? Not in the ordinary meaning of convey or conveyance. Does the road convey the precipitation or the pollutants? Most roads are crowned so that precipitation runs off to the side. Roads are defined, confined, and discrete as they run from one place to another, but are they defined, confined, and discrete as they convey stormwater runoff to their sides? Again, not in the ordinary meaning of convey or conveyance. Under this analysis, runoff from roads is not conveyed by the roads and the roads are nonpoint sources.

But that is not the end of the analysis. Once runoff has flowed off the roads, it often flows into roadside ditches, designed to carry stormwater runoff to the nearest surface water, often discharged from the ditches or culverts, both of which are point sources.¹³⁵ In the absence of ditches, roads might flood and some of the runoff would flow to surface waters, while some of it would percolate into the ground and some of it would evaporate. Courts and EPA are fond of citing roads as typical nonpoint sources,¹³⁶ but their analyses are not complete. Their reasoning would keep roads

128. See *infra* tbl. B.

129. 599 F.2d 368, 373, 23 ELR 21526 (10th Cir. 1979).

130. *Cordiano v. Metacon Gun Club, Inc.*, 575 F.3d 199, 219 (2d Cir. 2009); *Dague v. City of Burlington*, 935 F.2d 1343, 1354, 21 ELR 21133 (2d Cir. 1991); *United States v. West Indies Transp., Inc.*, 127 F.3d 299, 309, 28 ELR 20202 (3d Cir. 1997).

131. *Beartooth Alliance v. Crown Butte Mines*, 904 F. Supp. 1168, 1173, 26 ELR 20639 (D. Mont. 1995) (*quoting* 55 Fed. Reg. 47990, 47997 (Nov. 16, 1990)). See also *Washington Wilderness Coal. v. Hecla Mining Co.*, 870 F. Supp. 983, 988, 25 ELR 20661 (E.D. Wash. 1994).

132. The definition of point source “cannot be interpreted so broadly as to read the point source requirement out of the statute,” *Metacon Gun Club*, 575 F.3d at 219. For a discussion of how Congress realized that some of the goals in the CWA were unattainable and unrealistic, see *National Wildlife Fed’n v. Gorsuch*, 693 F.2d 156, 179-82, 13 ELR 20015 (D.C. Cir. 1982).

133. *Northwest Envtl. Def. Ctr. v. Brown*, 640 F.3d 1063, 1076, 41 ELR 20178 (9th Cir. 2011); *Gorsuch*, 693 F.2d at 177.

134. *League of Wilderness Defenders/Blue Mountains Biodiversity Project v. Forsgren*, 309 F.3d 1181, 1184 (9th Cir. 2002); see also *United States v. Earth Sciences, Inc.*, 599 F.2d 368, 371, 23 ELR 21526 (10th Cir. 1979); *U.S. EPA ex rel. McKeown v. Port Auth. of N.Y. & N.J.*, 162 F. Supp. 2d 173, 189 (S.D.N.Y. 2001).

135. “Ditches” are included in the list of examples of “point sources” in CWA §502(14). Culverts have been held to be point sources, *Dague*, 935 F.2d 1354, not surprisingly since culverts are pipes that are the first example of point sources listed in the statutory definition of point source, CWA §502(14).

136. *Earth Sciences*, 599 F.2d at 371; *Port Auth. of N.Y. & N.J.*, 162 F. Supp. 2d at 189; *Hecla*, 870 F. Supp. at 988 (E.D. Wash. 1994). See also EPA’s web page at <http://water.epa.gov/polwaste/nps/roadshwys>.

out of the CWA §402 program, but not roadside drainage ditches and culverts. After all, municipal storm sewers carry stormwater runoff from street gutters to navigable waters and municipal storm sewers are point sources that require permits under §402(p). EPA has exempted such flows from the requirement to secure §402 permits, however, as long as they are composed “entirely of stormwater.”¹³⁷

Most courts interpret point source in terms of the general distinctions between point sources and nonpoint sources found in the legislative history and hinted at by the statute itself. At a very general level, this is the distinction between stormwater runoff that is not collected or channeled by human activity, considered to be from a nonpoint source¹³⁸; and stormwater runoff that is collected or channeled by human activity, considered to be from a point source.¹³⁹ While this is a useful distinction, it is sometimes not dispositive because courts may believe that conveyances of stormwater flow created or channeled by minor human activity or by human activity not aimed at controlling water is insufficient to constitute a point source.¹⁴⁰ Moreover, many point source decisions do not involve stormwater flow at all, even decisions holding that there is no point source.

2. Getting Beyond Semantics: Dropping the Point Source/Nonpoint Source Distinction

The problem with interpreting point source by distinguishing between point sources and nonpoint sources is that Congress did not define nonpoint sources. They could be indiscernible, unconfined, and indiscrete conveyances or they might not be conveyances at all. When the legislative history and court decisions speak of nonpoint source pollution or a nonpoint source pollutant, they are referring to pollution and pollutants, not to conveyances. The easiest way to resolve this semantic and conceptual problem is simply to eliminate the concept of nonpoint sources from the interpretation of point source. We can still use the factors that courts consider to determine whether a conveyance is a point source. The benefits to nonpoint sources of evading regulation under §402 will not be lost to them, because if there is no point source, there is no regulation under §402. Moreover, Congress has provided that some discharges from point sources are not regulated under §402, and EPA has promulgated regulations providing that other discharges from point sources are exempted from the requirement of securing a §402 permit.¹⁴¹ EPA

has also extended indefinitely the exemption for discharges composed entirely of stormwater from the §402 permit requirement that Congress provided only until October 1, 1994.¹⁴² The Article’s analysis will proceed without distinguishing between point sources and nonpoint sources. It will, however, use many of the reasons courts have used to make that purported distinction. But it will use them as factors only to determine whether a particular discharge is through a point source rather than to determine whether it is through a point source or nonpoint source.

3. The Factors Test

To deal with the difficult distinction between discharges by point and nonpoint sources, courts have developed an analysis weighing specific factors under the circumstances of the cases.¹⁴³ They have not labeled their analyses as a factors-weighting test, but the factors they use are clear, although the weight courts give them is not clear or well-articulated. Although courts have used these factors to determine whether a flow is discharged by a point source or a nonpoint source, they can be applied to the narrower question of whether a flow is discharged through a point source. As discussed below, the factors are whether: (1) human activity collects and channels stormwater flow; (2) a single source discharges pollutants or multiple, dispersed sources discharge pollutants; (3) an artificial system channels water; (4) an industrial or municipal activity produces the pollutants discharged; and (5) the activity producing pollutants is more susceptible to end-of-pipe treatment technology and numerical effluent limitations or to best management practice. The first factor decides most cases involving stormwater flow, but is irrelevant in cases not involving stormwater runoff flow. Courts have considered the remaining factors regardless of whether cases involve runoff stormwater flow. By their very nature, factors tests are not entirely satisfactory because they do not always conclusively point to one answer and, therefore, do not produce uniform results. The less than satisfactory nature of a factors test to interpret “point source,” however, is mitigated by the list of examples in the definition, which point to a single answer in most cases. The factors are discussed in more detail below.

a. The Human Activity Factor

No factor is more important or cited more often in determining whether a discharge is from a point source than the question of whether or not human activity collects and

137. 40 C.F.R. §122.26(a)(9)(i).

138. *Northwest Envtl. Def. Ctr.*, 640 F.3d at 1070-71; *Greater Yellowstone Coal. v. Lewis*, 628 F.3d 1143, 1153, 41 ELR 20059 (9th Cir. 2010) (seep through cover over mining pit).

139. *Northwest Envtl. Def. Ctr.*, 640 F.3d at 1070-71; *Greater Yellowstone*, 628 F.3d at 1152 (mine drainage system); *Sierra Club v. El Paso Gold Mines, Inc.*, 421 F.3d 1133, 1142-44, 35 ELR 20175 (10th Cir. 2005); *Sierra Club v. Abston Constr. Co.*, 620 F.2d 41, 45, 10 ELR 20552 (5th Cir. 1980).

140. *Appalachian Power Co. v. Train*, 545 F.2d 1351, 1372-74, 6 ELR 20732 (4th Cir. 1978).

141. 40 C.F.R. §122.3. Query whether EPA has the authority to do so. See generally *Natural Res. Def. Council, Inc. v. Costle*, 568 F.2d 1369, 8 ELR 20028

(D.C. Cir. 1977).

142. CWA §402(p); 40 C.F.R. §122.26(a)(9)(i). Again, query whether EPA has the authority to do so. See generally *Costle*, 568 F.2d 1369.

143. EPA independently developed a more abbreviated factors test at an early date, but has not elaborated on it since. It wrote that discharges of pollutants are by nonpoint sources when the discharges are (1) “induced by natural sources”; (2) “not traceable to any discrete or identifiable facility”; and (3) “better controlled through the utilization of best management practices.” 44 Fed. Reg. 24700 (June 18, 1976), quoted in *Northwest Envtl. Def. Ctr.*, 640 F.3d at 1075.

channels the flow of stormwater into navigable waters.¹⁴⁴ If the stormwater is collected and channeled by human activity into navigable waters, it is usually from a point source. If stormwater reaches navigable water entirely through natural means, it is usually not from a point source. This reflects both legislative history and EPA's regulatory definition of "discharge of a pollutant" to include "surface runoff which is collected or channeled by man"¹⁴⁵ It should be remembered, however, that the statutory definition of point source says nothing about human activity; indeed, the fifth element of the §301(a) offense, "by any person," independently supplies that requirement.

