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FEDERAL PROTECTION OF WETLANDS THROUGH LEGAL PROCESS

Christopher B. Myhrum*

Wet lands and saturated soils are not only unremunerative, but if the area is considerable, they prove a source of enervation and disease to the section in which they exist. Although individuals may neglect swamp lands, or find their reclamation and drainage too expensive, the State cannot afford to be indifferent to their continuance, because they check production, limit population, and reduce the standard of vigor and health. Their value, too, when reclaimed, in an economic view will be greatly enhanced.

President of the American Public Health Association, 1876.1

Wetlands are areas of great natural productivity, hydrological utility, and environmental diversity, providing natural flood control, improved water quality, recharge of aquifers, flow stabilization of streams and rivers, and habitat for fish and wildlife resources. Wetlands contribute to the productivity of agricultural products and timber, and provide recreational, scientific, and aesthetic resources of national interest. This piecemeal alteration and destruction of wetlands through draining, dredging, filling and other means has had an adverse cumulative impact on our natural resources and on the quality of human life.

President Carter, 1977.2

I. INTRODUCTION

The diametrically opposed viewpoints presented above reflect the profound change in attitudes towards wetland areas and the growing

* Staff Member, BOSTON COLLEGE ENVIRONMENTAL AFFAIRS LAW REVIEW.
1 Toner, A View of Some of the Leading Public Health Questions in the United States, II PUBLIC HEALTH REPORTS 1, 22 (1876).
appreciation of the importance of wetlands to the ecological balance of the environment. The protection of wetland areas is a vitally important priority in the effort to restore and maintain water quality and preserve natural hydrologic cycles.³

Section 404 of the Clean Water Act of 1977 (CWA)⁴ represents the most recent attempt by the federal government to regulate discharges of dredged and fill material into any waters of the United States. Initially established by the Federal Water Pollution Control Act Amendments of 1972 (FWPCA),⁵ the Section 404 program has evolved to encompass wetland areas in its protective scheme. The development of Section 404 did not follow the usual paradigm of the legislative process, which might be summarized as follows: initial recognition of a problem, albeit in general terms; inquiry and study by legislative committees; drafting, amendment and enactment of legislation designed to address the problem; and, after implementation and experience in application, possibly revision. The enactment, in 1977, of revisions to Section 404 of FWPCA was the culmination of a much different sort of development. In fact, a program had evolved where apparently none was intended by Congress; the 1977 Amendments to Section 404 codified and expanded a regulatory program that had emerged from coincidence and fortuitous happenstance.

A generalized overview of the sequence of events discussed in this article demonstrates the disparity between the legislative paradigm and the anomalous genesis and growth of Section 404. In 1972, Congress enacted Section 404 of FWPCA with the apparent intent only of exempting dredging activities undertaken for navigational maintenance from the regulatory authority of the Administrator of the Environmental Protection Agency (EPA).⁶ The section, however,

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⁶ The Section reads:
was not conscientiously drafted. As a result, two troublesome terms were employed: "navigable waters" and "fill material." The meaning of these terms, especially the former, became the subject of an acrimonious debate between the Environmental Protection Agency (EPA) and the Army Corps of Engineers (the Corps),\(^7\) the agency mandated to administer Section 404. The agencies disputed the parameters of territorial jurisdiction and the nature of the activities which Congress had intended the Corps to regulate, with EPA claiming that a broad interpretation of the scope of the Act was mandated.\(^8\)

Judicial interpretation of the term "navigable waters" as used in FWPCA supported EPA's position,\(^9\) but the Corps refused to yield. Environmental groups brought suit, and a federal district court ordered the Corps to expand its program.\(^10\) The administrative re-

§ 1344. Permits for dredged or fill material
(a) Issuance by Secretary of Army

The Secretary of the Army, acting through the Chief of Engineers, may issue permits, after notice and opportunity for public hearings for the discharge of dredged or fill material into the navigable waters at specified disposal sites.

(b) Specification for disposal sites

Subject to subsection (c) of this section each such disposal site shall be specified for each such permit by the Secretary of the Army (1) through the application of guidelines developed by the Administrator [of EPA], in conjunction with the Secretary of the Army, which guidelines shall be based upon criteria comparable to the criteria applicable to the territorial seas, the contiguous zone, and the ocean under section 1343(c) of this title, and (2) in any case where such guidelines under clause (1) alone would prohibit the specification of a site, through the application additionally of the economic impact of the site on navigation and anchorage.

(c) Denial of specifications by Administrator; hearing; findings

The Administrator is authorized to prohibit the specification (including the withdrawal of specification) of any defined area as a disposal site, and he is authorized to deny or restrict the use of any defined area for specification (including the withdrawal of specification) as a disposal site, whenever he determines, after notice and opportunity for public hearings that the discharge of such materials into such area will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas. Before making such determination, the Administrator shall consult with the Secretary of the Army. The Administrator shall set forth in writing and make public his findings and his reasons for making any determination under this subsection.


\(^7\) See text at notes 137-47, infra.

\(^8\) See text at notes 141-43, infra.


sponse to the court order established the first comprehensive regulatory program that covered dredging and filling activities in most major wetland areas.11

Misinformation generated by a press release of the Corps, which implied that the Corps intended to forbid a vast array of previously unregulated activities, led to lobbying efforts to delimit the Section 404 program. Initial legislative proposals which would have eviscerated the scope of the program eventually succumbed to more moderate revisions which contoured the substance of the 1977 Amendments to the original Section 404.12

While a chronological approach can describe the events which impelled the present federal effort to protect wetlands, it cannot adequately present the reasons for the unusual process which took place. This legal process attending the development of the Section 404 program involved all three branches of government, dynamic forces of history and legal doctrine, and the impetus of the environmental movement. Therefore, in order to provide a perspective survey of this peculiar process, this article employs a different approach, first discussing wetlands, their importance in the ecosystem and the pressures upon them. A brief review of seminal state regulatory efforts reveals the shortcomings of the pollution control strategies of the states, and the necessity of a federal presence in water pollution control. An historical perspective follows, introducing the troublesome term "navigable waters" and the Rivers and Harbors Act of 1899,13 and by means of the illustrative examples of the application of Sections 10 and 13 of that Act the foundation is laid for analysis of subsequent events. An account of the enactment of Section 404 of FWPCA follows, detailing the drafting mistakes which portend the dispute between EPA and the Corps. The discussion next reviews the litigation which prompted administrative expansion of the Section 404 program, and then focuses upon the elements of the program which are especially significant to the protection of wetlands. The remainder of the article presents the legislative response to the surprising evolution of Section 404, surveying the maneuvering and debate in Congress and culminating with an

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11 The regulation promulgated pursuant to court order is discussed in detail in text at notes 160-98, infra.
12 See text at notes 242-98, infra.
13 Act of Mar. 3, 1899, ch. 425, 30 Stat. 1121 (current version at 33 U.S.C. §§ 401 (original § 9), 403 (original § 10), 407 (original § 13)).
examination of the expansive legislative revisions of Section 404 in CWA.\textsuperscript{14}

II. THE EYE OF THE STORM — WETLANDS

A. A Definitional Problem

Wetlands, as the name implies, can generally be defined as the zone of land lying between permanently inundated areas and dry, "fast" land. This inexact definition, however, is inadequate, for throughout the nation are isolated, "perched" wetlands which, while not adjacent to any body of water, are nonetheless connected to the water table.\textsuperscript{15} Common parlance recites swamps, marshes, bogs, wet meadows and mudflats as different types of wetlands.\textsuperscript{16} The factor shared by all is saturated soil conditions.

No exact legal definition of wetlands exists\textsuperscript{17} not only because of

\textsuperscript{14} Section 404 of FWPCA is a regulatory statute concerned with discharges of dredged and fill material in those waters which are within the reach of congressional authority. This article concentrates on the relationship between Section 404 and discharges of dredged and fill material in wetland areas, and analyzes the legal process whereby such discharges came to be regulated under Section 404. For purposes of the ensuing analysis, an important distinction must be drawn between two separate activities which impact upon water quality — direct discharges of pollutants, on the one hand, and hydrologic modification, such as altering wetland areas by discharges of dredged or fill material, on the other hand. Both activities result in the diminution of water quality, yet in the case of discharging dredged or fill material in wetland areas there are further ramifications resulting from the alteration or destruction of the delicate ecosystem of an important natural resource.

Section 404 by its terms focuses on the impacts upon water quality resulting from the discharge of dredged or fill material, whether the activity occurs in wetlands or in other water areas. Succinctly stated, it is a dredged spoil and fill material statute. However, the effects of discharging dredged and fill material in areas other than wetlands are considered only in passing.

Finally, in reviewing the development of Section 404 as a means of protecting wetlands, many issues related to the protection of wetlands by the law are only tangentially reviewed. Where other commentators have more fully discussed issues that are beyond the scope of this article, their works are cited. Since the legal process of central concern here is multi-levelled and of many facets, this article focuses only upon major components.

\textsuperscript{15} An interesting account of perched wetlands and an economic analysis of the competing interests involved in preservation versus use for agriculture is found in J. Goldstein, Competition for Wetlands in the Midwest: An Economic Analysis (1971).

\textsuperscript{16} For an illustrated, comprehensive explanation of the different types of wetland areas see Sen. 404 Hearings, supra note 3, at 68-90 (Testimony and Briefing Supplement to Testimony of Nathaniel P. Reed, Assistant Secretary of the Interior for Fish and Wildlife and Parks).

\textsuperscript{17} The task of definition is generally approached from the point of view of vegetative index, in conjunction with saturated earth. This method, however, will not cover areas such as mudflats, where no growth is present, but which are nevertheless important to hydrological cycles.

While the word "wetlands" itself would seem simply to cover lands which are wet, specifi-
the just recent concern of the law with wetlands, but also because scientists themselves are unable to agree as to which criteria ought to be employed for purposes of generic identification. Various disciplines urge alternatively that the degree of inundation, the duration of inundation and the presence of vegetation should serve as proper guidelines. 18

The problem of exact definition remains troublesome but resolution is important, for the legal framework demands categorization of wetlands as land or water. If categorized as the former, regulation of uses and activities therein is considered land use control; if the latter, prohibitions and conditions on discharges into wetlands are under the auspices of water pollution control. 19 Yet, as seasons change and water levels rise and recede, the attempt to neatly categorize wetlands for purposes of legal analysis becomes futile.

Of more importance then, is recognition by the law that water moves in hydrological cycles, 20 and that an inherent relationship exists among all water-related resources. Whether or not wetlands fit any discrete legal category, they are important natural resources intimately involved with water quality and should perhaps be afforded *sui generis* status. 21

B. The Value of Wetlands

Notwithstanding the difficulties encountered in determining the exact parameters of wetland areas, there is no doubt that they are valuable natural resources. 22 An incomplete list of their known func-

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18 See, e.g., Sen. 404 Hearings, supra note 3, at 316-17.
19 Some jurisdictions maintain distinctions in considering the "reasonableness" of a state's use of its police powers depending on the purpose of regulation. See Note, Wetlands Regulation: The "Taking" Problem and Private Property Interests, 12 URB. L. ANN. 301 (1976) and articles and cases cited therein.
21 State legislation regarding wetlands can take this approach, since regulation is based upon police powers which may be applied broadly to protect the public health, safety, welfare and morals. See, e.g., Sibson v. State, 115 N.H. 124, 336 A.2d 239 (1975). The federal government, on the other hand, is not endowed with a general police power and therefore must attempt to reach activities in wetlands through its other powers, most notably the Commerce Clause, U.S. CONST. ART. I, § 8, cl. 3. See generally Soper, The Constitutional Framework of Environmental Law, in FEDERAL ENVIRONMENTAL LAW 20 (E. Dolgin and T.G.P. Guilbert, eds. 1974). See also note 14, supra.
22 See generally Sen. 404 Hearings, supra note 3, at 73-90, 415-23, 467-79.
tions includes: water purification and regeneration, flood control, habitat and food source. Biologists have long recognized the intrinsic value of wetlands to flora and fauna. Chemists have more recently begun to appreciate wetlands, studying, through hydrological analysis, the ability of wetlands to buffer aquatic ecosystems from the inroads of pollution. In fact, scientists predict that quantitative cost-benefit analysis of the purification abilities of wetlands may soon be available.

Not to be overlooked is the aesthetic value of many wetland areas. Because they provide food and shelter to animals and rich soil to vegetation, wetlands attract a variety of insects, birds, mammals and fish, while fostering the growth of many types of plants and trees. As isolated laboratories, wetlands provide an ideal place within which to observe the workings of nature.

C. The Need for Wetlands Protection

The increasing awareness of the value of wetlands has not, in and
of itself, altered the serious problem of wetlands destruction. Three factors are especially responsible for continued pressures on wetlands: (1) the tremendous demand for real estate generally; (2) the demand for water-related facilities such as docks and marinas, as well as canals to connect them with water bodies; and (3) the relative ease with which a wetland can be permanently destroyed.

As communities grow and solid land is utilized, wetland areas often become either the only available or the least expensive property near centers of commercial development. Thus, wetlands become attractive to those who seek sites for either residential or commercial construction because of the economic value and potential marketability of such proximity. Furthermore, planners considering the prospective routes of highways, utility lines and other facilities recognize that less resistance will be encountered bisecting a neglected swamp than a suburban development.

Drainage, dredging and fill procedures rapidly transform a thriving wetland area into acreage ready for construction. The resultant destruction of the delicate ecology of a wetland is seldom reversible. Furthermore, even if the transformation of a wetland does not encompass the entire area of saturated soil, but is accomplished in a piecemeal fashion or incrementally by bulkheading a part of a wetland and then filling in behind the barriers, this partial encroachment also interferes with important water cycles and can upset the delicate balance of an area.

Air and water pollution have direct, tangible effects. Noxious odors, oil-slicked streams, dead fish and disease serve as constant reminders of such abuses. However, the effects of destroying a wetland are not always obvious or immediate, and the connection between interfering with a wetland area and diminution of water quality, flooding or the disappearance of a species of fish is not always

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28 Wetlands are indeed endangered. Although estimates vary, there is general agreement that 50 percent of the nation's wetlands have been destroyed in the last two centuries, see CEQ Rpt, 1978, supra note 24, at 315, citing a Fish and Wildlife Service study which concluded that of an original 127 million acres of wetlands in the lower 48 states, only 87 million acres remained in 1964. It estimated that by 1971 another 17 million acres had been lost, with only 70 million remaining.

29 See Sen. 404 Hearings, supra note 3, at 113.


31 Minor projects on the periphery of wetland areas are not usually as destructive as major projects, but the frequency of such inroads is significant and cumulatively such minor projects become a major problem. See 42 Fed. Reg. 37,131 (1977).
readily recognized. Indeed, the cumulative impact of excessive encroachment might never produce results in the immediate area of a destroyed wetland but could instead manifest itself at lower elevations in a watershed.32

Public awareness of the causal relationship between wetlands destruction and environmental imbalance has thus been impeded by the subtlety and remoteness of the impact of converting wetlands to dry lands. While convincing the public and private sectors of the need for protection of wetlands has been difficult, much has been accomplished.33

**D. The Development by States of Wetlands Protection**

In response to civilization’s encroachment upon vital wetland areas, a complex array of state regulatory legislation has appeared in the past decade. Following the lead of Massachusetts,34 several states responded to the lobbying efforts of environmentally concerned citizens by enacting comprehensive wetlands protection schemes.35

Those states which have effected wetlands protection have generally done so by means of a review process varying in detail depending upon the scope and impact of the proposed project. The review process is accomplished through a permitting system, whereby activities affecting wetlands are prohibited unless a permit is obtained from the proper authority.36 This approach has two advantages:

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32 See Sen. 404 Hearings, supra note 3, at 340, 500-01.

