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Defining "Addition" of a Pollutant Into Navigable Waters From a Point Source Under the Clean Water Act: The Questions Answered — and Those Not Answered — by South Florida Water Management District v. Miccosukee Tribe of Indians

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ARTICLES

DEFINING "ADDITION" OF A POLLUTANT INTO NAVIGABLE WATERS FROM A POINT SOURCE UNDER THE CLEAN WATER ACT: THE QUESTIONS ANSWERED — AND THOSE NOT ANSWERED — BY *SOUTH FLORIDA WATER MANAGEMENT DISTRICT v. MICCOSUKEE TRIBE OF INDIANS*

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I. INTRODUCTION

The Supreme Court recently held in *South Florida Water Management District. v. Miccosukee Tribe of Indians*[1] that under section 301(a)[2] of the Clean Water Act ("CWA") a transfer of water, containing pollutants, from one water body into another, by a pump, may be an "addition" of pollutants into navigable waters from a point source, thereby requiring a permit under section 402 of the CWA.[3] However, the Court's holdings in *Miccosukee Tribe* failed to

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1. 124 S. Ct. 1537 (2004).

2. 33 U.S.C. § 1311(a) (2000).

3. *Id.* § 1342. *See infra* notes 106-115 and accompanying text (discussing section 301(a) of the CWA which requires a permit under section 402 of the CWA, issued by the United States Environ-

specify the exact circumstances where such a transfer of water requires a section 402 permit and did not indicate how its definition of addition" of pollutants should be interpreted in situations resulting in the pollution of surface bodies of water but involving different activities from those involved in the *Miccosukee Tribe* case.[4]

In its *Miccosukee Tribe* decision, the Supreme Court defined the "addition" of a pollutant by a point source, under section 301(a) of the CWA, as a point source that conveys into a navigable body of water pollutants generated or created by other persons,[5] as well as a point source that creates or generates the pollutants which it introduces into a navigable body of water.[6] This holding by the Supreme Court does not indicate a point source is exempted from the requirements of section 301(a), either where the point source is only adding a small or *de minimis* amount of pollutants into a navigable body of water or where the point source is discharging the pollutants at or near the place where the point source removed those pollutants from that same body of water.

Consequently, the Supreme Court in *Miccosukee Tribe* held section 301(a) of the CWA requires a point source, pumping water containing pollutants generated by other sources into a navigable body of water, to have a permit under section 402 of the Clean Water Act.[7] The permit is required unless such a permit program would violate section 101(g) of the CWA[8] by raising "the costs of water distribution prohibitively"[9] or the point source is considered to be pumping water from one part of a particular body of water into another part of that same body of water.[10] The Supreme Court indicated in the *Miccosukee Tribe* decision, however, that EPA and the states could control costs of complying with CWA section 402 per-

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mental Protection Agency (EPA) or a state with an EPA-approved permit program, for the addition from a point source of a pollutant, other than dredged or fill material, into navigable waters of the United States).

4. 124 S. Ct. 1537.
5. *Id.* at 1543.
6. *Id.*
7. *Id.*
8. 33 U.S.C. § 1251(g).
9. *Miccosukee Tribe,* 124 S. Ct. at 1545.
10. *Id.*

mit programs for water distribution and transfer programs.[11] The Court suggested costs may be controlled by issuing general section 402 permits (for which a point source does not have to individually apply), rather than individual section 402 permits (for which a person has to apply individually).[12]

The Supreme Court in *Miccosukee Tribe* discussed three different theories asserted by the lower courts to determine if two bodies of water, involved in a transfer of water from one to the other, are the same (so that a CWA section 402 permit is not required for the transfer).[13] The Supreme Court, however, remanded the case to the District Court to determine if the receiving body of water, into which a point source pumped polluted water, is "meaningfully distinct" from the body of water from which the point source draws the water it pumps.[14] In addition, in its *Miccosukee Tribe* decision, the Supreme Court discussed the "unitary waters" approach advocated by the United States under which a CWA section 402 permit would not be required in order to discharge water "unaltered, into another navigable water body, ... [even] if one water body were polluted and the other pristine, and the two would not otherwise mix."[15] The Supreme Court, however, declined to decide whether the "unitary waters" approach should be adopted under the CWA, thereby leaving the "unitary waters" approach to be considered by the District Court upon remand.[16]

Consequently, the *Miccosukee Tribe* decision requires lower federal courts to select a theory or test to determine if a transfer of polluted water from one navigable body of water to another is a transfer of water into the same water body, which does not require a CWA section 402 permit under *Miccosukee Tribe*. In addition, *Miccosukee Tribe* requires lower federal courts to determine if the pumping of water from one water body into another water body can occur without a CWA section 402 permit under the "unitary waters" approach.

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11. *Id.*

12. *Id.*

13. *Id.* at 1545-46. *See infra* notes 214-247 and accompanying text for further discussion about the three alternatives theories asserted in the lower courts.

14. *Miccosukee Tribe,* 124 S. Ct. at 1547.

15. *Id.* at 1543.

16. *Id.* at 1547; s*ee also infra* notes 248-261 and accompanying text (discussing the "unitary waters" approach).

Part II of this Article analyzes how section 301(a) of the CWA defines the "addition" of a pollutant into navigable waters from a point source and how section 301(a) requires EPA, the United States Army Corps of Engineers (Corps) and States to regulate such point source additions of pollutants into navigable water.

Part III of this article, in analyzing the Supreme Court's *Miccosukee Tribe* decision, concludes that federal courts, in determining whether two bodies of water are the same and whether a CWA section 402 permit is required, should use either a biological/ ecosystems characteristics test or a "but for/ causation" test, rather than a hydrological connection test.[17] Part III of the article also concludes that federal courts should reject the "unitary waters" approach advocated by the United States in *Miccosukee Tribe*.[18] In addition, Part III concludes the EPA, the Corps, and States can reduce the costs and complexities of complying with section 301(a) of the CWA by issuing general permits under both sections 402 and 404 of the CWA[19] for water distribution programs and other activities now subject to section 301(a) as a result of the *Miccosukee Tribe* decision.

Parts IV, V and VI of this article analyze how *Miccosukee Tribe* affects other types of activities that cause pollutants to be introduced into surface bodies of water. Part IV of the article analyzes lower court decisions pre- *Miccosukee Tribe* that have held a CWA section 402 permit is not required for changes a dam causes to the quality of water in the river downstream. Part IV concludes that the *Miccosukee Tribe* decision does not require a section 402 permit for dam-induced changes in the water quality of a river downstream of the dam, where the reservoir behind the dam and the river downstream of the dam are considered parts of the same body of water and where the dam's point source pipes or spillways conveying water from the reservoirs do not create or generate pollutants. As discussed in Part IV, this latter condition means, however, that a hydroelectric dam requires a CWA section 402 permit, if the dam's turbines kill live

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17. *Infra* notes 236-247 and accompanying text.

18. *Infra* notes 248-261 and accompanying text.

19. 33 U.S.C. § 1344 (2000). As discussed *infra* notes 87-105 and accompanying text, section 301(a) of the CWA requires a permit under section 404 of the CWA, issued either by the Corps or a state with an EPA-approved permit program, for the addition from a point source of dredged or fill material into navigable waters of the United States.

fish that were in the dam's intake water and convey dead fish into the river downstream of the dam.

Part V of this article analyzes lower federal court decisions issued pre-*Miccosukee Tribe,* which held that re-deposits by a point source of soil or vegetation back into the same wetland or other navigable body of water, from which the soil or vegetation was removed, can be the "addition" by a point source of dredged or fill material for which a permit is required under section 404 of the CWA. Part V concludes that these decisions remain valid under the Supreme Court's *Miccosukee Tribe* decision.

On the other hand, Part VI of the article concludes that the Supreme Court's *Miccosukee Tribe* decision has implicitly overruled lower federal court decisions, which held that neither section 301(a) nor section 404 of the CWA apply to "incidental fallback" (the re-deposit of small volumes of dredged material that is incidental to excavation activity in navigable waters of the United States, where such material falls back to substantially the same place as where the initial removal occurred).

The *Miccosukee Tribe* decision is an important interpretation of the CWA since section 301(a) requires a point source to have a permit, if a particular activity is found to be the "addition" of pollutants from a point source into navigable waters of the United States. These permits, which are issued under section 402 or section 404, are often individual permits for which a person must apply but in some cases can be general permits for which an individual person does not have to apply. Under the Supreme Court's interpretation of the CWA in the *Miccosukee Tribe* decision, water distribution programs are important examples of programs for which States or the EPA can issue general section 402 permits, rather than individual permits.

Read as a whole, this article concludes general section 402 permits can also be issued for other categories of point sources, and general section 404 permits can be issued by the Corps or states to categories of point sources engaged in re-deposit or incidental fallback of soil or vegetation. This broad authority to issue general section 402 and 404 permits makes CWA administration less costly and compliance less costly for a point source discharger of pollutants. Therefore, a point source discharger regulated by section 301(a) of the CWA would usually prefer to be required to obtain a general section 402 or 404 permit, rather than an individual section 402 or 404 permit.

Both individual and general CWA section 402 and 404 permits, however, may require a point source discharger of pollutants to comply with limitations on the discharge of pollutants. In some

situations, a section 402 permit will direct a point source discharger of pollutants to comply with effluent limitation requirements that require use of expensive state-of-the-art, best available pollution control technology. "The process of obtaining an [individual section 402] permit can be time consuming, and compliance with the resulting effluent limitations often requires significant capital expenditures for treatment technologies."[20]

In contrast, an activity introducing pollutants into navigable waters, which is not considered to be an "addition" of pollutants from a point source, may only be regulated under the CWA (if at all) by a state government nonpoint source (runoff) pollution control program under section 319 of the CWA[21] or by nonpoint source controls imposed by a state under section 303(d).[22] Such nonpoint source programs and controls do not have to require nonpoint sources of pollution to obtain a CWA section 402 or 404 permit and may only require a category of nonpoint sources of water pollution to use "best management practices and measures"[23] rather than comply with more expensive effluent limitation requirements applicable to point dischargers of pollutants.

II. POLLUTANT DISCHARGES REGULATED UNDER THE CLEAN WATER ACT

Section 301(a) of the CWA[24] is the provision of the Act that makes the interpretation of the term "addition of a pollutant" a key issue in determining the application of the CWA's section 402 and 404 permit requirements, effluent limitation requirements, and regulations.

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20. Richard Davis and Brian Doster, *South Florida Water Management District v. Miccosukee Tribe of Indians: Supreme Court Considers Extending Clean Water Act Regulation,* 35 ENV'T REP. (BNA) 91, 95 (Jan. 9, 2004).

21. 33 U.S.C. § 1319 (2000).

22. *Id.* § 1313(d). *See also* Oliver A. Houck, *TMDLs, Are We There Yet? The Long Road Toward Water Quality-Based Regulation Under the Clean Water Act,* 27 ENVTL. L. REP. (ELI) 10391, 10399-10401 (Aug. 1997) (discussing the control of nonpoint sources under section 303(d)).

23. 33 U.S.C. 1329(b)(2)(A).

24. *Id.* § 1311(a).

Section 301(a) provides: "Except as in compliance with this section and sections 302, 306, 307, 318, 402 and 404 of this title, the discharge of any pollutant by any person is unlawful."[25] The sections cited in section 301(a) mandate permits for regulated discharges of pollutants and compliance with limitations on effluent discharges[26] to avoid liability under the CWA.[27] Because section 301(a) imposes a "zero discharge" of pollutants standard in the absence of a required permit[28] and because section 301(a)'s prohibition is self-executing,[29] a person who "discharges" any pollutant regulated by section 301(a) must comply with these specified requirements to avoid various penalties under the Act.[30]

As discussed below in more detail,[31] sections 502(16)[32] and 502(12) of the CWA[33] define "discharge" and "discharge of a pollut-

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25. *Id.*

26. *Id.* § 1317. These effluent limitations requirements are sections 301, 302, 306, and 307 and are discussed *infra* notes 118-129 and accompanying text.

27. Nat'l Wildlife Fed'n v. Consumers Power Co., 862 F.2d 580, 582-83 (6th Cir. 1988).

28. Hughey v. JMS Dev. Corp., 78 F.3d 1523, 1529 (11th Cir. 1996). In *Hughey*, however, the court recognized an exception from this "zero discharge" standard when: (1) compliance with such a standard is factually impossible; (2) no permit covering such discharge exists; (3) the discharge was in good faith compliance with local pollution control requirements that substantially "mirrored" the state's proposed discharge standards; and (4) the discharges of pollutants were minimal. *Id.* *Hughey* involved storm water discharges from a subdivision that were not subject to any section 402 permit requirements under the Act because EPA had delegated section 402 permit issuing authority to the state, but the state had only proposed a general section 402 permit that would regulate such storm water discharges.

29. United States v. Frezzo Bros., Inc., 602 F.2d 1123, 1127 (3rd Cir. 1979), *cert. denied*, 444 U.S. 1074 (1980).

30. The penalties that can be imposed upon a person who violates section 301(a) are discussed *infra* notes 57-68 and accompanying text.

31. *See infra* notes 69-85 and accompanying text.

32. 33 U.S.C. § 1362(16) (2000).

33. *Id.* § 1362(12).

ant/ pollutants" as "[the] addition of any pollutant to navigable waters from any point source [or] . . . to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft."[34] The CWA also defines the terms "pollutant,"[35] "navigable waters,"[36] "contiguous zone,"[37] "ocean,"[38] and "point source."[39] A "discharge" does not have to be an intentional act;[40] because "compliance with the CWA is a matter of strict liability . . . a [person's] intentions to comply or a good-faith effort to do so does not excuse a violation."[41]

Nonpoint sources of pollution (often referred to as "runoff" pollution), which encompass all water quality problems and pollution originating from or caused by sources that are not "point sources,"[42] are not subject to the permit requirements and limitations on effluent discharges that section 301(a) imposes upon point source discharges of pollutants into navigable waters.[43] Instead, nonpoint source pollution primarily is sought to be regulated under the CWA by nonpoint source management programs adopted by states under section 319 of the CWA.[44] Section 319 seeks to control pollutant loadings from nonpoint sources through "best management practices and measures."[45]

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34. *Id.*

35. *Id.* § 1362(6).

36. *Id.* § 1362(7).

37. *Id.* § 1362(9).

38. *Id.* § 1362(10).

39. *Id.* § 1362(14).

40. Greenfield Mills, Inc. v. O'Bannon, 189 F. Supp. 2d 893, 905 (N.D. Ind. 2002), *aff'd in part and rev'd in part on other grounds*, 361 F.3d 934 (7th Cir. 2004).

41. United States v. Gulf Park Water Co., Inc., 972 F. Supp. 1056, 1059 (S.D. Miss. 1997).

42. Nat'l Wildlife Fed'n v. Gorsuch, 693 F.2d 156, 166 (D.C. Cir. 1982).

43. League of Wilderness Defenders/Blue Mountains Diversity Project v. Forsgren, 309 F.3d 1181, 1183 (9th Cir. 2002).

44. 33 U.S.C. § 1329 (2000).

45. *Id.* § 1329(b)(2)(A)–(D). Nonpoint sources of pollution may also be regulated by a state under section 303(d), *id.* at § 1313(d), of the CWA in order to achieve total maximum daily loads of pollutant discharges established for a particular body of water to implement an

As noted above, section 301(a) prescribes a "zero discharge" standard unless the section's requirements are met. Therefore, neither section 301(a) nor any other provision of the CWA requires a "discharge" of a "pollutant" from a point source to meet any minimum threshold amount, by weight, volume or concentration, for section 301(a) to apply.[46] Section 301(a) does not require a point source "discharge of a pollutant" to cause either "significant alteration in water quality" in the body of water into which the pollutant is discharged,[47] or identifiable harm to that or any other water body, or to fish, shellfish or other organisms, humans or the environment in order for a discharge to be subject to section 301(a). Furthermore, the CWA does not require that a point source discharge of pollutants create a net increase in the level of pollution being introduced into the receiving body of water.[48]

The CWA's definition of "person" includes individuals, corporations, and state and local governments, but not the United States and agencies, departments, employees and agents of the United States.[49]

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applicable water quality standard. *See also* Houck, *supra* note 22, at 10399-10401 for discussion of the control of nonpoint sources under section 303(d).

46. Hughey v. JMS Dev. Corp., 78 F.3d 1523, 1529 (11th Cir. 1996). (Section 301(a) imposes a "zero discharge" of pollutants standard in the absence of a section 402 NPDES permit, although an exemption from this "zero discharge standard is available in a certain situation); Dubois v. USDA, 102 F.2d 1273, 1298 (1st Cir. 1996), *cert. denied*, 521 U.S. 1119 (1997) (stating in dictum that the definition of a "discharge of any pollutant", in section 502(12)(A), 33 U.S.C. § 1362(12)(A), of the CWA does not require an addition of "some not insignificant amount of pollutants to the transferee water body.")

47. Minnehaha Creek Watershed Dist. v. Hoffman, 597 F.2d 617, 626-27 (8th Cir. 1979).

48. Comm. to Save Mokelumne River v. E. Bay Mun. Util. Dist., 13 F.3d 305, 309 (9th Cir. 1993), *cert. denied*, 513 U.S. 873 (1994).

49. 33 U.S.C. § 1362(5). This provision defines "person" to mean "an individual, corporation, partnership, association, State, municipality, commission, or political subdivision of a State, or any interstate body." *Id.* This definition's use of "means" excludes entities that are not explicitly mentioned, such as the United States and its agencies, departments, employees and agents. "State" is defined by

Therefore, section 301(a) does not apply either to the United States or to agencies, departments, employees or agents of the United States.[50] However, section 313(a) of the CWA[51] provides:

> Each department, agency, or instrumentality of the executive, legislative, and judicial branches of the Federal Government (1) having jurisdiction over any property or facility, or (2) engaged in any activity resulting, or which may result, in the discharge or runoff of pollutants, and each officer, agent, or employee thereof in the performance of his official duties, shall be subject to, and comply with, all Federal, State, interstate, and local requirements, administrative authority, and process and sanctions respecting the control and abatement of water pollution in the same manner, and to the same extent as any nongovernmental entity including the payment of reasonable service charges.[52]

Section 313(a) regulates the nonpoint source "runoff of pollutants"[53] from a federal facility as well as the point source "discharge

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the CWA to mean "a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Trust Territory of the Pacific Islands," *id.* § 1362(3), while "municipality" is defined by the CWA to mean "a city, town, borough, county, parish, district, association, or other public body created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of this title." *Id.* § 1362(4). The CWA defines "interstate agency" to mean "an agency of two or more states established by or pursuant to an agreement or compact approved by the Congress, or any other agency of two or more States, having substantial powers or duties pertaining to the control of pollution as determined and approved by the Administrator [of the United States Environmental Protection Agency]." *Id.* § 1362(2).

50. EPA v. State Water Res. Control Bd., 426 U.S. 200, 222 n.37 (1976).

51. 33 U.S.C. § 1323(a) (2000).

52. *Id.*

53. The CWA does not define "runoff," but one District Court has held that "the term 'runoff' ordinarily refers to the flow of excess

of pollutants" from a federal facility.[54] The term "discharge of pollutants" is defined in the same manner under both sections 301(a) and 313 by interpretations of the CWA's definition of "discharge of a pollutant" and definitions of the terms "pollutant," "point source," and "navigable waters;" therefore, courts often rely upon a case interpreting "discharge of a pollutant" under one of the two sections when interpreting that term under the other section.[55] As is the case with section 301(a), section 313(a) does not explicitly require that a point source "discharge . . . of pollutants" either meet any minimum threshold amount by weight, volume or concentration or cause any identifiable harm to water quality, humans or the environment.

Although section 313(a) makes federal agencies, departments, employees and agents subject both to procedural requirements (including permit requirements) and to substantive effluent limitation requirements of federal, state and local water pollution control laws to the same extent as private persons,[56] they are not subject to the enforcement provisions of the CWA applied to a "person" who unlaw-

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precipitation (such as rain or snow) into a stream [and] ... that the rise and fall of the water level in [a] river because of fluctuations in the discharge of [a] dammed stream could not be classified as runoff of a pollutant within the meaning of the [Clean Water Act]." State of Mo. *ex rel.* Ashcroft v. Dep't. of the Army, 672 F.2d 1297, 1304 (8th Cir. 1982). This article will not analyze how "runoff of pollutants" should be defined under section 313.

54. *Id.*

55. *E.g.*, Nat'l Wildlife Fed'n v. Gorsuch, 693 F.2d 156 (D.C. Cir. 1982) (interpreting section 301(a)); Nat'l Wildlife Fed'n v. Consumers Power Co., 862 F.2d 580, 582 (6th Cir. 1988) (interpreting section 301(a)); State of Mo. *ex rel.* Ashcroft v. Dep't of the Army, 672 F.2d 1297 (8th Cir. 1982) (interpreting section 313); United States *ex rel.* Tenn. Valley Auth. v. Tenn. Water Quality Control Bd., 717 F.2d 992 (6th Cir. 1983) (interpreting section 313), *cert. denied*, 466 U.S. 937 (1984).

56. Tenn. Water Quality Control Bd., 717 F.2d at 997. The procedural requirements with which a federal facility is required to comply under section 313 can include the requirement for an NPDES permit for the discharge of pollutants from a point source, but section 313 does not require a federal facility to obtain an NPDES permit from a state for pollution that "does not result from the discharge of pollutants from a point source." *Id.* at 999-1000.

fully discharges a pollutant from a point source in violation of section 301(a). Under section 309 of the CWA,[57] when a person violates section 301(a) by unlawfully discharging a pollutant, the federal government has a number of enforcement options; including, EPA issuing a compliance order against the violator,[58] the United States filing a civil action in federal court seeking appropriate equitable relief,[59] EPA assessing administrative civil penalties,[60] and the United States filing suit against the violator in a federal district court seeking assessment of civil penalties[61] or imposition of criminal punishment.[62] Civil liability for violation of section 301(a) of the CWA is strict and not dependent upon proof of negligence or knowledge the act is illegal.[63]

In addition, a "person . . . having an interest which is or may be adversely affected"[64] can file a citizen suit under section 505[65] against a person alleged to be in violation of section 301(a), to seek appropriate injunctive relief and appropriate civil penalties under section 309(d) of the CWA.[66] Since states and local governments are a "person" under the CWA, a state or local government meeting the section 505 "adversely affected" standing to sue requirement can bring a citizen suit against another "person" who is allegedly in violation of section 301(a).

Because the CWA's definition of "person" does not include either the federal government or agencies, departments, employees or agents of the federal government, the United States' enforcement options under section 309 are not available against a federal agency, department, employee or agent that violates section 313 of the CWA. However, section 313's requirements can be enforced in a suit seeking injunctive relief brought against a federal administrative agency

57. 33 U.S.C. § 1319 (2000).
58. *Id.* § 1319(a)(1)-(3).
59. *Id.* § 1319(b).
60. *Id.* § 1319(g).
61. *Id.* § 1319(d).
62. *Id.* § 1319(c).
63. Kelly v. EPA, 203 F.3d 519, 522 (7th Cir. 2000).
64. 33 U.S.C. § 1365(g) (2000).
65. *Id.* § 1365.
66. *Id.* §§ 1365(a)(1)(ii)(A), (f)(1).

under the Administrative Procedure Act[67] by "a person ... adversely affected or aggrieved by [the challenged] agency action...."[68]

As noted earlier, by defining "discharge" "when used without qualification [to include] a discharge of a pollutant, and a discharge of pollutants,"[69] the CWA makes section 301(a)'s prohibition of unlawful discharges of pollutants applicable only to "point sources" that "discharge" pollutants. It defines the term "discharge of a pollutant" and the term "discharge of pollutants" to each mean: "(A) any addition of any pollutant to navigable waters from any point source, (B) any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft."[70]

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67. 5 U.S.C. §§ 701-706 (2000).

68. *Id.* § 702.

69. 33 U.S.C. § 1362(16) (2000).

70. *Id.* § 1362(12). The CWA defines "navigable waters" to mean "the waters of the United States, including the territorial seas." *Id.* § 1362(7). "Territorial seas" is defined by the CWA to mean "the belt of the seas measured from the line of ordinary low water mark along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending seaward a distance of three miles." *Id.* § 1362(8). "Contiguous zone" is defined by the CWA to mean "the entire zone established or to be established by the United States under article 24 of the Convention of the Territorial Sea and the Contiguous Zone," *id.* § 1362(9), while "ocean" is defined by the CWA to mean "any portion of the high seas beyond the contiguous zone." *Id.* § 1362(10). EPA regulations defining "waters of the United States" under the CWA are at 40 C.F.R. §§ 122.2, 230.3(s), and Corps regulations defining "navigable waters" for purposes of section 404 of the CWA are at 33 C.F.R. § 328.3(a).

"Navigable waters" under the CWA include a surface body of freshwater "navigable in fact" because it is used, has been used in the past, or is susceptible of being used, in its ordinary condition, as a route for waterborne interstate or foreign commercial trade or travel. United States v. Deaton, 332 F.3d 698, 709 (4th Cir. 2003), *cert. denied*, 124 S. Ct. 1874 (2004).

In addition, a majority of courts of appeals also hold that "navigable waters" under the CWA include the entire tributary system of a navigable in fact body of water (all of the streams whose

waters eventually flow into that "navigable in fact" body of water). *Id.*; Headwaters, Inc. v. Talent Irrigation Dist., 243 F.3d 526, 533 (9th Cir. 2001); United States v. Rapanos, 339 F.3d 447, 452-53 (6th Cir. 2003), *cert. denied*, 124 S. Ct. 1875 (2004); United States v. TGR Corp., 171 F.3d 762, 765 (2d Cir. 1999); United States v. Tex. Pipe Line Co., 611 F.2d 345, 347 (10th Cir. 1979); United States v. Ashland Oil and Transp. Co., 504 F.2d 1317, 1325 (6th Cir. 1974). The Fifth Circuit has held, however, that "navigable waters" under the CWA only include bodies of water that actually are navigable (in fact) or are adjacent to an open body of navigable water. Rice v. Harken Explor. Co., 250 F.3d 264, 269-70 (5th Cir. 2001).

"Navigable waters" under the CWA include human-made ditches and canals that are tributaries of "navigable in fact" waters, United States v. Eidson, 108 F.3d 1336, 1342 (11th Cir. 1997), *cert. denied*, 522 U.S. 899, 1004 (1997), and tributaries that only have water flowing in them intermittently during significant rainfall (such as normally dry drainage ditches and arroyos). *Id.*

"Navigable waters" ("waters of the United States") under the CWA also include freshwater "wetlands" (defined by Corps and EPA regulations as lands "inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." 33 C.F.R. § 328.3(b) (Corps); 40 C.F.R. § 122.2 (EPA)) that are adjacent to other navigable waters (other than other wetlands), 33 C.F.R. § 328.3(a)(7) (Corps); 40 C.F.R. § 122.2 (EPA); *see* United States v. Riverside Bayview Homes, Inc., 474 U.S. 121, 124 (1985), but not to non-navigable in fact, isolated, intrastate freshwater wetlands that are habitat for migratory waterfowl. Solid Waste Agency of N. Cook County v. United States Army Corps of Eng'rs, 531 U.S. 159 (2001) [hereinafter SWANCC] The Fifth Circuit has interpreted the SWANCC decision as limiting the definition of "navigable waters" under the CWA to bodies of water that are actually navigable or are adjacent to an open body of navigable water, Rice v. Harken Explor. Co., 250 F.3d 264, 269-70 (5th Cir. 2001), while most other courts have interpreted SWANCC only as holding that "navigable waters" under the CWA do not include an isolated water body with no hydrological connection to a navigable in fact body of water. United States v. Rapanos, 376 F.3d 629, 642 (6th Cir. 2004).

