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**Wetlands Loss and Agriculture: The
Failed Federal Regulation of Farming
Activities under Section 404 of the
Clean Water Act**

Joseph G. Theis*

Section 404 of the Clean Water Act is the single most important provision for the protection of the vital, yet dwindling wetlands resource. The application of section 404 to agricultural activities is of particular importance, since it has been these activities, particularly the draining and clearing of wetlands for agricultural purposes, that have resulted in the majority of all wetlands losses. In this article, the author discusses the narrow interpretation of 404 jurisdiction adopted by the Army Corps of Engineers and by the U.S. Environmental Protection Agency, which has left many agricultural conversion activities unregulated, and examines recent actions by these agencies which will further narrow 404 jurisdiction over agricultural lands.

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I. Introduction

Wetlands are a vital yet quickly vanishing natural resource.¹ Wetland habitats encompass some of the most biologically productive ecosystems on earth.² Wetlands provide habitat for fish and wildlife, including many endangered species.³ They are also important for flood and storm damage control, shoreline erosion protection, groundwater recharge,

1. *United States v. Larkins*, 657 F. Supp. 76 (W.D. Ky. 1987), *aff'd*, 852 F.2d 189 (6th Cir. 1988), *cert. denied*, 109 S. Ct. 1131 (1989).

Wetlands are considered an invaluable but dwindling natural resource. They improve the water quality of our streams, lakes and rivers by trapping sediment, sewage, and other pollutants, and help stabilize erosion and support wildlife. Congress has determined that the "systematic destruction of the Nation's wetlands is causing serious, permanent ecological damage," damage so egregious that wetlands merit protection by laws like the CWA which promotes restoration and maintenance of wetland resources.

Staff of Senate Comm. on the Environment, 95th Cong., 2d Sess., *A Legislative History of the Clean Water Act of 1977*, 869-870 (Comm. Print 1978) (Statement of Sen. Muskie). *Larkins*, 657 F. Supp. at 86. See also JON A. KUSLER, *OUR NATIONAL WETLAND HERITAGE* 1-3 (1983) [hereinafter KUSLER]. See generally U.S. FISH & WILDLIFE SERVICE, *REPORT TO CONGRESS: WETLANDS LOSSES IN THE UNITED STATES 1780's TO 1980's* (1990) [hereinafter F&WS REPORT TO CONGRESS]. "Over a 200-year timespan wetland acreage has diminished to the point where environmental and even socioeconomic benefits (i.e., ground water supply and water quality, shoreline erosion, floodwater storage and trapping of sediments, and climatic changes) are now seriously threatened." *Id.* at 10.

2. See U.S. FISH & WILDLIFE SERVICE, *WETLANDS OF THE UNITED STATES: CURRENT STATUS AND RECENT TRENDS* 19-20 (March 1984) [hereinafter F&WS TRENDS REPORT]; Bhavani Prasad V. Nerikan, Note, *This Wetland is Your Land, This Wetland is My Land: Section 404 of the Clean Water Act and Its Impact on the Private Development of Wetlands*, 4 ADMIN. L.J. 197, 202 (1990) (stating that the average net primary productivity of estuarine systems, swamps and marshes is about three times that of agricultural land and about 50% higher than that of temperate rain forests); Eric W. Nagle, *Wetlands Protection and the Neglected Child of the Clean Water Act: A Proposal for Shared Custody of Section 404*, 5 VA. J. NAT. RESOURCE L. 227 (1985) [hereinafter Nagle].

3. U.S. OFFICE OF TECHNOLOGY ASSESSMENT, *WETLANDS: THEIR USE AND REGULATION* 43-52 (1984) [hereinafter OTA REPORT]. More than one-third of all endangered species rely on wetlands for their survival. See Kusler, *supra* note 1, at 3. The National Wildlife Federation reports that, as of 1986, 45% of all animals listed as threatened or endangered in the United States and 26% of such plants depend directly or indirectly on wetlands to complete their life cycle successfully, and aside from threatened and endangered species that depend on wetlands, 5,000 species of plants, 190 species of amphibians, and 270 species of birds are estimated to occur in the Nation's wetlands. See NATIONAL WILDLIFE FEDERATION, *STATUS REPORT ON OUR NATIONS WETLANDS* 14-15 (1987) [hereinafter NWF STATUS REPORT].

and water quality improvement.⁴ They provide billions of dollars to the nation's economy each year from flood protection and water purification,⁵ fisheries,⁶ hunting of waterfowl,⁷ and other recreational opportunities.⁸ Yet despite these important values, wetlands are being lost at an alarming rate.⁹ Of the approximately 220 million acres of wetlands that existed in the coterminous United States when this country was first settled by Europeans, less than half remain.¹⁰

4. See OTA REPORT, *supra* note 3, at 43-52; NWF STATUS REPORT, *supra* note 3, at 6-15; F&WS TRENDS REPORT, *supra* note 2, at 13-25.

5. Jerry Jackson, *Wetlands and the Commerce Clause: The Constitutionality of Current Wetland Regulation Under Section 404 of the Clean Water Act*, 7 VA. J. NAT. RESOURCE L. 307, 313 (1988) [hereinafter *Wetlands and the Commerce Clause*] (citing statement by Rep. Lehman that "wetlands provide \$140 billion worth of flood protection and water purification services").

6. Michael C. Blumm & D. Bernard Zaleha, *Federal Wetlands Protection Under the Clean Water Act: Regulatory Ambivalence, Intergovernmental Tension, and a Call for Reform*, 60 U. COLO. L. REV. 695, 697 n.3 (1989) (the National Oceanic and Atmospheric Administration estimates that the commercial and recreational value of estuarine-dependent fishery species at \$27.4 billion annually).

7. See, e.g., F&WS TRENDS REPORT, *supra* note 2, at 24 (indicating that in 1980 5.3 million people spent \$638 million on hunting waterfowl and other migratory birds).

8. U.S. ENVIRONMENTAL PROTECTION AGENCY, *AMERICA'S WETLANDS: OUR VITAL LINK BETWEEN LAND AND WATER* 5 (1988) [hereinafter *AMERICA'S WETLANDS*] (the observation and photography of wetland-dependent birds, alone, entices an estimated 50 million people to spend nearly \$10 billion each year).

9. See F&WS REPORT TO CONGRESS, *supra* note 1, at 1 (stating that the lower 48 states have lost wetlands at a rate of over 60 acres for every hour between the 1780's and 1980's). Between the mid-1950's and mid-1970's approximately 11 million acres of marshes and swamps were destroyed (amounting to an area three times the size of New Jersey) with an average annual loss of 458,000 acres (440,000 acres of inland wetlands and 18,000 acres of coastal wetlands). See *AMERICA'S WETLANDS*, *supra* note 8, at 6. A recent survey by the Fish & Wildlife Service reports that over 2.6 million acres of wetlands were lost from the 1970's to 1980's, with an average annual loss of approximately 290,000 acres. See U.S. FISH & WILDLIFE SERVICE, *STATUS AND TRENDS OF WETLANDS IN THE COTERMINOUS UNITED STATES 1970's TO 1980's* 1 (1991) [hereinafter 1991 F&WS TRENDS REPORT].

10. In its 1990 Report to Congress, the U.S. Fish & Wildlife Service estimated that the United States originally contained 221 million acres of wetlands in the lower 48 states and that an estimated 104 million acres remained as of the 1980's, a 53% loss from the original acreage total. See F&WS REPORT TO CONGRESS, *supra* note 1, at 5. Previously, the Fish & Wildlife Service had reported that, as of the mid-1970's, there were approximately 99 million acres of wetlands in the continental United States (based on an estimate of 215 million acres of original wetlands). F&WS TRENDS REPORT, *supra* note 2, at 28. Some authorities believe as few as 80 million

By far the leading cause for this substantial loss of wetlands, has been their conversion to cropland for agriculture.¹¹ Farmers are enticed to convert wetlands to croplands because of their rich, fertile soil.¹² Thus, it is the biologically productive nature of wetlands that has itself helped lead to their destruction. A 1984 U.S. Fish & Wildlife Service report estimated that eighty-seven percent of wetland losses between the mid-1950's and mid-1970's resulted from agricultural development involving drainage.¹³ A recent update to that report analyzed wetland losses from the 1970's to the 1980's and concluded that conversions to agriculture still accounted for fifty-four percent of wetland losses.¹⁴ So while the rate of wetland losses to agriculture may have decreased, agricultural conversions continue to account for the majority of all wetland losses, more than losses from all other land uses combined.¹⁵ Over the next 20 years, the demand for new cropland is expected to increase despite advances in productivity.¹⁶ As the demand for new croplands continues to grow,¹⁷ the pressure to convert wetlands to agricultural uses will also increase.

The federal regulatory program established under section 404 of the Clean Water Act¹⁸ is the single most important

wetland acres now remain in the 48 coterminous states. See NWF STATUS REPORT, *supra* note 3, at 23.

11. See F&WS REPORT TO CONGRESS, *supra* note 1, at 9 (stating that "the vast majority of wetland losses have been due to agricultural conversion"). See also U.S. GENERAL ACCOUNTING OFFICE, WETLANDS: THE CORPS OF ENGINEERS' ADMINISTRATION OF THE 404 PERMIT PROGRAM 20 (1988) [hereinafter GAO WETLANDS REPORT].

12. Marc C. Rouvalis, *Restoration of Wetlands Under Section 404 of the Clean Water Act: An Analytical Synthesis of Statutory and Case Law Principles*, 15 B.C. ENVTL. AFF. L. REV. 295, 297 (1988).

13. See F&WS TRENDS REPORT, *supra* note 2, at 31.

14. See 1991 F&WS TRENDS REPORT, *supra* note 9, at 2.

15. *Id.* at 2 (conversions to "other" land uses accounted for 41% of losses during this period; apparently the other five percent of wetlands losses were the result of natural causes). It should be noted that a "significant number" of the lands classified as "other" in the updated report were lands which were drained or cleared of vegetation but had not yet been put to an identifiable use. *Id.*

16. See OTA REPORT, *supra* note 3, at 112.

17. See F&WS TRENDS REPORT, *supra* note 2, at vii (stating that recent population and agricultural trends point to increased pressure for converting wetlands to other uses, especially cropland).

18. Federal Water Pollution Control Act (CWA), §§ 101-606, 404, 33 U.S.C. §§

mechanism for the protection of wetlands.¹⁹ But federal wetlands regulation under section 404 has historically been controversial.²⁰ It has pitted protection of one of America's most productive and threatened natural resources "against its most cherished principles of private property and development."²¹ While its critics view the 404 program as an unprecedented federal intrusion into the traditionally local concern of land use regulation, "to its defenders, section 404 remains the most effective means of preserving this nation's diminishing wetland resources."²²

Nowhere has this conflict been more evident than in the regulation of agricultural activities under the 404 program.²³ Perhaps as a result of this intense conflict, the agencies established to oversee the program, the Army Corps of Engineers ("Corps") and the Environmental Protection Agency ("EPA"), frequently have failed to act to protect the wetlands

1251-1387, 1344 (1988).

19. Although some agricultural activities (those that take place in traditionally "navigable waters" below the ordinary high water mark) may be regulated under the Rivers and Harbors Act (R.H.A.), 33 U.S.C. § 403 (1988), this paper will deal only with federal regulation under section 404, since regulation under the R.H.A. will likely not extend to most wetlands in agricultural areas. See Mark J. Hanson, *Damming Agricultural Drainage: The Effect of Wetland Preservation and Federal Regulation on Agricultural Drainage in Minnesota*, 13 WM. MITCHELL L. REV. 135, 164 (1987) [hereinafter *Damming Agricultural Drainage*].

20. Michael C. Blumm, *The Clean Water Act's Section 404 Permit Program Enters Its Adolescence: An Institutional and Programmatic Perspective*, 8 ECOLOGY L.Q. 409, 411 (1980) see also Blumm & Zaleha, *supra* note 6, at 698.

21. Oliver A. Houck, *Section 404 of the Clean Water Act: The Conflict Continues*, in ALI-ABA Course of Study Materials - Environmental Law 326 (1991).

22. See Blumm & Zaleha, *supra* note 6, at 698.

23. See generally Gerald Torres, *Wetlands & Agriculture: Environmental Regulation and the Limits of Private Property*, 34 Kan. L. Rev. 539 (1986). See, e.g., *Federal Wetlands Conservation Policy May Collide with Constitutional Rights*, 21 Env't Rep. (BNA) 877-878 (Sept. 7, 1990) (farmers criticize President Bush's "no net loss" of wetlands policy at a hearing held by the White House Domestic Policy Council task force on wetlands because they believe it will place an "unconstitutionally heavy burden on private property owners"); see also 56 Fed. Reg. 8560, 8570-8571 (1991) (comments from the agricultural community to the Domestic Policy Council Task Force on Wetlands regarding a possible national goal of "no net loss" of wetlands expressing concern with regard to the current regulatory program and the impacts a national "no net loss" policy would have on farmers).

resource from destruction through agricultural conversion. EPA and the Corps have taken the position that they do not have jurisdiction over "*de minimis*" discharges into wetlands in agricultural conversion cases²⁴ and have claimed that they do not have authority under section 404 to regulate landclearing activities that involve only removal of wetland vegetation²⁵ or over the drainage of wetlands.²⁶

The Corps and EPA have taken these positions despite the fact that most wetland losses have resulted from the draining and clearing of inland wetlands for agricultural purposes.²⁷ The agencies have also taken these positions despite the fact that EPA itself has found that the alteration and destruction of natural habitats by such activities as the draining and degradation of wetlands is a problem posing one of the highest risks to the natural ecology and human welfare.²⁸ In fact, EPA has ranked this risk higher than the risk posed by such environmental threats as toxics, oil spills, and groundwater pollution.²⁹

This article examines the scope of federal regulation under the 404 program over agricultural activities which convert wetlands. The article reviews the scope of section 404 jurisdiction over agricultural lands, the types of agricultural activities that the courts have found to be regulated under section 404, the activities which the Corps and EPA have in fact regulated, and the recent attempts by EPA and the Corps to narrow the scope of their authority over agricultural lands, as well as the recent attempts by the Bush Administration to

24. See, e.g., *Avoyelles Sportsmen's League, Inc. v. Marsh*, 715 F.2d 897, 919 n.37 (5th Cir. 1983).

25. See *Save Our Wetlands, Inc. v. Sands*, 711 F.2d 634, 647 (5th Cir. 1983).

26. See *Save Our Community v. United States Environmental Protection Agency*, 741 F. Supp. 605 (N.D. Tex. 1990) (holding that mere drainage of a wetland is a regulated activity under section 404 of the Clean Water Act, despite a Corps and EPA finding that they did not have legal jurisdiction over such activity).

27. Approximately 80% of historical freshwater wetland losses have resulted from the draining and clearing of inland wetlands for cropland. See OTA REPORT, *supra* note 3, at 3.

28. U.S. ENVIRONMENTAL PROTECTION AGENCY, REDUCING RISK: SETTING PRIORITIES FOR ENVIRONMENTAL PROTECTION 13 (1990).

29. *Id.*

cutback on wetlands protection by narrowing the definition of wetlands. On the basis of this review, this article concludes that federal regulation over farming activities under the 404 program has failed. It has failed because it does not reach some of the activities that destroy wetlands but also because the agencies responsible for overseeing the program under the Clean Water Act have failed to assert their authority to its fullest extent to protect wetlands from agricultural conversion.

Part II of the article examines the impacts of agriculture on wetlands and explores the regulatory scheme for the protection of wetlands under the Clean Water Act. Part III discusses the geographic extent of Clean Water Act jurisdiction over agricultural lands, while part IV discusses the extent of section 404 authority over agricultural activities that affect wetlands including landclearing and drainage for conversion of wetlands to croplands. Part V examines a recent attempt by the Corps and EPA to narrow their authority over agricultural wetlands through Regulatory Guidance Letter (RGL) 90-7³⁰ and also discusses the recent actions of the Bush Administration to alter the definition of what constitutes a wetland, which could result in the removal from section 404 jurisdiction of up to one-half of the wetlands remaining in the coterminous United States.³¹ Part VI urges the Corps and EPA to take a more assertive position in regard to the regulation of agricultural activities that destroy wetlands, and concludes that Congress should amend section 404 to protect wetlands from all types of activities that destroy and degrade wetlands in order to halt the continuing losses of wetlands to agriculture and other forms of development.

30. U.S. Army Corps of Engineers, Regulatory Guidance Letter 90-7: Clarification of the Phrase "Normal Circumstances" as it Pertains to Cropped Wetlands (September 26, 1990), reprinted in 56 Fed. Reg. 2408, 2412 (1991) (publication of RGL 90-7 as well as all other current Corps regulatory guidance letters). This "guidance" attempts to remove millions of acres of wetlands from Clean Water Act jurisdiction. See *Millions of Acres of Converted Wetlands No Longer Subject to Federal Water Act Permits*, 21 Env't Rep. (BNA) 1120 (Oct. 5, 1990).