The meaning of the human activity factor is explored in greatest depth by the Fifth Circuit in *Sierra Club v. Abston Construction Co., Inc.*¹⁴⁶ In that case, the defendant sprayed liquid chemicals on a pile of ore to leach gold and collected the leachate to extract gold from it in a laboratory. It operated a supposedly closed loop system of sumps, ditches, hoses, pumps, and ponds to contain, collect, and recycle the leachate, thus preventing it from entering navigable water. The liquid overflowed its restraints during a storm event, either because the system was undersized, inadequately designed, or simply malfunctioned. The operation also had piles of waste rock from which pollutants flowed into the stream in stormwater runoff. The court characterized the ultimate question as "whether pollutants were discharged from 'discernible, confined, and discrete conveyance(s)' either by gravitational or nongravitational means."¹⁴⁷ The plaintiff argued that because the original source of the pollutants was from a human activity, they were added from a point source. The defendant argued that because the pollutants were carried by rainfall and natural erosion, they were not from a point source, even if they were created as a result of human activity.

The United States, as amicus curiae, argued that because the "surface runoff [was] collected or channeled by the operator [it] constitutes a point source discharge."¹⁴⁸ The *Abston* court agreed with the United States. It held that:

Gravity flow, resulting in a discharge into a navigable body of water, may be part of a point source discharge if the miner at least initially collected or channeled the water and other materials . . . [or] where miners design spoil piles from discarded overburden such that, during periods of precipitation, erosion of spoil pile walls results in discharges into a navigable body of water by means of ditches, gullies and similar conveyances Nothing in the Act relieves miners from liability simply because the operators did not actually construct those conveyances,

so long as they are reasonably likely to be the means by which pollutants are ultimately deposited into a navigable body of water. Conveyances of pollution formed either as a result of natural erosion or by material means, and which constitute a component of a mine drainage system, may fit the statutory definition.¹⁴⁹

The court concluded that while "the point source definition 'excludes unchanneled and uncollected surface waters,' surface runoff from rainfall, when collected or channeled . . . in connection with mining activities, constitutes point source pollution."¹⁵⁰

Overflows of stormwater from pollutant collection and storage systems are commonly held to be from point sources, even though the overflows are from storm events and are from facilities constructed for the purpose of collecting and channeling stormwater.¹⁵¹ EPA regulations, however, may give some relief from overflows in extraordinary storm events, such as its exemption of the zero discharge limit from CAFOs in the event of a 25-year storm event.¹⁵²

Mining and rock piles are a type of subcategory in the human activity category. This factor commonly occurs in cases involving mining waste, especially with regard to runoff from rock piles of various types. The argument that the CWA generally exempted mining wastes from the §402 permit program was decisively rejected at an early date (1979) by the Tenth Circuit in *United States v. Earth Sciences, Inc.*¹⁵³ Whether piles of rock at mining and other sites are point sources, however, has been a continuing issue and one that is fact-dependent because runoff from such piles results both from natural sources, such as precipitation and gravity, and human activity, such as the placement of the piles discussed in *Abston Construction*. The earliest decision on this issue, *Appalachian Power Co. v. Train*,¹⁵⁴ was a challenge to EPA's promulgation of effluent guidelines applicable to steam electric generating facilities. Industry admitted that runoff from coal piles and chemical handling facilities was from point sources, but argued that runoff from construction sites was not. It is not clear from the U.S. Court of Appeals for the Fourth Circuit's opinion what the principled difference was, although the court held (at least) that the application of the guidelines to construction site runoff was sufficiently vague to vacate and remand that portion of the regulations. In doing so, the court did not reject EPA's contention that runoff collected or channeled by man was from point sources.¹⁵⁵ Subsequent decisions have found runoff from piles to be from point sources

149. *Id.*

150. *Id.* at 47.

151. *Reynolds v. Rick's Mushroom Serv., Inc.*, 246 F. Supp. 2d 449, 456-58 (E.D. Pa. 2003); *Fishel v. Westinghouse Elec. Corp.*, 640 F. Supp. 442, 16 ELR 20634 (M.D. Pa. 1986); *O'Leary v. Moyer's Landfill, Inc.*, 523 F. Supp. 642, 12 ELR 20239 (E.D. Pa. 1981); *United States v. Oxford Royal Mushroom Prods., Inc.*, 487 F. Supp. 952, 10 ELR 20549 (E.D. Pa. 1980).

152. 40 C.F.R. §122.23(a).

153. 599 F.2d 368, 371-73, 23 ELR 21526 (10th Cir. 1979); *accord* *Trustees for Alaska v. EPA*, 749 F.2d 549, 557-58, 15 ELR 20146 (9th Cir. 1984).

154. 545 F.2d 1351, 6 ELR 20732 (4th Cir. 1978).

155. *Id.* at 1373-75.

144. *Greater Yellowstone*, 628 F.3d at 1152; *Cordiano v. Metacon Gun Club*, 575 F.3d 199, 221 (2d Cir. 2009); *Committee to Save Mokelumne River v. East Bay Mun. Util. Dist.*, 13 F.3d 305, 308, 24 ELR 20225 (9th Cir. 1993); *Environmental Prot. Info. Ctr. v. Pacific Lumber Co.*, 469 F. Supp. 2d 803, 822, 37 ELR 20012 (N.D. Cal. 2007).

145. 40 C.F.R. §122.2.

146. *Sierra Club v. Abston Constr., Inc.*, 620 F.2d 41, 10 ELR 20552 (5th Cir. 1989).

147. *Id.* at 45.

148. *Id.*

because the human placement of the piles dictates where natural gravity directs the runoff to navigable waters.¹⁵⁶

b. The Number of Sources Factor

This factor is variously described as whether there is one identifiable, discrete source discharging pollutants or instead whether there are multiple, dispersed sources discharging pollutants. Sometimes, the factor is described as whether pollutants are traceable to a single source.¹⁵⁷ It is rooted in the legislative history distinguishing between point and nonpoint sources. A common comparison is between a factory with a pipe discharging pollutants and a road with thousands of vehicles leaving traces of rubber, lead, and other pollutants on its surface to be carried to navigable water by precipitation flow. The common assumption courts make when using this factor is that a single source is susceptible to regulation by a permit, while multiple or dispersed sources, as a practical matter, are not.¹⁵⁸ This assumption is sometimes true, but not always. For instance, EPA can issue general permits to multiple sources in the same area and subject to identical controls, such as oil drilling platforms in the Gulf of Mexico.¹⁵⁹ Congress also authorized EPA to control hundreds or thousands of municipal storm drains in one permit issued to the municipality or other jurisdiction owning them.¹⁶⁰ Congress gave no such authority to EPA regarding water pollution from vehicles or roads. In any event, a general permit would not help to control millions of cars, registered anywhere in the country and beyond, each leaving small bits of pollutants on a road. Because an automobile can go anywhere, it would be impossible to know what water quality standards its discharges must comply with

or to know which state must certify that its operation will meet the state's standards under CWA §401. By those standards, the road itself or its drainage system, however, would be susceptible to control by CWA individual or general permits. Indeed, roads would be in a better position to capture and control such pollutants than vehicles using the roads. But, as discussed above, roads are not conveyances of pollutants to navigable waters in the sense contemplated for point sources, although their drainage ditches may be.

The Supreme Court skirted the issue in *Decker v. Northwest Environmental Defense Center*,¹⁶¹ holding, on the basis of EPA's interpretation of its industrial stormwater regulation and its silviculture point source regulation, that collected and channeled runoff discharges from logging roads were not from point sources. The focus of the decision and the largest point of contention among the Justices was the appropriateness of the almost complete deference that courts give to an agency's interpretations of its own regulations, following *Auer v. Robbins*.¹⁶² Chief Justice John Roberts and Justice Samuel Alito concurred in *Decker*, but suggested that the Court should reconsider *Auer*. Justice Antonin Scalia dissented on this part of the decision, asserting that the Court should reconsider and overturn *Auer* and that without deference to EPA's interpretation of its own regulation, runoff from the logging roads collected and channeled by pipes, ditches, and channels to navigable waters would be discharged from point sources. Both the majority opinion¹⁶³ and Justice Scalia's dissent¹⁶⁴ provide detailed analyses of CWA §402(p) and EPA's indus-

156. *Parker v. Scrap Metal Processors, Inc.*, 386 F.3d 993, 1009, 34 ELR 20104 (11th Cir. 2004) (piles of scrap debris); *Bravos v. EPA*, 324 F.3d 1166, 1169 (10th Cir. 2003) (waste rock piles at mine); *Consolidation Coal Co. v. Costle*, 604 F.2d 239, 249, 9 ELR 20511 (4th Cir. 1979) (piles of coal, chemical, and construction material).

157. *Cordiano v. Metacorn Gun Club, Inc.*, 575 F.3d 199, 220 (2d Cir. 2009); *League of Wilderness Defenders/Blue Mountains Biodiversity Project v. Forsgren*, 309 F.3d 1181, 1184 (9th Cir. 2002) ("nonpoint source pollution . . . is widely understood to . . . arise[] from many dispersed activities over large areas, and is not traceable to any single discrete source"); *United States v. Plaza Health Labs., Inc.*, 3 F.3d 643, 652, 23 ELR 21526 (2d Cir. 1993) (Oakes, J., dissenting) (nonpoint sources are from "runoff [occurring] in diffuse patterns, over land and into navigable waters"); *Trustees*, 749 F.2d at 558; *Earth Sciences*, 599 F.2d at 371 ("oil and gas runoffs caused by rainfall on the highways, are virtually impossible to isolate to one polluter, no permit or regulatory system was established as to them"); U.S. EPA ex rel. *McKeown v. Port Auth. of N.Y. & N.J.*, 162 F. Supp. 2d 173, 189 (S.D.N.Y. 2001); *Beartooth Alliance v. Crown Butte Mines*, 904 F. Supp. 1168, 1173, 26 ELR 20639 (D. Mont. 1995) (nonpoint source status "is limited to uncollected runoff water which is difficult to ascribe to a single polluter"); *Washington Wilderness Coal. v. Hecla Mining Co.*, 870 F. Supp. 983, 988, 25 ELR 20661 (E.D. Wash. 1994) ("the touchstone for finding a point source is the ability to identify a discrete facility from which pollutants have escaped . . . non-point source designation is limited to uncollected runoff water from, for example, oil and gasoline on a highway, which is difficult to ascribe to a single polluter").