The CWA, although providing no definition of "addition," does define the term "point source" to mean "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," excluding "agricultural storm water discharges and return flows from irrigated agriculture."[71] Section 301(a), therefore, only applies to an "addition" of pollutants from a discernible, confined and discrete conveyance (a "point source") into navigable waters, or into the contiguous zone or the ocean (except from a vessel or other floating craft).

An apparent majority of federal courts hold that "navigable waters" under the CWA include groundwater that is hydrologically connected to a navigable surface body of water. Williams Pipe Line Co. v. Bayer Corp., 964 F. Supp. 1300, 1320 (S.D. Iowa 1997); Washington Wilderness Coalition v. Hecla Mining Corp., 870 F. Supp. 983, 990 (E.D. Wash. 1994); Sierra Club v. Colorado Ref. Co., 838 F. Supp. 1428, 1434 (D. Colo. 1993); McClellan Ecological Seepage Situation v. Weinberger, 707 F. Supp. 1182, 1195-96 (E.D. Cal. 1988), *vacated on other grounds*, 47 F.3d 325 (9th Cir. 1995), *cert. denied*, 516 U.S. 807 (1995); New York v. United States, 620 F. Supp. 374, 381 (E.D.N.Y. 1985); Friends of the Coast Fork v. Turner, 1996 U.S. Dist. Lexis 22083 *7 (D. Ore. 1996). Federal courts, however, hold that "navigable waters" under the CWA do not include isolated, non-tributary groundwater that has no hydrologic connection to surface navigable waters, Exxon Corp. v. Train, 554 F.2d 1310, 1311-12 (5th Cir. 1977); and a substantial minority of federal courts hold that "navigable waters" under the CWA also does not include groundwater even if it is hydrologically connected to navigable surface waters. Vill. of Oconomowoc Lake v. Dayton Hudson Corp., 24 F.3d 962, 966 (7th Cir. 1994), *cert. denied*, 513 U.S. 930 (1994); Town of Norfolk v. United States Army Corps of Eng'rs, 968 F.2d 1438, 1451 (1st Cir. 1992); Umatilla Water Quality Protective Ass'n, Inc. v. Smith Frozen Foods, Inc., 962 F. Supp. 1312, 1314 (D. Or. 1997); Kelley v. United States, 618 F. Supp. 1103, 1106-07 (W.D. Mich. 1985).

71. 33 U.S.C. § 1362(14) (2000).

As discussed later,[72] the Supreme Court held in *Miccosukee Tribe* that the CWA's definition of "point source" "makes plain that a point source need not be the original source of the pollutant; it need only convey the pollutant to 'navigable waters' . . . ."[73] On the other hand, for purposes of section 301(a), an "addition" of pollutants to a navigable body of water from a point source "do[es] not have to involve the introduction of material brought in from somewhere else."[74] There can be an "addition" of a pollutant into a navigable body of water under section 301(a) "without an addition of material . . . , at least when an activity transforms some material from a non-pollutant into a pollutant," such as when soil and plant matter are removed from a wetland (that is a navigable body of water under the Act) and re-deposited into that same wetland.[75]

The Act also does not explicitly require that discharged pollutants be dissolved or suspended in the waters of the navigable body of water into which the pollutants have been added. The plain language of section 301(a) makes its requirements applicable to a discharge or addition of pollutants into a navigable water body when the discharged pollutants settle to the bottom of the navigable body of water into which the pollutants were added or carried by currents (in-

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72. *Infra* notes 176-200 and accompanying text.

73. S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe, 124 S. Ct. 1537, 1543 (2004).

74. Borden Ranch P'ship v. United States Army Corps of Eng'rs, 261 F.3d 810, 815 (9th Cir. 2001), *aff'd per curiam by equally divided court*, 123 S. Ct. 599 (2002).

75. United States v. Deaton, 209 F.3d 331, 335 (4th Cir. 2000), *mot. to reconsider denied*, 332 F.3d 698 (4th Cir. 2003), *cert. denied*, 124 S. Ct. 1874 (2004); *see also infra* notes 412-38 and accompanying text for a discussion of "Re-deposits" of dredged and excavated materials.

As discussed *infra* notes 201-47 and accompanying text, Miccosukee Tribe, 124 S. Ct. 1537, 1545 (2004), held that a NPDES permit is not required in order for a point source to pump water containing pollutants from one part of a navigable body of water to another part of that same navigable body of water, when the point source does not introduce any pollutants into that transferred water and the transferred water is not diverted for any intervening use after being withdrawn from that body of water prior to being pumped back into the source body of water.

stead of the discharged pollutants dissolving or becoming suspended in the waters of a navigable body of water). Although the Clean Water Act does not explicitly state section 301(a) requirements apply to a point source addition of pollutants to a navigable body of water that settle into the bottom sediment of that water body, a number of provisions of the CWA address pollutants in sediments on the bottoms of navigable bodies of water,[76] implicitly indicating that Congress intended that the CWA's regulatory programs (including section 301(a)) should apply to point source discharges of pollutants that settle on the bottoms of navigable bodies of water.

Although the CWA defines both "pollutants" and "pollution," these two terms are defined differently, with "pollutant" defined by the CWA to mean "dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemicals wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal and agricultural waste discharged into water," subject to some exclusions.[77] Although this

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76. Section 115, 33 U.S.C. § 1265 (2000), of the CWA directs the EPA Administrator, acting through the Secretary of Army, to enter into contracts for the removal and appropriate disposal of "in-place pollutants," "with emphasis on toxic pollutants in harbors and navigable waterways" ("in-place pollutants" presumably are pollutants that have settled to the bottom of a navigable body of water and are in the sediment on the bottom of a navigable body of water). Section 116, *id.* § 1266, authorized the EPA Administrator to enter into contracts and other agreements with the State of New York for a project "to demonstrate methods for the selective removal of polychlorinated biphenyls contaminating bottom sediments of the Hudson River" and the appropriate treatment and disposal of such removed sediments. Section 304(a)(1)(C), *id.* § 1314(a)(1)(C), directs the EPA Administrator to develop and publish "information on ... rates of organic and inorganic sedimentation for varying types of receiving waters," as part of published water quality criteria.

77. *Id.* § 1362(6). The CWA excludes, from the definition of "pollutant:"

> (A) sewage from vessels or a discharge incidental to the normal operation of a vessel of the Armed Forces within the meaning of section 312 of this title; or (B) water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water de-

definition's "restrictive phrasing," that defines "pollutant" "with a list of specific items," is not "all-inclusive,"[78] the courts have interpreted the CWA's definition of "pollutants" "to encompass substances not specifically enumerated but subsumed under the broad generic terms such as 'chemical waste' and 'solid waste',"[79] and Congress has given EPA reasonable discretion to define what is a "pollutant" (and what is a "point source") under the CWA.[80]

The CWA, however, defines "pollution" differently than "pollutant," as "the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water."[81] The CWA's definition of "pollution" is broader than the CWA's definition of "pollutants;" with the exception of "heat" (which can cause the temperature of a body of water to increase), the CWA's definition of "pollutant" requires some tangible type of material or substance to be placed into a body of water (as opposed to simply causing a change in water conditions).[82] Consequently, the "alteration of the chemical, physical, biological, [or] radiological" characteristics of a body of water, such as by changing the amount of dissolved oxygen present in a body of water, can satisfy the CWA's definition of "pollution"[83] even though the alteration does not result from any tangible material being placed into the body of water. "Although alterations in the properties of water are 'pollution' under the broader definition ..., all alterations do not fit the narrower defini-

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> rived in association with oil or gas production and disposed of in a well, if the well used either to facilitate production or for disposal purposes is approved by the authority of the State in which the well is located, and if such State determines that such injection or disposal will not result in the degradation of ground or surface water resources.

Id.

78. Nat'l Wildlife Fed'n v. Gorsuch, 693 F.2d 156, 172-73 (D.C. Cir. 1982).

79. Hudson River Fishermen's Ass'n v. New York, 751 F. Supp. 1088, 1101 (S.D.N.Y. 1990), *aff'd*, 940 F.2d 649 (2d Cir. 1991).

80. *Gorsuch,* 693 F.2d at 173-74.

81. 33 U.S.C. § 1362(19) (2000).

82. *Gorsuch,* 693 F.2d at 171.

83. *Id.* at 165.

tion of 'pollutants'. . . ."[84] Under the CWA, therefore, an "addition" of pollutants to a body of water by a point source does not necessarily occur when the point source causes "pollution" of the body of water, although a court may define "pollutant" under the Act in a manner that is consistent with the CWA's definition of pollution."[85]

Although section 301(a) generally makes it unlawful for a point source to add pollutants to a navigable body of water, certain permits may supersede the general rule. Sections 318, 402, and 404 of the CWA provide for the issuance of permits authorizing lawful discharges of pollutants from point sources into navigable waters that otherwise would be unlawful under section 301(a). Section 318 authorizes the EPA Administrator to permit "the discharge of a specific pollutant or pollutants under controlled conditions associated with an approved aquaculture project under Federal or State supervision pursuant to section 402 of this title."[86]

Section 404 authorizes the Corps or a state with an EPA Administrator-approved permit program,[87] to issue a permit "for the discharge of dredged or fill material into the navigable waters at specified disposal sites."[88] A section 404 permit often is an individual

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84. United States *ex rel.* Tenn. Valley Auth. v. Tenn. Water Quality Control Bd., 717 F.2d 992, 999 (6th Cir. 1983), *cert. denied*, 466 U.S. 937 (1984).

85. N. Plains Res. Council v. Fidelity Explor. and Dev. Co., 73 F.3d 1155, 1161-62 (9th Cir. 2003).

86. 33 U.S.C § 1328(a). This article will not discuss further permits under section 318 and 402 for aquaculture projects.

87. *Id.* § 1344(g); 40 C.F.R. § 233.50 (2003). The Corps' issuance of individual and general permits under sections 404(a) and section 404(e) is suspended for activities with respect to which a permit may be issued by a state that has been delegated the authority to issue section 404 permits. 33 U.S.C. §§ 1344(h)(2)(A), (3) (2000). Only Michigan and New Jersey have been authorized by EPA to administer state section 404 permit programs.

88. *Id.* §§ 1344(a), (h). The Corps and EPA have issued regulations defining "fill material" as any material (other than trash or garbage) placed in waters of the United States where the material has the effect of replacing any portion of a water of the United States with dry land or changing the bottom elevation of any portion of a water of the United States, 33 C.F.R. § 323.2(e)(1) (2003) (Corps), 40 C.F.R. § 232.2 (2003) (EPA), and "dredged material" as "mate-

permit for which a person must apply, although section 404(e)[89] authorizes the Corps to issue general permits (for which an individual would not have to apply[90]), on a state, regional, or nationwide basis, for any category of activities involving discharges of dredged or fill materials that the Corps finds are similar in nature and will cause, both separately and cumulatively, only minimal adverse effects on the environment.[91] A state with an approved section 404 permit pro-

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rial that is excavated or dredged from waters of the United States." 33 C.F.R. § 323.2(c) (Corps), 40 C.F.R. § 232.2 (EPA). "Dredging" for purposes of this regulation can include hydraulic dredging as well as mechanized means of dredging. Greenfield Mills, Inc. v. O'Bannon, 189 F. Supp. 2d 893, 905, 906 (N.D. Ind. 2002), *aff'd in part and rev'd in part on other grounds*, 361 F.3d 934 (7th Cir. 2004). The Corps and EPA also have issued regulations that define "discharge of fill material," 33 C.F.R. § 323.2(f) (Corps), 40 C.F.R. § 232.2 (EPA) and "discharge of dredged material," 33 C.F.R. § 323.2(d)(1) (Corps), 40 C.F.R. § 232.2 (EPA). *See also infra* notes 446-511 and accompanying text for discussion of the agencies' definition of "discharge of dredged material."

The Corps does not issue section 404 permits for its own civil works projects and navigation maintenance and improvement activities. 33 C.F.R. § 336.1(a).

Section 404(f)(1), 33 U.S.C. § 1344(f)(1), provides that the discharge of dredged or fill materials from a number of activities, including certain farming, silviculture, and ranching activities, "is not prohibited or otherwise subject to regulation" under sections 404, 301(a) or 402 of the CWA (except for effluent standards or prohibitions under section 307), except as provided under the "recapture" provision of section 404(f)(2), *id.* § 1344(f)(2). Section 404(f)(2) provides that "[a]ny discharge of dredged or fill material into the navigable waters incidental to any activity having as its purpose bringing an area of the navigable waters into a use to which it was not previously subject, where the flow or circulation of navigable waters may be impaired or the reach of such waters be reduced, shall be required to have a permit under section 404 of the CWA." *Id.*

89. *Id.* § 1344(e).

90. Oh. Valley Envtl. Coalition v. Horinko, 279 F. Supp. 2d 732, 759 (S.D. W.Va. 2003).

91. In accordance with the Corps' regulations for establishing general permits, 33 C.F.R. § 330 (2003), the Corps has issued forty-

gram can also issue general section 404 permits[92] and can assume administration and enforcement of a general permit issued by the Corps under section 404(e) with respect to activities in such state to which such general permit applies.[93] The Corps may sometimes deny an application for an individual section 404 permit, particularly when an application seeks a section 404 permit authorizing the discharge of dredged or fill materials into protected wetlands.

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four section 404 nationwide general permits (NWPs). 67 Fed. Reg. 2020 (Jan. 15, 2002); 67 Fed. Reg. 6692 (2002); 67 Fed. Reg. 8579 (Feb. 25, 2002). These nationwide general permits are published only in the Federal Register and are not published in the Code of Federal Regulations. Some of the NWPs are limited to discharges that do not cause the loss of more than a half-acre of protected waters. 67 Fed. Reg. at 2020, 2021, 2023.

These nationwide general permits are subject to General Conditions, 67 Fed. Reg. 2089-94 (Jan. 15, 2004), that require an activity authorized under a general permit to minimize adverse impacts on the aquatic environment. General Condition 19, 67 Fed. Reg. at 2092-93.

In accordance with 33 C.F.R. § 330.1(e), certain section 404 nationwide general permits (for discharges that will result in the loss of more than one-tenth of an acre of protected waters, 67 Fed. Reg. at 2021) require a person to give pre-construction notice [hereinafter PCN] (in compliance with General Condition 13, 67 Fed. Reg. at 2090-92) to a Corps District Engineer prior to undertaking an activity that is authorized by a section 404 general permit. NWPs for activities requiring a PCN generally require compensatory mitigation to offset the adverse impacts of the permitted discharges. General Condition 19(c), 67 Fed. Reg. at 2092-93. After receiving a PCN, a District Engineer can add special conditions to a nationwide general permit (NWP) to ensure that the permitted discharges only will have minimal adverse impacts on the aquatic environment, or may exercise discretionary authority to require that a person apply for an individual section 404 permit for a proposed discharge that will result in more than minimal adverse effects on the aquatic environment. General Condition 13, 67 Fed. Reg. at 2090.

The Corps also may issue section 404 regional general permits. 33 C.F.R. § 330.1(c) (2003).

92. 33 U.S.C. § 1344(g)(1) (2000).

93. *Id.* § 1344(h)(5).

The Corps can issue a section 404 permit when it finds, after weighing the costs and benefits of granting or denying the permit application, the public interest will be served by issuing the permit.[94] However, section 404(b)(1)[95] requires that the specification of each disposal site for the discharge of dredged or fill material under a section 404 permit shall occur through the application of guidelines developed by the EPA Administrator in conjunction with the Corps.[96] EPA's section 404(b)(1) guidelines[97] prohibit, except as authorized under section 404(b)(2),[98] the issuance of an individual section 404 permit "if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences."[99] EPA's section 404(b)(1) guidelines also mandate, except as provided under section 404(b)(2), that no individual section 404 permit for the discharge of dredged or fill material shall issue unless "appropriate and practicable steps have been taken, which will minimize potential adverse impacts of the discharge on the aquatic ecosystem."[100] To comply with this mitigation requirement, a section 404 individual permit holder must comply

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94. 33 C.F.R. § 320.4.

95. 33 U.S.C. § 1344(b)(1).

96. In any case where EPA's section 404(b)(1) guidelines would prohibit the specification of a disposal site, the specification of a disposal site for the discharge of dredged or fill material under a section 404 permit shall occur "through the application additionally of the economic impact of the site on navigation and anchorage." *Id.* § 1344(b)(2).

97. 40 C.F.R. § 230.

98. 33 U.S.C. § 1344 (b)(2).

99. 40 C.F.R. § 230.10(a); 33 C.F.R. §§ 320.4(a)(1), (b)(4). Unless clearly demonstrated otherwise, where the activity associated with a discharge proposed for a protected wetland or other special aquatic site is not "water dependent" (requiring access or proximity to or siting within a special aquatic site to fulfill its basic purpose), practicable alternatives not involving special aquatic sites are presumed to be available and all practicable alternatives to the proposed discharge, which do not involve a discharge into a special aquatic site, are presumed to have less adverse impact on the aquatic ecosystem. 40 C.F.R. § 230.10(a)(3).

100. 40 C.F.R. § 230.10(d).

with compensatory mitigation requirements when wetlands will be adversely affected by a discharge of dredged or fill materials.[101] Although the Corps' general section 404 permits are not subject to these requirements governing individual section 404 permits, the Corps' General Conditions[102] for Section 404 Nationwide General Permits (NWPs) require an activity authorized under an NWP to minimize adverse impacts on the aquatic environment and require some activities authorized by NWPs to provide compensatory mitigation for adverse impacts to wetlands, streams, and open waters.

In order for the Corps to issue either an individual or a general section 404 permit, the state in which the discharge will occur must certify (or waive its right to certify), in accordance with section 401(a) of the CWA,[103] that the discharge authorized by the section 404 permit will comply with the state's water quality standards.[104] In addition, the EPA Administrator can prohibit the specification of any defined area as a disposal site for the discharge of dredged or fill material if she determines "that the discharge of such materials into such an area will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas."[105]

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101. 55 Fed. Reg. 9211, 9212 (1990) (Memorandum of Agreement Between the EPA and the Dep't. of the Army Concerning the Determination of Mitigation Under the Clean Water Act Section 404(b)(1) Guidelines). In the case of a section 404 permit to fill in wetlands, compensatory mitigation requires the restoration of previously damaged wetlands or the creation of new wetlands, to off-set the harm to wetlands destroyed or damaged by the activities authorized by the section 404 permit. *Id.*

102. 67 Fed. Reg. 2089-94 (2002).

103. 33 U.S.C. § 1341(a) (2000).

104. Section 401(a) certification requirements apply to both individual and general section 404 permits. United States v. Marathon Dev. Corp., 867 F.2d 96, 100 (1st Cir. 1989). Section 401(a)(1), 33 U.S.C. § 1341(a)(1), directs that no individual or general section 404 permit shall be granted if section 401 certification has been denied by the state. *Id.* at 101.

105. 33 U.S.C. § 1344(c). This authority essentially gives the EPA Administrator the authority to veto both individual and general section 404 permits issued by the Corps or a state. The EPA Administrator can also veto the issuance of either an individual or general

Except as provided in sections 318 and 404 of the CWA, section 402 of the Act[106] authorizes the EPA Administrator, or a state with either a full or partial permit program approved by the EPA Administrator,[107] to "issue a permit for the discharge of any pollutant, or combination of pollutants, notwithstanding section 301(a)," upon certain conditions (including compliance with technology-based or water-quality based effluent limitation requirements) being satisfied.[108] These section 402 permits are referred to as NPDES (National Pollution Discharge Elimination System) permits. A section 402 NPDES permit usually is an individual permit for which a person must apply, although EPA regulations[109] authorize EPA Regional Administrators and directors of state section 402 NPDES permit programs to issue general NPDES permits (for which a person does not have to apply[110]) for a category of point sources within

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section 404 permit proposed to be issued by a state with an approved section 404 permit program, when the EPA Administrator finds that issuance of the permit would be "outside the requirements of . . . section [404] . . . ." *Id.* § 1344(j). If the state does not revise a permit, which the EPA Administrator has vetoed, to meet the EPA Administrator's objections, the Corps can issue the permit under section 404 either as an individual permit or as a general permit.

106. *Id.* § 1342.

107. *Id.* §§ 1342(b)-(f), (n). EPA has delegated either full or partial authority to 45 states to issue section 402 NPDES permits. EPA's authority to issue section 402 NPDES permits is suspended in a state that has been delegated the authority to issue section 402 NPDES permits. *Id.* § 1342(c)(1). *See also* William L. Andreen, *Water Quality Today - Has the Clean Water Act Been a Success?*, 55 ALA. L. REV. 537, 540 n.16 (2004).

108. *Id.* §§ 1342(a)-(b). EPA and the states are prohibited from requiring section 402 NPDES permits "for discharges composed entirely of return flows from irrigated agriculture," *id.* § 1342(l)(1), and for certain "discharges of storm water runoff from mining operations or oil and gas exploration, production, processing or treatment operations or transmission facilities . . . ." *Id.* § 1342(l)(2).

109. 40 C.F.R. §§ 122.28, 123.25 (2003).

110. Oh. Valley Envtl. Coalition v. Horinko, 279 F. Supp. 2d 732, 759 (S.D. W.Va. 2003).

a specified geographic area.[111] Unlike applications for individual section 404 permits (which sometimes are denied), applications for individual section 402 NPDES permits usually are granted, subject to the applicant complying with specified permit conditions (which may include costly effluent limitation requirements).

In order for EPA to issue either an individual or a general section 402 NPDES permit, the state in which the discharge will occur must certify (or waive its right to certify), in accordance with section 401(a) of the CWA,[112] the discharge authorized by the NPDES permit will comply with the state's water quality standards.[113] The EPA Administrator has the authority under section 402(d)[114] to veto a section 402 NPDES permit proposed to be issued by a state that has been delegated authority to issue NPDES permits, when the permit would be outside the guidelines and requirements of the CWA. Subsequent to the veto, the EPA has the authority to issue the permit in accordance with the guidelines and requirements of the CWA if the state does not properly revise the permit to meet EPA's objections.

Neither EPA nor a state has the authority to exempt from the section 402 NPDES permit requirement discharges otherwise subject to the requirements of sections 301(a) and 402 of the Act.[115] Similarly, because Congress' intent under section 402 is to require a permit "in any situation of pollution from point sources"[116] and because "[o]nly Congress may amend the CWA to create exemptions from regulation,"[117] neither the Corps nor a state has the authority to exempt a "discharge of dredged or fill material" from the section 404 permit requirement.

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111. *See infra* notes 264-79 and accompanying text for a more comprehensive discussion on General NPDES permits.

112. 33 U.S.C. § 1341(a) (2000).

113. Natural Res. Def. Council v. EPA, 279 F.3d 1180, 1183 (9th Cir. 2002). Section 401(a)(1), 33 U.S.C. § 1341(a)(1), directs that no individual or general permit shall be granted if the section 401(a) certification has been denied by the state. United States v. Marathon Dev. Corp., 867 F.2d 96, 101 (1st Cir. 1989).

114. 33 U.S.C. § 1342(d).

115. Natural Res. Def. Council v. Costle, 568 F.2d. 1369, 1382 (D.C. Cir. 1977); N. Plains Res. Council v. Fidelity Explor. and Dev. Co., 325 F.3d 1155, 1164 (9th Cir. 2003).

116. *Costle,* 568 F.2d at 1383.

117. *N. Plains Res. Council,* 325 F.3d at 1164.

In addition to requiring a permit to make lawful a point source addition of pollutants to a navigable body of water, section 301(a) of the CWA also requires a point source discharge of pollutants to comply with effluent limitation and pretreatment requirements prescribed in sections 301, 302, 306 and 307 of the Act. These sections require specified point sources, discharging pollutants (other than dredged or fill materials, whose discharges are regulated differently through section 404 permits[118]) into navigable waters, to comply with specified effluent limitation or pretreatment requirements or regulations. Section 301[119] requires publicly owned treatment works, in existence and operating in 1972 when Congress enacted the CWA, and other existing point sources discharging pollutants into publicly owned treatment works or into navigable waters, to comply with technology-based effluent limitation or pretreatment requirements and regulations promulgated by the EPA Administrator. The EPA Administrator is authorized by section 302 of the CWA[120] to establish effluent limitations for particular point sources that are stricter than those required under section 301 when necessary to attain or maintain "that water quality in a specific portion of the navigable waters which shall assure protection of public health, public water supplies, agricultural and industrial uses, and the protection and propagation of a balanced population of shellfish, fish and wildlife, and allow recreational activities in and on the water."[121] Section 306 of the CWA[122] requires a new point source[123] to comply

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118. Point source discharges of dredged or fill material that are required to have a section 404 permit are subject to Corps and EPA guidelines that seek to minimize adverse impacts upon the aquatic ecosystem and that require compensatory mitigation to offset harm to wetlands that occur under a section 404 permit. *Supra* notes 97-102 and accompanying text.

119. 33 U.S.C. § 1311 (2000).

120. *See id.* § 1312.

121. *Id.* § 1312(a).

122. *See id.* § 1316.

123. A "new source" is defined by the CWA to mean "any source, the construction of which is commenced after the publication of proposed regulations prescribing a standard of performance under this section [section 306, 33 U.S.C. § 1316] which will be applicable to such source, if such standard is thereafter promulgated in accordance with ... section [306]." *Id.* § 1316(a)(2).

with a technology-based standard of performance promulgated by the EPA Administrator for that category of sources. Under section 304(b)(2) of the CWA,[124] the EPA Administrator is required to promulgate effluent limitation requirements for categories of point sources discharging toxic pollutants that require application of the best technology economically achievable; the Administrator, however, is permitted under section 307(a)(2)[125] to establish more stringent requirements for the discharge of a toxic pollutant (including a prohibition) to provide an "ample margin of safety"[126] (presumably to aquatic organisms and to the health of human beings). The EPA Administrator is required by section 307(b)[127] to promulgate regulations establishing pretreatment standards for categories of point sources introducing pollutants into publicly owned treatment works, "to prevent the discharge of any pollutant through treatment works . . . which are publicly owned, which pollutant interferes with, passes through, or otherwise is incompatible with such works."[128] These technology and water-quality based effluent limitation requirements, which are included in section 402 NPDES permits issued by EPA and the states, "may be in the form of numeric effluent limitations or in the form of BMPs [Best Management Practices] or other non-numeric effluent limitations and standards."[129]

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124. *See id.* § 1314(b)(2).
125. *See id.* § 1317(a)(2).
126. *Id.* § 1317(a)(4).
127. *See id.* § 1317(b).
128. *Id.*
129. 68 Fed. Reg. 7184-85 (Feb. 12, 2003). Examples of best management practices effluent limitation requirements are EPA's best management practices and procedures, for land application of manure and for nutrient management plans, for CAFOs (large concentrated animal feeding operations). 40 CFR §§ 122.42(e), 412.4 (2003).

III. PUMPING POLLUTED WATER FROM ONE WATER BODY TO ANOTHER: *SOUTH FLORIDA WATER MANAGEMENT DISTRICT v. MICCOSUKEE TRIBE*

In *South Florida Water Management District v. Miccosukee Tribe*,[130] the U.S. Supreme Court held that the NPDES permit requirement of section 301(a) of the CWA applies to a point source which conveys into a navigable water body pollutants originating and added to the water elsewhere.[131] In *Miccosukee Tribe* the Supreme Court rejected the argument that section 301(a) NPDES permit requirements apply only to a point source adding to a navigable water body pollutants that originate at that point source.[132] The Court also held in *Miccosukee Tribe*, however, that the section 301(a) NPDES permit requirement does not apply to a point source merely pumping water, containing pollutants, back into the same navigable body of water from which the polluted water discharge was taken.[133] But, the Supreme Court remanded the case for determination of whether the definition of the "same navigable body of water" for purposes of this principle should be determined on the basis of hydrological connections of the source and receiving bodies of water, differing biological or ecosystem characteristics of the respective bodies of water, or whether the transfer of water would occur naturally.[134] As part of the remand order, the Supreme Court in *Miccosukee Tribe* also ordered the lower courts to consider the "unitary waters" approach advocated by the United States in the case. Under the "unitary waters" approach, the pumping of water containing pollutants from one navigable body of water to another navigable body of water would not be subject to section 301(a) requirements if the point source pumping the polluted water did not alter the water being pumped from one navigable body of water to another.[135]

At issue in the *Miccosukee Tribe* case was the S-9 pump facility operated by the South Florida Water Management District ("Water

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130. 124 S. Ct. 1537 (2004).