33 See text at notes 245-46, infra.

34 MASS. GEN. LAWS ANN. ch. 130, § 105; ch. 131, §§ 40, 40A (West 1979) (as amended in 1975). The original legislation protecting coastal wetlands (ch. 130, § 105) was enacted in 1965. Inland wetlands were the subject of legislation in 1967.


36 Permitting is to some extent a term of art which assumes the following: (1) absolute prohibition of an activity unless a permit is obtained; (2) application for a permit with the requirement that information regarding the proposed activity be submitted; (3) a review process by an administrative authority, resulting in a decision to grant or deny a permit; and
first, it allows permitting authorities to attach conditions while still approving the project; second, the review process educates the applicant as to the potential impact of the proposed project and thereby demonstrates the need for caution. In some cases, water quality, flooding and other considerations compel outright denial of a permit application.

The advent of prohibitions against and conditions upon dredging and filling wetlands has impeded the rapid rate of destruction. The delay, inconvenience and expense encountered in the administrative review process may have often motivated those wishing to undertake projects to avoid wetlands entirely in favor of alternative sites. Inevitably, however, the state's exercise of its police power in order to protect health, safety, and welfare by regulating and prohibiting uses of wetlands has conflicted with private rights in property. Landowners, developers and others have challenged wetlands regulations on the grounds that the state, in essence, is taking private property without compensation, in violation of state constitutional provisions and the Fourteenth Amendment of the United States Constitution. While case law is still developing, environmental commentators favorably report a trend toward judicial willingness to uphold state regulatory efforts after balancing public health, safety and welfare considerations against ownership rights.

(4) if a permit is granted, certain conditions may be listed which must be followed when performing the activity. See text at notes 86-89, infra.

37 U.S. CONST. AMEND. XIV; see State v. Johnson, 265 A.2d 711 (Me. 1970); Potomac Sand & Gravel Co. v. Governor of Maryland, 266 Md. 358, 293 A.2d 241 (1972). See also cases cited at note 38, infra.

38 Analysis of the "taking" issue is necessarily beyond the scope of this article. For consideration of the issue, see generally Note, Wetlands Regulation, supra note 19; see also Ablard and O'Neill, Wetland Protection and Section 404 of the Water Pollution Control Act Amendments of 1972: A Corps of Engineers Renaissance, 1 VT. L. REV. 51, 106-108 (1976). For cases evincing the favorable trend, see Sibson v. State, 115 N.H. 124, 336 A.2d 239 (1975) (denial of a permit to fill a wetland held a valid exercise of police power notwithstanding substantial reduction in value of owner's land). Accord, Just v. Marienette County, 56 Wisc. 2d 7, 201 N.W.2d 761 (1972) which contains this oft-cited language:

Swamps and wetlands were once considered wasteland, undesirable, and not picturesque. But as the people became more sophisticated, an appreciation was acquired that swamps and wetlands serve a vital role in nature, are part of the balance of nature and are essential to the purity of the water in our lakes and streams. Swamps and wetlands are a necessary part of the ecological creation and now, even to the uninitiated, possess their own beauty in nature.

Is the ownership of a parcel of land so absolute that man can change its nature to suit any of his purposes? The great forests of our state were stripped on the theory man's ownership was unlimited. But in forestry, the land at least was used naturally, only the natural fruit of the land (the trees) were taken. The despoilage was in the failure to look
States undertaking wetlands regulatory efforts have generally been those identified as liberal or noted for their environmental legislation, and are largely confined to the Northeast. As late as the early 1970's, when the United States Congress was debating the desirability of developing a strong federal water pollution program, vast acres of wetlands in the midwestern, southern, and western states remained unprotected. This situation in the field of wetlands protection was symptomatic of a larger national water pollution problem — the inability of the separate states to cope with their water pollution problems. States attempting to abate the pollution of water resources were frustrated by the absence of controls in neighboring states. The fact that water moves in hydrological cycles irrespective of political boundaries along with the continued diminution of water quality nationally pointed to the need for an effective, wide-scale federal program to institute control strategies. Therefore, against this backdrop of failure by the states, Congress recognized that water pollution control required a federal presence in an area traditionally regarded as within the purview of state authority.

The demonstrated importance of wetlands in the hydrological cycle would seem to have been significant enough, in and of itself, to attract congressional response. However, such was not the case, at least not explicitly. Section 404 of FWPCA of 1972, which does not even mention wetlands, became the basis of a federal regulatory program protecting wetlands from destruction by dredging and filling. In order to understand how Section 404 evolved into a wetlands protection statute, an historical perspective is necessary.
III. **The Power to Regulate: Confusion in Navigable Waters**

The power of Congress to reach activity polluting waters was in a confused state in the early 1970's. Although water pollution was recognized as a federal problem and the interstate movement of water in hydrological cycles provided an apparent nexus to the Commerce Clause powers of Congress, events which preceded the enactment of FWPCA of 1972 obfuscated the issue of congressional authority to regulate directly activity which diminished water quality. These events, and the confusion they spawned, contributed to the remarkable evolution of Section 404.

A. **Initial Federal Regulation of the Nation's Waters**

The authority of the federal government over certain waters in the United States was first expounded by Chief Justice Marshall in *Gibbons v. Ogden*, wherein the Supreme Court held that the constitutional grant to regulate commerce necessarily involved the regulation of navigation. This recognition of federal rights established the framework for future analysis: congressional regulatory authority attached to navigable waterways through the Commerce Clause. The Court confronted the problem of defining the extent of such waters in *The Daniel Ball*, an admiralty case arising in connection with the Great Lakes. Rejecting the admiralty definition of the English common law which limited navigable waters to those "subject to the ebb and flow of the tide," the Court concluded that navigable waters are those that are "navigable in fact," and are so defined when they are "used or susceptible to being used, in their ordinary condition, as highways for commerce . . . ." The Court reaffirmed this basic definition in 1874, specifically stating that navigable waters included waterways with the capability or poten-
tial for public use as a route in interstate commerce.\textsuperscript{50}

Congressional authority to regulate waterways thus depended on the resolution of a factual issue — whether a waterway was used or capable of use in interstate commerce. In 1865 the Supreme Court decided \textit{Gilman v. Philadelphia},\textsuperscript{51} and stated that congressional authority under the Commerce Clause "necessarily includes the power to keep [navigable waters] open and free from any obstruction to their navigation . . . to remove such obstructions when they exist; and to provide . . . such sanctions as they deem proper . . . ."\textsuperscript{52} Congress did not respond immediately to this offer to exercise authority. Yet in 1888, when the Court held in \textit{Willamette Iron Bridge Co. v. Hatch}\textsuperscript{53} that absent a specific congressional sanction the construction of a bridge obstructing navigable waters would not be enjoined,\textsuperscript{54} Congress responded with legislation addressing the problem.\textsuperscript{55} A compilation and revision of these efforts resulted in the Rivers and Harbors Act of 1899.\textsuperscript{56}

\textbf{B. The Rivers and Harbors Act of 1899: Judicial Expansion of the Scope of Navigable Waters}

The implementation of the Rivers and Harbors Act of 1899 accelerated the development of the doctrine of navigable waters. Through the Act Congress asserted jurisdiction over specific activities affecting the navigability of the nation's waterways. Sections 9, 10 and 13 are of central concern and are all in force today in slightly modified forms.\textsuperscript{57}

Section 9 of the Act was designed to dispose of the problems presented in \textit{Willamette}. The construction of bridges, dams and causeways obstructing navigable waters was outlawed absent specific congressional consent. Section 10 prohibited the unauthorized obstruction or alteration of any navigable water of the United States. Obstruction and alteration were broadly defined to include

\textsuperscript{50} The Montello, 87 U.S. (20 Wall.) 430, 441-42 (1874).
\textsuperscript{51} 70 U.S. (3 Wall.) 713 (1865).
\textsuperscript{52} \textit{Id.} at 725 (dicta).
\textsuperscript{53} 125 U.S. 1 (1888).
\textsuperscript{54} "There must be a direct statute of the United States in order to bring within the scope of its laws . . . obstructions and nuisances in navigable streams. . . ." \textit{Id.} at 8.
\textsuperscript{55} Act of Sept. 19, 1890, ch. 907, § 10; 26 Stat. 426, 454-55.
\textsuperscript{56} Act of May 3, 1899, ch. 425, 30 Stat. 1121.
\textsuperscript{57} The current versions of Sections 9, 10, and 13 are codified at 33 U.S.C. §§ 401, 403, 407 (1976). The modifications are general adjustments for governmental reorganization; for example, for purposes of the statute, the Secretary of War is now the Secretary of the Army.
excavation or depositing of materials (dredging and filling) in such waters, or any work affecting the course, location, condition or capacity of such waters. These activities could be undertaken only with the authorization of the Secretary of War. The focus of concern was the maintenance of navigability and the supervision of projects that might impair navigation. Section 13, referred to as the Refuse Act, prohibited the discharge of refuse into waters without a permit from the Secretary of War. In enacting this provision, Congress extended its regulatory power to activity occurring outside the confines of navigable waters themselves, for Section 13 also prohibited discharges into tributaries of navigable waters as well as the placement of refuse in land areas if either activity might cause refuse to reach navigable waters.

The development of new uses of waterways, such as hydro-electric power generation, and the application of the sanctions of the Rivers and Harbors Act to these activities, led to an expansion of the doctrine of navigable waters, although the doctrine remained tied to the Commerce Clause. In 1921 the Supreme Court decided Economy Light & Power Co. v. United States and created the concept of indelible navigability, that is, once a waterway has been used as a route in interstate commerce it retains its identification as navigable despite subsequent alterations of watercourse, commercial capacity, or economic conditions of surrounding areas. Therefore, a decision under a precursor of Section 10 in the same year as the enactment of the Rivers and Harbors Act of 1899 provided judicial precedent for this regulation. In United States v. Rio Grande Dam and Irrigation Co., 174 U.S. 690 (1899) the Court approved the injunction sought by the United States to halt the diversion of water from non-navigable tributaries of the Rio Grande because such use affected the navigability of the Rio Grande itself. The Court analogized:

If the State of New York should, even at a place above the limits of navigability, by appropriations for any domestic purposes, diminish the volume of waters, which, flowing into the Hudson, make it a navigable stream, to such an extent as to destroy its navigability, undoubtedly the jurisdiction of the National Government would arise and its power to restrain such appropriation would be unquestioned. . . .

Id. at 709. This reasoning has been extended to Section 10 of the Rivers and Harbors Act. See United States v. Sexton Cove Estates, Inc., 526 F.2d 1293 (5th Cir. 1976); Weiszman v. District Engineer, 526 F.2d 1302 (5th Cir. 1976); United States v. Moretti, 526 F.2d 1306 (5th Cir. 1976).

Indelible navigability is sometimes referred to as the historic test of navigability. This test has presented some thorny cases to judges, as in James River & Kanawha Parks, Inc. v. Richmond Metropolitan Authority, 359 F. Supp. 611 (E.D. Va. 1973), aff'd, 481 F.2d 1280 (4th Cir. 1973) wherein the federal district court rejected a claim that federal jurisdiction extended to a downtown parking lot that had been the site of a canal used in
Despite the fact that in the *Economy Light* case the particular body of water was obstructed and no longer used for commerce, the historical use of the river rendered it navigable for purposes of federal regulation, and Section 9 of the Rivers and Harbors Act of 1899 precluded construction of a dam without specific congressional authorization.

Finally, in *United States v. Appalachian Electric Power Co.*, the Court completed the spectrum of the "classical" or "traditional" definition of navigable waters, holding that if reasonable improvements could effect navigability, such waters were within the purview of federal jurisdiction. Thus, by applying the specific prohibitions of the Rivers and Harbors Act to areas beyond those waters actually used in navigation, the Supreme Court recognized a broad congressional authority to regulate activities in water areas of the United States. The touchstone of the doctrine of navigable waters, however, was still navigation, just as the specific concern of the 1899 Act had been the prevention of obstructions to the navigable capacity of waterways.

By 1940 navigable waters encompassed those waters which were presently, had been previously, or with reasonable improvements might be made suitable for navigation in interstate commerce. The determination of navigability remained a question of fact. Once a determination of navigability was made, however, another issue presented itself in some contexts: a determination of the shoreward limit of the territorial expanse of federal authority had to be made. The Court resolved this issue by reference to the high water mark of water bodies, the point traditionally employed to separate public interstate commerce in 1880. "Quite simply, it ceased to exist as a waterway." 359 F. Supp. at 640.

311 U.S. 377 (1940).

Id. at 408.

This summary of federal jurisdiction over waterways is the "traditional" or "classical" definition of navigable waters and will be referred to frequently as such. It is unclear exactly what happened to the old common law approach of waters subject to tidal action, though it seems clear that it is still viable in certain circumstances. Regulations published in 1972 pursuant to the Rivers and Harbors Act incorporated this test into the definition of navigable waters. See 33 C.F.R. § 290-260(k)(2) (1975). The Third Circuit has upheld this guide, *United States v. Stoeco Homes, Inc.*, 498 F.2d 597 (3d Cir. 1974), cert. denied, 420 U.S. 927 (1975) ("In tidal waters the test in our view remains what it was before 1851, the ebb and flow of the tide." Id. at 610). See also text at note 276, infra.

Riparian owners needed to know at what point activities on or near the banks of navigable waters would be subject to federal regulation.

ownership and use of water and submerged land from private use
and ownership of fast land. In tidal areas, the Court deemed the
high tide line to be the territorial limit of federal regulatory author­
ity.

Expressing this territorial expanse of the authority of Congress in
traditional property terms, the Court has referred to a "dominant
navigational servitude" running to the benefit of the federal govern­
ment. As stated in F.P.C. v. Niagara Mohawk Power Corp., "we
recognize the dominant servitude, in favor of the United States,
under which private persons hold physical properties obstructing
waters of the United States and all rights to use the water of those
streams." Therefore, the rights of the United States are paramount
to the possessory interest of individuals in the area of navigable
waters. Summarizing the shoreward reach of this servitude, Justice
White explained in United States v. Rands that "the navigational
servitude of the United States does not extend above the high water
mark."