31. See *infra* notes 237-245 and accompanying text.

II. Background: Wetlands Losses and Section 404

A. The Impact of Agriculture on Wetlands

The impact of agricultural activities on the wetland resource has been enormous. Agricultural activities have been the primary force destroying this nation's wetlands.³² Approximately eighty percent of historical freshwater wetland losses have resulted from the draining and clearing of inland wetlands for cropland.³³ The U.S. Fish & Wildlife Service has reported that agricultural development involving drainage was responsible for eighty-seven percent of wetland losses in this country between the mid-1950's and mid-1970's.³⁴ From the 1970's to the 1980's fifty-four percent of all wetland losses resulted from agricultural conversion.³⁵

Some of the largest losses of wetlands to agricultural conversion have taken place in the prairie pothole region of the Midwest and in the bottom land hardwood forests of the Lower Mississippi River Valley.³⁶ Less than half of the original prairie potholes remain.³⁷ Extensive drainage in Iowa has destroyed an estimated ninety-nine percent of that state's wetlands, and ninety percent of the pothole wetlands in Minnesota have been drained.³⁸ Four million of the original seven

32. See NWF STATUS REPORT, *supra* note 3, at 30. The legislative history of the 1990 Farm Bill states: "The Committee recognizes the role that agriculture has played in the conversion of wetlands in this country, and that recent data suggests that hundreds of thousand acres of wetlands continue to be converted for agricultural purposes each year." S. Rep. No. 101-357, 101st Cong., 2d Sess. 216 (1990).

33. See OTA REPORT, *supra* note 3, at 3.

34. See F&WS TRENDS REPORT, *supra* note 2, at 31.

35. See 1991 F&WS TRENDS REPORT, *supra* note 9, at 2. During the time period from 1975-1985, it is estimated that 2.8 million acres of wetlands were drained, at an average loss of 280,000 acres annually. See S. Rep. No. 101-357, 101st Cong., 2d Sess. 215 (1990).

36. See NWF STATUS REPORT, *supra* note 3, at 30. The prairie pothole region, which includes large portions of the Canadian Prairie Provinces, constitutes 10% of the waterfowl breeding area in North America but produces on average 60% of the continent's waterfowl. *Id.*

37. See Stewart L. Hofer, Comment, *Federal Regulation of Agricultural Drainage Activity in Prairie Potholes: The Effect of Section 404 of the Clean Water Act and the Swampbuster Provisions of the 1985 Farm Bill*, 33 S.D. L. REV. 511, 513 (1987).

38. See NWF STATUS REPORT, *supra* note 3, at 30.

million acres of prairie potholes in the Dakotas have been de-watered, destroying almost sixty percent of the wetlands in those states.³⁹ Drainage in Nebraska's Rainwater Basin has also been extensive.⁴⁰ The National Wildlife Federation estimates that more than ninety percent of Rainwater Basin wetlands have been lost, largely as the result of agricultural conversions.⁴¹

Agricultural conversion in the Lower Mississippi River Valley has also been dramatic. From the 1950's to the 1970's, the states of Louisiana, Arkansas, and Mississippi each lost nearly two million acres of bottomland hardwoods to crop production.⁴² Altogether, more than eighty percent of Mississippi River bottomland hardwoods have been destroyed, almost entirely from conversion to agriculture.⁴³ The U.S. Fish & Wildlife Service reports that "heavy annual losses" are continuing in the bottomland hardwood wetlands of the Lower Mississippi River Delta.⁴⁴

Through the "swampbuster" provisions of the 1985 Farm Bill,⁴⁵ Congress attempted to stem the rising tide of wetland conversions to agriculture. Although the swampbuster program has contributed to a significant reduction in the rate of

39. *Id.* See also Jon R. Luoma, *Twilight in Pothole Country*, AUDUBON Sept. 1985, at 66.

40. See NWF STATUS REPORT, *supra* note 3, at 29.

41. *Id.* The loss of Rainwater Basin wetlands has had a severe impact on the 2.5 million waterfowl which stop over during their annual migration. As birds are crowded into ever-decreasing areas, the incidence of disease, particularly avian cholera, increases dramatically. The nation's second largest recorded waterfowl die-off occurred when 80,000 birds died of avian cholera in the Rainwater Basin in 1980. *Id.*

42. *Id.* at 30 (losses were primarily due to conversion for soybean and cotton production). See also Oliver A. Houck, *Land Loss in Coastal Louisiana: Causes, Consequences, and Remedies*, 58 TUL. L. REV. 3, 25-26 (1983) (canals designed to serve oil and gas production have also resulted in significant dredging activities in coastal Louisiana in the last forty years).

43. See NWF STATUS REPORT, *supra* note 3, at 30.

44. See F&WS TRENDS REPORT, *supra* note 2, at 33.

45. 16 U.S.C. § 3821 (Supp. IV 1986). Congress amended the swampbuster provisions of the 1985 Farm Bill by passing the Food, Agriculture, Conservation, and Trade, Act of 1990 (1990 Farm Bill). Pub. L. No. 101-624, 104 Stat. 3359 (1990). For a discussion of the changes to the swampbuster program resulting from the 1990 Farm Bill, see Steve Moyer, *The 1990 Farm Bill: A Narrow Escape*, NAT'L WETLANDS NEWSL., Jan.-Feb. 1991, at 5 [hereinafter *A Narrow Escape*].

wetland conversions by eliminating farm benefits for farmers who clear and drain wetlands, swampbuster itself is not enough to solve the problem.⁴⁶ Swampbuster can only be effective when a farm operator depends on federal subsidies for a significant portion of his income, so that there is a real economic incentive to avoid converting wetlands.⁴⁷ Where dependence on subsidies is low, swampbuster is likely to fail.⁴⁸ About twenty-two percent of the 78.4 million acres of nonfederal, rural wetlands remaining are estimated to have some probability of conversion to cropland.⁴⁹ Assuming full implementation,⁵⁰ the swampbuster provision will effectively prevent conversion of only about six million acres (thirty-five percent) of these wetlands.⁵¹

Clearly, the incentive-based swampbuster program has helped decrease the rate of wetland conversions to agriculture. However, an effective regulatory program is also needed to protect wetlands in situations where the short term economic benefits of conversion would otherwise induce individuals to develop wetlands. Unfortunately, the Corps has been reluctant to regulate the clearing and draining of wetlands for agricultural purposes,⁵² and the EPA has failed to use its over-

46. James T. B. Tripp & Michael Herz, *Wetland Preservation and Restoration: Changing Federal Priorities*, 7 VA. J. NAT. RESOURCE L. 221, 252-253 (1988) [hereinafter *Changing Priorities*].

47. Ralph E. Heimlich, Marc B. Cary, & Richard J. Brazee, *Beyond Swampbuster: A Permanent Wetland Reserve*, J. SOIL & WATER CONSERVATION, Sept.-Oct. 1989, at 446 [hereinafter Heimlich, Cary, & Brazee].

48. *Id.* See also R. MASON & M. MATTSON, *ATLAS OF THE U.S. ENVIRONMENTAL ISSUES* 45 (1990) (stating that "any shifts in farm economy are likely to affect participation rates in government programs").

49. Heimlich, Cary, and Brazee, *supra* note 47, at 446.

50. Full implementation of the swampbuster program is unlikely, however, given the U.S. Department of Agriculture traditional mission of promoting intensive agricultural production, see *Changing Priorities*, *supra* note 46, at 254, and the Department's previous track record in implementing the swampbuster provisions. See, e.g., James M. McElfish Jr. & Kenneth J. Adler, *Swampbuster: Missed Opportunities for Wetland Protection*, J. SOIL & WATER CONSERVATION, May-June 1990, at 383.

51. Heimlich, Cary, & Brazee, *supra* note 47, at 446.

52. See, e.g., *Changing Priorities*, *supra* note 46, at 227-228 (stating that the "Corps has generally been hesitant to regulate farmers, particularly when federal programs, such as expensive agricultural flood control projects, are responsible for the clearing and drainage").

sight authority to ensure effective regulation of such activities.

B. The Regulatory Context of the 404 Program

Section 301⁵³ of the Clean Water Act⁵⁴ prohibits the discharge⁵⁵ of any pollutant⁵⁶ from any point source⁵⁷ into navigable waters,⁵⁸ except in compliance with the Act.⁵⁹ Section 402 of the Clean Water Act establishes the National Pollutant Discharge Elimination System (NPDES) permit program and provides EPA authority to issue permits for the "discharge of any pollutant, or combination of pollutants."⁶⁰ Section 404 creates an exception to EPA's general authority by establishing a separate permitting program for the discharge of dredged or fill material, to be administered by the Army Corps of Engineers.⁶¹ EPA, however, maintains shared respon-

53. CWA § 301, 33 U.S.C. § 1311 (1990).

54. Clean Water Act of 1977, Pub. L. No. 95-217, 91 Stat. 1566 (codified as amended 33 U.S.C. §§ 1251-1386 (1988)). Before the 1977 amendments, the Act was known as the Federal Water Pollution Control Act ("FWPCA"). Section 301 as well as sections 402 and 404 were enacted as part of the FWPCA Amendments of 1972, Act of Oct. 18, 1972, Pub. L. No. 92-500, Stat. 816, "which constituted a comprehensive legislative attempt 'to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.'" *United States v. Riverside Bayview Homes*, 474 U.S. 121, 132 (1985).

55. The term "discharge of a pollutant" means "any addition of any pollutant to navigable waters from any point source" CWA § 502, 33 U.S.C. § 1362(12) (1988).

56. The term "pollutant" is expressly defined to include dredged spoil. CWA § 502(6), 33 U.S.C. § 1362(6) (1988). "Fill material" also constitutes a pollutant within this statutory definition. *United States v. Tull*, 615 F. Supp. 610, 622 (E.D. Va. 1983), *aff'd*, 769 F.2d 182 (1985), *cert. granted in part*, 476 U.S. 1139 (1986), *rev'd on other grounds*, 481 U.S. 412 (1987).

57. The term "point source" is defined as "any discernible, confined and discrete conveyance . . . from which pollutants are or may be discharged" CWA § 502(14), 33 U.S.C. § 1362(14) (1988).

58. "Navigable waters" are defined by the Act as "the waters of the United States, including the territorial seas." CWA § 502(7), 33 U.S.C. § 1362(7) (1988). The Corps and EPA regulations defining "waters of the United States" are found at 33 C.F.R. § 328.3(a)(1990) and 40 C.F.R. § 230.3(s)(1990). *See infra* note 76.

59. Section 301 states: "Except as in compliance with [the Act] . . . the discharge of any pollutant by any person shall be unlawful." CWA § 301(a), 33 U.S.C. § 1311(a) (1988).

60. CWA § 402(a), 33 U.S.C. § 1342(a) (1988).

61. Section 404(a) provides: "The Secretary [of the Army, acting through the Chief of Engineers] may issue permits, after notice and opportunity for public hear-

sibility with the Corps for developing guidelines for 404 permit issuance⁶² and has authority to veto the issuance of any 404 permit, if a proposed discharge of dredged or fill material would have unacceptable adverse impacts.⁶³

In its initial implementation of the section 404 permit program, the Corps sought to limit the scope of its regulatory authority and narrowly interpreted the breadth of its jurisdiction under section 404, as limited exclusively to traditionally navigable waters.⁶⁴ In 1975, the Natural Resources Defense Council ("NRDC") and the National Wildlife Federation successfully challenged the Corps' self-imposed limits on 404 jurisdiction.⁶⁵ In response to *NRDC v. Callaway*, the Corps issued revised regulations to reflect the broader jurisdiction of the Clean Water Act.⁶⁶

In its initial implementation of the 404 program and in a number of subsequent actions, the Corps has demonstrated an ambivalence towards wetlands protection which has led a number of commentators to suggest that Congress relieve the Corps of its permit issuing authority.⁶⁷ The Corps has often

ings for the discharge of dredged or fill material into the navigable waters at specified disposal sites" CWA § 404(a), 33 U.S.C. § 1344(a) (1988).

62. CWA § 404(b)(1), 33 U.S.C. § 1344(b)(1) (1988). The present 404(b)(1) guidelines are codified at 40 C.F.R. pt. 320 (1990).

63. CWA § 404(c), 33 U.S.C. § 1344(c) (1988).

64. See 33 C.F.R. § 209.210(d)(1) (1974); 39 Fed. Reg. 12119 (1974). Such waters were narrowly defined as waters which are actually used to transport interstate or foreign commerce (navigable in fact), had been navigable in the past, or were susceptible to such navigation in the future. See Kenneth E. Varns, Note, *United States v. Larkins: Conflict Between Wetland Protection and Agriculture; Exploration of the Farming Exemption to the Clean Water Act's Section 404 Permit Requirement*, 35 S.D. L. REV. 272, 280 (1990) [hereinafter *Conflict*]. The Corps' narrow interpretation left unprotected 98% of the Nation's stream miles and 80% of its wetlands. Nagle, *supra* note 2, n.35 at 233.

65. *NRDC v. Callaway*, 392 F. Supp. 685 (D.D.C. 1975).

66. The Corps promulgated interim final regulations on July 25, 1975, which were to be phased in over a two year period, but which provided the Corps with discretion to accelerate regulation of activities that would significantly affect the environment. 40 Fed. Reg. 31,320 (1975) (codified at 33 C.F.R. pt. 209 (1976)); see William Want, *Federal Wetlands Law: The Cases and the Problems*, 8 HARV. ENVTL. L. REV. 1 (1984) [hereinafter *Federal Wetlands Law*]. Final regulations were published on July 19, 1977. See 42 Fed. Reg. 37,122 (1977).

67. See, e.g., Blumm & Zaleha, *supra* note 6, at 771; Ted Griswald, Comment, *Wetland Protection Under Section 404 of the Clean Water Act: An Enforcement*

sought to reduce its responsibilities under section 404,⁶⁸ in part as the result of the high administrative costs of running the 404 program, but also because of the lack, to some extent, of an environmental mission on the part of that agency as a whole. The Corps was given its permitting authority under section 404 because it was already administering a permit program under the River and Harbors Act,⁶⁹ which regulated dredge and fill activities in traditionally navigable waters, but also because the Corps and its legislative supporters did not want to see the Corps' own extensive dredge and fill activities regulated by any other agency.⁷⁰

While arguably having the ultimate responsibility for setting 404 policy,⁷¹ EPA has generally failed to assume the leading role envisioned for it by Congress.⁷² EPA probably does not have the resources, nor does it have the political will, in light of the Corps' historical intransigence, to accept the responsibility of effectively overseeing the 404 program.⁷³

Paradox, 27 S.D. L. REV. 139, at 172 (1990).

68. See Jan Goldman-Carter, *Clean Water Act Section 404: A Critical Link in Protecting Our Nation's Waters*, 5 NAT. RESOURCES & ENV'T 10, 11 (1991) [hereinafter *A Critical Link*].

69. Act of March 3, 1899, ch. 425, 30 Stat. 1151 (current version at 33 U.S.C. §§ 401-416 (1988)). For a discussion of the earlier Corps permitting program and the evolution of the 404 program, see Blumm and Zaleha, *supra* note 6, at 700-704.

70. WILLIAM WANT, *LAW OF WETLAND REGULATION* § 2.02[2], at 2-7 (1990) [hereinafter WANT]. As the world's largest civil engineering firm and navigational dredger, the Corps has been a major despoiler of the environment and has only in recent years begun to rectify some of the environmental damage it has caused. See, e.g., Vicki Monks, *Engineering the Everglades: The Army Corps Begins to Undo Its Own Damage*, 65 NAT'L PARKS 32 (Sept.-Oct. 1990) (describing restoration efforts on the Kissimmee River in Florida which the Corps had previously channelized to provide flood protection for pasture land and to drain portions of the Everglades for agriculture and urban development).

71. In 1979, then Attorney General of the United States, Benjamin Civiletti, concluded that EPA and not the Corps has final authority over all jurisdictional questions under the Act. 43 Op. Att'y Gen. No. 15, 1 (Sept. 5, 1979) [hereinafter Civiletti Opinion]. In addition, Congress expressly gave EPA final decision making authority over permit decisions under section 404(c). CWA § 404(c), 33 U.S.C. § 1344(c) (1988).

72. Nagle, *supra* note 2, at 246-247.

73. *Id.* at 247.

III. The Extent of Section 404 Jurisdiction Over Agricultural Lands (Geographic Jurisdiction)

Under the Clean Water Act, Congress prohibited the discharge of any pollutant into navigable waters without authorization of a permit. Congress, in turn, defined "navigable waters" in the most expansive terms possible, as the "waters of the United States."⁷⁴ In promulgating this definition, Congress invoked its authority under the Commerce Clause to provide for the broadest possible federal jurisdiction permissible under the Constitution.⁷⁵ Consistent with Congressional intent, the courts have interpreted the geographic jurisdiction of the Clean Water Act broadly. Despite these judicial precedents, the Corps, at times with EPA's acquiescence, has taken a narrow view of the breadth of the geographic coverage of the 404 program. This section discusses the legal and technical criteria for determining whether a given geographic area falls within 404 jurisdiction.

