History, Practice and Emerging Problems of Wetlands Regulation: Reconsidering Section 404 of the Clean Water Act

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In this article the authors explore the problems with the Section 404/wetlands permit program as currently administered by the Corps of Engineers. The authors critique the existing program and provide a guide for the practitioner dealing with its uncertainties. The article also examines the extent to which Section 404/wetlands regulations deviate from enabling legislation and the Constitution and offers suggestions for reform.

HISTORY, PRACTICE AND EMERGING PROBLEMS OF WETLANDS REGULATION: RECONSIDERING SECTION 404 OF THE CLEAN WATER ACT

Gary E. Parish*
J. Michael Morgan**

INTRODUCTION AND OVERVIEW

Of our numerous schemes for environmental protection, the regulation of dredge and fill discharges into navigable waters of the United States is perhaps the most unique. It is far different from the programs which seek to attain and prevent deterioration of air quality, limit industrial and municipal discharges into water, ensure the safety of drinking water, and protect us from the dangers of toxic and hazardous substances. These programs are based on the realization that certain substances in our environment are hazardous to health. Each

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is premised upon the assumption that safe limits can be set
and, through quantitative limits on discharge, the application
of technology, or the enforcement of standards for introduc-
tion, handling and disposal, our exposure to these substances
may be held to safe levels. Though disputes may rage, the stan-
dards established in these schemes are generally objective, and
Congressional intentions with regard to them are fairly well
enunciated.

The federal scheme for the regulation of dredge and fill
discharges stands in sharp contrast to other environmental
programs. The objective determination that a discharge will
not result in violation of an established water quality standard
is only the first of the program’s many, increasingly subjective
requirements which follow. The scheme does not establish
minimum wetlands acreages which must be preserved in a
watershed or ecosystem to protect the public health or
welfare. The quantity and qualities of offsets which may be
necessary are left to case by case determinations. In our inter-
connected scheme of environmental law, where certainty is a
virtue, dredge and fill regulation is the wild card.

The discharge of refuse, including dredged and fill
material, into navigable waters of the United States without a
permit has been prohibited since President McKinley signed
the Rivers and Harbors Appropriation Act of 1899. 1 Section
404 of the Federal Water Pollution Control Act which provid-
ed additional regulatory and permitting authority, has now
been public law for almost a decade. 2 With the exception of
amendments to Section 404 in 1977, 3 these statutes have re-
mained unaltered. Nonetheless, the focus and scope of regula-
tion under each statute has gradually changed.

While the intent of federal dredge and fill regulation was
at one time the preservation of navigability, its primary pur-
pose has been expanded over the years to include protection of
a broad range of environmental concerns. Despite Congress-
sional efforts to the contrary, permit processing procedures

1344 (1976)).
and standards have become increasingly complex as the focus of regulation has expanded.

This shift in focus has brought with it an almost continuous expansion in the scope of waters and activities subject to permit requirements. Like the amphibian, the program has gradually crawled from the navigable waters and now operates in areas where ships’ keels have never ventured. It is in these land areas, wetlands by definition, that the dredge and fill permit program has encountered its most heated controversies. It is here that implementation of the program has strayed from statutory purposes. The current program now creates uncertainties and liabilities for all those who would dredge, fill, fell or level in all but the most arid locales.

A brief overview of the program will be helpful. Section 404 requires potential dischargers to secure permits from the Corps of Engineers (Corps) before they discharge dredge or fill materials into navigable waters. The geographical extent of areas now classified as navigable waters and the types of activities which are deemed to constitute discharges would probably astound even the most liberal congressman involved in the 1972 and 1977 legislation. Although Congress and the Corps desired to alleviate permitting burdens by statutorily or administratively exempting many activities and areas from permit requirements, the more recent practice reflects little of that good sense. Obtaining a 404 permit used to be the easiest environmental hurdle for a project. Now it is one of the most difficult.