While the boundary of the high water mark defined the extent of
the navigational servitude, a distinction was made between regula­
tion of activity affecting the area of the navigational servitude and
federal rights in the area itself. The assertion of jurisdiction by
Congress in enacting Section 13 of the Rivers and Harbors Act did
not conflict with the judicial limitation of the area of navigable
waters, inasmuch as the section regulated activity outside the servi­
tude in order to protect waters within the servitude. The high water
mark and the high tide line, therefore, only provided a boundary to

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46 See generally Gay, The High Water Mark: Boundary Between Public and Private Lands,
18 U. FLA. L. REV. 553 (1966) and cases cited therein.
47 Borax Consol., Ltd. v. City of Los Angeles, 296 U.S. 10, 26-27 (1935). Most states use
the mean high water mark or mean high tide line to separate private ownership and use of
land bordering on navigable waters from public ownership and use of the water and sub­
merged land. See Hoyer, Corps of Engineers Dredge and Fill Jurisdiction: Buttressing a
Citadel Under Siege, 26 U. FLA. L. REV. 19, 23 (1973); see also Gay, supra note 66.
49 Id. at 249. See also United States v. Chandler-Dunbar Water Power Co., 229 U.S. 53
(1913); United States v. Appalachian Electric Power Co., 311 U.S. 377 (1940).
The Federal Government has domination over the water power inherent in the flowing
stream. It is liable to no one for its use or non-use. The flow of a navigable stream is in no
sense private property. . . . Exclusion of riparian owners from its benefits without com­
 pensation is entirely within the Government’s discretion.
50 Id. at 424.
51 389 U.S. 121 (1967).
52 Id. at 123.
the areas subject to federal rights, while Congress could legislate to reach activity beyond the confines of navigable waters.\textsuperscript{72}

C. \textit{Section 10 of the Rivers and Harbors Act: Erosion of the High Water Mark Boundary}

The authority to authorize construction activities in navigable waters which Section 10 of the Rivers and Harbors Act of 1899 vested in the Secretary of War was delegated to the Army Corps of Engineers.\textsuperscript{73} Initially, the Corps limited its jurisdiction to activity affecting the navigable capacity of waterways, reviewing permit applications on the basis of impact upon navigation and allowing work where no adverse impact would ensue.\textsuperscript{74} However, as a belated response to a provision in the 1958 amendments to the Fish and Wildlife Coordination Act,\textsuperscript{75} the Corps developed a "public interest review" which went beyond the confines of the 1899 Act's concern with navigability.\textsuperscript{76} In 1968 the Corps published the following regulation: "The decision as to whether a permit will be issued must rest

\textsuperscript{72} The doctrine of navigable waters defines an area in a spatial sense, while the nexus of the doctrine to the Commerce Clause provides Congress with a much broader authority to regulate activities. The Supreme Court summarized this relationship while rejecting an argument that the Federal Power Commission could grant a license for a private dam on a navigable river subject to conditions not related to navigation: By navigation respondent means no more than operations of boats and improvements on the waterway itself. In truth the authority of the United States is the regulation of commerce on its waters. Navigability, in the sense just stated, is but a part of this whole. Flood protection, watershed development, recovery of the cost of improvements through utilization of power are likewise parts of commerce control. . . . [The] authority is as broad as the needs of commerce. United States v. Appalachian Electric Power Co., 311 U.S. 377, 426 (1940). See also note 58, supra.

\textsuperscript{73} The Army Corps of Engineers, first established in 1802, is a branch of the United States Army. Act of March 16, 1802, ch. 9, §§ 26-29, 2 Stat. 132, 137. Initially involved only in the construction of coastal fortifications, as the United States expanded westward during the nineteenth century the Corps became more involved in the development of commercial waterways. Following enactment of the Rivers and Harbors Act, the Corps clearly became the guardians of navigable waters. As this article indicates, the traditional role of the Corps in the construction, operation and maintenance of civil works projects for navigation, flood control, water resources and other purposes has been supplemented with an environmental role. See text at note 148-159, infra.

At present the Army Corps of Engineers comprises the world's largest engineering firm, reflected by the fiscal 1974 budget request of $1,479 million for the Corps civil works program. \textit{Budget of the U.S. Gov't, Fiscal Year 1974}, at 345, U.S. Gov't Printing Office. See generally Hoyer, supra note 67.

\textsuperscript{74} See Hoyer, supra note 67, at 25.


\textsuperscript{76} 33 C.F.R. § 209.120(d)(1968).
on an evaluation of all relevant factors, including the effect of the proposed work on navigation, fish and wildlife, conservation, pollution, aesthetics, ecology and the general public interest . . . ."\textsuperscript{77}

Thus the Corps, by regulation, expanded the scope of concern of the 1899 Act to many considerations other than navigability.\textsuperscript{78}

However, the Corps accepted the high water mark as the absolute limit of its physical jurisdiction under Section 10 and required no permits for even massive dredging and filling projects above this line.\textsuperscript{79} The legal basis for this limit began eroding, however, as courts gradually realized that work done above the line might violate Section 10 if the activity altered or modified the course, condition or location of navigable waters.\textsuperscript{80} This realization, particularly if further extended, was of importance for the protection of wetlands, which often fell above the mean high water mark but nonetheless were hydrologically connected with adjacent water bodies. However, the Corps did not actively seek such an interpretation of Section 10.\textsuperscript{81} While the Corps did assert jurisdiction over wetlands falling

\textsuperscript{77} Id.

\textsuperscript{78} The Public Interest Review has become a requirement of law for any Corps permit program. In 1970, a report of the House Committee on Government Operations advocated that the Corps "increase its consideration of the effects the proposed work will have, not only on navigation, but also on conservation of natural resources, fish and wildlife, air and water quality, aesthetics, scenic view, historic sites, ecology, and other public interest aspects of the waterway." House Comm. on Gov't Operations, Our Waters and Wetlands: How the Corps of Engineers Can Help Prevent Their Destruction and Pollution, H.R. Rep. No. 917, 91st Cong., 2d Sess. 2 (1970).

The Fifth Circuit in 1970 held that when the House Report, the amendments to the Fish and Wildlife Coordination Act and the National Environmental Policy Act, 42 U.S.C. §§ 4321-4347 (1976) were considered together, "there is no doubt that the Secretary can refuse on conservation grounds to grant a permit under the Rivers and Harbors Act." Zabel v. Tabb, 430 F.2d 199, 214 (5th Cir. 1970), cert. denied 401 U.S. 910 (1971).

The court in Zabel further stated that "the Secretary must weigh the effect a dredge and fill project will have on conservation before he issues a permit. . . ." Id. at 211, accord United States v. Joseph G. Moretti, Inc., 478 F.2d 418 (5th Cir. 1973).


\textsuperscript{80} See, e.g., United States v. Perma Paving Co., 332 F.2d 754 (2d Cir. 1964) (overloading of land causing underlying soil to block channel held violative of Section 10); Hoyer, supra note 67, and cases cited therein. The question devolves as follows: does the reference to navigable waters in Section 10 of the Rivers and Harbors Act connote a spatial or causal relationship? Since the enactment of FWPCA, courts have been more willing to accept a causal relationship. See, e.g., United States v. Sexton Coves Estates, Inc., 526 F.2d 1293 (5th Cir. 1976) (upholding Corps jurisdiction over inland canals, the excavation of which would alter or modify nearby navigable waters.)

\textsuperscript{81} The growing awareness of the value and importance of wetlands and the incorporation of the "ebb and flow of the tide" test into the scope of navigable waters by some courts, see note 63, supra, has more recently led to increased use of Section 10 for the protection of tidal
below the mean high water line when activity in those areas affected the navigability of an adjacent water body, the limitation of the mean high water line and the lack of desire on the part of the Corps to become guardian of all wetland areas adjacent to navigable waters dissuaded the Corps from more extensive regulation. Thus, Section 10, even in conjunction with the Corps' public interest review, did not afford adequate protection from dredging and filling to wetlands.

While an examination of the application of Section 10 demonstrates the inapplicability of the doctrine of navigable waters to effective wetlands protection because of the limit of the mean high water line, Section 13 of the Rivers and Harbors Act, by its own language, reached beyond the navigational servitude. However, a review of the application of Section 13 will reveal not only the inapplicability of the historical doctrine of navigable waters to the area of pollution control, but will also, in part, explain the underlying confusion concerning the regulatory authority of Congress which attended the enactment of FWPCA.

D. Recycling Statutes: Section 13 Becomes the Refuse Act Permit Program

Unlike Section 10, which had frequently been applied by the Corps, Section 13 was largely ignored following its enactment. However, just as the evolving environmental consciousness of the 1960's had impelled the broader application of the prohibitions of Section 10 and consideration of factors other than navigability in reviewing permit applications, so too was Section 13 revitalized as a potential weapon against industrial pollution. Despite the obvious concern of Section 13 with obstructions to navigation, the scope of its prohibition against the disposal of refuse in navigable waters and their tributaries ironically transformed Section 13 from a navigational preservation statute of the laissez faire McKinley administration


See text at notes 57-58, supra.

See text at notes 75-81, supra.

An account of the development of this program is presented in J. Quarles, Cleaning Up America: An Insider's View of the EPA, 98-111 (1976).
into the statutory basis of the first federally administered permit program designed for water pollution control. This program became known as the Refuse Act Permit Program (RAPP). The impetus for this transformation was found in significant dictum stated by Justice Douglas to the effect that the term "refuse" as used in the Rivers and Harbors Act was broad enough to cover industrial wastes.66

The scheme of RAPP was to utilize Section 13 as a ban upon discharges of industrial pollutants into navigable waters and their tributaries. Dischargers were required to obtain permits from the Army Corps of Engineers, to whom the Secretary of War’s permitting authority was delegated.67 As in any permit program, the plan was not designed to stop all polluting discharges immediately, but instead to abate such discharges by interpreting data collected during the review of applications for permits.68 The involvement of the Army Corps of Engineers alarmed some environmentalists, since the Corps had earned a rather checkered environmental reputation as a result of their historical role in construction projects and water resource development.69 Nevertheless, the Corps was experienced in water matters and had developed permit review procedures in the administration of Section 10 of the 1899 Act. By executive order, RAPP became effective in 1971.70

The program, however, was short lived. The optimistic revitalization of Section 13 could not overcome the conflict between the scope of the pollution control effort and the limitations of the language of Section 13. The expansion of the doctrine of navigable waters by the Supreme Court did not go far enough to encompass the area necessary for a successful permitting effort.

In Kalur v. Resor,81 a district court confronted with a challenge to the program carefully construed the statute and enjoined the operation of RAPP. The court concluded that although Section 13 might well prohibit the discharge of pollutants into all waters tan-

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67 At the time of the initial development of the Refuse Act Permit Program no procedures existed for issuance of permits under Section 13 of the Rivers and Harbors Act.
68 See note 38, supra.
69 In 1969 Justice William O. Douglas labelled the Corps "public enemy number one" of the environment. SATURDAY REV., May 1, 1971, at 4.
gentially affecting navigable waters, the statute only extended permitting authority to cover discharges in navigable waters. In other words Section 13 prohibited certain discharges for which the Corps lacked authority to issue permits. The decision rendered literally thousands of dischargers in violation of the law, without any means of legitimizing their activity through permitting. RAPP was not intended to end immediately all discharges; such a simplistic solution to water pollution problems would have resulted in disastrous economic consequences, halting the productivity of many United States industries. RAPP was abandoned as infeasible.

The decision in Kalur reaffirmed the Corps conception of their statutory mandate as being confined to traditional navigable waters. While policy decisions of the Corps concerning major projects might encompass areas beyond traditional navigable waters under the National Environmental Policy Act, the demise of RAPP seemed to be a clear indication that their permitting authority was confined to the navigational servitude.

The RAPP initiative did not resolve the issue of whether Congress could establish permit programs in any areas beyond the traditional limits of navigable waters. Unfortunately, the program had attempted to regulate discharges of pollutants under the authority of a nineteenth century law which was based on navigational jurisdiction and led to confusion between the statutory assertion of federal authority in territorial jurisdictional terms and the power of Congress to regulate pollution as a federal problem under modern interpretations of the Commerce Clause. The innovation of this first

The conclusion that is drawn from this [statutory] language [it shall not be lawful . . . to discharge . . . refuse . . . into any tributary of any navigable water . . . [p]rovided further that the Secretary of the Army may permit the discharge of any material above mentioned in navigable waters . . .] is that the Corps of Engineers has no authority to authorize deposits of refuse matter in non-navigable tributaries of navigable waterways.

Id. at 11.

See QUARLES, supra note 85, at 98-111.


Under modern interpretations of the Commerce Clause activities having even a remote effect upon interstate commerce are subject to congressional control through the broad constitutional authority granted Congress to regulate interstate commerce. E.g., Perez v. United States, 402 U.S. 146 (1971); Heart of Atlanta Motel, Inc. v. United States, 379 U.S. 241 (1964); Wickard v. Filburn, 317 U.S. 111 (1942). Since water pollution impacts upon interstate commerce, Congress can regulate the activities which cause it.

In this time of awakening to the reality that we cannot continue to despoil our environment and yet exist, the nation knows, if the Courts do not, that the destruction of fish
regulatory effort was a noble experiment, but nevertheless a practical failure.

However, RAPP did explore the means by which a federal regulatory mechanism might be implemented. This necessary first experiment provided valuable experience and a model which aided in the development of the subsequent federal effort embodied in the Federal Water Pollution Control Act Amendments of 1972. Yet, the decision in Kalur, as noted above, affected the Corps' conception of its authority and, as will be discussed, later emerged to obfuscate the issues in a debate over jurisdiction between the Corps and EPA.

IV. THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972: CREATION OF SECTION 404

A. From RAPP to NPDES

At the time of the decision in Kalur, Congress was conducting oversight and legislative hearings to determine the best approach for restructuring and strengthening the weak water pollution legislation then in existence. The result of these efforts was the Federal Water Pollution Control Act Amendments of 1972 (FWPCA). The legislative history of the Act evinces the intent of Congress to continue the permit program approach and to consolidate the necessarily complex administrative procedures into one federal agency, EPA:

and wildlife in our estuarine waters does have a substantial, and in some areas a devastating, effect on interstate commerce. . . . Dredge and fill projects are activities which may tend to destroy the ecological balance and thereby affect commerce substantially. Zabel v. Tabb, 430 F.2d 199, 203-04 (5th Cir. 1970) (citations omitted).

See text at notes 98-103, infra.

See text at notes 138-47, infra.

The Federal Water Pollution Control Act was first passed in 1948, Act of June 30, 1948, ch. 758, 62 Stat. 1155, and was subsequently amended several times, see, e.g., Act of July 17, 1952, ch. 927, 66 Stat. 755, prior to the 1972 Amendments, because of its obvious failure to cope with the growing national problem of water pollution. The original Act proceeded on the assumption that control of water pollution was primarily the responsibility of the states and, while later amendments instituted more substantial enforcement provisions, few results were achieved.

The 1972 Amendments were, in effect, a complete re-writing of the past law, see note 5, supra, incorporating some of the techniques of the prior legislative efforts, but establishing a much more prominent federal role in the supervision and coordination of pollution control strategies. An excellent, concise summary is found in W. Rodgers, ENVIRONMENTAL LAW ch. 4 (1977). See also Zener, supra note 42.