131. *Id.* at 1542-43.

132. *See id.* at 1543.

133. *Id.* at 1545.

134. *See infra* notes 201-47 and accompanying text.

135. *See Miccosukee Tribe,* 124 S. Ct. at 1543-44; *see also infra* notes 248-61 for a discussion of the court's treatment of unitary waters.

District") "that transfers water from a canal into a reservoir a short distance away."[136] Water is pumped westward by the S-9 pump station from the C-11 canal to the WCA-3 reservoir. The water is pumped to the reservoir to prevent flooding of the populated western portion of Broward County drained by the canal,[137] "to conserve fresh water that might otherwise flow directly to the ocean, and to preserve wetlands habitat [in the reservoir, which is a "remnant" of the original South Florida Everglades]."[138] The canal and reservoir are separated by two levees that prevent or slow the flow of water in the reservoir back east to the water in the canal.[139] "The combined effect of [the two levees, the] C-11 [canal] and [the] S-9 [pump station] is artificially to separate the C-11 basin from [the] WCA-3 [reservoir]; left to nature, the two areas would be a single wetland covered in an undifferentiated body of surface and ground water flowing slowly southward."[140] The pump facility, canal, and reservoir are part of the Central and South Florida Flood Control Project constructed by the United States Army Corps of Engineers and operated by the Water District to further several purposes, including, flood protection, water conservation, and drainage in the area between south Florida's coastal hills and the Everglades.[141]

The water in the canal pumped into the reservoir contains elevated levels of phosphorous, which is found in fertilizers used by farmers in the basin drained by the canal.[142] The water in the canal pumped into the reservoir alters the balance of the reservoir's "ecosystem (which is naturally low in phosphorous) and stimulates the growth of algae and plants foreign to the Everglades ecosystem."[143]

The Miccosukee Tribe of Indians and the Friends of the Everglades (a non-profit organization) (hereinafter both are referred to collectively as "the Tribe") filed a citizen suit against the District under section 505 of the CWA,[144] in which they claimed that the pumping facility is required by section 301(a) of the Act to obtain an

136. *Id.* at 1540.
137. *See id.* at 1546.
138. *Id.* at 1540.
139. *See id.* at 1541.
140. *Id.*
141. *See id.* at 1540.
142. *Id.* at 1541.
143. *Id.*
144. 33 U.S.C. § 1365 (2000).

NPDES permit for the water it pumps from the canal into the reservoir because the pumped water contained phosphorous (a pollutant regulated under the CWA).[145] The District Court, agreeing with this argument, granted summary judgment in favor of the Tribe, reasoning:

> In this case an addition of pollutants exists because undisputedly water containing pollutants is being discharged through [the pumping station] from [the canal] waters into the Everglades, both of which are separate bodies of United States water with . . . different quality levels. They are two separate bodies of water because the transfer of water or its contents from [the canal] into the Everglades would not occur naturally.[146]

A panel of the United States Court of Appeals for the Eleventh Circuit affirmed the summary judgment of the District Court, but vacated the District court's issuance of an injunction prohibiting the Water District from operating the S-9 pump station without an NPDES permit.[147]

The Court of Appeals first stated, "[n]o party disputes that the S-9 pump station and, in particular, the pipes from which water is released constitute a point source or that the water released by the station contains pollutants."[148] The court noted that the parties agreed both the canal and reservoir constitute navigable waters within the meaning of the CWA.[149]

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145. *Miccosukee Tribe,* 124 S. Ct. at 1542.

146. *Id.* (*citing* App. To Pet. For Cert. 28a-29a).

147. Miccosukee Tribe of Indians v. S. Fla. Water Mgmt. Dist., 280 F.3d 1364 (11th Cir. 2002). The panel held that an injunction stopping the operation of the S-9 pump station until it obtained a NPDES permit should not issue because that would result in "[t]he flooding of western Broward County and the resulting displacement of the residents there [which] do far outweigh the continued addition of low levels of phosphorous to [the reservoir] without a NPDES permit." *Id.* at 1370-71. The panel held that instead "the district court should order the Water District to obtain a NPDES permit within some reasonable period." *Id.* at 1371.

148. *Id.* at 1367.

149. *Id.*

The Eleventh Circuit panel stated, however, the parties "mainly dispute one legal issue: whether the pumping of the already polluted water constitutes an addition of pollutants to navigable waters from a point source."[150] The Water District argued "that no addition of pollutants from a point source can occur unless a point source adds pollutants to navigable waters from the outside world"[151] (the "outside world" excludes another body of navigable waters[152]). In support of this argument, the Water District relied upon several appellate decisions,[153] which held that changes in water quality caused by hydroelectric dams are not the addition of pollutants from a point source requiring an NPDES permit under section 301(a) of the CWA.[154] The Eleventh Circuit panel described these decisions as "in essence"[155] giving deference, under *Chevron, U.S.A., Inc. v. Natural Resources Defense Council*,[156] to an EPA position that under the CWA "[an] addition [of pollutants] from a point source occurs only if the point source itself physically introduces a pollutant into water from the outside world."[157] However, after noting "[i]nterpretations contained in policy statements, agency manuals, and enforcement guidelines . . . do not warrant *Chevron*-style deference"[158] and a Second Circuit panel conclusion that EPA's position relied upon in the dam cases was based on policy statements and consistent litigation positions not entitled to *Chevron* deference,[159] the panel concluded that "[w]e know of no instance in which the EPA has extended its policy on dams and dam-induced water-quality changes to facilities like the S-9 pump station. The EPA is no party to this case;

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150. *Id.*

151. *Id.*

152. *See id.* at 1368.

153. Nat'l Wildlife Fed'n v. Gorsuch, 693 F.2d 156 (D.C. Cir. 1982); Nat'l Wildlife Fed'n v. Consumers Powers Co., 862 F.2d 580 (6th Cir. 1988).

154. *See infra* notes 280-411 and accompanying text for a discussion in more depth of these decisions and other similar decisions.

155. *Miccosukee*, 280 F.3d at 1367 n.4.

156. 467 U.S. 837 (1983).

157. *Gorsuch*, 693 F.2d at 175.

158. Christensen v. Harris County, 529 U.S. 576, 587 (2000).

159. Catskill Mountains Chapter of Trout Unlimited, Inc. v. City of New York, 273 F.3d 481, 490 (2d Cir. 2001).

we can ascertain no EPA position applicable to S-9 to which to give any deference, much less *Chevron* deference."[160]

The Eleventh Circuit panel then reasoned, "in determining whether pollutants are being added to navigable waters for purposes of the CWA, the receiving body of water is the relevant body of navigable water."[161] After concluding pollutants were being added to the reservoir, the Court of Appeals stated an addition of pollutants to navigable waters must be "from a point source" in order for an NPDES permit to be required under the CWA.[162] The panel stated, therefore, to determine under the CWA whether an addition of pollutants is from a "point source:"

> the relevant inquiry is whether -- but for the point source -- the pollutants would have been added to the receiving body of water, (For pollutants to be from a point source, the point source does not necessarily have to be the source or origin of pollutants. "From a point source" can also indicate the "agent or instrumentality" or the "cause or reason" by which pollutants are added to navigable waters." We conclude that this interpretation of "from" is most apt; from = by). We, therefore, conclude that an addition from a point source occurs if a point source is the cause-in-fact of the release of pollutants into navigable waters.

When a point source changes the natural flow of a body of water which contains pollutants and causes that water to flow into another distinct body of navigable water into which it would not have otherwise flowed, that point source is the cause-in-fact of the discharge of pollutants.[163]

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160. *Miccosukee,* 280 F.3d at 1367 n.4. The panel also rejected the argument that under *Chevron* it should defer to the decision by the Florida Department of Environmental Protection that operation of the S-9 pump station does not require a NPDES permit under the Clean Water Act, on the ground that "[a] state agency's interpretation of federal law is generally not entitled to deference by the courts." *Id.* at 1368 n.4, (*citing* GTE S. Inc. v. Morrison, 199 F.3d 733, 745 (4th Cir. 1999)).

161. *Id.* at 1368.

162. *Id.*

163. *Id.* (footnotes omitted). The Eleventh Circuit panel stated, *id.* at 1368 n.7, that its conclusion "is consistent with the views of" Du-

Because the Eleventh Circuit panel "believed that the water in the C-11 canal would not flow into WCA-3 [the reservoir] without the operation of the S-9 pump station,"[164] the panel held "an addition of pollutants from a point source occur[ed]."[165] The Eleventh Circuit panel reasoned:

> [n]either party disputes that, without the operation of the S-9 pump station, the polluted waters from the C-11 canal would not normally flow [west] into the WCA-3A [reservoir]. (Both the C-11 [Canal] Basin and the [reservoir] were part of the historical Everglades. Before construction of the C-11 Canal, the Levees and the S-9 pump station, the surface and ground waters on both sides of the Levees intermingled. But for man's intervention, these waters would essentially be a single body of water. Since the completion of the [two] levees, water does not flow from the C-11 Canal into [the reservoir]. Man has made the two bodies of water two separate and distinct bodies of water. The Water District argues that the his-

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bois v. USDA, 102 F.3d 1273 (1st Cir. 1996), *cert. denied*, 521 U.S. 1119 (1997), and Catskill Mountains Chapter of Trout Unlimited, Inc. v. City of New York, 273 F.3d 481 (2d Cir. 2001). In *Dubois*, a panel of the First Circuit held that the piping of water from the polluted East Branch for commercial use in snowmaking equipment, and its proposed release into the uphill (and therefore upstream) Loon Lake, constituted an addition of pollutants from a point source into Loon Lake that required a NPDES permit under the Clean Water Act, because the transfer of water from the East Branch to Loon Lake would not occur naturally. 102 F.3d at 1297. *Catskill Mountains* held that an addition of pollutants from a point source occurs when there is a release of water from a reservoir, used to supply drinking water to New York City, into a creek that flows into a different reservoir, where water in the reservoir would not flow naturally into the creek. The Eleventh Circuit panel stated that "[b]oth courts emphasized that the two bodies of water were separate and that pollutants would not enter the second body except for the point sources." *Miccosukee*, 280 F.3d at 1368 n.7.

164. S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe, 124 S. Ct. 1537 (2004).

165. *Miccosukee,* 280 F.3d at 1369.

> torical hydrological connectedness of these two bodies of water (1) precludes a finding that the [reservoir] and the C-11 Canal are two distinct bodies of water, and (2) precludes a finding that the operation of the S-9 [pump station] changes the "natural" flow of water between these two bodies. In the context of the circumstances of this case, we reject the Water District's argument). The S-9 pump station, therefore is the cause-in-fact of the addition of pollutants to the [reservoir]. We, therefore, conclude that the release of water caused by the S-9 pump station's operation constitutes an addition of pollutants from a point source.[166]

In her opinion for the Court, Justice O'Connor interpreted the trial court and the Court of Appeals as having based their holdings upon "the predicate determination that the canal and reservoir are two distinct water bodies"[167] for purposes of the requirements of section 301(a) of the CWA. The Supreme Court granted certiorari in *Miccosukee Tribe* only on the question of whether under section 301(a) of the CWA the section 402 NPDES permit requirement applies to a point source that pumps water containing pollutants already in the water (not created or added by the point source).[168]

The *Miccosukee Tribe* case attracted a lot of attention throughout the nation, particularly in western states. Western water appropriators feared that an NPDES permit requirement under the CWA in western states "on water control or similar structures would result in an encroachment by the federal government into an area traditionally reserved to the states, that of water management and flow."[169] Interest groups concerned about the issues raised by the *Miccosukee Tribe* case included: farmers, who often obtain water for agricultural operations from agricultural irrigation districts through inter-basin transfers of water; governmental and private water utilities; and suppliers that obtain public water supplies through inter-basin transfers

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166. *Id.*

167. *See Miccosukee Tribe*, 124 S. Ct. at 1540.

168. *See id.* The question presented in the District's petition for certiorari is set forth in the Court's opinion. *Id.* at 1543.

169. Lisa A. Kirchner, *Trends and Insights; Miccosukee — Evaluating the Scope of CWA Point Source Permitting*, 18 NAT. RESOURCES & ENV'T 65, 66 (Spring 2004).

of water.[170] Western water appropriators were concerned that an NPDES permit requirement for "the transfer of water between basins or sub-basins could constrain 'the ability to move water to the place of need, for example from high mountain run-off areas to dry low-lying urban corridors'," and "could be used as leverage to ensure water deliveries downstream (i.e., to more junior water rights holders), thereby compromising long-standing western water appropriation laws and requirements."[171]

Justice O'Connor's opinion in *Miccosukee Tribe*, in addition to answering the precise question on which the Court granted certiorari,[172] addressed whether the particular canal and reservoir involved in the *Miccosukee Tribe* are distinct navigable water bodies for purposes of the NPDES permit requirement under section 301(a) of the CWA and the legal issue raised by the United States Government's "unitary water" approach to application of section 301(a) of the CWA.[173] The Supreme Court, however, did not decide these latter two issues for which certiorari had not been explicitly granted. Instead, the Court vacated and remanded "for further development of the factual record as to the accuracy of that determination [that the canal and reservoir are two distinct water bodies]"[174] and for the District Court

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170. The constituencies that are concerned about the issues raised by the *Miccosukee Tribe* case, and the impacts that the decision may have upon these constituencies, are discussed in Davis and Doster, *supra* note 20, at 91, 96-97.

171. Kirchner, *supra* note 169, at 66, 67.

172. 124 S. Ct. at 1543.

173. Under this "unitary waters" approach, a section NPDES permit would not be required under section 301(a) "when water from one navigable water body is discharged, unaltered, into another navigable water body. That would be true even if one water body were polluted and the other pristine, and the two would not otherwise mix." *Miccosukee Tribe,* 124 S. Ct. at 1543. *See also infra* notes 248-61 and accompanying text analyzing the "unitary waters" approach. Dubois v. USDA., 102 F.3d 1273, 1296-97 (1st Cir. 1996), *cert. denied*, 521 U.S. 1119 (1997), rejected the unitary waters theory in a case involving the proposed transfer of water from a stream to an upstream lake into which the stream does not flow naturally.

174. *Miccosukee Tribe,* 124 S. Ct. at 1540.

to consider the United States government's "unitary waters" approach to application of section 301(a).[175]

Addressing first the question for which certiorari was granted, Justice O'Connor held that section 301(a) of the CWA makes the section 402 NPDES permit requirement applicable to a point source conveying pollutants, that originated elsewhere and that were not generated by the point source, into a navigable water body.[176] Jus-

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175. *Id.* at 1547.
Justice Scalia concurred with Parts I and II-A of Justice O'Connor's opinion for the Court, "which [held] that a point source is not exempt from the NPDES permit requirement merely because it does not itself add pollutants to the water it pumps." *Id.* He dissented, however, from the Court's decision in Part II-C to vacate the judgment below for reconsideration of the issue of whether the canal and reservoir are distinct bodies of water and from Part II-B in which the Court "invite[s] consideration of yet another legal theory," on the grounds that "[n]either of those actions is taken in response to the question presented." *Id.* Justice Scalia argued that the Court of Appeals' "disposition of the question presented" should be affirmed "without reaching other issues." *Id.* Justice Scalia also argued that the Court of Appeals below in fact had addressed and rejected the "unitary waters" approach and that he saw "no point in directing the Court of Appeals to consider an argument it has already rejected." *Id.* He also argued that the Court acted improperly in Part II-C of its opinion in holding "that summary judgment was precluded by the possibility that if the pumping station were shut down, flooding in the [canal] basin might ultimately cause pollutants to flow from [the canal to the reservoir]," because that argument had not previously been made by the parties. *Id.;* See *also infra* notes 224-34 and accompanying text.

176. *Id.* at 1543. This holding in *Miccosukee Tribe* implicitly overrules the holding in Appalachian Power Co. v. Train, 545 F.2d 1351, 1377 (4th Cir. 1976), that an "addition" of pollutants does not occur under section 301(a) of the CWA when an industrial plant's point source conveys back into a navigable body of water pollutants that were in the plant's intake water (that are present naturally or as a result of discharges from other industrial plants). *Appalachian Power* also held that EPA has no authority under the CWA to require an industrial point source to remove pollutants that enter an industrial plant through the plant's intake stream. 545 F.2d at 1377 As

tice O'Connor, however, did not discuss whether effluent limitation requirements imposed upon such a point source under section 301(a) can require such a point source to remove from its discharges pollutants that the point source did not generate or create. Justice O'Connor's opinion in *Miccosukee Tribe,* however, referred both to effluent limitation requirements and to the section 402 NPDES permit requirement imposed upon point source dischargers by section 301(a).[177] The opinion also referred[178] (in the part addressing the "unitary waters approach") to EPA "intake credit" regulations[179] that usually only permit an NPDES permit to exempt a point source discharger from technology-based effluent limitations or standards for pollutants in the discharger's intake water when the discharger "demonstrates that the intake water is drawn from the same body of water into which the discharge is made."[180] Consequently, her first

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discussed *infra* notes 179-80 and 259-61 and accompanying text, EPA "intake credit" regulations, 40 C.F.R. §§ 122.45(g), 123.25(a)(16) (2003), now provide that upon request of a point source discharger, technology-based effluent limitation requirements in the discharger's NPDES permit "shall be adjusted to reflect a credit for pollutants in the discharger's intake water," but only to the extent necessary to meet the applicable limitation or standards, 40 C. F. R. § 122.45(g), and usually only when the discharger's intake water is drawn from the same water body into which the discharge is made (although this latter requirement may be waived if no environmental degradation will result). 40 C.F.R. § 122.45(g)(4).

177. 124 S. Ct. at 1541.

178. *Id.* at 1544.

179. 40 C.F.R. § 122.45(g)(4). 40 C.F.R. § 123.25(a)(16) makes this regulation applicable to NPDES permits issued by states with an approved state NPDES permit program.

180. *See infra* notes 259-61 and accompanying text for Justice O'Connor's discussion of this regulation in the "unitary waters" part of her opinion. In that part of her opinion she did not discuss whether these EPA "intake credit" regulations are valid under the CWA. EPA's "intake credit" regulations provide that an EPA Regional Administrator or a state Director of a state NPDES permit program may waive the requirement that the intake water must be drawn from the same water body into which the discharge is made, if she finds no environmental degradation will result. *Id.* Justice O'Connor's *Miccosukee Tribe* opinion did not mention this provi-

holding in *Miccosukee Tribe* implicitly requires a point source conveying pollutants generated by other persons or sources to obtain an NPDES permit that may require compliance with effluent limitation requirements, mandating the point source to remove some or all of these conveyed pollutants from its discharges, unless the point source is exempted from technology-based effluent requirements under EPA's "intake credit" regulations.

A significant consequence of this first holding in *Miccosukee Tribe* is:

> pollutants already in jurisdictional waters will become the responsibility of any entity, public or private, that transfers them into a new watershed. Thus, nonpoint source runoff, air-deposited pollutants, pollutants emanating from sediment or introduced through the expression of groundwater--even pollutants that previously have been lawfully discharged into upstream waters--all of these pollutants will become the responsibility of a downstream "re-discharger."[181]

Because this holding in *Miccosukee Tribe* "extends the reach of the CWA to activities and industries historically exempt from regulation under that statute,"[182] the holding has been criticized as "disrupt[ting] the traditional allocation of responsibilities for pollution control . . . [that have] rested on the facility that creates the waste and first introduces it into waters of the United States."[183]

Justice O'Connor based this holding upon the definition of a "point source" in section 502(14)[184] as a "discernible, confined and discrete *conveyance*."[185] She emphasized that the "definition makes plain that a point source need not be the original source of the pollutant; it need only convey the pollutant to 'navigable waters' . . . Tellingly, the examples of 'point sources' listed by the Act include pipes, ditches, tunnels, and conduits, objects that do not themselves gener-

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sion of the regulations in her discussion of EPA's "intake credit" regulations.

181. Davis and Doster, *supra* note 20, at 92.

182. *Id.*

183. *Id.* at 91.

184. 33 U.S.C. § 1362(14) (2000).

185. Miccosukee Tribe v. S. Fla. Waste Mgmt. Dist., 124 S. Ct. 1537, 1543 (2004) (emphasis in original).

ate pollutants but merely transport them."[186] Justice O'Connor also supported her holding on one of the "primary" goals of the Act - "to impose NPDES permitting requirements on municipal wastewater treatment plants [which] treat and discharge pollutants added to water by others."[187] Justice O'Connor concluded that the definition of "discharge of a pollutant" in section 502(12) of the CWA[188] "includes within its reach point sources that do not themselves generate pollutants."[189] In this part of her opinion, Justice O'Connor did not mention the EPA that "addition from a point source occurs only if the point source itself physically introduces a pollutant into the water from the outside world"[190] position that was followed by several appellate courts in cases litigated in the 1980's,[191] but the Eleventh Circuit panel declined to follow in the *Miccosukee Tribe* case.[192]

This holding in *Miccosukee Tribe* should be interpreted as implicitly also holding that section 301(a) applies to a point source that generates or creates pollutants that it conveys or transports to a navigable body of water through a discernible, confined and discrete conveyance. This follows from Justice O'Connor's statement that "a point source need not be the original source of the pollutant"[193] and her statement that the examples of point sources listed in the CWA's definition of "point source" include "objects that do not themselves generate pollutants but merely transport them."[194]

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186. *Id. (citing* 33 U.S.C. § 1362(14)).
187. *Id.* at 1543.
188. 33 U.S.C. § 1362(12) (2000).
189. *Miccosukee Tribe,* 124 S. Ct. at 1543.
190. Nat'l Wildlife Fed'n v. Gorsuch, 693 F.2d 156, 175 (D.C. Cir. 1982).
191. *Id.* at 175; Nat'l Wildlife Fed'n v. Consumers Power Co., 862 F.2d 580, 584 (6th Cir. 1988). These decisions are discussed *infra* notes 305-411 and accompanying text.
192. Miccosukee Tribe of Indians v. S. Fla. Water Mgmt. Dist. 280 F.3d 1364, at 1368 (11th Cir. 2002). *See also, supra* notes 153-63 and accompanying text for a discussion of this part of the Court of Appeals decision.
193. *Miccosukee Tribe,* 124 S. Ct. at 1543. (implying that section 301(a) clearly regulates a point source that is the original source of pollutants it adds to a navigable body of water).
194. *Id.*

This holding in *Miccosukee Tribe* should not be interpreted, however, as requiring an NPDES permit for a point source that merely conveys or transfers "clear" water (water not containing CWA "pollutants"). "Clear" water is not within the Act's definition of "pollutant,"[195] although in some cases water can be a "pollutant" under the CWA when it is "industrial waste" (without regard to whether "pollutants" are suspended or dissolved in that water).[196]

In holding that the CWA's definition of a "discharge of a pollutant" includes both point sources that do not themselves generate pollutants and point sources that do themselves generate pollutants, Justice O'Connor did not state that a discharge had to meet a minimum threshold (by weight, concentration or volume),[197] cause any identifiable harm to the receiving body of water or the environment,[198] or result in the discharged pollutants being moved any minimum distance from the location where the point source obtained or created the discharged pollutants.[199]

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195. Orleans Audubon Soc'y v. Lee, 742 F.2d 901, 910 (5th Cir. 1984); Bettis v. Town of Ontario, 800 F. Supp. 1113, 1119 (W.D.N.Y. 1992).

196. N. Plains Res. Council v. Fidelity Explor. and Dev. Co., 325 F.3d 1155, 1160-61 (9th Cir. 2003) (unaltered groundwater pumped from underground aquifers during extraction of methane gas, which is "an unwanted byproduct of the extraction process," held to be "industrial waste" that is a "pollutant" under the Clean Water Act); Sierra Club, Lone Star Chapter v. Cedar Point Oil Co., 73 F.3d 546, 568 (5th Cir. 1996) (water "produced" during the extraction of oil and gas held to be an "industrial waste" that is a "pollutant" under the Act).

197. *Supra* note 46 and accompanying text discuss lower federal court holdings that a "discharge of a pollutant" under the Act does not have to meet any minimum threshold amount (by weight, concentration or volume).

198. *Supra* note 47 and accompanying text discuss lower federal court holdings that section 301(a) does not require a point source discharge of pollutants to cause any identifiable harm to the receiving body of water or to the environment.

199. This issue has been addressed in cases before lower federal courts in cases involving "re-deposits" and "incidental fallback" into a wetland of material excavated or dredged from that same wetland or navigable body of water. *See infra* notes 412-511 and accompany-

Justice O'Connor's holding, specifically, that section 301(a) requirements apply to a point source that conveys or transports pollutants originating elsewhere, encompasses both point sources (such as a pumping facility) that transport or convey water containing pollutants added by other persons elsewhere, as well as point sources that treat and remove pollutants added by others elsewhere (but convey some pollutants that originated elsewhere into a navigable body of water). This holding also applies to a point source (such as a factory's wastewater discharge pipe that conveys pollutants into a navigable body of water) that conveys pollutants generated, and possibly also treated, within the factory to which the discharge pipe is connected into a navigable body of water. But in this type of situation, only the factory's wastewater discharge pipe, not the entire factory, would be considered the "point source" of the pollutants discharged by the pipe into a navigable water body, because only the pipe would be "a discernible, confined, and discrete conveyance' within the CWA's definition of a "point source."[200] In this type of case, the factory's wastewater discharge pipe would be discharging pollutants that originated elsewhere (within the factory to which the discharge pipe is connected) rather than from or in the point source.

In a second holding in *Miccosukee Tribe*, Justice O'Connor found that no "addition" of pollutants to navigable waters occurs within the meaning of section 301(a) of the CWA where water (containing pollutants) is pumped from one water body into another water body that is not "meaningfully distinct."[201] She held, therefore, if the S-9 pump station only pumps water from one part of a water body into another part of the same water body, no section 402 NPDES permit is required.[202] Furthermore, although Justice O'Connor did not so

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ing text for discussion of these "re-deposit" and "incidental fallback" cases.

200. Catskill Mountains Chapter of Trout Unlimited, Inc. v. City of New York, 273 F.3d 481, 493 (2d Cir. 2001) ("... the term 'point source,' ... does not necessarily refer to the place where the pollutant was created but rather refers only [to] the proximate source from which the pollutant is directly introduced to the destination water body. A pipe from a factory draining effluent into a navigable water is a point source, but the factory itself is not.") (dictum).

201. S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe, 124 S. Ct. 1537, 1545 & 1547 (2004).

202. *Id.*

state, such an intra-water body transfer of water also would not be subject to any effluent limitation requirements under section 301(a) because such a transfer of water is not an "addition" of pollutants to the receiving body of water that would make section 301(a) applicable.

This second holding addressed only the issue of pumping or transfer of water (containing dissolved or suspended pollutants) from one part of a navigable body of water into another part of that same water body. It did not address the issue of the application of sections 301(a) and 402 of the CWA to the introduction of soil or vegetation, excavated or dredged from the surface of a protected wetland or the bottom of a navigable body of water, back into that protected wetland or navigable body of water. As discussed below,[203] Justice O'Connor's reasoning in support of this second holding indicates that this holding does not apply to the introduction into a wetland or other navigable body of water of sediment or other materials excavated from the surface of that same wetland or from the bottom of the same body of water.

