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Federal Wetlands Regulatory Policy: Up to Its Ears in Alligators¹

Hope Babcock*

I. Introduction

Protecting the nation's dwindling wetland resources under section 404 of the Clean Water Act² has been a persistent and discouraging proposition. Section 404 of the Act "lies like an open wound across the body of environmental law."³ Given the ecological and economic value of the resource, this seems puzzling - but only for a moment. An examination of the federal wetlands permitting program reveals significant problems. These problems, combined with ingrained attitudes about the sanctity of private property, lack of public appreciation of wetland values, and insufficient political will to protect them, make it easy to see why wetlands continue to disappear,

1. "It's time to stand the history of wetlands destruction on its head; from this year forward, anyone who tries to drain the swamp is going to be up to his ears in alligators." Keynote Address by President George Bush, Ducks Unlimited, Sixth International Waterfowl Symposium (June 6, 1989), *reprinted in* U.S. FISH & WILDLIFE SERVICE, *WETLANDS: MEETING THE PRESIDENT'S CHALLENGE*, (1990) [hereinafter *WETLANDS: MEETING THE PRESIDENT'S CHALLENGE*].

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2. Clean Water Act (CWA) § 404, 33 U.S.C. § 1344 (1988).

3. Houck, *Hard Choices: The Analysis of Alternatives Under Section 404 of the Clean Water Act and Similar Environmental Laws*, 60 U. COLO. L. REV. 773 (1989) [hereinafter *Houck*].

and why the federal wetlands regulatory program is one of the most controversial of the country's environmental programs.

Recent attempts by the federal government to improve the regulatory program, while laudable, have only served to magnify the program's problems. Each attempt has become a lightning rod for the program's many opponents. Two of these attempts will be discussed in depth in this article. Both initiatives involved the issuance of agency staff guidance documents: one, an inter-agency agreement on federal policy for mitigating wetland losses; the other, a manual containing technical criteria for delineating wetland boundaries. The controversy surrounding these documents has swirled into the halls of Congress and has reached as high as the Oval Office, threatening to unravel gains made in wetlands protection during the first year of the Bush Administration and threatening the very continuation of the federal program in its current form.⁴

While it may be startling that the debate over these administrative initiatives reached such heights and gained so much momentum in the political structure, the controversy should not have been unexpected. In fact, the brouhaha was, sadly, all too predictable from prior experience with this extremely truculent area of environmental policy.

This article examines these two initiatives and attempts to show how the hostility with which they were greeted is illustrative of the deep-seated problems plaguing the wetlands regulatory program. In order to clarify these problems, this article places the initiatives against a backdrop of wetland losses and of imperfections in the protective regulatory program. The rationale behind the initiatives is examined and their contents parsed for the seeds of what was to come. The article concludes with some general recommendations, based

4. President George Bush's announcement that the wetlands policy of his Administration would be "no net loss of wetlands" was greeted as a welcome change from his predecessor, former President Ronald Reagan, whose Assistant Secretary of the Army, William Gianelli, had initiated a series of "regulatory reforms" to get the section 404 Program off the back of Americans and decrease the Corps' regulatory workload. For a detailed description of some of these initiatives, see Houck, *supra* note 3, at 780-84.

upon this analysis, concerning where improvements could be made in the federal approach to protecting wetlands.

II. The Value of Wetlands

Wetlands are among the most productive and valuable ecosystems in the world.⁵ A brief recitation of wetland values helps to illustrate the paradox of the negative response that greeted the two attempts to make the federal regulatory program more effective.

Wetlands are the "farmlands" of the aquatic environment.⁶ Their productivity has been compared favorably to our most productive cornfields.⁷ The detritus from wetland plant fragments forms the base of an aquatic food chain that supports higher consumers, such as various species of fish which are caught for both commercial and sport purposes. As a result, both inland⁸ and coastal wetlands⁹ are essential for maintaining economically valuable fish populations.¹⁰

As particularly efficient converters of solar energy, the resultant biomass also serves as food for a wide variety of terrestrial and avian species, such as muskrat, moose, bear, and waterfowl.¹¹ This ready supply of food makes a wetland the ideal environment for resident birds; providing both a year-round habitat and a critical breeding ground. In addition, wetlands provide over-wintering areas and feeding grounds for

5. Tiner, *Wetlands of the United States: Current Status and Recent Trends*, in U.S. FISH & WILDLIFE SERVICE HABITAT RESOURCES 19 (1984). For a general discussion of wetland values, see *id.* at 13-27.

6. *Id.*

7. *Id.*

8. River swamps in Georgia produce 13,000 pounds of fish per acre. *Id.* at 14 (citing WHARTON, *THE SOUTHERN RIVER SWAMP - A MULTIPLE USE ENVIRONMENT*, 48 School of Business Administration Library, Georgia State University (1970)).

9. Scientific studies demonstrate that there is a direct correlation between shrimp production and the amount of intertidal marsh habitat. *Id.* at 13 (citing Turner, *Intertidal Vegetation and Commercial Yields of Penaeid Shrimp*, 106 TRANS. AMER. FISH SOC. 411-416 (1977)).

10. Approximately two-thirds of the major U.S. commercial fishes depend on estuaries and salt marshes as nurseries or spawning grounds. *Id.* at 13 (citing McHugh, *Management of Estuarine Fishes*, 133-154 (Amer. Fish Soc. Spec. Pub. No. 3, (1966))). See *infra* note 17.

11. *Id.* at 19.

migratory waterfowl and shorebirds.¹² In fact, the "prairie pothole" regions of the Dakotas have been called the nation's "duck factories" because of their importance as breeding grounds for waterfowl.¹³ Wetlands, in their natural state, contribute a variety of environmental and socioeconomic values to society. For example, wetlands help maintain water quality,¹⁴ control erosion,¹⁵ discharge and recharge ground water,¹⁶ and provide opportunities for the harvest of indigenous products including timber, fish,¹⁷ shellfish, peat, cranberries, and wild rice.¹⁸ Wetlands also provide valuable recreational opportunities, such as bird watching, canoeing, hunting, and fishing.¹⁹

Despite their importance, wetlands are not valued by society as a whole. In fact, there is a general perception rooted

12. Myers, *Wildlife and Urban Wetlands* (1988), reprinted in URBAN WETLANDS: PROCEEDINGS OF THE NATIONAL WETLANDS SYMPOSIUM, ASSOCIATION OF WETLAND MANAGERS, INC. at 28-30 (1988) [hereinafter URBAN WETLANDS].

13. Tiner, *supra* note 5, at 14-16.

14. Wetlands remove nutrients, filter chemicals and organic wastes, and trap sediments. *Id.* at 18-19.

15. Wetlands temporarily store flood water and reduce wave surges. Mangroves are considered so valuable in regard to the latter function that the Federal Insurance Administration has required communities to prohibit their destruction or forfeit federal flood insurance. *Id.* at 22-23.

16. For a more detailed discussion of these functions, see *id.* at 23.

17. Experts estimate that approximately two-thirds of the United State's commercial and sport salt water fish catch depends upon coastal estuaries and their wetlands for food, spawning grounds, and nurseries for their young. See, e.g., J. McHUGH, ESTUARINE FISHERIES: ARE THEY DOOMED? 15-27 (1976); 1 ESTUARINE PROCESSES: USES, STRESSES AND ADAPTION TO THE ESTUARY (1981); J. Larson, *Wetland Value Assessment-State of the Art*, 3 No. 2 NAT. WETLANDS NEWSLETTER 4 (1982); WETLAND MANAGEMENT. CONG. RES. SERV. REP. SER. 97-11 (cited in U.S. FISH & WILDLIFE SERVICE, FWS/OBS-84/18, AN OVERVIEW OF MAJOR WETLAND FUNCTIONS AND VALUES, 44 (Sept. 1984)[hereinafter WETLANDS FUNCTIONS AND VALUES]).

18. It should be noted that some of the activities, namely timber production and peat mining, have caused significant wetland losses. For example, since 1970, timber companies in North Carolina, which own nearly 44% of that state's pocosin wetlands, have transferred nearly 500,000 acres to large-scale agriculture. Thirty-three percent of the state's original 2.5 million acres of pocosins have been converted to either agriculture or tree farms; another 36% have been partially drained, cleared or planned for development. Tiner, *supra* note 5, at 49-50.

19. While it is difficult to quantify these values, their importance to America's way of life is illustrated by the fact that in 1980 alone, 17% of the U.S. population took special trips to observe or photograph wildlife. *Id.* at 24.

in this country's history that wetlands are a source of disease and pestilence.²⁰ Wetlands are commonly seen as breeding grounds for mosquitoes and other nuisance insects, plants and wildlife, or as idle or waste lands to be ditched, drained, filled, and converted to a higher societal use.

The economic benefits of wetlands protection usually accrue to society as a whole, while the costs of conservation fall on the property owner in the form of lost investment opportunities, reinforcing negative attitudes toward wetlands conservation. The public benefits of leaving the resource in its natural state are not as easily quantified as are lost investment opportunities, nor are the immediate beneficiaries of a wetland left in its natural state as discernible. This imbalance in equities leads to a perceived injustice in most situations where a conflict over use erupts.

The pressure to convert wetlands to other uses is enormous. Land containing wetlands is valuable for water-based activities such as ports, canals, reservoirs and impoundments, marinas, and vacation homes. Wetlands may overlies mineral and energy deposits or support valuable stands of timber. Land composed of wetlands often offers farmers the best opportunity to increase their cropped acreage, thereby gaining the benefits of federal subsidies. In metropolitan areas, land containing wetlands is often the only available, flat, large, centrally located, cheap land, making wetlands attractive sites for shopping malls, industrial parks and residential developments.

III. Private Property Interest in Wetlands

Complicating the picture is the nation's sanctification of

20. The Swamp Land Acts of 1849, 1850, and 1860 stand as testament to that fact. Under these acts, all swamp and overflow lands in fifteen states (Alabama, Arkansas, California, Florida, Illinois, Indiana, Iowa, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Ohio, Oregon, and Wisconsin) were granted to those states to be drained for agriculture by the construction of levees and drainage ditches. Under these laws, 65 million acres of wetlands were transferred from the federal government to the states. See The Swamp Land Act of 1849, c. 87, 9 Stat. 352; The Swamp Land Act of 1850, c. 84, 9 Stat. 519; The Swamp Land Act of 1860, c. 5, 12 Stat. 3. See also Tiner, *supra* note 5, at 33.

the rights of private property, which is rooted in the Due Process Clause of the Constitution.²¹ Despite a consistent line of cases sustaining most exercises of regulatory power over private property rights,²² the mythology persists that private property ownership is unrestricted. Nowhere is this mythology stronger than in the area of wetland regulation where the public benefits of restrictions are not easily discernible while the expectations of economic gain from conversions are clear.

The combination of negative attitudes toward wetlands, hostility toward the regulation of private property, and unre-

21. The Fifth Amendment of the Constitution provides in relevant part that "private property [shall not] be taken for public use, without just compensation." U.S. CONST. amend. V.

22. Two recent decisions by the U.S. Court of Claims have thrown a shadow over the effect of the Fifth Amendment of the Constitution on the denial of a section 404 permit. See *Florida Rock Indus., Inc. v. United States*, 31 Env't Rep. Cas. (BNA) 1835 (Cl. Ct. July 23, 1990); and *Loveladies Harbor, Inc. v. United States*, 31 Env't Rep. Cas. (BNA) 1847 (Cl. Ct. July 23, 1990); but cf. *Dufau v. United States*, 22 Cl. Ct. 156 (1990) (holding that a 16-month permit processing delay was not extraordinary enough to create a temporary taking). Until these two decisions, the federal courts had consistently declined to find a "taking" when the action substantially advanced a legitimate state interest and/or denied the property owner the economically viable use of his land. See, e.g., *Deltona Corp. v. United States*, 657 F.2d 1184, 1192 (Ct. Cl. 1981), cert. denied, 455 U.S. 1017 (1982); *Alaskan Arctic Gas Pipeline Co. v. United States*, 9 Cl. Ct. 723, 726 (1986), aff'd on other grounds, 831 F.2d 1043 (Fed. Cir. 1987); *Agins v. Tiburon*, 447 U.S. 255, 260 (1980). See also *Keystone Bituminous Coal Ass'n v. DeBenedictis*, 480 U.S. 470 (1987); *Nollan v. California Coastal Comm'n*, 483 U.S. 825 (1987); *First English Evangelical Lutheran Church of Glendale v. County of Los Angeles*, 482 U.S. 304 (1987); *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985); *Penn Central Transp. Corp. v. New York*, 438 U.S. 104 (1978); *Ciampitti v. United States*, 22 Cl. Ct. 310 (1991) (holding that property owners are not entitled to compensation for a taking that allegedly occurred after the Corps denied a CWA section 404 permit because the value of the property had not been significantly diminished, and that any expectation that the property owners had that they could profitably develop wetlands was unreasonable); *Lucas v. South Carolina Coastal Council*, 21 Env'tl. L. Rep. (Env'tl. L. Inst.) 20,837 (S.C. Feb. 11, 1991), cert. granted, 60 U.S.L.W. 3371 (Nov. 19, 1991) (sustaining state setback line prohibiting construction of any permanent structure seaward of setback line); but see *Whitney Benetits, Inc. v. United States*, 32 Env't Rep. Cas. (BNA) 1768 (1991) (holding alluvial valley floor prohibitions in Surface Mining Control and Reclamation Act unconstitutional because they deprived the company of all economically viable use of its property, which could not be cured by the existence of a land exchange provision in the Act); *Rybachek v. United States*, 33 Env't Rep. Cas. (BNA) 1473 (June 17, 1991) (government not entitled to summary judgment in suit by placer mine owners who alleged that Clean Water Act discharge permit limitations deprived them of all economically viable use of their property).

lenting development pressure has contributed to a significant reduction in the country's original wetland base. Over half of the lower forty-eight states' original wetlands have been destroyed.²³ Between mid-1950 and mid-1970, over nine-million acres of wetlands were lost, an average annual net loss of 458,000 acres.²⁴

IV. Wetland Losses

The causes of wetland losses are many and diverse. While natural causes such as rising sea level, subsidence, drought, hurricanes, erosion, and animal activity have contributed to wetland losses, human activities remain the dominant cause.²⁵ For example, agricultural activities, including drainage, account for eighty-seven percent of recent wetland losses.²⁶ Similarly, although urban development has resulted in only eight percent of the documented conversions,²⁷ it has been the pri-

23. OFFICE OF TECHNOLOGY ASSESSMENT, OTA-0-206, U.S. CONGRESS, WETLANDS: THEIR USE AND REGULATION 87 (1984) [hereinafter WETLANDS: THEIR USE AND REGULATION]. The following statistics illustrate the severity and geographic dispersion of these losses: California has lost 90% of its original wetland base; less than five percent of Iowa's natural wetlands remain; over 90% of Nebraska's Rainwater Basin has disappeared; and only 20% of the Lower Mississippi Alluvial Plain remains. See Tiner, *supra* note 5, at 32-33.