Although Congress directed the Corps to review applications on the basis of Section 404(b) guidelines developed by the Environmental Protection Agency (EPA), the regulatory review criteria and standards established by the Corps far exceed that requirement. Application procedures are extremely complex and involve regulatory consultation requirements, statutory overview by EPA, and numerous non-regulatory agreements between the Corps and the other Federal agencies which may have severe adverse effects on an applicant. In addition to the Section 404 program, President Carter issued an Executive Order which overlaps 404 requirements and creates
the potential for an applicant to become even further mired in the federal regulatory bog.

This article is intended as a critique of the Section 404 permit program and a guide for the practitioner in dealing with its uncertainties. The statute and the numerous regulations and policies which guide its implementation are not easily presented in the standard law review format. An analysis of statute, regulations, and then issues, would result in excessive repetition. We have chosen, therefore, to discuss the program functionally. Questions will be taken up in the order in which they must be addressed by the practitioner whenever the need for a permit is suspected.

We will critique the Section 404 program by examining the extent to which its application strays from its Congressional purpose and constitutional foundations, and the degree to which it poses problems of uncertainty, cost and delay for permit applicants. Suggestions for dealing with the existing program and for amending it will be offered.

Much has been written concerning federal regulation of dredge and fill discharges. The history of the definition of navigable waters has been detailed by other scholars.\(^4\) Enforcement authorities and procedures have been analyzed and critiqued.\(^5\) It is not the authors’ intention to duplicate such efforts, and therefore, these matters will not be discussed.

I. JURISDICTION

A. Waters and Lands Subject to Regulation

When considering the applicability of dredge and fill regulation to a particular activity, the first question is whether the activity will be conducted in a “water of the United States”. In most cases water is easily identified and the answer is easily obtained. However, in far too many instances it is difficult to determine with certainty whether a particular


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area of land will be considered a water of the United States as well. This jurisdictional non sequitur can only be understood by examining the origins of dredge and fill regulation.

The discharge of materials into navigable waters was first regulated by the Rivers and Harbors Appropriations Act of 1899. Section 13 of the Act, known as the Refuse Act, prohibits the discharge of any material into navigable waters without a permit. Though it applied only to activities which affected "navigable waters", the 1899 Act did not define "navigable waters". Case law became the primary means for determining whether activities in certain waters required authorization under the Act. The result was a patchwork of court decisions which generally defined navigable waters to include: (1) waters which are navigable in fact when they are used or susceptible of being used in their ordinary condition as highways of commerce over which trade and travel are or may be conducted; (2) waters which were used in the past as a highway or part of a highway of interstate or foreign commerce; and (3) waters which could be made suitable for such use in the future with reasonable improvements.

In September 1972, the U.S. Army Corps of Engineers, in response to the growing number of judicial decisions addressing the agency's jurisdiction under the Act, promulgated regulations which provided the first comprehensive definition of the term "navigable waters". However, the regulations did little more than adopt the definition which the courts had gradually developed.

During the same year, Congress enacted the Federal Water Pollution Control Act (FWPCA). Like the 1899 Act,

6. Act of March 3, 1899, 33 U.S.C. §§ 401-418 (1976). Section 10 of the Rivers and Harbors Appropriations Act prohibits: (1) any unauthorized obstruction to the navigable capacity of the waters of the United States; (2) the construction of certain facilities outside established harbor lines except in accordance with plans authorized by the Secretary of the Army; and (3) the alteration of any navigable water of the United States which has not been approved by the Secretary of the Army. 33 U.S.C. § 403 (1976).
8. The Daniel Ball, 77 U.S. (10 Wall.) 557, 563 (1871).
11. 37 Fed. Reg. 18,290 (1972). While the regulations made no mention of wetlands, they did, for the first time, indicate that Corps jurisdiction extended, in the case of inland waters, to all land and water below the ordinary high water mark and, in the case of coastal waters, the mean high water mark (higher high water mark on the Pacific Coast). 37 Fed. Reg. 18,291 (1972).
the FWPCA prohibited the discharge of pollutants into navigable waters without a permit. Section 404 specifically regulated the discharge of dredge and fill material. However, the term “navigable waters” was defined by the FWPCA to include all waters of the United States. It constituted a significant statutory departure from existing and more limited judicial interpretations of the term.