A. Areas Within Section 404 Jurisdiction

Deciding whether agricultural lands are within the jurisdiction of section 404 of the Clean Water Act requires a determination of whether a given area falls within the regulatory definition of "waters of the United States."⁷⁶ Ascertaining if

74. CWA § 502, 33 U.S.C. § 1362(7) (1986).

75. U.S. CONST. art. I, § 8, cl. 3. See *NRDC v. Callaway*, 392 F. Supp. 685 (D.D.C. 1985). The legislative history of the Clean Water Act makes clear that Congress intended "that the term 'navigable waters' be given the broadest possible constitutional interpretation unincumbered by agency determinations which have been made or may be made for administrative purposes". S. Conf. Rep. No. 1236, 92d Cong., 2d Sess. 144 (1972).

76. The Corps and EPA have identical definitions of the term "waters of the United States":

- (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate commerce, including all waters which are subject to the ebb and flow of the tide;
- (2) All interstate waters including interstate wetlands;
- (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:

jurisdictional wetlands are present on a given parcel of land will also likely require a highly technical review of a specific area to determine if the wetland characteristics of vegetation, soils, and hydrology are present.⁷⁷ Thus, there are both legal and scientific considerations for determining the presence of jurisdictional wetlands in a given area.

Since 1977, both EPA and the Corps have defined the biological nature of wetlands, in legal terms, as "those areas that are inundated or saturated by surface or groundwater 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."⁷⁸ In *United States v. Riverside Bayview Homes*,⁷⁹ the Supreme Court found this definition of wetlands consistent with the terms and intent of the Clean Water Act and upheld the Corps' regulatory authority under section 404 over wetlands adjacent to navigable waters and their tributaries.

B. Isolated Waters and NWP 26

Although the Supreme Court's decision in *Riverside Bayview Homes* made clear that the Corps can require permits for discharges of dredged or fill material into adjacent

(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or

(ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(iii) Which are used or could be used for industrial purpose by industries in interstate commerce;

(4) All impoundments of waters otherwise defined as waters of the United States under the definition;

(5) Tributaries of waters identified in [this section];

(6) The territorial seas;

(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in [this section]

33 C.F.R. § 328.3(a)(1991); 40 C.F.R. § 230.3(s) (1991).

77. See discussion *infra* notes 113-123 and accompanying text.

78. 33 C.F.R. § 328.3(b) (1991); 40 C.F.R. § 230.3(t) (1991). "Wetlands generally include swamps, marshes, bogs and similar areas." 33 C.F.R. § 328.3(b) (1991); 40 C.F.R. § 230.3(t) (1991).

79. 474 U.S. 121, 129 (1985).

wetlands,⁸⁰ it did not resolve all the issues related to the geographic jurisdiction of section 404.⁸¹ In particular, the Court did not rule on the question of non-adjacent wetlands jurisdiction,⁸² and this raises questions concerning the scope of federal regulation over agricultural wetlands, since it is likely that many of these wetlands will be in areas isolated geographically,⁸³ if not hydrologically,⁸⁴ from other waters.⁸⁵ Despite the fact that, in passing the Clean Water Act Amendments of 1972, Congress intended to assert jurisdiction over the nation's waters to the maximum extent permissible under the Commerce Clause of the Constitution,⁸⁶ and the fact that

80. See 33 C.F.R. § 328.3(a)(7) (1991). "Adjacent wetlands" are those bordering, contiguous, or neighboring other waters of the United States, as defined in 33 C.F.R. §§ 328.3(a)(1)-(6), including those wetlands separated from other waters of the United States by manmade dikes or barriers, natural river berms, beach dunes and the like. See 33 C.F.R. § 328.3(c) (1990).

81. Blumm & Zaleha, *supra* note 6, at 717.

82. In *Riverside Bayview Homes*, the Supreme Court reserved judgement regarding the question of section 404 jurisdiction over wetlands not adjacent to other waters as provided for in 33 C.F.R. §§ 328.3(a)(2) and (3). 474 U.S. at 124 n.2, 131 n.8.

83. For example, the prairie pothole wetlands of the Mid-west and the Rainwater Basin wetlands of Nebraska, which have been greatly impacted by agricultural conversions, are by their nature generally isolated bodies of waters. See *supra* notes 36-41.

84. See *Wetlands and the Commerce Clause*, *supra* note 5, at 322 (arguing that even isolated waters such as prairie pothole wetlands are important for flood protection because they retain surface runoff that might otherwise flood river channels miles away).

85. It is also significant, since agricultural activities which result in the loss or adverse modification of less than 10 acres of wetlands may be authorized under Corps' Nationwide Permit 26. See 33 C.F.R. § 330.5(a)(26)(1991). See also discussion *infra* notes 97-103 and accompanying text.

86. U.S. CONST. art. I, § 8, cl. 3. See *NRDC v. Callaway*, 392 F. Supp. 685 (D.D.C. 1985). "Congress by defining the term 'navigable waters' in section 502(7) of the Federal Water Pollution Control Act Amendments of 1972 . . . to mean the 'waters of the United States, including the territorial seas,' asserted federal jurisdiction over the nation's waters to the maximum extent permissible under the Constitution." *Id.* at 686. The authority conferred on Congress by the Commerce Clause is plenary. *United States v. Darby*, 312 U.S. 100 (1941). See *Wetlands and the Commerce Clause*, *supra* note 5, at 315-327 (arguing that Congress, by invoking its Commerce Clause powers to the fullest extent in establishing Clean Water Act jurisdiction, intended to regulate discharges of dredged or fill material into wetlands as a class, and hence no case by case showing of adjacency or demonstration of impacts on interstate commerce need be made). An analogy can be made to the Endangered Species Act, 16 U.S.C. §§ 1531-1544 (1988), which likewise is premised on the Commerce Clause power, but does not

the language of the regulatory definition of "waters of the United States" seems broad enough to assert federal jurisdiction over all wetlands,⁸⁷ the Corps has in the past limited its jurisdiction over some isolated wetlands because of an alleged lack of nexus to interstate commerce.⁸⁸ More recently, the Corps appears to have adopted the EPA position⁸⁹ that all wetlands that could provide habitat for migratory birds are within section 404 jurisdiction,⁹⁰ although both agencies still

require a demonstration of any effects on interstate commerce before a given species can be protected under the Act. See *Wetlands and the Commerce Clause*, *supra* note 5, at 323-324.

87. See Blumm & Zaleha, *supra* note 6, at 713. Because the degradation or destruction of any wetland could potentially affect interstate commerce, see 33 C.F.R. § 328.3(a)(3) (1990), it is arguable that any wetland is within section 404 jurisdiction even under the Corps' regulation.

88. See *WANT* *supra* note 70, § 4.05[1], at 4-13 and 14. One notable example of the Corps' failure to exercise its jurisdiction, because of an alleged lack of effects on interstate commerce, was the Pond 12 case. See *National Wildlife Federation v. Laubscher*, 662 F. Supp. 548 (S.D. Tex. 1987). Pond 12 was a 30 acre pothole wetland in South Texas which was drained and destroyed through the discharge of dredged and fill material. Although the Corps was informed of the violation, it refused to issue a cease and desist order because, in its view, Corps' jurisdiction over Pond 12 was limited and not clearly defined, despite the fact that the U.S. Fish and Wildlife Service had demonstrated that the site was extensively used by migratory birds (one biologist recorded 26,000 birds using Pond 12 based on 49 site visits). See *Wetlands and the Commerce Clause*, *supra* note 5, at 328-34 (citing other examples of wetlands excluded from 404 jurisdiction because of an alleged lack of nexus to interstate commerce).

89. See Memorandum from Francis S. Blake, U.S. Env'tl. Protection Agency Gen. Counsel, to Richard E. Sanderson, U.S. Env'tl. Protection Agency Acting Ass't Administrator, Office of External Affairs, entitled "Clean Water Act Jurisdiction Over Isolated Waters" (Sept. 12, 1985).

90. See 51 Fed. Reg. 41,206, 41,217 (1986) (preamble to Corps' regulations containing an explanatory statement that the definition of "waters of the United States" includes waters which are or could be used as habitat for migratory birds or endangered species). On Nov. 8, 1985, the Corps issued guidance that set forth use and potential use of waters by migratory birds as a criterion for interstate commerce. See *Want*, *supra* note 70, § 4.05[4], at 4-16. In *Tabb Lakes Ltd. v. United States*, 715 F. Supp. 726 (E.D. Vir. 1988), a Virginia district court ruled that this guidance was invalid, finding that it was a substantive rule requiring notice and comment rulemaking under section 553 of the Administrative Procedures Act. This decision was affirmed by the Fourth Circuit Court of Appeals, 885 F.2d 886 (1989), in an unpublished opinion, 30 Env't Rep. Cas. (BNA) 1510 (Sept. 19, 1989). Subsequently, on January 19, 1990, EPA and the Corps issued a joint memorandum stating that, although it would not appeal, the government believed the *Tabb Lakes* decision was incorrect, and that it would not be followed in any circuit but the Fourth, and that even in that Circuit

require a case by case determination of effects on interstate commerce for isolated wetlands.⁹¹ Two recent decisions, one judicial⁹² and one administrative,⁹³ have affirmed the agencies' positions that an isolated wetland is within Clean Water Act jurisdiction if it could be used as a habitat by migratory birds. Arguably, any wetland, whether isolated or adjacent, can meet this interstate commerce test.⁹⁴

The potential reach of 404 jurisdiction over agricultural lands is thus extremely broad. Any farmlands, whether adja-

the agencies would continue to assert jurisdiction over isolated wetlands but would state another basis for satisfying the interstate commerce requirement. *See Want, supra* note 70, §4.05[5], at 4-16. Because there are many bases for finding an interstate commerce nexus for isolated waters (e.g. fisheries, recreational use by interstate travelers, flood protection), this decision should have little practical effect even in the Fourth Circuit. *Id.* EPA and the Corps could resolve this issue by initiating a rulemaking to include use and potential use of waters by migratory birds as a basis for 404 jurisdiction.

91. *See Wetlands and the Commerce Clause, supra* note 5, at 320. No such demonstration is necessary for adjacent wetlands. *Id.* at 321-322 (arguing that there is no basis for the adjacent/nonadjacent distinction and that it is contrary to science and law).

92. *United States v. Leslie Salt Co.*, 896 F.2d 354 (9th Cir. 1990), *cert. denied*, 59 U.S.L.W. 3582 (1991) (holding that the Commerce Clause, and thus the Clean Water Act, is broad enough to extend the Corps' jurisdiction to local waters which may provide habitat to migratory birds and endangered species and remanding to the district court for a determination of whether there were sufficient connections to interstate commerce to come within the Corps' jurisdiction as defined in 33 C.F.R. § 328.3(a)(3)(1990)).

93. U.S. Environmental Protection Agency, In the Matter of the Hoffman Group, CWA Appeal No. 89-2 (Decision of the Chief Judicial Officer)(U.S. Env'tl. Protection Agency 1990) (holding that: (1) to assert jurisdiction over an isolated, intrastate water body, EPA must demonstrate that the destruction of that water body will have an effect on interstate commerce; (2) to satisfy its burden EPA need only show some minimal, potential effect on interstate commerce; and (3) EPA had demonstrated the requisite effect by providing some evidence that the wetland in question provided suitable habitat for migratory birds). *Id.* at 9, 27. This decision has recently been challenged by a lawsuit, *Hoffman Homes, Inc. v. EPA*, filed on March 11, 1991 in the United States Court of Appeals for the Seventh Circuit. *See Lawsuit Challenges Massive, Precedent-Setting Expansion of EPA Wetland Regs*, vol. 12, no. 13 INSIDE E.P.A. WEEKLY REPORT 1 (Mar. 29, 1991).

94. *See Blumm & Zaleha, supra* note 6, at 715-716 (citing lower court decisions approving all of the following as "waters of the United States": usually dry arroyos with only occasional surface flows; isolated lakes and isolated wetlands; wetlands adjacent to a lake used for recreation by interstate travelers; private lands flooded by a federal dam; artificially created wetlands; a mangrove forest; and bottomland hardwoods).

cent to another body of water or completely isolated from any surface waters, which are inundated or saturated long enough to create soil conditions which support a prevalence of wetlands vegetation, are wetlands under the agencies' definition,⁹⁵ and are thus within the regulatory definition of waters of the United States. Since saturation by groundwater as well as inundation from surface waters may create wetlands conditions,⁹⁶ there need be no water even visible on farmlands for jurisdictional wetlands to be found.

One significant limitation on the potential breadth of 404 jurisdiction over agricultural wetlands is Corps Nationwide Permit 26 ("NWP 26"). Discharges into isolated wetlands or adjacent wetlands located above the headwaters⁹⁷ of non-tidal rivers or streams as the result of agricultural conversion activities can still be exempted from the 404 permitting requirements under NWP 26, if the area affected is less than ten acres in size.⁹⁸

In July 1982, as part of the regulatory relief efforts of the Reagan administration, the Corps (in yet another attempt to limit its responsibilities under the 404 program) proposed

95. Under the 1989 manual, inundation or saturation of soils for seven or more consecutive days during the growing season is deemed sufficient to create wetland conditions. See *infra* note 123. FEDERAL INTERAGENCY COMMITTEE FOR WETLAND DELINEATION, FEDERAL MANUAL FOR IDENTIFYING AND DELINEATING JURISDICTIONAL WETLANDS, (U.S. ARMY CORPS OF ENGINEERS, U.S. ENVIRONMENTAL PROTECTION AGENCY, U.S. FISH AND WILDLIFE SERVICE, AND U.S.D.A. SOIL CONSERVATION SERVICE) 7 (1989) [hereinafter *FEDERAL WETLANDS MANUAL*]. EPA, the Corps, the Soil Conservation Service, and the Fish and Wildlife Service have recently proposed a revised manual, at the behest of the Bush Administration, which would require at least 15 consecutive days of inundation or 21 consecutive days of soil saturation. See 56 Fed. Reg. 40446 (1991). See also *infra* notes 237-245 and accompanying text.

96. See *United States v. Riverside Bayview Homes*, 474 U.S. at 130, n.7 (rejecting the Sixth Circuit's finding that flooding from adjacent navigable waters was necessary before wetlands could be considered waters of the United States). In *Riverside Bayview Homes*, the Court noted that the original Corps regulations included an explicit requirement of periodic inundation, which the Corps had subsequently removed from the regulation. *Id.* at 130. See 33 C.F.R. § 209.120(d)(2)(h) (1976). The present Corps and EPA definition of wetlands specifically refers to "saturation" or "inundation." See *supra* note 78 and accompanying text.

97. The term "headwaters" means the point on a non-tidal stream above which the average annual flow is less than five cubic feet per second. 33 C.F.R. § 330.2(b)(1990).

98. 33 C.F.R. § 330.5(a)(26) (1990).

general permits which potentially excluded from 404 jurisdiction all isolated waters and waters above the headwaters of a non-tidal river or stream.⁹⁹ This action was challenged by several environmental groups in *National Wildlife Federation v. Marsh*,¹⁰⁰ and, as a result, the Corps entered into a settlement by which it agreed to reinstate a ten-acre limit on the exemption for discharges into such waters and to require pre-discharge notification for discharges into such waters which cause the loss or substantial modification of one to ten acres of those waters.¹⁰¹

The net effect of NWP 26 is to greatly limit the potential reach of section 404 jurisdiction over agricultural wetlands.¹⁰² While 404 jurisdiction potentially extends to any agricultural lands having the requisite wetlands characteristics of soils, vegetation, and hydrology, NWP 26 authorizes discharges into isolated wetlands or wetlands located above the headwaters of a non-tidal river or stream, without pre-notification for wetlands of less than one acre, and with limited pre-notification requirements for wetlands between one and ten acres in size. Because the Corps provides only a cursory review of NWP 26 pre-discharge notifications, does not enforce NWP 26 conditions, and rarely requires mitigation of wetlands lost through this exemption, thousands of acres of wetlands are needlessly lost each year.¹⁰³

99. See Jan Goldman-Carter, *Nationwide Permit 26: The Wetlands Giveaway*, NAT'L WETLANDS NEWSL., Nov.-Dec. 1989, at 4. [hereinafter *Wetlands Giveaway*].

100. *National Wildlife Federation v. Marsh*, 14 Env'tl. L. Rep. (Env'tl. L. Inst.) 20261 (D.D.C. 1984) (filed Dec. 22, 1982, settlement approved Feb. 10, 1984).