24. W. FRAYER, T. MONAHAN, D. BOWDEN, & F. GRAYBILL, STATUS AND TRENDS OF WETLANDS AND DEEPWATER HABITATS IN THE COTERMINOUS UNITED STATES, 1950's to 1970's 3 (Dept. of Forest and Wood Sciences, Colo. St. U. Ft. Collins 1983) [hereinafter STATUS AND TRENDS OF WETLANDS]. The U.S. Fish & Wildlife Service recently estimated that, based on current rate of wetland losses, the nation will lose an additional 4,250,000 acres of wetlands by the year 2000. WETLANDS: MEETING THE PRESIDENT'S CHALLENGE, *supra* note 1, at 6.

25. The Office of Technology Assessment estimated in 1984 that human activities were responsible for 95% of the wetland losses that had occurred in the preceding twenty-five years. WETLANDS: THEIR USE AND REGULATION, *supra* note 23, at 3. The U.S. Environmental Protection Agency has estimated, assuming the same level of vertical wetland growth and assuming that economic development does not prevent the formation of new wetlands, a five to seven-foot rise in sea level would result in approximately 30% to 80% loss of coastal wetlands. Protective bulkheading will increase that rate of loss to approximately 50% to 90%. U.S. ENVIRONMENTAL PROTECTION AGENCY, EPA-230-05-86-013, OFFICE OF PLANNING AND EVALUATION, GREENHOUSE EFFECT: SEA LEVEL RISE AND COASTAL WETLANDS, at iii (1988) [hereinafter GREENHOUSE EFFECT].

26. Tiner, *supra* note 5, at 31.

27. *Id.*

mary cause of coastal wetland losses,²⁸ with a total of ninety percent of these losses directly attributable to human activities.²⁹

Two prime examples of estuarine wetlands loss which have resulted from urbanization are located in the San Francisco Bay area and in Florida. Today, in the San Francisco Bay area, less than nine percent of the original 200,000 acres of coastal marsh remain.³⁰ In Florida, 11,000 acres of estuarine sub-tidal deepwater habitat, over 9,000 acres of estuarine non-vegetated wetlands, and 45,000 acres of estuarine vegetated wetlands, were lost to urban development between mid-1950 and mid-1987.³¹

Louisiana contains roughly one-third of the coastal marshes in the mainland United States,³² and has the highest rate of wetland loss in the country. This loss averages approximately 25,000 acres per year (or forty square miles).³³ Al-

28. Between mid-1950 and mid-1979, thirty-thousand acres of estuarine sub-tidal deepwater habitat were lost to urban development. STATUS AND TRENDS OF WETLANDS, *supra* note 24, at 24.

29. *Id.* at 24-25. See also Tiner, *supra* note 5, at 36 (citing GOSSELINK & BAUMAN, WETLAND INVENTORIES, WETLAND LOSS ALONG THE UNITED STATES COAST 173-187 (1980)).

30. California as a whole is estimated to have lost 91% of its original 3.5 million acres of coastal wetlands. See Chambers, *Habitat Degradation and Fishery Declines in the United States*, Proceedings of the Seventh Symposium on Coastal and Ocean Management, Long Beach, California, July 12, 1991. A recent report by a citizens group on San Francisco Bay shows that the South San Francisco Bay has lost 61% of its seasonal wetlands since 1956 and that if all planned development takes place total cumulative losses in the South Bay will reach 73% of the 1956 acreage. NATIONAL AUDUBON SOCIETY, ENDANGERED HABITAT: A REPORT ON THE STATUS OF SEASONAL WETLANDS IN SAN FRANCISCO BAY AND A RECOMMENDED PLAN FOR THEIR PROTECTION (1989)[hereinafter AUDUBON REPORT].

31. STATUS AND TRENDS OF WETLANDS, *supra* note 24, at 24-25.

32. Tiner, *supra* note 5, at 37 (citing Turner & Gosselink, *A Note on Standing Crops of Spartina Alterniflora in Texas and Florida*, 19 CONTR. MAR. SCI. 113-118 (1975)).

33. Tiner, *supra* note 5, at 38 (citing FRUGE, EFFECTS OF WETLAND DETERIORATION ON THE FISH AND WILDLIFE RESOURCES OF COASTAL LOUISIANA (1982)). The United States Environmental Protection Agency estimates the annual rate of coastal wetland loss in the Mississippi River Delta to be fifty square miles per year due to the interaction of human activities, such as levee and navigation channel construction, and sea level rise due to land subsidence. GREENHOUSE EFFECT, *supra* note 25, at iii.

though the causes of coastal marsh loss in Louisiana are complicated because they are a combination of natural and man-induced causes, there can be no question that human activity has played a major role.³⁴ Channels and canals used for both oil and gas development and for navigation have increased marsh erosion and salt water intrusion along the coast.³⁵ Flood control levees have disrupted natural marsh building by preventing overflow of sediment-rich waters.³⁶ The United States Army Corps of Engineers estimates that by the year 2040, nearly one million acres of additional Louisiana wetlands will be lost creating a total loss of 2.4 million acres.³⁷ If this rate of loss continues unabated, the Gulf of Mexico shoreline may advance inland by as much as thirty-three miles in some areas.³⁸

The recent decline in the Chesapeake Bay's submerged aquatic grasses illustrates the devastating impact of indirect human activities on wetland resources. These grass beds provide a critical habitat for the estuarine-dependent fish of the Bay, the largest estuary in the United States. The grass beds have been declining since the 1960's.³⁹ Inadequately controlled, land-based activities in the bay watershed which discharge point and non-point source pollution into the bay's wa-

34. What is uncalculated to date is the loss of coastal wetland habitat due to chemical pollution as a result of onshore and offshore oil and gas activities. For example, one billion barrels of polluted waters containing minute quantities of hydrocarbons, organics, heavy metals, and sometimes high levels of radioactive contaminants, such as radium, were discharged into coastal Louisiana in 1986. U.S. ENVIRONMENTAL PROTECTION AGENCY, OFFICE OF INSPECTOR GENERAL FOR AUDIT, E1HWG9-13-9024-0400018, SPECIAL REVIEW REPORT (1990) (EPA is not adequately controlling the negative impacts of oil and gas activities on Louisiana coastal wetlands).

35. *Id.*

36. Tiner, *supra* note 5, at 38.

37. See LOUISIANA WETLAND PROTECTION PANEL, U.S. ENVIRONMENTAL PROTECTION AGENCY, EPA-230-02-87-026, SAVING LOUISIANA'S COASTAL WETLANDS, THE NEED FOR A LONG TERM PLAN OF ACTION 102 (1987) [hereinafter PANEL REPORT]. This report notes, in addition to the causes of wetland loss discussed in the text above, the effects of global climate change and sea level rise on the resource. According to this report, global sea level rise currently accounts for 10% to 15% of the sea level rise along the Louisiana coast and resultant loss of coastal wetlands, which number could increase significantly in the future. *Id.* at 32-34.

38. *Id.*

39. Tiner, *supra* note 5, at 39.

ters are primarily responsible for the decline of the grass beds.⁴⁰ The Chesapeake Bay Program has identified the loss of submerged aquatic vegetation as a primary area of concern and remedial attention.⁴¹

The effect of the loss of coastal wetlands has been both dramatic and immediate. Studies have shown that the productivity of the Gulf of Mexico shrimp fishery is directly proportional to the total area of intertidal marsh habitat, underscoring the urgency of Louisiana's wetland losses.⁴² The National Marine Fisheries Service estimated in 1983 that the annual fishery loss due to estuarine wetland destruction was approximately 208 million dollars.⁴³

Inland wetlands fare even worse, as few states have laws protecting them. Urbanization threatens freshwater wetlands in Northern and Central New Jersey. Peat mining and resort development are major causes of wetland losses in the Pocono region of Pennsylvania. Agricultural impacts, including silviculture practices, are responsible for significant losses of bottomland hardwood swamps of the mid-Atlantic, southeastern, and Gulf Coast States, where bottomland hardwoods are being clearcut for tree farms and commodity crops, like soybeans and corn. Phosphate mining is ruining freshwater wetlands in Florida and North Carolina. Puerto Rico's inland marshes are being transformed into sugar cane farms. Lacustrine marshes along the Great Lakes are being obliterated by industrial development. Construction of irrigation and drain-

40. Discharges from sewage treatment and industrial plants and from failing septic systems, as well as agricultural and urban runoff, have increased turbidity and sedimentation problems in the watershed. In addition, nutrient overloading and chemical pollution have adversely affected the size and vitality of these resources. See generally ENVIRONMENTAL PROTECTION AGENCY, CHESAPEAKE BAY: A PROFILE OF ENVIRONMENTAL CHANGE (1983); ENVIRONMENTAL PROTECTION AGENCY, CHESAPEAKE BAY: A FRAMEWORK FOR ACTION (1983).

41. In 1976, Congress directed the Environmental Protection Agency to study the Chesapeake Bay's resources and water quality in order to develop appropriate management strategies. The result of that study was a series of reports profiling the environmental quality of the Bay watershed and recommending initiatives to improve and maintain that quality. See PANEL REPORT, *supra* note 37.

42. Chambers, *supra* note 30 (quoting TURNER, LOUISIANA'S COASTAL FISHERIES AND CHANGING ENVIRONMENTAL CONDITIONS 363-70 (1979)).

43. Tiner, *supra* note 5, at 36.

age facilities is destroying vast portions of the remaining inland wetlands in the Midwest corn belt states, the Northern Midwest, and the farming areas of California and the Northwest. Oil and gas development is threatening the once pristine tundra wetlands of Alaska.⁴⁴

How can these losses be occurring given the protective web of federal and state laws⁴⁵ surrounding wetlands? The answer is quite simple - the web has significant holes in it. For purposes of this article, only the holes in the federal regulatory program⁴⁶ are examined. However, inconsistencies, conflicts and limitations plague state programs as well as other federal programs affecting wetlands.⁴⁷

V. Wetlands Regulatory Program

The legal framework of the federal wetlands regulatory program is complex. One reason for this is the bifurcated administration of the program. Another explanation is the ambiguity of the statutory language, making the framework a prod-

44. See generally Tiner, *supra* note 5, at 33-53.

45. The high rate of wetland destruction has prompted some states to pass legislation protecting wetlands in the 1970's and 1980's. For example, all of the coastal states in the lower forty-eight, except Texas, have enacted laws to protect coastal wetlands. However, these laws vary considerably with respect to their protective abilities. Like their federal counterpart, some of these laws exempt major destructive activities or apply only to state-owned lands. At the other end of the spectrum is Delaware, whose Wetlands Act of 1973 caused that state's annual rate of estuarine wetland loss to drop from 450 acres per year to 20 acres per year. *Id.* at 33.

46. This program is known as the section 404 program because its authorization is found in section 404 of the Clean Water Act. CWA § 404, 33 U.S.C. § 1344 (1988).

47. Many other federal programs have a direct or indirect effect on wetlands, such as the "Swampbuster" provisions of the Food Security Act of 1985, *amended*, 16 U.S.C. § 3801, (offers benefits to farmers who set aside sensitive land including wetlands); Tax Reform Act of 1986, 100 Stat. 2085 (eliminates some incentives for wetland conversions); Federal Water Bank Program of 1970, *as amended*, 16 U.S.C. § 1301 (pays farmers in major waterfowl production states to keep their wetlands out of crop production); Emergency Wetlands Resources Act of 1986, 16 U.S.C. §§ 3901, 3921 (directs Fish & Wildlife Service to prepare a National Wetlands Conservation Priority Plan setting priorities for that agency's wetlands acquisition programs (see U.S. FISH & WILDLIFE SERVICE, NATIONAL WETLANDS PRIORITY CONSERVATION PLAN (April 1989))); Land and Water Conservation Fund of 1955, 16 U.S.C. § 460 (provides funds for acquisition of wildlife habitat including wetlands); Coastal Zone Management Act of 1972, 16 U.S.C. § 1451 (provides federal funding for state wetlands programs in most coastal states).

uct of disparate administrative and judicial interpretations of legislative intent.⁴⁸

The starting point for the federal regulatory program can be found in section 301 of the Clean Water Act ("the Act").⁴⁹ Section 301 makes it unlawful to discharge any pollutant into the waters of the United States except pursuant to the standard setting and permitting provisions of the Act. One of these permitting provisions is located in section 404 of the Act.⁵⁰ Section 404 gives the Secretary of the Army⁵¹ the discretion to issue permits for the discharge of dredged or fill material into navigable waters.⁵² The Secretary's authority has been delegated through the Assistant Secretary (Civil Works) to the United States Army Corps of Engineers (Corps).

Permits issued by the Corps must be consistent with environmental guidelines issued by the United States Environmental Protection Agency (EPA).⁵³ EPA also has the authority to veto and comment on permits issued by the Corps and to delegate the program to qualified states.⁵⁴ The EPA and the Corps share the enforcement responsibilities under the Act.⁵⁵ Federal resource agencies, such as the United States

48. Ambiguous statutory language leaves the outlines and content of the section 404 program vulnerable to the winds of political change and the fact-specific nature of litigation which sometimes results in the emergence of different interpretations in different circuits. *See, e.g., Leslie Salt Co. v. United States*, 896 F.2d 354 (9th Cir. 1990), *cert. denied*, 111 S.Ct. 1089 (1991); *United States v. City of Fort Pierre*, 747 F.2d 464 (8th Cir. 1984).

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

50. CWA § 404, 33 U.S.C. § 1344.

51. Section 404 is the only program in the Clean Water Act not administered by the EPA, and was the result of a compromise in the drafting of the original act. Since the Corps had developed considerable experience administering the precursor permitting program to section 404, section 10 of the River and Harbors Act of 1899, 33 U.S.C. §§ 401-413, 403 (1988), it seemed logical to grant it regulatory authority to administer the section 404 program as well, particularly, since there are some cases in which jurisdiction under both laws may be invoked.

52. The Clean Water Act defines "navigable waters" as "waters of the United States." CWA § 502(7), 33 U.S.C. § 1362(7) (1989).

53. CWA § 404(b)(1), 33 U.S.C. § 1344(b)(1). These regulations are commonly known as the 404(b)(1) guidelines, and are promulgated at 40 C.F.R. Part 230 (1990).

54. *See infra* note 57.

55. *See* CWA §§ 301(a), 308, 309, 404(n) and (s), 33 U.S.C. §§ 1311(a), 1318,

Fish & Wildlife Service and the National Marine Fisheries Service, share the right to comment on permits issued by the Corps with the EPA.⁵⁶

Regulatory authority under section 404 is thus shared between the Corps and the EPA.⁵⁷ This divided authority has resulted in a strained relationship between the two agencies with respect to many aspects of the program. From the beginning, the two agencies have disagreed about the jurisdictional reach of the program,⁵⁸ the activities covered by it,⁵⁹ and the binding nature of the section 404(b)(1) guidelines.⁶⁰ Most of these disagreements have been ironed out in court, making section 404 one of the most litigated of the federal environmental programs. Ironically, the two initiatives under study in this article were administrative attempts to eliminate some of those differences.