158. "Because [nonpoint source pollution] arises in such a diffuse way, it is very difficult to regulate through individual permits." *League of Wilderness Defenders*, 309 F.3d at 1184. See also *Earth Sciences*, 599 F.2d at 371.

159. 40 C.F.R. §122.28.

160. CWA §402(p)(3)(B)(i).

161. 133 S. Ct. 1326, 43 ELR 20062 (2013).

162. 519 U.S. 410 (1997).

163. The majority opinion, authored by Justice Anthony Kennedy, begins with the proposition that §402(p) exempts discharges composed entirely of stormwater from requiring §402 permits, except for discharges "associated with an industrial activity," §402(p)(2)(B). The majority's analysis failed to note that the exemption expired in 1994. It stated that the CWA did not define "industrial activity," but EPA did so in its industrial stormwater regulation, 40 C.F.R. §22.26(b)(14), defining "associated with an industrial activity" to include discharges of stormwater "directly related to manufacturing, processing or raw materials storage areas in an industrial plant . . . includ[ing] . . . storm water discharges from . . . immediate access roads . . . used or traveled by carriers of raw materials, manufactured products, waste materials, or by-products used or created by the facility . . ." EPA interpreted the phrase to include only traditional industrial operations like sawmills and other fixed and permanent operations, as opposed to logging operations that were outdoor and impermanent. The majority noted that under *Auer*, courts must defer to an agency's interpretation of its regulations if the interpretation is reasonable; it need not be the only or the best interpretation in order to warrant deference. The majority found EPA's interpretation to be reasonable and accordingly granted it deference.

164. Justice Scalia starts by casting doubt on whether the discharges are exempted by §402(p)(a) because stormwater discharges are not "natural runoff" when they are channeled through manmade pipes and ditches, and carry with them manmade pollutants, from manmade forest roads." *Decker*, 133 S. Ct. at 1326, 1342 (Scalia, J., dissenting). Even if it were, however, §402(p)'s recapture provision for stormwater associated with industrial activities, as interpreted by EPA's regulation, 40 C.F.R. §122.27(b)(1), covers SIC Code 24, the forest products industry, including Group 2411, "Logging," for establishments primarily engaged in cutting timber, whose primary product is logs. "That," wrote Justice Scalia, "I would think, is that." *Decker*, 133 S. Ct. at 1343 (Scalia, J., dissenting). Cutting timber simply does not involve a fixed and permanent facility as argued by EPA. That addressed EPA's industrial stormwater regulation, but not its amended silvicultural point source definition consisting of four particular operations, which Justice Scalia apparently concluded, without analysis, was within EPA's authority.

trial stormwater and silviculture regulations, 40 C.F.R. §§122.26 and 122.27. The majority's focus on EPA's interpretation of regulations applied to particular silvicultural activities diminishes the force of its decision on the general issue of whether road ditches are point sources. Justice Scalia's dissent, however, focuses precisely on that issue, as well as on an exhaustive analysis of the regulations. His analysis on the general question is straightforward and persuasive and very much leaves open the question of whether road ditches and similar stormwater drainage systems are point sources, although they may be exempted from regulation by §402(p). While this factor is not dispositive in all cases, it is useful.

c. The Artificial System Factor

The "artificial" part of this factor duplicates and adds nothing to the first human activity factor. The "system" part of the factor, however, adds a new consideration that has been useful in some cases. A few courts have used this factor to decide that the addition of pollutants was not from a point source. None of them involve precipitation runoff, but the factor could be easily used in runoff cases. In *United States v. Plaza Health Laboratories, Inc.*,¹⁶⁵ the U.S. Court of Appeals for the Second Circuit held that a person is not a point source, at least not in a criminal case under the rule of lenity. Although the decision used many interpretive devices, its primary focus was on the wording of the definition of point source and the examples it includes, commenting that they "evoke images of physical structures and instrumentalities that systematically act as a means of conveying pollutants from an industrial source to navigable waters"¹⁶⁶ as opposed to the "myriad, random acts of human waste disposal, for example, a passerby who flings a candy wrapper into the Hudson River, or a urinating swimmer."¹⁶⁷ The decision as a whole is questionable, as we will examine in detail below. If the Second Circuit had made the observation that all of the examples given in the definition of point source are inanimate, while a person is animate, it would have made a pertinent observation. But to conclude that the definition suggests that point sources are only physical structures that systematically convey pollutants from an industrial source is overblown. The first and most common examples of a point source, pipes, commonly carry municipal, commercial, and agricultural waste as well as industrial waste.

In *Hudson Riverkeeper Fund, Inc. v. Harbor at Hastings Associates*,¹⁶⁸ the plaintiff alleged that trash falling from an abandoned and dilapidated building into an adjacent river violated CWA §301(a) because the building was a point source. The Southern District of New York cited the above-quoted language from *Plaza Health* and summarily held that the building was not a point source because

"the discharge of material" from it "would not be deliberate or systematic."¹⁶⁹ If the court meant that an addition must be intentional for it to be from a point source, it is simply wrong. The Supreme Court has held that passive owners of point sources are liable for additions of pollutants to navigable waters from their point sources.¹⁷⁰ Moreover, civil liability under the CWA is commonly held to be strict¹⁷¹ and even criminal liability may be negligent.¹⁷² What the court meant by "systematic" is not clear. Perhaps, it meant the complained-of action must be continuing rather than a one-time event. That interpretation is wrong as well, for spills are one-time events and unpermitted spills of pollutants from point sources violate the statute.¹⁷³ Indeed, the CWA requires EPA to develop best management practices to prevent spills, for inclusion in permits to industrial dischargers.¹⁷⁴

Several other decisions used the system approach to determine that a facility was a point source. In *Frobel v. Meyer*, the U.S. Court of Appeals for the Seventh Circuit, citing the Second Circuit's *Plaza Health* decision, commented that point source "connotes the terminal end of an artificial system for moving water waste, or other materials."¹⁷⁵ The Tenth Circuit in *Earth Sciences* answered, in part, an argument that an overflowing sump was not a point source by commenting that "[w]e have no problem finding a point source here. The undisputed facts demonstrate the combination of sumps, ditches, hoses and pumps is a circulating or drainage system to serve this mining operation."¹⁷⁶ The Fifth Circuit in *Abston Construction* later held that "[c]onveyances of pollution formed either as a result of natural erosion or by material means, and which constitute a component of a mine drainage system, may fit into the statutory definition" of point source.¹⁷⁷ In *Williams Pipe Line Co. v. Bayer Corp.*, an Iowa district court held that an oil pipeline facility was a point source.¹⁷⁸ Another district court in *North Carolina Shellfish Growers Ass'n v.*

169. *Id.* at 257.

170. *South Fla. Water Mgmt. Dist. v. Miccosukee Tribe of Indians*, 541 U.S. 95, 104-05, 34 ELR 20021 (2004).

171. *Stoddard v. Western Carolina Regional Sewer Auth.*, 784 F.2d 1200, 1208, 16 ELR 20503 (4th Cir. 1986); *Sierra Club v. Abston Constr. Co., Inc.*, 620 F.2d 41, 45, 10 ELR 20552 (5th Cir. 1980); *United States v. Earth Sciences, Inc.*, 599 F.2d 368, 374, 23 ELR 21526 (10th Cir. 1979); *West Virginia Highlands Conservancy, Inc. v. Huffman*, 651 F. Supp. 2d 512, 519, 39 ELR 20201 (S.D. W. Va. 2009); *Fishel v. Westinghouse Elec. Corp.*, 640 F. Supp. 442, 446, 16 ELR 20634 (M.D. Pa. 1986).

172. CWA §309(c)(1).

173. *See, e.g., United States v. Hamel*, 551 F.2d 107, 7 ELR 20253 (6th Cir. 1977); *Williams Pipe Line Co. v. Bayer Corp.*, 964 F. Supp. 1300 (S.D. Iowa 1997).

174. CWA §304(e).

175. 217 F.3d 928, 30 ELR 20746 (7th Cir. 2000). In this case the county incompletely dismantled a deteriorated dam. Predictably, the current in the stream carried sediment accumulated behind the dam, depositing it on gravel bars and native aquatic plants downstream, destroying the natural habitat of the stream. The plaintiff's theory was that the remains of the dam and the channel through which the sediment flowed were a point source. At that point the nonexistent dam was the terminal end of nothing and was not a conveyance.

176. *Earth Sciences*, 599 F.2d at 374.

177. *Sierra Club v. Abston Constr. Co., Inc.*, 620 F.2d 41, 45, 10 ELR 20552 (5th Cir. 1980).

178. *Williams Pipe Line Co.*, 964 F. Supp. at 1318-20.

165. 3 F.3d 643, 23 ELR 21526 (2d Cir. 1993).

166. *Id.* at 646.

167. *Id.* at 647.

168. 917 F. Supp. 251, 26 ELR 21120 (S.D.N.Y. 1996).

Holly Ridge Associates found that an entire tract of land was a point source when it contained an “extensive network of seventeen ditches specifically designed to concentrate and accelerate the flow of stormwater from the track.”¹⁷⁹ Finally, in *Reynolds v. Rick’s Mushroom Service, Inc.*, a Pennsylvania district court found that a mushroom farmer’s point source included his whole system to prevent the discharge of pollutants, consisting of “land gradations, berms . . . , sedimentation basin, the wastewater impoundment, and the sprayer system.”¹⁸⁰

d. The Nature of the Polluting Activity Factor

In *Plaza Health*, the Second Circuit concluded from both the structure of the CWA¹⁸¹ and its legislative history¹⁸² that the §402 permitting program was designed to regulate industrial and municipal waste, not agricultural or random human waste. It used that conclusion to support its ruling that human beings are not point sources.¹⁸³ Later, in another context, the same circuit commented that non-point sources came, in part, from agricultural use of land adjacent to a river.¹⁸⁴ These comments are loosely in accord with the legislative history, which suggests industrial and municipal waste are regulated by the §402 permit program, but agricultural waste is not because it was nonpoint source in nature. This interpretation is overly simplified. The definition of point source includes CAFOs, which are agricultural in nature. Moreover, the exemptions for agricultural pollution are limited to “agricultural stormwater discharges” and “return flows from irrigated agriculture.”¹⁸⁵ While these are broad-reaching exemptions, they do not include everything discharged from a farm. Moreover, there are many categories of activity that generate pollutants, beyond industrial, municipal, and agricultural. Commercial activities with point source dischargers, such as developing photographic film and prints, are regulated by the CWA permit program.¹⁸⁶ *Plaza Health*’s conclusion, therefore, is erroneous. Indeed, some courts have rejected it altogether. The Ninth Circuit, in *Greater Yellowstone Coalition v. Lewis*, said “point and nonpoint sources are not distinguished by the kind of pollution they cause or by the activity causing the pollution, but rather by whether the pollution reaches the water through a confined, discrete conveyance.”¹⁸⁷ The analytical factor that focuses on the nature of the polluting activity does not appear to be a useful one.