This second holding also should not be applicable either where water withdrawn from a water body is diverted for agricultural, industrial or commercial use prior to being pumped back into that same water body, or where water withdrawn from a water body is pumped into another navigable body of water prior to being pumped back into the body of water from which the water was withdrawn. Although this second holding does not explicitly require that water be pumped directly from one part of a water body to another part of that same water body, without transfer to a facility for any intervening industrial, commercial or agricultural use of that water before it is pumped back into that same water body, such a direct pumping requirement (with no intervening uses of the pumped water permitted) should be implied from the Court's use of the word "pumping" (rather than "transfers" or "conveys") in its holding that "pumping water from one [part] into another [part of the same water body] cannot constitute an 'addition' of pollutants."[204]

Such a direct pumping requirement also may be implied from the "pot of soup" scenario upon which this holding is based. Justice O'Connor based this second holding upon the argument that "'[i]f one takes a ladle of soup from a pot, lifts it above the pot, and pours

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203. *Infra* notes 211-213 and accompanying text.

204. *Miccosukee Tribe,* 124 S. Ct. at 1545.

it back into the pot, one has not "added" soup or anything else to the pot'."[205] Under this scenario, if soup is ladled out of the pot into a bowl, from which some soup is eaten, and then later some or all of the soup in that bowl is spooned back into the pot (contrary to recognized sanitary practices!), one probably is considered to have "added" something to the pot (even if there are no bacteria or germs in the left-over, partially eaten soup in the bowl that is returned to the pot of soup). A situation where water is diverted from a river to flow through turbines in an electric power-generating facility and back into the river may present a close case as to whether the water being pumped is within *Miccosukee Tribe's* second holding because it is being directly transferred or instead is being diverted for an intervening use that makes *Miccosukee Tribe*'s second holding inapplicable. In such situations, however, the transferred water should be considered to be within *Miccosukee Tribe*'s second holding because the transferred water is being directly transferred from one part of a navigable water body to another part of that same navigable water body; the transferred water is being "pumped" from one part of the water body to another part of that same water body even though the transferred water is providing a commercial service while being transferred.

Miccosukee Tribe's second holding does not explicitly state the pumped water transferred must be unaltered (in the sense that the point source transferring the water must not introduce pollutants into the water that is pumped from one part of a navigable body of water into another part of the same water body), but such a requirement is implicit in this second holding. If the point source pump does add pollutants to the transferred water there clearly would be an "addition" of pollutants to the navigable body of water receiving the transferred water, for which a section 402 NPDES permit is required.[206] Consequently, if a point source (such as a turbine) generates or create pollutants (such as by killing live fish in the water flowing through the turbines), an NPDES permit would be required for the

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205. *Id.*

206. A requirement that water being pumped from one water body to another water body not be altered (by the introduction of pollutants into that transferred water) is part of the "unitary waters" approach advocated by the United States in *Miccosukee Tribe*. *Id.* at 1543; *see also infra* notes 249-53 and accompanying text discussing this "unaltered" requirement of the "unitary waters" approach.

point source because it creates or generates pollutants which are then discharged/ added into a navigable body of water.[207] *Miccosukee Tribe*'s second holding would not exempt from the NPDES permit requirement a point source that generates or creates pollutants and adds those pollutants into water that is withdrawn from one part of a navigable water body and then is pumped back into another part of that same water body.

In addition, *Miccosukee* Tribe's second holding should not apply when water pumped from a source navigable body of water is transferred to and temporarily stored in a reservoir (or other storage facility) that is a navigable body of water and then is pumped or released back into the same navigable body of water from which the water was withdrawn (possibly after first flowing through turbines or other equipment or facilities).[208] In such a situation, the transfer of water should be segmented into two separate transfers; the first being from the source to the reservoir and the second being from the reservoir back to the source. If the source body of water and the reservoir are considered parts of the same body of water for purposes of *Miccosukee Tribe*'s second holding, no NPDES permit would be required under the second holding for either of these two water transfers (unless the flow of water through turbines or other equipment either generates or creates pollutants or is considered an intervening industrial or commercial use that makes *Miccosukee Tribe*'s second holding inapplicable), because each of the two transfers would be considered the pumping of water from one part of a navigable body of water to another part of the same navigable body of water. But if the source and reservoir are not considered parts of the same navigable body of water for purposes of the second holding, an NPDES permit would be required for each of the two water transfers under *Miccosukee Tribe*'s first holding – unless the "unitary waters" approach is

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207. *Infra* notes 388-411 and accompanying text.

208. Such a situation existed in Nat'l Wildlife Fed'n v. Consumers Power Co., 862 F.2d 580 (6th Cir. 1988), which dealt with a pumped storage electric generating facility that pumped water containing live fish from Lake Michigan into a reservoir located above the facility and then released water from the reservoir to flow through turbines and then back into Lake Michigan, with the water released into the lake containing a substantial number of dead fish and other aquatic organisms. *See infra* notes 388-411 and accompanying text.

adopted by the federal courts and such a situation is held to be a transfer permitted under the "unitary waters" approach.[209]

Therefore, the first and second holdings in *Miccosukee Tribe* make section 301(a) of the CWA applicable to an industrial facility's point source addition to a navigable body of water of pollutants that are in water withdrawn by that plant from that same navigable water body in the plant's intake water stream. In such a situation, if an industrial plant's intake water stream contains pollutants (that occur naturally or as a result of discharges from other point sources or from runoff from nonpoint sources) and that plant, after using that water in its operations, then conveys those pollutants through a discharge pipe (a point source) back into that same navigable body of water, the plant may be required by section 301(a) of the CWA to obtain an NPDES permit and to comply with EPA effluent limitation requirements, which may require the point source to treat its discharged wastewater to remove or treat some or all of those pollutants in the plant's intake water.[210] In addition, if an industrial plant withdraws water containing pollutants from one navigable water body and then through a point source conveys those pollutants into another distinct navigable body of water, the plant will be required by *Miccosukee Tribe*'s first holding to obtain an NPDES permit for this point source addition of pollutants and to comply with CWA effluent limitation requirements that may require the discharger to remove from its discharges some or all of the pollutants that were added by other persons or sources (unless exempted from doing so by EPA's "intake credit" regulations).

In support of this second holding, Justice O'Connor only reasoned in *Miccosukee Tribe* that "'[I]f one takes a ladle of soup from a pot, lifts it above the pot, and pours it back into the pot, one has not 'added' soup or anything else to the pot'."[211] She provided no addi-

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209. *Infra* notes 248-61 and accompanying text discussing the "unitary waters" approach.

210. As discussed *supra* notes 178-81 and accompanying text, EPA's "input credit" regulations may exempt such a point source from removing from its discharge some or all of the pollutants that were in the discharger's intake water.

211. *Miccosukee Tribe*, 124 S. Ct. at 1545, quoting Catskill Mountains Chapter of Trout Unlimited, Inc. v. New York, 273 F.3d 481, 492 (2d Cir. 2001). Justice O'Connor omitted the last part of this quoted sentence in which the Second Circuit referred to in a paren-

tional reasoning based upon either the language of any provisions of the CWA or the goals and purposes of the CWA.

This reasoning only refers to a situation where a person uses a ladle to re-deposit into a pot liquid from the pot of soup (that may have solid material dissolved or suspended in the soup). This reasoning does not refer to a situation where a person uses a ladle to re-deposit into a pot both liquid soup and solid materials that had been resting on the bottom of the pot of soup. In the latter type of situation, the solid material that was scooped from the bottom of the pot by the ladle may wind up resting in a different part of the pot than before it was removed and re-deposited and may wind up on top or beneath other material after the re-deposit.

Therefore, Justice O'Connor's pot-of-soup example in support of her second holding should be viewed as only referring to the specific situation involved in the *Miccosukee Tribe* case - a situation where only water (containing dissolved or suspended pollutants) is removed from a body of water and is re-deposited into another part of that same body of water. This second holding of *Miccosukee Tribe* should not be viewed as also applying to a situation where sediment or materials excavated from the bottom of a navigable body of water are placed into that body of water at the same location or a nearby location, because in such a case, pollutants not already dissolved or suspended in that body of water are being added into that body of water. Section 301(a) applies to a point source addition of pollutants into a body of water even if those discharged pollutants settle back onto the bottom of that body of water from which they were dredged or excavated,[212] at least in part because the re-deposit of dredged or excavated materials may cause toxic pollutants that previously had been covered by sediment to become exposed to aquatic organisms or to humans.[213]

Although the parties in *Miccosukee Tribe* did not dispute the Court's second holding, they disagreed as to whether, for purposes

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thetical: "beyond, perhaps, a *de minimis* quantity of airborne dust that fell into the ladle." Catskill Mountains, 273 F.3d at 492.

212. *Supra* note 76 and accompanying text.

213. *Infra* notes 425-29 and accompanying text. This latter type of situation, involving the addition into a navigable body of water of material excavated or dredged from the bottom of that navigable body of water, is analyzed *infra* notes 412-511 and accompanying text.

of this second holding in the case, the C-11 canal and the WCA-3 reservoir are parts of a single water body or are separate and distinct water bodies. The Miccosukee Tribe argued that the canal and reservoir are separate and distinct bodies of water because they have "differing 'biological or ecosystem characteristics'," [214] while the Water District argued that the canal and reservoir are parts of the same water body because of "the close hydrological connections between the two." [215] The United States agreed the canal and reservoir are two parts of the same water body because they have a hydrological connection. [216]

Justice O'Connor stated, however, that the District Court in *Miccosukee Tribe* had utilized yet a third legal theory ("that neither party defends" [217]) to determine if the canal and reservoir are parts of a single water body. The District Court granted summary judgment to the Tribe on the ground that the canal and reservoir are distinct water bodies "'because the transfer of water or its contents from [the canal] into the Everglades would not occur naturally'." [218] As discussed earlier, [219] under this approach a court examines natural hydrologic conditions to determine if "but for the point source . . . the pollutants would have been added to the receiving body of water." [220] Under this lower court approach, "[w]hen a point source changes the natural flow of a body of water which contains pollutants and causes that water to flow into another distinct body of water into which it would not have otherwise flowed, that point source is the [but for] cause-in-fact of the discharge of pollutants" [221] – and the receiving body of water is considered to be separate and distinct from the body of water from which the water is withdrawn.

The Water District's hydrologic connection test and the lower court's "but for cause-in-fact" test both rely upon existing, natural

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214. *Miccosukee Tribe,* 124 S. Ct. at 1546.
215. *Id.*
216. *Id.* at 1545.
217. *Id.* at 1546.
218. *Id.* at 1546 (citing App. To Pet. For Cert. 28a). "The Court of Appeals for the Eleventh Circuit endorsed this test." *Id.* at 1546 (citing Miccosukee Tribe of Indians v. S. Fla. Water Mgmt. Dist., 280 F.3d 1364, 1368 (11th Cir. 2002)).
219. *Supra* notes 163-67 and accompanying text.
220. *Miccosukee,* 280 F.3d. at 1368.
221. *Id.*

hydrologic conditions; under the Water District's test a downstream body of water from which water is pumped to an upstream water body that has a hydrologic connection to that water body would not be considered a water body that is separate and distinct from the receiving body of water, even though water from that downstream water body would not naturally flow to the upstream (uphill) receiving water body.

In support of its argument that the canal and reservoir are two parts of a single water body, the Water District relied in part upon the facts that "water flows easily between ground and surface waters" in this Everglades area; 1) "Everglades soil is extremely porous;" 2) the canal and reservoir "share a common underlying aquifer;" and, 3) the levees separating the canal and reservoir "continually leak, allowing water to escape from [the reservoir]."[222] Justice O'Connor commented that "[t]his means not only that any boundary between [the canal and reservoir] is indistinct, but also that there is some significant mingling of the two waters; the record reveals that even without use of the S-9 pump station, water travels as both seepage and groundwater flow between the [reservoir] and the [canal] basin."[223]

Justice O'Connor declined, however, to determine if the District Court applied the correct legal standard to determine if the canal and reservoir are distinct water bodies, on the grounds that "the District Court applied its test prematurely" because summary judgment was not appropriate since "some factual issues remain unresolved."[224] Although Justice O'Connor found that the District Court correctly characterized the flow of water through the pumping station as non-natural, she noted that if the pumping station was shut down, the area

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222. *Miccosukee Tribe,* 124 S. Ct. at 1546. Earlier in her opinion, Justice O'Connor had stated that the two levees separating the canal and reservoir only slow, but do not prevent, return flow of water pumped into the reservoir back into the canal. *Id.* at 1541.

223. *Id.* at 1546. O'Connor stated earlier in the opinion that "[t]he combined effect of [the two levees, the] C-11 [canal], and [the] S-9 [pump station] is artificially to separate the C-11 basin from [the] WCA-3 [reservoir]; left to nature, the two areas would be a single wetland covered in an undifferentiated body of surface and ground water flowing slowly southward." *Id.* at 1541.

224. *Id.*

drained by [the canal] would flood quickly."[225] She reasoned "[t]hat flooding might mean that [the canal] would no longer be a 'distinct body of water'," [226] but part of a larger water body encompassing both the reservoir and the canal; and "also might call into question the Eleventh Circuit's conclusion that [the pumping station] is the cause in fact of phosphorous addition to [the reservoir]."[227]

Justice O'Connor found in *Miccosukee Tribe* that "[n]othing in the record suggests that the District Court considered these issues when it granted summary judgment"[228] and therefore concluded "that further development of the record is necessary to resolve the dispute over the validity of the distinction between [the canal and the reservoir]."[229] Dissenting in part, Justice Scalia argued, however, that the Court should not have held in Part II-C of its opinion 'that summary judgment was precluded by the possibility that, if the pumping station were shut down, flooding in the [canal] basin might ultimately cause pollutants to flow from [the canal to the reservoir];" to his knowledge, that argument had not previously been made by any of the parties.[230] Justice Scalia asserted the Water District had argued the reservoir and canal "were historically part of the same ecosystem and that they remain hydrologically related, . . . but that is quite different from arguing that absent [the pumping station], pollutants would flow from [the canal to the reservoir] (a journey that, at the moment, is *uphill*)."[231] Justice Scalia asserted that "[n]othing requires a district court to speculate *sua sponte* about possibilities even the parties have not contemplated," so he argued that the judgment below should have been affirmed "as to the question presented, leaving the [United States] Government's unitary-waters theory to be considered in another case."[232]

Although Justice O'Connor did not specify which legal theory the District Court should apply, she stated that "it is possible" that the District Court, after reviewing the full record, "will conclude that [the canal and the reservoir] are not meaningfully distinct water bod-

225. *Id.*
226. *Id.* (quoting *Miccosukee,* 280 F.3d at 1368).
227. *Miccosukee Tribe,* 124 S. Ct. at 1546.
228. *Id.*
229. *Id.* at 1547.
230. *Id.* (Scalia, J., concurring in part and dissenting in part).
231. *Id.*
232. *Id.*

ies" and that "[i]f it does so, then the ... pump station will not need an NPDES permit."[233] She also stated that the United States "Government's broader 'unitary waters' argument is open to the District [Court] on remand."[234]

These statements by Justice O'Connor, which follow her earlier statement that the flooding of the area drained by the canal basin (that would occur if the pump station was shut down) "might mean" that the canal and reservoir are not distinct water bodies,[235] might be interpreted as implying that the hydrologic connection test advocated by the South Florida Water Management District and the United States should be applied by the lower courts in deciding this issue - even though, in some situations discussed below, the hydrologic connection test does not further any explicit goals or purposes of the CWA.

The hydrologic connection test may be a proper test for determining if two navigable bodies of water are part of one single body of water in a situation involving the pumping of water containing pollutants from an upstream water body into a downstream body of water to which it is naturally hydrologically connected. The reason for this position is that in the absence of the transfer of the water caused by the point source, water transferred from the upstream water probably eventually would have flowed naturally into the downstream body of water as a result of natural hydrological conditions. The hydrologic connection test also is appropriate for the factual situation that Justice O'Connor suggested was the true situation in the *Miccosukee Tribe* case – where without human intervention, natural flooding and inundation would cause two bodies of water created by that human intervention to become one single body of water.

The hydrologic connection test, however, should not be used to determine that two navigable water bodies are parts of the same navigable body of water when water that contains pollutants is pumped from a downstream water body into a less-polluted upstream water body (where the transfer of water is against the natural hydrologic flow of water).[236] In this latter type of situation, the hydrologic con-

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233. *Id.*

234. *Id.*

235. *Id.* at 1546.

236. Dubois v. USDA, 102 F.3d 1273, 1298 (1st Cir. 1996), *cert. denied*, 521 U.S. 1119 (1997) (rejecting the hydrologic connection

nection test would allow transfers of water containing pollutants into a pristine body of water without either a permit or compliance with effluent limitation requirements. The hydrologic connection test also should not be used to determine that two navigable bodies of water are parts of the same navigable body of water when water containing pollutants is being transferred from a human-made navigable body of water into a natural navigable body of water through man-made pipes or spillways, where there is no natural hydrologic flow of water from the human-made source body of water into the receiving body of water.[237]

The use of the hydrologic connection test to exempt a transfer of water between two water bodies from the NPDES permit requirement in these two types of situations would be contrary to a number of the goals of the CWA. These include, the goals of eliminating "the discharge of pollutants into navigable waters . . . by 1985,"[238] prohibiting "the discharge of toxic pollutants in toxic amounts,"[239] restoring and maintaining "the chemical, physical and biological integrity of the Nation's waters,"[240] and achieving by July 1, 1983, "an interim goal of water quality, which provides for the protection and propagation of fish, shellfish and wildlife."[241]

On the other hand, in situations involving transfer of water from a heavily-polluted body of water into a less-polluted body of water or from a man-made navigable body of water to a natural navigable body of water, a determination that an NPDES permit is required for a transfer of water is appropriate where the two bodies of water are

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test in such a situation and holding that such a transfer of water was an "addition" of pollutants to a navigable body of water that required an NPDES permit under the CWA).

237. An example of such a situation is the pump storage electricity generating facility involved in Nat'l Wildlife Fed'n v. Consumers Power Co., 862 F.2d 580 (6th Cir. 1988), which pumps water through pipes from a natural navigable lake uphill into a man-made reservoir and then releases water from the reservoir to flow through the pipes and turbines, back into that lake. *See infra* notes 388-411 and accompanying text for discussion of the application of the NPDES permit requirement to this type of facility.

238. 33 U.S.C. § 1251(a)(1)(2000).

239. *Id.* § 1251(a)(3).

240. *Id.* § 1251(a).

241. *Id.* § 1251(a)(2).

distinct under the "but for cause-in-fact" test (a test which has been followed by the First Circuit[242] and the Second Circuit[243] as well as by the Eleventh Circuit in the *Miccosukee Tribe* case). Requiring an NPDES permit in these situations is consistent with the goals of the CWA to eliminate "the discharge of pollutants into the navigable waters . . . by 1985"[244] and to prohibit "the discharge of toxic pollutants in toxic amounts."[245]

In these types of situations, however, where the hydrologic connection test should not be used, a determination that an NPDES permit is required for either type of water transfer under the "biological/ecosystem" test (because the two water bodies are biologically or ecologically distinct), is also consistent with the goals of the CWA "to restore and maintain the chemical, physical and biological integrity of the Nation's waters"[246] and to achieve, by July 1, 1983, "an interim goal of water quality which provides for the protection and propagation of fish, shellfish and wildlife."[247]

Although Justice O'Connor in her opinion for the Court in *Miccosukee Tribe* did not decide whether the United States' "unitary waters" approach should be followed by the lower courts, her opinion did discuss the reasoning supporting this approach and how this approach might interface with other provisions of the CWA. She noted that the United States' reasoning in support of its "unitary waters" approach is that because section 301(a) of the CWA and the CWA's definition[248] of "discharge of a pollutant/pollutants" require "NPDES permits only when there is an addition of a pollutant 'to navigable waters', such permits are *not* required when water from one navigable water body is discharged, unaltered, into another navigable water body. That would be true even if one water body were polluted and the other pristine and the two would not otherwise mix."[249]

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242. Dubois v. USDA, 102 F.3d 1273 (1st Cir. 1996), *cert. denied*, 521 U.S. 1119 (1997).

243. Catskill Mountain Chapter of Trout Unlimited, Inc. v. City of New York, 273 F.3d 481 (2d Cir. 2001).

244. 33 U.S.C. § 1251(a)(1) (2000).

245. *Id.* § 1251(a)(3).

246. *Id.* § 1251(a).

247. *Id.* § 1251(a)(2).

248. *Id.* § 1362(12).

249. S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe, 124 S. Ct. 1537, 1543.

Justice O'Connor did not define "unaltered" and did not discuss whether the "unitary waters" approach would permit transfer of withdrawn water to a facility for intervening commercial, industrial or agricultural uses before the water is returned to a navigable water body. However, "unaltered" should be interpreted to mean that the point source transferring polluted waters from one navigable water body to another must not itself add or introduce any "pollutants" into that transferred water. Transferred water apparently should be considered "unaltered" even if the point source transferring water from one water body to another caused "pollution" of the transferred water without adding "pollutants" to the destination water body, because causing "pollution" in a water body does not necessarily constitute "addition" of "pollutants" to that water body.[250]

In addition, transferred water should be considered "unaltered" for purposes of the "unitary waters" approach if the point source does not itself introduce pollutants into the transferred water, even though the point source transferring the water is part of a facility that has caused the addition of pollutants to the transferred water. This approach follows from the fact that "... the term 'point source,' ... does not necessarily refer to the place where the pollutant was created but rather refers only [to] the proximate source from which the pollutant is directly introduced to the destination water body."[251] An example of such a situation is when water is released from a reservoir behind a storage dam into a river downstream of the dam through a point source pipe or spillway. The water released from the reservoir into a downstream river may contain some pollutants (such as minerals, nutrients, and heat) not in the upstream river water, because the pollutants are added to the water in the reservoir as a result of the upstream river water being backed up behind the reservoir.[252] In such a situation the reservoir behind the storage dam, not the point source pipe or spillway conveying water from the reservoir to the downstream river, has caused the alteration of the water in the upstream river by causing pollutants to be added to water collected behind the reservoir. If the "unitary waters" approach is adopted, the focus in such a situation should be upon alteration of the water in the

250. *Supra* notes 77-85 and accompanying text.

251. Catskill Mountains Chapter of Trout Unlimited, Inc. v. City of New York, 273 F.2d 481, 493 (2d Cir. 2001) (dictum).

252. *See infra* notes 286-304 and accompanying text for a discussion of such dam-induced water quality changes.

reservoir caused by the point source pipe or spillway (rather than alteration of water quality caused by the nonpoint source reservoir and dam). Under this interpretation of the "unitary waters" approach, an NPDES permit would not be required for such a storage dam,[253] even though the storage dam and its reservoir would be altering the water in the upstream river as a result of the reservoir behind the dam causing the "addition" of pollutants to the water in the upstream river, before the dam's pipes or spillways release reservoir water into the downstream river.

Justice O'Connor explained that the United States further contends in support of the "unitary waters" approach:

> that the absence of the word "any" prior to the phrase "navigable waters" in § 1362(12) signals Congress' understanding that NPDES permits would not be required for pollution caused by the engineered transfer of one "navigable water" into another. It argues that Congress intended that such pollution instead would be addressed through local nonpoint source pollution programs. Section 1314(f)(2)(F), which concerns nonpoint sources, directs the Environmental Protection Agency (EPA) to give States information on the evaluation and control of "pollution resulting from . . . changes in the movement, flow, or circulation of any navigable waters or ground waters, including changes caused by the construction of dams, levees, channels, causeways, or flow diversion facilities."[254]

Justice O'Connor pointed out, however, section 1314(f)(2)(F) "does not explicitly exempt nonpoint sources from the NPDES program if they *also* fall within the 'point source' definition"[255] and that several provisions of the Act governing the NPDES permit program "might be read to suggest a view contrary to the unitary waters approach."[256]

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253. *See infra* notes 354-58 and accompanying text for an analysis of this issue.

254. *Miccosukee Tribe*, 124 S. Ct. at 1544.

255. *Id. See infra* notes 324-33 and accompanying text for a discussion of the relevance of Section 1314(f)(2)(F) to changes in water quality conditions caused by dams.

256. *Miccosukee Tribe*, 124 S. Ct. at 1544.

For example, under the Act, a State may set individualized ambient water quality standards by taking into consideration "the designated uses of the navigable waters involved." 33 U.S.C. § 1313(c)(2)(A). These water quality standards, in turn, directly affect local NPDES permits; if standard permit conditions fail to achieve the water quality goals for a given water body, the State must determine the total pollutant load that the water body can sustain and then allocate that load among the permit-holders who discharge to the water body. §1313(d). This approach suggests that the Act protects individual water bodies as well as the "waters of the United States" as a whole.[257]

Justice O'Connor also noted that the "unitary waters" approach arguably was based upon "deference to a longstanding EPA view that the process of 'transporting, impounding, and releasing navigable waters' cannot constitute an 'addition' of pollutants to ' "the waters of the United States," ' " but she noted that the United States did not identify any EPA administrative documents in which EPA espouses this position and several former EPA officials argued in an *amicus* brief that EPA once reached the opposite conclusion.[258]

In addition, Justice O'Connor stated that the "unitary waters" approach also could conflict with EPA's current NPDES regulations. As an example, she noted the EPA "intake credit" regulation[259] "allows an industrial water user to obtain an 'intake credit' for pollutants present in water that it withdraws from navigable waters." The regulation excuses the user from having to remove pollutants present in the water before it was withdrawn - but "'only if the discharger demonstrates that the intake water is drawn from the same body of water into which the discharge is made.'"[260] Justice O'Connor did not state whether this EPA "intake credit" regulation was valid under the CWA, but she stated, "[t]he NPDES program thus appears to

257. *Id.*

258. *Id.* Justice O'Connor noted that this amicus brief cited in *In re Riverside Irrigation Dist.*, 1975 WL 23864 (Off. Gen. Couns., June 27, 1975), which concluded that irrigation ditches that discharge into navigable waters require NPDES permits, even if they themselves qualify as navigable waters. *Id.* at 1544.

259. 40 C.F.R. § 122.45(g)(4) (2003).

260. *Miccosukee Tribe,* 124 S. Ct. at 1544, quoting 40 C.F.R. § 122.45(g)(4). *See also supra* notes 178-80 and accompanying text discussing these EPA "intake credit" regulations.

address the movement of pollutants among water bodies, at least at times."[261]

Although Justice O'Connor did not decide in *Miccosukee Tribe* whether the "unitary waters" approach is valid under the CWA, her discussion of this issue in her opinion in the case indicates that lower courts should reject the approach because it allows water containing pollutants to be added to unpolluted or less-polluted bodies of water without being subject to any regulatory controls under the CWA. As discussed below, however, she suggested the states and EPA do not need to require an individual NPDES permit under the CWA for an engineered transfer of water from one water body to another distinct water body, but instead can regulate such transfers of water under the CWA through general NPDES permits.

If the "unitary waters" approach is not adopted by the federal courts, *Miccosukee Tribe*'s second holding would not require an NPDES permit for a transfer of water from one part of a water body to another part of that same water body, where there is no intervening commercial or industrial use of the withdrawn intake water and where the point source discharging the withdrawn water back into the source water body does not introduce pollutants into the discharged water. If these two conditions are not met, however, *Miccosukee Tribe*'s first holding would require a point source, which conveys water containing pollutants into a navigable body of water, to obtain a section 402 NPDES permit and to comply with effluent limitation requirements that might require removal or treatment of pollutants, added by other persons or sources, in the withdrawn water.