101. See 33 C.F.R. § 330.5(a)(26) (1991). Isolated wetlands and wetlands above the headwaters of non-tidal waters which are less than one acre in size may be filled without such pre-notification, provided that certain other conditions are met. In addition, Corps regulations set out conditions for the authorization of a discharge under any of the 26 nationwide permits. See 33 C.F.R. § 330.5(b) and § 330.6 (1991) (best management practices).

102. See *Wetlands Giveaway*, *supra* note 99, at 4-7 (NWP # 26 as currently written and enforced results in large amounts of lost wetlands and is not consistent with the principle of "no net loss" of wetlands). See also Blumm and Zaleha, *supra* note 6, at 726 (these permits exempt some 17 million acres of wetlands in the contiguous United States from the 404 program, resulting in the authorization of approximately 40,000 discharges annually).

103. *A Critical Link*, *supra* note 68, at 10-11.

C. Identifying and Delineating Jurisdictional Wetlands

Given the fact that the vast majority of remaining wetlands are on private, largely agricultural lands¹⁰⁴ and given the potential impact of the 404 permitting requirement on development of these lands, it is not surprising that the geographic scope of section 404 has been the subject of considerable legal and technical dispute.¹⁰⁵ This dispute was heightened by the issuance in January, 1989 of the Federal Manual for Identifying and Delineating Jurisdictional Wetlands,¹⁰⁶ which has resulted in a widespread protests from agriculture and development interests¹⁰⁷ and the recent introduction in Congress of legislation aimed at limiting the scope of the 404 program.¹⁰⁸ On August 17, 1991, President Bush signed into law the 1992 Energy and Water Development Appropriations Act¹⁰⁹ (the Corps' appropriations bill), which contains a provision which specifically prohibits the Corps from using the 1989 manual after October 1, 1991.¹¹⁰ This amendment also provides that

104. See *A Narrow Escape*, *supra* note 45, at 5.

105. See *Changing Priorities*, *supra* note 46, at 230-1.

106. See FEDERAL WETLANDS MANUAL, *supra* note 95.

107. See *supra* note 23. See also *Wetlands to be Most Controversial Issue of Clean Water Act Reauthorization Process*, 21 Env't Rep. (BNA) 1675-76 (Jan. 18, 1991); *Congressman Asks Bush to Halt Use of Federal Wetlands Manual*, 21 Env't Rep. (BNA) 1841-42 (Feb. 15, 1991); *Wetlands Definition Should Be Written Into Clean Water Act, House Member Says*, 21 Env't Rep. (BNA) 1990 (Mar. 8, 1991); Warren Brookes, *Ambush of the Green Guards*, THE WASH. TIMES, Mar. 14, 1991, at G1.

108. See H.R. 404, 102d Cong., 1st Sess. (1991) (this bill would amend section 404 by providing a statutory definition of wetlands, broadening the existing agricultural exemptions under 404(f)(1), and limiting the 404(f)(2) recapture provision); see also H.R. 1330, 102d Cong., 1st Sess. (1991). The latter bill, introduced by Rep. Jimmy Hayes (D-La.), would eliminate section 404 of the Clean Water Act and replace it with a wetlands classification scheme aimed at "undoing what farmers, developers, and other landowners consider a federal infringement on their fundamental property rights: the 1989 *Federal Manual for Identifying and Delineating Jurisdictional Wetlands*." See *Legislation to Limit EPA Veto Authority Introduced Amid Wetland Protection Dispute*, 21 Env't Rep. (BNA) 2029-30 (Mar. 15, 1991). In addition to the above proposals, which are aimed at cutting back protection of wetlands, one bill has been introduced in Congress which would promote the conservation and enhancement of wetlands. See H.R. 251, 102d Cong. 1st Sess. (Jan. 3, 1991).

109. Energy and Water Development Appropriations Act, 1992, Pub. L. No. 102-104, 105 Stat. 510 (1991).

110. This amendment, sponsored by Sen. Johnston of Louisiana, states as

for ongoing Corps enforcement actions and permit applications under section 404, the landowner or permit applicant has the option of selecting a new delineation under the Corps' 1987 Wetland Delineation Manual unless the Corps determines that the delineation would be substantially the same under either manual.¹¹¹ On August 23, 1991 the Corps issued guidance to its field offices implementing this legislative directive.¹¹²

The Corps, EPA, the Fish & Wildlife Service, and the Soil Conservation Service jointly developed the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989 manual) to provide a single, consistent approach for determining whether an area is a jurisdictional wetland and for delineating¹¹³ the upper boundary of an area determined to be a wetland.¹¹⁴ Prior to the issuance of the joint federal wetlands manual in January 1989, the Corps and EPA, as well as other federal agencies, used different wetland identification methodologies which contributed to an inconsistent application of the 404 permit program.¹¹⁵ Differences in the way wetlands delineations were performed by each agency resulted in

follows:

None of the funds of this Act shall be used to identify or delineate any land as a 'water of the United States' under the Federal Manual for Identifying and Delineating Jurisdictional Wetlands that was adopted in January 1989 . . . or any subsequent manual not adopted in accordance with the requirements for notice and public comment of the rule-making process of the Administrative Procedure Act

Pub. L. No. 102-104, 105 Stat. 510, 518 (1991).

111. *Id.* The Johnston amendment applies only to the Corps, leaving EPA free to use the 1989 manual until a revised manual is issued. A bill was introduced by Rep. Paxon of New York on Feb. 20, 1991, which would prohibit all federal agencies from using the 1989 manual. H.R. 1010, 102d Cong., 1st Sess. (Feb. 20, 1991).

112. Memorandum from Lester Edelman, Chief Counsel, Army Corps of Engineers to all Division and District Commanders, entitled: Recent language in the 1992 Energy and Water Development Appropriations Act (printed as H.R. 2427 on July 10, 1991) Regarding Enforcement Actions (August 23, 1991).

113. The term "wetland determination" refers to "the process by which an area is identified as a wetland or a non-wetland," in other words, simply determining if wetlands exist in a given area. FEDERAL WETLANDS MANUAL, *supra* note 95, at 75. The term "wetland delineation" refers to the process by which one separates wetlands from non-wetlands, determining where the wetland ends and upland begins. *Id.*

114. See FEDERAL WETLANDS MANUAL, *supra* note 95, at 1.

115. See *Changing Priorities*, *supra* note 46, at 230-231.

varying determinations of the jurisdictional boundaries for the 404 program.¹¹⁶ The Corps' method for delineating wetlands, in particular, resulted in the exclusions of large amounts of wetlands from section 404 jurisdiction.¹¹⁷

The Federal Wetlands Manual is based on a three-parameter approach for identifying wetlands which requires examination of an area's vegetation, soils, and hydrology.¹¹⁸ The manual establishes a consistent approach for determining whether the three essential characteristics of a wetland (hydrophytic vegetation,¹¹⁹ hydric soils¹²⁰ and wetland hydrology¹²¹) are present in a given area. This three-part test is derived directly from the agencies joint definition of "wetlands."¹²² Under the 1989 manual, if soils are inundated or saturated for a sufficient period of time during the growing season (generally one week or more), a prevalence of wetlands vegetation is found, and hydric soils are present, the area in question will be considered jurisdictional wetlands.¹²³

116. See GAO WETLANDS REPORT, *supra* note 11, at 23-25.

117. *Id.* at 24-25 (citing the "disparate estimates of wetlands impacts prepared by the Corps and the U.S. Fish & Wildlife Service (F&WS) in Vicksburg, where the Corps determined that the program permitted the loss of about 800 acres of wetlands in fiscal year 1986; whereas, F&WS estimated that about 55,000 acres were adversely affected."). *Id.* at 24. See also *Avoyelles Sportsman's League v. Marsh*, 715 F.2d 897 (5th Cir. 1983) (adopting EPA's determination that 80% of defendant's 20,000 acre tract were wetlands, where the Corps had originally concluded that only 35% of the tract was wetlands).

118. FEDERAL WETLANDS MANUAL, *supra* note 95, at 5.

119. Hydrophytic vegetation is defined as "plant life growing in water or on a substrate that is at least periodically deficient of oxygen as a result of excessive water content." *Id.* at 69.

120. A hydric soil is defined as "a soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic (oxygen deficient) conditions in the upper part." *Id.*

121. Wetland hydrology refers to the "permanent or periodic inundation or prolonged soil saturation sufficient to create anaerobic conditions in the soil." *Id.* at 75.

122. See *supra* note 78 and accompanying text.

123. FEDERAL WETLANDS MANUAL, *supra* note 95, at 5. Summarized below are the mandatory technical criteria for wetland identification as set out in the manual:

A. *Hydrophytic Vegetation*: An area is considered to meet this criteria when under normal circumstances:

(1) more than 50% of the composition of the dominant species from all strata (layers of vegetation) are obligate wetland plants (OBL) that occur almost always in wetlands (estimated probability 99%), facultative wetland (FACW)

The Federal Wetlands Manual has proven to be extremely controversial¹²⁴ mainly because of a perception in the regulated community that it has substantially increased the amount of acreage subject to section 404 jurisdiction.¹²⁵ The perceived expansion in the amount of acreage subject to 404 jurisdiction may instead reflect the fact that the Corps was not properly asserting jurisdiction over wetlands in the past.¹²⁶

that usually (67-99% frequency) occur in wetlands, and/or facultative (FAC) species that are equally likely to occur in wetlands or non-wetlands (estimated probability 34-66%).

(2) a frequency analysis of all species within the community yields a prevalence index value of less than 3.0 (where OBL = 1.0, FACW = 2.0, FAC = 3.0, facultative upland (FACU) = 4.0 and (obligate upland) UPL = 5.0.)

(3) when a plant community has less than or equal to 50% of the dominant species from all strata represented by OBL, FACW, and/or FAC species, or a frequency analysis of all species within the community yields a prevalence index of greater than or equal to 3.0, and hydric soils and wetland hydrology are present, the area is presumed to have hydrophytic vegetation.

B. Hydric Soil Criterion: An area is considered to have hydric soils when the National Technical Committee for Hydric Soils (NTCHS) criteria are met (these criteria were established by the U.S.D.A. Soil Conservation Service in 1987). Generally, hydric soils are defined as soils that have been inundated or saturated for a sufficient period of time to create anaerobic soil conditions in the upper part.

C. Wetland Hydrology Criterion: An area is considered to have wetland hydrology when saturated to the surface or inundated for a period of time (usually one week or more) during the growing season of an average rainfall year. The Manual allows a presumption of wetlands hydrology for areas where hydric soils are present and which under normal circumstances support hydrophytic vegetation. Significantly, the term "saturation to the surface" in the 1989 Manual does not require that the water table actually reach the surface but merely be close to the surface (0.5 feet to 1.5 feet depending on the soil type).

Id. at 5-7.

124. See *supra* notes 107-108 and accompanying text.

125. See, e.g., *Wetland Issues Contested at Hearing: Committee Says It Will Play 'Catalyst Role'*, 21 Env't Rep. (BNA) 1801, 1802 (Feb. 8, 1991).

126. See *A Critical Link*, *supra* note 68, at 11 (before the joint manual was adopted, "the Corps typically applied its wetland definition rigidly to exclude many wet areas, and to delineate wetland boundaries narrowly"); see also *Federal Wetlands Conservation Policy May Collide with Constitutional Rights*, 21 Env't Rep. (BNA) 877 (Sept. 7, 1990) (quoting Gregory E. Peck, Chief of EPA's Office of Wetlands Protection Enforcement Branch, as stating that "wetland acreage increases in some regions indicate that the [C]orps was not doing its job properly before the man-

IV. The Regulation of Agricultural Activities Under Section 404

The Clean Water Act expressly regulates only point source discharges of dredged or fill material. But there are some activities that degrade and destroy wetlands, for which there are no identifiable point source discharges and which are thus arguably outside the scope of the 404 program. In addition, the Corps and EPA have taken a narrow view of what constitutes a "point source discharge," which has permitted other activities which result in wetland loss to go unregulated. This section discusses those agricultural activities which are and are not regulated under section 404.

A. The Limits of Section 404

One might logically think that any activity that adversely affects or destroys wetlands or other waters of the United States is subject to regulation under section 404.¹²⁷ However, as one commentator has put it, "the regulation of activities affecting wetlands is tied not so much to logic on this matter as to the general statutory scheme of the Clean Water Act."¹²⁸ Under sections 301¹²⁹ and 502¹³⁰ of the Act, activities that involve the "discharge of dredged or fill materials" into wetlands or other waters of the United States are prohibited.¹³¹ Unless an activity involves a discharge¹³² of dredged¹³³ or

ual was issued").

127. This is especially true since it has been recognized that "[a] basic policy of the [CWA] is the protection of our nation's wetlands and the important functions they serve. The legislative history of the Clean Water Act Amendments of 1977 reflects an abiding Congressional concern with the functional importance of wetlands." *Avoyelles Sportsmen's League v. Alexander*, 473 F. Supp. 525, 533 (W.D. La. 1979) ("*Avoyelles I*"), later proceeding, 511 F. Supp. 278 (W.D. La. 1981) ("*Avoyelles II*"), *aff'd in part & rev'd in part sub nom*, *Avoyelles Sportsmen's League, Inc. v. Marsh*, 715 F.2d. 897 (5th Cir. 1983) ("*Avoyelles III*").

128. WANT, *supra* note 70, § 4.06(1), at 4-17.

129. CWA § 301, 33 U.S.C. § 1311 (1988).

130. CWA § 502, 33 U.S.C. § 1362 (1988) (the definition section of the Act).

131. See also *United States v. Riverside Bayview Homes*, 474 U.S. 121, 123 (1980). See also *supra* notes 53-59 and accompanying text.

132.

The term 'discharge of dredged material' means any addition of dredged ma-

fill¹³⁴ material from a point source,¹³⁵ however, it is arguably not regulated under section 404.¹³⁶

terial into the waters of the United States. The term includes, without limitation, the addition of dredged material to a specified discharge site located in waters of the United States and the runoff or overflow from a contained land or water disposal area The term does not include plowing, cultivating, seeding and harvesting for the production of food, fiber, and forest products The term does not include *de minimis*, incidental soil movement occurring during normal dredging operations.

33 C.F.R. § 323.2(d) (1990).

133. "The term 'dredged material' means material that is excavated or dredged from waters of the United States." 33 C.F.R. § 323.2(c)(1990).

134.

The term 'fill material' means any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a waterbody. The term does not include any pollutant discharged into the water primarily to dispose of waste, as that activity is regulated under section 402 of the Clean Water Act.

33 C.F.R. § 323.2(e) (1990).

EPA's definition of fill material is slightly different: "fill material means any 'pollutant' which replaces portions of the 'waters of the United States' with dry land or which changes the bottom elevation of a water body for any purpose." 40 C.F.R. § 232.2(i) (1990). EPA and the Corps have disagreed in regard to whether certain solid wastes are subject to section 402 or section 404 and have entered into an Memorandum of Agreement on the subject. See Memorandum of Agreement on Solid Waste, 51 Fed Reg. 8871 (1986).

135. "Any discernible, confined or discrete conveyance" CWA § 502(14), 33 U.S.C. § 1362(14) (1988). See *supra* note 57. The term "point source" has been broadly construed to include such heavy equipment as bull dozers, backhoes, and other earthmoving equipment. *Avoyelles III*, 715 F.2d. 897, 922 (5th Cir. 1983); *United States v. Holland*, 373 F.Supp. 665, 668 (M.D. Fla. 1974); *United States v. Larkins*, 657 F. Supp. 76, 85 (W.D. Ky. 1987), *aff'd*, 852 F.2d. 189 (6th Cir. 1988), *cert. denied*, 489 U.S. 1016 (1989). The term "point source" also includes dump-trucks. See *United States v. Robinson*, 570 F. Supp. 1157, 1163 (M.D. Fla. 1983); *United States v. Weisman*, 489 F. Supp. 1331, 1337 (M.D. Fla. 1980), *aff'd mem.*, 632 F.2d 891 (5th Cir. 1980). Although section 404, 33 U.S.C. § 1344, refers to permits for the "discharge of dredged or fill material" it does mention that the discharge must emanate from a point source. This requirement is embodied in section 301, 33 U.S.C. § 1311, which prohibits the "discharge of any pollutant" without a permit under sections 402 or 404. That term is defined by section 502(12) as "*any addition of any pollutant to navigable waters from any point source.* . . ." CWA § 502(12), 33 U.S.C. § 1362(12)(1988) (emphasis added). Also, while section 404 does not mention pollutant, section 502(16) states that "the term discharge when used without qualification includes a discharge of a pollutant, and a discharge of pollutants." CWA § 502(16), 33 U.S.C. § 1362(16)(1988).