1319, 1344(n) and (s); *see also* Memorandum of Agreement Between the Department of the Army and the Environmental Protection Agency Concerning Federal Enforcement for the Section 404 Program of the Clean Water Act, 19 *Envtl. L. Rep. (Envtl. L. Inst.)* 35,183 (1989)[hereinafter *Enforcement MOA*].

56. CWA § 404(m), 33 U.S.C. § 1344(m). The Act also directs the Secretary to enter into agreements with these and other federal agencies to minimize delays in the processing of permits. CWA § 404(q), 33 U.S.C. § 1344(q). In addition, State Fish and Wildlife agencies may also comment on section 404 permit applications. 33 C.F.R. § 320.4(c).

57. EPA has the authority to deny (characterized as a permit "veto") the use of specified disposal sites for the discharge of dredged or fill material based upon the impact of the discharge on municipal water supplies, shellfish beds and nursery areas, or upon wildlife or recreational areas. CWA § 404(c), 33 U.S.C. § 1344(c). EPA also promulgates regulations (known as the 404(b)(1) guidelines, found in 40 C.F.R. Part 230 (1990)), which "guide" the Corps in its assessment of the environmental impact of activities permitted under CWA § 404(b), 33 U.S.C. § 1344(b). EPA has sole authority to delegate permitting authority under the program to the several states, under CWA § 404(h), 33 U.S.C. § 1344(h), and shares enforcement authority with the Corps under CWA §§ 404(n), (s), 33 U.S.C. §§ 1344(n), (s). The latter authority as well as the authority to determine the jurisdictional limits of section 404 are discussed later in this article. *See infra* notes 73-114 and accompanying text.

58. *Natural Resources Defense Council v. Callaway*, 389 F. Supp. 1263 (D.D.C. 1974). *See also* *Administrative Authority to Construe Section 404 of the Federal Water Pollution Control Act*, 43 Op. Att'y. Gen. No. 15 (September 5, 1979) [hereinafter *Civiletti Opinion*].

59. *Avoyelles Sportsmen's League, Inc. v. Marsh*, 715 F.2d 897 (5th Cir. 1983).

60. *National Wildlife Fed'n v. Marsh*, 568 F. Supp. 985 (D.D.C. 1983), *aff'd*, 14 *Envtl. L. Rep. (Envtl. L. Inst.)* 20,262 (D.D.C. 1984).

Congress intended that section 404 protect wetlands.⁶¹ However, in reality, the section authorizes the destruction of wetlands rather than the protection of these valuable resources.⁶² The Office of Technology Assessment calculated in 1984 that less than three percent of the permit applications under section 404 were denied.⁶³ In fiscal year 1987, the Corps received 8,600 applications, approved 5,071, and denied 397.⁶⁴ In 1987, for coastal Louisiana, 498 section 404 permits were issued and four were denied; a year later, 554 permits were issued and only three were denied.⁶⁵ Some permit applications are withdrawn because the need for the project disappears due to redesign, economic changes, or because it is discovered that a permit is not needed.⁶⁶ However, when an application does actually move forward into the permitting process, there appears to be a ninety-two percent approval rate.⁶⁷

One check on the Corps' permitting prerogative is the EPA's authority to "veto" permits under section 404(c) of the Act.⁶⁸ However, the EPA has exercised this power sparingly,

61. See Remarks of Sens. Chafee, Stafford, and Mitchell, *Oversight Hearings on Section 404 of the Clean Water Act, 1985: Before the Subcomm. on Envtl. Pollution of the Comm. on Env't and Pub. Works*, 99th Cong., 1st Sess. 292 (1985) at 96, 102, and 105 [hereinafter *Oversight Hearings*]. See also *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 139 (1985).

62. A report prepared by the U.S. General Accounting Office states that the Corps issues permits over the objections of EPA and the U.S. Fish & Wildlife Service, more than one-third of the time. The Fish & Wildlife Service is authorized under section 404(m) of the Act, CWA § 404(m), 33 U.S.C. § 1344(m), to comment on individual and general permit applications. See Houck, *supra* note 3, at 788 (citing U.S. GENERAL ACCOUNTING OFFICE, *THE CORPS OF ENGINEERS' ADMINISTRATION OF THE SECTION 404 PROGRAM* at 52 (1988)). These differences of opinion are rarely elevated to the Administration of the respective agencies, as provided for in CWA section 404(q), 33 U.S.C. § 1344(q). When elevated, the outcome is rarely changed. Houck, *supra* note 3, at 788.

63. WETLANDS: THEIR USE AND REGULATION, *supra* note 23, at 141.

64. Houck, *supra* note 3, at 787.

65. *Id.* at 788.

66. There are several reasons that a permit may not be needed even though the discharge is into a "wetland": the wetland may not be within the jurisdictional reach of section 404, the activity may be exempt, or the wetland may be covered by a general permit. The impact of these reasons are discussed later in the text of this article. See *infra* notes 73-114 and accompanying text.

67. Houck, *supra* note 3, at 788.

68. CWA § 404, 33 U.S.C. § 1344(c). See *supra* note 57.

with good reason.⁶⁹ Each use of the veto authority has caused a political outcry.⁷⁰ While the agency has recently increased its use of section 404(c) vetoes,⁷¹ it is unrealistic to expect that the provision will stem the hemorrhaging of permits by the Corps.⁷²

The high rate of permit issuance has resulted in significant wetland losses,⁷³ and is of grave concern to anyone inter-

69. Of the estimated 160,000 section 404 permits issued from the enactment of the program in 1972 to January 1, 1989, EPA exercised its veto authority only eight times. Houck, *supra* note 3, at 790. For a discussion of the specifics of those vetoes, see *id.* at 790-794.

70. A review of the most recent exercise of that power, stopping the multi-billion dollar Two Forks dam and reservoir in Colorado, gives some idea of how controversial the exercise of this power can get. The permit veto involved one former and one sitting President, ten United States senators, and hearings in two states at which hundreds of individuals turned out to speak on behalf of one side or the other of the issue.

71. EPA has issued section 404(c) vetoes in the Plantation Landing Resort Complex, Pamo Dam (San Diego), the Big River project (Rhode Island), and various salt marshes in South Carolina. See Houck, *supra* note 3, at 793. In addition, EPA has vetoed the construction of a dam on the South Platte River, and a reservoir on Ware Creek, Virginia. See Final Determination of the U.S. Environmental Protection Agency's Assistant Administrator for Water Pursuant to section 404(c) of the Clean Water Act Concerning the Proposed Ware Creek Water Supply Impoundment James City County, Virginia (July 10, 1989). The latter determination was successfully challenged in the U.S. District Court for the Eastern District of Virginia by the project proponent on the ground that EPA did not demonstrate the non-availability of "practicable available alternatives" to the construction of the project and has been appealed. *James City County v. Environmental Protection Agency*, 758 F. Supp. 348 (E.D. Vir. 1990). In addition, EPA has threatened to veto projects for: the construction of a "designer" golf course in southeastern Florida which led to the reconfiguration of the golf course and the withdrawal of the EPA's threat; a commercial development on pilings in central New Jersey; and a drill site and associated gravel road involving 21.5 acres of Arctic tundra. Proposed Determination to Withdraw or Restrict the Specification of an Area for Use as a Disposal Site, Kaparuk River Unit, North Slope Borough, Ark., 56 Fed. Reg. 22,161 (1991).

72. For a similar analysis of the limitations of the section 404(c) veto authority, see Houck, *supra* note 3, at 790-795.

73. The effect of these permitted losses historically has not been reduced by the requirement in the section 404(b)(1) guidelines to compensate unavoidable permitted wetland losses. 33 C.F.R. §§ 230.10(d) and 230.75(d)(1990). The Office of Technology Assessment estimated that in each of the years 1980 and 1981, section 404 permit applicants originally proposed the alteration of approximately 100,000 acres of wetlands. Permit processing resulted in the avoidance of 50,000 acres annually and for those 50,000 acres of wetlands that were permitted only 5,000 acres of compensatory mitigation was required. WETLANDS: THEIR USE AND REGULATION, *supra* note 23, at

ested in protecting wetland resources.⁷⁴ This concern escalates when one realizes how few activities affecting wetlands actually require a federal permit. The narrow jurisdictional reach of the section 404 program severely limits the regulatory program's effectiveness and lessens the importance of trying to improve the permitting process.⁷⁵ Section 404 regulates only the discharge of dredged or fill material into waters of the United States.⁷⁶ It does not apply to many of the activities that have a significant and lasting adverse effect on wetlands. The chemical contamination of a wetland does not require a federal permit; nor does excavating wetland soils, flooding a wetland, shutting off the flow of fresh water into the wetland by constructing an upstream dam,⁷⁷ or removing wetland vegetation.⁷⁸

What little section 404 does regulate, it regulates with numerous exceptions. The section exempts from its permitting requirements: "normal" farming,⁷⁹ silviculture,⁸⁰ and ranching

143-145.

74. For a thorough examination of the breakdown in the permitting process, see Houck, *supra* note 3.

75. The scope of the regulatory program is so limited, as this article shows, one could argue that a 100% permit denial rate would still leave vast areas of important, high quality wetlands at risk to development. For a contrary view, see generally Houck, *supra* note 3.

76. CWA § 404(a), 33 U.S.C. § 1344(a). While the courts have interpreted this phrase broadly, see, e.g., *Avoyelles Sportsmen's League, Inc. v. Alexander*, 511 F. Supp. 278, 285-86 (W.D. La. 1981), *aff'd in part and rev'd in part on other grounds*, 715 F.2d 897 (5th Cir. 1983), it seems unlikely that it can be construed to reach the activities listed in the text above.

77. For example, 60% of the freshwater inflow into San Francisco Bay in average weather years, and 80% to 85% in dry years, is diverted by a melange of federal and state water projects. Davoren, *Saving San Francisco Bay Once, Twice, Thrice*, in *URBAN WETLANDS*, *supra* note 12, at 13 (1988).

78. While the chemical contamination of a wetland might be reached under other environmental laws, such as the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901 - 6922, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. §§ 9601 - 9675, as well as under other sections of the Clean Water Act, CWA § 402, 33 U.S.C. § 1342, these laws only apply if the activities are jurisdictional under these laws. Even so, activities, such as excavation of wetland soils, flooding, drainage, and removal of wetland vegetation probably cannot be addressed under other laws.

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

80. A consortium of environmental organizations, including the National Audu-

activities; maintenance of dikes, dams, and levees; construction and/or maintenance of farm or stock ponds, and irrigation ditches; maintenance of drainage ditches; construction of sedimentation basins on construction sites; and construction or maintenance of farm or forest roads and roads for moving mining equipment.⁸¹

The exact reach of most of these exemptions has been litigated over the years. The courts have universally held that the exemptions should be given an extremely narrow reading.⁸² However, inadequate monitoring and lax enforcement of the application of the exemptions has resulted in significant loss of wetland acreage nationwide.⁸³ For example, the farming and silviculture exemptions, as well as the exemptions relating to dikes, dams, and levees,⁸⁴ have caused significant loss of coastal wetlands in the Gulf of Mexico and southeast regions of the country.

The Corps has devised its own regulatory exemptions to the wetlands permitting requirements. One of these excep-

bon Society, have challenged the application of this exemption to silviculture practices in North Carolina, which involve the gradual expansion of tree farming activities over vast areas of the Great Dismal Swamp. See *North Carolina Wildlife Fed'n v. Suermann*, Civil No. 90-713-Civ.-5-BO (E.D.N.C. 1991).

81. CWA § 404(f)(1), 33 U.S.C. § 1344(f)(1). Section 404(f)(2) states that if the purpose of the exempt activity is to bring an area of navigable waters into a use that it was not previously subject to, a permit is required—the so-called “recapture” clause. Unlike the basic exemption, the courts have interpreted the recapture clause broadly. See, e.g., *United States v. Akers*, 785 F.2d 814, 16 Env'tl. L. Rep. (Env'tl. L. Inst.) 20,538 (9th Cir. 1986); *Bayou Marcus Livestock and Agriculture Co. v. Environmental Protection Agency*, No. 88-30275 WEA (N.D. Fl. 1989).

82. See, e.g., *Akers*, 785 F.2d 814, 16 Env'tl. L. Rep. (Env'tl. L. Inst.) 20,538; *United States v. Huebner*, 752 F.2d 1235, 1241 (7th Cir. 1985), cert. denied, 106 S.Ct. 62 (1985); *Avoyelles*, 715 F.2d at 926; *Bayou Marcus Livestock*, No. 88-30275 WEA.

83. It has been conservatively estimated that over 80% of the historic wetland loss resulted from draining and clearing inland wetlands for agriculture. See *WETLANDS: THEIR USE AND REGULATION*, *supra* note 23. The U.S. Fish & Wildlife Service estimates that agricultural development involving drainage is responsible for 87% of recent national wetland losses. Tiner, *supra* note 5, at 31. The Food Security Act of 1985, 16 U.S.C. § 3801, and the recent amendments to that Act strengthened incentives for farmers who refrained from draining and planting wetlands and should begin to reduce this rate of loss. See *Food, Agricultural Conservation and Trade Act*, Pub. L. No. 101-624, 104 Stat. 3,359 (1990).

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

tions allows *de minimis* or incidental discharges.⁸⁵ This exemption has been applied in the coastal areas of the southeastern United States in order to deregulate the discharge of negligible amounts of soil associated with building dikes and drainage ditches.⁸⁶ Despite a successful lawsuit forcing the Corps to take jurisdiction over pocosin wetlands,⁸⁷ the effect of the *de minimis* regulatory exemption has devastated⁸⁸ North Carolina's pocosin wetlands.⁸⁹

In addition to these apertures in the regulatory program, the Corps can generically authorize the discharge of dredged or fill material under a nationwide or regional general permit.⁹⁰ General permits allow similar activities having minimal individual or cumulative environmental impact to proceed in a wetland as though the activities did not require a permit. Even though notice must be given to the federal and state resource agencies regarding the use of certain general permits

85. The term "discharge of dredged material" does not include "*de minimis*, incidental soil movement occurring during normal dredging operations." See 33 C.F.R. § 323.2(d). Another exemption is contained in a recently issued regulatory guidance letter for prior converted cropped wetlands. U.S. ARMY CORPS OF ENGINEERS, REGULATORY GUIDANCE LETTER 90-7 (1990).

86. The National Wildlife Federation has filed a suit against the Corps over, among other violations, the use of this exemption to allow the drainage of over 600 acres of bottomland hardwood swamps in North Carolina. *North Carolina Wildlife Federation v. Suermann*, Civil No. 90-713-Civ.-5-BO (E.D.N.C. 1991).

87. *National Wildlife Fed'n v. Hanson*, 623 F. Supp. 1539 (E.D.N.C. 1985), *aff'd on other grounds*, 859 F.2d 313 (4th Cir. 1988).

88. Approximately 44% of North Carolina's pocosins are owned by major timber companies. Tiner, *supra* note 5, at 49 (citing Richardson, *Pocosins: Ecosystem processes and the influence of man on system response*, reprinted in C.J. RICHARDSON, *POCOSIN WETLANDS* at 3-19 (1981)). Thirty-three percent of the State's original pocosins have been converted to agriculture or managed forests, while 36% have been partially drained or cleared or planned for development. Tiner, *supra* note 5, at 50. Since 1970, the *de minimis* exemption has enabled these companies to convert 500,000 acres of pocosins to tree farms. *Id.* at 49.