In April 1974, the Corps revised its regulations to include authority for administering the Section 404 permit program. However, the Corps decided not to revise its definition of navigable waters for Section 404 purposes. Its refusal to expand its definition of navigable waters was attacked by environmentalists as an attempt to circumvent Congressional intent. In March 1974, the Federal District Court for the District of Columbia, agreeing with the environmentalists, held that the term “navigable waters” in Section 404 had the same meaning that it did in the rest of the Act and that the Corps was obliged to revise its regulatory definition to reflect the broader legislative mandate.

In attempting to comply with the court’s order the Corps redefined the term “navigable waters” to include not only traditionally navigable waters but also artificially created channels connected to navigable waters, tributaries to navigable waters up to their headwaters, non-navigable interstate waters up to their headwaters, intrastate waters up to their headwaters which are used for interstate commerce, and wetlands adjacent to such waters. Wetlands were defined to mean areas that are periodically inundated and normally characterized by the prevalence of vegetation that requires saturated soil conditions for growth and reproduction. These regulations brought within the Corps’ jurisdiction many small waterbodies with no connection to navigability and little or no connection to interstate commerce. As a result, development

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16. Id. In the preamble to the regulations the Corps acknowledged the broad FWPCA definition of navigable waters but concluded that its definition, which reflected judicial precedents under the 1899 Act, was consistent with legislative intent under the FWPCA of 1972.
18. 40 Fed. Reg. 31,324 (1975). “Wetlands” were defined to mean areas that are periodically inundated and normally characterized by the prevalence of vegetation that requires saturated soil conditions for growth and reproduction. Id. at 31,324-31,325.
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became more difficult in many wetland areas which were only periodically flooded but nonetheless supported specified types of vegetation.

The result was a demand for legislative relief to limit the scope of waters subject to Section 404. After a heated struggle, Congress revised Section 404 to include, inter alia, exemptions for certain activities and deadlines for agency actions, but refused to modify the definition of navigable waters.19

While Congress debated the 1977 amendments, the Corps revised and reorganized its Section 404 regulations to provide an expanded definition of wetlands. The regulations, which are still current, define "wetlands" as:

Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. (Emphasis added).20

Thus, while Congress was considering limitations on the Corps' program, the agency implemented a very subtle definitional change which succeeded in broadening its jurisdiction over many areas not previously considered to be wetlands.

Courts have also succeeded in expanding the "wetlands" definition. In Avoyelles Sportsman's League v. Alexander, (Avoyelles II) the court found that "vegetation typically adapted for life in saturated soil conditions" includes all vegetation which is capable of tolerating saturated soil conditions regardless of the mechanism it might employ to do so.21

The contention that only vegetation which requires saturated soils should be included within the definition was rejected. Under the court's holding, all vegetation, except those species

19. In 1976, Representative Wright (D-Tex.) introduced a bill, which would have eliminated the need for any permit to discharge dredged or fill material except in navigable waters and their adjacent wetlands unless a state Governor and the Corps agreed to extend jurisdiction to other waters or wetlands within the state. The Wright Amendment was passed by the House of Representatives as part of the 1977 Amendments to the Act, but was defeated in the Senate where opponents of the bill successfully argued that passage of the bill would allow the unrestricted discharge of dredged and fill material into non-navigable waters and increase pollution of all waters.
20. 33 C.F.R. § 323.2 (1981); 42 Fed. Reg. 37,122, 37,144 (1977). Note the difference in language from the prior definition in note 18 supra.
which are intolerant of saturated soil conditions, must be considered wetlands vegetation.22