179. 278 F. Supp. 2d 654, 681 (E.D.N.C. 2003).

180. 246 F. Supp. 2d 449, 457-58 (E.D. Pa. 2003).

181. *United States v. Plaza Health Labs., Inc.*, 3 F.3d 643, 646, 23 ELR 21526 (2d Cir. 1993).

182. *Id.* at 647.

183. The reasoning of this decision is questionable and will be examined in detail below.

184. *Natural Res. Def. Council, Inc., v. Muszynski*, 268 F.3d 91 (2d Cir. 2001).

185. CWA §502(14).

186. 40 C.F.R. pt. 459.

187. 638 F.3d 1143, 1152, 41 ELR 20059 (9th Cir. 2010) (quoting *Trustees for Alaska v. EPA*, 749 F.2d 549, 558, 15 ELR 20146 (9th Cir. 1984)).

e. The Appropriate Control Factor

This factor also is rooted in the legislative history, which suggests that the §402 permit program was designed for point sources, for which uniform national technology-based standards for similar facilities, expressible in numbers, are appropriate. The legislative history also suggests that the §402 permit program was not designed for non-point sources, for which climate and geography vary so greatly that they are not susceptible to uniform standards and are more amenable to control by best management practices than by technology. While this is a useful distinction, it is somewhat vague. Is intercepting sediment at a construction site by placing bales of hay in the path of the flow of stormwater a best management practice or a use of primitive “hay bale” technology? Moreover, as we have already discussed, it is possible to intercept most runoff by trenches and ditches leading the runoff to sedimentation basins or more effective treatment technologies. The issue is largely one of cost, both in dollars and in land use. Cost is one of the factors that EPA must use in developing and promulgating effluent guidelines for industries.¹⁸⁸

The Ninth Circuit has commented that the reason for the CWA’s focus on point sources rather than nonpoint sources “is simply that ‘[d]ifferences in climate and geography make nationwide uniformity in controlling non-point pollution virtually impossible. Also, the control of non-point source pollution often depends on land use controls, which are traditionally state or local in nature.’”¹⁸⁹ The latter point is overstated. Most pollution control does not restrict the uses of our land, but rather tells us how we must conduct some of those uses to avoid injuring others or society as a whole. Land use control is telling a contractor what he can or cannot build on his land, not that he must place bales of hay to intercept sediment flowing in rainwater during active construction. Requiring sediment control at construction sites to prevent pollution discharges to navigable water is not inherently a state or local interest. How and where the bales of hay are placed at a construction site to best contain sediment is entirely a local matter, dictated by the topography of the site.

At issue in *League of Wilderness Defenders/Blue Mountains Biodiversity Project v. Forsgren*¹⁹⁰ was whether spraying pesticides from an aircraft’s spray bar on rivers in a national forest required a §402 permit. The Ninth Circuit easily concluded that the spraying apparatus was a discrete conveyance. The U.S. Forest Service, however, noted that EPA’s regulations defining silvicultural point sources excluded “non-point source activities such as . . . pest and fire control . . . from which there is natural runoff”¹⁹¹ and argued the exclusion included spraying pesticides for pest

188. CWA §304(b)(1)(B), (b)(2)(B), & (b)(4)(B).

189. *Oregon Natural Desert Ass’n v. U.S. Forest Serv.*, 550 F.3d 778, 785, 39 ELR 20297 (9th Cir. 2008) (quoting Marc R. Poirier, *Non-Point Source Pollution*, in ENV’T L. PRACTICE GUIDE §18.13 (2008)).

190. 309 F.3d 1181 (9th Cir. 2002).

191. 40 C.F.R. §122.27(b)(1).

control. The court noted that the regulation excluded only nonpoint sources from which there is natural runoff. Since there is no natural runoff from aerial application of pesticides directly onto water, the general understanding of nonpoint sources did not apply and therefore the regulatory exclusion of point source did not apply. The court also noted that the preamble to EPA's silvicultural point source definition identified three characteristics of nonpoint sources: (1) precipitation flow; (2) number of sources; and (3) "better controlled through . . . best management practices"¹⁹² than by end-of-pipe treatment. The best control of spraying pesticides over water is to "just say no," an end-of-pipe control.¹⁹³ The U.S. Court of Appeals for the Sixth Circuit held in *National Cotton Council v. U.S. EPA* that an aerial pesticide spray apparatus was a point source in part because it was controllable at the source.¹⁹⁴ Other decisions consider the silviculture point source regulations in different contexts.¹⁹⁵

f. The Curious Tales of Dams and Ditches

Dams and ditches are conveyances of both stormwater runoff and non-stormwater runoff. Flood control dams impound stormwater to control flooding, while other dams have nothing to do with stormwater, such as run-of-the-river dams generating electricity. Some ditches control stormwater, such as the roadside drainage systems discussed above, while other ditches have nothing to do with stormwater, such as ditches carrying water destined for irrigation. Ditches are included in the list of point source examples; dams are not. There are thousands of each, enough to present formidable challenges for the limited resources of permit writers. On the other hand, both can contribute to the degradation of water quality. Each presents a unique interpretive issue.

Dams carry pollutants from upstream waters to downstream waters and they certainly are discernible, confined, and discrete. Thus, even run-of-the-river dams seem to be point sources. Power-generating dams that convey water through pipes, sluices, and tunnels through turbines and ultimately to downstream waters, even more clearly are or include discernible, confined, and discrete conveyances. At the outset of the §402 permit program, EPA made a decision that dams did not require permits. The Agency did so for policy reasons. The acknowledged reason was that the large number of dams would overwhelm permit writers, although few presented real water quality issues. The unspoken reason may have been that many dams were owned and operated by the federal government or were already subject to federal permit programs that involved environ-

mental review and control.¹⁹⁶ The National Wildlife Federation sued EPA challenging its determination that dams were not covered by the §402 permit program; the plaintiff alleged that the Agency lacked the authority to declare that point sources adding pollutants to navigable waters did not require §402 permits. The D.C. Circuit upheld EPA's determination in *National Wildlife Federation v. Gorsuch*.¹⁹⁷ While it might be assumed that this decision held that dams are not point sources, it did not so hold. Instead, EPA conceded that under some circumstances, dams could be point sources,¹⁹⁸ and the court held that dams did not add pollutants to downstream waters. Courts today largely discount the decision because it accorded *Chevron* deference where none was due.¹⁹⁹ All other decisions considering the issue of whether dams are point sources have held that they are, at least under the facts of the cases.

Ditches present particular interpretive issues because they are listed as an example of a point source but also hold bodies of water, including stormwater runoff that could be waters of the United States, possibly meaning that they satisfy two elements of the discharge of pollutants offense. Justice Scalia, writing for the plurality in *Rapanos v. United States*, suggested that ditches could not be navigable water, in part because they were designated as point sources by the CWA.²⁰⁰ He admitted that the two could overlap on occasion, but stated that they could not do so generally.²⁰¹ The problem with this analysis, however, is that ditches are man-made trenches in the earth, not bodies of water: They convey water; they are not water. This was a central point in *National Association of Home Builders v. U.S. Army Corps of Engineers*,²⁰² where the petitioner challenged a nationwide permit because it applied to some ditches; ditches could not be waters of the United States because they were point sources; and the two terms are mutually exclusive. The D.C. Circuit noted that the plurality in *Rapanos* did not declare that "a point source, such as a ditch, can never be a navigable water under the CWA."²⁰³ It also noted that a number of courts had held that ditches were navigable waters²⁰⁴ and the courts that held otherwise did so on the

196. Environmental review was required for all major federal actions significantly affecting the environment under the National Environmental Policy Act (NEPA), 42 U.S.C. §§4321-4370f, ELR STAT. NEPA §§2-209. Section 401 of the CWA also required federal permit-issuing agencies to secure from the state in which federal projects, or federally licensed projects, were undertaken a certification that the project would meet state water quality standards. These statutory provisions, however, would not address water quality problems from existing dams.

197. 693 F.2d 156, 13 ELR 20015 (1982).

198. *Id.* at 165.

199. See generally *Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 14 ELR 20507 (1984).

200. 547 U.S. 715, 735, 36 ELR 20116 (2006).

201. *Rapanos*, 547 U.S. at 735-36 (The statutory definitions of "point source" and "navigable waters" suggests that they are "separate and distinct categories." It "would make little sense if the two categories were significantly overlapping." Therefore, ditches "by and large" are point sources and not navigable waters.)

202. 669 F. Supp. 2d 209, 215, 40 ELR 20104 (D.C. Cir. 2010).

203. *Id.* at 216.

204. *Parker v. Scrap Metal Processors, Inc.*, 386 F.3d 993, 1009, 34 ELR 20104 (11th Cir. 2004); *United States v. Deaton*, 332 F.3d 698 (4th Cir. 2003); *Treacy v. Newdunn Assocs.*, 344 F.3d 407 (4th Cir. 2003).

192. *Wilderness Defenders*, 309 F.3d at 1188.

193. Indeed, EPA is directed to promulgate technology-based effluent guidelines for many industrial sources requiring elimination of discharges altogether if "technologically and economically achievable." §301(b)(2)(B).