89. Pocosins are freshwater wetlands that are hydrologically connected to the many estuaries that dot North Carolina's shoreline. Pocosins help stabilize the water quality of these coastal systems and balance their salinity. In addition, they provide wildlife habitat to a wide variety of species and perform groundwater recharge functions. Seventy percent of the nation's pocosins are in North Carolina, where they comprise about 2.2 million acres of that state's freshwater wetland resource base. See generally Tiner, *supra* note 5. The Corps contended that pocosins are isolated wetlands and, therefore, non-jurisdictional under section 404.

90. CWA § 404(e), 33 U.S.C. § 1344(e); 33 C.F.R. Part 330 (1990).

and an opportunity given to those agencies to comment adversely on that use,⁹¹ the Corps need only give these comments "full consideration."⁹²

The nationwide general permits cover disparate activities, such as the location of navigational buoys;⁹³ the backfitting of oil and gas pipelines;⁹⁴ the construction of bridges;⁹⁵ and the placement of structures for exploration, production, and transportation of oil, gas and minerals.⁹⁶ Under Nationwide Permit 26,⁹⁷ up to ten acres of wetlands can be filled for any purpose without an individual permit.⁹⁸ To date, the Corps has issued 26 nationwide general permits⁹⁹ and numerous regional general permits.¹⁰⁰

The use of these permits varies significantly in different

91. See generally 33 C.F.R. § 330.7.

92. See *id.* § 330.7(d).

93. *Id.* §§ 330.5(a)(1), 330.5(a)(10), 330.5(a)(11).

94. *Id.* § 330.5(a)(12).

95. *Id.* § 330.5(a)(15).

96. *Id.* § 330.5(a)(8).

97. Although section 404(e), 33 U.S.C. § 1344(e), restricts general permits to those activities that "are similar in nature, will cause only minimal adverse environmental effects when performed separately, and will have only minimal cumulative adverse effect on the environment," Nationwide General Permit 26 does not conform to that statutory restriction. 33 C.F.R. § 330.5(a)(26) (1990). The latter permit was part of a settlement agreement in *National Wildlife Fed'n v. Marsh*, 568 F. Supp. 985 (D.D.C. 1983), *aff'd*, 14 Env'tl. L. Rep. (Env'tl. L. Inst.) 20,262 (D.C. Cir. 1984).

98. Specifically, Nationwide General Permit 26, 33 C.F.R. § 330.5(a)(26), authorizes the discharge of dredged or fill material from any activity into (a) non-tidal rivers, streams, and their lakes and impoundments, including adjacent wetlands, that are located above the headwaters; and (b) other non-tidal waters of the United States, including adjacent wetlands, that are not part of a surface tributary system to interstate waters or navigable waters of the United States (i.e. "isolated waters"), so long as those discharges do not cause the loss or substantial adverse modification of ten acres or more of such waters, including wetlands. Any discharge authorized under Nationwide General Permit 26 which causes the loss or substantial adverse modification of between one to ten acres must comply with the Corps' notification and review requirements, which include an opportunity for the federal and state resource agencies to request that the Corps require an individual permit be issued. The Corps need not accept these recommendations.

99. The Corps recently proposed revisions to its permit issuance regulations which would significantly increase the number of general permits. 56 Fed. Reg. 48,136 (1991)(to be codified at 33 C.F.R. Part 330)(proposed Sept. 24, 1991).

100. See, e.g., the recently issued regional general permit for Maryland, available from the Department of the Army, Baltimore District, Corps of Engineers, P.O. Box 1715, Maryland General Permit Non-Tidal Wetlands (MDGP-1), January 31, 1991.

regions of the country. The Gulf coast region appears to bear the full brunt of their application,¹⁰¹ with Nationwide Permits 8 and 26 causing most of the impact, while Nationwide Permit 26,¹⁰² alone has had a particularly devastating impact on the remnant wetlands of San Francisco Bay.¹⁰³

Although case law has made it clear that section 404 regulates most forms of wetlands,¹⁰⁴ the extent to which the law

101. In 1980, 1,371 section 404 permits were issued by the New Orleans District and only 300 activities were authorized under nationwide and regional general permits. By 1986, the number of individual section 404 permits issued had shrunk to 609, while the number of general permits had skyrocketed to 1,162. Houck, *supra* note 3, at 787 n.108.

102. It has been estimated that Nationwide General Permit 26 allows a substantial share of the estimated 50,000 discharge activities authorized annually under the twenty-six nationwide general permits. See Complaint, North Carolina Wildlife Fed'n v. Suermann, Civ. No. 713 (E.D.N.C. 1990). See also WETLANDS FUNCTIONS AND VALUES, *supra* note 17; AN ASSESSMENT OF THE CORPS OF ENGINEERS' SECTION 404 PERMIT PROGRAM IN NORTHERN NEW JERSEY (1980-1984), A REPORT PREPARED BY STATE COLLEGE FIELD OFFICE, ECOLOGICAL SERVICES at ii (August 1984) (documenting that nearly one-fifth of the wetland losses in the area were under Nationwide General Permit 26, over the specific objections of the U.S. Fish & Wildlife Service).

103. According to a study on the status of San Francisco Bay's seasonal wetlands, nearly 2% of that area's remaining wetlands are less than ten acres. GRANHOLM, SEASONAL WETLANDS IN SAN FRANCISCO AND SAN PABLO BAYS CURRENT STATUS, PROJECTED LOSSES, AND CUMULATIVE LOSSES SINCE 1975 (1989), in AUDUBON REPORT, *supra* note 30. Given that South Bay's seasonal wetlands declined 61% between 1956 and 1988, the fact that these wetlands are unprotected under the regulatory program as a result of Nationwide General Permit 26 is of grave concern.

104. The courts, as well as Congress, have firmly laid this particular controversy to rest. See, e.g., United States v. Riverside Bayview Homes, Inc., 474 U.S. 121 (1985) (affirming the broad reach of section 404); Natural Resources Defense Council v. Calloway, 392 F. Supp. 685 (D.D.C. 1975) (holding that the term "navigable waters" should not be limited to the traditional tests of navigability and should be limited only by the constraints of the commerce clause); United States v. Tilton, 705 F.2d 429, 431 (11th Cir. 1983); Avoyelles Sportsmen's League, Inc. v. Alexander, 511 F. Supp. 278, 285-86 (W.D. La. 1981), *aff'd in part and rev'd in part on other grounds*, 715 F.2d 897 (5th Cir. 1983); United States v. Byrd, 609 F.2d 1204, 1209 (7th Cir. 1979); Sun Enterprises, Ltd. v. Train, 394 F. Supp. 211, 223-24 (S.D.N.Y. 1975), *aff'd*, 532 F.2d 280 (2d Cir. 1976); United States v. Ashland Oil and Transp. Co., 504 F.2d 1317, 1324-25 (6th Cir. 1974). See also, S. CONF. REP. No. 1236, 2d Sess. 144 (1972); H.R. REP. No. 911, 92d Cong., 2d Sess., at 131 (1972); 118 CONG. REC. 33,756-33,757 (1972)(statement of Rep. Dingell). The Congressional debate leading up to the 1977 amendments of the Act revolved around the expanded definition of wetlands set forth in the 1975 U.S. Army Corps of Engineers interim final regulations after the Calloway decision, and involved an attempt by Sen. Bentsen to limit the scope of the Corps' regulatory jurisdiction. See Natural Resources Defense Council v. Callaway, 389 F.

applies to wetlands that are not "adjacent" to waters of the United States, such as "isolated"¹⁰⁵ and/or "seasonal" wetlands,¹⁰⁶ or freshwater vernal pools, is a matter of continuing regulatory uncertainty.¹⁰⁷ The EPA has maintained that these wetlands are jurisdictional, while the Corps had held the opposite view until recently.¹⁰⁸ The issue has been presented to the courts in various guises, but has not yet been resolved definitively.¹⁰⁹ This particular instance of jurisdictional ambiguity might seem inconsequential given the preceding recitation of programmatic deficiencies. However, it leaves critically important resources in various parts of the country vulnerable to development pressure, including the seasonal wetlands of San Francisco Bay,¹¹⁰ the pocosins of North Carolina,¹¹¹ and the

Supp. 1263 (D.D.C. 1974). Senator Bentsen lost this debate and the section 404(f) exemptions emerged as a result. See 123 CONG. REC. 26,710-728 (1977).

105. See, e.g., *National Wildlife Fed'n v. Laubscher*, 662 F. Supp. 548 (S.D. Tex. 1987).

106. See, e.g., *Leslie Salt Co. v. United States*, 896 F.2d 354 (9th Cir. 1990), *cert. denied*, 111 S.Ct. 1089 (1991).

107. The legal basis for this debate centers on whether the presence of migratory birds is sufficient to confer interstate commerce clause jurisdiction over these resources. See Op. Gen. Counsel, U.S. EPA, *Clean Water Act Jurisdiction Over Isolated Waters* (September 12, 1985); *Oversight Hearings supra* note 61, at 189 (EPA's statement listing the circumstances which provided the necessary interstate commerce nexus, including the existence of waters used by migratory birds). See also *infra* note 113.

108. See, e.g., *Memorandum of Agreement Between the Department of the Army and the Environmental Protection Agency Concerning the Determination of the Geographic Jurisdiction of the Section 404 Program and the Application of the Exemptions under Section 404(f) of the Clean Water Act*, 19 Env'tl. L. Rep. (Env'tl. L. Inst.) 35,181 (Jan. 19, 1989) [hereinafter *Jurisdictional MOA*] (discussed *infra* note 115).

109. See, e.g., *Tabb Lakes Ltd. v. United States*, 715 F. Supp. 726 (E.D. Va. 1988), *aff'd without opinion*, 885 F.2d 866 (4th Cir. 1989), *reported in full in* 20 Env'tl. L. Rep. (Env'tl. L. Inst.) 20,008 (1989) (assertion of jurisdiction over isolated wetlands based on EPA interpretative guidance struck down); *Leslie Salt Co.*, 896 F.2d 354; *National Wildlife Fed'n v. Laubscher*, 662 F. Supp. 548 (S.D. Tex. 1987) (suit involving Corps failure to take regulatory jurisdiction over a playa lake settled prior to court resolution of jurisdictional issue).

110. *But see Leslie Salt Co.*, 896 F.2d 354. Note, however, that this case involved an interlocutory ruling on the Clean Water Act's jurisdiction over seasonal wetlands, and therefore did not resolve the underlying legal question. *Id.*

111. *Cf. National Wildlife Fed'n v. Hanson*, 623 F. Supp. 1539 (E.D.N.C. 1985), *aff'd on other grounds*, 859 F.2d 313 (4th Cir. 1988). Note, however, that the U.S. District Court remanded the case to the Corps for a more in-depth analysis of the jurisdictional indicators than had been given prior to the permit's issuance, and,

playa lakes of Texas.¹¹²

The limited jurisdiction of section 404, the continuing uncertainty over its exact regulatory reach, the various statutory and regulatory exemptions from the program's permitting requirements, and the generous use of general permits by the Corps have created a porous regulatory program through which many activities slip. Given these limitations, as well as the program's fragmented administrative responsibilities and the resistant attitudes towards wetland protection, it is not surprising that wetlands are continuing to disappear. The two initiatives under review in this article, which sought to make that program more effective and plug some of its holes, must be placed against this background.

VI. The Memorandum of Agreement

The first of these initiatives involves the publication by the EPA and the Corps of a joint-staff guidance document, called a "Memorandum of Agreement" (MOA),¹¹³ on federal

therefore, cannot be considered a ruling on the merits of the underlying legal issue.

112. The recent U.S. Fourth Circuit decision in *Tabb Lakes*, has created some additional confusion over this issue by setting aside the Corps' finding of jurisdiction over an isolated wetland, which had been based upon an internal 1985 Corps memorandum. The court explicitly did not decide whether the Corps may assert jurisdiction over waters which provide habitat for endangered species or migratory birds. While the court did voice "grave doubts" about whether habitat for migratory birds establishes a sufficient nexus with interstate commerce to justify the Corps' assertion of jurisdiction, the court did not express any opinion on whether Congress intended Clean Water Act jurisdiction to extend as far as permitted under the Commerce Clause, 715 F. Supp. at 729. After the *Tabb Lake* decision came down, the Corps and EPA issued a joint memorandum announcing their intent to limit the effect of the decision to the Circuit in which it came down. Elmore & Davis, Memorandum on Clean Water Act Section 404 Jurisdiction over Isolated Waters in Light of *Tabb Lakes v. United States*, John P. Elmore, Chief, Operations, Construction, and Readiness Division, Directorate of Civil Works, and David G. Davis, Director, Office of Wetlands Protection (January 24, 1990). Cf. *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985).

113. MOAs are interagency documents, clarifying responsibilities between agencies under multi-jurisdictional programs. Although most frequently used to avoid policy differences arising in multi-agency programs, their use to resolve differences that have arisen as a result of implementation of such programs is not unusual. MOAs have no legal force and effect, and cannot exceed or conflict with an agency's jurisdiction established by its authorizing legislation and implementing regulations. They are basically agency "housekeeping" documents, usually drawing little attention or com-

wetlands mitigation policy.¹¹⁴ The publication of this document ended years of negotiations over differences between the two agencies concerning the contents of that policy.¹¹⁵ These differences of opinion had caused delays in the processing of section 404 permits because the two agencies argued in the field over individual permit applications. These "field" debates extended the length of time that it took to review permit applications, which, in turn, increased project costs. Often it was the wetland resource that suffered. Therefore, both the regulated community and conservationists shared the same goal; to achieve a consistent regulatory policy with regard to mitigation of wetland losses between the two regulatory agencies.

The concept of mitigation of adverse environmental impacts did not originate with the publication of the Mitigation MOA. The origin of the mitigation concept¹¹⁶ lies in regula-

ment. Their innocuous nature underscores the significance of the outcry that accompanied the publication of the Mitigation MOA.

114. Memorandum of Agreement between the Department of the Army and the Environmental Protection Agency Concerning Determination of Mitigation under the Clean Water Act section 404(b)(1), 20 *Envtl. L. Rep. (Envtl. L. Inst.)* 35,223 (Feb. 6, 1990) [hereinafter Mitigation MOA].

115. Two other memoranda of agreements were concluded by the Corps and EPA in 1989 without any attendant protest on topics which are potentially as, if not more, controversial than the one under study in this article. See Memorandum of Agreement Between the Department of the Army and the Environmental Protection Agency Concerning Federal Enforcement for the Section 404 Program of the Clean Water Act, 19 *Envtl. L. Rep. (Envtl. L. Inst.)* 35,183 (Jan. 19, 1989) [hereinafter Enforcement MOA]; Jurisdictional MOA, *supra* note 108. The Jurisdictional MOA announced the issuance of a federal manual to be used by the Corps, EPA, the Soil Conservation Service (SCS), and the U.S. Fish & Wildlife Service field staff to identify wetlands under the section 404, Swampbuster, and National Wetlands Inventory programs. See FEDERAL INTERAGENCY COMMITTEE FOR WETLAND DELINEATION, (U.S. ARMY CORPS OF ENGINEERS, U.S. ENVIRONMENTAL PROTECTION AGENCY, U.S. FISH & WILDLIFE SERVICE, AND U.S.D.A. SOIL CONSERVATION SERVICE) FEDERAL MANUAL FOR IDENTIFYING AND DELINEATING JURISDICTIONAL WETLANDS (1989) [hereinafter MANUAL]. The public and the regulatory response to the MANUAL comprise the second case study. See Part VII, *infra*.