In the part of her opinion addressing the "unitary waters" approach, Justice O'Connor also referenced arguments that section 101(g) of the CWA,[262] which provides that "[i]t is the policy of Congress that the authority of each State to allocate quantities of water within its jurisdiction shall not be superseded, abrogated or otherwise impaired" by the CWA, would be violated by requiring an NPDES permit to transfer water from one water body to another. She suggested that section 101(g) might be violated if an NPDES permit requirement for water transfers raised the costs of water distribution in western states "prohibitively" by requiring an NPDES permit for "every engineered diversion of one navigable water into

261. *Id.*

262. 33 U.S.C. § 1251(g) (2000).

another" and by mandating expensive treatment of the diverted water for many of these diversions to meet the receiving water body's water quality criteria.[263]

Justice O'Connor noted, however, "it may be that such permitting authority is necessary to protect water quality, and that the States or EPA could control regulatory costs by issuing a general permit to point sources associated with water distribution programs."[264] Justice O'Connor did not cite any section of the CWA as providing authority to EPA or the states to issue a general NPDES permit (rather than the typical individual NPDES permit[265]) to water distribution programs or to any other category of point sources. She did, however, cite two EPA regulations[266] which authorize an EPA Regional Administrator, or a state director of a state NPDES permit program (for a state to which EPA has delegated authority to issue NPDES permits under the Act), in the exercise of discretion, to issue a general permit for one or more categories or subcategories of point source dischargers of pollutants, except those covered by individual permits, within a specified geographic area corresponding to existing geographic or political boundaries. In order for an EPA Regional Administrator or state director to issue a general NPDES permit to a category or subcategory of point source dischargers, the sources

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263. *Miccosukee Tribe,* 124 S. Ct. at 1544 -45.

264. *Id.* at 1545 (citing 40 C.F.R. §§ 122.28, 123.25 (2003)). Justice O'Connor noted that general permits authorize "discharges from a category of point sources within a specified geographic area" and that in some cases, entities covered by a general permit "need take no further action to achieve compliance with the NPDES [general permit] besides adhering to the permit condition. [40 CFR § 122.28(b)(2)(v) (2003)]." *Id.* at 1545. She also noted the State of Pennsylvania, "the one State that *has* interpreted the Act to cover interbasin water transfers," issues general permits to cover interbasin water transfers. *Id.* (emphasis in original).

265. Justice O'Connor noted in *Miccosukee Tribe* that "[a]n applicant for an individual NPDES permit must provide information about, among other things, the point source itself, the nature of the pollutants to be discharged, and any water treatment system that will be used. General permits greatly reduce that administrative burden by authorizing discharges from a category of point sources within a specified geographical area." 124 S. Ct. at 1545.

266. 40 C.F.R. §§ 122.28, 123.25.

within the category or subcategory must: involve the same or substantially similar types of operation; discharge the same types of waste or engage in the same types of sludge use or disposal practices; require the same effluent limitations, operating conditions, or standards for sludge use or disposal; require the use of similar monitoring; and be more appropriately controlled under a general permit than under individual permits.[267] There are no provisions in these general permit regulations indicating that the effluent limitations, operating conditions or standards that are imposed upon point sources under a general permit can be less rigorous than the effluent limitation requirements that would be imposed upon those point sources under individual NPDES permits.

These EPA general NPDES permit regulations state that unless otherwise specified in a general permit, a discharger seeking coverage under a general NPDES permit must submit, to the EPA Regional Administrator or state director that created the general permit, written notice of its intent to be covered by the general permit.[268] These EPA general permit regulations also provide that an EPA Regional Administrator or a state director may require a person seeking to discharge pollutants under the authorization of a general permit to obtain an individual NPDES permit.

Neither section 402[269] (the provision of the CWA regulating the NPDES permit program) nor any other provision of the Act explicitly authorizes EPA or the states to issue general NPDES permits, although section 402(p)(3)(B)(i)[270] authorizes "[p]ermits for discharges from municipal storm sewers [to] be issued on a system or jurisdiction-wide basis . . .." EPA, however, may have the authority to issue its general NPDES permit regulations under section 501(a) of the CWA,[271] which provides that "[t]he [EPA] Administrator is authorized to prescribe such regulations as are necessary to carry out his functions under this chapter." In 1977, a panel of the District of Columbia Court of Appeals held that area or general permits are allowed under section 402 because "area-wide regulation is one well-

267. 40 C.F.R. § 122.28(a)(2).
268. *Id.* § 122.28(b)(2).
269. 33 U.S.C. § 1342 (2000).
270. *Id.* § 1342(p)(3)(B)(i).
271. *Id.* § 1361(a).

established means of coping with administrative exigency."[272] Neither this panel nor any other court, however, has explicitly held that EPA's general NPDES permit regulations cited in *Miccosukee Tribe* are valid regulations under the CWA.

Section 404(e) of the CWA[273] explicitly authorizes the Corps to:

> issue general [section 404] permits on a State, regional, or nationwide basis for any category of activities involving discharges of dredged or fill material, if the [Corps] determines that the activities in such category are similar in nature, will cause only minimal adverse environmental effects when performed separately, and will have only minimal cumulative adverse effect on the environment.

These criteria for issuance of a general section 404 permit are similar, but not identical, to the criteria for issuance of a general section 402 permit under EPA's regulations.

Although Justice O'Connor's *Miccosukee Tribe* decision does not indicate if the states or EPA can establish general section 402 NPDES permit programs for categories of point sources other than water distribution programs, the EPA general permit regulations cited by Justice O'Connor authorize a general NPDES permit for any category or subcategory of point source discharges for which a general permit is found to be appropriate under the regulation's specified criteria. Justice O'Connor implied general NPDES permits could be established by a state or EPA for other categories of point sources by stating that general permits "authoriz[e] discharges from a category of point sources within a specified geographical area."[274]

If this statement is interpreted as giving states and EPA broad authority to establish general section 402 NPDES permits for various categories of point sources (at least when findings of appropriateness

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272. Natural Res. Def. Council v. Costle, 568 F.2d 1369, 1381 (D.C. Cir. 1977). In support of this principle, the court referred to the Supreme Court's approval of area pricing for natural gas producers in the Permian Basin Area Rate Cases, 390 U.S. 747 (1968), and the Supreme Court's approval, Camara v. Mun. Court, 387 U.S. 523 (1967), of the use, under the Fourth Amendment of the United States Constitution, of administrative search warrants on an area basis.

273. 33 U.S.C. § 1344(e). *See supra* notes 89-93 and accompanying text for discussion of Corps of Engineers general section 404 permits.

274. *Miccosukee Tribe,* 124 S. Ct. at 1545 n. *.

under the regulation's specified criteria are made), a state or an EPA Regional Administrator may decide to issue general rather than individual section 402 NPDES permits for other categories of point sources, such as storage dams (with respect to pollutants released into rivers downstream of a dam)[275] and pumped storage electricity-generating facilities.[276] In addition, the Corps or a state may decide to issue general section 404 permits for certain categories of activities that cause "re-deposits" or "incidental fallback" of soil and vegetation back into the same wetland or other navigable body of water from which those materials were removed during excavation or dredging activities.[277]

EPA's position is that both technology-based and water-quality based effluent limitation requirements included in NPDES permits may be in the form of specific Best Management Practices (BMPs) or other non-numeric effluents limitations and standards (rather than in the form of numeric effluent limitations).[278] Because of this position, EPA or a state can issue a general NPDES permit that requires the point sources regulated under the general permit to follow certain prescribed best management practices (such as specified methods of operation) that may be less expensive than numeric effluent limitation regulations (that often require the installation and operation of expensive equipment to remove or treat pollutants in discharges).[279]

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275. *See infra* notes 280-87 and accompanying text for discussion of regulation of discharges from these types of facilities.

276. *See infra* notes 388-411 and accompanying text for discussion of regulation of discharges from these types of facilities.

277. *See infra* notes 412-511 and accompanying text for discussion of regulation of discharges from these types of activities.

278. 68 Fed. Reg. 7184-85 (Feb. 12, 2003) (EPA policy statement in preamble to regulation). Courts agree that section 402 NPDES permits do not have to impose numerical effluent limitation requirements and that when numerical effluent limitations are infeasible, EPA may issue NPDES permits that "proscribe industry practices" or contain "conditions designed to reduce the level of effluent discharges to acceptable levels." Natural Res. Def. Council, Inc. v. Costle, 568 F.2d 1369, 1380 (D.C. Cir. 1977).

279. For example, a general permit for certain dams might require the regulated dams to follow certain operational practices in order to reduce the amounts of minerals, nutrients, sediment and heat released into a downstream river from the reservoir behind a dam.

IV. CHANGES IN WATER QUALITY CAUSED BY DAMS

The first holding of the Supreme Court's *Miccosukee Tribe* decision has modified previous decisions[280] by courts of appeals that have held that changes to the quality of a navigable river downstream of a storage dam,[281] caused by the dam, are not point source "additions" of pollutants to navigable water bodies that require an NPDES permit under the CWA. Storage dams, however, may be excused from the NPDES permit requirement either under *Miccosukee Tribe*'s second holding (an NPDES permit is not required to transfer water from one part of a navigable body of water to another part of that same water body) or under the "unitary waters" approach (if it is adopted by the federal courts) when a point source pipe, spillway or turbine in a dam conveys water from the reservoir behind the dam to a river or stream downstream of the dam. If these exceptions do not apply and a section 402 NPDES permit is required for the release of pollutants into a river downstream of a dam from a point source in a storage dam, EPA or a state may issue an NPDES general permit for that category of dams in a specified geographic area. EPA's "intake credit" regulation[282] also may excuse such point sources from having to remove pollutants that are present in the dam's reservoir water before that water is conveyed to a downstream

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Nat'l Wildlife Fed'n v. Gorsuch, 693 F.2d 156, 163, 164 (D.C. Cir. 1982) discusses such types of operational practices. *See infra* notes 286-304 and accompanying text for discussion of the types of pollutant discharges caused by dams.

280. State of Mo. *ex rel.* Ashcroft v. Dep't. of Army, 672 F.2d 1287 (8th Cir. 1982); Nat'l Wildlife Fed'n v. Gorsuch, 693 F.2d 156 (D.C. Cir. 1982); United States *ex rel.* Tenn. Valley Auth. v. Tenn. Water Quality Control Bd., 717 F.2d 992 (6th Cir. 1983), *cert. denied,* 466 U.S. 937 (1984); Nat'l Wildlife Fed'n v. Consumers Power Co., 862 F.2d 580 (6th Cir. 1988).

281. The term 'storage dam" is used to refer to a dam that backs up water flowing in an upstream river, forming a reservoir of water behind the dam, with some of the water in the reservoir released into the river downstream of the dam through pipes or spillways (often after flowing through turbines that generate electricity if a storage dam is a hydroelectric power dam).

282. 40 C.F.R. § 122.45(g)(4) (2003). *See supra* notes 178-80, 259-61 and accompanying text.

river or stream. If EPA's "intake credit" regulation does not excuse such releases from effluent limitation requirements, such a general permit only may have to require compliance with best management practices effluent limitation requirements (rather than numerical effluent limitations).

Although this section of this article focuses primarily upon pollutants released from storage dams and pumped storage facilities,[283] the quality of water in surface bodies of water also can be adversely affected by dams that divert water from its natural course[284] and by impoundment dams that collect surface runoff of pollutants in a reservoir behind the dam.[285]

Storage dams can change both the quality of water that is backed up in the reservoir behind the dam as well as the quality of water in a river or stream downstream of the dam. The water quality changes caused by a particular storage dam are "highly site-specific" and dependent upon particular circumstances at a dam.[286] Such "dam-caused pollution is unique because its severity depends partly on whether other sources have polluted the upstream river."[287] In general, storage dams can cause water quality problems in reservoirs or downstream rivers or streams due to low dissolved oxygen, dissolved minerals and nutrients, water temperature changes, sediment release, and supersaturation.[288]

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283. At a typical pump storage facility, water from a lake or other navigable body of water is pumped uphill to a reservoir and then later released to flow through tunnels and turbines that generate electricity, before the water is returned to the same navigable body of water. Nat'l Wildlife Fed'n v. Consumers Power Co., 862 F.2d 580, 581-82 (6th Cir. 1988).

284. Such a diversion dam may divert water to a hydroelectric power plant, as was the case of the dam at issue in *Tennessee Water Quality Control Board.*, 717 F.2d 992 (6th Cir. 1983).

285. Comm. to Save Mokelumne River v. East Bay Mun. Util. Dist., 13 F.3d 305 (9th Cir. 1993), *cert. denied*, 513 U.S. 873 (1994).

286. Nat'l Wildlife Fed'n v. Gorsuch, 693 F.2d 156, 182 (D.C. Cir. 1982). "Dams therefore may not be amenable to the nationally uniform controls contemplated by § 402...." *Id.* at 177 n.62. The *Gorsuch* opinion includes a detailed discussion of the different types of water quality changes that a reservoir dam may cause. *Id.* at 161-64.

287. *Id.* at 182.

288. *Id.* at 161.

"Only large storage dams have low dissolved oxygen problems, and then only during warmer months and only when water is released from the lower part of the reservoir."[289] During warm months, a deep reservoir will "stratify into a cold, dense lower layer" (called the "hypolimnion") and "a warmer, lighter upper layer" (called the "eplimnion").[290] In "'fall turnover, . . . the two layers break up and the reservoir returns to full aeration."[291] The oxygen level in the upper eplimnion layer will be good because its water is aerated by wind mixing and because photosynthesis produces oxygen.[292] But, the cold, dense lower hypolimnion level of water backed up in the reservoir will be low in dissolved oxygen, because it "is too deep to be aerated by wind action and light levels are too low to support photosynthesis.[293] The rate of oxygen depletion is dependent primarily on the volume of water in the hypolimnion (the more water, the more oxygen is available for decomposition), its temperature (decomposition occurs more slowly in cold water and colder water also contains more oxygen), and the quantity of organic matter it contains (the more organic matter, the greater the oxygen demands for decomposition).[294]

If the lower hypolimnion layer of water in a reservoir behind a dam becomes totally depleted of oxygen, a number of minerals (including iron and manganese) and plant nutrients (including phosphates), which are soluble in anaerobic (zero-oxygen) water, leach into the hypolimnion water layer in the reservoir from bottom muds.[295]

As a result, water released from a reservoir dam may be low in dissolved oxygen and high in concentrations of these minerals and nutrients downstream of the dam.[296] Fish cannot survive in oxygen depleted water, and water low in oxygen has little ability to break down organic matter and other pollutants.[297] High concentrations of minerals and nutrients released into a downstream river from a res-

289. *Id.* at 162.
290. *Id.*
291. *Id.* (footnote omitted).
292. *Id.*
293. *Id.*
294. *Id.*
295. *Id.* at 163.
296. *Id.* at 161, 163.
297. *Id.* at 161.

ervoir "can harm fish, make the water unpalatable for drinking, and foster undesirable plant growth."[298]

As noted earlier, during warm months the water in a deep reservoir behind a storage dam will stratify into a cold, dense lower layer [the "hypolimnion"] and a warmer, lighter upper layer [the "eplimnion]."[299] Consequently, depending on from which layer of the storage dam water is released the storage dam may release water that is colder or warmer than the water in the upstream river that backs up in the dam's reservoir, causing harm to fish in the downstream river.[300]

A large reservoir also may cause sediment in the backed-up reservoir water to settle to the bottom of the reservoir, resulting in water released from the dam having less sediment than upstream water.[301] Fluctuations in the flow of water from a storage dam, however, can cause erosion of soil downstream of the dam, restoring sediment loading in the water.[302] Finally, water plunging at high velocity from a reservoir dam can become supersaturated (having higher than normal oxygen concentration), which can be harmful to fish.[303]

A pumped storage facility can cause a different type of water quality problem by discharging large numbers of dead fish into a navigable water body. During the operation of a pumped storage facility, large numbers of live fish in the facility's intake water, which is pumped uphill from a navigable water body into a reservoir, are killed when water in the reservoir flows through the facility's turbines. This results in a substantial amount of dead fish and other dead aquatic organisms, which flowed through the facility's turbines, being released into a navigable water body (often the same water body from which the facility's intake water is drawn).[304]

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298. *Id.* at 163. There are several mechanical methods of aeration and de-stratifying that can be utilized by a storage dam to prevent release from a reservoir of oxygen-depleted water and dissolved minerals and nutrients. *Id.* at 162, 163.

299. *Id.* at 162.

300. *Id.* at 163.

301. *Id.* at 163-64.

302. *Id.* at 164.

303. *Id.*

304. Nat'l Wildlife Fed'n v. Consumers Co., 862 F.2d 580, 582 (6th Cir. 1988).

In decisions issued prior to the Supreme Court's 1984 *Chevron*[305] decision (which specifies the deference courts must give to an interpretation of a federal statute by a federal administrative agency), courts of appeals in four cases[306] deferred to EPA's position that storage dams and pumped storage facilities do not require an NPDES permit under the CWA for dam-induced water quality changes. Instead, the storage dams and pumped storage facilities could be regulated under state-developed area-wide waste treatment management plans pursuant to section 208 of the CWA.[307,308]

These cases, however, did not "categorically exempt all dams from the discharge requirements of the CWA."[309] An impoundment dam that collects acid mine drainage (surface runoff pollutants collected or channeled into a reservoir behind the dam) and then releases these pollutants into a downstream river through the dam's point source spillway or discharge valve, has been held subject to the NPDES permit requirement for point source discharges of pollutants.[310] In addition, EPA requires NPDES permits for the discharge of grease, oil, or trash through the outlet works of a storage dam.[311]

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305. Chevron, U.S.A., Inc. v. Natural Resource Defense Council, 467 U.S. 837 (1984).

306. State of Mo. *ex rel.* Ashcroft, 672 F.2d 1297 (8th Cir. 1982); Nat'l Wildlife Fed'n v. Gorsuch, 693 F.2d 156 (D.C. Cir. 1982); United States *ex rel.* Tenn. Valley Auth. v. Tenn. Water Quality Control Bd., 717 F.2d 992 (6th Cir. 1983), *cert. denied*, 466 U.S. 937 (1984); Nat'l Wildlife Fed'n v. Consumers Power Co., 862 F.2d 580 (6th Cir. 1988).

307. 33 U.S.C. § 1288 (2000).

308. As a result of amendments to the Clean Water Act enacted in 1987, states are now required to regulate nonpoint source pollution primarily under state nonpoint source management programs adopted under section 319, 33 U.S.C. § 1329, that seek to reduce pollutant loadings resulting from nonpoint source pollution through the use of best management practices and measures. *Id.* § 1329(b)(2)(A)-(D).

309. Comm. to Save Mokelumne River v. East Bay Mun. Util. Dist., 13 F.3d 305, 308 (9th Cir. 1993), *cert. denied*, 513 U.S. 873 (1994).

310. *Id.*

311. Gorsuch, 693 F.2d at 165 n.22.

The most in-depth analysis of EPA's position with respect to dam-induced water quality changes occurred in Judge Patricia Wald's 1982 decision in *National Wildlife Federation v. Gorsuch.*[312] This opinion, which deals generally with changes in water quality caused throughout the United States by all storage dams, addressed only the issue of whether an NPDES permit is required for water-quality changes in a river downstream of a storage dam, induced by the storage dam's release, from a point source pipe or spillway, of water in the reservoir behind the dam into the downstream river.[313]

In *Gorsuch,* Judge Wald deferred to and upheld EPA's position that a dam does not require an NPDES permit for adverse changes it causes to the quality of water in the reservoir behind the dam and in river water downstream. EPA's position is that dam-induced water quality changes are to be regulated instead under state-developed area-wide waste management plans pursuant to section 208 of the CWA.[314] Judge Wald upheld this EPA position on the grounds it was a reasonable interpretation of the CWA and "not inconsistent with congressional intent."[315]

In addition, several courts of appeals[316] have held water quality changes caused by a dam owned and operated by the federal government are not the "discharge or runoff" of pollutants subject to regulation under section 313 of the CWA[317] (water pollution caused by federal government facilities is regulated under section 313 of the CWA rather than by section 301(a) of the Act[318]).[319] One court held

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312. 693 F.2d 156.

313. Judge Wald in *Gorsuch* did not address the issue of whether an NPDES permit is required for changes in the water quality in the reservoir behind a storage dam because the parties in *Gorsuch* agreed "that water quality problems that occur within a reservoir (*e.g.*, dissolved minerals) are nonpoint [source] pollution, for lack of a point source." *Id.* at 174.

314. 33 U.S.C. § 1288 (2000).

315. 693 F.2d at 161, 183.

316. United States *ex rel.* Tenn. Valley Auth. v. Tenn. Water Quality Control Bd., 717 F.2d 992 (6th Cir. 1983), *cert. denied,* 466 U.S. 937 (1984). State of Mo. *ex rel* Ashcroft v. Dep't of the Army, 672 F.2d 1297 (8th Cir. 1982).

317. 33 U.S.C. § 1323.

318. *Id.* § 1311(a).

that the District Court did not err in finding alleged soil erosion caused below a hydroelectric storage dam (as a result of fluctuations in the flowage of water from the power plant) and the reduction of oxygen (as a result of water turbulence at the dam), constituted neither the "discharge" nor "runoff" of pollutants within the meaning of section 313 and therefore, the federal dam was not subject to state water quality laws.[320] Another court followed the *Gorsuch* decision and held that a state NPDES permit is not required for changes in the physical and chemical properties of small quantities of water that seep through a federal dam that diverts water from its natural course (rather than impounding water), on the grounds that the court should defer to EPA's reasonable interpretation of the CWA as not requiring an NPDES permit for such dam-induced water quality changes.[321]

Judge Wald in *Gorsuch* noted the parties in the case agreed that a storage dam's reservoir and the river downstream are "navigable waters" under the CWA.[322] The parties also agreed that pipes or spillways through which water flows from a reservoir through a dam into a downstream river "clearly fall within" the CWA's definition of a "point source."[323]

The parties in *Gorsuch* further agreed that "water quality problems that occur within a reservoir (*e.g.*, dissolved minerals) are nonpoint [source] pollution, for lack of a point source,"[324] a position legally correct because the changes to the quality of water in a reservoir behind a storage dam do not result from the introduction of pollutants from a "discernible, confined and discrete conveyance" (a "point source"). Furthermore, classifying water quality changes in a storage dam's reservoir as nonpoint source pollution is consistent with section 304(f)(2)(F) of the CWA,[325] which directs the EPA Administrator to issue information including:

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319. *See supra* notes 51-56 and accompanying text for analysis of Section 313.

320. *State of Mo. ex rel. Ashcroft,* 672 F.2d at 1304.

321. *Tenn. Water Quality Control Bd.,* 717 F.2d at 999-1000.

322. Nat'l Wildlife Fed'n v. Gorsuch, 693 F.2d. at 156, 165 (D.C. Cir. 1982).

323. *Id.* at 165 n.22.

324. *Id.* at 174.

325. 33 U.S.C. § 1314(f)(2)(F) (2000).

> (1) guidelines for identifying and evaluating the nature and extent of nonpoint sources of pollutants, and (2) processes, procedures, and methods to control pollution resulting from--(F) changes in the movement, flow, or circulation of any navigable waters or ground waters, including changes caused by the construction of dams, levees, channels, causeways, or flow diversion facilities.[326]

In her opinion for the Court in *Miccosukee Tribe*, Justice O'Connor stated that section 304(f)(2)(F) is "concern[ed with] nonpoint sources" and "that § [304(f)(2)(F)] does not explicitly exempt nonpoint pollution sources from the NPDES program if they *also* fall within the 'point source' definition."[327]

Judge Wald noted in *Gorsuch* that in the District Court EPA had argued section 304(f)(2)(F) "was totally irrelevant," but that EPA had argued to the Court of Appeals that this provision "demonstrates Congressional intent that some dam-caused water quality changes should be treated as nonpoint source pollution."[328] Judge Wald added that even if EPA counsel has "rethought its legal argument,"[329] EPA documents suggested EPA's position is that section 304(f)(2)(F)

> [R]eflects congressional understanding that some dam-induced water quality problems are nonpoint source pollution (thus it would be improper to treat all dam-induced water problems as point source pollution), but does not indicate which dam-caused problems are nonpoint pollution (thus, the section does not preclude a finding that any particular pollution problem involves a point source of pollutants).[330]

She also added that even if EPA counsel had rethought its legal argument;

> EPA has never changed its basic position that dams generally do not require NPDES permits. Thus, any inconsistency in EPA's statutory argument would at most be cause not to defer to the agency on the narrow question of the relevance of § 304(f)(2)(F), not reason to withdraw

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326. *Id.*
327. 124 S. Ct. 1537, 1544 (2004).
328. *Gorsuch,* 693 F.2d at 168.
329. *Id.*
330. *Id.* at 168 n.36.

deference to EPA on its underlying position concerning dams.[331]

Although section 304(f)(2)(F) does not explicitly state that nonpoint source pollution occurs when a storage dam causes the condition of the water in the reservoir behind the dam to change when the water in the river upstream of the storage dam is backed up or its flow is slowed by the dam, section 304(f)(2)(F) should be interpreted as categorizing changes in the quality of water in a reservoir behind a dam, caused by "changes in the movement, flow, or circulation" of a navigable river upstream of a dam resulting from the construction of the dam, as nonpoint source pollution. This interpretation follows from section 304(f)(1)'s explicit reference to nonpoint source pollution, which implies that the various types of pollutants listed in section 304(f)(2) (including changes in the movement, flow, or circulation of navigable waters caused by dams) are considered by Congress to be types of nonpoint source pollution. This interpretation of section 304(f)(2) is further supported by the fact sections 304(f)(1)(A), (B), and (C)[332] explicitly refer to "runoff" (a term often used synonymously with nonpoint source pollution).

On the other hand, although section 304(f)(2) supports classification of water quality changes in a storage dam's reservoir as nonpoint source pollution, section 304(f)(2) should not be interpreted as also classifying all changes in the water quality in a river downstream of a storage dam as nonpoint source pollution. This interpretation of section 304(f)(2)(F) follows from Justice O'Connor's statement in *Miccosukee Tribe* that section 304(f)(2)(F) "does not explicitly exempt nonpoint pollution sources from the NPDES program if they *also* fall within the 'point source' definition."[333] This indicates section 301(a) should apply to downstream water quality changes caused by "additions" of pollutants to downstream rivers from a dam's point source pipes or spillways.

A ruling that a discharge of "pollutants" from a dam's pipes or spillways into a river downstream of the dam is an addition of pollutants into a navigable body of water from a point source subject to section 301(a) of the CWA is also consistent with the principle that "EPA may not exempt from NPDES permit requirements that which

331. *Id.* at 168.

332. 33 U.S.C. §§ 1314(f)(2)(A), (B), (C) (2000).

333. S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe of Indians, 124 S. Ct. 1537, 1544 (2004).

clearly meets the statutory definition of a point source by 'defining' it as a nonpoint source."[334] However, as discussed below,[335] changes in downstream water quality caused by low dissolved oxygen, cold, and supersaturation are not "pollutants" under the CWA. Those types of water quality changes do not require an NPDES permit because they do not result from pollutants being added to the downstream river from a point source.