194. 553 F.3d 927, 940, 39 ELR 20006 (6th Cir. 2009).

195. See *Decker v. Northwest Envtl. Def. Ctr.*, 133 S. Ct. 1326, 43 ELR 20062 (2013); *Environmental Prot. Info. Ctr. v. Pacific Lumber Co.*, 469 F. Supp. 2d 803, 37 ELR 20012 (N.D. Cal. 2007).

facts rather than as a matter of law.²⁰⁵ Indeed, Justice Scalia subsequently concluded that ditches could be point sources.²⁰⁶ Despite the controversy, both dams and ditches convey pollutants and are or can be point sources.

4. Point Source Issues Not Involving Precipitation Flow

Most of the decisions above concerned discharges of stormwater flow in which the distinction between point and nonpoint sources depended on the degree of human involvement in the discharge. In cases that were not clear, the courts developed the other factors to make that determination. In most point source decisions, however, stormwater flow is irrelevant. For example, when bulldozers push fill material into wetlands, the issue of whether bulldozers operating in that capacity are point sources has nothing to do with stormwater flow. In these decisions, courts primarily analyze whether the alleged point source is a “discernible, confined, and discrete conveyance” of pollutants and whether it is one of the examples listed in the definition or is analogous to them. Courts often use precedent and the broad interpretation canon of construction. They may also use one or more of the factors discussed above. This section discusses the cases that either fall into broad categories, have precedents on both sides of the issue, or raise particularly interesting issues.

a. Vehicles on or in Land, Water, and Air

By far, the largest number of non-runoff decisions concern whether the defendants’ vehicles are point sources. All of them hold that vehicles are point sources. Typically, courts do so by reciting that point source is interpreted broadly and by citing a precedent or two, often *Avoyelles Sportsmen’s League v. Marsh*.²⁰⁷ They probably cite *Avoyelles* because it is the earliest appellate court decision holding bulldozers and backhoes to be point sources, not because its analysis is exhaustive.²⁰⁸ Despite the absence of analytical attention to the issue, the courts are undoubtedly correct. Vehicles fit precisely within the definition as “discernible, confined and discrete conveyance[s].” The very purpose of vehicles is to convey people and material. The list of examples given in the definition includes “rolling stock” and “vessel or other floating craft,” vehicles whose purposes are to convey peo-

ple and materials on land and water. Although other types of terrestrial vehicles and aircraft are not listed, the nonexhaustive list includes the mentioned examples; it does not exclude others. Unlisted terrestrial vehicles and aircraft are conveyances and are analogous to rolling stock and vessels.

It was held fairly early in the §402 permit program that Navy aircraft dropping ordnance into coastal waters during bombing practice were point sources, with no analysis of the definitional issue.²⁰⁹ Subsequent cases under the CWA in which aircraft (and sometimes trucks) were alleged to be point sources involve aircraft spraying pesticides into water. It is not always clear whether the aircraft (or trucks) or the spray bars attached to them were alleged to be the point sources. In either event, courts held the vehicles or the spray apparatus to be point sources, with little analysis.²¹⁰

The problem with this easy analysis is that passenger vehicles generally, and automobiles in particular, are conveyances and therefore point sources. If so, why aren’t the owners of such vehicles liable for their deposits of oil, grease, and rubber residue on roads that are ultimately discharged into navigable waters by precipitation flow? Here, a return to the definitions of “discharge of a pollutant” and “point source” are useful. Reordering the elements in the statute somewhat, §301(a) regulates the addition by conveyances of pollutants to navigable waters. It focuses on point sources as conveyances of pollutants rather than as the origins of pollutants. Most of the examples of point sources in the definition emphasize this. We think of the first, “pipe,” as carrying pollutants, not creating them. CAFOs are the big anomaly in the list, but they are an anomaly in the definition for several reasons, which we will discuss below.

Finally, automobile-produced pollutants are not susceptible to regulation by the §402 permit program. They are classic multiple and dispersed sources, too many in number

205. *F.D. & P. Enters., Inc. v. Army Corps of Eng’rs*, 239 F. Supp. 2d 509, 514 (D.N.J. 2003); *Haniszewski v. Cadby*, 2009 WL 316723 (W.D.N.Y. 2009).

206. “The stormwater here was discharged from logging roads through a series of pipes, ditches, and channels—all items expressly named in the definition [of ‘point source’].” *Decker v. Northwest Env’tl. Def. Ctr.*, 133 S. Ct. 1326, 1344, 43 ELR 20062 (2013) (Scalia, J., dissenting).

207. 715 F.2d 897, 922, 13 ELR 20942 (5th Cir. 1983).

208. The Fifth Circuit’s analysis was, in fact, cursory. “[B]ulldozers and backhoes were point sources, since they collected into windrows and piles material that may ultimately find its way back into the waters.” *Avoyelles*, 715 F.2d at 922. It cited *United States v. Holland*, 373 F. Supp. 665, 668, 4 ELR 20710 (M.D. Fla. 1974), in which a Florida district court found that the point source element of CWA §301(a) was satisfied because defendant admitted that he had “discharged from point sources, including dump trucks, drag lines and bulldozers.”

209. “It would be a strained construction of unambiguous language for the court to interpret that the release or firing of ordnance from aircraft into the navigable waters of Vieques [an island off the coast of Puerto Rico] is not ‘any addition of any pollutant . . . from any point source,’” *Barcelo v. Brown*, 478 F. Supp. 646, 664 (D.P.R. 1979). The Supreme Court, on appeal from the First Circuit’s reversal of the district court on other grounds, stated, without comment, that the district court held “the release of ordnance from aircraft or from ships into navigable waters is a discharge of pollutants.” *Weinberger v. Romero Barcelo*, 456 U.S. 305, 309, 12 ELR 20538 (1982).

210. *Peconic Baykeeper, Inc. v. Suffolk County*, 600 F.3d 180, 40 ELR 20098 (2d Cir. 2010). The district court had held that the spray applicators attached to trucks and aircraft were not point sources because they discharged into air rather than into water. The Second Circuit made use of the broad interpretation canon of construction and the Ninth Circuit’s reasoning in *League of Wilderness Defenders/Blue Mountains Biodiversity Project v. Forsgren*, 309 F.3d 1181, 1184 (9th Cir. 2002), to reverse. “Here, the spray apparatus was attached to trucks and helicopters, and was the source of the discharge. The pesticides were discharged ‘from’ the source, and not from the air The District Court’s conclusion that the pesticides were not discharged from a point source was in error.” *Peconic Baykeeper*, 600 F.3d at 188-89. In *National Cotton Council of America v. U.S. EPA*, 553 F.3d 927, 940, 39 ELR 20006 (6th Cir. 2009), the parties assumed that aerial pesticide spraying was from point sources, but EPA contended that the point sources did not add pollutants because they sprayed pesticides, not pollutants. The court rejected that argument. *See also Forsgren*, 309 F.3d at 1185 (“[A]n airplane fitted with tanks and mechanical spraying apparatus is a ‘discrete conveyance.’”).

for EPA to control by permits. They do not convey pollutants to water. They are not susceptible to end-of-pipe treatment technology. There's not much end-of-pipe technology that an automobile owner or driver can apply to stop leaving bits of her tires on the highway. Although end-of-pipe technology may treat pollutants coming from the tailpipes of motor vehicles, those emissions are already comprehensively regulated by the Clean Air Act (CAA), both in terms of end-of-pipe and internal technology and fuel content.²¹¹ If the technology-based standards required to be applied in permits to point sources under the CWA are not possible or appropriate, the other source of effluent limitations in the CWA, water quality standards, are not possible or appropriate either for they are developed on a local basis and we don't know what waters any particular motor vehicle's pollutants will enter. The only decision to consider this issue did so in a case alleging that tollbooths on a highway were point sources, *U.S. EPA ex rel. McKeown v. Port Authority of New York & New Jersey*.²¹² The court held that the vehicles passing through the tollbooths were "the sources of the pollutants complained of" and that they were "air emissions and not water pollutants," emissions regulated by the Clean Air Act rather than the CWA.²¹³

b. People and Other Animals

In *United States v. Plaza Health Laboratories, Inc.*,²¹⁴ the Second Circuit considered the question of "whether a human being can be a point source"²¹⁵ and held that the CWA "was never designed to address the random, individual polluter."²¹⁶ The court began its analysis with the statutory definition of point source, which the court noted did not include human beings in its list of examples. Moreover, the court found that the examples "evoke images of physical structures and instrumentalities that systematically act as a means of conveying pollutants from an industrial source to navigable waterways."²¹⁷ It also noted that "by any person" is already an element in a §301(a) violation and, therefore, reading point source to include a person would make "point source" and "by any person" duplicative. Such an interpretation would make the violation read, "the addition of any pollutant to navigable waters from any person by any person shall be unlawful," and this simply makes no sense."²¹⁸ If the court had stopped there, its interpretation of point source would have been well-analyzed, if not unassailable.²¹⁹

The court next analyzed the statute and its legislative history to demonstrate that the CWA was designed to regulate industrial and municipal waste, not the random polluting acts of individuals. First, the court listed a number of sections dealing with point sources,²²⁰ implying that those sections deal exclusively with industrial and municipal discharges. They do not. They sometimes distinguish between municipal and other point sources.²²¹ But for the most part, they apply to all point sources, without limiting themselves to industrial point sources. The court proceeded to legislative history, which it also concluded focuses on industrial polluters.²²² For that conclusion, it cited a Senate report that distinguished between point and nonpoint sources²²³ and a floor statement by Senator Dole suggesting that all agricultural discharges, including CAFO discharges, are nonpoint source pollution.²²⁴ These authorities do not support the Second Circuit's conclusion that Congress did not intend the CWA to include human beings as point sources. Indeed, the suggestion by Senator Dole that CAFOs are not point sources is simply wrong, undercutting whatever credibility his statement has. The court then noted the absence of case law or EPA regulations suggesting that human beings are point sources. Of course, there was no case or regulatory law that people are not point sources.