The Corps is now asserting authority over many small waterbodies and wetlands which historically have not been subject to federal control. The assertion of such authority, particularly in the western United States, is contrary to public expectations and frequently unjustified. The definition itself may lead to absurd results. For instance, waters flowing in irrigation ditches excavated on dry land are not considered to be waters of the United States under the current Corps definition.23 However, irrigated lands adjacent to these ditches are considered to be waters subject to regulation where they support a prevalence of vegetation typically adapted for life in saturated soil conditions.24 The bizarre result which flows from these definitions is that no permit is required for the discharge of fill material into an irrigation ditch, yet a discharge onto the adjacent land, saturated as a result of the ditch may require a permit.25

Wetlands which are located above the mean high water mark but which are adjacent to interstate waters or their tributaries are also subject to Section 404. Regulation of these lands serves few of the purposes which apparently underlie the Act. Discharges onto these lands are not likely to have an adverse effect on navigation or interstate water quality, particularly where the areas are separated by barriers or where saturation is caused by groundwater.

22. Id. at 290. Though the court's interpretation of the phrase "typically adapted for life" is broad, its definition of "prevalence of vegetation" is narrower and may limit the reach of wetlands under the regulations. If a "substantial growth" of intolerant species is present, then under the court's definition, there is no "prevalence" of tolerant species.
24. 33 C.F.R. § 323.2(c) (1981).
25. The problem has recently reached crisis proportions in several communities where the Corps, following its regulatory definition of wetlands and the USFWS classification of wetland species, has classified vast areas of irrigated acreage as wetlands. The classification, in and of itself, is innocuous. The effect of the classification of such areas can be devastating. Irrigated acreage classified as wetlands are effectively locked into a single land use by the de facto federal action. Use of the land cannot be changed without a permit. Obtaining a 404 permit under current standards, especially the water dependency test, appears impossible. See note 77 infra. Many areas of the west are characterized by vast federal land holdings with private lands limited to irrigated areas along rivers and streams.
Deciding whether a wetland area is adjacent to waters of the United States requires difficult factual determinations. Whether or not an area is a wetland under the current definition must first be addressed. Unless the area is easily recognizable as a swamp, bog, or marsh, the services of a professional botanist who is familiar with federal wetland species classifications and procedures may be required. If the "area" contains non-homogeneous patterns of vegetation, a conclusion regarding the "prevalence" of wetland species will also be required. A "prevalence" conclusion must be preceded by a decision on the geographic limits of the area of inquiry. Unfortunately, the Corps has not provided a system for making these determinations.

Assuming that a reliable determination can be made concerning the prevalence of wetland species, the next inquiry is whether the area is an isolated intrastate wetland, or an "adjacent" wetland. If it is the former, either no permit requirements apply or the area may qualify under the general permit regulations which are discussed infra. On the other hand, if the wetland is adjacent to another water of the United States (e.g., a stream, tributary, interstate lake), it is subject to Section 404. The common understanding of "adjacency" has not been employed in the Section 404 definitions. In addition to the common meanings accorded the word "adjacent", 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".

A third problem is posed by isolated wetlands and lakes, prairie potholes and other waters which are not tributary to a system of interstate or navigable waters. These areas are subject to permit requirements if a discharge into them "could affect" interstate commerce. Under EPA's 404 guidelines, all interstate waters and wetlands which are used by interstate travelers for water-related recreation, or the production of agricultural products which are sold in interstate commerce, or for industrial purposes by industries in interstate commerce

26. See note 22 supra.
27. 33 C.F.R. § 323.2(d) (1981).
28. Id. § 323.2(a)(5).
are subject to Section 404 permit requirements. Consequently, the definition is intended to and does incorporate virtually all waters and wetlands in the United States.