Judge Wald noted in *Gorsuch* that EPA also supported its position, that dam-induced water quality changes in the water in a river downstream of a dam do not require an NPDES permit, upon the grounds that a "point source must *introduce* the pollutant into navigable water from the outside world" in order for there to be an "addition" of a pollutant into navigable waters from a point source that requires an NPDES permit.[336] In contrast, a "dam-caused pollution merely passes through the dam from one part of a navigable body water (the reservoir) into another (the downstream river)."[337] The National Wildlife Federation argued

> [H]owever, that the statutorily necessary "addition ... from a point source" occurs when (1) a dam causes pollutants to enter the reservoir and (2) the polluted water subsequently passes through the dam—the point source—into the formerly unpolluted river below. EPA responds that addition from a point source occurs only if the point source itself physically introduces a pollutant into water from the outside world. In its view, the point or nonpoint character of pollution is established when the pollutant first enters navigable water, and does not change when the polluted water later passes through the dam from one body of navigable water (the reservoir) to another (the downstream river). As for supersaturation, which does not exist in the reservoir, EPA argues that it occurs downstream, *after* the water is released from the dam.[338]

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334. League of Wilderness Defenders/Blue Mountains Biodiversity Project v. Forsgren, 309 F.3d 1181, 1190 (9th Cir. 2002).

335. *Infra* notes 359-67 and accompanying text.

336. *See Gorsuch,* 693 F.2d at 156.

337. *Id.* at 165.

338. *Id.* at 174-75.

EPA also argued in *Gorsuch* that under the CWA "any addition must occur 'from' a point source and not merely through a point source," [339] although Judge Wald noted[340] this EPA argument is inconsistent with several EPA regulations[341] which classify as point sources several structures that "merely pass through" pollutants from land to navigable water.[342] Judge Wald, however, accepted this EPA position that an "addition" of a pollutant only occurs when a point source introduces a pollutant into navigable water from the outside world, on the grounds it was not "manifestly unreasonable."[343] This EPA "outside world" position, however, was rejected by the United States Supreme Court's first holding in the *Miccosukee Tribe* case,[344] after the Court of Appeals below in *Miccosukee Tribe* indicated this EPA position was not entitled to deference under the *Chevron* doctrine because it was only contained in policy statements and litigation positions.[345]

A release, into a river downstream from a storage dam through a storage dam's point source pipe or spillway of water, from a reservoir containing pollutants is subject to *Miccosukee Tribe's* first holding, requiring an NPDES permit for a point source that transports water, already containing pollutants, into a navigable body of water. Such a point source release of water from a storage dam's reservoir legally is indistinguishable from the situation in *Miccosukee Tribe*, because the point source S-9 pump station in *Miccosukee Tribe* that transfers water containing pollutants from the C-11 canal into the WCA-3 reservoir (with the C-11 canal and the WCA-3 reservoir separated by levees), factually is almost the same as a point source

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339. *Id.* at 175 n.58.

340. *Id.*

341. 40 C.F.R. § 122.2 (2003) (defining "discharge of a pollutant" to include "surface runoff which is collected or channeled by man); 40 C.F.R. § 122.26 (treating storm sewers as point sources).

342. 693 F.2d at 175 n.58.

343. *Id.* at 175.

344. 124 S. Ct. at 1543. *See supra* notes 176-200 and accompanying text for a discussion of this Supreme Court holding.

345. Miccosukee Tribe of Indian v. S. Fla. Water Mgmt. Dist., 280 F.3d 1364, 1367 n.4. *See supra* notes 150-160 and accompanying text for discussion of this Court of Appeals holding in *Miccosukee Tribe.*

pipe or spillway in a storage dam that conveys water from the reservoir behind the dam to the river downstream from the dam.

Gorsuch's exemption of dam-induced downstream water quality changes from the NPDES permit requirement, however, may be consistent with the second holding of the Supreme Court in *Miccosukee Tribe*. Under this second holding, an NPDES permit is not required in order for a point source to transfer water from one part of a navigable water body to another part of that same water body, if no pollutants are added to that transferred water by the point source and if the water body into which water is transferred is part of the same water body from which the water is removed.[346]

Although a storage dam does change the quality of the upstream river's water by causing heat (or cold) and dissolved minerals and nutrients to be added to the river water that backs up in the reservoir behind the dam, these changes in the quality of water in the reservoir are caused by the nonpoint source dam, not by a "point source."[347] Furthermore, low dissolved oxygen and supersaturation are not "pollutants' under the CWA[348] and increased sediment in a river downstream of a storage dam is caused by downstream river water "'scouring the downstream channel',"[349] not by the point source that releases reservoir water into the downstream river.

Consequently, if the point source pipe or spillway that releases water in a storage dam's reservoir into the river downstream of the dam does not create or generate any pollutants that are added to the water flowing through the point source into the river downstream of the dam, the release by a point source in a storage dam of reservoir water from a storage dam should not require an NPDES permit under the second holding in *Miccosukee Tribe,* where the reservoir behind the dam and the river downstream of that dam are considered to be parts of the same navigable body of water. But, if water in a reservoir behind a storage dam flows through turbines that kill live fish in the water, which are then discharged into a river downstream of the dam, an NPDES permit is required for the discharge of these dead fish. Even if the reservoir and downstream river are considered part of the same water body, the point source turbines would be creating

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346. 124 S. Ct. at 1543. *See supra* notes 201-47 and accompanying text for discussion of this second holding.

347. *See supra* notes 324-33 and accompanying text.

348. *See infra* notes 359-64 and accompanying text.

349. *Gorsuch*, 693 F.2d at 164.

or generating pollutants and adding them into the downstream river.[350]

Under the hydrologic connection test,[351] the reservoir behind a storage dam and the river downstream from the dam would be considered part of the same navigable body of water, because water from the reservoir flows through the dam into the downstream reservoir. The reservoir and downstream river would also be considered parts of the same navigable body of water under the "but for" causation test;[352] without the storage dam the water in the reservoir (which is water that is backed up from the upstream river) would naturally flow from the upstream river into the downstream river (since a storage dam merely slows the natural flow of water from the upstream river into the downstream river). The determination of whether a reservoir and downstream river are parts of the same navigable body of water under a biological/ecosystems test[353] probably requires a case-by-case analysis of the water quality, fish and other aquatic organisms in the reservoir compared to the downstream river.

Even if a storage dam is not exempted from the NPDES permit requirement under *Miccosukee Tribe*'s second holding, a storage dam would be excused from the NPDES permit requirement under the "unitary waters" approach[354] if the storage dam is considered to transfer water "unaltered" from the reservoir behind the dam to the river downstream of the dam[355] (assuming the unitary waters approach is adopted by the federal courts). As noted above, if water in a dam's reservoir containing live fish passes through turbines that kill some or all of the fish and then convey these dead fish to the river downstream of the dam, the dam's turbines would have altered the transferred water by adding pollutants (the dead fish) to the transferred water. But because the focus for purposes of defining

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350. *See infra* notes 388-411 and accompanying text.

351. *See supra* notes 214-41 and accompanying text for discussion of the hydrologic connection test.

352. *See supra* notes 161-66, 217-21, 242-45 and accompanying text for discussion of the but for causation test.

353. *See supra* notes 214, 246-47 and accompanying text for discussion of the biological/ecosystems test.

354. *See supra* notes 248-61 and accompanying text for discussion of the "unitary waters" approach.

355. S. Fla. Water Mgmt. Dist v. Miccosukee Tribe, 124 S. Ct 1537, 1543 (2004).

"unaltered" should be upon the effects of a storage dam's point source pipes or spillways that release water from the dam's reservoir into the downstream river,[356] a dam's pipes or spillways otherwise should be found to transfer reservoir water "unaltered" to the downstream river because a storage dam's pipes and spillways do not add any pollutants to the reservoir water before the water is released into the downstream river.[357] The focus in defining "unaltered" under the "unitary waters" approach should not be upon the effects upon the water in the upstream river caused by the reservoir and storage dam (from which the dam's spillways and pipes receive the water released into the downstream river), because these effects are caused by nonpoint sources, not by the dam's point source pipes and spillways.[358]

Judge Wald in *Gorsuch* also relied upon EPA's position that dam-induced water quality changes do not require an NPDES permit because dam-induced water quality changes such as low-dissolved oxygen, cold, and supersaturation, although within the definition of "pollution" under section 502(19) of the CWA,[359] are not within the "narrower" definition of "pollutants" under section 502(6).[360] She noted that EPA's "quite plausible" "policy-oriented explanation" for the CWA's distinction between "pollutant" and "pollution" is "that Congress purposely limited the NPDES permit program to certain well-recognized pollutants and left control of other water-altering substances or conditions to the states under § 208."[361] Although this theory supports EPA's decision not to require an NPDES permit for low-dissolved oxygen, cold, and supersaturation in a downstream river caused by a storage dam, it does not provide grounds for not

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356. *See supra* notes 251-53 and accompanying text.

357. Although a dam's spillway or pipe may cause water released from the dam to become supersaturated with oxygen, Nat'l Wildlife Fed'n v. Gorsuch, 693 F.2d 156, 164 (D.C. Cir. 1982), such supersaturation, although constituting "pollution" under the Clean Water Act, is not the addition of "pollutants" to the released water. *Supra* note 348 and accompanying text.

358. *See supra* notes 251-53 and accompanying text.

359. 33 U.S.C. § 1362(19) (2000).

360. *Gorsuch*, 693 F.2d at 165. *See supra* notes 77-85 and accompanying text for discussion of the differences between the CWA's definition of "pollution" and the CWA's definition of "pollutants."

361. *Id.* at 172.

requiring an NPDES permit for the introduction of pollutants (such as dissolved minerals and nutrients and heat) into a downstream river from a storage dam's point source pipe or spillway.

Judge Wald did not mention dissolved minerals, nutrients, or sediment that storage dams may cause to be added to a downstream river, although she did note the definition of "pollutant" in section 502(6) of the CWA[362] "primarily lists substances" and that heat is the only water condition explicitly listed as a "pollutant" under the CWA.[363] Although Judge Wald noted the CWA's definition of "pollutant" defines the term "with a list of specific items" that is not "all-inclusive" and "all-encompassing as 'pollution,'"[364] she indicated EPA is "entrusted . . . with at least some discretion over which 'pollutants' and sources of pollution were to be regulated under the NPDES program."[365] Judge Wald did not explicitly discuss whether EPA reasonably had concluded dam-induced dissolved minerals and nutrients and downstream sediment loading are ***not*** within the definition of "pollutant" section 502(6) under the CWA. However, because courts interpret "pollutant" under the CWA "to encompass substances not specifically enumerated but subsumed under the broad generic terms such as 'chemical wastes' and 'solid waste',"[366] dissolved minerals, nutrients, and sediment probably would be found to be "pollutants" under the CWA. Dissolved minerals in a dam's reservoir might be considered a "pollutant" because they are a form of "rock" or are chemical, agricultural, or industrial waste.[367] Nutrients may be classified as "pollutant(s)" -- chemical, agricultural, or

362. 33 U.S.C. § 1362(6).

363. *Gorsuch,* 693 F.2d at 171.

364. *Id.* at 173.

365. *Id.*

366. Hudson River Fishermen's Ass'n v. New York, 751 F. Supp. 1088, 1101 (S.D.N.Y. 1990), *aff'd*, 940 F.2d 649 (2d Cir. 1991).

367. The minerals and nutrients found in the mud at the bottom of a dam's reservoir, which may leach into the reservoir's water, may be chemical, agricultural or industrial wastes that originated from upstream runoff (nonpoint sources) or point sources. "Industrial waste" for purposes of the Act's definition of "pollutant" has been defined broadly as "any useless byproduct derived from the commercial production and sale of goods and services." N. Plains Res. Council v. Fidelity Explor. and Dev. Co., 325 F.3d 1155, 1161 (9th Cir. 2003).

industrial waste. Sediment might be considered a "pollutant" because it is "rock" or "sand." In any case, "heat" is clearly a "pollutant" under the CWA. Therefore, the EPA's policy of not requiring an NPDES permit for dam-induced water quality changes cannot be upheld simply on the grounds that all dam-induced water quality changes in rivers downstream of dams are not "pollutants" under the CWA.

Although Judge Wald in *Gorsuch* also deferred to EPA's position with respect to NPDES permits for dam-induced water quality changes, at least in part because of a number of policy considerations[368] (involving, as discussed below, administrative difficulty in requiring EPA and states to regulate dam-induced water quality changes under the NPDES permit program, as well as costs of complying with NPDES permit and effluent limitation requirements), the Supreme Court ignored similar policy considerations in *Miccosukee Tribe* when deciding whether point sources involved in water distribution programs require an NPDES permit.[369] One of the policy considerations mentioned in *Gorsuch* is the large number of dams that might have to be regulated on a site-specific basis under the NPDES permit program. EPA noted that there might be two million dams for which an NPDES permit might have to be issued, although Judge Wald in *Gorsuch* stated the "number of dams that would require permits is probably no more than the 50,000 'large' dams in the country, and quite possibly only the 3,000 or so dams that are large enough to generate significant amounts of electricity" – a "manageable number even if it turns out impractical to issue categorical permits."[370] In *Miccosukee Tribe*, Justice O'Connor noted similar concerns that the Court's holding might require "thousands" of new NPDES permits that "might require expensive treatment to meet water quality criteria ... and therefore raise the costs of water

368. 693 F.2d at 170 (Judge Wald found that although the EPA "did give primary emphasis to the policy implications of the point source-nonpoint source choice" when it reconsidered its position in 1974 and 1978, she held that "we must conclude that its interpretation does in fact merit full deference on the basis of agency expertise"). *Id.*

369. S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe, 124 S. Ct. 1537, 1544-45 (2004).

370. *See Gorsuch*, 693 F.2d at 182.

distribution prohibitively,"[371] but she pointed out that states and the EPA may be able to "control regulatory costs by issuing general [categorical] permits to point sources associated with water distribution programs."[372]

With respect to the impracticability of issuing categorical (general) permits, Judge Wald noted in *Gorsuch* that "dam-caused pollution is unique because its severity depends partly on whether other sources have polluted the upstream river."[373] Furthermore, she stated that water-quality changes caused by dams "may not be amenable to the nationally uniform controls contemplated by § 402 because pollution problems are highly site-specific."[374] She stated, "[t]he NPDES permit program, however, requires the EPA to issue nationally uniform standards, and thus would not allow the agency to take full account of the interrelationship between dam-caused pollution and other pollution sources."[375] In *Miccosukee Tribe,* Justice O'Connor did not discuss this issue of whether all point sources, even those regulated under a general NPDES permit, must be regulated by nationally uniform, categorical effluent limitations. Justice O'Connor, however, noted in *Miccosukee Tribe* that general NPDES permits may be issued for "a category of point sources within a specified geographic area,"[376] which might have different effluent limitation requirements for different categories of point sources and for different geographical areas.

Miccosukee Tribe does not authorize either federal courts or the EPA to exempt storage dams from the NPDES permit requirement simply because an NPDES general permit for a category of dams that causes water quality changes would be required to impose either nationally uniform or regionally uniform control requirements upon that category of dams. Even if a regional general NPDES permit for dam-induced water quality changes must include nationally uniform, categorical pollution control requirements, general permit effluent

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371. 124 S. Ct. at 1544, 1545.

372. *Id.* at 1545.

373. 693 F.2d at 182.

374. *Id.* at 177 n.62. Subsequently, Judge Wald further discussed the "highly site-specific" "severity of dam-caused pollution" and the difficulty EPA would have in establishing best available technology effluent limitations for each category or class of dams. *Id.* at 182-83.

375. *Id.* at 182.

376. *Miccosukee Tribe*, 124 S. Ct. at 1545 n. *.

limitation requirements can be tailored differently for each category of dams and can be specific Best Management Practices or other non-numeric effluent limitations or standards.[377] Judge Wald in *Gorsuch* identified various methods of operation storage dams can utilize to prevent dams from causing changes in water quality in downstream rivers.[378] These methods of operation might be found to be Best Management Practices or operating conditions and standards that can be incorporated into general NPDES permits for dams without making compliance with such permits too expensive or complicated.

Another EPA concern Judge Wald noted in *Gorsuch* is that "dams are a major component of state water management, providing irrigation, drinking water, flood protection, etc...,"[379] so that a NPDES permit program for dam-induced water quality changes might violate Congress' policy in section 101(g)[380] of the CWA "that the authority of each State to allocate quantities of water within its jurisdiction shall not be superseded, abrogated, or otherwise impaired by this [Act]." Judge Wald stated that "[i]n light of these complexities, which the NPDES program was not designed to handle, it may well be that state area-wide water quality plans are the better regulatory tool."[381] Justice O'Connor, however, considered section 101(g) in *Miccosukee Tribe* and suggested that although it might preclude application of the NPDES permit requirement to water distribution programs if it "raise[d] the costs of water distribution prohibitively," "it may be that such permitting authority is necessary to protect water quality, and that the States or EPA could control regulatory costs by issuing general permits to point sources associated with water distribution programs."[382] Section 101(g), therefore, should not preclude application of the NPDES permit requirement to dams that are components of state water distribution programs under general permit requirements that do not impose "prohibitively costly" expenses upon regulated dams.

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377. *See* 68 Fed. Reg. 7184-85 (Feb. 12, 2003).
378. *See id.* at 162, 163, 164.
379. *See id.*
380. 33 U.S.C. § 1251(g) (2000).
381. *Gorsuch*, 693 F.2d at 182.
382. S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe, 124 S. Ct. 1537, 1545 (2004).

Judge Wald concluded in *Gorsuch*, a decision decided prior to the Supreme Court's 1984 *Chevron* decision,[383] that the courts should defer to the EPA's position that dam-induced water quality changes do not require a NPDES permit under the CWA because the EPA's interpretation "is reasonable, not inconsistent with congressional intent, and entitled to great deference."[384]

Although Judge Wald's decision in *Gorsuch* follows the basic standards of *Chevron* by stating a court must uphold an agency's reasonable interpretation of a federal statute,[385] a court under *Chevron* only defers to an agency's interpretation of a statute found to be silent or ambiguous with respect to its application in a particular situation.[386] If a court finds Congress' intent with respect to how a statute is to be applied in a particular situation is clear from the statute's text and legislative history, the court is required by *Chevron* to follow Congress' clear intent rather than the agency's interpretation.[387]

In her opinion for the court in *Miccosukee Tribe*, Justice O'Connor did not find any ambiguity in how section 301(a) of the CWA applies to point sources that convey pollutants not generated by the point source and to point sources that transfer water from one part of a navigable water body to another part of that same water body. Justice O'Connor in *Miccosukee Tribe,* therefore, did not refer to, let alone defer to, the EPA's "outside world" position in reaching these holdings in *Miccosukee Tribe.* Because the EPA's "outside world' position to which Judge Wald deferred in *Gorsuch* has been overruled by *Miccosukee Tribe*, conveyances of "pollutants" from a point source in a dam only can be exempted from the CWA's NPDES permit requirement when either *Miccosukee Tribe*'s second holding is applicable or if the "unitary waters" approach is adopted by the federal courts.

The Supreme Court's *Miccosukee Tribe* decision also modified *National Wildlife Federation v. Consumers Power Co.*,[388] which held that the discharge of dead fish into a navigable body of water by

383. Chevron, U.S.A., Inc. v. Natural Res. Def. Council, 467 U.S. 837 (1984).
384. 693 F.2d at 183.
385. *See id.* at 171.
386. *See Chevron*, 467 U.S. at 843-45.
387. *See id.* at 842-43.
388. 862 F.2d 580 (6th Cir. 1988).

a pumped storage facility[389] is not an "addition" of pollutants to a navigable body of water that requires a NPDES permit under section 301(a) of the CWA, even though the fish were alive in the water which the facility pumped from that same navigable body of water into the facility's reservoir. The pump storage facility involved in the *Consumers Power Co.* case pumps water from Lake Michigan, containing live fish and other aquatic organisms, into a reservoir located above a building housing the facility's reversible pumps/ turbines. Water is released from the reservoir (which the Court of Appeals found to be navigable waters and waters of the United States under the CWA[390]) to generate electricity, by flowing through the turbines. After the reservoir water flows through the turbines, it is released back into Lake Michigan, with a substantial number of the fish and other aquatic organisms in the intake water being returned dead into Lake Michigan.[391]

The Court of Appeals held in *Consumers Power Co.* that the introduction of dead fish and other organisms into Lake Michigan, in the water flowing through the facility's turbines, was not an "addition" of pollutants to a navigable body of water within the meaning of section 301(a) of the CWA that requires a NPDES permit. The court based this holding in part upon EPA's position that an "addition" of pollutants cannot occur under section 301(a) of the CWA unless a point source physically introduces a pollutant into navigable waters from the outside world, a position to which the court held it must defer because it was a reasonable interpretation of the CWA.[392] The court reasoned that fish are a "pollutant" under section 502(6) of the Act[393] because they are "biological materials," both when living and when dead,[394] so the water withdrawn from Lake Michigan already contains pollutants (live fish) and the facility's turbines do not introduce any pollutants into Lake Michigan when they kill the fish and return dead fish to Lake Michigan.

A panel of the Ninth Circuit Court of Appeals has stated (in *dictum)* however, that although parts of dead fish (fish skin, scales,

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389. *See supra* notes 283, 304 and accompanying text for a discussion of the characteristics of a pump storage facility.

390. *Nat'l Wildlife Fed'n,* 862 F.2d at 589.

391. *See id.* at 581-82.

392. *See id.* at 584.

393. 33 U.S.C. § 1362(6) (2000).

394. *Nat'l Wildlife Fed'n.,* 862 F.2d at 583, 585.

bones and entrails) are "biological materials" within the CWA's definition of "pollutants" (because they are waste materials or products that result from or have been transformed by human or industrial activity or processes), live shell fish, their shells and the natural chemicals and particulate biological matter emitted from them, are not "biological materials" that are within the definition of "pollutants" under the CWA.[395] Under this Ninth Circuit approach, live fish in a pumped storage facility's intake water are not a "pollutant" under the CWA, but whole bodies of dead fish and parts of dead fish discharged from the facility's turbines would be "pollutants" under the CWA. This Ninth Circuit approach is preferable to the *Consumers Power Co.* approach because the Ninth Circuit's approach implicitly follows the principle "that there could be an addition of a pollutant without an addition of material . . . , at least when an activity transforms some material [live fish] from a nonpollutant into a pollutant [dead fish ("biological materials")]."[396] Under this Ninth Circuit approach, an NPDES permit is required under *Miccosukee Tribe*'s first holding in order for the facility's turbines to convey dead fish into a navigable body of water from which the fish were withdrawn alive in the facility's intake water, because the killing of fish by the facility's turbines generates or creates pollutants.

But, the dead fish do not constitute a "pollutant" under the CWA simply because they add "pollution" to the water returned to Lake Michigan. Although dead fish have a biological oxygen demand that is "man-made or man-induced alteration of the . . . physical . . . [and] biological . . . integrity of the water" within the meaning of the definition of "pollution" under section 502(19) of the CWA,[397] biological oxygen demand is not listed as a "pollutant" under section 502(6) of the CWA. Consequently, killing live fish should not be considered to introduce or create new pollutants within intake water simply because the killing of fish adds biological oxygen demand to the water.

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395. Ass'n to Protect Hammersley v. Taylor Res., Inc., 299 F.3d 1007, 1017 (9th Cir. 2002); *see* N. Plains Res. Council v. Fidelity Explor. Dev. Co., 325 F.2d 1155, 1162-63 (9th Cir. 2003).

396. United States v. Deaton, 209 F.3d 331, 335 (4th Cir. 2000), *denial of mot. to reconsider aff'd*, 332 F.3d 698 (4th Cir. 2003), *cert. denied*, 124 S. Ct. 1874 (2004).

397. 33 U.S.C. § 1362(19) (2000).

The holding in *Consumers Power Co.*, that no NPDES permit is required for the release of dead fish from a pumped storage facility's turbines into Lake Michigan, should be considered to no longer be in effect, since EPA's "outside world" position, upon which *Consumers Power Co.* relied, has been invalidated by the Supreme Court's first holding in the *Miccosukee Tribe* case.[398] *Miccosukee Tribe*'s first holding requires an NPDES permit for the pumped storage facility's release of dead fish from its point source turbines into Lake Michigan if the dead fish are "pollutants" within the meaning of the CWA. As noted above, both *Consumers Power Co.* and the Ninth Circuit Court of Appeals agree dead fish are a "pollutant" under the CWA because dead fish are "biological materials" within the meaning of section 502(12) of the CWA.[399] Consequently, the release of dead fish from the facility's point source turbines into Lake Michigan would require an NPDES permit under *Miccosukee Tribe*'s first holding even if the facility's pumps/turbines are not considered to create or generate these pollutants when the turbines kill fish (which would be the case if live fish in the reservoir and in the facility's intake water are considered "pollutants").

The releases of dead fish from the pumped storage facility's point source turbines into Lake Michigan may be exempt from the NPDES permit requirement either under *Miccosukee Tribe*'s second holding (that an NPDES permit is not required to pump water from one part of a navigable body of water into another part of the same water body),[400] or under the "unitary waters" approach discussed in *Miccosukee* Tribe (if the "unitary waters" approach is adopted by the federal courts).[401] The releases of dead fish would be exempt from the NPDES permit requirement under either of these two doctrines only if the killing of fish by the facility's turbines is *not* considered to be generation or creation of pollutants introduced into the water flowing

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398. S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe, 124 S. Ct. 1537, 1543 (2004). *See supra* notes 176-200 and accompanying text for further discussion of this holding.

399. 33 U.S.C. § 1362(12).

400. 124 S. Ct. at 1545; *See also supra* notes 201-47 and accompanying text.

401. 124 S. Ct. at 1543-45; *See also supra* notes 248-61 and accompanying text (analyzing the "unitary waters" approach).

through the turbines and released into Lake Michigan.[402] As noted earlier, under the Ninth Circuit's approach, the killing of fish by the facility's turbines would be considered to be generation or creation of pollutants, but under the *Consumers Power Co.* approach the facility's turbines are not considered to generate or create pollutants when the turbines kill fish.

For purposes of *Miccosukee Tribe*'s second holding, the pumped storage facility's operation must be considered to involve two separate transfers of water— first, the pumping of water to the reservoir (which *Consumers Power Co.* held to be a navigable body of water under the Clean Water Act[403]) and second, the transfer of water from the reservoir into Lake Michigan after passing through the facility's turbines.[404] The transfer of water would not be considered to be exempt from the NPDES permit requirement under *Miccosukee Tribe*'s second holding as a transfer of water from one part of Lake Michigan to another part of Lake Michigan, both because the water in Lake Michigan is first transferred to a reservoir that is itself a navigable body of water under the Clean Water Act and because *Miccosukee Tribe*'s second holding probably is inapplicable when there is an intervening commercial or industrial use of transferred water.[405]

Consequently, the transfer of water from the facility's reservoir into Lake Michigan would not be exempt from the NPDES permit requirement unless the reservoir is considered part of Lake Michigan

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402. *See supra* notes 206-07 and 249-53 and accompanying text (discussing this limitation on *Miccosukee Tribe*'s second holding and on the "unitary waters' approach).

403. 862 F.2d 580, 589 (6th Cir. 1988).

404. *See supra* notes 208-09 and accompanying text (discussing this analytical approach).