Finally, the court observed that holding a human being to be a point source would lead to the absurd result that "a passerby who flings a candy wrapper into the Hudson River, or a urinating swimmer" would violate the statute.²²⁵ These images are easily distinguished from the facts in *Plaza Health*, where the defendant took waste from the commercial testing of blood at his laboratory in vials, which he placed below the high-water line in a bulkhead so that they would be removed by high tide. This was not a kid throwing a candy wrapper in the water, but instead the principal of a commercial activity evading the costs of proper disposal of medical waste by secretly disposing of it in navigable waters; his very secrecy is persuasive evidence of his knowing wrongdoing.

In *Oregon Natural Desert Association v. Dombeck*, the Ninth Circuit, citing *Plaza Health* as its only authority, stated that "[i]t would be strange indeed to classify as a point source something as inherently mobile as a cow" and held "the term 'point source' does not include

and "discrete fissure" do not, particularly if physical structures are equated with human-made structures, for channels and fissures occur in nature.

220. CWA §§301, 301(e), 301(g)(2), 304(b)(4)(B), 306, 308(a), 308(c), & 402(f).

221. CWA §301(b), for example, deals specifically with municipal point sources, see §301(b)(1)(B), (h), (i) & (j), while the remainder deal with point sources generally, not specifying industrial point sources. Section 306 requires EPA to promulgate standards for new sources for at least 27 categories of point sources, many of which are manufacturing facilities. These are industrial facilities. But the list includes a number of food-processing facilities. Query whether they are industrial facilities? EPA has promulgated technology-based standards for a number of commercial facilities, such as the development of photographic film and prints in 40 C.F.R. pt. 459.

222. 3 F.3d at 647.

223. *Id.*

224. *Id.*

225. *Id.*

211. 42 U.S.C. §§7401-7671q, ELR STAT. CAA §§101-618; see 42 U.S.C. §§7521-7589.

212. 162 F. Supp. 2d 173, 189 (S.D.N.Y. 2001).

213. *Id.*

214. 3 F.3d 643, 23 ELR 21526 (2d Cir. 1993).

215. *Id.* at 645.

216. *Id.* at 646.

217. *Id.*

218. *Id.* at 647.

219. The issues with its interpretation thus far relate to its comments that the examples of point source in the definition are physical structures and structures that convey pollutants from industrial sources. Many of the examples, such as "pipe," do evoke such images. However, others, such as "channel"

a human being or any other animal.”²²⁶ Ten years later, the circuit court cited that decision as good authority in *Oregon Natural Desert Association v. U.S. Forest Service*.²²⁷ Both cases were challenges to grazing licenses on federal land without CWA §401 certifications on the theory that cattle were point sources that would pollute streams and the granting of the licenses were federal actions that required §401 certification.

Humans can be conveyances. When we take clean laundry from the dryer and carry it to the bedroom, we are conveyances of clean clothes. Animals can be conveyances; horses are an obvious example. Both are discernible, confined, and discrete conveyances. As Judge Oakes pointed out in his strong dissent in *Plaza Health*, the holding that humans cannot be point sources opens a gaping door for evasion of the CWA's prescription simply by having employees form a bucket brigade from a pollutant-producing facility to the river in place of a pipe.²²⁸ Stripped of its erroneous arguments, the court in *Plaza Health* could have come plausibly to the opposite conclusion, as the dissent did. Unfortunately, the government poorly argued the case. If the government had argued that the vials, as containers, were the point sources, then the issue of humans as point sources would not have arisen. Indeed, the district court noted that there was an alternative to humans as point sources in the case: The fissures in the bulkhead into which the defendant inserted vials of blood to be washed away by the rising tide could be considered as point sources, thus removing the issue of whether humans could be point sources.²²⁹

c. CAFOs, Fish-Raising Facilities, and Other Agricultural Discharges

The definition of point source specifically provides that “agricultural stormwater discharges” and “return flows from irrigated agriculture” are not point sources and that a CAFO is a point source. Unless flowing water is a point source, however, agricultural stormwater discharges and return flows from irrigated agriculture cannot be point sources, even in the absence of the statutory exemption, because flowing water is not a conveyance; flowing water is carried by a conveyance. To give those exemptions meaning, they must be applied to additions of pollutants from agricultural stormwater and return flows from irrigation agriculture by point sources. Stormwater flow and irrigation return flow may include groundwater that originates in irrigation by flooding.²³⁰

Are CAFOs regulated because they are point sources, or are they exempted if they deposit their waste into navigable waters through stormwater flows or irrigation return flows? If pollutants from CAFOs enter navigable water by means other than stormwater flow or irrigation return flow, for instance in a stream flowing through the CAFO, then the exemptions do not come into play. But if pollutants from the CAFO are discharged to navigable water only by stormwater flow or irrigation return flow, then which authority governs: the definition of CAFO as a point source or the exemptions? Under the canon of statutory interpretation that the specific governs over the general,²³¹ the definition of CAFO as a point source should govern, because the exemptions of stormwater flow and irrigation return flow are general types of agricultural flow, while flow from a CAFO is a specific agricultural flow.²³² It also can be argued that unless flow from CAFOs is covered by §301(a), the inclusion of CAFOs in the definition of point source has no meaning. This is a weaker argument, however, because a CAFO would still be a point source if a stream flowed through it.

EPA has defined CAFOs in great detail in 40 C.F.R. §122.23 and courts have applied the definition as written. To be a CAFO, the operation must contain more than the number of animals specified in the regulation. EPA may also designate smaller operations as CAFOs if they significantly contribute to violations of water quality standards. Once it is a CAFO, the point source includes not just the feeding operation, but ancillary areas for raising or housing the animals and storing or disposing of manure. Thus, discharges from adjacent fields used to spread or store manure violate the statute unless performed in compliance with the regulations.²³³ We have already seen that the CWA does not regulate CAFOs because they are point sources; they must also add pollutants to navigable water in order to be regulated. The CAFO must be designed not to discharge except as a result of a 25-year, 24-hour storm event and may discharge only as a result of such an event. Thus, a properly designed CAFO violates the statute if it discharges as a result of a lesser storm event.²³⁴

Mushroom-growing operations, like CAFOs, often dispose of their wastewater by spraying it on adjacent fields as fertilizer. When properly designed and applied, it does not escape into adjacent waterways. If it is overapplied, or applied using improperly designed or deteriorated retention facilities, it may flow into such waterways. When it does so without or in violation of a permit, it violates the statute.²³⁵ One court remarked on the similarity of the

226. 172 F.3d 1092, 28 ELR 21471 (9th Cir. 1998).

227. 550 F.3d 778, 782, 39 ELR 20297 (9th Cir. 2008).

228. The district court opinion, *United States v. Villegas*, 784 F. Supp. 6, 8-11, 22 ELR 21027 (E.D.N.Y. 1991), *rev'd sub nom. United States v. Plaza Health Labs., Inc.*, 3 F.3d 643, 23 ELR 21526 (2d Cir. 1993), is extremely well-analyzed, using more interpretive devices than any other decision in this Article. See *infra* tbl. B.

229. *Villegas*, 784 F. Supp. at 10.

230. *Fishermen Against Destruction of Env't, Inc. v. Closter Farms, Inc.*, 300 F.3d 1294, 1297 (11th Cir. 2002).

231. WILLIAM N. ESKRIDGE JR., *DYNAMIC STATUTORY INTERPRETATION* 324 (1994); ANTONIN SCALIA & BRYAN A. GARNER, *READING LAW* 183-89 (2012).

232. *Community Ass'n for Restoration of Env't v. Henry Bosma Dairy*, 305 F.3d 943, 955 (9th Cir. 2002) (“because the farm itself falls within the definition of CAFO and is not subject to the agricultural exemption”).

233. *Id.*

234. *Carr v. Alta Verde Indus., Inc.*, 931 F.2d 1055, 1059-60, 21 ELR 21005 (5th Cir. 1991).

235. *Reynolds v. Rick's Mushroom Serv., Inc.*, 246 F. Supp. 2d 449, 457 (E.D. Pa. 2003) (“point source” was the entire control system consisting of “land

mushroom-growing control system to CAFO control systems and that used to collect and contain mining waste in *Earth Sciences*.²³⁶

Fish-raising facilities are analogous to CAFOs and are regulated similarly. EPA defines point source to include a “concentrated aquatic animal production facility” by producing designated numbers and weights of fish raised, and provides that the Agency may designate a smaller operation as a point source if it contributes significantly to a violation of water quality standards.²³⁷ Where a fish hatchery is below the size designated as a point source in the regulation, it is not a point source unless so designated by EPA because the operation significantly contributes to violations of water quality standards.²³⁸ The definition includes operations raising cold water fish in “ponds, raceways, or other similar structures which discharge at least 30 days a year.”²³⁹ The Agency interprets that to include offshore net pen operations raising salmon, and its interpretation has been upheld by at least one court.²⁴⁰ While CAFO discharges are usually of polluted stormwater and mushroom-growing discharges may be of polluted stormwater, fish-raising operation discharges are not of polluted stormwater.

V. Conclusion

The statutory definition of point source is the most detailed and complex of the definitions of the elements of the water pollution offense. But the interpretation of point source is complicated by the statutory juxtaposition of the term with nonpoint source and the statutory failure to define nonpoint source or to draw a bright line between the two terms. The statutory history adds to the complication by suggesting that the presence of precipitation runoff is the signature of nonpoint sources, a false suggestion if the runoff is collected and channeled by human activity. Adding to the confusion is the tendency of courts and EPA to conflate point source and nonpoint source with other elements of the offense, such as by referring to a “point source pollutant.” (As mentioned at the beginning of this Article, “pollutant” is a separate element of the §301(a) offense.) Despite these complications, in most cases, the determination of whether there is a point source is easy because there is an obvious “discernible, confined and discrete conveyance” and it is often one of the examples listed in the statutory definition, such as a pipe.