116. Actually, a Presidential Executive Order, signed by President Carter in 1977, imposed mitigation requirements on federal actions that adversely affect wetlands a year before CEQ's regulations went into effect. Protection of Wetlands, Exec. Order No. 11,990, 3 C.F.R. 121, *reprinted in* 42 U.S.C. § 4321 (1991). While an Executive Order does not have the legal affect of a regulation, it is intended to be binding on the Executive Branch to the extent that the policies contained in it are consistent

tions promulgated by the Council on Environmental Quality (CEQ)¹¹⁷ in 1978,¹¹⁸ implementing the National Environmental Policy Act (NEPA).¹¹⁹ The CEQ's regulations require applicants to avoid adverse environmental impacts, and where these impacts are unavoidable, to minimize their effect in a variety of ways, including compensation for whatever resource loss occurs.¹²⁰

EPA's section 404(b)(1) guidelines¹²¹ also require that the adverse environmental impacts of the issuance of a section 404 permit be mitigated through avoidance, minimization, and

with the agency's enabling legislation.

117. The Council on Environmental Quality is authorized under the National Environmental Policy Act (NEPA) § 202, 42 U.S.C. § 4342 (1988), and is in the Executive Office of the President. CEQ's principle functions include assuring that federal agencies comply with the requirements of NEPA and reporting to Congress annually on the state of the environment.

118. 43 Fed. Reg. 55,990 (1978) codified at 40 C.F.R. § 1508.20 (1990).

119. National Environmental Policy Act of 1969, NEPA §§ 121-209b, 42 U.S.C. §§ 4321-4370b (1988).

120. 40 C.F.R. § 1508.20. CEQ's regulations define the term "mitigation" as: (1) avoiding impacts by not taking a certain action or parts of an action; (2) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (3) rectifying impacts by repairing, rehabilitating or restoring the affected environment; (4) reducing or eliminating impacts over time by preservation and maintenance operations during the life of the action; and (5) compensating for impacts by replacing or providing substitute resources or environments. *Id.*

121. The section 404(b)(1) guidelines, 40 C.F.R. Part 230, contain the environmental criteria that the Corps must apply in issuing permits under that section of the law. They apply to both standard and general permits, (CWA §§ 404(a), (e), 33 U.S.C. §§ 1344(a), (e)), Corps civil work projects, federal construction projects which are not addressed in an environmental impact statement submitted to Congress, (CWA § 404(r), 33 U.S.C. § 1344(r)), and to permits that are issued by states with delegated authority to administer the section 404 program pursuant to §§ 404(g), (h) (33 U.S.C. §§ 1344(g), (h)). *See generally* 40 C.F.R. § 230.2. In addition to the criteria listed in the text of this article, the guidelines prohibit discharges of dredged or fill material if they cause or contribute to the violation of any state water quality standard, violate any applicable toxic effluent standard under CWA § 307, 33 U.S.C. § 1317, jeopardize the continued existence of a listed endangered or threatened species under the Endangered Species Act, 16 U.S.C. §§ 1531-1544 (1988), violate any requirement of the Secretary of Commerce to protect any Marine Sanctuary under the Marine Protection, Research and Sanctuaries Act, 16 U.S.C. §§ 1531-1544 (1988), or contribute to or cause the significant degradation of waters of the United States (defined to include adverse impacts on human health, life stages of aquatic ecosystems, ecosystem diversity, productivity and stability, recreation, aesthetic, and economic values). *See generally* 40 C.F.R. §§ 230.10(b), (c).

compensation.¹²² These guidelines reflect CEQ's mitigation requirements, and are binding on the Corps.¹²³

While EPA had been pursuing the mitigation policies set forth in the Mitigation MOA for many years under its regulations promulgated under section 404, the Corps had not been.¹²⁴ The disagreement between the two agencies¹²⁵ over whether a particular permitted activity required mitigation, and the contents and timing of what would be required, led to

122. The section 404(b)(1) guidelines impose a strong avoidance burden on applicants, 40 C.F.R. § 230.10(a), as well as a duty to take all "appropriate and practicable steps" to minimize potential adverse impacts on the aquatic ecosystem, 40 C.F.R. § 230.10(d). Subpart H to the guidelines identifies the ways in which the impacts of a proposed discharge on an aquatic ecosystem can be minimized. 40 C.F.R. §§ 230.70-230.76. These include the construction of "[h]abitat development and restoration to produce a new or modified environmental state of higher ecological value . . ." 40 C.F.R. § 230.75(d). Subpart H, by authorizing restoration of degraded habitat or creation of new habitat as a means of minimizing the impact of a section 404 permit, provides a basis for the third element of the policy - compensation.

123. CWA § 404(b)(1), 33 U.S.C. § 1344(b)(1).

124. Prior to the issuance of the Mitigation MOA under study in this article, the Corps' mitigation policy allowing off-site compensatory mitigation was satisfied by "practically any permit condition or best management practice," and allowed consideration of the positive public interest aspects of proposed projects when determining whether mitigation was required. See 51 Fed. Reg. 41,208, 41,227 (1986). EPA's mitigation policies required stricter compliance with the sequencing requirements contained in its regulations and did not allow the alleged public purpose of a proposed action to influence the applicability of mitigation requirements.

125. The U.S. Fish & Wildlife Service applies yet a different mitigation policy in meeting its review responsibilities under CWA section 404(m), 33 U.S.C. § 1344(m), as well as in its other review functions under the Fish & Wildlife Coordination Act, 16 U.S.C. §§ 661-667(e) (1988), the National Environmental Policy Act, 42 U.S.C. §§ 4321-4370(a)(1988), the Endangered Species Act, 16 U.S.C. §§ 1531 - 1544 (1988), and the Federal Energy Regulatory Commission's Licensing Procedures, 40 C.F.R. Part 4 (1991). Under its regulations U.S. Fish & Wildlife Service requires that avoidance be recommended for the most valuable resources and that the degree of mitigation requested respond to the value and scarcity of the habitat at risk. See Notice of Final Policy, 46 Fed. Reg. 7,633-7,644 (1981). The National Marine Fisheries Service (NMFS), which reviews section 404 permit applications that affect coastal fishery resources, has, as a general policy for anticipating problems: identifying alternatives for achieving objectives; reducing the possibility of conflict; and minimizing adverse effects on living marine resources and their habitats. NMFS will also recommend measures to mitigate habitat loss where practicable alternatives are unavailable, such as habitat rehabilitation. See Notice of Effective NMFS Habitat Conservation Policy, 48 Fed. Reg. 53,147 (1983). In addition, states like New Jersey, Florida, and California have *sui generis* mitigation policies which they follow when evaluating wetland fill permit.

frequent clashes between them.¹²⁶ These disagreements were aired at a 1986 Senate Oversight Hearing.¹²⁷ An interagency work group, consisting of EPA, the Corps, Fish & Wildlife Service, and National Marine Fishery Service,¹²⁸ was convened shortly after the hearings, to resolve these differences. However, the agencies could not come to an agreement concerning whether EPA's regulations required sequencing of mitigation, as was required by CEQ's mitigation regulations, or concerning the details of interagency coordination.

The inability of the federal agencies to coordinate their policies on mitigation and the resulting confusion angered the regulated interests, partly because it caused what they perceived to be unnecessary delays and additional project costs. This example of program breakdown was used, with some effectiveness, by the regulated community as part of its litany of what was wrong with the section 404 program.

From a conservationist's perspective,¹²⁹ the conflict be-

126. The Corps granted wide discretion to its field staff in the definition and application of wetlands mitigation policies, which led to different positions being taken in similar situations depending on which part of the country a particular permit was applied for. Not infrequently, EPA contested the Corps' action, and often the differences of opinion resulted in litigation. See, e.g., *Bersani v. Environmental Protection Agency*, 674 F. Supp. 405 (N.D.N.Y. 1987), *aff'd sub nom.*, *Bersani v. Robichaud*, 850 F.2d 36 (2d Cir. 1988), *cert. denied*, 489 U.S. 1089 (1989).

127. See *Oversight Hearings*, *supra* note 61.

128. Letter to the Honorable John H. Chafee, U.S. Senate, from Lawrence J. Jensen, Assistant Administrator, Office of Water, U.S. Environmental Protection Agency, and Robert K. Dawson, Assistant Secretary of the Army (Civil Works), Washington, D.C. (December 3, 1986).

129. Of particular concern to the conservation community was the Corps' reliance on compensation as a way of avoiding wetland losses. Given the scientific uncertainty surrounding wetlands creation and restoration, conservationists feared that viable, functioning wetlands would be destroyed in favor of hypothetical wetlands. See Zedler, *Wetland Restoration: trials and errors in ecotechnology?*, in *WETLANDS FUNCTIONS, REHABILITATION, CREATION IN THE PACIFIC NORTHWEST; THE STATE OF OUR UNDERSTANDING, PROCEEDINGS OF A CONFERENCE HELD APRIL 30-MAY 2, 1985, FORT WORDEN STATE PARK, PORT TOWNSEND, WASHINGTON*, WASHINGTON STATE DEPARTMENT OF ECOLOGY, at 11-16, (cited in Kuntz, Rylko and Somers, *An Assessment of Wetland Mitigation Practices in Washington State*, NATIONAL WETLANDS NEWSLETTER, ENVIRONMENTAL LAW INSTITUTE (May-June 1988) [hereinafter *Assessment*]). See also Houck, *supra* note 3, at 836-839; THE CONSERVATION FOUNDATION, *PROTECTING AMERICA'S WETLANDS: AN ACTION AGENDA, THE FINAL REPORT OF THE NATIONAL WETLANDS POLICY FORUM* 61-63 (1988) [hereinafter *FORUM REPORT*]. The author of this

tween the two agencies meant that the resource was not being adequately protected.¹³⁰ The Office of Technology Assessment (OTA), estimated in 1983 that ninety percent of the permitted wetland losses were uncompensated.¹³¹ With regard to "minimization" of wetland impacts, OTA reported in a 1982 survey of thirty-seven Corps District offices on the effects of pre-application consultation with applicants, that only fourteen offices reported substantial changes in project design as a result of these consultations.¹³² According to an earlier OTA study, only fifty-six percent of the section 404 permits issued were ever field-checked to determine the extent of compliance with permit conditions requiring some form of mitigation.¹³³

An assessment of "compensatory" mitigation in the State of Washington involving thirty-five projects over the six-year period from 1980 to 1986 showed that planned mitigation resulted in a substantial net loss of wetland acreage as well as a net loss of wetland diversity.¹³⁴ Only fifty-four percent of the permits included some design criteria for the compensatory mitigation, and only fifty-one percent of the permits imposed

article attended the Forum as a representative of the National Audubon Society. EPA, in contrast, required strict sequencing of mitigation under its regulations, allowing compensation only for unavoidable wetland losses.

Reflecting the experimental nature of wetlands restoration and creation science, the Mitigation MOA recommended that compensatory wetland mitigation should provide "at a minimum" one-for-one functional replacement "with an adequate margin of safety to reflect the expected degree of success associated with the mitigation plan," and it recognizes that the ratio may be greater where "functional values of the area being impacted are demonstrably high and the replacement wetlands are of lower functional value or the likelihood of success of the mitigation project is low." See Mitigation MOA, *supra* note 114.

130. Of significant concern to that community was the fact that the Corps did not, and still does not, have a system for tracking permits which have been conditioned to require compensatory mitigation. This makes it extremely difficult to accumulate statistics on the effectiveness of these mitigation requirements. It is even more difficult to determine to what extent pre-application consultations with Corps and EPA officials have resulted in projects being dropped, moved to another non-wetland site, or redesigned to avoid adverse impacts on wetlands.

131. WETLANDS: THEIR USE AND REGULATION, *supra* note 23, at 145.

132. *Id.* at 143.

133. *Id.* at 179.

134. See *Assessment*, *supra* note 129, at 2. One hundred and fifty-two acres of natural wetlands were exchanged for 100 acres of restored or created wetlands.

some requirement to monitor the results of mitigation.¹³⁵

Prior to November 1989, the general consensus was that no one was happy with the situation as it existed. The dynamics of the negotiations between the agencies significantly changed with the Bush Administration and the release of the Final Report of the National Wetlands Policy Forum (Forum Report).¹³⁶ President Bush, early in his administration, announced that his administration would pursue a policy of "no net loss" of wetlands.¹³⁷ He adopted this goal at the suggestion of former New Jersey Governor Kean, who was then chairperson of the National Wetlands Policy Forum,¹³⁸ and Russell Train,¹³⁹ former President and now Chairman of the

135. *Id.* at 3.

136. The National Wetlands Policy Forum consisted of 20 individuals with widely divergent views on wetlands and their use. The Forum included three governors (former Governor Thomas Kean (NJ), who chaired the Forum, and Governor Booth Gardner (WA) and Carroll Campbell (SC), each of whom served as Co-Vice-Chairs), representatives from the environmental community and business (oil and gas, agriculture, and forest products industry), representatives from state agencies, a town supervisor, a rancher, and several academics. The Forum was convened at the request of former EPA Administrator Lee Thomas. Senior officials from EPA, the Corps, and the Departments of Agriculture, Interior and Commerce participated as ex-officio members, and attended all meetings. The Forum met continuously over a year and one-half. Three public workshops were held in May of 1988, in different parts of the country. The Final Report, published in the fall of 1988, reflected a consensus on all recommendations. Only the National Homebuilders refused to approve the Final Report, and withdrew at the last moment from the Forum. See FORUM REPORT, *supra* note 129 at ix-x (1989).

137. This goal was announced in a speech the President made to Ducks Unlimited:

I want to ask today what generations to follow will say of us forty years from now. It could be that they will report the loss of many millions of acres more of wetlands. The extinction of species. The disappearance of wilderness and wildlife. Or they could report something else. They could report that, sometime around 1989, things began to change. That we began to hold onto our parks and refuges. That we protected our species. And that, in that year, the seeds of a new policy about our valuable wetlands were sown — a policy summed up in three simple words: 'no net loss.' I prefer the second vision of America's environmental future.

WETLANDS: MEETING THE PRESIDENT'S CHALLENGE, *supra* note 1, inside cover.