136. See Blumm, *supra* note 20, at 418 (section 404 permit requirements apply only to point source discharges of dredged or fill material and thus a 404 permit is not required if all the spoil from a dredging operation is deposited upland or where a

The requirement of a point source discharge of dredged or fill material as it has been generally interpreted, is a fundamental barrier to comprehensive federal protection of wetlands under the 404 program.¹³⁷ On this basis, the Corps¹³⁸ and EPA¹³⁹ have, in a number of instances, concluded that the clearing and drainage of wetlands for agricultural purposes, the activities which result in the majority of wetland losses each year, are not within the regulatory scope of section

wetland is drained without a deposit of fill material); Nagle, *supra* note 2, at 238 (the Act requires permits only for activities that involve the discharge of dredged or fill material into waters of the United States); *Federal Wetlands Law*, *supra* note 66, at 14 (section 404 jurisdiction depends on the existence of a discharge); Hofer *supra* note 37, at 519 (section 404 permit is not required for drainage activities that do not deposit or spill materials into the area being drained); *but see* *Save Our Community v. EPA*, 741 F. Supp. 605 (N.D. Tex. 1990) (holding that mere drainage of a wetland, without demonstration of a point source discharge, is a regulated activity under section 404 of the Clean Water Act when it presents the threat of significant alteration or destruction of a wetland, since Congress by ? has expressed a clear intent to protect the integrity of aquatic resources).

137. See *A Critical Link*, *supra* note 68, at 11. See also Nagle, *supra* note 2, at 238; Blumm *supra* note 20, at 418; GAO WETLANDS REPORT, *supra* note 11, at 19 (stating that as the 404 program is currently structured, "the Corps does not regulate most of the activities that result in wetland losses").

138. See *A Critical Link*, *supra* note 68.

The Corps has restricted the activities it regulates under section 404. Through regulations and field guidance the Corps has determined that 'de minimis' discharges of dredged material do not require a permit - even when such discharges result in large-scale destruction of aquatic areas. Consequently, Corps districts have allowed ditching, draining, channelization, and excavation activities to destroy wetlands without section 404 permit review, despite the clear intent to dewater and destroy wetlands.

Id. at 11-12 (original emphasis). See also GAO WETLANDS REPORT, *supra* note 11, at 19 ("activities such as clear-cutting existing forests, ditching that drains wetlands, and certain plowing that does not deposit substantial dredged or fill materials have at times been interpreted by the Corps as not coming under its regulatory purview").

139.

[T]he nagging problem of destruction by draining continues to haunt any efforts in the Basin. Section 404 only grants authority to regulate filling activities. Much of the wetland destruction in Nebraska occurs through draining. Thus, without regulatory authority, all we can do to attempt to stop such activities is to increase public awareness of the value of these wetlands and appeal to landowners to preserve their wetlands.

GAO WETLANDS REPORT, *supra* note 11, at 20. (citing Environmental Management Report prepared by EPA Region VII entitled *Environmental Action Plan for Rainwater Basin Wetlands Project*).

404.¹⁴⁰ It is true that some activities which destroy wetlands may not involve any discharge.¹⁴¹ But, it is difficult to imagine how any drainage or clearing operation which takes place in wetlands and is designed to destroy wetlands, can do so without resulting in some discharge of dredged or fill material.¹⁴²

B. Normal Farming Activities and the 404(f) Exemptions

Even farming activities which clearly do result in point source discharges of dredged and fill material are not necessarily regulated under the 404 program. Section 404 expressly exempts discharges associated with certain normal farming activities¹⁴³ provided they do not result in the conversion of wetlands to uplands.¹⁴⁴

In response to the *NRDC v. Callaway* decision in 1975, the Corps issued revised regulations expanding its jurisdiction.¹⁴⁵ In *NRDC v. Callaway* the court found the Corps had acted unlawfully in limiting 404 jurisdiction to traditionally navigable waters. Apparently unhappy with its broadened re-

140. See *supra* notes 27, 32-35 and accompanying text.

141. See, e.g., Blumm, *supra* note 20, at 418 (no 404 permit is required for activities that alter upland drainage patterns and block runoff into wetlands because there is no discharge of dredged or fill material); *Damming Agricultural Drainage*, *supra* note 19, at 174 (unless there is a discharge of dredged or fill material into water or wet soils they may be completely drained, so that if a ditch is dug adjacent to a water or wet soil area sufficiently deep to lower the water table and convert the area to upland, it may be drained without a permit). These are "classic" examples which demonstrate the limits of section 404 as it is now drafted. Even in these cases, however, an argument can still be made that the Corps could assert jurisdiction over the site based on a "normal circumstances" argument (i.e. under normal circumstances the site would meet the wetlands definition), if an individual subsequently attempts to discharge dredged or fill material on the site. See *infra* notes 214-216 and accompanying text.

142. See *Save Our Community v. United States Environmental Protection Agency*, CA 3-90-0799-11 (Amici Curiae Memorandum of the Environmental Defense Fund and National Wildlife Federation at 6, *Save Our Community v. United States Environmental Protection Agency*, 741 F.Supp. 605 (N.D. Tex. 1990)). See also Blumm *supra* note 20, at 418 n.34 (stating that it is difficult to dredge without some discharge at the site of dredging and arguing that the dredger should have the burden of demonstrating that there will not be a discharge).

143. CWA § 404(f)(1), 33 U.S.C. § 1344(f)(1) (1988).

144. CWA § 404(f)(2), 33 U.S.C. § 1344(f)(2) (1988).

145. *NRDC v. Callaway*, 392 F. Supp. 685 (D.D.C. 1975). See also *supra* notes 64-66 and accompanying text.

sponsibilities, the Corps issued a now infamous press release warning that the new regulations were so inclusive that they might require a permit for "the rancher who wants to enlarge his stock pond, or the farmer who wants to deepen an irrigation ditch or plow a field . . ." ¹⁴⁶ The resulting outcry from the agricultural community and other interests prompted unsuccessful attempts in Congress to restrict the scope of 404 jurisdiction to the traditional limits of navigability under the Rivers and Harbors Act. ¹⁴⁷

Although Congress did not limit the jurisdictional scope of section 404, a compromise was reached as part of the 1977 Clean Water Act Amendments. ¹⁴⁸ As part of this compromise, Congress created categorical exemptions for certain activities thought to have minor impacts, including normal farming, ranching, and silvicultural operations. ¹⁴⁹ To ensure that these exemptions were interpreted narrowly, Congress also added section 404(f)(2) which provides that discharges are not exempt from 404 permit requirements if they are part of an activity designed to bring "navigable waters" into a new use,

146. Press Release, Dep't of Army, Office of Chief of Engineers (May 6, 1975), reprinted in *Section 404 of the Federal Water Pollution Control Act Amendments of 1972: Hearings Before the Senate Comm. on Pub. Works*, 94th Cong., 2d Sess. 4, 517-520 (1976). As a result of congressional opposition, the Corps later retracted this press release. See *Conflict supra* note 64, at 281.

147. Blumm, *supra* note 20, at 418. See also Comment, *The Move to Amend §404 of FWPCA: House Passes Bill Limiting Federal Authority Over Dredge-and-Fill Activities*, 7 *Envtl. L. Rep.* (Envtl. L. Inst.) 10082-10084 (1977) [hereinafter *Move to Amend*].

148. Clean Water Act of 1977, Pub. L. No. 95-217, 91 Stat. 1566 (codified as amended at 33 U.S.C. §§ 1251-1376 (1988)). In addition to affirming the broad jurisdiction of the 404 program, Congress in the 1977 Amendments also provided the first statutory mention of wetlands and supplied extensive legislative history confirming the role of section 404 in protecting wetlands. See Blumm & Zaleha, *supra* note 6, at 707-708. See also *United States v. Riverside Bayview Homes*, 474 U.S. 121, 133 (1985) (the evident breadth of congressional concern for protection of water quality and aquatic ecosystems suggests that it is reasonable for the Corps to interpret the term 'waters' to encompass wetlands adjacent to waters as more conventionally defined).

149. CWA § 404(f), 33 U.S.C. § 1344(f)(1988). See Blumm, *supra* note 20, at 419. For an in depth discussion of the effects of the 1977 Amendments on the 404 program see Thompson, *Section 404 of the Federal Water Pollution Control Act Amendments of 1977: Hydrologic Modification, Wetlands Protection and the Physical Integrity of the Nations Waters*, 2 *HARV. ENVTL. L. REV.* 264 (1977).

where the discharge would impair the flow or circulation of navigable waters or reduce the reach of such waters.¹⁵⁰ This "recapture" provision was intended to insure that discharges which are part of activities causing major disruptions of wetlands or other aquatic resources, are not exempted from section 404 permit requirements.¹⁵¹ For example, the conversion of a bottomland hardwood forested wetland to cropland would not be exempt from 404.

Under section 404(f)(1), and the Corps and EPA regulations interpreting this provision, "normal farming activities" such as plowing, seeding, cultivating, minor drainage, and harvesting are generally exempt from 404 permit requirements.¹⁵² Section 404(f)(1) also exempts discharges resulting from the following agricultural activities: maintenance of dikes, dams, levees and similar structures;¹⁵³ construction or maintenance of farm or stock ponds or irrigation ditches, or the maintenance (but not the construction) of drainage ditches;¹⁵⁴ and construction or maintenance of farm roads.¹⁵⁵

The 1977 Amendments address those agricultural activities regulated under the Clean Water Act in a negative sense. The Act clarifies those activities not covered by the Act, but does not definitively address which agricultural activities fall within the purview of section 404. What is clearly implied in the specific recitation of activities in 404(f)(1) and the addition of 404(f)(2), is that discharges associated with agricultural activities other than those specifically exempted by 404(f)(1) *are* regulated. Clearing and drainage activities,

150. Section 404(f)(2) states:

Any 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 this section.

CWA § 404(f)(2), 33 U.S.C. § 1344(f)(2) (1988).

151. See *Changing Priorities*, *supra* note 46, at 237. See also *infra* note 156.

152. CWA § 404(f)(1)(A), 33 U.S.C. § 1344(f)(1)(A) (1988). See also 33 C.F.R. § 323.4(a); and 40 C.F.R. § 232.3(c) (1991).

153. CWA § 404(f)(1)(B), 33 U.S.C. § 1344(f)(1)(B) (1988).

154. CWA § 404(f)(1)(C), 33 U.S.C. § 1344(f)(1)(C) (1988).

155. CWA § 404(f)(1)(E), 33 U.S.C. § 1344(f)(1)(E) (1988).

which are the leading cause of wetland destruction, are precisely the type of activities Congress intended to address in enacting 404(f)(2).¹⁵⁶ These activities, when used to convert wetlands to croplands, clearly "bring an area of the navigable waters into a use to which it was not previously subject" and result in "the reduction in the reach of such waters."¹⁵⁷ Any discharger of dredged or fill material incidental to draining or clearing activities clearly should be "required to have a permit" as prescribed in 404(f)(2).¹⁵⁸

Consistent with the congressional intent that only activities having minor impacts be exempted from the 404 permit program, courts have narrowly construed the 404(f) exemptions.¹⁵⁹ Likewise, current Corps¹⁶⁰ and EPA¹⁶¹ regulations appear to narrowly limit the types of activities exempted under 404(f).¹⁶² Only "normal" activities that are part of an "established" (i.e. ongoing) farming, silviculture, or ranching operation are exempted.¹⁶³ Despite Congress' clear intent that only agricultural activities which cause little or no adverse impacts may be exempted under 404(f), the Corps has been reticent in regulating activities associated with the draining and clearing

156. Senator Edmund Muskie, a key sponsor of the 1972 and 1977 Amendments, explained the significance of section 404(f) as follows:

New subsection 404(f) provides that Federal permits will not be required for those narrowly defined activities *that cause little or no adverse effects either individually or cumulatively*. While it is understood that some of these activities may necessarily result in incidental filling and minor harm to aquatic resources, the exemptions do not apply to discharges that convert extensive areas of water into dry land or impede circulation or reduce the reach or size of the water body.

3 Legislative History of the Federal Water Pollution Control Act Amendments, at 474 (emphasis added).

157. CWA § 404(f)(2), 33 U.S.C. § 1344(f)(2) (1988).

158. *Id.*; see also *Changing Priorities*, *supra* note 46, at 238-239.

159. See *United States v. Larkins*, 852 F.2d 189 (6th Cir. 1988), *cert. denied*, 486 U.S. 1016 (1989); *United States v. Huebner*, 752 F.2d 1235 (7th Cir. 1985), *cert. denied*, 474 U.S. 817 (1985); *United States v. Akers*, 785 F.2d 814 (9th Cir. 1986), *cert. denied*, 479 U.S. 828 (1986); *Avoyelles Sportsmen's League, Inc. v. Marsh*, 715 F.2d 897 (5th Cir. 1983). For an excellent analysis of these decisions see *Conflict*, *supra* note 64 at 286-293.

160. 33 C.F.R. § 323.4 (1991).

161. 40 C.F.R. § 232.3 (1991).

162. See *Blumm & Zaleha*, *supra* note 6, at 721.

163. 33 C.F.R. § 323.4(a)(1)(ii) (1991); 40 C.F.R. § 232.3(c)(1)(ii) (1991).

of wetlands for conversion to croplands.¹⁶⁴

C. Landclearing and Drainage Activities

Landclearing and drainage activities for the conversion of wetlands to agriculture have been responsible for the vast majority of all wetlands losses.¹⁶⁵ Despite this fact, these activities have often gone unregulated. EPA and the Corps have at times allowed such actions to proceed on the grounds that they result in only "de minimis" point source discharges. This section discusses the basis for the regulation of landclearing and drainage activities under section 404.

1. Landclearing

Whether landclearing is subject to 404 jurisdiction is a significant issue, because landclearing is an initial step in the conversions of wetlands to agriculture which account for the majority of wetlands losses each year.¹⁶⁶ It is also an activity where regulatory jurisdiction has been disputed by farmers and others in the regulated community¹⁶⁷ on the basis that it is not an activity which Congress intended to regulate under the Clean Water Act.¹⁶⁸ The issue was addressed in two Fifth Circuit decisions: *Avoyelles Sportsmen's League, Inc. v. Marsh*¹⁶⁹ and *Save Our Wetlands, Inc. v. Sands*.¹⁷⁰ The com-

164. See *Changing Priorities*, *supra* note 46, at 226-228. It is reported that large losses of wetlands have occurred under the alleged auspices of the normal farming exemptions. *Id.* at 236; see also GAO WETLANDS REPORT, *supra* note 11, at 19 (stating there is little doubt that normal agricultural, silvicultural, and ranching activities have resulted in "large and unregulated wetlands losses").

165. See *supra* notes 11-15, 27 and accompanying text.

166. *Federal Wetlands Law*, *supra* note 66, at 15.

167. WANT, *supra* note 70, § 4.06[5], at 4-20.

168. See, e.g., *Avoyelles III*, 715 F.2d 897, 925 (1985) (defendants argued that there landclearing activities to convert wetlands to agricultural use were exempt under section 404(f) of the Clean Water Act, 33 U.S.C. § 1344 (1988)). The more philosophical basis for this dispute is the fact that many farmers and developers view the section 404 program, to the extent that it restricts their ability to develop their property as they choose, as an infringement on their constitutionally protected private property rights. See *supra* notes 21, 23 and accompanying text.

169. *Avoyelles III*, 715 F.2d at 922-925 (holding landclearing activities to convert wetlands to agricultural use on a 20,000 acre tract in Avoyelles, Louisiana, required a section 404 permit).

bined holdings of these cases indicate that landclearing for agricultural conversion which involves landlevelling and/or substantial earth movement is subject to 404 permitting requirements,¹⁷¹ although land clearing activities that merely remove some wetlands vegetation but do not convert wetlands are not regulated.¹⁷²

The district court in *Avoyelles* found that the regulatory definition of wetlands included "the vegetation that grows thereon and thus, went on to conclude that clearing wetlands of trees and vegetation, which it had determined were part of the waters of the United States, "constituted a discharge of dredged material."¹⁷³ The Fifth Circuit affirmed, agreeing with the district court that defendant's clearing activities had resulted in discharges subject to 404 permit requirements, but the Court expressly declined to address the question of whether "mere removal of vegetation" was a discharge since the landclearing activities undertaken by the defendants clearly involved the redeposit of materials rather than their mere removal.¹⁷⁴ Other courts have followed the lead of the

170. 711 F.2d 634 (5th Cir. 1983) (upholding a Corps decision not to require a permit from an electric company for construction of electric transmission corridor along the Mississippi River where vegetation was cleared but the wetland was not permanently converted).

171. *WANT*, *supra* note 70, § 4.06[5], at 4-19 to 4-20.1.

172. *See Save Our Wetlands*, 711 F.2d at 647.

173. *Avoyelles I*, 473 F. Supp. at 532. The Corps and EPA argued, along with the private defendants, that "mere removal" of wetlands vegetation was not a discharge because the term discharge is defined as the "addition" of pollutants not removal of materials. *Avoyelles III*, 715 F.2d at 922-923. *See also* *National Wildlife Federation v. Gorsuch*, 693 F.2d 156, 173 (D.C. Cir. 1982) (upholding as reasonable EPA construction that addition from a point source occurs only if the point source itself physically introduces a pollutant, i.e. this does not include oxygen content changes). EPA further explained that, if vegetation or other materials are redeposited it would consider this activity a discharge, but if vegetation was cut down without significant soil disturbance and then removed to dry land, no section 404 permit would be required. *Avoyelles III*, 715 F.2d at 923 n.40.