Unfortunately, it is probable that Congress did not intend such broad coverage, and it may in fact be unnecessary to the accomplishment of stated goals. The FWPCA has been held to be authorized by the Commerce Clause. The courts have generally assumed that pollution of water may be regulated because of its adverse effect on interstate commerce. Although the FWPCA contains no legislative finding concerning effects on interstate commerce, the connection between some forms of water pollution and resulting adverse effects on interstate commerce cannot be seriously questioned. However, a respectable argument can be made that Congress intended only to regulate discharges into waters which have the potential to affect interstate commerce due to water pollution or to affect commerce by water transportation. Nonetheless, courts have typically focused on a single statement of legislative intent that the term "navigable waters" be given the broadest possible constitutional interpretation:

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.33

29. 40 C.F.R. § 230.3(e)(3) (1981). EPA, of course, has adopted its criteria for effect on interstate commerce assuming that Section 404 was intended to protect commerce generally, rather than for the more limited purpose of protecting commerce by water transportation or interstate commerce from water pollution. Under EPA's definition it is hard to conceive of circumstances where intrastate waters are clearly not subject to 404. See note 32 and accompanying text infra.


"Finally, we agree with the lower federal courts that have uniformly found the power conferred by the Commerce Clause broad enough to permit congressional regulation of activities causing air or water pollution, or other environmental hazards [that may have effects in more than one State]." (emphasis added).

31. See cases cited in id. at 2363 n21. SMCRA contains a specific congressional finding of adverse effects on commerce and public welfare which compelled the Court to state that it must defer to such a congressional finding if there is any rational basis for it. 101 S. Ct. at 2360.

32. See, e.g., 118 CONG. REC. 33,699 (1972); 118 CONG. REC. 33,757 (1972).

33. S. REP. NO. 92-1236, 92d Cong., 2d Sess. 144 (1972). See also S. REP. NO. 95-370, 95th Cong., 1st Sess. 75 (1977). To our knowledge no court has considered the statement in the Conference Report in the overall context of a more limited legislative intent to protect only interstate commerce affected by water pollution, or commerce by water transportation. Unless the more limited intent can be established, the ability of the Commerce Clause to reach activities with marginal effects on general interstate commerce cannot be seriously doubted. Heart of Atlanta Motel, Inc. v. United States, 379 U.S. 241, 258 (1964); Katzenbach v. McClung, 379 U.S. 294, 302 (1964).
Absence of Congressional findings, and ambiguity concerning Congressional intent casts considerably more doubt on the authority for, as well as the wisdom of, the program than is revealed by a cursory review of existing case law. The Section 404 permit program now extends to areas which are primarily land rather than water. With each regulatory extension of asserted jurisdiction, the nexus between the program and protection of commerce from water pollution or protection of commerce by water transportation becomes more tenuous. The legislative history to the 1977 amendments to the Act reflects a Congressional concern for protection of wetlands. Yet, Congress made no finding that federal regulation of land use in these land/water areas was necessary to protect interstate commerce. The Act itself contains no discussion whatsoever of wetlands protection, and the little legislative history which exists regarding wetlands typically contains statements about swamp, bogs and marshes.

Federal regulation of discharge activities in "dry" wetlands may be justifiable under the Commerce Clause, if Congress intended to do so. However, discharges in areas that are basically land, rather than water, generally pose little or no risk of downstream pollution and consequently have no impact on commerce by water transportation. Federal regulation of activities in these areas imposes substantial, and arguably unnecessary, burdens on private businesses and individuals. These burdens may not justify the minimal amount of water pollution control achieved.

B. Activities Subject to Section 404

Both the 1899 Act and the FWPCA prohibit the discharge of any material into navigable waters without a permit. In crafting the FWPCA, Congress provided two sections which authorized the issuance of permits. Section 402(a), which supplanted the old Refuse Act permit program, authorized EPA to issue permits for the discharge of any pollutant if the discharge complies with applicable standards and limitations. This section alone would have required an EPA permit for the discharge of dredged or fill material. Congress, at the behest

34. Regulation of private land-use has traditionally been reserved for state and local governments. Section 101(b) of the Act recognizes and preserves the primary responsibility of the States to plan the development and use of land. 33 U.S.C. § 1251(b) (1976).

of the dredging industry, provided separate authority in Section 404 to allow the Corps to continue issuing permits for the placement of dredged or fill material in navigable waters.\textsuperscript{36}