At this point, the CWA robustly regulates most discharges of pollutants by point sources, but depends on state

regulation of discharges of pollutants by nonpoint sources. For the most part, however, such state regulation is neither pervasive nor robust and most continuing water pollution problems can be traced primarily to nonpoint sources. The legislative history of the CWA suggested that relatively unregulated nonpoint sources should become robustly regulated point sources over time as national uniform standards became available to control water pollution from them. EPA has not expanded the definition of point source to accomplish this objective. The Agency should begin to do so. Interpreting and applying the term would be easier if EPA amended its regulatory definition of point source to incorporate what case law and the Agency’s own practice have established. Distinguishing point from nonpoint sources would also be easier if EPA promulgated a regulatory definition of nonpoint source.

The following suggested definitions summarize the results of this Article’s analysis:

Nonpoint source means conveyances adding pollutants to the waters of the United States for which conveyances are either: (1) indiscernible, unconfined, and indiscrete; or (2) not the result of human activity, in whole or in part. Note: Every five years, EPA will review categories of nonpoint sources to determine if cost-effective technology has become available to treat pollutants discharged by any such category and to add to the list of point sources in the definition of point source in this section any category of nonpoint source for which such technology has become available.

Point source means any discernible, confined, discrete conveyance, resulting in whole or in part from human activity, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, CAFO, landfill leachate collection system, or vessel or other floating craft, from which pollutants are or may be discharged. The term includes human beings deliberately discharging pollutants produced in the course of a waste-generating activity and devices collecting and channeling stormwater, but does not include devices channeling agricultural stormwater, return flow from irrigated agriculture, or runoff from roads, except as regulated under CWA §402(p). In determining whether a conveyance is a point source, the following factors should be taken into account: (1) human activity collects and channels flow to navigable waters; (2) there is a single source of pollutants, rather than multiple or dispersed sources; (3) the conveyance is systematic; and (4) the activity producing the pollutants is susceptible to end-of-pipe treatment technology with numerical effluent limitations rather than by best management practices.

gradations, berms . . . , sedimentation basin, the wastewater impoundment, and the sprayer system”); *United States v. Oxford Royal Mushroom Prods., Inc.*, 487 F. Supp. 852, 854, 10 ELR 20549 (E.D. Pa. 1980) (overapplication and escape through a break in a berm).

236. *Rick’s Mushroom Serv.*, 246 F. Supp. 2d at 456-577.

237. 40 C.F.R. §122.24 & app. C.

238. *Wild Fish Conservancy v. Quilcene Nat’l Fish Hatchery*, 2009 WL 3380655 (W.D. Wash. 2009).

239. 40 C.F.R. §122.24(a).

240. *U.S. Public Interest Research Grp. v. Atlantic Salmon of Maine, LLC*, 215 F.2d 239, 32 ELR 20535 (D. Me. 2002).

Table A
Decisions Interpreting “Point Source”

U.S. Supreme Court Decisions	
1.	Decker v. Northwest Environmental Defense Center, 133 S. Ct. 1326, 43 ELR 20062 (2013)
2.	South Florida Water Management District v. Miccosukee Tribe of Indians of Florida, 541 U.S. 95, 34 ELR 20021 (2004)
U.S. Court of Appeals Decisions	
3.	Natural Resources Defense Council, Inc. v. County of Los Angeles, 673 F.3d 880, 41 ELR 20109 (9th Cir. 2011), <i>rev'd on other grounds</i> , 133 S. Ct. 710 (2013)
4.	Northwest Environmental Defense Center v. Brown, 640 F.3d 1063, 41 ELR 20178 (9th Cir. 2011)
5.	National Pork Producers' Council v. U.S. EPA, 635 F.3d 738, 41 ELR 20115 (5th Cir. 2011)
6.	Greater Yellowstone Coalition v. Lewis, 628 F.3d 1143, 41 ELR 20059 (9th Cir. 2010)
7.	United States v. Agosto-Vegas, 617 F.3d 541, 40 ELR 20222 (1st Cir. 2010)
8.	Peconic Baykeeper, Inc. v. Suffolk County, 600 F.3d 180, 40 ELR 20098 (2d Cir. 1010)
9.	Cordiano v. Metacon Gun Club, 575 F.3d 199 (2d Cir. 2009)
10.	National Cotton Council v. U.S. EPA, 553 F.3d 927, 39 ELR 20006 (6th Cir. 2009)
11.	Oregon Natural Desert Association v. U.S. Forest Service, 550 F.3d 778, 39 ELR 20297 (9th Cir. 2008)
12.	United States v. Lucas, 516 F.3d 316, 38 ELR 20041 (5th Cir. 2008)
13.	United States v. Gerke Excavation, Inc., 464 F.3d 723, 36 ELR 20200 (7th Cir. 2006)
14.	Sierra Club v. El Paso Gold Mines, Inc., 421 F.3d 1133, 35 ELR 20175 (10th Cir. 2005)
15.	United States v. Gerke Construction, Inc., 412 F.3d 804 (5th Cir. 2005), <i>judgment vacated on other grounds</i> , 548 U.S. 901 (2006)
16.	Parker v. Scrap Metals Processors, Inc., 386 F.3d 993, 34 ELR 20104 (11th Cir. 2004)
17.	League of Wilderness Defenders v. Forsgren, 309 F.3d 1181 (9th Cir. 2002)
18.	Community Association for Restoration of the Environment v. Henry Bosma Dairy, 305 F.3d 943 (9th Cir. 2002)
19.	Fishermen Against Destruction of the Environment v. Closter Farms, Inc., 300 F.3d 1294 (11th Cir. 2002)
20.	Association to Protect Hammersley, Eld, & Totten Inlets v. Taylor Resources, Inc., 299 F.3d 1007 (9th Cir. 2002)
21.	Borden Ranch Partnership v. U.S. Army Corps of Engineers, 261 F.3d 810, 32 ELR 20011 (9th Cir. 2001), <i>aff'd without opinion</i> , 537 U.S. 99 (2002)
22.	Froebel v. Meyer, 217 F.3d 928, 30 ELR 20746 (7th Cir. 2000)
23.	United States v. West Indies Transportation, Inc., 127 F.3d 299, 28 ELR 20202 (3d Cir. 1997)
24.	Concerned Area Residents for the Environment v. Southview Farm, 34 F.3d 114, 24 ELR 21480 (2d Cir. 1994)
25.	Committee to Save Mokelumne River v. East Bay Municipal Utility District, 13 F.3d 305, 24 ELR 20225 (9th Cir. 1993)
26.	United States v. Plaza Health Laboratories, Inc., 3 F.3d 643, 23 ELR 21526 (2d Cir. 1993)
27.	Dague v. City of Burlington, 935 F.2d 1343, 21 ELR 21133 (2d Cir. 1991)
28.	Carr v. Alta Verde Industries, Inc., 931 F.2d 1055, 21 ELR 21005 (5th Cir. 1991)
29.	Trustees for Alaska v. EPA, 749 F.2d 549, 15 ELR 20146 (9th Cir. 1984)
30.	Avoyelles Sportsmen's League v. Marsh, 715 F.2d 897, 13 ELR 20942 (5th Cir. 1983)
31.	National Wildlife Federation v. Gorsuch, 693 F.2d 156, 13 ELR 20015 (D.C. Cir. 1982)
32.	Missouri ex rel. Ashcroft v. Department of Army, 672 F.2d 1297, 12 ELR 20368 (8th Cir. 1982)
33.	Sierra Club v. Abston Construction Co., Inc., 620 F.2d 41, 10 ELR 20552 (5th Cir. 1980)
34.	United States v. Earth Sciences, Inc., 599 F.2d 368, 9 ELR 20542 (10th Cir. 1979)
35.	Natural Resources Defense Council, Inc. v. Costle, 568 F.2d 1369, 8 ELR 20028 (D.C. Cir. 1977)
36.	Appalachian Power Co. v. Train, 545 F.2d 1351, 6 ELR 20732 (4th Cir. 1976)
U.S. District Court Decisions	
37.	Assateague Coastkeeper v. Hudson Farm, 727 F. Supp. 2d 433, 40 ELR 20208 (D. Md. 2010)
38.	United States v. Righter, 2010 WL 2640189 (M.D. Pa. 2010)