138. No net loss of wetlands was one of the key recommendations of the Forum. FORUM REPORT, *supra* note 129, at 18-19.

139. Russell Train was Chairman of the Council on Environmental Quality and the first Administrator of EPA, under former President Nixon. A staunch conservationist and member of the Republican Party, Train's opinion on environmental policy

Board of the Conservation Foundation and World Wildlife Fund. The Forum Report contained, among other things, a stinging indictment of present federal mitigation policy and several recommendations for its reform.¹⁴⁰ As a result of new agency heads, new faces at the negotiating table, new directions from the Oval Office, and the impetus created by the release of the Forum's report,¹⁴¹ negotiations between the two agencies suddenly accelerated, and the Mitigation MOA was concluded in less than a year. However, as soon as the document was signed, the consensus that had produced it began to come apart.¹⁴² As that consensus dissolved, the document it-

was highly regarded by this Administration, as it had been in the Nixon and Ford administrations. The Conservation Foundation, which merged with the World Wildlife Fund, and whose prior Executive Director, William Reilly, is Bush's EPA Administrator, facilitated the Forum's deliberations and published its final report. Thus, the Forum, representing a broad consensus of divergent views on wetlands and their use, was superbly positioned to play a pivotal role in shaping the Bush Administration's initial position on wetlands policy.

140. As is discussed later in this article, many of the Forum's recommendations were reflected in the Mitigation MOA. The Forum concluded that mitigation policies should be reformed to make them "more effective and coherent" if the "no net loss" goal was to be achieved, and made several recommendations as to how that could be done, including mitigation sequencing, mitigation banking and more effective monitoring of mitigation requirements. See FORUM REPORT, *supra* note 129, at 42-44.

141. As noted previously, *supra* note 136, the agency heads served on the Forum in an *ex officio* capacity. EPA Administrator Thomas frequently attended Forum meetings, including some of the meetings held by representatives of Forum members.

142. A recent challenge to the Mitigation MOA brought by the City of Anchorage, Alaska was dismissed by a U.S. district court on the ground that the issue was not ripe for review. The court did not pass on the merits of the allegation that the MOA imposed new requirements, specifically the requirement to compensate wetland losses on a one-to-one replacement basis, and, therefore, should have been subject to the notice and comment provisions of the Administrative Procedure Act. See *The Administrative Procedure Act*, 5 U.S.C. § 553 (1988). The court ruled that the dispute would be more effectively resolved in a specific permit proceeding. *Municipality of Anchorage v. United States*, 32 Env't Rep. Cas. (BNA) 1199 (D. Ak. 1990). The underlying issue in that case concerned whether the MOA was an "interpretative rule" within the meaning of 5 U.S.C. § 553(b)(A) and, therefore, exempt from the Act's notice and comment provisions. For guidance on what makes a rule an interpretative rule, see *Eastern Kentucky Welfare Rights Org. v. Simon*, 506 F.2d 1278, 1290 (D.C. Cir. 1974), *cert. granted*, 421 U.S. 975 (1975), 426 U.S. 26 (1976); *Gibson Wine Co. v. Snyder*, 194 F.2d 329, 331-332 (D.C. Cir. 1952); *Daughters of Miriam Center for the Aged v. Mathews*, 590 F.2d 1250 (3rd Cir. 1978) (interpretative rules are those rules promulgated to give guidance to agency staff and affected parties about how agency intends to administer statute or regulation); *Minority Business Legal Defense*

self started to unravel, placing at risk the underlying regulatory policies which had been in existence for over a decade.

Given the document's intended purpose and actual content, as well as the political environment within which it was issued, the broad-based opposition that the Mitigation MOA generated caught many proponents of wetlands protection by surprise, including the regulatory agencies. The reasons for this opposition, however, went beyond the MOA to include the underlying public dissatisfaction with the government's methods of protecting wetlands.

Nothing in the document seems to warrant the extreme negative response. An examination of the Mitigation MOA shows that it was little more than a directive to the personnel of both agencies to interpolate CEQ's mitigation definition¹⁴³ into the 404(b)(1) guidelines when processing "standard permits"¹⁴⁴ under the 404 Program.¹⁴⁵ In addition, consistent with CEQ's guidance, agency staff members were directed to progress through the various elements of mitigation in "sequence," beginning with avoidance and ending with compensation.¹⁴⁶ Further, there is considerable flexibility built into the MOA's policy guidance.¹⁴⁷ For example, an applicant is re-

& Education Fund Inc. v. Small Business Admin., 557 F. Supp. 37, 41-42 (D.D.C. 1982); and General Motors Corp. v. Ruckelshaus, 742 F.2d 1561, 1565 (D.C. Cir. 1984), *cert. denied*, 471 U.S. 1074 (1985)(the determinative factor is whether the agency intended to create new law or merely to "remind" affected parties of existing duties).

143. For practical reasons, the Mitigation MOA combined CEQ's five mitigation steps into three: avoidance, minimization and compensation.

144. Those individual permits that have been processed through application of the Corps' public interest review procedures, 33 C.F.R. §§ 320.1(a), 320.45, and EPA's section 404(b)(1) guidelines, 40 C.F.R. Part 230, including notice and receipt of comments. 33 C.F.R. § 325.2 Standard permits do not include letters of permission, or regional, nationwide or programmatic general permits.

145. Although the MOA focuses on the application of mitigation policies to wetlands, its actual application is broader, extending under the regulations of the two agencies to "special aquatic sites." See Mitigation MOA, *supra* note 114. Included among "special aquatic sites" are mudflats, vegetated shallows and coral reefs. See 40 C.F.R. §§ 230.40-230.45.

146. As noted previously, EPA's § 404(b)(1) guidelines already were being interpreted by EPA to require mitigation sequencing. Note 129 *infra*.

147. For example, the MOA: (1) does not require that the "no net loss" goal be met in each permit action; (2) considers mitigation sequencing policy to be met if the

quired to avoid wetland impacts only where "practicable," and to minimize those impacts to the extent "appropriate and practicable."¹⁴⁸ The MOA exempts from the sequencing requirement those instances where the discharge is necessary to avoid environmental harm or where the two agencies agree that the discharge can "reasonably" be expected to result in environmental gain or "insignificant environmental losses."¹⁴⁹ While the MOA states a preference¹⁵⁰ for on-site, "in-kind"

applicant can show that the proposed mitigation plan is in accordance with a Corps/EPA approved comprehensive plan; (3) allows off-site and not-in-kind compensatory mitigation in some circumstances; (4) allows less than one-for-one acreage replacement for low value wetlands where the likelihood of mitigation success is high; and (5) allows mitigation banking. These adjustments to the basic requirements are drawn from the Forum's recommendations on mitigation. FORUM REPORT, *supra* note 129, at 24.

148. The MOA uses the words "appropriate" and "practicable" to qualify the mitigation burden imposed on applicants for section 404 permits. According to the MOA what constitutes "appropriate" mitigation is that which is based "solely on the values and functions of the aquatic resources that have been impacted." See Mitigation MOA, *supra* note 114. A determination of what is "practicable" mitigation is founded on the definition of "practicable" found in EPA's section 404(b)(1) guidelines, namely that the required mitigation must be "available and capable of being done after taking into consideration cost, existing technology and logistics in light of overall project purposes." 40 C.F.R. § 230.3(q).

149. The original version of the MOA qualified what could be considered an "environmental gain" by including language that prohibited including in the calculation of "gain" the benefits that would allegedly accrue from the proposed compensatory mitigation. The language "or insignificant environmental losses" was added to appease the Alaskan oil and gas interests, who, the author was led to believe, had argued that their activities would have an "insignificant" impact on the wetland resources of the state, because 45% of the state was classified as wetlands. See Mitigation MOA, *supra* note 114. In addition, the MOA states that compliance with the "sequencing" requirement will be considered satisfied when the proposed mitigation is in accordance with a Corps and an EPA approved comprehensive plan, such as Special Area Management Plans, Advance Identification Areas, and State Coastal Zone Management Plans. *Id.*

150. Off-site compensatory mitigation was specifically included in the Mitigation MOA to assist the Alaskan oil and gas industry. That industry had argued that present technology and science did not allow them to restore or create tundra wetlands. This flexibility was to allow the industry to locate compensatory mitigation projects in the lower forty-eight states, for example, in the Pacific Flyway, where they also were engaging in oil and gas exploration, development and production activities. The language of the MOA, however, does not restrict the use of off-site compensatory mitigation to Alaska. To the extent that the Mitigation MOA allows even the possibility of off-site compensatory mitigation, something EPA and the conservation community opposed, the Mitigation MOA reflects the policies that had historically been

mitigation, it allows flexibility even here,¹⁵¹ including the use of mitigation banks.¹⁵²

While the policies reflected in the Mitigation MOA might not have been new or particularly onerous, and while they offered an element of greater predictability to the wetland permitting process (something long-sought by the regulated interests), the application of the sequencing and compensation requirements had been consistently opposed by those interests during the deliberations of the National Wetlands Policy Forum.¹⁵³ Representatives from the regulatory agencies heard these complaints. Therefore, it should have been no surprise that the Alaskan oil and gas industry launched a negative

pursued by the Corps.

151. For example, the Mitigation MOA allows staff to use a one-to-one acreage replacement ratio as "a reasonable surrogate" for no net loss of functions and values, but notes that this ratio may be greater where function values of the affected area are "demonstrably high" and the value of the replacement wetlands is low or the likelihood of success of the mitigation project is low. See Mitigation MOA, *supra* note 114.

152. Mitigation banks allow a prospective permittee to satisfy a future mitigation compensation requirement by contributing acreage or money to a "bank" for wetlands restoration or creation. This deposit can then be used at the time of permit issuance to satisfy compensatory mitigation requirements. Although mitigation banks are extremely controversial because of past abuses (e.g., inadequate monitoring and enforcement of banked acreage and permit compliance), the Forum recommended their use. FORUM REPORT, *supra* note 129, at 42-44. The Mitigation MOA uses mitigation banks as a hedge against the scientific uncertainty that attends wetlands restoration and creation projects, while allowing applicants to proceed with proposed fills. See Mitigation MOA, *supra* note 114.

153. ARCO Alaska had argued during the Forum that "tundra" were not wetlands, that special circumstances in Alaska necessitated the entire state's being relieved from the Forum's recommended "no net loss of wetlands" goal, and that mitigation sequencing should not apply to the industry's activities in Alaska. The industry tried unsuccessfully to persuade the Forum members that Alaskan wetlands were both abundant and of low or limited value and that strict sequencing of mitigation would close down energy and mineral production in the State, particularly on the North Slope.

In fact, Alaskan wetlands, among other things support a multi-billion dollar fishing industry, and produce millions of migratory shorebirds and waterfowl annually. These tundra wetlands function as a safety net to many continental waterfowl populations in years of severe drought, and their importance is increasing as unchecked destruction of wetlands continues in the lower forty-eight. Although Alaskan wetlands comprise 170 million acres of the State's land base, the U.S. Fish & Wildlife Service's National Wetlands Inventory shows that only 11% of these wetlands are coastal wetlands and deepwater habitat; the very wetlands most threatened by the industry's activities in the State.

campaign against the Mitigation MOA shortly after its publication.¹⁵⁴ What took everyone by surprise, however, was how quickly the broader Forum consensus behind that policy dissolved, and how quickly dissatisfaction with the document spread to other affected interests who had not participated in the Forum. In its efforts to take care of its own unique problems with the policies enunciated in the Mitigation MOA, the Alaskan oil and gas industry tapped into a much deeper and broader-based wellspring of opposition to, and frustration with, the federal wetlands regulatory program.¹⁵⁵ By the time the fracas was over, the storm of protest that had been generated not only gained the Alaskan oil and gas industry the relief it sought from the application of the document's sequencing requirements,¹⁵⁶ but also imperiled the underlying policies

154. The fact that the Alaskan oil and gas industry led the charge against the Mitigation MOA was disturbing, since the industry had been vigorously represented in the Forum's deliberations on this and many other issues, and had agreed with other Forum participants to support the Report as a "package," including the mitigation recommendations. This agreement among the participants reflected the acknowledgment that all participants had gained something of value from the process, although perhaps not everything that had been wished for. In fact, specific changes had been made in the document to reflect many of the Alaskan oil industry representative's concerns. Clearly not content with its failure to influence this aspect of the Forum's recommendations, the industry renewed its attack on the MOA; this time targeting the White House and using the Alaskan congressional delegation to carry its message. The industry also joined a lawsuit brought by the City of Anchorage, Alaska challenging the legality of MOA under the Administrative Procedure Act, 5 U.S.C. § 553, and under the National Environmental Policy Act, 42 U.S.C. § 4332(c)(2). *Anchorage v. Reilly*, 32 Env't. Rep. Cas. (BNA) 1199 (D.Ak. 1990), *reh'g denied*, No. A89-503 (D. Ala. Jan. 4, 1991)(LEXIS, Env. Library).

155. During the two and one-half month campaign against the MOA, the Alaskan oil and gas representatives were joined by two Cabinet Secretaries (Energy and Transportation), several members of Congress, representatives of the real estate development and farm lobbies, the White House Chief of Staff, and directors of other White House offices. Even the President was consulted on the contents of the document.

156. During the period of interagency review of the Mitigation MOA, an extremely controversial footnote was added to the document, which loosened the sequencing requirements even more. Footnote 7 created an exception to the sequencing requirement where there is a "high proportion" of wetlands. The history of Footnote 7 reveals that it was added to appease the Alaskan oil and gas interests, *see supra* note 154. However, because the area in which a "high proportion" can be found is not defined in the footnote, this exception could cover not only most of Alaska, but other important areas of the country where wetlands abound such as Louisiana and Dela-

themselves.¹⁵⁷ Even more troubling was that the momentum started by the debate over the Mitigation MOA set the stage for the reception, given the second initiative under study in this article.

VII. The Wetlands Delineation Manual

The second initiative involved the publication¹⁵⁸ by four federal agencies¹⁵⁹ of a manual describing the technical criteria and field indicators to be used by those agencies in order to assure consistent wetland delineation under their respective laws.¹⁶⁰ The conflagration that erupted over this initiative

ware, and southeastern states. Areas adjacent to parks, or to national or state wildlife refuges, and private sanctuaries such as the Everglades, might not be protected as wetlands. See Mitigation MOA *supra* note 114.

157. The Interagency Task Force on Wetlands indicated its continuing interest in the Mitigation MOA with a view toward making additional changes. This Task Force was appointed by President Bush in 1989, to solicit and receive public input on appropriate strategies for working towards a national goal of "no net loss." Individuals on the Task Force include representatives from the White House Offices of Cabinet Affairs, Policy Development, Management and Budget. Additionally, the Departments of Agriculture, Commerce, Defense, Energy, Housing and Urban Development, Interior, Justice, and Transportation were represented. Other organizations represented are the EPA, and the Council on Environmental Quality. The Task Force is chaired by a Special Assistant to the Director of the Domestic Policy Council. The mission of the Task Force is to provide recommendations on wetland policy to the Domestic Policy Council. In the summer of 1990, the Task Force held a series of meetings across the country on a variety of wetlands policy issues, including some on mitigation policy. See 55 Fed. Reg. 30,279-280 (1990). As of the date of this article, no further changes have been made.