405. *Supra* notes 204-10 and accompanying text discuss these possible limitations of *Miccosukee Tribe*'s second holding. The second holding also might not be applicable under the Ninth Circuit position that fish that have been killed by humans are "pollutants," because under that position the killing of fish by the facility's turbines is considered to generate or create pollutants that are added to the water withdrawn from Lake Michigan and then returned to Lake Michigan after flowing through the facility's turbines. *Miccosukee Tribe*'s second holding does not apply when the point source transferring water adds pollutants to the transferred water. *Supra* notes 206-07 and accompanying text.

and the killing of fish by the facility's turbines is not considered the "addition" of pollutants to the water flowing through the turbines. The reservoir would be considered a part of Lake Michigan under the hydrologic connection test only if the flow of water from the reservoir into Lake Michigan through the facility's turbines is considered to satisfy the test despite the fact that the hydrologic connection between the reservoir and dam is a human-made connection, not a natural, hydrologic connection. The reservoir and Lake Michigan, however, should not be considered part of the same navigable body of water either under the biological/ecosystem test (because the man-made reservoir probably has different ecological and biological characteristics than Lake Michigan) or under the "but for/causation" test (because water in Lake Michigan would not flow naturally uphill into the pump storage facility's reservoir and then back into Lake Michigan through the facility's turbines).[406]

As an additional ground for its judgment, the Court of Appeals in the *Consumers Power Co.* case based its decision upon EPA's policy that an NPDES permit is not required for dam-induced water quality changes, on the grounds a pumped storage facility is a dam for purposes of the CWA[407] and this EPA policy is a reasonable interpretation of the CWA.[408] The court, however, did not support this alternative holding with any evidence that EPA intended pumped storage facilities to be covered by its policy on NPDES permits for dams or that EPA considered fish killings by either dams or pumped storage facilities when it adopted this policy, although the court did note that EPA "has never required an NPDES permit for turbine generating water releases at thirty-four other pumped storage facilities" or for hydroelectric storage dams "whose 'turbine generating water releases also may contain both dead and live aquatic organisms' . . . ."[409] The court in *Consumers Power Co.* agreed with Judge Wald's view in *Gorsuch* "that generally water quality changes caused by the existence of dams and other similar structures were intended by

406. *See supra* notes 214, 246-47 and accompanying text (discussing the biological/ecosystem test); *supra* notes 163-66, 217-21 and 242-45 and accompanying text (discussing the but for/causation test).

407. 862 F.2d at 589-90.

408. *Id.* at 585.

409. *Id.* at 587.

Congress to be regulated under the 'nonpoint source' category of pollution."[410]

As discussed earlier, however, EPA's "outside world" position, which is the basis for EPA's position that an NPDES permit is not required for releases of water into a river downstream of a storage dam from the reservoir behind the dam and the holding in *Gorsuch* that dam-induced water quality changes do not require an NPDES permit, have been overruled by the first holding in *Miccosukee Tribe. Consumers Power Co.,* therefore, is subject to similar modifications under *Miccosukee Tribe.* Consequently, an NPDES permit is required for a pumped storage facility to release dead fish from a point source turbine into a navigable body of water.[411]

EPA and the states have authority, however, under the Supreme Court's *Miccosukee Tribe* decision to issue general section 402 NPDES permits to categories of point sources for specified regions or geographical areas, and EPA and the states, therefore, have the authority to establish separate general section 402 NPDES permits for different categories of dams, including general NPDES permits for the category of hydroelectric storage dams and separate general NPDES permits for the category of pumped storage electricity-generating facilities. These general NPDES permits can require compliance with best management practices effluent limitation requirements rather than with numerical effluent limitations.

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410. *Id.* at 588.

411. The Federal Energy Regulatory Commission (FERC) is required to impose fish protection requirements upon a hydroelectric power storage dam or pump storage facility when building and operating licenses are issued by the FERC to such a facility under the Federal Power Act, 16 U.S.C. § 803(j); *see also* Nat'l Wildlife Fed'n v. Consumers Power Co., 862 F.2d 580, 590 (6th Cir. 1988). In accordance with 33 U.S.C. § 1369(a)(1), EPA therefore needs to coordinate with the FERC the NPDES permit provisions for such a facility that are designed to protect fish in the facility's intake water, to avoid duplicative or contradictory requirements.

V. "RE-DEPOSITS" INTO A WETLAND OR OTHER NAVIGABLE BODY OF WATER OF SOIL AND VEGETATION REMOVED OR EXCAVATED FROM THE BOTTOM OF THAT SAME WETLAND OR BODY OF WATER

The Supreme Court's *Miccosukee Tribe* decision has not modified court of appeals' decisions holding that an "addition" of pollutants into a navigable body of water occurs for purposes of section 301(a) of the CWA both where soil or vegetation on the bottom of a navigable body of water are dug up and "re-deposited" back into "adjacent" areas of that same body of water[412] and where soil or vegetation on a wetland (that is a navigable body of water under the CWA[413]) are dug up or excavated and "re-deposited" back into that same wetland.[414] Under this approach, an "addition" of pollutants

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412. United States v. M.C.C. of Florida, Inc., 772 F.2d 1501, 1506 (11th Cir. 1985) (addition of pollutants into a navigable body of water held to occur when propellers of a tug boat, a point source, cut into the bottom of that body of water, uprooting sea grass and digging up sediment on the bottom and depositing bottom sediment on adjacent sea grasses), *vacated and remanded on other grounds,* 481 U.S. 1034 (1987), *readopted in relevant part,* 848 F.2d 1133 (11th Cir. 1988); Rybachek v. EPA, 904 F.2d 1276, 1285 (9th Cir. 1990) (re-deposit into a stream of material excavated from the bed of that stream during placer mining held to be an "addition" of pollutants into stream under Clean Water Act); Greenfield Mills, Inc. v. Macklin, 361 F.3d 934, 948-49 (7th Cir. 2004); United States v. Sinclair Oil Co., 767 F. Supp. 200 (D.Mont. 1990).

413. As discussed *supra* note 70, certain wetlands are considered navigable waters under the Clean Water Act under Corps of Engineers regulations published at 33 C.F.R. § 328.3 (2004). Under this regulation, a wetland can have saturated ground water without any visible surface water. Land-clearing activities that occur on this type of wetland that has no visible surface water may be considered to "discharge" pollutants into that wetland (a navigable body of water) when soil and vegetation in that wetland are dug up and re-deposited back into wetland. Avoyelles Sportsmen's League, Inc. v. Marsh, 772 F.2d 897, 912, 924 (5th Cir. 1983).

414. *Avoyelles Sportsmen's League, Inc.,* 772 F.2d at 920-25 (redepositing into a wetland parts of trees and vegetation that were cut in and removed from that same wetland held to be the addition of pollutants into a navigable body of water, where more than *de mini-*

may be considered to occur even though some period of time may pass between the removal of the materials and their re-deposit,[415] and even though the "re-deposited" materials only remain on the wetland or in the water body temporarily and are ultimately removed from the wetland or water body.[416]

On the other hand, the Supreme Court's *Miccosukee Tribe* decision should be interpreted as having overruled federal court decisions[417] that have held there is no "addition" of pollutants into a navigable body of water when "incidental fallback" of soil or vegetation occurs

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mis disturbances were involved); United States v. Deaton, 209 F.3d 331, 337 (4th Cir. 2000) (piling excavated dirt, dug up from a ditch in a protected wetland, alongside that ditch (a practice known as sidecasting), held to be the addition of pollutants into a navigable body of water), *denial of mot. to reconsider aff'd,* 332 F.3d 698 (4th Cir. 2003), *cert. denied,* 124 S. Ct. 1874 (2004); Borden Ranch P'ship v. United States Army Corps of Eng'rs, 261 F.3d 810, 813 (9th Cir. 2001) (dragging long metal prongs pulled behind a tractor or bulldozer through the soil of a protected wetland (a practice known as "deep ripping"), resulting in soil that is ripped up being re-deposited nearby in that same wetland, held to be the addition of pollutants into a navigable body of water), *aff'd per curiam by equally divided Court,* 537 U.S. 99 (2002); United States v. Bay-Houston Towing Co., 33 F. Supp. 2d 596 (E.D. Mich. 1999) (sidecasting and discing (having a disc cut into ground of a protected wetland, with some soil riding on the front of the disc being re-deposited in other areas), held to be the "addition" of pollutants); United States v. Hummel, 2003 U.S. Dist. Lexis 5656, *26 (N.D. Ill. 2003) (intentional re-deposit of dirt and vegetation, excavated from trenches dug in a wetland and sidecast alongside the trenches, back into the trenches to cover up sewer pipes laid in the trenches, held to be the "addition" of pollutants to the wetland under the CWA).

415. *Bay-Houston Towing Co.,* 33 F. Supp. 2d at 605.

416. *Id.* at 607.

417. American Mining Cong. v. United States Army Corps of Eng'rs, 951 F. Supp. 267 (D.D.C. 1997), *aff'd sub nom.*, Nat'l Mining Ass'n v. United States Army Corps of Eng'rs, 145 F.3d 1399 (D.C. Cir. 1998), *mot. to compel compliance with court's injunction denied,* 120 F. Supp. 2d 23 (D.D.C. 2000); Nat'l Ass'n of Home Builders v. United States Army Corps of Eng'rs, 311 F. Supp. 2d 91 (D.D.C. 2004).

into a protected wetland during mechanized land-clearing, ditch-digging, channelization, excavation, or dredging activity (with "incidental fallback" defined as a small amount of material that falls back to substantially the same part of that wetland from which it was initially removed from the wetland during such activity, where the fallback is incidental to the removal activity and not a purposeful redeposit[418]).

"Re-deposits" of soil or vegetation have been found to be the "addition" of pollutants into a navigable body of water in a number of circumstances, including where parts of trees and vegetation, that were cut near the surface of a protected wetland, were raked (by bulldozers (point sources) outfitted with rake blades) into low areas or buried in holes (leveling the surface of the wetland, and involving more than *de minimis* disturbances).[419] In addition, an "addition" of pollutants has been found under section 301(a) where dirt excavated from a ditch dug in a protected wetland (by a backhoe, front-end track loader and a bulldozer) is piled up along the sides of the ditch (a practice know as "sidecasting"),[420] where soil in a wetland is ripped up by long metal prongs pulled behind a tractor or bulldozer (point sources), resulting in the ripped-up soil being moved and redeposited in some other part of the wetland (a practice called "deep-ripping"),[421] and where propellers of a tugboat (a point source) cut into the bottom of a navigable body of water, uprooting sea grass and dislodging sediment on the bottom and depositing the uprooted vegetation and dislodged sediment on adjacent sea grass beds on the bottom of that same water body.[422]

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418. *Nat'l Ass'n of Home Builders,* 311 F. Supp. 2d at 102. *See infra* notes 439-511 and accompanying text.

419. *Avoyelles Sportsmen's League, Inc.,* 772 F.2d at 920-25.

420. United States v. Deaton, 209 F.3d 331, 337 (4th Cir. 2000), *denial of mot. to reconsider aff'd,* 332 F.3d 698 (4th Cir. 2003), *cert. denied,* 124 S. Ct. 1874 (2004).

421. Borden Ranch P'ship v. United States Army Corps of Eng'rs, 261 F.3d 810, 813 (9th Cir. 2001), *aff'd per curiam by equally divided court,* 537 U.S. 99 (2002).

422. United States v. M.C.C. of Florida, Inc., 772 F.2d 1501, 1506 (11th Cir. 1985), *vacated and remanded on other grounds,* 481 U.S. 1034 (1987), *readopted in relevant part,* 848 F.2d 1133 (11th Cir. 1988).

The principle that an "addition" of pollutants occurs when there is a "re-deposit" into a navigable body of water or a protected wetland of soil or vegetation removed from the bottom of that same navigable body of water or from that wetland (the "re-deposit" principle) has been supported by one court on the ground that under the CWA's definition of a "discharge of a pollutant," an "addition of a pollutant" does "not [have to] involve the introduction of material brought in from somewhere else."[423] This reasoning essentially is one relying upon the plain text or meaning of the CWA's definition of a "discharge of a pollutant."

United States v. Deaton[424] supported the "re-deposit" principle in part upon the ground that re-deposited material can have adverse impacts upon protected wetlands:

> In deciding to classify dredged spoil as a pollutant, Congress determined that plain dirt, once excavated from waters of the United States, could not be re-deposited into those waters without causing harm to the environment. Indeed, several seemingly benign substances like rock, sand cellar dirt, and biological materials are specifically designated as pollutants under the Clean Water Act . . . . Congress had good reason to be concerned about the reintroduction of these materials into the waters of the United States, including wetlands that are a part of those waters.

When a wetland is dredged, . . . and the dredged spoil is redeposited in the water or wetland, pollutants that had been trapped may be suddenly released. Even in a pristine wetland or body of water, the discharge of dredged spoil, rock, sand, and biological material threatens to increase the amount of suspended sediments, harming aquatic life.

These effects are no less harmful when the dredged spoil is redeposited in the same wetland from which it was excavated. The effects on hydrology and the environment are the same. Surely Congress would not have used the word "addition" (in "addition of any pollutants") to prohibit the discharge of dredged spoil in a wet-

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423. Borden Ranch P'ship v. United States Army Corps of Eng'rs, 261 F.3d 810, 815 (9th Cir. 2001), *aff'd per curiam by equally divided court,* 537 U.S. 99 (2002).

424. 209 F.3d at 331.

land, while intending to prohibit such pollution only when the dredged material comes from outside the wetland.[425]

Some of the other courts that have recognized this "re-deposit" principle also have emphasized this principle's application to re-deposits in a wetland is consistent with Congress' recognition that protecting wetlands is an important means of reaching the goal under section 101(a) of the CWA[426] to "'restore and maintain the chemical, physical and biological integrity of the Nation's waters.'"[427] The re-deposit into a wetland of plain dirt dug up from that wetland can "destroy the ecology of a wetland"[428] and "significantly alter the character of the wetlands and limit the vital ecological functions served by the [wetlands]."[429]

In *United States v. Deaton*,[430] a case involving the re-deposit of soil excavated from a wetland back into that same wetland during the process of digging a ditch through that wetland ("sidecasting"), the Fourth Circuit Court of Appeals rejected the arguments by the Deatons (the owners of that wetland) that an "addition" of pollutants within the meaning of CWA section 502(12) requires "an 'introduction of new material into the area, or an increase in the amount of a type of material which is already present,'"[431] and that a re-deposit of excavated dirt cannot be an addition of a pollutant because it "results in no net increase in the amount of material present in the wetland."[432] The Fourth Circuit rejected these arguments in *Deaton* on the grounds that:

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425. *Id.* at 336 (citation omitted).

426. 33 U.S.C. § 1251(a) (2000).

427. *Avoyelles Sportsmen's League, Inc.*, 715 F.2d at 923 (5th Cir. 1983) (quoting 33 U.S.C. § 1251(a)).

428. *Borden Ranch P'ship.*, 261 F.3d at 814.

429. *Avoyelles Sportsmen's League, Inc.*, 715 F.2d at 923.

430. 209 F.3d at 331.

431. *Id.* at 335 (quoting United States v. Wilson, 133 F.3d 251, 259 (4th Cir. 1997) (Niemeyer, J.)).

432. *Id.* at 335. This argument was supported by the statement by Judge Stephen F. Williams, in Nat'l Mining Ass'n v. United States Army Corps of Eng'rs, 145 F.3d 1399, 1404 (D.C. Cir. 1998), that "... we fail to see how there can be an addition of *dredged material* when there is no addition of *material*." *See also infra* notes 487-90 and accompanying text for analysis of this statement by Judge Williams.

> Contrary to what the Deatons suggest, the statute does not prohibit the addition of material; it prohibits "the addition of any pollutant." The idea that there could be an addition of a pollutant without an addition of material seems to us entirely unremarkable, at least when an activity transforms some material from a nonpollutant into a pollutant, as occurred here. In the course of digging a ditch across the Deaton property, the contractor removed earth and vegetable matter from the wetland. Once it was removed, that material became "dredged spoil," a statutory pollutant and a *type* of material that up until then was not present on the Deaton property. It is of no consequence that what is now dredged spoil was previously present on the same property in the less threatening form of dirt and vegetation in an undisturbed state. What is important is that once that material was excavated from the wetland, its re-deposit in that same wetland *added* a pollutant where none had been before. (*See* 33 U.S.C. § 1362(6), (12)). Thus, even under the definition of "addition" (that is, "something added") offered by the Deatons, sidecasting adds a pollutant that was not present before.[433]

This reasoning, based upon the principle that a re-deposit of materials can involve an activity that changes a nonpollutant into a pollutant, is consistent with the Ninth Circuit Court of Appeals' recognition that human activity can transform fish and shell fish (which when alive in a navigable body of water are not considered by the Ninth Circuit to be "pollutants" under the CWA) into "pollutants' (as "biological materials") under the Act when the shellfish or fish are killed and transformed into carcasses, heads, tails or internal residues.[434]

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433. 209 F.3d at 335-36.

434. Ass'n to Protect Hammersley, Eld & Totten Inlets (APHETI) v. Taylor Res. Inc., 299 F.3d 1007, 1016-17 (9th Cir. 2002); N. Plains Res. Council v. Fidelity Explor. & Dev. Co., 325 F.2d 1155, 1162-63 (9th Cir. 2003); *see supra* notes 395-96 and accompanying text (this principle that an "addition" of pollutants to a navigable body of water occurs, when live fish or shellfish in a body of water are removed and killed and then dead fish are re-deposited back into that body of water is discussed); *see supra notes* 392-94 and accom-

The "re-deposit" principle, which considers the "re-deposit" into a navigable body of water or wetland of soil or vegetation removed from the bottom of that navigable body of water or from that wetland to be an "addition" of pollutants into that body of water or wetland, is not inconsistent with the holding by the Supreme Court in *Miccosukee Tribe*, that "pumping water from one [part of a water body] into . . . [an]other [part of the same water body] cannot constitute an 'addition' of pollutants."[435] There is no inconsistency between this holding in *Miccosukee Tribe* and the "re-deposit principle" because the Supreme Court's holding in *Miccosukee Tribe* only addressed the pumping of water (containing suspended or dissolved pollutants) from one part of a navigable water body to another part of that same water body, not the transfer back into a navigable water body or wetland of soil and vegetation dug up from the bottom of that water body or from that wetland (as is the case in situations involving the re-deposit principle).[436]

As discussed earlier, the "re-deposit" principle, in addition to not conflicting with the Supreme Court's *Miccosukee Tribe* decision, also is supported by the plain text and meaning of the definition of a "discharge of a pollutant" in section 502(12) of the CWA[437] and by the CWA's goals of protecting wetland ecosystems and the chemical, physical and biological integrity of the nation's waters. Consequently, federal courts should continue to follow the "re-deposit" principle, requiring a section 404 permit for a point source's "re-deposit" back into a protected wetland or other navigable body of water of soil, vegetation, or other dredged or fill material removed from that same wetland or water body. These courts also should require a section 404 permit for the "incidental fallback" of soil, vegetation or other dredged or fill material into a navigable body of water or protected wetland that occurs during land-clearing activi-

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panying text (the Sixth Circuit Court of Appeals held, in Nat'l Wildlife Fed'n v. Consumers Power Co., 862 F.2d 580, 585 (6th Cir. 1988), that both live fish and dead fish are "biological materials" and "pollutants" under the Clean Water Act's definition of "pollutant" in section 502(6), 33 U.S.C. § 1362(6) (2000), of the Act).

435. S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe of Indians, 124 S. Ct. 1537, 1545 (2004); *see also supra* notes 201-47 and accompanying text.

436. *See also supra* notes 203, 211-13 and accompanying text.

437. 33 U.S.C. § 1362(12) (2000).

ties, digging of ditches, channelization, dredging or excavation, although the Corps and states (with approved section 404 permit programs) may exercise their authority under section 404 to issue general permits for certain categories of point source "re-deposits" and "incidental fallback."[438] As is the case with individual section 404 permits, such section 404 permits should require the permitted discharges to minimize harm to aquatic ecosystems.

VI. INCIDENTAL FALLBACK OF SOIL AND VEGETATION

Prior to the Supreme Court's *Miccosukee Tribe* decision, several lower federal courts[439] held that "incidental fallback" of material back into a navigable body of water or protected wetland, during the course of mechanized land-clearing activities, digging of ditches, channelization, excavation or dredging, is not the "addition of pollutants" under section 301(a) of the CWA. These cases based this holding primarily on the ground that Congress intended section 301(a) only to regulate a point source's addition of pollutants into a navigable body of water, and not to also regulate land-clearing activities, digging of ditches, channelization, excavating, and dredging in wetlands or other navigable bodies of water that only incidentally result in small amounts of soil or vegetation falling back to essentially the same place from which the material was removed.[440] These courts reasoned that if "incidental fallback" from such activities is not excluded from the CWA's definition of a "discharge of a pollutant," the permit and effluent limitation requirements of section 301(a) of the CWA would be extended, contrary to the intent of Congress, to all land-clearing activities, channelization, digging of ditches, excavation, and dredging in protected wetlands and other navigable bodies of water, because these land-clearing and excava-

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438. *See supra* notes 87-93 and accompanying text (discussing the authority of the Corps and the states to issue general section 404 permits).

439. American Mining Cong. v. United States Army Corps of Eng'rs, 951 F. Supp. 267 (D.D.C. 1997), *aff'd sub nom.*, Nat'l Mining Ass'n v. United States Army Corps of Eng'rs, 145 F.3d 1399 (D.C. Cir. 1998), *motion to compel compliance with court's injunction denied*, 120 F. Supp. 2d 23 (D.D.C. 2000).

440. American Mining Cong., 951 F. Supp. at 272-78.

tion activities almost always result in small amounts of soil or vegetation falling back into the same wetland or navigable body of water from which they were removed.[441]

Other lower federal courts, however, have held that the addition of even the smallest amount of pollutants into a navigable body of water is subject to the requirements of section 301(a)[442] and that neither the courts, EPA, nor the Corps can exempt from section 301(a) requirements a discharge of pollutants subject to section 301(a).[443] Furthermore, the Supreme Court's *Miccosukee Tribe* decision did not exempt, from the CWA's definition of "discharge of a pollutant," "additions" back into a wetland or other navigable body of water of small amounts of soil, vegetation, or other pollutants removed from a nearby part or same general area of that same wetland or navigable body of water.[444]

Consequently, the *Miccosukee Tribe* decision should be interpreted as requiring a section 404 permit for "incidental fallback" of soil, vegetation, or other dredged or fill material from a point source engaged in land-clearing, ditch digging, channelization, excavation, or dredging – although the Corps or a state (with an approved section 404 permit program) may exercise its discretion under section 404 to issue general section 404 permits for categories of point source activities discharging "incidental fallback" into protected wetlands or other navigable bodies of water, which require the permitted discharge to minimize harm to aquatic ecosystems.

The issue of "incidental fallback" has been almost continuously addressed since at least 1986 by the Corps (which has authority under section 404 of the CWA[445] to issue permits for the addition of dredged or fill materials into navigable waters from a point source) and by federal courts. In 1986, the Corps issued a regulation[446] that defined, for purposes of section 404 of the CWA, the term "discharge of dredged material" to mean "any addition of dredged material into the waters of the United States," but not including "*de*

441. *Id.* at 270 (dredging and excavation of navigable waters is regulated under section 10 of the Rivers and Harbors Act of 1899, 33 U.S.C. § 403, by the Corps).

442. *Supra* note 28-29, 46 and accompanying text.

443. *Supra* notes 115-17 and accompanying text.

444. *Supra* notes 197-99 and accompanying text.

445. 33 U.S.C. § 1344 (2000).

446. 51 Fed. Reg. 41,206, 41,232 (Nov. 13, 1986).

minimis incidental soil movement occurring during normal dredging operations."[447] This regulation did not define "normal dredging operations." The Corps' preamble to this regulation noted section 404 only directs the Corps to regulate the discharge of dredged materials, not dredging activity itself, but pointed out dredging operations cannot be performed without some fallback of dredged materials. The Corps therefore would be regulating dredging under section 404, contrary to the intent of Congress, if fallback was included within the definition of "discharge of dredged materials."[448] This 1986 rule, however, stated "sidecasting" (the placing of material excavated from a ditch along the side of the ditch) is considered to be a regulated "discharge of dredged material."[449]

In the 1990's however, the Corps changed direction, taking the position that the Corps had authority under section 404 of the CWA to regulate any re-deposits of materials resulting from land-clearing activity or excavation. First, in 1990, the Corps issued a guidance letter[450] "stating its 'position that mechanized land clearing activities in jurisdictional wetlands result in a re-deposition of soil that is subject to regulation under section 404.'"[451] Then, in response to litigation,[452] the Corps in 1993 adopted a new rule[453] (referred to as the *Tulloch* Rule) that revised the Corps' 1986 definition of "discharge

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447. A regulation, 42 Fed. Reg. 37, 145 (July 19, 1977), issued in 1977 by the Corps, had defined "discharge of dredged material" as "any addition of dredged material into the water of the United States," with a few limited exceptions.

448. 51 Fed. Reg. 41, 210 (1986).

449. Nat'l Mining Ass'n v. United States Army Corps of Eng'rs, 145 F.3d 1399, 1402 (D.C. Cir. 1998).

450. United States Army Corps of Eng'rs Regulatory Guidance Letter 90-5 (July 18, 1990).

451. Nat'l Ass'n of Home Builders v. United States Army Corps of Eng'rs, 311 F. Supp.2d 91, 94 (D.D.C. 2004).

452. N.C. Wildlife Fed'n v. Tulloch, Civil No. C-90-713-CIV-5-BO (E.D.N.C.) (settled, with the Corps and EPA agreeing to revise the definition of the term "discharge of dredged material" to include re-deposit of dredged material, but to exclude *de minimis* soil movement that does not destroy or degrade any area of waters of the United States); *see* American Mining Cong. v. United States Army Corps of Eng'rs, 951 F. Supp. 267, 269-70 (D.D.C. 1997).

453. 58 Fed. Reg. 45,008, 45,035 (Aug. 25, 1993).

of dredged material." The new *Tulloch* Rule removed the *de minimis* exception from the Corps' definition of "discharge of dredged material" and expanded the definition to include "any addition, including any re-deposit, of dredged material, including excavated material, into waters of the United States which is incidental to any activity, including mechanized land clearing, ditching, channelization, or other excavation."[454]

The *Tulloch* Rule, however, included a limited exception from the definition of "discharge of dredged material" for "any incidental addition, including re-deposit, of dredged material associated with any activity" that the Corps finds would not have the effect of destroying or degrading (adversely affecting in more than a *de minimis* or inconsequential manner) an area of waters of the United States.[455] This exemption focuses "on the environmental effects of the activity resulting in the discharge, rather than on the discharge itself."[456] In support of their authority to promulgate the *Tulloch* Rule, the Corps

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454. The Corps at the same time in 1993 also promulgated a rule, now codified at 33 C.F.R. § 323.2(d)(3)(ii) (2003), that states that "discharge of dredged materials" does not include "[a]ctivities that involve only the cutting or removing of vegetation above the ground (e.g., mowing, rotary cutting, and chainsawing) where the activity neither substantially disturbs the root system nor involves mechanized pushing, dragging, or other similar activities that re-deposit excavated soil material." This rule is in accord with the holding in *Save Our Wetlands, Inc. v. Sands*, 711 F.2d 634, 647 (5th Cir. 1983), that a section 404 permit is not required for the cutting of trees and vegetation on a wetland.

455. This exemption provision, originally codified in 1999 at 33 C.F.R. § 328.3(d)(3)(I) (2003), now is codified at 33 C.F.R. § 323.2(d)(4)(I) (2004). EPA, which under 33 U.S.C. §§ 1344(b)(1), (c) (2000), also is involved in administering the section 404 permit program, issued a similar regulation. 40 C.F.R. § 232.2*(l)*(iii) (2003).

Although the Corps does not issue section 404 permits for its own civil works projects and navigation maintenance and improvement activities, 33 C.F.R. § 336.1(a), the *Tulloch* Rule "effectively exempts" the Corps' own dredging projects, to maintain or improve the navigability of waters of the United States, from the section 404 permit requirements. *American Mining Cong.*, 951 F. Supp. at 270 n.3 (D.D.C. 1997).