39. National Association of Homebuilders v. U.S. Army Corps of Engineers, 699 F. Supp. 2d 209, 40 ELR 20104 (D.D.C. 2010), *vacated on other grounds*, 663 F.3d 470 (D.C. Cir. 2011)
40. Ogeechee-Canooche Riverkeeper, Inc. v. T.C. Logging, Inc., 2009 WL 2390851 (S.D. Ga. 2009)
41. West Virginia Highlands Conservancy v. Huffman, 2009 WL 2705854, 39 ELR 20201 (S.D. W. Va. 2009), *aff'd*, 625 F.3d 159, 40 ELR 20014 (4th Cir. 2010)
42. Wild Fish Conservancy v. Quilcene National Fish Hatchery, 2009 WL 3380655 (W.D. Wash. 2009)
43. United States v. Acquest Transit, LLC, 2009 WL 2157005 (W.D.N.Y. 2009)
44. Environmental Protection Information Center v. Pacific Lumber Co., 469 F. Supp. 2d 803, 37 ELR 20012 (N.D. Cal. 2007)
45. United States v. Lippold, 2007 WL 3232483 (C.D. Ill. 2007)
46. North Carolina Shellfish Growers Ass'n v. Holly Ridge Associates, 278 F. Supp. 2d 654 (E.D.N.C. 2003)
47. Reynolds v. Rick's Mushroom Service, Inc., 246 F. Supp. 2d 449 (E.D. Pa. 2003)
48. U.S. Public Interest Research Group v. Atlantic Salmon of Maine, LLC, 215 F. Supp. 2d 239, 32 ELR 20535 (D. Me. 2002)
49. U.S. EPA ex rel. McKeown v. Port Authority of N.Y. & N.J., 162 F. Supp. 2d 173 (S.D.N.Y. 2001), *aff'd sub nom.* McKeown v. Delaware Bridge Authority, 23 F. App'x 81 (2d Cir. 2001)
50. Stone v. Naperville Park District, 38 F. Supp. 2d 651 (N.D. Ill. 1999)
51. Froebel v. Meyer, 13 F. Supp. 2d 843 (E.D. Wis. 1998)
52. Williams Pipe Line Co. v. Bayer Corp., 964 F. Supp. 1300 (S.D. Iowa 1997)
53. RSR Corp. v. Browner, 924 F. Supp. 504, 26 ELR 21353 (S.D.N.Y. 1996)
54. United States v. Lambert, 915 F. Supp. 797, 26 ELR 21116 (S.D. W. Va. 1996)
55. Hudson Riverkeeper Fund, Inc. v. Harbor at Hastings Associates, 917 F. Supp. 251, 26 ELR 21120 (S.D.N.Y. 1996)
56. Long Island Soundkeeper Fund, Inc. v. New York Athletic Club, 1996 WL 131863 (S.D.N.Y. 1996)
57. Beartooth Alliance v. Crown Butte Mines, 904 F. Supp. 1168, 26 ELR 20639 (D. Mont. 1995)
58. Molokai Chamber of Commerce v. Kukui, 891 F. Supp. 1389, 26 ELR 20303 (D. Haw. 1995)
59. Washington Wilderness Coalition v. Hecla Mining Co., 870 F. Supp. 983, 25 ELR 20661 (E.D. Wash. 1994)
60. United States v. Villegas, 784 F. Supp. 6, 22 ELR 21027 (E.D.N.Y. 1991), *rev'd sub nom.* United States v. Plaza Health Laboratories, Inc., 3 F.3d 643, 23 ELR 21526 (2d Cir. 1993)
61. United States v. Sinclair Oil, 767 F. Supp. 200, 21 ELR 21323 (D. Mont. 1990)
62. Friends of the Sakonnet v. Dutra, 738 F. Supp. 623, 21 ELR 20055 (D.R.I. 1990)
63. National Wildlife Federation v. Consumers Power Co., 657 F. Supp. 1007 (W.D. Mich. 1987), *rev'd on other grounds*, 862 F.2d 580 (6th Cir. 1988)
64. Fishel v. Westinghouse Elec. Corp., 640 F. Supp. 442, 16 ELR 20634 (M.D. Pa. 1986)
65. O'Leary v. Moyer's Landfill, Inc., 523 F. Supp. 642, 12 ELR 20239 (E.D. Pa. 1981)
66. United States v. Weisman, 489 F. Supp. 1331, 10 ELR 20698 (M.D. Fla. 1980)
67. United States v. Oxford Royal Mushroom Products, Inc., 487 F. Supp. 952, 10 ELR 20549 (E.D. Pa. 1980)
68. Romero-Barcelo v. Brown, 478 F. Supp. 646 (D.P.R. 1979), *rev'd on other grounds sub nom.* Weinberger v. Barcelo-Romero, 643 F.2d 835, 11 ELR 20391 (1st Cir. 1981), *rev'd on other grounds*, 456 U.S. 305, 12 ELR 20538 (1982)
69. South Carolina Wildlife Federation v. Alexander, 457 F. Supp. 118, 8 ELR 20757 (D.S.C. 1978)
70. Mahelona v. Hawaiian Electric Co., Inc., 418 F. Supp. 1328, 7 ELR 20031 (D. Haw. 1976)
71. United States v. Holland, 373 F. Supp. 665, 4 ELR 20710 (M.D. Fla. 1974)

Table B
Analysis of Decisions Interpreting Point Source

Decision Number	Year	+/- ^a	Type of Case ^b	Canons Used	Number of Canons Used ^c	Number of Decisions Cited ^d	CWA §
U.S. Supreme Court Decisions							
1.	2013	-	Cit. S.	4, 5, 6, 22	4	--	402
2.	2004	+	Cit. S.	2, 5, 21	3	--	402
U.S. Court of Appeals Decisions							
3.	2011	+	Cit. S.	1, 5, 6	3	4	402
4.	2011	-	Cit. S.	1, 3, 5, 6	4	4	402
5.	2011	-	Jud. Rev.	1, 5	2	4	402
6.	2010	+	Cit. S.	1, 5	2	3	402
7.	2010	+	Crim.	5	1	--	402
8.	2010	+	Cit. S.	1, 2, 5	3	3	402
9.	2009	-	Cit. S.	1, 2, 4, 5, 6	5	7	402
10.	2009	+	Jud. Rev.	1, 2, 5, 6	4	4	402
11.	2008	-	Cit. S.	1, 6	2	3	402
12.	2008	+	Crim.	1, 3, 5	3	6	402
13.	2005	+	Crim.	1	1	4	404
14.	2005	+	Cit. S.	1, 4, 5, 6	4	5	402
15.	2005	+	Enf.	1	1	4	404
16.	2004	+	Cit. S.	1, 2	2	2	402
17.	2002	-	Cit. S.	1, 4, 5, 13, 22	5	2	402
18.	2002	+	Cit. S.	1, 2	2	2	402
19.	2002	+	Cit. S.	1, 5	3	2	402
20.	2002	-	Cit. S.	1	1	1	402
21.	2001	+	Jud. Rev./Enf.	1, 2	2	1	404
22.	2000	-	Cit. S.	1, 5	2	5	402/404
23.	1997	+	Crim.	1, 2, 5	3	5	402
24.	1994	+	Cit. S.	1, 2, 4, 5	4	7	402
25.	1993	+	Cit. S.	1, 5	2	2	402
26.	1993	-	Crim.	1, 3, 5, 6, 8, 13, 20, 21	8	7	402
27.	1991	+	Cit. S.	1, 2, 14	3	3	402
28.	1991	+	Cit. S.	5	1	--	402
29.	1984	+	Jud. Rev.	1, 3, 6	3	2	402
30.	1983	+	Cit. S.	1, 5	2	2	402
31.	1982	-	Cit. S.	1, 2, 3, 4, 6, 18	6	1	402
32.	1982	-	Cit. S.	5	1	--	402
33.	1980	+	Cit. S.	1, 5	2	2	402
34.	1979	+	Enf.	1, 2, 3, 5, 6, 10	6	2	402

- a. Plus (+) denotes an expansive interpretation of point source; minus (-) denotes a restrictive interpretation. Note that even though the interpretation of point source may be expansive, the environmental party may have lost the case for other reasons.
- b. Canons used to interpret point source: (1) precedent; (2) broad interpretation to achieve statutory purpose; (3) legislative history; (4) deference; (5) plain meaning; (6) structure of statute; (7) harmonize with other statutes; (8) avoid absurd results; (9) avoid constitutional issues; (10) interpret exceptions narrowly; (11) honor federalism; (12) exception proves the rule; (13) give every word meaning; (14) interpret waivers narrowly (finality); (15) inclusiveness of definition; (16) exclusiveness of definition; (17) equity; (18) avoid administrative difficulties; (19) inclusion of one implies exclusion of another; (20) rule of lenity; (21) *eiusdem generis*; and (22) rule of the last antecedent.
- c. Cit. S. means citizen suit; Crim. means criminal prosecution; Enf. means civil enforcement; Jud. Rev. means judicial review.
- d. Decisions Cited refers only to Supreme Court or lower federal court precedent interpreting point source.

Decision Number	Year	+/- ^a	Type of Case ^b	Canons Used	Number of Canons Used ^c	Number of Decisions Cited ^d	CWA §
35.	1977	+	Jud. Rev.	1, 3, 5, 6, 18	5	1	402
36.	1976	-	Jud. Rev.	5, 6	2	--	402
U.S. District Court Decisions							
37.	2010	+	Cit. S.	5	1		402
38.	2010	+	Jud. Rev.	1, 6, 8	3	8	404
39.	2010	+	Enf.	1, 5	2	1	404
40.	2009	-	Cit. S.	1, 4	2	1	402
41.	2009	+	Cit. S.	1, 5	2	2	404
42.	2009	+	Cit. S.	1, 4, 5, 8, 13	5	2	402
43.	2009	+	Enf.	15	1	5	404
44.	2008	--	Cit. S.	1	1	9	402
45.	2007	+	Cit. S.	1, 2, 5	3	7	402
46.	2003	+	Cit. S.	1, 5	2	5	402/404
47.	2003	+	Cit. S.	1, 2, 4	3	3	402
48.	2002	+	Cit. S.	1, 2, 4, 5	4	8	402
49.	2001	-	Cit. S.	1, 7, 16, 21	4	5	402
50.	1999	+	Cit. S.	1, 5	2	1	402
51.	1998	--	Cit. S.	1, 6	2	2	402/404
52.	1997	+	Cit. S.	1, 8	2	3	402
53.	1996	+	Jud. Rev.	1, 2, 6	3	4	402
54.	1996	+	Crim.	1	1	1	404
55.	1996	-	Cit. S.	1, 16	2	2	402
56.	1996	+	Cit. S.	1, 2	2	8	402
57.	1995	+	Cit. S.	1, 2, 4	3	2	402
58.	1995	+	Cit. S.	1, 5	2	1	402
59.	1994	+	Cit. S.	1, 2, 4	3	8	402
60.	1991	+	Crim.	1, 2, 3, 4, 5, 6, 8, 15, 21	9	5	402
61.	1990	+	Enf.	1	1	3	404
62.	1990	-	Cit. S.	1, 2, 4, 8	4	3	402
63.	1987	+	Cit. S.	1, 5	2	2	402
64.	1986	+	Cit. S.	1, 2	2	4	402
65.	1981	+	Cit. S.	1, 5	2	3	402
66.	1980	+	Enf.	1, 5	2	1	404
67.	1980	+	Crim.	1, 5, 6	3	1	402
68.	1979	+	Cit. S.	1, 5	2	2	402
69.	1978	+	Cit. S.	1, 5	2	1	402
70.	1976	+	Cit. S.	4, 6	2	--	NEPA
71.	1974	+	Enf.	5	1	--	402