During the Committee’s extensive hearings — oversight and legislative — on water pollution control, one question which kept appearing and reappearing was the appropriate relationship between the Federal Water Pollution Control Act and the permit program initiated by the Corps of Engineers under the authority of the Refuse Act of 1899. Information gathered during the hearings made it abundantly clear that the two programs needed to be consolidated and not left each to go in its own direction.\[^{100}\]

FWPCA incorporated the basic purpose of RAPP\[^{101}\] into an explicitly declared congressional goal to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”\[^{102}\] Additionally, national goals of swimmable water by 1983 and the elimination of all water pollution by 1985 were established.\[^{103}\]

Section 301\[^{104}\] of FWPCA outlawed the discharge of any “pollutant” from a “point source” into waters of the United States unless a permit was obtained. The principal permit mechanism and the backbone of the National Pollution Discharge Elimination System (NPDES) was Section 402.\[^{105}\] EPA was vested with authority to issue permits allowing the discharge of pollutants subject to effluent limitations also established by EPA. However, another tenet of the Act was to “recognize, preserve and protect the primary responsibilities and rights of States to prevent, reduce and eliminate pollution [and] to plan the development and use (including restoration, preservation, and enhancement) of land and water resources. . . .”\[^{106}\]

State participation in pollution control efforts was to be achieved in several ways, two of which are of critical concern. First, EPA’s permitting authority could be transferred to the states, subject to the requirement that the state have a pollution control agency approved by EPA to administer the program.\[^{107}\] While states were free to adopt more stringent effluent limitations than those set by EPA, EPA retained the right to disapprove weaker standards and to veto


\[^{101}\] See discussion of RAPP in text accompanying notes 84-97, supra.


\[^{103}\] Id.

\[^{104}\] Id. § 1311. Section 301(a) (33 U.S.C. § 1311(a)) provides that: “Except in compliance with this section and sections 1312, 1316, 1317, 1328, 1342 and 1344 of this title, the discharge of any pollutant by any person shall be unlawful.”

\[^{105}\] Id. § 1342.

\[^{106}\] Id. § 1251(b).

\[^{107}\] Id. § 1342(b).
permit approvals on a case by case basis.\textsuperscript{108}

A second means of promoting state involvement was Section 208 of FWPCA.\textsuperscript{109} Unlike the NPDES program, which was directed specifically at polluting discharges from "point sources,"\textsuperscript{110} Section 208 was primarily concerned with non-point sources of pollution,\textsuperscript{111} a much more difficult form of pollution to control.\textsuperscript{112} Examples of non-point source pollution include run-off from urban developments, construction sites and agricultural, mining and silvicultural locations; salt water intrusion into rivers, lakes and estuaries resulting from redirection of fresh water flow; and hydrologic modification.\textsuperscript{113} Section 208 provided funding incentives\textsuperscript{114} and established procedures under which states or regional agencies were required to develop regulatory programs to control various types of non-point source pollution.\textsuperscript{115} EPA was to assist state and local governments in carrying out their planning responsibilities.\textsuperscript{116}

\textsuperscript{108} Id. Another device for maintaining federal control over state programs was § 402(c)(3) (33 U.S.C. § 1342(c)(3)). Upon a finding that "a state was not administering a program in . . . compliance with [this section]" EPA could withdraw approval of the state program. 33 U.S.C. § 1342(c)(3).

\textsuperscript{109} Id. § 1288.

\textsuperscript{110} See definition of point source in text accompanying note 118, infra.


\textsuperscript{112} The relegation of "non-point source" pollution control to the states was in large part motivated by what one commentator has identified as "the fact that no one has a good idea of how federal control over non-point sources of pollution can be achieved." Zener, supra note 42, at 769.

A detailed discussion of the problems and methods of controlling "non-point source" pollution is beyond the scope of this article, although the Section 208 strategy is potentially of great importance to wetlands. As one court summarized the purpose of the Section:

"Section 208 charts a course not only for the cleaning up of polluted waters but also for the prevention of future pollution by identifying problem sources, regulating construction of certain industrial facilities, and developing processes to control runoff sources of pollution. While Section 208 focuses on "urban-industrial" areas with substantial water control difficulties, it also directs attention to other geographical locations with water pollution problems, such as forests, mining areas, farms, and salt water inlets. As a "bottom line" for the Section 208 waste treatment management activities, the Act prescribes a 1983 goal of clean waterways. The period between October 8, 1972 and July, 1976 is mainly a planning and development stage. The remaining seven years are for implementing plans and eliminating the more difficult and persistent sources of water pollution."


The relationship between Section 208 and wetlands protection under Section 404 is discussed in the text at notes 274-276, infra. See generally Lazarus, Nonpoint Source Pollution, 2 HARV. ENV'T'L L. REV. 176 (1977).


\textsuperscript{114} Id. § 1288(f)(2).

\textsuperscript{115} Id. § 1288(b)(1).

\textsuperscript{116} Id. § 1288(a)(1).
The far-reaching scope of the Act was reflected in the definitions of "pollutant" and "point source":

The term "pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.\textsuperscript{117}

The term "point source" means any discernible confined and discrete conveyance, including but not limited to any pipe ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.\textsuperscript{118}

The inclusion of "dredged spoil" and other refuse in the definition of pollutant, in conjunction with the broad definition of point source, concerned members of the Senate Public Works Committee during their review of the proposed drafts of FWPCA.\textsuperscript{119} Taken together, these definitions would expand the scope of FWPCA's NPDES program to encompass activities already subject to the permitting authority of the Army Corps of Engineers under Sections 10 and 13 of the Rivers and Harbors Act of 1899. For example, dredging activities in navigable waters would require both an NPDES permit from EPA and a Section 10 permit from the Corps of Engineers. Because this potential overlap would result in a time-consuming review process, possibly stalling many dredging projects and thereby interfering with the maintenance of the navigational capacity of waterways and harbors, Congress created Section 404.\textsuperscript{120}

\textsuperscript{117} Id. § 1362(6).
\textsuperscript{118} Id. § 1362(14).
\textsuperscript{119} See Ablard & O'Neill, \textit{supra} note 38, at 67-69.
\textsuperscript{120} Ablard and O'Neill survey in detail the legislative history of Section 404, and by reference to (1) the historical role of the Army Corps of Engineers in administering the Rivers and Harbors Act of 1899; (2) the discussions regarding proposed amendments to exempt the Corps dredge and fill programs from the NPDES program of § 402; and (3) the overall structure of FWPCA and its stated desire to "encourage the drastic minimization of paper work and interagency decision procedures . . ." 33 U.S.C. § 1251(f) (1976) and its affirmative statement that "this chapter shall not be construed as . . . (2) affecting or impairing the authority of the Secretary of the Army (A) to maintain navigation . . ." id. § 1371(a) (1976), conclude that "the intent of Section 404 was merely to continue the Corps in its traditional stewardship of those waterways subject to navigation." Ablard & O'Neill, \textit{supra} note 38, at 74.
B. Section 404

At first glance, Section 404 appeared to accomplish its avowed purpose of avoiding confusion and redundancy in the areas where EPA authority overlapped Corps authority under the Rivers and Harbors Act of 1899. Subsection (a)\textsuperscript{121} provided for permitting of dredge and fill activities by the Secretary of the Army, acting through the Chief of Engineers. Subsections (b) and (c)\textsuperscript{122} reflected a compromise effort to retain EPA oversight of dredging activities and their effect on water quality and the environment. Subsection (b) provided that the Administrator of EPA, in conjunction with the Secretary of the Army, would develop guidelines to assist in the selection of disposal sites; however, the Secretary of the Army could additionally consider negative impacts on navigation if these guidelines prohibited the specification of a site. Under subsection (c) the Administrator of EPA was nonetheless vested with a final veto of any site selection, if he determined that an adverse impact would result upon municipal water supplies, shellfish, fishery areas, wildlife or recreation areas. Senator Muskie explained the rationale of the compromise as follows:

The Conferees were uniquely aware of the process by which the dredge and fill permits are presently handled and did not wish to create a burdensome bureaucracy in light of the fact that a system to issue permits already existed. At the same time, the Committee did not believe there could be any justification for permitting the Secretary of the Army to make determination as to the environmental implications of either the site to be selected or the specific spoil to be disposed of in a site. Thus, the Conferees agreed that the Administrator of the Environmental Protection Agency should have the veto over the selection of the site for dredged spoil disposal and over any specific spoil to be disposed of in any selected site.\textsuperscript{123}

The Conferees apparently considered Section 404 to be a restatement of Corps authority under the 1899 Act, modified by the adoption of review procedures focusing on environmental considerations, but still recognizing the authority of the Secretary of the Army to

\textsuperscript{121} 33 U.S.C. § 1344(a). The text of Section 404 is set forth in note 6, supra.

\textsuperscript{122} Id. §§ 1344(b), (c).

maintain navigational capacity.124 The Corps had always been concerned with navigation, and their authority extended throughout traditional navigable waters, as stated by the Court in Kalur v. Resor.25 Whatever expansion of Corps authority was envisioned was probably confined to the subjection of federal projects, such as Corps dredging activities, to Section 404(b) guidelines and 404(c) review. The 1899 Act extended Corps permitting authority only to projects undertaken by states and private enterprise.126

Drafting peculiarities and oversights, however, wrought a far different result. Disturbingly, Section 404 referred to dredge and fill activities, while congressional debate had focused upon the effects of dredged spoil only. The term "fill material" was not discussed in the legislative history, and neither its meaning nor the reasons for including it in the Act were explained.127 Notwithstanding the latent ambiguity of the term "fill material," the language that proved most divisive and problematical in Section 404 was the term "navigable waters."128 If interpreted as traditionally understood in light of judicial construction of the 1899 Act,129 the territorial juris-

124 See Ablard & O'Neill, supra note 38, at 67-80.
126 The Conference Report stated:
It is expected that until such time as feasible alternative methods for disposal of dredged
or fill material are available, unreasonable restrictions shall not be imposed on dredging
activities essential for the maintenance of interstate and foreign commerce. Consistent
with the intent of this Act, the conferees expect that the disposal activities of private
dredgers and the Corps of Engineers will be treated similarly.
3819. Recalling the original intent of Congress in 1972, Senator Muskie stated in 1976:
Section 404 [was] designed to require the [C]orps, because of their existing authority
to maintain navigation, to regulate the dumping of polluted dredge spoil at specific dis-
posal sites, the EPA having veto power over the selection of sites. That was the intent
precisely and specifically stated.
Section 404 was an exception to an otherwise comprehensive regulatory program embod-
ied in Section 402. But implementation of Section 404 has not led to the elimination of
open water dredge spoil discharge, which was the specific objective of Section 404.
Sen. 404 Hearings, supra note 3, at 2.
127 Senator Muskie, in 1976, explained the addition:
The only reason we added the word fill was to make it clear that if the specific disposal
site agreed upon by the [Army Corps of] [E]ngineers and EPA happened to be on land
thus taking the form of fill, that there be no ambiguity on the question of whether or not
it also was covered by Section 404.
Id. at 62.
129 See text at notes 44-83, supra.
diction of the Corps remained unaffected, and regulation of dredging and filling activities would proceed as it had under Section 10 of the Rivers and Harbors Act of 1899, subject only to the Section 404(b) guidelines and the Section 404(c) veto power vested in the Administrator of EPA. While the scope of Section 10 went beyond dredging and filling as a means of altering the course, location or condition of navigable waters and included all types of activity which might effect such a result, the specific concern of Section 404 was the diminution of water quality caused by the disposal of dredged and fill material. Therefore, while Section 10 and Section 404 might cover the same activity in some circumstances, such an overlap could be explained by the former’s concern with navigation and the latter’s focus upon water quality.

However, in enacting FWPCA, Congress abandoned the limited confines of the doctrine of navigable waters. Despite the fact that the term was used, Congress approached the problem of water pollution as a federal problem under modern judicial interpretation of the Commerce Clause. Therefore, in Section 502(7) of the Act, Congress explicitly defined “navigable waters” as “waters of the United States, including the territorial seas.” While this definition on its face did not directly overturn prior doctrine, the Joint Conference Report’s further elucidation of the meaning of 502(7) indicates movement away from earlier restrictive definitions: “The conferees fully intend that the term ‘navigable waters’ be given the broadest possible constitutional interpretation unencumbered by agency determinations which have been made or may be made for administrative purposes.” Congress seemed to be repudiating the traditional definition of navigable waters as set out in administrative regulations of the Corps of Engineers. Representative Dingell, an active supporter of the FWPCA in the House, explained the conference report:

130 See note 95, supra.
132 “The omission of the term ‘navigable’ from the definition of ‘navigable waters’ bears all the earmarks of deliberate ambiguity designed to paper over irreconciled disagreements among the conferees over the desired scope of federal jurisdiction.” Zener, supra note 42, at 690-91. See also Comment, Deficiencies in the Regulatory Scheme of the Federal Water Pollution Control Act Amendments of 1972, 19 St. Louis U. L.J. 208, 212-17 (1974).
The conference bill defines the term navigable waters broadly for water quality purposes. It means all "waters of the United States" in a geographic sense. It does not mean "navigable waters of the United States" in the technical sense we sometimes see in some laws. . .

Thus the new definition clearly encompasses all waterbodies, including main streams and their tributaries, for water quality purposes. No longer are the old, narrow definitions of navigability, as determined by the Corps of Engineers, going to govern matters covered by this bill. 118

This definition of navigable waters, applied to Section 404, transformed the section from a restatement of Corps authority to protect navigation with the addition of EPA water quality oversight to a provision vesting the Corps with responsibility for permitting all dredge and fill activities occurring in "waters of the United States." Wittingly or unwittingly, Congress vastly expanded the territorial jurisdiction of the Corps, placing upon it the burden of supervising not only dredging but also filling activities in all waters Congress could reach through its Commerce Clause powers.

The enactment of FWPCA in 1972 brought together the components necessary for the creative fashioning of a widescale federal wetlands protection scheme. Although the Corps had previously

118 Cong. Rec. 33756-57 (1972). The definitions referred to by Congressman Dingell were those issued under the Refuse Act Permit Program, reflecting the traditional definition of navigable waters. See 33 C.F.R. § 209.260 (1972).

In construing FWPCA, several courts have mistakenly referred to Congressman Dingell as a conferee, see, e.g., United States v. Holland, 373 F. Supp. 665, 672 (M.D. Fla. 1974) and have ignored the statements of Senator Muskie linking the term more closely to its traditional roots:

One matter of importance throughout the legislation is the meaning of the term "navigable waters of the United States."

The Conference agreement does not define the term. The Conferees fully intend that the term "navigable waters" be given the broadest constitutional interpretation unencumbered by agency determinations which have been made or may be made for administrative purposes.

Based on the history of consideration of this legislation, it is obvious that its provisions and the extent of application should be construed broadly.

It is intended that the term "navigable waters" include all water bodies, such as lakes, streams, and rivers regarded as public navigable water in law which are navigable in fact. It is further intended that such waters shall be considered navigable in fact when they form, in their ordinary condition by themselves or by uniting with other waters or other systems of transportation, such as highways or railroads, a continuing highway over which commerce is or may be carried with other States or with foreign countries in the customary means of trade and travel in which commerce is conducted today. In such cases the commerce on such waters would have a substantial economic effect on interstate commerce.

118 Cong. Rec. 33699 (1972) (Exhibit to the Remarks of Senator Muskie).
asserted jurisdiction under Section 10 of the Rivers and Harbors Act in order to reach dredging and filling activities in wetlands below the high water mark,135 Section 404 extended Corps authority to all waters and removed the impediments associated with the doctrine of navigable waters. Section 404 explicitly mentioned dredging and filling, the most commonly employed techniques for converting wetlands to fast land. Whatever Congress originally intended in enacting Section 404, ensuing events vastly altered the role of the Army Corps of Engineers.136 The missing element in the process of converting Section 404 into a mandatory federal wetlands protection program was the incorporation of wetlands within the definition of "waters of the United States." Subsequent court decisions accomplished this, thereby compelling the Corps to regulate discharges of dredged and fill material in wetlands.