456. *American Mining Cong.*, at 275 n.18.

and EPA contended they always have had authority to regulate incidental fallback under section 301(a) of the Clean Water Act, but prior to adoption of the *Tulloch* Rule they had simply chosen not to exercise that authority for *de minimis* discharges, pursuant to the *de minimis* doctrine (a judicially-recognized doctrine which gives an administrative agency "the authority to provide exemptions from regulation when the burdens of regulation yield, at most, a trivial value," provided the agency would not "exceed the scope of their authority when regulation would be beneficial."[457])

But, because federal courts have held Congress' intent under section 301(a) is "to require permits in any situation of pollution from point sources"[458] and because section 301(a) establishes a "zero discharge" standard in the absence of a required permit,[459] exemptions from section 301(a) only can be created by Congress[460] and cannot be created by the Corps, EPA, a state, or a federal court.[461] Furthermore, Justice O'Connor's opinion in *Miccosukee Tribe* does not indicate *de minimis* discharges or additions of pollutants into navigable waters are exempt (or can be exempted) from the regulatory requirements of section 301(a) of the CWA.[462] Consequently, neither the Corps nor the federal courts have the authority to exempt *de minimis* discharges or additions of dredged or fill material or other pollutants from section 301(a)'s permit and other regulatory requirements.

The 1993 *Tulloch* Rule included small volume incidental fallback associated with excavation and land-clearing within the definition of "discharge of dredged material" unless the person engaging in the activity convinced the Corps the activity would have only minimal

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457. *Id.* at 271 n.5 (D.D.C. 1997).

458. Natural Res. Def. Council v. Costle, 568 F.2d 1369, 1383 (D.C. Cir. 1977).

459. Hughey v. JMS Dev. Corp. 78 F.3d 1523, 1529 (11th Cir. 1996); See *supra* notes 28-29, 46 and accompanying text for discussion of these principles.

460. N. Plains Res. Council v. Fidelity Explor. & Dev. Co., 325 F.3d 1155, 1164 (9th Cir. 2003).

461. *Id.*; *Costle,* 568 F.2d at 1374, 1377, 1382; *see also supra* notes 115-17 and accompanying text.

462. *Supra* notes 197-99 and accompanying text.

adverse effects on wetlands and other navigable waters.[463] Because incidental fallback "is a practically inescapable byproduct" of mechanized land clearing, digging ditches, channelization, dredging and other excavation activities, the *Tulloch* Rule effectively required a section 404 permit for almost all of these activities when performed in wetlands or another navigable body of water.[464]

In 1997, a District Court, in *American Mining Congress v. United States Army Corps of Engineers,*[465] held the *Tulloch* Rule's inclusion of incidental fallback within the definition of "discharge of dredged material" was facially invalid and enjoined the Corps and EPA nationwide from applying or enforcing that part of the rule. The *Tulloch* Rule was held to be invalid on the grounds that the Corps exceeded its statutory authority under the CWA in promulgating the *Tulloch* Rule because Congress did not intend "incidental fallback" (defined as fallback of small volumes of soil and other material to substantially the same place where the initial removal of soil occurred, during land-clearing, ditching, channelization, excavation or dredging, which is incidental to excavation activity[466]) to be considered an "addition of pollutants" to navigable waters that can be regulated under sections 301(a) and 404 of the CWA.[467] Such incidental fallback was held to be distinguishable from a "re-deposit" of excavated material that can constitute an "addition of pollutants" to navigable waters,[468] although the Court of Appeals, affirming the District Court, observed the CWA "sets out no bright line between incidental fallback on the one hand and regulable re-deposits on the other hand."[469]

Although the District Court stated in *American Mining Congress* that the *Tulloch* Rule's exemption of *de minimis* incidental additions and re-deposits associated with an activity that will not destroy or

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463. American Mining Cong. v. United States Army Corps of Eng'rs, 951 F. Supp. 267, 270 (D.D.C. 1997), *aff'd sub nom.* Nat'l Mining Ass'n v. United States Army Corps of Eng'rs, 145 F.3d 1399, 1403 (D.C. Cir. 1998).

464. *Nat'l Mining Ass'n,* 145 F.3d at 1403.

465. 951 F. Supp. at 278.

466. Nat'l Ass'n of Home Builders v. United States Army Corps of Eng'rs, 311 F. Supp. 2d 91, 102 (D.D.C. 2004).

467. *American Mining Cong.,* 951 F. Supp. at 272-78.

468. *Nat'l Mining Ass'n,* 145 F.3d at 1405-06.

469. *Id.* at 1405.

degrade an area of a water body was impermissibly based upon the adverse effects of the entire activity resulting in the discharge,[470] that exemption provision has not been either repealed or amended by the Corps.[471]

This exemption provision probably is invalid because only Congress can exempt from section 301(a) a discharge of pollutants subject to section 301(a) requirements.[472] Furthermore, the Supreme Court's *Miccosukee Tribe* decision applies the requirements of section 301(a) to all point source conveyances of pollutants, no matter how small the discharge and regardless of how close the discharge is to the place the pollutants in the discharge were removed from a water body.[473] Congress intended to require permits "in any situation of pollution from point sources"[474] and neither EPA nor the Corps can exempt from section 301(a) point source discharges of pollutants subject to the requirements of that section.[475] Although such nonharmful *de minimis* additions and re-deposits cannot be exempted from section 301(a) requirements, the Corps of Engineers and the states can regulate such *de minimis* discharges under general section 404 permits issued under section 404(e) of the CWA[476] (these general permits must require a permitted discharge to minimize adverse impacts to the aquatic environment).

One of the reasons in support of the District Court's holding in *American Mining Congress* that "Congress did not intend to cover incidental fallback under section 404" is that "section 404 refers to 'discharges' but does not refer to the regulation of excavation or dredging activities; the fact that Congress has specifically referred to excavation activities elsewhere [section 10 of the Rivers and Harbors

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470. *American Mining Cong.*, 951 F. Supp. at 275 n.18.

471. The exemption provision, originally codified in 1999 at 33 C.F.R. § 323.2(d)(3)(i) (2003), now is codified at 33 C.F.R. § 323.2(d)(4)(i). This provision is discussed *supra* notes 455-56 and accompanying text.

472. N. Plains Res. Council v. Fidelity Explor. & Dev. Co., 325 F.3d 1155, 1164 (9th Cir. 2003).

473. *Supra* notes 197-99 and accompanying text.

474. Natural Res. Def. Council, Inc. v. Costle, 568 F.2d 1369, 1381 (D.C. Cir. 1977).

475. *Id.* at 1374, 1377; *N. Plains Res. Council*, 325 F.3d at 1164.

476. 33 U.S.C. § 1344(e) (2000).

Appropriation Act of 1899 [RHAA][477]] is evidence that Congress did not intend to regulate these activities under section 404."[478] This reasoning mistakenly is based, however, upon analysis of section 404 (which authorizes the Corps to "issue permits . . . for the discharge of dredged or fill material into the navigable waters at specified disposal sites,"[479] that otherwise would be unlawful discharges in violation of section 301(a)), rather than upon a determination of whether "incidental fallback" is an "addition" of pollutants from a point source into navigable waters subject to the requirements of section 301(a) (which include a section 404 permit). The fact that the Corps' permit-issuing authority under section 404 only extends to the "discharge of dredged or fill material," and not to drainage, digging of ditches, excavating, dredging, and channelization, does not mean that "incidental fallback" is not an "addition" of pollutants into navigable waters from a point source under section 301(a) of the CWA.

The District Court's invalidation of the *Tulloch* Rule in *American Mining Congress* also was premised upon the proposition that both the CWA and section 10 of the RHAA would concurrently regulate dredging/excavating activities if "incidental fallback" resulting from dredging activities was subject to regulation under section 301(a) of the CWA (as the point source "addition" of pollutants into navigable waters).[480] This reasoning, however, fails to recognize there is no concurrent regulation if the CWA, in addition to regulating the disposal of dredged spoil, regulates only "incidental fallback" resulting from dredging or excavating, while the RHAA regulates the dredg-

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477. *Id.* § 403.

478. Am. Mining Cong. v. United States Army Corps of Eng'rs, 951 F. Supp. 267, 272 (D.D.C. 1997), *aff'd sub nom.*, Nat'l Mining Ass'n v. United States Army Corps of Eng'rs, 145 F.3d 1399 (D.C. Cir. 1998).

479. 33 U.S.C. § 1344(a).

480. Section 404 of the CWA and section 10 of the RHAA would not exactly duplicate each other's regulatory coverage, because "navigable waters" is defined more broadly under the Clean Water Act than under section 10 of the RHAA, Nat'l Mining Ass'n v. United States Army Corps of Eng'rs, 145 F.3d 1399, 1404 (D.C. Cir. 1998); *see supra* note 70 for discussion of the definition of "navigable waters" under the Clean Water Act.

ing and excavating itself. As one other court[481] has recognized, under this dual regulatory approach, the Corps under the CWA would regulate only the discharge involved in the "incidental fallback," but not the dredging or excavating activity itself. The fact that this approach would mean most dredging, excavating, ditch-digging, channelization and land-clearing activities could not take place without a section 404 permit for "incidental fallback" does not mean incidental fallback should therefore be exempted from the requirements of section 301(a) and 404. Any harshness from this approach could be alleviated through the use of general section 404 permits as an alternative to a requirement of individual section 404 permits for "incidental fallback."

A second reason in support of the District Court's holding in *American Mining Congress* is that legislative history of the CWA in 1972 and 1977 indicates "Congress understood 'discharge of dredged material' to mean open water disposal of material removed during the digging or deepening of navigable waterways, . . . at another location, [thus] . . . involv[ing] the moving of material from one place to another [as an] understanding of 'discharge' [that] excludes the small-volume incidental discharge that accompanies excavation and land-clearing activities."[482] None of this cited legislative history, however, refers either specifically or even implicitly to "incidental fallback." This second reason was further supported by the reference in section 404(a) to the discharge of dredged or fill material at "specific disposal sites," which was viewed as "convey[ing] Congress' understanding that discharges would result in the relocation of material from one site to another."[483]

This reasoning, however, like the first reasoning for the invalidation of the *Tulloch* Rule, is incorrectly premised upon analysis of section 404 (which authorizes the Corps to issue permits for dredged

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481. Reid v. Marsh, 20 Env't Rep. Cas. (BNA) 1337, 1342, 1984 WL 178396 (N.D. Ohio 1984).

482. American Mining Cong., 951 F. Supp. at 273. The District Court in this case further explained that "[i]ncidental fallback associated with excavation or landclearing does not add material or move it from one location to another; some material simply falls back at the same general location from which it was removed." *Id.*

483. *Id.* at 273-74 (footnote omitted). The District Court later in its opinion essentially repeated this argument, albeit in a different manner. *Id.* at 278.

or fill materials) rather than upon analysis of section 301(a). This second reason asserts that a section 404 permit authorizing a discharge of dredged material must "result in the relocation of material from one site to another,"[484] but the *Tulloch* Rule results in there being two "specified disposal sites" for excavation sites: the site of excavation where the "incidental fallback" occurs and the place where the dredged material is disposed.[485] This reasoning, however, mistakenly assumes that under the *Tulloch* Rule all pollutant discharges resulting from "incidental fallback" will be authorized by the Corps under permits issued under section 404. In fact, the opposite is the case under the *Tulloch* Rule, which prohibited the discharge of "incidental fallback" unless the Corps issued a permit under section 404 authorizing the "incidental fallback."

Furthermore, although a section 404 permit authorizing "incidental fallback" to be discharged near an excavation site and requiring dredged or excavated material (other than incidental fallback) to be disposed of at another location would specify two different disposal sites, such a permit is not prohibited by section 404. The Corps in certain situations can issue an individual section 404 permit requiring both "incidental fallback" and dredged spoil to be removed from an excavation site and disposed of at a location different than the excavation site. In other situations, however, the Corps can issue an individual section 404 permit requiring the disposal of dredged spoil at a location different from the excavation site and also issue either an individual or general section 404 permit that authorizes "incidental fallback" to be discharged at the excavation site. Alternatively, of course, the Corps can deny either an individual or a general section 404 permit for "incidental fallback" resulting from certain types of dredging, excavating, channelization, land-clearing or ditch-digging activity (which would mean that such activity could not lawfully be conducted unless the "incidental fallback" can be prevented from occurring).

A third reason in support of the District Court invalidating the *Tulloch* Rule in *American Mining Congress*, and holding that "incidental fallback" is excluded from regulation under sections 301(a) and 404 of the Clean Water Act, was that "Congress, through its lack of an amendment, ratified 18 years of agency and judicial interpretation

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484. *Id.* at 273-74.

485. *Id.*

that excluded incidental fallback from section 404."[486] This argument, however, was premised upon the Corps' and EPA's interpretation of the CWA up until the agencies' adoption of the *Tulloch* Rule, which amended the agencies' regulations under sections 301(a) and 404 to regulate "incidental fallback."

A fourth reason for invalidating the *Tulloch* Rule, provided by the Court of Appeals is "[b]ecause incidental fallback represents a net withdrawal, not an addition of material, it cannot be a discharge."[487]

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486. *Id.* at 274. The District Court noted that the Corps' 1986 regulation defining "discharge of dredged material" (discussed *supra* notes 446-49 and accompanying text) excluded "*de minimis*, incidental soil movement occurring during normal dredging operations" and did not regulate dredging itself. *Id.* at 274. The District Court also cited, *American Mining Cong.*, 951 F. Supp. at 274-75, the holding in *Salt Pond Assocs. v. United States Army Corps of Eng'rs*, 815 F. Supp. 766, 778 (D. Del. 1993), that landclearing, excavation and dredging activities are not subject to regulation under section 404 of the Clean Water Act, and the court cited the holding in *United States v. Lambert*, 18 Env't Rep. Cas. (BNA) 1294, 1296, 1981 WL 14886 (M.D. Fla. 1981), *aff'd*, 695 F.2d 536 (11th Cir. 1983), that back-spill from excavation does not constitute the discharge or addition of a pollutant under the Act "when the dredged spoil simply falls back into the area from which it has just been taken." The District Court in *American Mining Cong.*, F. Supp. at 274 n.15, also noted that the court in *Salt Pond Assocs.* subsequently found that the landowner's activities were subject to regulation under section 404 because they "extended well beyond excavation resulting in only *de minimis*, incidental fallback." Salt Pond Assocs., 1993 WL 738478 at 9. The District Court in *Am. Mining Cong.* discounted *Reid v. Marsh*, 20 Env't Rep. Cas. (BNA) 1337, 1342, 1984 WL 178396 (N.D. Ohio 1984), which it referred to as "the only case to consider incidental fallback to be a regulated discharge," 951 F. Supp. at 275, because the Corps and EPA "expressly rejected that interpretation in the 1986 regulation," *id.* at 275 n.17, with the *American Mining Cong.* court noting, *id.* at 275, 275 n.18, that the court in *Reid* held that the Corps under section 404 could only regulate the discharge itself, not the entire dredging activity. 20 Env't Rep. Cas. (BNA) at 1342.

487. Nat'l Mining Ass'n v. United States Army Corps of Eng'rs, 145 F.3d 1399, 1404 (D.C. Cir. 1998) (emphasis in original). The

The court added, "we fail to see how there can be an addition of *dredged material* when there is no addition of material."[488]

This reasoning, however, erroneously focuses upon the type of discharge for which the Corps can issue a permit under section 404 (a discharge of dredged or fill material), rather than the term "discharge of a pollutant" used in section 301(a) of the CWA, the section of the Act that imposes regulatory requirements upon point source discharges of pollutants (including dredged or fill materials) into navigable waters. The Fourth Circuit Court of Appeals, in *United States v. Deaton*,[489] convincingly has refuted this argument on the grounds that a "discharge of a pollutant" within the meaning of section 301(a) does not require the addition of materials into a receiving body of water not previously present in that water body, such as in "re-deposit" situations where dredging or excavating changes non-pollutant soil and vegetation in a wetland or on the bottom of another navigable water body into pollutants when soil is dug up and vegetation is uprooted.[490]

The courts that invalidated the *Tulloch* Rule declined to defer to the Corps' and EPA's re-interpretation of the Clean Water Act in the *Tulloch* Rule. The District Court reasoned in *American Mining Congress* that a court does "not defer to agency reinterpretations that exceed the scope of the agency's authority; as with the *Chevron* doctrine generally, courts defer to agency interpretations [of a statute] only when the statute is ambiguous."[491] In this reasoning the District Court implied Congressional intent was clear (not ambiguous) with respect to regulation of "incidental fallback" under the CWA, a situation where under the *Chevron* doctrine a court follows clear Congressional intent as to the meaning of the statute rather than the

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Court of Appeals rejected, as "ingenious but unconvincing," the argument that "fallback constitutes an 'addition of any pollutant' because material becomes a pollutant only upon being dredged...." *Id.* This argument was accepted, however, in *United States v. Deaton*, 209 F.3d 331, 337 (4th Cir. 2000), as discussed *supra* notes 430-34 and accompanying text.

488. *Id.*

489. 209 F.3d at 337, *denial of mot. to reconsider aff'd*, 332 F.3d 698 (4th Cir. 2003), *cert. denied*, 124 S. Ct. 1874 (2004).

490. *See supra* notes 430-34 and accompanying text for discussion of the holding in *Deaton*.

491. 951 F. Supp. at 274 n.13.

agency's interpretation of the statute.[492] The District Court also added that "an additional reasoning for rejecting the agencies' request for heightened deference is the inconsistency of positions they have taken." The court commented that it was "not apparent" how the two agencies' increased experience with harmful environmental effects of excavating and land-clearing activities "would alter the agencies' interpretation of congressional intent."[493] The Court of Appeals, on the other hand, seemed to find that although Congress' intent with respect to regulation of "incidental fallback" under the CWA was ambiguous or unclear, the Corps' and EPA's interpretation of the ambiguous statute was unreasonable and that the Corps' and EPA's positions therefore were not entitled to deference by the courts under the *Chevron* doctrine.[494] Nevertheless, the Court of Appeals, although following a different approach than the District Court as to the *Chevron* doctrine, affirmed both the District Court's judgment that the *Tulloch* Rule's inclusion of incidental fallback within the definition of "discharge of dredged material" was invalid on its face and the District Court's order enjoining the Corps and EPA from applying or enforcing that part of the rule against any person anywhere in the United States.[495]

In response to the judicial invalidation of the *Tulloch* Rule's inclusion of incidental fallback in the definition of "discharge of dredged material," the Corps of Engineers, on May 10, 1999, in a final rule, revised its regulations to define "discharge of dredged material" to mean:

> Any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the waters of the United States. The term includes ... (iii) Any addition, including re-deposit other than incidental fallback, of dredged material, including excavated material, into waters of the United States which is incidental to any activity, including mechanized

492. Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837, 843-45 (1984).

493. *American Mining. Cong.*, 951 F. Supp. at 274 n.13.

494. Nat'l Mining Ass'n v. United States Army Corps of Eng'rs, 145 F.3d 1399, 1404, 1404 n.5; 1410 (Silberman, J., concurring).

495. *Id.* at 1406-10.

> land clearing, ditching, channelization, or other excavation.[496]

The preamble to this revised definition stated that the revision "does not alter the well-settled doctrine . . .that some re-deposits of dredged material in waters of the United States constitute a discharge of dredged material and therefore require a section 404 permit,"[497] and that the Corps and EPA would be undertaking notice and comment rulemaking to adopt a final rule that would "more clearly delineate the scope of CWA jurisdiction over re-deposits of dredged material in waters of the U.S."[498] The preamble also indicated that until such a final rule is promulgated, the Corps and EPA would decide on a case-by-case basis whether a particular re-deposit is subject to regulation under the CWA or whether a particular re-deposit is incidental fallback not subject to regulation under section 404.[499]

This 1999 revised definition of "discharge of dredged material" was held not to violate the District Court's injunction against applying or enforcing the *Tulloch* Rule.[500] The District Court held the revised definition of "discharge of dredged material" "eliminates section 404 jurisdiction over incidental fallback," explaining that the court's earlier "order enjoining the agencies from applying or enforcing the *Tulloch* Rule must be understood to bar the agencies from regulating incidental fallback."[501]

On January 17, 2001, the Corps and EPA adopted regulations[502] that defined "incidental fallback" as "the re-deposit of small volumes of dredged material that is incidental to excavation activity in waters of the United States when such material falls back to substantially the same place as the initial removal." At the same time, both agencies also issued final rules[503] that modified their definitions of "discharge of dredged material" by adding the following provision:

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496. 33 C.F.R. § 323.3(d)(1)(iii) (2000); 64 Fed. Reg. 25120 (May 10, 1999).

497. 64 Fed. Reg. 25121 (May 10, 1999).

498. *Id.*

499. *Id.*

500. American Mining Cong. v. United States Army Corps of Eng'rs, 120 F. Supp. 2d 23 (D.D.C. 2000).

501. *Id.* at 29.

502. 33 C.F.R. § 323.2(d)(2)(ii); 40 C.F.R. § 232.2 (2003).

503. 33 C.F.R. § 323.2(d)(2)(i) (2003); 40 C.F.R. § 232.2 (2004); 66 Fed. Reg. 4550, 4575 (Jan. 17, 2001).

> The Corps and EPA regard the use of mechanized earth-moving equipment to conduct land clearing, ditching, channelization, in-stream mining or other earth-moving activity in waters of the United States as resulting in a discharge of dredged material unless project-specific evidence shows that the activity results in only incidental fallback. This paragraph (i) does not and is not intended to shift any burden in any administrative or judicial proceeding under the CWA.[504]

The agencies indicated that under this final definition of "discharge of dredged material," a decision whether an activity involves a regulated re-deposit/addition of pollutants or a non-regulated incidental fallback would "be made on a case-by-case basis considering actual evidence of the particular activity in question."[505] According to case law, a determination of whether a particular deposit is incidental fallback is dependent "on whether it (1) is small in volume, (2) is incidental to excavation activity, and (3) falls back to substantially the same place as the initial removal."[506] A judicial challenge to this new rule recently was dismissed on grounds it was not ripe for judicial review.[507]

The Corps and EPA should re-promulgate a modified version of the *Tulloch* Rule to require a section 404 permit for any incidental fallback, even *de minimis* fallback (fallback that would not destroy or degrade wetlands or other navigable waters) presently exempted from regulation as a "discharge of dredged material."[508] Any incidental fallback of pollutants, even if it has *de minimis* adverse effects, is subject to CWA regulatory requirements, because Congress

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504. 66 Fed. Reg. at 4575. The agencies' proposed final rules would have established a rebuttable presumption that a discharge of dredged material results from mechanized land clearing, ditching, channelization, in-stream mining, or other mechanized excavation activity in waters of the United States, with this presumption being rebutted if "the party proposing such an activity demonstrates that only incidental fallback will result from its activity." 65 Fed. Reg. 50108, 50117 (Aug. 16, 2000).

505. 66 Fed. Reg. at 4562.

506. Nat'l Ass'n of Home Builders v. United States Army Corps of Eng'rs, 311 F. Supp. 2d 91, 102 (D.D.C. 2004).

507. *Id.*

508. 33 C.F.R. 323.2(d)(4)(i); 40 C.F.R. § 232.2 (2003).

intended to require permits under the CWA "in any situation of pollution from point sources"[509] and because neither EPA, the Corps, nor the states have authority to exempt discharges subject to section 301(a) from the CWA's permit and effluent discharge limitation requirements.[510] Furthermore, the definition of "discharge of a pollutant" adopted by the Supreme Court in its *Miccosukee Tribe* decision requires both "re-deposits" and "incidental fallback" be regulated as required by section 301(a) of the CWA if they are an addition of pollutants from a point source into a navigable body of water. The Supreme Court's *Miccosukee Tribe* decision holds that a point source "discharge of a pollutant" subject to regulation under the CWA occurs when a point source conveys pollutants which it generates, as well as when a point source conveys pollutants which it does not generate. No exceptions are permitted even where only small amounts of pollutants are discharged, where a discharge causes no substantial or even identifiable harm to the receiving body of water or the environment, or where pollutants are re-deposited into a wetland or navigable body of water near where they were removed from that same wetland or body of water.[511]

However, although the Corps and EPA are not authorized by *Miccosukee Tribe* to exclude "incidental fallback" from the definition of a "discharge of a pollutant" for purposes of sections 301(a), 402 and 404 of the Act, the Corps and states (with approved section 404 permit programs) may issue general section 404 permits for discharges of "incidental fallback" (or at least discharges of "incidental fallback" in *de minimis* amounts or that are not harmful to the aquatic ecosystem), from certain categories of point sources engaged in land-clearing activities, digging of ditches, channelization, excavation, or dredging.

VII. CONCLUSION

Although the Supreme Court's *Miccosukee Tribe* decision may impose significant increased costs upon some water transfer pro-

509. Nat. Res. Def. Council v. Costle, 568 F.2d 1369, 1383 (D.C. Cir. 1977).

510. *Id.* at 1374, 1377; N. Plains Res. Council v. Fidelity Explor. and Dev. Co., 325 F.3d 1155, 1164 (9th Cir. 2003).

511. *Supra* notes 197-99 and accompanying text.

grams that divert water from one body of water to a separate and distinct body of water, if such programs are required to obtain an individual NPDES permit and to comply with expensive technology-based effluent limitation requirements, at least some of the costs attributable to compliance with Clean Water Act requirements can be reduced if the EPA and the states issue general NPDES permits to water transfer programs. The EPA also may be able to keep the costs of complying with effluent limitation requirements under such general permits from being prohibitively expensive by adopting operational control or best management practice effluent limitation requirements rather than numerical effluent limitations.

Water transfer programs are not the only point source dischargers of pollutants into waters of the United States that are affected by the Supreme Court's *Miccosukee Tribe* decision. The decision also may have wide-spread impacts upon discharges of dead fish from pumped storage electricity generating facilities and upon land-clearing, ditch digging and excavation activities that result in incidental fallback of soil and vegetation, as well as upon other point source dischargers of pollutants that convey into waters of the United States water containing pollutants that were added by some other persons' point source pollutant discharges or by runoff, non-point source pollution. Such sources may need to obtain either a section 402 NPDES permit or a section 404 dredged or fill material permit, although EPA, the Corps of Engineers, and the states may reduce the costs attributable to a required permit by issuing general permits for certain categories of these point source dischargers. A general section 402 NPDES permit may require compliance with best management practices effluent limitation requirements rather than with numerical effluent limitations. Some of these point source dischargers, however, may be required to comply with expensive technology-based numerical effluent limitation requirements that require a point source to remove from its pollutant discharges pollutants that were generated or created by other persons, although some governmental point sources may be able to pass some or all of these costs "back upstream to the generators of the pollution."[512]

The Supreme Court's *Miccosukee Tribe* decision, however, does not require a water transfer program to obtain either an individual NPDES permit or a general NPDES permit in order to transfer water from one part of a navigable body of water to another part of that

512. Davis and Doster, *supra* note 20, at 98.

same water body. This principle may exempt hydroelectric storage dams from the NPDES permit requirement for releases of water into a downstream river or stream from the reservoir behind the dam, through a dam's spillways or pipes. This exemption, however, will not excuse storage dams and pump storage facilities from the NPDES permit and effluent limitation requirements for discharges from turbines of dead fish killed when passing through the turbines.

Federal courts, however, need to adopt an appropriate test for determining when a body of water is a separate and distinct body of water for purposes of *Miccosukee Tribe*'s exemption from the NPDES permit requirement of intra-water body transfers of water. The appropriate test that federal courts should apply when this principle is at issue should be either the "but for/cause in fact" test applied by the Eleventh Circuit in the *Miccosukee Tribe* case or a biological/ecosystem characteristic test, rather than a hydrological connection test. The hydrological connection test should not be adopted because it would exempt from regulation under the CWA those transfers of water from polluted downstream bodies of water to less-polluted upstream bodies of water that have a hydrological connection to the downstream body of water. The federal courts also should reject the "unitary waters" approach when addressing water transfer programs under the CWA. The "unitary waters" approach would permit a body of water containing little or no amounts of pollutants to become more polluted by a transfer of water from a more polluted body of water, without the need for either a permit under the CWA or compliance with CWA effluent limitation requirements.