Section 404 is applicable only to the discharge of dredged or fill material. The term “discharge of dredged material” means the addition of dredged material into waters of the United States.\textsuperscript{37} Dredged material is material excavated or dredged from waters of the United States.\textsuperscript{38} Fill material is any material used for the “primary purpose” of replacing an aquatic area with dry land or of changing the bottom elevation of a waterbody.\textsuperscript{39} It does not include any pollutant discharged into water primarily for waste disposal purposes.\textsuperscript{40}

As mentioned above, Congressional efforts to limit Section 404 resulted in exemptions for certain activities rather than a narrowing in the scope of the navigable waters definition. Consequently, the statute exempts from all permit requirements the discharge of dredged or fill material in connection with certain minor activities \textit{provided} the discharge is not incidental to an activity intended to convert an area of navigable waters to a new use which involves impairment of flow or circulation of waters.\textsuperscript{41}

The statutory exemption covers the discharge of dredged or fill material:

(a) from normal farming, silviculture and ranching activities;
(b) for maintenance of currently serviceable structures;
(c) for construction or maintenance of farm or stock ponds or irrigation ditches or the maintenance of drainage ditches;
(d) for construction of temporary sedimentation basins on a construction site which does not involve a discharge to navigable waters;

\textsuperscript{36} 33 U.S.C. \textsection 1344 (1976).
\textsuperscript{37} 33 C.F.R. \textsection 323.2(l) (1981).
\textsuperscript{38} Id. \textsection 323.2(k).
\textsuperscript{39} Id. \textsection 323.2(m). It includes the placement of fill required for construction of structures, impoundments, causeways, roads, dams and dikes, artificial islands, property protection and/or reclamation devices, beach nourishment, levees, sewage treatment facilities, intake and outfall pipes for power plants, subaqueous utility lines and artificial reefs.
\textsuperscript{40} Id. \textsection 323.2(m). Pollutants discharged into water primarily for waste disposal will be subject to regulation under Section 402(a).
\textsuperscript{41} 33 U.S.C. \textsection 1344(f) (Supp. III 1979).
(e) for construction or maintenance of farm or forest roads or temporary roads for moving mining equipment; and
(f) resulting from any activity covered by an approved state water quality management plan.42

Activities which constitute a “discharge” of fill material may be de minimis in nature.43 Leveling and blading, or even the felling of wetlands vegetation itself may constitute a discharge.44 The fact that the placement of fill material will have little or no effect on water quality in a given instance is irrelevant to the determination.

The decision in Avoyelles I indicates how broadly a “discharge” may be interpreted, and how narrowly permit exceptions may be drawn. Plaintiffs in the action brought suit under Section 10 of the Rivers and Harbors Act of 1899 and Section 404 to compel the Corps and EPA to require private defendants to obtain permits prior to clearing their land of hardwood trees and preparing it for soybean production.

The court noted that wetlands were defined in terms of the vegetation which they support. It reasoned, therefore, that vegetation located in a wetland was part of the wetland and, in turn, was part of a water of the United States. It further noted that dredged material was defined as “material that is excavated or dredged from waters of the United States.” On that basis, the court concluded that clearing wetlands of trees and vegetation, which are a part of the wetland itself, constitutes a discharge of dredged material. The court also determined that the activities were not “normal” farming or silviculture. It noted that the proposed clear-cutting of trees and other vegetation might constitute a normal silviculture operation, but only if regeneration of timber, rather than soybean production was contemplated. It further found that to be “normal”, and thus fall within the Section 404(f) exception, an activity must “occur on a continuing basis as part of an ongoing farm or forestry operation”.