158. See MANUAL, *supra* note 115. The release of the manual was preceded by the issuance of another memorandum of agreement between EPA and the Corps, entitled Memorandum of Agreement Between the Department of the Army and the Environmental Protection Agency Concerning the Determination of the Geographic Jurisdiction of the section 404 Program and the Application of the Exemptions Under section 404(f) of the Clean Water Act (January 19, 1989). See Jurisdictional MOA, *supra* note 108. The issuance of the Jurisdictional MOA went largely unnoticed even though it clearly stated that the Corps would abide by EPA's position on section 404 jurisdiction over isolated wetlands, a very controversial matter. However, neither the Jurisdictional MOA nor the MANUAL, like the Mitigation MOA before them, were released for public comment.

159. The agencies are the Environmental Protection Agency (EPA), the Corps of Engineers (Corps), the U.S. Fish & Wildlife Service, and the Soil Conservation Service.

160. MANUAL, *supra* note 116. The Corps and EPA were to use the MANUAL to identify jurisdictional wetlands under section 404 of the Clean Water Act. The SCS

was fueled by the frustrations released during the debate over the Mitigation MOA.

The historic failure of the Corps and EPA to agree upon what constitutes a wetland, even though they shared the same regulatory definition,¹⁶¹ caused innumerable problems for the regulated and conservation communities alike. These problems were not unlike the problems that had led to the issuance of the Mitigation MOA. Reflecting that concern, and noting that there were over fifty different definitions of wetlands employed in the various regulatory, research, survey, and other wetlands programs around the country,¹⁶² the National Wetlands Policy Forum¹⁶³ identified the need to eliminate inconsistent definitions,¹⁶⁴ and recommended delineation

was to use the MANUAL to identify wetlands for purposes of the "Swampbuster" provisions of the Food Security Act, 16 U.S.C. § 3801, *supra* note 115, and the U.S. Fish & Wildlife Service to identify vegetated wetlands in general for the National Wetlands Inventory Project, 16 U.S.C. § 3931 (1989).

161. *See infra* note 164.

162. FORUM REPORT, *supra* note 129, at 36.

163. *Id.*

164. As noted previously, there is one regulatory definition of wetlands that is used by both the Corps and EPA in their implementation of the section 404 Program. That definition is as follows:

[T]hose 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. Wetlands generally include swamps, marshes, bogs, and similar areas.

33 C.F.R. § 328.3; 40 C.F.R. § 230.3. The U.S. Fish & Wildlife Service employs a different, and more inclusive definition of wetlands, to identify those areas of the country to be included in the National Wetlands Inventory:

Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes, (2) the substrate is predominantly undrained hydric soil, and (3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year.

COWARDINE, CARTER, GOLET & LAROE, U.S. FISH & WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, PUBL. NO. FWS/OBS-79/31, CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES 107 (1979). The Soil Conservation Service uses yet another definition of wetlands under its programs implementing the "Swampbuster" provisions of the Food Security Act of 1985:

Wetlands are defined as areas that have a predominance of hydric soils and

methodologies to achieve that goal.¹⁶⁵ Once again, the federal agencies responded to the Forum's recommendations.

VIII. The Federal Manual for Identifying and Delineating Jurisdictional Wetlands

The issuance of the Manual in early 1989 created no stir of any kind in either the regulated or conservation communities.¹⁶⁶ However, the period of calm ended abruptly when the agencies started to apply the Manual's delineation methodologies in the field, particularly in the farm fields of Gulf Coast States the Delmarva Peninsula.¹⁶⁷ The resulting fervor gathered sufficient force to threaten the integrity of the entire section 404 program, as no other federal wetlands regulatory initiative before had ever done. What went wrong? How did the initiative move from consensus to descensus?

Looking at the Manual, it is difficult to believe that it could have precipitated such a firestorm. The Manual is a technical document, devoid of policy pronouncements. Like the Mitigation MOA, it contains little that is new.¹⁶⁸ Rather, the Manual represents an effort by the four agencies to achieve a "single, consistent approach for identifying and delineating wetlands from a multi-agency perspective"¹⁶⁹ by merging the disparate manuals and approaches of the four agencies into a single document.¹⁷⁰ The only novel aspect to

that are inundated or saturated by surface of ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions, except lands in Alaska identified as having a high potential for agricultural development and a predominance of permafrost soils.

MANUAL, *supra* note 115. These three definitions of wetlands are the only definitions in use at the federal level.

165. FORUM REPORT, *supra* note 129, at 37-38.

166. MANUAL, *supra* note 115.

167. The four agencies had started meeting in May of 1988 to reconcile the differences between them on the methods used to identify wetlands under the various programs each administered. On January 10, 1989, having reached agreement, they adopted the MANUAL and on March 20, 1989 they finally started applying it.

168. See U.S. Army Corps of Engineers, Department of Defense, Notice of Meetings, 55 Fed. Reg. 24,138 (1990).

169. MANUAL, *supra* note 115, at 1.

170. The MANUAL incorporates information from the CORPS OF ENGINEERS WET-

the 1989 Manual is that the federal agencies agreed after many years of disagreement.

The federal agencies, however, should have anticipated the outcry that would greet the Manual's application. In the first place, by using Fish & Wildlife Service indicators and methodologies for delineating wetlands, the Manual virtually guaranteed that more wetlands would be declared jurisdictional than under the prior practices of the two regulatory agencies.¹⁷¹ This alone would guarantee that the Manual would be ill-received once it was actually applied. Second, although not necessarily required by the new Manual, for the first time in the history of the program, the two federal regulatory agencies actually tried to delineate wetlands in agricultural production. This decision reversed years of neglect by the Corps, which had consistently treated the limited exemptions for certain agricultural activities in section 404(f),¹⁷² as complete programmatic exemptions for the entire industry. Now, for the first time, the Corps and EPA were in farm fields in force, identifying and delineating wetlands that had been cropped for years, sometimes generations. Their mere presence indicated to the largely unregulated and depressed segment of the economy that they had fallen under the regulation of the Clean Water Act.¹⁷³ The result was pandemonium.¹⁷⁴ Farmers in those areas suddenly discovered

LANDS DELINEATION MANUAL, EPA'S WETLANDS IDENTIFICATION AND DELINEATION MANUAL, and SCS'S FOOD SECURITY ACT MANUAL WETLAND DETERMINATION PROCEDURES. *Id.*

171. Indeed, preliminary work done under the 1989 Manual showed a remarkable similarity to the Fish & Wildlife Service Inventory Maps.

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

173. Further aggravating the situation, some agency personnel applied only a single wetlands indicator, hydric soils, in some areas of the country, most notably in the Southern and Mid-Atlantic States where alterations made it particularly difficult to locate all three indicators.

174. "As currently defined, wetlands could conceivably encompass 70% of the United States. It would then be off limits to further development or usage." *Detroit News*, January 28, 1991, editorial section. Maryland's Governor Schaefer wrote to William Reilly, EPA Administrator, to complain about the assertion of federal jurisdiction over non-tidal, vacant or farmed wetlands, and to warn that the application of the single indicator to Maryland farm land was "fatally" undercutting the State's support for a non-tidal wetlands protection program — a high priority of the Admin-

that fields which they had cropped for generations were jurisdictional wetlands within the meaning of section 404,¹⁷⁶ potentially requiring a permit¹⁷⁸ before they could be converted to another use, including a different type of crop.¹⁷⁷ Letters and calls poured into EPA and the Corps.¹⁷⁸ Soon the White House¹⁷⁹ and Congress became involved as well.¹⁸⁰ The Corps

istrator. Letter from Donald Schaefer, Governor, State of Maryland, to William K. Reilly, Administrator, U.S. Environmental Protection Agency (Aug. 17, 1990).

175. As previously discussed, under the regulatory definition of wetlands, land displaying hydric soils, hydrophytic vegetation and sufficient hydrology are jurisdictional wetlands. See *supra* note 172. The MANUAL reflects that definition and requires that the agencies consider all three technical criteria in making a wetlands determination. However, in some circumstances where all three indicators are not present, either because they have been destroyed to evade wetlands jurisdiction or because of natural causes like drought or winter die-off of annual vegetation, under the MANUAL the agencies were allowed to hypothesize the missing indicator. See MANUAL, *supra* note 115, at §§ 4.20-4.23. In the case of areas currently in agriculture where the land was drained to the extent that it no longer met the hydrology criterion, agency staff was not to posit hydrology solely on soil characteristics. See Letter to The Honorable Patrick J. Leahy, U.S. Senate, from LuJuana S. Wilcher, U.S. Environmental Protection Agency, Assistant Administrator for Water, and Robert W. Page, Department of the Army, Assistant Secretary of the Army (Civil Works) (April 19, 1990). For reasons that are not clear, the Corps and EPA applied a single parameter to cropped land in the Gulf Coast States and the Delmarva Peninsula.

176. When coupled with the policies set forth in the Mitigation MOA, farmers suddenly saw themselves faced with having to acquire compensatory wetland acreage for farm fields that they had held for years for later conversion as part of their retirement nest egg.

177. See 33 C.F.R. § 323.4(a)(1). The most extreme example of this was occurring in Louisiana where soybean farmers were being told that they would have to compensate for lost wetlands when they converted their cropped fields into rice paddies. Since the cropped fields were now wetlands, their conversion to a new use was "recaptured" by section 404(f)(2), 33 U.S.C. § 1344(f)(2), requiring the issuance of a permit and triggering the compensatory mitigation burden. Given the low wetland value of a cropped field, and the comparatively higher wetland value of a rice paddy, this position by the Corps confounded even EPA and the Fish & Wildlife Service. Of even greater importance to the farmers was that banks were refusing to issue loans out of fear that property that once could be converted at a profit to another use could not be so converted if it was classified as a wetland.

178. By now the Farm Bureau had entered the fray and organized a national campaign to abolish the MANUAL. The Bureau was actually busing in farmers to voice their opposition to the MANUAL at the Interagency Wetlands Task Force hearings held in August and September. See *infra* note 198.

179. For example, on July 31, 1990, thirteen members of Congress met with White House Chief of Staff Sununu, Secretary of the Interior Lujan, EPA Administrator Reilly, Assistant Secretary of the Army (Civil works), and representatives from the Domestic Policy Council staff, including its Director Porter, to discuss the impact

and EPA attempted to accomplish damage control¹⁸¹ by sending a joint letter to Senator Leahy, Chairman of the Committee on Agriculture, Nutrition, and Forestry, explaining what they were doing to correct the problem.¹⁸² This letter was

of the MANUAL on the "Sunbelt" States. Assertions were made at the meeting that 53% of Louisiana is now "wet" as a result of the Manual, as well as 40% of Dorchester County, Maryland, and 80% of Harris County, Texas. Clearly, hysteria was beginning to reign.

180. In response to issuance of the MANUAL, the Sunbelt Caucus, a coalition of southern and southeastern congressional members, has sponsored legislation this session of Congress to protect agriculture from the section 404 Program, to take regulatory jurisdiction away from EPA, and to establish a targeting system that will protect only the most valuable wetlands. See *The Comprehensive Wetlands Management and Conservation Act of 1991*, H.R. 1330, 101st Cong., 2d Sess. (1991) (introduced by Sen. Hayes). See also *Wetlands Protection and Reform Act* H.R. 404, 101st Cong., 2d Sess. (1991) (introduced by Sen. Hammerschmidt); *To Prohibit Federal Agencies from applying the Federal Manual for Identifying and Delineating Wetlands* H.R. 1010, 101st Cong., 2d Sess. (1991) (introduced by Sen. Paxon). In the second session of the 100th Congress, Sen. Symms proposed legislation to require federal agencies to evaluate the "takings" impact of permit denial and other regulatory initiatives. See S.50, 100th Cong., 2d Sess. (1989). The proposed legislation sought to enact a Reagan Administration Executive Order, Exec. Order No. 12,630, 53 Fed. Reg. 8,859 (1988) (Governmental Actions and Interference with Constitutionally Protected Property Rights), requiring agencies to perform a takings analysis prior to promulgation of any regulation to determine the cost to the federal fisc. if the regulation was later determined by a court of law to work a taking. Senator Symms' bill failed by only five votes, the overwhelming support for the bill due in large part to the negative response to the Manual. The bill has been reintroduced as an amendment to the Senate version of the EPA Cabinet Bill, and then as an amendment to the Transportation Bill, from which it was removed in conference in the waning hours of the First Session of the 101st Congress. Also in the first session of the 101st Congress, Sen. Johnston successfully added a provision to the House Energy and Waters Appropriation Bill, H.R. 2427, preventing the Corps from spending any money on implementing any manual issued after 1989 unless it had gone through notice and comment within the meaning of section 553 of the Administrative Procedure Act, 5 U.S.C. § 553. See H.R. 2427, 101st Cong., 1st Sess. (1990). That prohibition is now law.

181. The extent to which the political appointees in the agencies were informed of these changes in prior practice before the Manual's application is uncertain. Judging from the lack of damage control once the uproar started and the slow reaction by the agencies, either the program directors were uninformed, misinformed, or informed and unwilling or unable to assess the consequences. In any event, the ensuing outcry threatened and still threatens to bring the entire regulatory program down.

182. Letter to The Honorable Patrick J. Leahy, Chairman, Committee of Agriculture, Nutrition, and Forestry, U.S. Senate from LaJuana S. Wilcher, Assistant Administrator for Water, U.S. Environmental Protection Agency, and Robert W. Page, Assistant Secretary of the Army (Civil Works) (April 19, 1990). In that letter, the two agencies reported that they were working on a general permit to authorize the dis-

quickly followed by a Memorandum for the Field ("Field Memorandum"), which explained the extent to which section 404 applies to agricultural activities, particularly to rice farming and catfish ponds.¹⁸³ The Field Memorandum was accompanied by a Question and Answer paper (Q and A paper) intended for distribution to the farmers to allay their concerns.¹⁸⁴ Despite their wide distribution, including publication of the Q and A paper in the American Farm Bureau newsletter, the howls of protest did not diminish,¹⁸⁵ and have not diminished to this day.

The Corps and EPA could not stop the onslaught;¹⁸⁶ it

charge of dredged or fill material associated with the construction of catfish ponds (a North Carolina problem), would be soliciting public comment on the MANUAL, and would be developing specific guidance for the agricultural community on section 404's regulatory requirements and the applicability of the section 404(f) exemptions to agricultural activities.

183. U.S. ENVIRONMENTAL PROTECTION AGENCY AND U.S. DEPARTMENT OF THE ARMY, MAY 13, 1990 MEMORANDUM FOR THE FIELD, CLEAN WATER ACT SECTION 404 REGULATORY PROGRAM AND AGRICULTURAL ACTIVITIES.

184. Each of these documents set forth as a policy position that if a farm field had been effectively and legally drained so that it no longer met the three-parameter test, then it was not subject to section 404 regulatory jurisdiction.

185. For example, the House Small Business Committee held a series of hearings on the impact of Section 404 on small business, at the end of which Chairman LaFalce announced that, even though the Committee lacked jurisdiction over wetlands, it will be putting forth the "wetlands agenda" of small businesses in the 102nd Congress. Directing his ire particularly at the MANUAL, Chairman LaFalce said that while the definition of wetlands may not have been broken before the MANUAL's publication, "it's broke now and needs fixing." 21 *Env'tl. L. Rep. [Current Developments]* 1801-02 (February 8, 1991).