174. *Avoyelles III*, 715 F.2d at 923 (holding that the word "addition" as used in the definition of the term "discharge" can reasonably be understood to include "redeposit" and that the term "discharge," thus, includes the redepositing of materials taken from wetlands). The Court of Appeals found that there was ample evidence in the record to support a finding that the defendants had "discharged fill material," namely that during the clearing procedures logs and materials that would not burn were buried and materials were disced into the soil "filling in sloughs on the tract and

Fifth Circuit's decision in *Avoyelles III* and have held that the redeposit of indigenous materials is a "discharge" under the meaning of the Clean Water Act.¹⁷⁵ Under the *Avoyelles III* decision, if the conversion of a wetland to croplands involves the redeposit of materials taken from that wetland, that activity is subject to the permitting requirements of section 404.

In *Save Our Wetlands*, the Fifth Circuit considered the question of whether the Corps was correct in not requiring a permit from an electric company for construction of an electric transmission corridor along Mississippi River which necessitated removal of vegetation from wetlands. In this case, the court found that the felling of trees and clearing of vegetation which were then piled-up and allowed to naturally deteriorate, did not constitute fill material within the Corps definition, since the trees and vegetation would not be used, in the words of the Corps definition of "fill material", to "replace an aquatic area with dry land or change the bottom elevation of a waterbody."¹⁷⁶ Thus, the court found that no 404 permit was

leveling the land." *Id.* at 924. The court also concurred with the lower court finding that bulldozers and backhoes were "point sources," and thus found that the district court had correctly decided that the landclearing activities constituted a discharge from a point source. *Id.* at 922.

175. See *United States v. Akers*, 15 *Env'tl. L. Rep.* (*Env'tl. L. Inst.*) 20,243 (E.D. Cal. 1985) (finding that discing, as well as constructing ditches, roads, and channel fills in order to convert a large wetland area to farmland involved the discharge of dredged or fill material; and holding that heavy equipment used to move and deposit earth were point sources), *aff'd*, 785 F.2d 814 (9th Cir. 1986), *cert. denied*, 479 U.S. 828 (1986); *United States v. M.C.C. of Florida, Inc.*, 772 F.2d 1501, 1505-1506 (11th Cir. 1985), *reh'g en banc denied*, 778 F.2d 793 (11th Cir. 1985), *vacated on other grounds*, 481 U.S. 1034 (1987), "redeposit" analysis readopted on remand, 848 F.2d 1133 (11th Cir. 1988) and 863 F.2d 802 (11th Cir. 1989) (holding that redeposit of spoil dredged by the propellers of tug boats constituted a "discharge of a pollutant"); *Rybachek v. EPA*, 904 F.2d 1276, 1285-86 (9th Cir. 1990) (upholding EPA regulation of placer mines on the basis that resuspension of materials from a streambed during mining activities was an "addition of a pollutant" under the Clean Water Act, since the word addition may reasonably be understood to include redeposit); *United States v. Sinclair Oil Company*, CV 88-278-BLG-JFB (D.D. Mont. Dec. 12, 1990) (redeposit of indigenous river bed materials during channelization activities in the Little Big-horn River constituted a discharge of a pollutant).

176. 711 F.2d at 634, 647 (5th Cir. 1983) (citing 33 C.F.R. § 323.2(m) (1979) (now codified at 33 C.F.R. § 323.2(e) (1991))). The Corps definition of "fill material" is arguably not in accord with the broad purposes of the Clean Water Act because it

required.¹⁷⁷

It is difficult to read *Save Our Wetlands* and *Avoyelles* as entirely in accord with each other, since windrowing felled trees and cleared vegetation and allowing them to naturally deteriorate is arguably a "redeposit" under the *Avoyelles* decision and thus subject to regulation under 404.¹⁷⁸ The possible distinction between the two is that in *Save Our Wetlands* the activities in question did not result in the conversion of a wetland to upland.¹⁷⁹

requires a showing that fill materials were placed with a specific purpose before such materials are considered pollutants. See *Minnehaha Creek Watershed v. Hoffman*, 597 F.2d 617, (8th Cir. 1979).

We similarly find no justification in the Act for the District Court's determination that whether the discharge of a particular substance listed in § 502(6) constitutes the discharge of a 'pollutant' under the Act depends upon the purpose for which the discharge is made. Other than the specific exceptions in § 502(6) . . . the Act contains no indication that the discharge of the substances listed in § 502(6) constitutes the discharge of a pollutant if the discharge is made for some purposes, and not if it is made for others.

Id. at 627.

177. 711 F.2d at 647.

178. See also CWA § 502(6), 33 U.S.C. § 1362(6)(1988) (the definition of "pollutant" under the CWA includes "biological materials"). As in *Avoyelles III*, EPA took the position that "if vegetation or other materials are redeposited in [a] wetland, that activity is a discharge." 715 F.2d at 923; but see EPA's present definition of fill material in 40 C.F.R. § 232.3(i).

179. *Save Our Wetlands, Inc. v. Sands*, 711 F.2d 634, 634 (5th Cir. 1983). "The wetlands involved here will not be converted as in *Avoyelles*. The trees and vegetation to be windrowed will not be used to replace an aquatic area with dry land or change the bottom elevation of a waterbody." *Id.* at 647 (citing Corps' definition of "fill material" currently at 33 C.F.R. § 323.2(e) (1990)). Thus, the court was prepared to accept the degradation of wetlands, as long as they were not totally destroyed by conversion to dry land. That this is a reasonable interpretation of the Corps' definition of "fill material," and EPA's for that matter, 40 C.F.R. § 232.2(i), demonstrates that these definitions are seriously flawed and overly broad. Wetlands vegetation is an integral part of wetlands ecosystems. To say that section 404 protects wetlands from discharges that would fill or cover them, but does not protect them from degradation associated with the destruction of wetlands vegetation, seems illogical. Congress made it clear through section 404(f)(2) that even incidental discharges are to be regulated under section 404 if wetlands are brought into a new use and the reach of such waters is reduced. The district court in *Avoyelles* observed, quite succinctly, that the regulatory definition of wetlands:

makes it clear that wetlands include the vegetation that grows thereon. Such lands in the absence of vegetation cannot fulfill the purposes of the Act. Consequently, in determining what constitutes dredged material in a wetland area, the inquiry does not end at the surface of the earth or water. Rather,

Based on the *Avoyelles III* decision and the other decisions that have followed it,¹⁸⁰ it is likely that any landclearing activities for agricultural or other purposes which involve the redeposit of soil or vegetation are within the scope of section 404 and require a permit. Wetlands vegetation is clearly an integral part of wetlands ecosystems.¹⁸¹ Large scale removal of wetlands vegetation will inevitably result in some redeposit of biological materials, and this redeposit is the basis for jurisdiction under section 404.¹⁸² Where clearing of vegetation causes the large scale degradation of a wetland, there should be a presumption that a regulated discharge has occurred, because of the likelihood that such activity will result in some redeposit of soils or vegetation. Any discharges incidental to such activity can and should be regulated. Certainly, if discharges associated with landclearing activities result in the conversion of the wetlands to upland then they will require a permit, even under the holding in *Save Our Wetlands v. Sands*.¹⁸³

any such inquiry must also consider vegetation, the very thing that defines a wetland.

Avoyelles I, 473 F. Supp. at 532 (1979).

180. See *supra* note 175.

181. The district court in *Avoyelles I* had found that the wetlands vegetation itself was part of the waters of the United States, and found that clearing the land of trees and vegetation constituted a discharge of dredged or fill material. 473 F. Supp. at 532. The court's assertion that wetlands vegetation should be considered part of the "waters of United States" makes some sense considering the broad way in which Congress defined "navigable waters." See *supra* notes 74-75, 86. Congress declared that the goal of the Clean Water Act was "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters," which "refers to a condition in which the natural structure and function of ecosystems is maintained." *United States v. Riverside Bayview Homes*, 474 U.S. 121, 132 (1980) (citing H.R. Rep. No. 92-911, p.76 (1972)).

182. To the extent that the *Avoyelles* district court decision suggests that cutting down one tree in a wetland constitutes a discharge of dredged or fill material is questionable, since the Clean Water Act and its legislative history make clear that section 404 was intended to regulate "point source discharges." See *infra* note 190. However, any larger scale activity, involving mechanized clearing of vegetation for conversion of wetlands to cropland or some other purpose, will inevitably result in some point source discharge which could serve as the basis for requiring a permit under section 404.

183. 711 F.2d 634, 647 (1983).

2. Drainage

Drainage of wetlands is likewise a significant issue for wetlands protection, and perhaps the most significant issue, since drainage of wetlands for agricultural purposes has been the primary cause of wetlands destruction.¹⁸⁴ Section 404 jurisdiction over drainage activities is even less clear than in the case of landclearing.¹⁸⁵ In at least one case, a court has found that the deposit of fill material and dredged spoil, in connection with the construction of a drainage system consisting of ditches and levees, involved a discharge of pollutants requiring a section 404 permit.¹⁸⁶ However, another court upheld a Corps of Engineers' decision not to require an individual permit for installation of two drainage culverts and an adjacent drainage canal, where the Corps' on-site investigator had found no evidence of any discharges regulated under section 404 of the Clean Water Act.¹⁸⁷

184. See OTA REPORT, *supra* note 3, at 3 (stating that 87% of recent wetland losses (1950's to 1970's) were caused by agricultural development involving drainage). See also S. Rep. No. 101-357, 101st Cong., 2d Sess. 216 (1990).

185. Section 404(f) exempts minor drainage and specifically exempts the maintenance of drainage ditches, but not their construction. CWA § 404(f)(1)(c), 33 U.S.C. § 1344(f)(1)(C). The legislative history of the 1977 Clean Water Act Amendments suggests that the construction of drainage ditches is covered by section 404. See 4 LEGISLATIVE HISTORY OF THE CLEAN WATER ACT OF 1977 906. The Corps' regulations also appear to prohibit construction of drainage ditches. See 33 C.F.R. § 323.4(a)(2) (1991) (stating that any discharge of dredged or fill material into waters of the United States incidental to the construction of any such structure requires a 404 permit). The Corps, however, has allowed such activities to take place in a number of instances without regulation. See *A Critical Link*, *supra* note 68, at 11. The Corps' narrow definition of what constitutes a discharge of dredged or fill material creates a loophole to avoid regulation under section 404.

186. *United States v. Fleming Plantations*, No. 78-2110, 78-3111, 12 Env't Rep. Cas. (BNA) 1705, 1706 (E.D. La. Dec. 22, 1978). See also *Creppel v. United States Army Corps of Eng'rs*, 500 F. Supp. 1108, 1115 (E.D. La. 1980), *rev'd on other grounds*, 670 F.2d 564 (5th Cir. 1982) (finding that closure of a pipeline canal with fill in conjunction with construction of a pumping station would result in the destruction of a 3,700-acre tract of wetlands and, therefore, was within the scope of section 404); *Bayou Des Familles Dev. v. United States Army Corps of Eng'rs*, 541 F. Supp. 1025, 1037 (E.D. La. 1982) (finding that discharges of dredged or fill material as part of plaintiff's levee project construction constituted discharges of pollutants into navigable waters within the meaning of the Clean Water Act).

187. *Orleans Audubon Soc'y v. Lee*, 742 F.2d 901, 910 (5th Cir. 1984). Orleans Audubon had argued that a "plug" of dirt was washed through the canal during the

A district court in Texas recently concluded that drainage of a wetland, which presents the threat of significant alteration or destruction of that wetland, is in fact a regulated activity requiring a permit under section 404, without a demonstration of a point source discharge.¹⁸⁸ This finding was reached despite the fact that EPA and the Corps determined that they did not have the jurisdiction to require a permit, where the only activity conducted on a legally-designated wetland was draining or dewatering.¹⁸⁹ Whether this decision is legally correct can be debated given the explicit language in the Act and its legislative history referring to "point source discharges."¹⁹⁰

installation of the culverts, and that this "discharge of dirt, no matter how small, violated the CWA." *Id.* at 910. The *Orleans* court noted in a footnote that the government in the *Avoyelles III* litigation had expressed the position that *de minimis* discharges do not require permits under section 404. *Id.* at 910 n.17. The *Orleans* court did not base its decision on this ground, however, but explicitly found that there was no evidence in the record that would confirm that dirt had been deposited either into the tract or into the canal. *Id.* at 910. In the referenced *Avoyelles III* decision, the Fifth Circuit noted that the government had suggested that *de minimis* discharges do not require a section 404 permit and seemed to question this position with a reference to *Minnehaha Creek Watershed Dist v. Hoffman*, 597 F.2d 617, 626-27 (8th Cir. 1979), and with the following statement:

Had the Corps been permitted to make the initial determination [of which activities could be allowed], it might have concluded that the permit should issue because of the *de minimis* impact of the activities, a factor it was free to consider in making its determination, rather than suggesting that no application be made in the first place.

Avoyelles III, 715 F.2d 897, 919 n.37 (5th Cir. 1983). In this statement, the *Avoyelles* court suggested, correctly, that the *de minimis* nature of a discharge may be considered in the decision whether or not a permit should be granted for a given activity once applied for, but should not factor in whether or not a permit is necessary or should be applied for in the first instance. Both of these cases indicate that courts, rather than adopting the agencies' view that *de minimis* discharges are exempt from the, have looked to the record to determine if in fact any discharge at all has occurred.

188. *Save Our Community v. EPA*, 741 F. Supp. 605, 611-15 (N.D. Tex. 1990).

189. *Id.* at 609.

190. The Senate Environment and Public Works Committee, commented in the legislative history of the 1977 CWA Amendments as follows:

Section 404 of the Federal Water Pollution Control Act Amendments of 1972 required a permit program to control the adverse effects caused by *point source discharges* of dredged or fill material into the navigable waters including: (1) the destruction and degradation of aquatic resources that results from replacing water with dredged material or fill material; and (2) the con-

On the other hand, when Congress enacted the Clean Water Act, it stated that the objective of the Act was to "re-store and maintain the chemical, physical, and biological integrity of the Nation's waters."¹⁹¹ There is, thus, a tension between the Act's goal of protecting the integrity of aquatic resources and the requirement for a "point source discharge" of "dredged or fill material". In any event, the evident intent of Congress, as expressed in the goal of the Act, argues for a broad interpretation of the scope of section 404 jurisdiction over agricultural conversion activities. Whether the *Save Our Community* decision is legally defensible or not,¹⁹² it highlights both the inherent problem of the current wording of section 404¹⁹³ as well as the narrow regulatory interpretation

tamination of water resources with dredged or fill material that contains toxic substances. The committee amendment is designed to reaffirm this intent and dispel the widespread fears that the program is regulating activities that were not intended to be regulated.

S. Rep. No. 95-370, 95th Cong., 1st Sess. at 74-75 (1977) (emphasis added). See, e.g., *Reid v. Marsh*, 20 Env't Rep. Cases (BNA) 1337, 1341-42 (N.D. Ohio Jan. 4, 1984) (citing Professor Blum [sic], "Section 10 [of the Rivers and Harbors Act] permits are required for dredging activities that excavate material even though no material is placed in navigable waters. In contrast, section 404 permit requirements apply only to . . . discharges of dredged or fill material").

191. CWA § 101(a), 33 U.S.C. § 1251(a) (1988). In *United States v. Riverside Bayview Homes*, the Supreme Court stated: "This objective incorporated a broad, systemic view of the goal of maintaining and improving water quality: As the House Report on legislation put it, 'the word 'integrity'. . . refers to a condition in which the natural structure and function of ecosystems is [sic] maintained. H.R. Rep. No. 92-911, p.76 (1972).'" 474 U.S. 121, 132-33 (1980).

192. The result in the *Save Our Community* case, that the defendant's drainage activities were regulated under section 404, is supportable, but on other grounds. The court specifically found that some minor discharges had occurred at the site, (Findings of Fact No. 14), but expressly stated that it would not rule on the issue of whether *de minimis* discharges were regulated under section 404, since it found that drainage *per se* was a regulated activity in this instance, which required a 404 permit. 741 F. Supp. 605, 609, 613 n. 11 (N.D. Tex. 1990). Because *any addition of any pollutant* is a "discharge" under the Clean Water Act, see *infra* notes 200-206 and accompanying text, the minor discharges that occurred during the defendants drainage activities were sufficient to bring these activities within 404 jurisdiction.