V. THE DISPUTE BETWEEN THE CORPS AND EPA — NRDC v. CALLOWAY

A. A Reluctant Corps of Engineers and An Ambitious EPA

Following enactment of FWPCA, the Corps and EPA undertook the cumbersome process of promulgating regulations under the new law. Both agencies faced the tasks of defining the scope of their territorial jurisdiction, developing procedures for administering their respective permit programs and establishing guidelines to apply in the consideration of permit applications. The different approaches taken by the Corps and EPA precipitated a debate over the meaning of "navigable waters" as used in the Act, and thus questioned the scope of Section 404.

In a proposed regulation published in 1973, the Corps expressed an intent to apply its Section 404 mandate to "waters of the United States, including the territorial seas."137 However, in the final regulation published in 1974 the Corps confined the scope of its territorial jurisdiction to "navigable waters,"138 with the intent of restricting its jurisdiction to those areas covered under the Rivers and Harbors Act of 1899.139

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135 See text at notes 79-82, supra; see especially note 81, supra.
136 See text at notes 137-59, infra.
139 Id. at 12,117. The Corps limited its jurisdiction to traditional navigable waters as defined in previous Corps regulations. See 33 C.F.R. § 209.260 (1973).
EPA, meanwhile, had substantially developed the NPDES program by the time the Corps regulation was published. EPA defined the term "navigable waters" in FWPCA to mean:

1. All navigable waters of the United States;
2. Tributaries of navigable waters of the United States;
3. Interstate waters;
4. Intrastate lakes, rivers and streams which are utilized by interstate travelers for recreational or other purposes;
5. Intrastate lakes, rivers, and streams from which fish or shellfish are taken and sold in interstate commerce; and
6. Intrastate lakes, rivers, and streams which are utilized for industrial purposes by industries in interstate commerce.\(^{140}\)

EPA became concerned with the Corps' reluctance to expand its jurisdiction. Following success in cases where courts upheld EPA's far-reaching assertion of jurisdiction under FWPCA,\(^{141}\) the Administrator expressed his disquiet in a letter to the Chief Engineer of the Army Corps:

Our interpretation of "navigable waters" within the meaning of the FWPCA does not conform to the Corps recently issued regulation. We firmly believe that the Conference Committee deleted "navigable" from the FWPCA definition of "navigable waters" in order to free pollution control from jurisdictional restrictions based on "navigability."\(^{142}\)

The Administrator expressed particular interest in the protection of wetlands. Pointing out that recent court decisions had supported EPA's broad definition of jurisdiction, the Administrator lamented...

\(^{140}\) 40 C.F.R. § 125.1(p) (1975).

the failure of the Corps to extend its jurisdiction co-extensively with EPA's in order to protect wetlands above the mean high water line:

Notwithstanding [recent decisions], and the recognized importance of wetlands to the environment, we have been informed that the Corps has declined to acquiesce in [these decisions] and has advised Corps installations not to accept applications for permits ... in these areas. The Department of Justice has taken the position that it will not bring enforcement action against persons disposing of dredge or fill material in wetlands areas without Section 404 permits so long as the Corps refuses to issue such permits. As a consequence, wetland areas above the mean high water mark are presently unprotected from the irreparable damage caused by the disposal of dredged and fill materials.143

The Corps was not pursuaded by these arguments. Nor did the Corps alter its position after the House Committee on Government Operations published a report on October 1, 1974, urging the Corps and EPA to develop a uniform regulation consistent with congressional desire that navigable waters "be given the broadest possible constitutional interpretation."144 The Corps maintained its position not only because of inevitable administrative inertia but also because the Corps conceived of itself as something other than an environmental control agency. Historically the Corps had essentially two roles: maintenance and protection of navigation in commercial waterways, and construction supervision of congressionally authorized water resource projects.145 The scope of the Corps' environmental concern was limited to the guidelines of an administrative "public interest" review which attended the development of projects and permit application decisions.146 The Corps was unwilling to broaden the scope of its environmental protection role without compulsion.147

B. NRDC v. Callaway and Its Aftermath

In late 1974 the Natural Resources Defense Council (NRDC) brought suit seeking a declaratory judgment compelling the Corps

143 Id. at 349.
145 See note 73, supra.
146 See 33 C.F.R. § 209.120(f) (1974). EPA did not promulgate Section 404(b) guidelines on site selection until September 5, 1975; therefore, site selection under Section 404 before this date was guided by the Corps public interest review discussed in note 78, supra.
to rescind its 1974 regulation and promulgate a new regulation\footnote{39 Fed. Reg. 12,115 (1974).} properly reflecting the mandate of Section 404 of FWPCA.\footnote{N.R.D.C. v. Callaway, 392 F. Supp. 685 (D.D.C. 1975).} On March 27, 1975 Judge Audrey Robinson granted plaintiff’s motion for a partial summary judgment, and ordered the revocation and recission of that part of the Corps regulation which limited “the permit [Section 404] jurisdiction of the Corps by definition or otherwise to other than ‘waters of the United States.’” \footnote{Id. at 686.}

Following the decision in Callaway, the Corps published four alternative proposals and invited public comment.\footnote{40 Fed. Reg. 19,766-94 (1975).} However, the Corps simultaneously issued a press release that generated tremendous confusion which afflicted the Section 404 program long afterward. The four proposals were shadowed by allegations in the press release which suggested that thousands of routine activities by farmers, ranchers, foresters and other groups would be subject to permit review and its inevitable delay and expense.\footnote{Id. at 19,768.} The press release drew outraged comments from agricultural interests which impelled farm-block congressmen to act.

The Administrator of EPA requested the Corps to retract the press release publicly,\footnote{Press Release, Dep’t of the Army, Office of the Chief of Engineers, May 6, 1975, reprinted in Sen. 404 Hearings, supra note 3, at 517.} and Senator Muskie condemned the action from the floor of the Senate.\footnote{Id.} Many of the 4,500 comments received from the public responded to the press release and not to the pro-

\begin{itemize}
\item \footnote{Under some of the proposed regulations, Federal permits may be required by the rancher who wants to enlarge his stock pond, or the farmer who wants to deepen an irrigation ditch or plow a field, or the mountaineer who wants to protect his land against stream erosion. \textit{Id}.}
\item \footnote{Letter from Russell Train to Lt. General William C. Gribble, Jr., May 16, 1975, reprinted in Sen. 404 Hearings, supra note 3, at 528. “Because of the extreme importance of section 404 as the primary mechanism to protect America’s valuable wetland resources, I consider it imperative that the Corps of Engineers take steps to remedy these impressions.” \textit{Id}.}
\item \footnote{121 CONG. REC. 17347 (1975).}
\end{itemize}
posed alternatives.155

The initial furor evoked by the press release attracted congres­
sional attention and, as a result, subcommittees in both the House
and the Senate held hearings in order to inquire into the Corps' allegations.156 The testimony at these hearings provided a unique
"legislative history" to the regulation drafting process, and sug­
gested the scope of the effort required to comply with the court's
order in NRDC v. Callaway.157 In their testimony, both Assistant
Secretary of the Army Victor V. Veysey and Assistant EPA Admin­
istrator Alvin AIm assured skeptical congressmen that the Corps
and EPA had resolved their differences and could properly fashion
a workable program.158 Despite some congressmen's contentions that
the Callaway decision should be appealed, the process of drafting
the regulation continued and on July 25, 1975 the Corps published
the regulation, which was entitled "Interim Final" and effective
immediately.159

VI. THE INITIAL REGULATORY PROGRAM

In drafting and promulgating an interim final regulation the
Corps attempted to resolve three basic problems presented by the
district court's order to fully implement the mandate of Section 404
of FWPCA. First, jurisdiction had to be defined in territorial terms
in order to clearly delineate the scope of the program. Second, the
Act's absolute prohibition of the disposal of dredged and fill mate­
rial160 without a permit had to be reconciled with any expansion of
jurisdiction. Otherwise the program would have had to cope with

155 See, e.g., Development of New Regulations by the Corps of Engineers, Implementing
Section 404 of the Federal Water Pollution Control Act Concerning Permits for Disposal of
Dredge or Fill Material: Hearings Before the Subcomm. on Water Resources of the House
cited as House 404 Hearings, 1975].
156 See generally id. at 1-256; Development of New Regulations by the Corps of Engineers,
Implementing Section 404 of the Federal Water Pollution Control Act Concerning Permits
for Disposal of Dredge or Fill Material: Hearings Before the Subcomm. on Water Resources
157 See text at notes 161-84, infra.
158 See, e.g., House 404 Hearings, 1975, supra note 155, at 2.
159 40 Fed. Reg. 31,322-43 (1975), codified in 33 C.F.R. § 209.120 (1977) (as amended by 41
Fed. Reg. 55,524 (1976)). The identification of the regulation as "Interim Final" referred to
the fact that the regulation was effective immediately but public comment would continue
to be received for an additional 90 days, after which time the regulation would be modified,
many routine activities involving hydrologic modification, even though some of these activities were only remotely connected to water quality considerations. Such a result would have rendered the regulatory effort unmanageable. Finally, procedures had to be developed to correlate the detail of administrative review of permit applications to the potential severity of hydrological impact of the proposed projects and activities.

Beyond these initial problems confronting the drafters of the regulation was the larger issue of how to implement a suddenly expanded program within existing budgetary and manpower constraints. Whatever approaches might resolve the territorial scope and subject matter concerns of the enlarged and revised Section 404 program, the actual implementation thereof posed a further challenge to all Corps personnel.

The 1975 regulation responded to these constraints and the underlying problems. Although this specific regulation has been su-

161 See note 14, supra.
162 As the Department of Agriculture noted:

literally interpreted, [section 404] means that "navigable waters" . . . include tributar­ies of tributaries of tributaries, etc. to the crest of a watershed divide—indeed to the tiniest trickle of surface water resulting from rainfall, snowmelt, or other precipitation. Thus, all water and all land area within the watersheds of inland navigable waters of the United States would be included.

Accordingly, if virtually all land, as well as water, areas in the Nation are to be designated "navigable waters," then the definitions of "dredged" and "fill" material become most pertinent to farmers, ranchers, and the general rural sector of the Nation.

Hearings Before the Subcomm. on Water Resources of the Senate Comm. on Public Works and Transportation, supra note 156, at 56 (Enclosure No. 1 to the Dep't of Agriculture's letter commenting on the Army Corps of Engineers Proposed Regulations) (emphasis in the original).

While the regulations did not take such an expansive view of navigable waters, the activities of farmers irrigating, ranchers impounding stock ponds, and foresters crossing streambeds had to be considered and a means to exclude routine discharges of dredged and fill material with lesser impact upon water quality needed to be developed.

163 Ideally, the degree of review to which a proposed project is subject ought to correlate with the scope and potential impact of the project. The National Environmental Policy Act, 42 U.S.C. §§ 4321-47 (1976) requires detailed review of only "major" federal actions. Id. § 4332.

164 A preamble to the 1975 regulation stated:

We have attempted to create a program that recognizes the need to interweave all concerns of the public — environmental, social, and economic — in the decision-making process; that recognizes that present limitations on manpower preclude its immediate implementation throughout the country; and that we believe to be responsive to the overall objectives and needs of the Federal Water Pollution Control Act to the extent that the law now allows.

perseded, consideration of the Corps' initial approach is important and relevant for two reasons. First, the regulation satisfied the party plaintiff in *NRDC v. Callaway* and established an accepted interpretation of Section 404. Second, the methods and procedures utilized provided an effective and reasonable approach to administering a federal regulatory program intended to oversee the disposal of dredged and fill material in waters and wetlands throughout the United States. The 1975 regulation clearly demonstrated that comprehensive wetlands protection could be accomplished.

A. Phased Implementation

To resolve the larger issue of administering the vastly expanded Section 404 program within then existing manpower and budgetary constraints the Corps adopted an approach that broadened jurisdiction incrementally in three phases. The phases covered a period of two years, allowing the time necessary to recruit personnel and establish procedural routines to process permit applications.

Phase I, operative upon publication, included not only all waters within the "classical" definition of navigable waters but also specifically included "adjacent wetlands," regardless of whether they were above or below the mean high water line. As such, this phase represented only a lateral extension of the territorial jurisdiction of the Corps.

Phase II, effective July 1, 1976, incorporated primary tributaries, freshwater wetlands contiguous thereto and all lakes not within the traditional jurisdiction of the Corps. Finally, Phase III, beginning July 1, 1977, encompassed the entire area of Section 404 territorial jurisdiction.

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187 As a preliminary note to review of the regulation, it is important to realize that analysis concentrates on the import of the regulation for wetlands, although the Section 404 program extends to all "waters of the United States" and discharges of dredged and fill material occurring therein. See note 14, supra.
188 33 C.F.R. § 209.120(e)(2)(1977).
189 Id.
190 Id. "Primary tributaries" are the main stems of tributaries directly connected with navigable waters. Id. § 209.120(d)(2)(ii)(e).
191 Id. § 209.120(e)(2). The 1975 regulation extended the coverage of the Section 404 program to encompass all areas within EPA's judicially affirmed broad interpretation of "navigable waters" as defined in 33 U.S.C. § 1362(7) (1976). See text at notes 172-78, infra.
B. The Delineation of Territorial Jurisdiction

When the Corps introduced the new regulation, it also announced: “we recognize that this program, in its effort to protect water quality to the full extent of the commerce clause, will extend Federal regulation over discharges of dredged or fill material to many areas that have never before been subject to Federal permits or to this form of water quality protection.”

Since the regulation set forth the administrative definition of the term “navigable waters” for the purpose of Section 404 as “waters of the United States including the territorial seas with respect to the disposal of fill material and excluding the territorial seas with respect to the disposal of dredged material. . . .” the extent of Corps jurisdiction paralleled the expanded view of jurisdiction adopted by EPA under FWPCA. Additionally, the definition listed specific waters in eight succeeding sub-paragraphs, in order to assert jurisdiction over areas previously in question.

The definition of “navigable waters” clearly included wetlands by specifically mentioning coastal and freshwater wetlands. This dis-

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173 33 C.F.R. § 209.120(d)(2)(i) (1977). The exclusion of dredged material in the territorial seas followed from the fact that this activity was already subject to regulation under 33 U.S.C. § 1413 (1976).
174 See 40 C.F.R. § 125.1(p) (1975). See also text at note 137, supra.
175 33 C.F.R. §§ 209.120(d)(2)(i)(a)-(h) (1977). Ablard and O’Neill discuss in detail the significance of these eight sub-paragraphs as they relate to all aspects of the jurisdiction of the Corps. Ablard & O’Neill, supra note 38, at 80-91.
176 Coastal wetlands, mudflats, swamps, and similar areas that are contiguous or adjacent to other navigable waters. “Coastal wetlands” includes marshes and shallows and means those areas periodically inundated by saline or brackish waters and that are normally characterized by the prevalence of salt or brackish water vegetation capable of growth and reproduction.
177 33 C.F.R. § 209.120(d)(2)(ii)(d) (1977). However, at his discretion, the District Engineer of the Corps can require permitting for an activity in any area if he determines water quality protection so requires, id. § 209.120(d)(2)(i)(i). Therefore, wetland areas fed only by groundwaters would be regulated, but only when necessary to protect water quality.
178 Freshwater wetlands including marshes, shallows, swamps and, [sic] similar areas that
tinction between coastal and freshwater wetlands was perhaps unnecessary, but the explicit inclusion of mudflats in the coastal category made clear the recognition that such saturated areas, while not supporting any vegetation, were nonetheless important to hydrologic cycles.