42. Id.
43. Minnehaha Creek Watershed District v. Hoffman, 597 F.2d 617 (8th Cir. 1979).
44. Avoyelles Sports League v. Alexander (Avoyelles I), 473 F. Supp. 525, 532 (W.D. La. 1979). The parties stipulated that the land involved was a wetland. Id. at 529.
We normally think of the term "discharge of dredged and fill material" in the context of landfill for industrial and residential development, dam or road construction, or the discharge of dredged spoil pursuant to navigation or harbor projects. However, Avoyelles I tells us that virtually any change in the land use of a wetland area may constitute a discharge, subject to Section 404 permit requirements. At the very least, serious inquiries must be made by anyone seeking to change vegetation patterns in a wetland or alter its surface contour. When the expansive definition of wetlands is considered, Avoyelles I sends a clear signal that federal jurisdiction at the water's edge is virtually absolute.

Jurisdictional uncertainties associated with Section 404 are not limited to questions of which waters, lands, and activities are subject to regulation. It may also be difficult to determine which federal agency, EPA or the Corps, will make the jurisdictional determination.

On September 5, 1979, Attorney General Civiletti issued an opinion in which he concluded that EPA, and not the Corps, had final authority to determine which waters were navigable waters and what activities were exempt from the permit requirements. The Corps and EPA then entered into a Memorandum of Understanding (MOU) establishing procedures to be followed in making such jurisdictional determinations. The MOU allows the Corps to make jurisdictional determinations except in "special" cases when such determinations are to be made by EPA. A special case is any situation where EPA has declared a special interest because the consequences of jurisdiction in a particular area are significant or there are technical difficulties in determining jurisdictional scope. To date, EPA has established two areas that will routinely be designated as special cases; all areas containing bottomland hardwoods, and a 1,200 acre area known as Bolsa Chica Gap in Orange County, California.

Though EPA has deferred to the Corps determinations in most instances, the MOU division of authority is undesirable.

46. Id.
47. 45 Fed. Reg. 70,564 (1980). The listing of bottomland hardwood areas as a special case does not mean that all such areas will be considered waters of the United States. It merely means that EPA has the opportunity to make jurisdictional determinations on a case-by-case basis.
It creates uncertainty and even delay for applicants, and undermines the Corps’ control of its program. It is also unnecessary, for EPA possesses no greater expertise than the Corps in making wetland determinations.

II. GENERAL OR NATIONWIDE PERMITS

In lieu of individual permits, Section 404(e) authorized the Secretary to issue general permits on a state, regional or nationwide basis for categories of activities which have minimal adverse effects either separately or cumulatively. The concept of general or nationwide permits was devised as a mechanism to ameliorate the regulatory costs and burdens created by the judicial mandate that jurisdiction must be exercised over all water of the United States. General permits have been issued by regulation for certain activities and waters. These regulatory permits are applicable to all Corps districts and are commonly referred to as nationwide permits. Activities which satisfy the regulations are “permitted” and are not required to go through the application process.

In devising its current nationwide permit, the Corps specifically found that the types of activities and/or the waters involved did not need the special protections afforded by closer permit scrutiny. Nonetheless, these general permits must comply with the Section 404(b) guidelines and contain applicable requirements and standards. Moreover, they may be revoked or modified any time the Secretary determines that the activities will have an adverse impact on the environment or are more appropriately authorized by individual permits. Proposed Corps regulations would increase the types of activities which qualify for nationwide permits.

49. Id. § 1344(e)(2).
50. Discharges into all lakes, regardless of size, which are not tributary to interstate or navigable waters, would be authorized. Proposal to Amend Permit Regulations for Controlling Certain Activities in Waters of the United States, 45 Fed. Reg. 62,732, 62,775 (1980) (to be codified in 33 C.F.R. § 330.4(a)). The 10-acre limitation would be deleted. Activities authorized by nationwide permits would include:
(a) Seismic operations;
(b) Outfall structures and associated intakes where the effluent from the outfall has been permitted under Section 402;
(c) Return water from upland dredge disposal if state certification under Section 401 has been provided;
(d) Discharges that do not exceed five cubic yards for a complete project;
(e) Discharges associated with surface coal mining activities authorized under the Surface Mining Control and Reclamation Act of 1977; and
(f) Discharges undertaken or regulated in whole or part by another federal agency where that agency has determined that the discharge will not either individually or
Corps regulations also authorize District Engineers to issue district-wide general permits for clearly described categories of discharges. These permits may be issued for activities which are similar in nature, and which will cause only minimal adverse environmental impact, either individually or cumulatively. Each general permit must describe the activity and type of water in which the activity may occur. It must also limit the quantity of material discharged and the area which may be disturbed by each operation.