193. Sections 301 and 404 address only "point source" "discharges" of "dredged" or "fill material" leaving activities without such discharges arguably unregulated under the Act. As the Court in *Save Our Community* stated: "It would seem to stand logic on its head . . . to permit a landowner to avoid the section 404(b) [permitting] process by completely draining a land and then claiming 'Permit for what wetland?'" 741 F. Supp. at 615.

of what constitutes a "point source discharge," applied by the agencies responsible for implementing section 404.

3. "De minimis" Discharges

Although activities with "de minimis" discharges may have minimal impacts in some circumstances, when they are part of landclearing or drainage activities intended to convert wetlands to upland for agricultural use or other uses, they may have significant individual and cumulative impacts. With respect to both landclearing¹⁹⁴ and drainage activities,¹⁹⁵ however, the Corps and EPA have taken a narrow view of what constitutes a point source "discharge of dredged or fill material" necessary to find that an activity is within section 404 jurisdiction and therefore requires a permit.¹⁹⁶ Although the Corps has more recently recognized that mechanized landclearing involving the redeposit of soils is generally a regulated activity under section 404,¹⁹⁷ neither the EPA nor the Corps have repudiated their previously stated positions that "de minimis" discharges, such as spillage from a bulldozer's load or drippings from a dragline or clamshell bucket, do not require a permit under section 404.¹⁹⁸ Although the courts

194. See, e.g., *Avoyelles I*, 437 F. Supp. at 532 (EPA and the Corps argued along with private defendants that removal of trees and vegetation, which were then wind-drowed and allowed to naturally deteriorate, was not a discharge).

195. See, e.g., 741 F. Supp. at 609 (EPA and the Corps determination that they did not have jurisdiction over defendants drainage activities despite the fact that these activities involved "minor" discharges at the site).

196. See, e.g., U.S. Army Corps of Engineers, Regulatory Guidance Letter (RGL) 85-4: *Avoyelles* (Mar. 29, 1985 expired Dec. 31, 1987) [hereinafter RGL 85-4] (stating that the Fifth Circuit's decision in *Avoyelles* does not change the Corps' policy that a permit is not required for the mere removal of vegetation from the land; also stating that the felling of a tree in a water of the United States is not a 404 discharge).

197. See, e.g., U.S. Army Corps of Engineers, Regulatory Guidance Letter (RGL) 90-5: *Landclearing Activities Subject to Section 404 Jurisdiction* (July 18, 1990 expiring Dec. 31, 1992) [hereinafter RGL 90-5] (the Corps' present guidance states that, as a general rule, mechanized landclearing is a regulated activity under section 404, but indicating that cutting trees above the soils surface is not a regulated activity).

198. For an example of the EPA's statement of this view, see Memorandum from Cortney M. Price, U.S. Env'tl. Protection Agency Acting Associate Administrator and General Counsel to Glenn Kinser, Maryland Fish and Wildlife Service, entitled *Applicability of Section 404 of the Clean Water Act to Certain Channelization and Stream Maintenance Activities* (April 5, 1983). For examples of the Corps' statement

were split on the issue of whether dredging itself is a regulated activity under section 404 prior to the revised Corps regulations,¹⁹⁹ arguably *any* discharge from the dredging or excavation of wetlands or from landclearing activities is sufficient to bring an activity under the scope of section 404,²⁰⁰ and such an interpretation is more consistent with the language²⁰¹ and the broad purposes of the Clean Water Act. Section 502(12) of the Clean Water Act defines the term "discharge of a pollutant" to include "*any addition of any pollutant to navigable*

of this position, see 33 C.F.R. § 323.2(d) (Corps' definition of "discharge of dredged material" stating that the term does not include *de minimis* discharges); see *supra* note 132 for full text; see also 51 Fed. Reg. 41,206, 41,210 (1986) (preamble to Corps' regulations introducing the term *de minimis* discharges to describe those discharges that are so minimal or inconsequential as to warrant no federal review); RGL 85-4, *supra* note 196 (stating that the Fifth Circuit did not decide whether *de minimis* discharges are exempt from the 404 permit requirement and, therefore, the Court's decision does not alter the current Corps policy stating that permits are not required for such discharges).

199. See *Weiszmann v. District Eng'r, United States Army Corps of Eng'rs*, 526 F.2d 1302, 1305 (5th Cir. 1976) (ruling that the dredging involved was subject to section 404 since it would be impossible to dredge the canal in question without sediment entering the pre-existing canal). Compare *United States v. Lambert*, 18 Env't Rep. Cas. (BNA) 1294, 1296 (M.D. Fla. June 3, 1981), *aff'd*, 695 F.2d 536 (11th Cir. 1983) (holding that back-spill from a dredge line does not constitute the discharge of a pollutant for purposes of Section 301 of the Clean Water Act when the dredged spoil simply falls back into the area from which it was taken). The *Lambert* court stated that "such an event cannot reasonably be considered to be the addition of a pollutant," distinguishing the *Weiszmann* decision on the grounds that in *Weiszmann* the dredging apparently caused sediment to enter another canal. 18 Env't Rep. Cas. (BNA) at 1296. The *Lambert* court did find that several other activities at the site violated section 301, including the placing of a fill mat on a wetland, the dripping of spoil on wetlands adjacent to the dredged sites, and the construction of fill roads in wetlands. *Id.*

200. See *Reid v. Marsh*, 20 Env't Rep. Cas. (BNA) 1337, 1341-42 (N.D. Ohio Jan. 4, 1984) (holding that a minor dredging project was within the Corps' jurisdiction under section 404 and specifically holding that *de minimis* discharges occurring during normal dredging operations "[a]re not exempted from the section 404 permit program").

201. See *NRDC v. Costle*, 568 F.2d 1369 (D.C. Cir. 1977). In this case, the Fourth Circuit held that the plain language of section 301 makes clear that any discharge of pollutants without a permit is prohibited and that EPA is without authority to exempt categories of point sources from regulation under section 402 of the Clean Water Act. *Id.* at 1374-1375. Although this case dealt with EPA's NPDES permit program, it is directly applicable to the 404 program since section 301 is the basis for regulation under both the 402 and 404 permit programs.

waters from any point source."²⁰² The legislative history of the Act plainly states: "Any discharge of a pollutant without a permit . . . under section 404 is unlawful."²⁰³ The courts have rejected the argument that "significant alteration in water quality must be demonstrated before the addition of a particular substance to navigable waters can be classified as the discharge of a pollutant."²⁰⁴ Congress decreed in the Clean Water Act that discharges of certain substances into the waters of the United States are subject to regulation under the Act.²⁰⁵ Congress did not provide that these listed substances could be considered "pollutants" "only upon a further administrative or judicial finding that their addition to navigable waters results in a significant decrease in water quality."²⁰⁶

The *Save Our Community v. EPA* litigation illustrates the fact that the Corps has adopted a narrow view of what constitutes a "discharge of dredged or fill material," by effectively sanctioning activities that degrade or destroy large amounts of wetlands. Worse, the EPA is not using its oversight authority to force the Corps to regulate such activities. A good example is provided by a recent citizen suit brought against EPA and the Corps by the National Wildlife Federation.

In November of 1990, the National Wildlife Federation and its North Carolina affiliate brought suit against the Corps and EPA for their failure to regulate certain clearing and drainage activities at two sites in coastal North Carolina.²⁰⁷ In

202. CWA § 502(12), 33 U.S.C. § 1362(12) (1988).

203. H.R. No. 911, 92d Cong., 2d Sess. 100 (1972) (emphasis added).

204. See *Minnehaha Creek Watershed Dist. v. Hoffman*, 597 F.2d 617, 627 (8th Cir. 1979) (reversing the district court's finding that a significant alteration in water quality must be shown, and holding that defendant's construction of dams and riprap into navigable waters was subject to section 404 permitting program).

205. CWA § 301, 33 U.S.C. § 1311(a) (1988).

206. See *supra* note 204. In fact, the regulatory system in place prior to the FWPCA Amendments of 1972 did require such a showing. The regulatory program was based on state-developed ambient water quality standards which depended on the designated uses for a particular waterbody. "Enforcement was possible only where a discharge reduced the quality of a receiving stream below the specified ambient level." ROGER W. FINDLEY & DANIEL A. FARBER, *ENVIRONMENTAL LAW IN A NUTSHELL* 102 (1983).

207. *National Wildlife Federation v. Suerman*, No. 90-713-CIV-5-BO (E.D.N.C.

its complaint, the NWF alleged that the Corps illegally authorized, and failed to require, a permit for discharges associated with the clearing of 600 acres of wetlands and the drainage or flooding of 250 additional acres of wetlands at one site;²⁰⁸ and the clearing, ditching, and draining of 100 acres of wetlands at a second site. The National Wildlife Federation contended that Corps personnel, after observing clearing and drainage activities over a period of months at the first site and four years at the second site, determined that the hydrology of certain ditched and drained wetlands had been sufficiently altered so that these areas could no longer be considered jurisdictional wetlands and were therefore "removed from jurisdiction."²⁰⁹

If an individual excavates drainage ditches or removes wetlands vegetation from a site, there will inevitably still be some incidental discharge of dredged or fill materials.²¹⁰ Any discharge of dredged or fill material in a jurisdictional wetland, no matter how small, incidental, or "de minimis," should serve as the basis for jurisdiction under section 404. To allow otherwise would ignore the tremendous cumulative losses which have resulted in the destruction of over half of the 220 million acres of wetlands originally found in the coterminous United States,²¹¹ and ignore Congressional intent as expressed in section 404(f)(2) that such incidental discharges be regulated.²¹² Moreover, where an activity, having no discharge associated with it (such as using pumps and hoses to drain a wetland), or which takes place outside of the waters of the United States (such as lowering the ground water table through lateral ditches), is intended to result in and does result in the destruction of wetlands, that activity could still be regulated under a "normal circumstances" argument.²¹³

The federal definition of wetlands includes those areas

filed Nov. 3, 1990).

208. *Id.* at 3.

209. *Id.* at 24, 32.

210. *See supra* notes 142, 180-183.

211. *See supra* notes 9-10 and accompanying text.

212. *See supra* notes 156-158 and accompanying text.

213. *See infra* notes 214-216 and accompanying text.

which are "inundated or saturated . . . 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."²¹⁴ As this definition makes clear, wetlands vegetation is required to be found only under normal circumstances. Where an individual has illegally converted wetlands so that they no longer exhibit wetland characteristics, 404 jurisdiction continues since the site would still be a jurisdictional wetland but for the individuals unauthorized "abnormal" activities.²¹⁵ If the Corps were to announce that it had authority to regulate post conversion discharges, as in a situation where an individual had drained a wetland to avoid 404 permitting requirements, this might deter defendants from moving forward with the development of a site without applying for section 404 permit.²¹⁶

Where farming activities such as normal plowing, cultivation, and harvesting can be undertaken without resulting in the reduction in the reach of the waters of the United States or the significant alteration of such waters, they are arguably exempt from 404 permit requirements.²¹⁷ On the other hand, landclearing and drainage activities aimed at converting wetlands to croplands will clearly result in the destruction or significant degradation of those wetlands. Congress did not intend to exempt such activities from the 404 program,²¹⁸ and these activities should be closely regulated by the Corps and EPA, especially in light of the significant impact these activi-

214. 33 C.F.R. § 328.3(b) and 40 C.F.R. § 230.3(t) (1990). (emphasis added).

215. See *Golden Gate Audubon Soc. v Army Corps of Eng'rs*, 700 F. Supp. 1549, 1557, *amended*, 717 F. Supp. 1417 (N.D. Cal. 1988) (holding that permitless discharges of fill material that are in violation of the CWA may not be used to establish the normal circumstances of a site). See also *United States v. Larkins*, 657 F. Supp. 76, 82 (W.D. Ky. 1987), *aff'd*, 852 F.2d 189 (6th Cir. 1988) (stating that "normal circumstances end when a landowner's activities modify the hydrological conditions of a site . . . [t]hus to determine whether the Larkins' property supported a prevalence of wetland vegetation under normal circumstances, the court must determine what type of vegetation dominated the site prior to construction of the dikes and levees").

216. See *Save Our Community v. EPA*, CA 3-90-0799-11, at 13 (N.D. Tex. July 30, 1990) (Amici Curiae Memorandum of the Environmental Defense Fund and National Wildlife Federation). See also *supra* note 142.

217. See *supra* notes 143-149, 152-155 and accompanying text.

218. See *supra* notes 150-151, 156-158 and accompanying text.

ties have had historically on the wetlands resource.

V. The Narrowing of Section 404 Jurisdiction Over Agriculture

Because agricultural activities, primarily drainage and land clearing, are responsible for the majority of wetlands losses,²¹⁹ it is surprising, but perhaps not unexpected,²²⁰ that EPA and the Corps have acted recently to narrow their jurisdiction over agricultural wetlands. This section discusses two recent actions, the first with regard to prior converted croplands, and the second relating to the agencies' proposed revision of the Federal Manual for Identifying and Delineating Jurisdictional Wetlands, which will have the effect of narrowing the reach of the 404 program over agriculture.

A. RGL 90-07 and the Normal Circumstances of Conversion

On September 26, 1990, the Corps, with EPA concurrence, issued Regulatory Guidance Letter 90-07²²¹ ostensibly to clarify the term "normal circumstances"²²² as it pertains to cropped wetlands. The effect of this guidance was to remove 20 to 60 million acres of wetlands from Clean Water Act jurisdiction.²²³ Under the guidance, wetlands which were both

219. Conversion to agriculture resulted in 87% of the losses between the 1950's and 1970's, and 54% of wetland losses between the 1970's and 1980's. See 1991 F&WS TRENDS REPORT, *supra* note 9, at 2. See also *supra* notes 11, 32-35 and accompanying text.

220. This action is not necessarily unexpected, given the past efforts by the Corps to limit its authority under section 404 and given EPA's acquiescence in a number of these actions. See *supra* notes 64-73 and accompanying text.

221. U.S. Army Corps of Engineers, Regulatory Guidance Letter 90-07: *Clarification of the Phrase "Normal Circumstances" as it Pertains to Cropped Wetlands* (September 26, 1990) [hereinafter cited as RGL 90-07], reprinted in 56 Fed. Reg. 2408-12 (1991) (publication of RGL 90-07 as well as all other current Corps regulatory guidance letters).

222. The guidance interprets the definition of "normal circumstances" as used in the regulatory definition of wetlands: "areas that are inundated or saturated by surface or groundwater 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)(1990); 40 C.F.R. § 230.3(t)(1990) (emphasis added).

223. See *Millions of Acres of Converted Wetlands No Longer Subject to Federal*

manipulated²²⁴ and cropped before December 23, 1985,²²⁵ are classified as "prior converted cropland" and are exempted from section 404 jurisdiction unless those wetlands are inundated for more than 15 days during the growing season.²²⁶

RGL 90-7 exempts these prior converted wetlands based on the assumption that these areas have received such extensive physical alteration that they would no longer support wetlands vegetation, if cropping were ceased.²²⁷ In effect, what the RGL does is to make conversion the "normal circumstance" for these prior converted wetlands.²²⁸ RGL 90-07 establishes an un rebuttable presumption that a "prior converted cropland" is not a wetland, and thus creates an outright exemption of these lands from Clean Water Act juris-

Water Act Permits, 21 Env't Rep. (BNA) 1120 (Oct. 5, 1990).

224. The term "manipulated" means "drained or otherwise physically altered to remove excess water from the land." RGL 90-07, *supra* note 221, at 5a.

225. This is the effective date of the 1985 Food Security Act. Under the "swampbuster" provisions of this act and the 1989 Farm Bill, farmers who convert wetlands after this date lose their eligibility for federal farm benefits. *See also supra* notes 45-51 and accompanying text.

226. Wetlands which were both manipulated and cropped before December 23, 1985, but which are inundated for 15 consecutive days during the growing season (or 10% of the growing season whichever is less) are classified as "farmed wetlands" and remain subject to section 404 jurisdiction under this RGL. RGL 90-07, *supra* note 221, at 5b and 5c. Farmed wetlands also include cropped potholes and playas. There seems to be no scientific or legal basis for distinguishing between inundated and saturated soils in this instance, with only wetlands inundated for more than 15 days during the growing season remaining subject to 404 requirements. In *Riverside Bayview Homes*, the Supreme Court rejected the Sixth Circuit's finding that soil saturation from groundwater was insufficient to serve as the basis for Clean Water Act Jurisdiction and that inundation from frequent flooding was required. *See United States v. Riverside Bayview Homes*, 474 U.S. at 130.

227. The RGL states: "In contrast to 'farmed wetlands,' prior converted croplands, generally have been subject to such extensive and relatively permanent physical hydrological modifications and alteration of hydrophytic vegetation that the resultant cropland constitutes the 'normal circumstances' for purposes of section 404 jurisdiction." RGL 90-07, *supra* note 221, at 5d.