The definitions of "coastal wetlands" and "freshwater wetlands" demonstrated that the Corps had finally abandoned the procedure of determining federal jurisdiction by reference to the high water mark when water quality was at issue.\(^\text{177}\) Instead, a vegetative index was employed in conjunction with periodic inundation and specific designations.\(^\text{178}\) Therefore, wetlands were firmly ensconced in the scope of the Section 404 navigable waters.

**C. Activities Regulated**

The absence of detailed discussion of the terms "dredged and fill material" in the legislative history of Section 404\(^\text{179}\) afforded drafters of the regulation significant flexibility in determining which activities the Corps would subject to permit requirements. This opportunity contributed to the development of definitions that specifically excluded some routine activities which were of lesser environmental concern or were of such social utility as to justify whatever minor pollution they did entail. By creating exemptions, the Corps may have allowed some truly harmful activities to escape regulation,\(^\text{180}\) but the exemptions allowed the Corps to fashion a workable program. Thus, while "dredged material" was identified broadly in the regulation as "material that is excavated or dredged from navigable waters...", the definition exempted "material resulting from normal farming, silviculture, and ranching activities, such as plowing, cultivating, seeding, and harvesting for the production of food, fiber and forest products."\(^\text{181}\) Likewise, fill material included "any

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\(^{177}\) See id. § 209.120(d)(2)(i)(h).

\(^{178}\) See id. §§ 209.120(d)(2)(i)(b), (h).

\(^{179}\) See text at note 127, supra.


\(^{181}\) 33 C.F.R. § 209.120(d)(4) (1977).
pollutant used to create fill in the traditional sense of replacing an aquatic area with dry land or changing the bottom elevation of a waterbody for any purpose,” but exempted material resulting from the same activities as enumerated in the “dredged material” definition. Additionally, the definition of “fill material” exempted material used in emergency reconstruction or in maintenance of currently serviceable structures.

Employing definitions to exclude activities from Section 404 coverage accomplished two things: as previously mentioned, it contributed to the development of a manageable program; second, it assuaged apprehension resulting from the Corps’ press release. As such, exemption was a politically astute maneuver, for burdening the powerful interests of forestry, farming and ranching could have devastated the entire Section 404 program.

D. Permitting Methods

The regulatory scheme of a permit program generally requires an individual application for each separate activity. The Section 404 regulation followed this basic procedure but also experimented with two other permitting techniques.

In order to obviate the requirement of a specific permit application in all cases, the drafters of the regulation devised a general or categorical permitting procedure. Activities “substantially similar in nature, that cause only minimal adverse environmental impact when performed separately, and that will have only a minimal adverse cumulative effect on the environment. . . .” could qualify for general permits. Once issued, a general permit would authorize clearly described categories of work; individual activities within such categories needed no further authorization. Since Section 404 required that permits be issued only for specified disposal sites, the general permit procedure required either that specific water

182 Id. § 209.120(d)(6).
183 Id.
184 See generally House 404 Hearings, 1975, supra note 156. Many congressmen were especially concerned that the Section 404 program would interfere with the routine activities of farmers, ranchers, and foresters. The exemptive definitions made it possible for the Corps to accommodate these concerns by excluding activities from permit requirements while maintaining broad territorial jurisdiction.
185 See discussion of RAPP, text at notes 84-90, supra.
187 See text of Section 404, 33 U.S.C. § 1344 (1976), at note 6, supra.
bodies be designated by the permit or that dischargers report to the local Corps’ authority forty-five days prior to the commencement of work involving discharges. Under this procedure beach erosion control projects along an area of coastline or construction of small recreational piers on a particular body of water could be permitted generally, subject to specific conditions and qualifications.

The second procedure designed to alleviate the anticipated administrative burden of the Section 404 program was permitting through the regulation itself; the regulation itself was functionally a permit for certain specifically defined activities. Subject to listed environmental criteria, the construction of bulkheads less than 500 feet long, using less than one cubic yard of fill per running foot, could be undertaken in waters not also covered by Section 10 of the Rivers and Harbors Act without any permit application. The regulation also “automatically” permitted a very small class of projects underway when the regulation was promulgated.

E. The Success of the 1975 Regulations

The Corps of Engineers responded to the challenges posed by the court’s order in NRDC v. Callaway by developing a permit program that could accommodate the enormity of the expanded territorial jurisdiction and by implementing the program in phases. Furthermore, the Corps’ regulation, although fashioned to resolve practical problems, established clear territorial jurisdiction over the nation’s wetlands. Read in conjunction with guidelines promulgated by EPA pursuant to Section 404(b) on September 5, 1975 the Section 404 regulation seemed to be a firm step forward in halting the devastating destruction of wetlands. The stated policy considerations in reviewing permit applications for projects militated strongly against wetlands development. In net effect the program proceeded with a rebuttable presumption against construction in wetlands if alternatives existed.

190 Id.
192 The Corps regulations stated that “[u]nless the public interest requires otherwise, no permit shall be granted for work in wetlands . . . .” 33 C.F.R. § 209.120(g)(2)(iv) (1977). The EPA regulations stated that:

The following objectives shall be considered in making [a determination as to site selection]:

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The following objectives shall be considered in making [a determination as to site selection]:
The Corps encouraged public comment on the interim final regulation during Phase I. It conducted hearings throughout the United States to solicit the public's views about the program. This process was in part an educational effort to assuage fears aroused by the 1975 press release.193

During the comment period public response was evenly divided between proponents of expanded jurisdiction and opponents194 who considered the 404 program another instance of federal government intrusion on local concerns. Proponents saw the expansion as a viable mechanism for retarding the continued filling and elimination of wetlands, as well as a necessary component in the general effort to control water pollution caused by hydrologic modification. Officials of the Department of the Interior and EPA joined in support of expansion of Corps jurisdiction.195

The most vocal and best organized opponents were representatives of agricultural, forestry and construction interests who were uncertain whether the 1975 regulation's exceptions were broad enough to exempt their activities.196 They were greatly disturbed by the threat that many heretofore routine, unregulated activities would become mired in an irksome, expensive and time-consuming permitting process.

These opponents, perhaps because of past experience with administrative bureaucracy, took their grievances to Congress and demanded statutory revision of Section 404. While Congress consid-

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(1) Avoid discharge activities that significantly disrupt the chemical, physical and biological integrity of the aquatic ecosystem . . .
(2) Avoid discharge activities that significantly disrupt the food chain . . .
(3) . . .
(4) Avoid discharge activities that will destroy wetland areas having significant functions in maintenance of water quality . . .
193 See 6 ENVRL. REP. (BNA) 1963 (1976). 50% favorable, 43% unfavorable, 7% no clear choice. Id.
195 See, e.g., 6 ENVRL. REP. (BNA) 643 (1975) (comment of Robert W. Long, Asst Sec'y of Agriculture); Sen. 404 HEarings, supra note 3, at 227 (Statement of William H. McCredie, National Forest Products Association); at 551 (Statement of Bruce Hawley, Asst Dir., National Affairs, National Farm Bureau). See also Boxer, Every Pond and Puddle — or, How Far Can the Army Corps Stretch the Intent of Congress, 9 NAT. RESOURCES LAW. 467 (1976).
ered revisions in 1976, a group of legislators persuaded President Ford to delay implementation of Phase II, scheduled for July 1, 1976.\textsuperscript{117} However, despite the extended period for review, the moratorium on Phase II implementation expired on September 1,\textsuperscript{118} and Congress thereafter adjourned on September 30, 1976 without taking any further action with respect to Section 404.

While Congress continued to consider further action in 1977, the Corps responded to public concern and confusion by revising the 1975 regulation before publishing it in final form. Following implementation of Phase III on July 1, 1977 this revised regulation appeared on July 19, 1977.\textsuperscript{119} Currently in effect, it made refinements in the 404 program which reflected the practical problems encountered during Phases I and II and anticipated under Phase III.

### VII. The 1977 Regulation

The 1977 regulation is important not only because it is now in effect but also because both the expansion and the rejection of certain approaches taken by the 1975 regulation constituted a further evolution of the federal wetlands regulatory effort. These revisions contributed substantially to the statutory amendment undertaken by Congress later in 1977. The most significant revisions in the 1977 regulation were a new approach to interpreting navigable waters, a redefinition of wetlands; and an expansion of the permitting by regulation approach\textsuperscript{200} introduced by the 1975 regulation.

A comprehensive introduction preceded the new regulation,\textsuperscript{201} providing a historical perspective and summarizing the purpose of the final regulation as being “to make the policies and procedures [of the Corps] more understandable to a person desiring to perform work in the waters of the United States.”\textsuperscript{202} The 1975 regulation had

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\textsuperscript{117} 7 ENVIR. REP. (BNA) 435 (1977). This action of delay outraged the National Wildlife Federation, an original party plaintiff in N.R.D.C. v. Callaway, 392 F. Supp. 685 (D.D.C. 1975). A representative of the organization characterized the action as “clear illegality” since “first, the regulations were published pursuant to direct court order . . . [and] second, any alteration in implementation dates . . . may lawfully be made only through amendatory rule making action or by Act of Congress.” Statement of Louis D. Clapper, Sen. 404 Hearings, supra note 3, at 412.

\textsuperscript{118} The moratorium imposed by President Ford lasted only 60 days. See 7 ENVIR. REP. (BNA) 435-36 (1977).


\textsuperscript{200} See text at note 189, supra.


\textsuperscript{202} Id. at 37,122.
combined the Section 404 provisions with other Corps permitting programs under the Rivers and Harbors Act of 1899; these different programs were all codified in one part of the Code of Federal Regulations.\textsuperscript{203} This intermingling of other programs based on traditional navigable waters with the broader based Section 404 program\textsuperscript{204} had generated confusion. Therefore, the 1977 revision separated the different permit programs, general regulatory policies and permit processing procedures into separate sections.\textsuperscript{205} This simple device allowed easy reference to each program; however, some activities were still subject to more than one program.\textsuperscript{206}

A. Territorial Jurisdiction: Adoption of the Term “Waters of the United States” and A New Definition of Wetlands

The 1977 revisions of the Section 404 program adopted a new approach to the definition and interpretation of the term “navigable waters.”\textsuperscript{207} This confusing and troublesome term, afflicted with the doctrinal gravity resulting from decades of judicial construction of the Rivers and Harbors Act of 1899, was rejected in favor of the term “waters of the United States.” By employing the definitional term of Section 502(7) of FWPCA the regulation clarified the distinction between the scope of Section 404 and other Corps regulatory programs based on the term “navigable waters” in its classical sense. The delineation of “waters of the United States” categorized waters in separate groupings, beginning with those longest recognized as being subject to federal control and concluding with those waters most recently subject to federal jurisdiction under FWPCA.\textsuperscript{208} The final sub-paragraph of this categorization, and a footnote thereto, indicated that the new definition reflected an approach to the regulation of discharges of dredged and fill material from the perspective of congressional authority to regulate all water pollution which in any way affected interstate commerce.\textsuperscript{209}

\textsuperscript{204} The Section 404 program was based on the more expansive definition of “navigable waters” as “waters of the United States” in Section 502(7) of FWPCA, 33 U.S.C. § 1362(7) (1976).
\textsuperscript{206} An activity involving discharge of dredged and fill material in traditional navigable waters would fall within Section 10 of the Rivers and Harbors Act and Section 404 of FWPCA.
\textsuperscript{207} See 33 C.F.R. §§ 323.2(a)(1)-(5) (1978).
\textsuperscript{208} Id.
\textsuperscript{209} All other waters . . . such as isolated wetlands and lakes, intermittent streams, prairie
The 1977 regulation also took a new approach to incorporating wetlands within the territorial expanse of Section 404.210 The summary which introduced the 1977 revisions referred to comments received from the public expressing dissatisfaction with the dichotomy between “coastal” and “fresh-water” wetlands and the vagueness of terms such as “periodically inundated,” “normally” and “adjacent.”211 Responding to these complaints, the 1977 regulation abandoned the distinction between “coastal” and “fresh-water” wetlands by adding the words “including adjacent wetlands” to each category of waters listed as “waters of the United States.”212 The terms “wetlands” and “adjacent” were then defined separately:

The term “wetlands” means those areas that are inundated or saturated by surface or groundwater at a frequency and duration 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. . . . The term “adjacent” means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are “adjacent wetlands.”214

This new method of defining territorial jurisdiction by dropping the term “navigable waters” and redefining wetlands did not diminish the scope of the 404 program, but instead clarified the wide expanse of hydrologic cycles which the program covered.215
B. **New Terminology of Exemption and Expansion of Permitting by Regulation: Nationwide Permits**

The 1975 regulation had experimented with different techniques designed to exclude many activities from plenary review under Section 404. The 1977 regulation continued the experiment of the general or categorical permit and, importantly, vastly expanded the concept of permitting activities through the regulation itself. However, the 1975 regulation’s device of exempting specific activities by simply excluding the discharges they entailed from the definitions of “dredged material” and “fill material” had been jeopardized by the holding of a district court in a suit by the Natural Resources Defense Council against EPA.

In *NRDC v. Train*, environmentalists brought suit against the Administrator of EPA alleging that the exemption of certain classes of point source discharges from the prohibitions of Section 301 of FWPCA on the basis of the type of industry involved in the discharging activity (such as agriculture and silviculture) violated the Act’s provisions. The court held that the Act did not allow such discretionary exemption, absent specific authorization by Congress.

Thus, in order to maintain a workable program, the 1977 regulation had to retain some means of exempting certain activities from review, while at the same time accommodating the holding in *NRDC v. Train*. The Corps solved this problem by removing industry-defined exemptions from the definitions of “dredged material” and “fill material.” Instead, the Corps amended the definitions of “discharge of dredged material” and “discharge of fill material” to include a closing proviso that these terms did not include “plowing, cultivating, seeding and harvesting for the production of

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218 See text at notes 180-90, supra.

217 33 C.F.R. §§ 323.4 - 323.4-4 (1978).


215 Id. at 1395.

214 Id. at 1402.
food, fiber, and forest products.”

This sleight of hand by the drafters of the 1977 regulation brought the regulation within the confines of the court’s opinion in NRDC v. Train, but did not adequately preserve the broad exemptions that guaranteed non-interference with the routine activities of farmers and others. To assure non-interference and to eliminate other projects from individual permit review, the Corps expanded the experiment of permitting by regulation. This technique of using the regulation to serve functionally as a permit was accomplished by the creation of a nationwide permit.