186. The Corps was forced to make the MANUAL available for public review and comment as part of the Interagency Task Force on Wetlands public hearings. *See* 55 *Fed. Reg.* 24,138 (1990) and 55 *Fed. Reg.* 33,349 (1990) (extending the public comment deadline from August 3, 1990 to September 28, 1990). As a result of that review, the Manual went through many more revisions during the spring and early summer of 1991. Each revision has weakened the protection afforded wetlands under the 1989 Manual, by narrowing the indicators and methodologies used for wetland delineation. As the process continued, it bore less and less relationship to science and more to politics. For an "inside the Beltway" account of the process, *see* Michael Weisskopf, *Wetlands Protection and the Struggle Over Environmental Policy*, *Washington Post*, Aug. 8, 1991, A-17 (discussing the role of the Vice-President's Council on Competitiveness in the Manual). Finally, on August 14, 1991, the four agencies released the revised Manual for public comment. 56 *Fed. Reg.* 40,446 (1991). The conservationists, joined by nearly one-third of the states, rose up in protest. Changes to the hydrology and vegetation indicators, they allege, would deregulate the Florida Everglades, the

was spreading like wildfire throughout the farming areas of the country.¹⁸⁷ Similar to the Mitigation MOA before it, the attack had gained a life of its own beyond the initial grievance. Once again, a chord had been struck with respect to the federal regulatory program that resonated deeply in the public's consciousness.

The Corps panicked,¹⁸⁸ fearing another White House or even a legislative roll.¹⁸⁹ On September 26, 1990, the agency issued a regulatory guidance letter (RGL), RGL 90-7,¹⁹⁰ exempting "prior converted" cropped wetlands from section 404 jurisdiction.¹⁹¹ While EPA looked the other way, the Corps had rolled itself, by carving a huge exception out of the regulatory program for the agricultural community.

The RGL excludes from the definition of regulated activities discharges into areas that had been converted to farming prior to the enactment date of the Food Security Act of 1985.¹⁹² This is accomplished by directing the Corps to con-

Great Dismal Swamp in Virginia and over fifty percent of the wetlands nationwide, such as in Delaware. On October 16, 1991, EPA extended the public comment period on the Manual into mid-December. 56 Fed. Reg. 51,868 (1991). Meanwhile, legislation circulated and died in the waning hours of the first session of the 101st Congress to refer the entire question of wetlands identification and delineation to the National Academy of Sciences.

187. See *supra* note 189.

188. The Assistant Secretary for Civil Works, Robert W. Page, had indicated his intent to resign. There was general concern in the two agencies that, given the opposition this initiative had generated that the White House might appoint a less sympathetic replacement. Therefore, the two agencies were motivated to find a quick and complete fix to the problem before more ground was lost.

189. Indeed, legislation was introduced in recent Congressional sessions to reduce the jurisdictional reach of wetlands regulations in response to the Manual. See H.R. 1010, 101st Cong., 2d Sess. (1991); H.R. 251, 101st Cong., 2d Sess. (1991); S.R.J. 6, 101st Cong., 2d Sess. (1991); H.R. 404, 101st Cong., 2d Sess. (1991); H.R. 1330, 101st Cong., 2d Sess. (1991); and H.R. 2400, 101st Cong., 2d Sess. (1991). Fortunately, the session ended without further action being taken.

190. Regulatory Guidance letters are internal guidance documents issued by the Corps to clarify regulatory policies. As such, they are not subject to the notice and comment provisions of the Administrative Procedure Act, 5 U.S.C. § 553(b)(3)(A) (1984). See *Hobbs v. United States*, 32 Env't Rep. Cas. (BNA) 2091 (E.D. Va. 1990), *appeal pending*, No. 90-1861 (4th Cir.).

191. It is interesting to note that the RGL expires on December 31, 1993 unless previously rescinded or revised.

192. 16 U.S.C. § 3801, note 160 *infra*.

strue the phrase, "normal circumstances," in the definition of wetlands to exclude cropped wetlands that had been converted (i.e., manipulated, drained, or otherwise physically altered, to remove excess water from the land) prior to December 23, 1985, to the extent that those wetlands no longer exhibit wetland values. The RGL excludes from the exemption prairie potholes, playa lakes, and wetlands that are seasonally flooded or ponded for at least fifteen days during the growing season.¹⁹³ In addition, it excludes wetlands where the hydrophytic vegetation has been destroyed for the specific purpose of evading wetlands jurisdiction.¹⁹⁴ However, the guidance letter effectively de-regulates wetlands that had been converted to agriculture during the thirteen year period between the enactment dates of the Clean Water and Food Security Acts.¹⁹⁵

The legal validity of the RGL is highly questionable.¹⁹⁶ Nothing in the Clean Water Act provides a basis for the sophistry employed by the Corps. Further, engrafting temporal boundaries and language — e.g., "prior converted wetlands" — from another law into the body of regulations implementing the Clean Water Act will only create future confusion; the very thing the publication of the Manual was intended to eliminate.

No argument can be mustered that the RGL advances the President's "no net loss" of wetlands goal. The effect of the RGL on wetlands is potentially devastating. The National

193. The Corps calls these three types of wetlands "farmed wetlands" to distinguish them from "cropped wetlands."

194. With regard to the latter exception to the exemption, the Corps may "reasonably infer" that the purpose of the physical disturbance is to avoid such jurisdiction and need not prove that fact. *Id.*

195. The RGL also allows the Corps to reclaim jurisdiction over prior converted cropped wetlands, if the land is abandoned and wetland conditions return. See The Soil Conservation Service National Food Security Act Manual § 512.17 (1988) for the definition of "abandonment."

196. The legal basis for the RGL is questionable at best, as the Clean Water Act is effective as of the date of enactment in 1972. There is no language in section 404 which allows the Corps to carve out from regulatory control, wetlands which otherwise might meet the regulatory definition of wetlands, but which have lost some or all of the wetland indicators between 1972 and 1985.

Wildlife Federation¹⁹⁷ estimates that the RGL will release from regulatory jurisdiction forty million acres of prior converted cropped wetlands.¹⁹⁸ One area that is particularly vulnerable to the effect of the RGL is San Francisco Bay.¹⁹⁹ There, twenty-eight percent of the wetlands are "farmed" wetlands which are seasonally ponded or wet,²⁰⁰ but may not meet the RGL's requirement for surface ponding during the growing season.²⁰¹

What began as an attempt to improve the efficacy of the 404 Program ended up nearly scuttling the entire program. While it appears less likely now that the program will be destroyed as a result of the onslaught against it triggered by the Delineation Manual, there are still efforts afoot in Congress and the current Administration to reduce its protective effectiveness. The particular window of vulnerability for the program will remain open during the debates on reauthorization of the Clean Water Act, which should begin in earnest next session of Congress. It remains to be seen if it can be closed or will be flung open wider still.

Could the debacle on the Manual have been avoided? Perhaps it could have been had the agencies proceeded more slowly and publicly in their development of the Manual, or understood the depth of that hostility toward the program. Instead, the four agencies assumed that the goodwill gener-

197. National Wildlife Federation is a national environmental organization with over one million members and is an active advocate for wetlands protection at the national level.

198. See Letter from Jay Hair, President National Wildlife Federation to Dr. G. Edward Dickey, Acting Assistant Secretary of the Army (Civil Works) and William K. Reilly, Administrator, U.S. Environmental Protection Agency (October 25, 1990)[hereinafter Hair Letter].

199. An additional problem may be posed by the RGL for "farmed" wetlands in the Bay area and other comparable coastal areas as a result of Soil Conservation Service mapping of these areas. Many believe that the SCS have mapped "farmed" wetlands as "prior converted cropped" wetlands. Hair Letter, *supra* note 198.

200. Ironically, most of these farmed wetlands would revert back to wetlands if present agricultural practices such as disking and draining were discontinued. This fact makes these wetlands particularly valuable for wetland restoration sites as part of a compensatory mitigation or wetlands mitigation banking program. See AUDUBON REPORT, *supra* note 30, at 38.

201. *Id.*

ated during the deliberations of the National Wetlands Policy Forum would transcend publication of the Forum's report and turn itself into a broad-based support for the program. The agencies relied on this assumption in their decision to proceed swiftly behind closed doors in the waning months of the Bush Administration as they deliberated over the Manual's contents.

IX. Conclusion

What can be learned from this analysis of the 404 program, and in particular, these two case studies, about the fate of wetlands protection in this country? At a minimum, this analysis should raise questions about the wisdom of relying solely on the 404 program to save wetlands. First, the program is significantly flawed, barely capable of protecting the resource even in the best of times. The probability of being able to improve the program, fill the regulatory gaps, eliminate the exemptions, and tighten the general permitting regulations seems low, if the morphology of the two case studies contains any lessons.

Even if the scope and content of the existing 404 program could be improved, wetlands would continue to disappear. The structure is just too creaky to bear much more weight — nor should the program bear the entire burden of protecting and enhancing the national wetland resource base. If this country is serious about halting the demise of our wetland resource base, then dramatic initiatives must be taken which go beyond applying yet another bandage to the 404 program.

Without touching the 404 program, Congress could make major improvements in the legal framework affecting wetlands. For example, Congress could use its authority under the Wilderness Act²⁰² and the Federal Land Policy and Management Act²⁰³ to protect wetlands as part of the national wilderness system by designating qualifying wetlands on public lands. Prime candidates for such systems would be wetlands

202. 16 U.S.C. §§ 1131-36 (1989).

203. 42 U.S.C. §§ 1701 to 1784 (1988).

on public lands that are part of a migratory flyway or have been designated wetlands of international significance under RAMSAR.²⁰⁴ Surely, Congress could direct the federal land managers to do a better job preserving, protecting, and enhancing wetlands on public lands, including wetlands which are part of the national wildlife refuge system, and require the federal government to expend funds to restore wetlands that have been degraded as a result of earlier misguided land management policies. At minimum, Congress could add to the federal financial incentives for wetlands protection,²⁰⁵ improve opportunities for private organizations to acquire wetlands,²⁰⁶ and eliminate the remaining federal programs that convert or subsidize conversion of wetlands by private interests.²⁰⁷

One must target more than just the Congress of the United States to make significant improvements in wetlands protection. State houses, governor's mansions and local land use authorities are equally important to those seeking to slow the rate of wetland loss. Wetlands are being lost incrementally and inexorably at the local level to urban sprawl, poor road design, marinas, homes, and the like. The first line of defense must be at this level.

The best tool that state and local governments possess is the authority to plan the use of lands within their respective political boundaries — a tool that the federal government does not at present have. With this tool, states²⁰⁸ and local

204. The Ramsar Convention (the Convention on Wetlands of International Importance Especially as Waterfowl Habitat, Feb. 2, 1971), was confirmed by the U.S. Senate on Oct. 9, 1986. S. Treaty Doc. 99-28, 99th Cong., 2d Sess., 132 Cong. Rec. 15773 (1986).

205. For example, the Coastal Barriers Resources Act of 1982, 16 U.S.C. §§ 3501-3510, and the Food Security Act of 1985, 16 U.S.C. §§ 3831-3836, contain provisions encouraging preservation of the resource through a system of financial incentives.

206. Amending the Tax Code, 26 U.S.C. §§ 1-8023 (1988), to increase the deductible allowed for gifts of appreciated real property and carry forward period for the unused portion of the deduction would make gifts of real property containing wetlands that much more attractive.

207. The National Wetlands Policy Forum made many of these recommendations in its Final Report. *FORUM REPORT*, *supra* note 129, at 25-33, 49-55.

208. The Maryland General Assembly has before it legislation to manage growth in the Chesapeake Bay Region. The bill is the result of a year-long study by Governor Shaefer's Commission on Growth in the Chesapeake Region. The draft bill, released

governments can set aside wetlands and other high quality habitat from development. Municipalities could reform zoning and building codes to minimize the impact on wetlands by allowing cluster developments as well as the use of transferable development rights and impact fees. Public services, such as roads, utility lines, and sewage treatment facilities could be offered in non-wetland areas. Each of these would encourage the location of development in upland areas, away from wetlands.²⁰⁹

None of these suggestions probably has much chance of success, however, until the perceived individual inequities of the present program are addressed. Until individual property owners no longer think of themselves as unfairly disadvantaged economically by their ownership of wetlands, opposition to wetland protection efforts will continue. In light of this notion, how can a change in mindset can be accomplished without draining the federal treasury, especially in this era of fiscal conservatism.²¹⁰ That it must be done is without question.

Whether any of these suggestions will lessen the apparent sting of the federal regulatory program remains to be seen.²¹¹

in late November 1990, recommended focusing 65% of new growth in developed areas (i.e., lands that are essentially all incorporated or are at least already 75% developed) and "growth areas" (lands that will be serviced with sewers within the next 20 years). Little, if any development is to be allowed on so-called "sensitive lands" (floodplains and steep slopes) and limited development on rural lands, with cluster zoning, leaving 85% of the land in open space, being required for development of tracts of greater than twenty acres.

209. The state of Vermont has taken another approach to controlling growth by establishing a Trust Fund that provides money for both affordable housing and conservation — often two activities that are perceived as conflicting. Over the two and one-half year period the project has been in operation, 28,300 acres of natural resource and agricultural lands have been preserved and 1,657 units of affordable housing constructed.

210. One far-reaching approach might be to create a market in transferable development rights like the futures market in air emission allowances authorized under Title IV of the 1990 amendments to the Clean Air Act. Pub. L. No. 101-549 (Nov. 15, 1990). Under such a program, a property owner of wetlands would be given development rights, which could be banked, sold or transferred, in other areas of the state where development is not restricted. The net effect of such a program would be to move development out of wetland areas.

211. This is not to say that improvements of a more modest nature than those set forth in the text cannot be made and have a significant impact on wetlands protection. For example, significantly improving publicly available information on wet-

The fact that opposition to protecting wetlands remains as high as it does, as reflected in the two case studies, is deeply troubling; especially in an era of heightened environmental consciousness and feigned Presidential leadership in wetlands protection. What is clear is that until the community that benefits from leaving the resource in its natural state is expanded through some of the initiatives suggested in this article, or until Americans change their attitudes about the sanctity of private property, it is unlikely that the negative perceptions concerning wetlands protection will change. Perceived inequities in the 404 program must be lessened or the individual property owner will remain a dormant force, waiting to be mobilized by any organized interest seeking to convert the resource to a private use by weakening the regulatory program.

The country is entering a critical stage with respect to protecting one of its most important natural resources. The federal wetlands regulatory program, like the resource it tries to protect, is in need of significant restoration. Infallible regulatory programs, however, are a chimera. Even if the program could be made foolproof, which seems unlikely at this time, it would be a mistake to think that that is all that is required. Other approaches, only a few of which are catalogued here, should be pursued, and every effort made to expand the community that benefits from leaving the resource in its natural state.

land locations, values, functions, and threats to impairment of these values and functions would make a major improvement in wetlands protection as well as wetlands restoration and creation. See FORUM REPORT, *supra* note 129, at 57-59.