228. *See Memorandum Jan Goldman-Carter to Jay D. Hair, President of the National Wildlife Federation 2* (October 17, 1990) [hereinafter *National Wildlife Memorandum*] (stating that "[s]ince hydrophytic vegetation will often return to PC wetlands once cropping ceases, the Corps has apparently manufactured a new and different definition of 'normal circumstances': rather than referring to the vegetation that will return when the alteration ceases, the term now seems to refer to the historically established use of the land").

diction.²²⁹ This presumption is not scientifically supportable because prior converted wetlands still exhibit important wetland values.²³⁰ This presumption arbitrarily results in the exemption of all wetlands which were cropped prior to December 23, 1985, and which are inundated for less than 15 days during the growing season. This interpretation is contrary to the definition of "normal circumstances" as it has been interpreted by the courts²³¹ and is also inconsistent with the definition of "normal circumstances" in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands.²³²

Because the effect of RGL 90-07 is to create an outright exemption from section 404 jurisdiction, it arguably is not regulatory "guidance" but is a substantive rulemaking and is invalid because it was issued without the notice and opportunity for comment required under the Administrative Procedure Act.²³³ Congress intended that the Clean Water Act be given the "broadest possible constitutional interpretation unencumbered by agency determinations which have been made or may be made for administrative purposes."²³⁴ Neither the Corps nor EPA have authority to promulgate rules restricting

229. *Id.*

230. See Jan Goldman-Carter, *Cropped Wetlands Deserve Protection, Too*, NAT'L WETLANDS NEWSL., Nov.-Dec. 1990, at 3 (prior converted wetlands perform significant wetland functions such as providing flood water retention, groundwater recharge, water quality improvement, and waterfowl habitat); see also National Wildlife Memorandum, *supra* note 228.

231. See *Golden Gate Audubon Soc. v. Army Corps of Engineers*, 700 F. Supp. 1549, 1557, *amended*, 717 F. Supp. 1417 (N.D. Cal. 1988) (holding that permitless discharges of fill material that are in violation of the CWA may not be used to establish the normal circumstances of a site); see also *United States v. Larkins*, 657 F. Supp. 76, 82 (W.D. Ky. 1987), *aff'd*, 852 F.2d 189 (6th Cir. 1988) (stating that "normal circumstances end when a landowner's activities modify the hydrological conditions of a site . . . [t]hus to determine whether the Larkins' property supported a prevalence of wetland vegetation under normal circumstances, the court must determine what type of vegetation dominated the site prior to construction of the dikes and levees").

232. See *FEDERAL WETLANDS MANUAL*, *supra* note 95, at 71 (stating that the term "normal circumstances" "refers to the soil and hydrology conditions that are normally present, without regard to whether the vegetation has been removed"). See also National Wildlife Memorandum, *supra* note 228.

233. 5 U.S.C. § 553 (1988).

234. S. CONF. REP. NO. 1236, 92d Cong., 2d Sess. 144 (1972).

the jurisdiction of the Act.²³⁵ Thus, once a determination is made that a site meets all the requirements of a wetland, and thus is a water of the United States, the Corps and EPA cannot exempt the area from Clean Water Act jurisdiction based on policy considerations, as they have purported to do with prior converted croplands under RGL 90-07. Finally, providing such an exemption for prior converted croplands appears to be in direct conflict with congressional intent, as declared in section 404(f)(2). Through section 404(f)(2) Congress expressed its intent that discharges which cause more than minimal adverse impacts should be subject to the permitting requirements of section 404.²³⁶

B. Revision of the Federal Wetlands Manual

The issuance of RGL 90-07, which removed millions of acres of prior converted wetlands from the protection of section 404, pales in comparison to the latest administrative action restricting the scope of the 404 program. On Friday, August 9, 1991, President Bush announced a new administration wetlands policy which alters the definition of what constitutes a wetland, removing from 404 protection up to one-half of the approximately 100 million acres of wetlands remaining in the contiguous United States.²³⁷ The self-proclaimed "Environ-

235. See *NRDC v. Callaway*, 392 F. Supp. 685 (D.D.C. 1985). In this case the district court for the District of Columbia ruled that: "Congress, by defining the term 'navigable waters' in Section 502(7) of the Federal Water Pollution Control Act Amendments of 1972 . . . to mean 'the waters of the United States, including the territorial seas,' asserted federal jurisdiction over the nation's waters to the maximum extent permissible under the Commerce Clause of the Constitution." The Court declared that the Secretary of the Army and the Chief of the Army Corps of Engineers were "without authority to amend or change the statutory definition of navigable waters" and had "acted unlawfully and in derogation of their responsibilities under Section 404" in so doing, and the Court ordered the Corps to revise its regulations to reflect the "full mandate" of the Clean Water Act. *Id.* at 686. See also *NRDC v. Costle*, 568 F.2d 1369 (D.C. Cir. 1977), discussed *supra* note 201. If the agencies chose to do so, they could possibly issue a general permit for prior converted wetlands, but only after notice and comment rulemaking.

236. See *supra* notes 156-158 and accompanying text.

237. See *Fact Sheet: Protecting America's Wetlands*, the White House Office of the Press Secretary (August 9, 1991) (hereinafter *White House Proposal*). See also Michael Weisskopf, *Half of Wetlands in U.S. Could Lose Protected Status*, *The*

mental President" endorsed an agreement, negotiated by Vice President Quayle, which changes the technical criteria for jurisdictional wetlands as previously defined in the 1989 Federal Manual for Identifying and Delineating Jurisdictional Wetlands.²³⁸ Although this action does not address agricultural wetlands specifically, its implications to the problem of the agricultural conversion of wetlands are obvious. Lands removed from 404 jurisdiction as a result of the Administration's redefinition of wetlands may be converted to agricultural uses without the protection previously afforded by the 404 regulatory program.

The most significant change instituted by the Bush proposal relates to the technical requirements for hydrology under the three-parameter test for wetlands identification.²³⁹ Under the 1989 manual, seven consecutive days of inundation or saturation (within eighteen inches of the surface), during the growing season, was sufficient for a finding of 404 jurisdiction.²⁴⁰ The new proposal would require at least 15 consecutive days of inundation or 21 consecutive days of saturation to the surface, during the growing season, before wetlands are considered within 404 jurisdiction.²⁴¹

Wash. Post, Nov. 2, 1991, at A2; Michael Weisskopf, *Wetlands Policy Shift Announced: Bush Endorses Plan Easing Protection for Millions of Acres*, The Wash. Post, Aug. 10, 1991, at A1, col. 1 [hereinafter *Wetlands Policy Shift*]; see generally, *New Administration Wetlands Policy Focuses on Definition, Permit Process*, 22 Env't Rep. (BNA) 1052 (Aug. 16, 1991). The Administration proposal also calls for establishment of a mitigation banking system for wetlands, based on the unproven science of wetlands restoration and creation, and endorses the questionable policy of wetlands categorization, with various levels of protection for different types of wetlands. See, e.g., *Too Little Known About Functions for Protection Based on Classification*, 21 Env't Rep. (BNA) 2,226 (Apr. 12, 1991).

238. See *Wetlands Policy Shift*, *supra* note 237, at A1. See also Michael Weisskopf, *Wetlands Protection and the Struggle over Environmental Policy*, The Wash. Post, Aug. 8, 1991, at A17, col. 1 [hereinafter *Wetlands Protection*]. On August 14, 1991, EPA, the Corps, the Soil Conservation Service, and the Fish and Wildlife Service announced, in the Federal Register, their proposal for the revised wetlands manual negotiated by the Administration. See 56 Fed. Reg. 40446 (1991).

239. See *supra* notes 118-123 and accompanying text.

240. See FEDERAL WETLANDS MANUAL, *supra* note 95, at 7.

241. See 56 Fed. Reg. 40452 (1991). See also *Wetlands Protection*, *supra* note 238. Again, the basis for the distinction between saturated and inundated soils seems questionable from a legal as well as a ecological standpoint. In *Riverside Bayview*

The Bush Administration has justified this action on the grounds that the 1989 manual brought many acres of lands, that were not truly wetlands in the functional sense, into 404 jurisdiction, and because it was believed necessary to protect farmers from overregulation by federal agencies.²⁴² In fact, the 1989 manual espoused a definition of wetlands which included about the same number of acres within 404 jurisdiction as had generally been thought to be wetlands for years.²⁴³ Although some aspects of the President's August 9 proposal would be a step forward for wetlands protection,²⁴⁴ the proposed revision of the definition of wetlands attempts to achieve the goal of "no net loss" by simply defining away a large portion of this country's wetlands.²⁴⁵ Those who wish to develop these wetlands may gain short term benefits from the Administration's proposal. However, the long term environmental costs from the loss of wetlands, no longer protected by the 404 program, will be significant.

VI. The Need for Administrative Reform and Legislative Action

Although Section 404 is the primary mechanism for wetlands protection, it is clear that, as to the regulation of the farming activities which are responsible for the vast majority

Homes, the Supreme Court pointed out that saturation of soils from groundwater or inundation from flooding could equally serve as the basis for Clean Water Act Jurisdiction. See *United States v. Riverside Bayview Homes*, 474 U.S. 121, 129-30.

242. See *Bush Defends Decision on Wetlands, Denies Deviation From Campaign Pledge*, 22 *Env't Rep. (BNA)* 1149 (Aug. 23, 1991) (quoting President Bush as saying that the new policy towards wetlands is needed to protect farmers from "some bureaucrat in Washington" and that he had not broken his no-net-loss pledge).

243. *Id.* Scientists have questioned the technical, as opposed to the political, justifications for the proposed changes to the federal wetlands manual. See Michael Weisskopf, *Rewriting the Book on Wetlands: Scientists Wash Hands of White House's Definition of Protected Areas*, *The Wash. Post*, May 3, 1991, at A23.

244. The President's proposal would back a statutory amendment to section 404 to cover activities such draining and dredging for at least some wetlands, increase funding of wetlands protection programs, and initiate an Administration-wide wetlands restoration and creation program on Federal lands. See *White House Proposal*, *supra* note 237, at 2.

245. If an area to be filled is no longer defined as a wetland, its destruction will not count as a debit in the "no net loss" equation.

of wetlands losses in this country, it has largely been a failure.²⁴⁶ Despite the fact that Clean Water jurisdiction under section 404 is broad, both in its geographic scope and the types of activities which are potentially regulated under section 404, significant losses of wetlands to agricultural conversion continue.²⁴⁷

Congress declared that the objective of the Clean Water Act was "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters,"²⁴⁸ but established a statutory scheme under section 301 of the Act which would ultimately be unable to achieve this goal. There are some activities which result in the deterioration and degradation of wetlands and other waters that do not easily fit within this regulatory framework, because they result in no identifiable point source discharge. Wetlands losses are thus occurring as a result of the inherent limitation of section 404, that it regulates only point source discharges of dredged or fill material. Wetlands are also being lost from the way the 404 program is presently implemented,²⁴⁹ and from the narrow interpretation of what constitutes a "discharge of dredged or fill material"

246. The rate of wetlands loss to agriculture has decreased in recent years from 87% during the 1950's to 1970's down to 54% for the period from the 1970's to the 1980's. See 1991 F&WS TRENDS REPORT, *supra* note 9, at 2. Conversion to agriculture still results in more wetlands losses each year than all other land uses combined (41%). *Id.*

247. See Legislative History of the 1990 Farm Bill, *supra* note 32, at 216 (stating that the committee recognized the role that agriculture has played in the conversion of wetlands in this country, and stating that recent data suggest that hundreds of thousand of acres of wetlands continue to be converted for agricultural purposes each year).

248. CWA § 101, 33 U.S.C. § 1251 (1988).

249. The Corps estimates that of the 15,000 permits it receives annually, under section 404 of the CWA and section 10 of the Rivers and Harbors Act, only 500 (approximately 3%) are denied while 10,000 are issued (the 4,500 others are either withdrawn by the applicant, canceled by the Corps or qualify for authorization under a general permit). See Testimony of G. Edward Dickey, Acting Principal Deputy Assistant Secretary of the Army (Civil Works) Before the Senate Committee on Environment and Public Works (July 10, 1991) [hereinafter Corps Testimony]. In addition, the Corps estimates that it verifies authorization of 40,000 activities annually under the terms and conditions of regional and nationwide general permits, and estimates that another 40,000 activities are completed each year under general permits which do not require reporting. *Id.* at 3.

that the Corps and EPA have adopted.

Rather than trying to expand their regulation over the conversion of wetlands to agricultural uses, the Corps and EPA have exempted millions of acres of prior converted wetlands from 404 jurisdiction. While the Corps has failed to aggressively regulate activities associated with the conversion of wetlands to croplands in the field, EPA has failed to use its oversight authority to ensure that such activities are regulated. The Agencies have apparently decided that the administrative and political costs of such regulation are too high, and have attempted to avoid the political and legal battles such regulation would entail. The agencies have been in a reactive mode in response to increased pressure from public interest groups, the White House, and members of Congress aimed at limiting the wetlands protection requirements of the 404 program. But given the importance of the resource at stake, the agencies must make every effort to preserve federal wetlands protection under section 404 and not acquiesce in the restriction of the scope of 404 jurisdiction.

To reduce the rate of wetlands loss to agricultural conversion and other types of development, the Corps and EPA should issue regulations clearly indicating that activities such as drainage and removal of wetlands vegetation are presumed to involve discharges and are regulated under 404.²⁵⁰ The agencies should also move to clarify the issue of what constitutes "waters of the United States" by initiating a rulemaking to include use and potential use of waters by migratory birds as a basis for Clean Water Act jurisdiction.²⁵¹ In addition, the agencies should rethink their exemption of prior converted wetlands, and, at a minimum, should initiate a rulemaking regarding such wetlands. A nationwide permit with conditions and a pre-discharge notification requirement would be better than the outright exemption of such lands from 404

250. Apparently, the Corps has been considering proposing a rule that would "clearly require that drainage, channelization, excavation activities in the Waters of the United States will be regulated under section 404." See Corps Testimony, *supra* note 249, at 13. The Corps should immediately initiate such rulemaking proceedings along with EPA.

251. See discussion *supra* note 90.

jurisdiction.

The President's endorsement of the restriction of 404 jurisdiction through changes to the federal wetlands manual contradicts his pledge to support "no net loss" of wetlands. Achieving the goal of "no net loss" by defining wetlands out of existence will do nothing towards advancing the true goal of protecting this country's valuable wetlands resource. The definition of what constitutes a jurisdictional wetland should be based on a sound scientific consideration rather than politically expediency.

Section 404 should be amended to make the protection of wetlands an express national policy and the avoidance of wetlands losses an explicit goal under the Clean Water Act. Congress should also amend section 404 to expressly provide for wetlands protection, and to broaden its scope to protect the wetlands resource from all types of degradation and conversion, not just point source discharges of dredged or fill material.

A number of bills have been introduced in Congress this session that would cut back on the minimum protection provided wetlands under the 404 program.²⁵² The amendment to the Corps' appropriations bill, limiting the Corps' use of the 1989 manual,²⁵³ is some indication that the battle to protect wetlands and preserve section 404 may be an uphill one. Before Congress takes any action to weaken section 404, it should closely consider the 290,000 acres of wetlands which continue to be lost annually,²⁵⁴ and the fact that more than half of these losses result from agricultural conversion.²⁵⁵ Congress should also consider the fact that section 404, even as it is now drafted and implemented, has failed to stop the vast majority of all wetlands losses.

252. See *supra* note 108.

253. See *supra* notes 109-110 and accompanying text.

254. See 1991 F&WS TRENDS REPORT, *supra* note 9 at 1. In ten years, at the present rate of loss, 2.9 million additional acres of the approximately 100 million acres of wetlands remaining in the coterminous United States will be gone. In one-hundred years, at this rate over a quarter of these remaining wetlands will be destroyed.

255. *Id.* at 2.

It is up to Congress and the Administration, and ultimately all of us, to take responsibility for the continuing loss of the wetlands resource. Wetlands provide invaluable benefits to the human and natural environments.²⁵⁶ We may obtain some short term gain from the increased development of wetlands, but it will come at significant costs. The price that we pay will be in terms of the degradation of our fisheries, decreased water purification and groundwater recharge, lost flood protection, significant declines in fish and wildlife populations, as well as the deterioration of the human environment. We must decide, if this price is too high, and these costs too great.

AUTHOR'S NOTE:

After this article was submitted for publication, the United States and the National Wildlife Federation entered into a settlement agreement in *NWF v. Suermann*, see *supra* footnote 207. As part of this settlement, EPA and the Corps have agreed to issue proposed regulations to clarify the regulatory definition of the term 'discharge of dredged material.' The proposed regulations will indicate that this term includes, without limitation, "any addition or redeposit of dredged materials" associated with "mechanized landclearing, ditching, channelization, or other excavation, which has or would have the effect of destroying or degrading any area of waters of the United States." See Settlement Agreement, *National Wildlife Federation v. Suermann*, No. 90-713-CIV-5-BO (E.D. N.C. Mar. 5, 1992).

256. See *supra* notes 1-8 and accompanying text.