The nationwide permit had two separate and distinct components, each of which was intended to respond to a different concern. First, it applied to specific types of discharges. The particular categories of discharges covered by the permit might take place anywhere, subject only to the restraints of local law and the Rivers and Harbors Act of 1899. Thus, even though a specific type of discharge of dredged or fill material might be excluded from individual review by the Corps under Section 404 since the 1977 regulation functionally operated as a permit for it, if such a discharge occurred in navigable waters as traditionally defined, a Section 10 permit might be required. The second component of the nationwide permit applied to discharges of dredged or fill material into certain waters. The list of waters where discharges might occur included several wetlands areas. However, the sections of

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221 33 C.F.R. §§ 323.2(1),(n) (1978).
222 Congress incorporated the broad exemptions for “normal farming, silviculture, and ranching activities” into the 1977 Amendments of Section 404; thus, this method of exemption by simply changing language was never challenged. See text at note 282, infra.
224 "The term 'nationwide permit' means a Department of the Army authorization that has been issued by this regulation . . . to permit certain discharges of dredged and fill material into waters of the United States throughout the Nation.” Id. at § 323.2(q).
226 33 C.F.R. § 323.4-3 (1978).
227 Id.
228 Id. at § 323.4-2.
229 The following waters and wetlands were listed:
   (1) Non-tidal rivers, streams and their impoundments including adjacent wetlands that are located above the headwaters;
   (2) Natural lakes, including their adjacent wetlands, that are less than 10 acres in surface area and that are fed or drained by a river or stream above the headwaters. In the absence of adjacent wetlands, the surface area of a lake shall be determined at the ordinary high water mark;
   (3) Natural lakes, including their adjacent wetlands, that are less than 10 acres in
the 1977 regulation which established the two components of the nationwide permit listed specific conditions to be met in order for the discharge of dredged or fill material to qualify:

1. The discharge must not destroy an endangered species or its habitat;
2. Discharges must be free of toxic pollutants except in trace quantities;
3. All discharges must be properly maintained to prevent erosion and water quality diminution; and
4. Discharges must not occur in a component of the National Wild and Scenic Rivers System or a State equivalent thereof.\textsuperscript{230}

Beyond these specific constraints, the 1977 regulation provided certain management practices to be followed “to the maximum extent practicable.”\textsuperscript{231} These practices include:

1. Seeking alternative approaches in order to avoid discharges;
2. Avoidance of spawning areas;
3. Precautions so as to avoid interference with the movement of an indigenous aquatic species, unless the purpose of the fill is to impound water;
4. Minimization of adverse impact on water quality resulting from restriction of water flow;
5. Avoidance of all discharges in wetlands;
6. The utilization of mats when performing work with heavy equipment in wetlands;
7. Avoidance of breeding and nesting areas of waterfowl; and
8. Removal of all temporary fills.\textsuperscript{232}

Thus, while across-the-board compliance with these conditions and practices would best protect wetlands,\textsuperscript{233} the nationwide permit
scheme clearly indicated a shift in focus from regulating all projects to controlling major projects. Although specific restraints such as discretionary authority to require individual or general permits were retained, the nationwide permit amounted to a wide-scale retreat from individual review of all potentially harmful activities clearly within the scope of the Corps' jurisdiction under Section 404. This retreat, however, was perhaps a practical necessity.

The manpower and budgetary constraints placed upon the Corps greatly inhibited the effective processing and review of individual permit applications. District offices of the Corps were understaffed, precluding effective investigation and enforcement of violations. Furthermore, the general public did not provide much assistance to enforcement efforts; while certain environmental groups may have been familiar with the program and willing to report illegal activities, the average citizen certainly was not.

The preservation of a respected, wide-scale program depended upon the ability of the Corps to administer and enforce it effectively. By excluding from plenary review activities occurring in waters more remotely connected with interstate commerce, the Corps avoided extensive litigation concerning their territorial jurisdiction. The inclusion in the nationwide permit of specific categories

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We are responding to the concern of uncertainty over the need to obtain a permit in . . . [certain] waters by issuing today a nationwide permit for discharges into most of these waters. We believe that if the common sense conditions, guidelines and management practices . . . are followed, the concern for water quality, as it affects the production, movement, and for use for interstate commerce, ordinarily will be satisfied with respect to these discharges.


33 C.F.R. § 323.4-4 (1978).

The incorporation of specific types of discharges and discharges into certain waters into the nationwide permit reflected the reality that an absolute ban on all discharging of dredged and fill material in wetland areas of the United States was impossible to administer and enforce. The issue of whether the 1977 regulation was too broad in its exclusion of certain activities from plenary review is difficult to resolve, but the question has not been litigated, largely due to the subsequent "re-statement" of congressional intent embodied in the 1977 amendments to Section 404 discussed in the text at notes 270-98, infra. As a potential defense against such challenges, the 1977 regulation added a proviso to the expansive scope of the nationwide permits by retaining discretionary authority in District Engineers to require individual or general permits "if the District Engineer determines that the concerns of the aquatic environment, as expressed in the [EPA] guidelines (see 40 C.F.R. part 230) indicate the need for such action because of individual and/or cumulative adverse impacts to the affected waters." 33 C.F.R. § 323.4-4 (1978).

33 C.F.R. § 323.4-4 (1978).

Cf. Sen. 404 Hearings, supra note 3, at 56 (Statement of Victor V. Veysey, Ass't Sec'y of the Army, Civil Works (suggestions for conservation of personnel and resources)).

In this way the Corps avoided repeating the difficulties experienced under the 1899 Act,
of discharges often undertaken by utility companies, maintenance and construction crews of local and state governments and landowners protecting their property from erosion spared the Corps from constantly interfering with these necessary activities. If the exemptions from plenary review went too far, the absence of a firm statutory mandate from Congress and the lack of sufficient funding were more to blame than inertia or a desultory effort on the part of the Corps.

Review of the 1977 regulation must proceed in the context of the political turmoil which attended its appearance. Powerful interests were lending their well-organized support to proposed legislation that would have vitiiated the reach of Corps jurisdiction under the Section 404 program. The legislative maelstrom which began in 1976 and continued through 1977 was fraught with misinformation, indignation and allegations of usurpation of congressional legislative power by the courts and the Corps. This climate threatened to destroy a very necessary and important program protecting the nation’s wetlands and water quality. The new regulation projected the image of an orderly, manageable and reasonable approach to achieving the goals of FWPCA. Thus, the moderate tack taken by the 1977 regulation may have saved the Section 404 program.

VIII. LEGISLATIVE RESPONSE TO THE SECTION 404 PROGRAM

The final component of the legal process that produced the revised Section 404 of the Clean Water Act of 1977 was the legislative proceedings that occurred in 1976 and 1977. The events attending the development of Section 404 had attracted the attention of Congress at an early stage, and that attention did not wane through

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i.e., the constant litigating of the boundaries of jurisdiction. Cf. United States v. Holland, 373 F. Supp. 665 (M.D. Fla. 1974) (EPA brought action). In fact, the Doctrine of Navigable Waters under the 1899 Act had developed expansively, largely in connection with the affirmative defense that the prosecuted activity was not within the ambit of Corps jurisdiction. See generally Hoyer, supra note 67.

230 See 33 C.F.R. § 323.4-3 (1978).

231 See text at note 250, infra.

246 See, e.g., Sen. 404 Hearings, supra note 3 at 131-32, 159-323, 384-89. See also, To Amend and Extend Authorizations for the Federal Water Pollution Control Act: Hearings before the Subcomm. on Water Resources of the House Comm. on Public Works and Transportation, 95th Cong., 1st Sess. 382-87, 398-403 (1977).


subsequent developments.\textsuperscript{243} The proposed statutory modifications of Section 404 fell into two broad categories, those seeking to reduce the scope of the Corps' territorial jurisdiction and provide for state participation\textsuperscript{244} and those aimed at maintaining the broad territorial reach of the section, while amending and integrating it within the overall scheme of the Act.\textsuperscript{245} The House of Representatives overwhelmingly favored reducing jurisdiction, and many Senators were willing to acquiesce in their proposals. The one-year delay caused by a Conference Committee deadlock at the end of the 1976 legislative session provided valuable time for those legislators dedicated to maintaining the scope of the program to marshal their forces and prevail in 1977. Interestingly, the debate over Section 404 reflected a somewhat novel occurrence; environmental lobbying groups suddenly were fighting to preserve the status quo, rather than urging the implementation of new protective legislation.

A. 1976: The Framing of Issues

1. The Breaux Amendment

In the 1976 legislative session, the House Public Works Committee was considering H.R. 9650, a bill to provide financial authorizations under FWPCA.\textsuperscript{248} In the spring of that year, Representative Breaux of Louisiana, a state with extensive wetland acreage, offered an amendment to Section 404, which the committee adopted. The proposed amendment became Section 17 of H.R. 9650.\textsuperscript{247}

\textsuperscript{243} See House and Senate Hearings, supra note 156.

\textsuperscript{244} The Corps had developed procedures to coordinate processing applications with state and local agencies. See generally 33 C.F.R. § 209.120(f) (1977) (superseded by 33 C.F.R. § 320.4(j) (1978)). While the development of joint processing encouraged public acceptance of the expanded 404 program, avoided duplicative efforts and diminished discredit of the federal regulatory effort caused by expensive and unnecessary delay in administrative processing, Section 404 itself provided no mechanism whereby states might take over the program, and thus did not comport with the stated goals of FWPCA. See 33 U.S.C. § 1251(a) (1976). As Victor V. Veysey, Asst Secretary of the Army, stated to the Senate Committee on Public Works:

\begin{quote}
I believe there [is] a real need to allow delegation of the program to states, subject, of course, to adequate standards that would allow for National Water Quality Management. Up to this point, however, there has been only a limited opportunity for discourse with the states because the Act does not provide a legal basis for delegation of Section 404.
\end{quote}

\textsuperscript{245} Sen. 404 Hearings, supra note 3, at 58.

\textsuperscript{246} That is, by providing a mechanism whereby states could take over the program subject to on-going federal supervision.


The concern of Representative Breaux focused upon the definition of navigable waters. His amendment would have added two subsections to Section 404:

(d) the term "navigable waters" as used in this section shall mean all waters which are presently used, or are susceptible to use in their natural condition or by reasonable improvement as a means to transport interstate or foreign commerce shoreward to their ordinary high water mark, including all waters which are subject to the ebb and flow of the tide shoreward to their mean high water mark (mean higher high water mark on the west coast);
(e) the discharge of dredged or fill material in waters other than navigable waters is not prohibited by or otherwise subject to regulation under this Act, or section 9, section 10, or section 13 of the Act of March 3, 1899.248

This proposal represented the most extreme position for withdrawal of Corps jurisdiction and substantively would have had greater limiting effect than the outright repeal of Section 404. The definition in subsection (d) would have removed the test of historic navigability and the concept of "indelible navigability"249 from the ambit of navigable waters as traditionally defined. Subsections (d) and (e) together would have eradicated the judicially sanctioned reach of regulatory efforts under Sections 10 and 13 of the River and Harbors Act, thus removing many wetlands from their protection as well.

The Committee Report of the Breaux Amendment clearly stated the intent to remove from regulation by the Corps any waterway not susceptible to use in commercial navigation presently or with reasonable improvements. The Committee commented: "without such an amendment we find ourselves with a program that promises more while delivering less and discourages the States from exercising their proper role in the management of water and wetland areas which traditionally have been within their responsibility."250 The Committee concluded that the Section 404 program as set forth in the 1975 regulation would prove impossible to administer effectively, and "the required additional personnel [could] not be real-

248 Id. The parenthetical reference to the mean higher high water mark on the west coast reflects the fact that the two daily tides of the Pacific Ocean are disparate; thus the higher of the two is the boundary.
249 See text at notes 59-60, supra.
istically expected to be approved by either the Administration or by the Congress.\textsuperscript{251}

Opposition preceded the Breaux Amendment to the floor of the House. During debate, Representative Cleveland of New Hampshire proposed a moderate position which had Administration backing. The Cleveland Amendments to Section 404 would have codified the general permits and exemptions of the 1975 Section 404 regulation;\textsuperscript{252} however, the Amendment was defeated by the House on June 3, 1976 in favor of another amendment proposed by Representative Wright of Texas.\textsuperscript{253}

2. The Wright Amendment

The 1976 Wright Amendment was offered again in 1977, and parts of it survived and are found in the present version of Section 404. This proposal added "and adjacent wetlands" to the Breaux Amendment's definition of navigable waters, then added subsection (f) which authorized the Secretary of the Army to enter into agreements with states regarding the regulation of other wetland areas not adjacent to navigable waters.\textsuperscript{254} Therefore, regulation of such wetlands could be requested by a state, but the program would be run by the Corps itself.\textsuperscript{255}

Subsections (g) and (h) incorporated the general permit procedures and subject matter exemptions, respectively, of the 1975 regulation.\textsuperscript{256} Subsection (i) exempted federal or federally-assisted projects from permit requirements, if the impacts of any dredging and filling involved had been included in an environmental impact statement submitted to Congress in connection with the authorize-

\textsuperscript{251} Id. at 22.
\textsuperscript{253} See id. at H5267 (remarks of Rep. Wright).
\textsuperscript{254} See id.
\textsuperscript{255} The Wright Amendment essentially would have limited the Corps jurisdiction under Section 404 to those waters covered by Phase I of the 1975 regulation, see text at note 169, supra, incorporating only those wetlands adjacent to traditional navigable waters. The compromise embodied in the Wright Amendment was the provision authorizing the Corps to assume jurisdiction over other wetland areas at the request of the Governor of a state. The shortcomings of such a compromise are obvious, for in the event of no such request, hydrologically important wetland areas not adjacent to traditional navigable waters, as well as non-navigable waters, would remain unprotected from the impacts of disposal of dredged or fill material. The resultant water quality diminution was not considered in this politically expeditious compromise.
Finally, the Wright Amendment expressed a desire to return traditional regulatory responsibilities back to the states; however, rather than casting wetlands protection into an uncertain void, subsection (j) contemplated the creation of a mechanism similar to that under Section 402 of FWPCA, whereby the Section 404 program could be delegated to the states. Such delegation was possible if the Secretary of the Army determined: "(A) that the state has the authority, responsibility and capability to carry out such functions;" and "(B) that such delegation is in the public interest."

The Wright Amendment passed in the House on June 3, 1976 by a vote of 234 to 121.

3. **Senate Response: The Baker-Randolph Amendment**

The Senate Public Works Committee held oversight hearings on July 27 and 28, 1976 and heard testimony from Assistant Secretary of the Army Victor V. Veysey urging continued broad territorial jurisdiction and announcing administration support. Yet, despite remonstrations from Senator Muskie, Senators Baker and Randolph drafted an amendment to S. 2710 utilizing a different approach than the Wright Amendment. This amendment would have:

1. reduced Corps territorial jurisdiction for purposes of Section 404 to traditional limits under the Rivers and Harbors Act;
2. required that permits be obtained from EPA for other point source discharges in other waters of United States;
3. not defined wetlands as areas separate from waters of the United States;
4. provided for specific exemptions and general permitting of

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257 See id. The original Committee Report on the Breaux Amendment had expressed displeasure at the Corps' regulation of programs previously authorized by Congress:

Even specific statutory enactments of Congress are being challenged as being subject to veto through the present section 404 program. For example, a Bureau of Reclamation or watershed project authorized by Congress is alleged by some to require a section 404 permit before it can be constructed. Executive agencies have not been granted such powers to overturn specific congressional enactments.


260 Sen. 404 Hearings, supra note 3, at 51-59.

261 Id. at 2.

262 Following passage in the House of Representatives H.R. 9560 was redesignated S. 2710, 94th Cong., 2d Sess. (1976).
certain activities as did the 1975 regulation;
5. allowed for the delegation of permit programs to the states under the criteria employed in Section 402 of the FWPCA; and
6. provided for general permitting of activities having a de minimus impact on water quality.263

The Public Works Committee approved the amendment 7 to 6, and the bill went to the Senate floor on September 1, 1976.

On the floor of the Senate, Senator Tower proposed the Wright Amendment, just as Senator Bentsen had in committee.264 The first vote carried 39 to 38,265 but then Senator Baker arrived from a meeting with the President, won two procedural votes,266 and upon reconsideration the Wright Amendment failed 39 to 40.267 The Senate and House proposals268 were sent to Joint Conference Committee but the Conferees could not reach a compromise. Section 404 had survived the 1976 legislative Session.

C. 1977: Compromise

The 1977 legislative session began with the immediate resurrection of the Section 404 dispute. The House approved the Wright Amendment in slightly modified form, while the Senate again passed the Baker-Randolph Amendment. This time the Conference Committee was able to contour a compromise269 and the resulting legislation, the Clean Water Act of 1977, was enacted on December 27, 1977.

IX. THE CLEAN WATER ACT OF 1977: THE NEW SECTION 404

Section 404 of the Clean Water Act of 1977270 preserves intact the broad territorial jurisdiction of the Corps;271 it does not alter the administrative interpretation of "waters of the United States"
which emerged in the 1977 regulation.\textsuperscript{272} However, the addition of sixteen new subsections effected three basic results. First, the new Section 404 incorporates and expands the exemptive definitions of the original 1975 regulation and 1977 revisions and provides a statutory underpinning for them.\textsuperscript{273} Second, by cross-reference to an amendment of Section 208 of FWPCA,\textsuperscript{274} Section 404 exempts from permitting dredge and fill activities already regulated under state Best Management Practices.\textsuperscript{275} Finally, the amended statute provides a mechanism whereby states may take over the Section 404 program in waters and wetlands,

other than those which are presently used, or are susceptible to use in their natural condition or by reasonable improvement as a means to transport interstate or foreign commerce shoreward to their ordinary high water mark including all waters which are subject to the ebb and flow of the tide shoreward to their . . . mean high water mark or mean higher high water mark on the west coast, including wetlands adjacent thereto.\textsuperscript{276}

The Administrator of EPA is to supervise the process by which states will assume responsibility under their own laws; notice and consultation requirements ensure on-going federal oversight of state-run programs.\textsuperscript{277} Thus, Section 404 is more closely coordinated with the stated policy of the original FWPCA of 1972 to recognize the primary responsibility of the states to protect water quality.\textsuperscript{278}

\textsuperscript{272} See 33 C.F.R. § 323.2(a) (1978).
\textsuperscript{273} Pub. L. No. 95-217, § 67(b), 91 Stat. 1600-01 (1977) (to be codified in 33 U.S.C. §§ 1344(e), (f)).
\textsuperscript{275} The amendment to Section 208 of FWPCA was Pub. L. No. 95-217, § 34(a), 91 Stat. 1577-78 (1977) (to be codified in 33 U.S.C. §§ 1288(b)(4)(A), (B), (C), (D)). The term "Best Management Practices" is an engineering term of art adopted by EPA, and defined in agency regulations as follows:

The term "Best Management Practices" (BMP) means a practice, or combination of practices, that is determined by a State (or designated areawide planning agency) after problem assessment, examination of alternative practices, and appropriate public participation to be the most effective, practicable (including technological, economic and institutional considerations) means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals.

\textsuperscript{276} See Pub. L. No. 95-217 § 67(b), 91 Stat. 1600, 1601 (1977) (to be codified in 33 U.S.C. § 1344(g)).
\textsuperscript{277} See id., 91 Stat. 1600-06 (1977) (to be codified in 33 U.S.C. §§ 1344(g)-(t)).
\textsuperscript{278} See 33 U.S.C. § 1251(b) (1976).
A. Codification and Expansion of the Regulations

Subsections (e) and (f) of the amended Section 404 codify the exemptive approaches of the 1975 and 1977 regulations through general and nationwide permits and exclusion of certain activities. To accommodate the holding in *NRDC v. Train*, subsection (f) specifically exempts the “normal activities” of farming, silviculture and ranching activities. Furthermore, explicitly exempted are dredge and fill activities undertaken for the purposes of:

1. construction of temporary sedimentation basins on construction sites;
2. construction or maintenance of farm and forest roads, or temporary roads for moving mine equipment;
3. construction or maintenance of farm or stock ponds or irrigation ditches; and
4. the maintenance of drainage ditches.

Any activities exempted from Section 404 coverage, including discharges resulting from any activity already subject to an EPA-approved state program under Section 208, may still be prohibited by effluent standards or prohibitions under Section 307 of the Act. Subsection (f)(2) tempers the wide scope of these exemptions:

> any discharge of dredged or fill material . . . incidental to any activity having as its purpose bringing an area . . . into a use to which it was not previously subject, where the flow or circulation of navigable waters may be impaired or the reach of such waters be reduced, shall be required to have a permit under this section.

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280 Pub. L. No. 95-217, § 67(b), 91 Stat. 1600-01 (1977) (to be codified in 33 U.S.C. §§ 1344(e), (f)).
283 *Id.* § 67(b), 91 Stat. 1600-01 (1977) (to be codified in 33 U.S.C. §§ 1344(f)(1)(B), (C), (D), (E)).
285 33 U.S.C. § 1317 (as amended by Pub. L. No. 95-217, §§ 53-54(a), 91 Stat. 1588-91 (1977)). This requirement recognizes that dredged spoil and fill often contain toxic pollutants from industrial and agricultural use. However, a literal reading of the statute would require testing of all material to be discharged to determine its chemical content. Obviously, this procedure would defeat the purpose of the sub-section by eliminating the administrative convenience of avoiding plenary review and streamlining procedures.
This proviso serves as a safeguard to subvert land use alteration undertaken in the guise of an exempted activity. Thus, while "normal farming" activity may include converting wetlands to arable land, subsection (f)(2) requires permitting of such activities.287

B. State Assumption of Dredge and Fill Supervision

The Administrator of EPA has substantial responsibility in overseeing the process of transferring dredge and fill supervision to a state desirous of taking over such regulation in waters not specifically reserved for Corps jurisdiction.288 The detailed statutory scheme contains complicated notice and response deadlines and requires consultation between the Administrator of EPA, the Secretary of the Army and the Director of the United States Fish and Wildlife Service regarding the ability and authority of a state to manage a responsible program.289 While the Corps is to maintain jurisdiction over waters used or of potential use in navigation,290

This is a very important provision in light of the observations of the Council on Environmental Quality:
The filling or draining of wetlands does not necessarily waste the land, which may be turned into other valuable but competing uses. In fact, 24 percent of all agricultural soils on non-federal lands in the United States were originally wetlands. One half of wet soils (outside non-federal lands) falls in the prime farmland class.
CEQ Report, 1978, supra note 24, at 318. If wetlands are to be preserved to provide their vital natural functions, conversion to agricultural use by incremental hydrologic modification must be retarded. Therefore, subsection (f)(2) prohibits this practice, notwithstanding the CEQ Report's suggestion that such land use conversion is a long-standing, agriculturally productive practice.

288 See Pub. L. No.95-217, § 67(b), 91 Stat. 1601-05 (1977) (to be codified in 33 U.S.C. §§ 1344(g)-(q)).

289 See id., 81 Stat. 1601-03 (1977) (to be codified in 33 U.S.C. § 1344(h)(1)). The transfer of Section 404 responsibility to a state is subject to the approval of EPA and is expressly conditioned upon the state's adoption of a program that assures that discharges will comply with the 404(b) guidelines of EPA. See 40 C.F.R. § 230 (1977). Approval of a state program may be revoked if EPA determines that it is not being conducted in accordance with the provisions of Section 404. See Pub. L. No. 95-217, § 67(b), 91 Stat. 1603 (1977) (to be codified in 33 U.S.C. § 1344(i)). EPA must be furnished with a copy of each application received by a state under its 404 program, in order to insure that the views of other federal agencies will be part of the administrative review. See id. (to be codified in 33 U.S.C. § 1344(j)). See also id., 91 Stat. 1604 (to be codified in 33 U.S.C. § 1344(m) (Fish and Wildlife Service Review). Finally, no state may issue a permit over the objection of the EPA Administrator. See id., 91 Stat. 1603 (to be codified in 33 U.S.C. § 1344(j)). See also 33 U.S.C. § 1344(c) (1976) (allowing EPA administrator to veto permit issuance on the basis of certain criteria).

290 See Pub. L. No. 95-217, § 67(b), 91 Stat. 1601 (1977) (to be codified in 33 U.S.C. § 1344(g)(1)). Thus, Corps dredging activities will not be subject to state regulation under Section 404, but states may regulate Corps dredging projects under other provisions of state law.
subsection (t) provides that "[n]othing in this section shall preclude or deny the right of any State or interstate agency to control the discharge of dredged or fill material . . . including any activity of any Federal agency . . . " by means of state law. Therefore, with respect to activities in waters reserved within Corps jurisdiction under Section 404 and with respect to federal projects specifically exempted from permitting under Section 404, states may still enact restrictive legislation.

C. Substantive Effects of Section 404 of the Clean Water Act of 1977

The Clean Water Act of 1977 continues the trend of withdrawing certain activities from Section 404 permit review first evidenced in the 1975 and 1977 regulations. However, considering the alternative of no regulation whatsoever outside of waters actually used or of potential use in interstate commerce, the Act appears to be a viable compromise preserving administrative review of projects involving major hydrologic modification. Inasmuch as Congress may have never intended any form of wetlands protection in enacting the 1972 FWPCA, the Clean Water Act's preservation of Section 404 was a significant political accomplishment. As President Carter commented upon signing the Act into law, "the Nation's wetlands will continue to be protected under a framework which is workable and which shares responsibility with the States."

Nevertheless, problems remain. States are not encouraged to take over the regulation of dredge and fill activities by assuming the Section 404 program because of the complexity and resulting ex-

\[291\] Id., 91 Stat. 1606 (1977) (to be codified in 33 U.S.C. § 1344(t)).
\[292\] The 1977 Clean Water Act was intended to amend FWPCA and resolve several controversies of interpretation that had arisen in the course of implementing and applying the 1972 Amendments. Complex problems involving issues of federalism, the applicability of the National Environmental Policy Act, 42 U.S.C. §§ 4321-47 (1976) and the discretion of agencies administering the provisions of FWPCA were reviewed and resolution was attempted through amendment of the legislation. Some of these problems are reflected in the amendments to Section 404, but analysis of these issues is beyond the scope of this article. For a detailed review of Section 404 of the CWA, see Thompson, Section 404 of the Federal Water Pollution Control Act Amendments of 1977: Hydrologic Modification, Wetlands Protection and the Physical Integrity of the Nation's Waters, 2 HARV. ENVT'L L. REV. 264, 275-87 (1978).
\[293\] This was the proposal of the Breaux Amendment, H.R. 9650, § 17, 94th Cong., 2nd Sess. (1976).
\[294\] See text at notes 120-35, supra.
The profound change in attitude toward the vital natural resources called wetlands has fostered an unusual legal process which has culminated in a comprehensive federal program regulating the discharge of dredged and fill material in “waters of the United States” — broadly defined to include vast acres of wetlands. Despite the increasing awareness of the value of wetlands, initial state regulatory efforts proved insufficient to cope with wetlands destruc-

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295 In proposed rules published August 21, 1978 EPA summarized the principal requirements of state take-over of Section 404 responsibility which are in addition to the policies and requirements under 33 U.S.C. § 1342 (1976). Included are the following:

1. Assurances that the state will pursue a coordinated strategy with EPA and the Corps;
2. Development of a memorandum of agreement as to which waters the state will regulate, and those which the Corps will regulate;
3. Procedures for joint processing of Section 404 and Section 10 permits where applicable;
4. General coordination of the state program with Corps programs;
5. Assurances that the state’s law of taking will not adversely affect implementation of the state program;
6. Authority to prohibit, deny, or restrict the issuance of State 404 permits on the basis of 404(b) and 404(c) guidelines.


297 This is the language used by supporters of the Breaux and Wright Amendments. See, e.g., H.R. REP. No. 1107, 94th Cong., 2d Sess. 23 (1976). Ironically, the genesis of and motivating force behind federal involvement in the area of water pollution control had been the failure of the states to regulate effectively.

298 In its summary of proposed rules regarding § 404, EPA stated: “in view of the number of unresolved issues concerning the requirements for approvable 404 programs, states are encouraged not to seek federal approval of their programs until these regulations become final . . . .” 43 Fed. Reg. 37,085 (1978).
tion and water quality diminution, while on the federal level the expanded application of the Rivers and Harbors Act of 1899 could not overcome the constraints of that Act's traditional jurisdictional framework of navigable waters. The ensuing enactment of FWPCA in 1972 and the confusing language of Section 404 laid a precarious foundation upon which a federal permit program protecting wetlands could be established. Administrative development of the Section 404 program pursuant to court order exerted federal jurisdiction over wetland areas while attempting to accommodate competing political interests and reckon with practical problems by experimenting with definitional exemptions and novel permit procedures. Finally, the United States Congress reviewed the program and amended Section 404. The Clean Water Act of 1977 revamped Section 404 and revised the dredge and fill permit program by incorporating the exemptions and procedures administratively developed. It also provided for increased state involvement in the program while maintaining the broad territorial scope of the interpretation of the term "navigable waters" as used in the original 1972 Act.

Although the substantive provisions developed by the administrative and legislative revision of Section 404 indicate a retreat from widescale regulation of all activities involving the discharge of dredged and fill material into waters of the United States, at present Section 404 protects many wetland areas from the destructive impacts of large scale, ill-conceived hydrologic modification. The peculiar development of Section 404 is at least partly responsible for the problems that remain with the program. Assumption of the program by states will be a costly and cumbersome procedure, and the willingness and ability of individual state governments to administer the expensive program is unknown. Moreover, inasmuch as the original Section 404 never mentioned wetlands, and since the 1977 amendments only continue the statutory reference to navigable waters, the entire Section 404 program continues to suffer from the absence of an explicit legislative statement of intent to protect wetlands.

Nevertheless, the defeat of the Breaux and Wright Amendments and the continuation of a broad interpretation of "waters of the United States" indicate congressional recognition of the important relationship between wetlands and water quality. The growing

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299 As a part of the Clean Water Act of 1977, the United States Congress authorized six million dollars to complete the National Wetlands Inventory of the United States. The inven-
national awareness of the value of wetlands — expressed through the continued lobbying efforts of environmental organizations — combined with effective implementation and enforcement of Section 404 can provide a valuable contribution toward the achievement of the goals of FWPCA and to the restoration and maintenance of an ecologically balanced environment.

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tory is under the direction of the Secretary of the Interior, and is expected to be completed by December 31, 1981. See Pub. L. No. 95-217, § 34(b)(i)(2), 91 Stat. 1578 (1977).