After a general permit is issued, an individual permit is generally not required. However, the District Engineer retains the right to require an individual permit for any discharge subject to a nationwide permit where the concerns for the aquatic environment as expressed in the Section 404(b) guidelines indicate the need for such action because of individual and/or cumulative adverse impacts to affected waters. A general permit may also be revoked if the public interest requires.

As the general permit program approach has evolved, it has become the Jekyll and Hyde feature of the Section 404 program. Instead of eliminating paperwork, regulatory burdens, costs and delays, as intended, it may be bringing about the opposite result. A potential nationwide or general permittee has little certainty that its activities can be conducted without an individual permit. For instance, the Corps has determined that discharges above the headwaters should be authorized pursuant to a nationwide permit because they have insignificant impacts on the aquatic environment. The Corps has informally determined the headwater points of many rivers and large streams and these determinations are reflected on maps available at Corps offices for the affected area. For most smaller streams and tributaries, however, no determination of headwater points have been made.

51. 33 C.F.R. § 323.3(c) (1981).
52. Id. § 323.4-4. In Memoranda of Agreement, EPA and the Departments of the Interior, Commerce and Agriculture have agreed to assist the Corps in its efforts to remain aware of potential cumulative impacts of activities covered by general permits. 45 Fed. Reg. 62,764, 62,765, 62,766, 62,770 (1980).
53. The legal effect of the informal maps is not clear. Consequently a potential discharger should be counseled that the maps may provide no assurance of nationwide applicability. Similarly, year-to-year variation in flow rates has received no regulatory attention.
The burden is on potential dischargers who claim authorization under the general or nationwide permit to correctly determine that their activity will occur above the headwaters. This determination is often extremely difficult in areas that have no stream flow monitoring history and for those western streams which typically have immense flows during snowmelt or after rare thunderstorms, but have little or no flow during the remainder of the year.

A second problem has resulted from EPA's opposition to the general permit approach. EPA has insisted that the nationwide permit contain numerous conditions and requirements. The conditions specify those circumstances in which the nationwide permit is applicable. The requirements establish practices which, to the maximum extent practical, must be employed by a nationwide permittee to avoid violating the permit.

Lack of certainty is inherent in the language of the permit conditions. A discharge will be permitted in certain waters if it consists of "suitable" materials free from toxic materials, and the fill will be "properly" maintained. If a discharger incorrectly interprets any of these terms and an individual Section 404 permit is required, its issuance will involve the need for federal environmental assessment and may be subject to a full EIS review and its attendant delays. Even where a potential nationwide permittee successfully meets the conditions and can comply with the practices, there is a problem of uncertainty. He may be required by the District Engineer at any time to cease activities until an individual permit is obtained.

Corporations typically spend hundreds of thousands of dollars on baseline and impact studies to acquire the types of information called for in the nationwide permit conditions. Less substantial dischargers such as individual home builders and small real estate developers cannot afford such information and must proceed largely on intuition. Indeed, less

54. Id. § 323.4-2(b).
55. Id. § 323.4(b).
56. Id. § 323.4-4.
substantial dischargers rarely comprehend that their activities are subject to federal regulation, until served with a Corps' cease and desist order.

III. STANDARDS APPLICABLE TO PERMITS

The purpose of the 1899 Act was to prevent interference with navigation. Accordingly, navigational impact was the standard applied, and the Secretary, through the Corps of Engineers, simply authorized activities which caused no adverse navigational impact. In 1968, however, in response to growing pressure from environmentalists who had begun using the Refuse Act as the basis for lawsuits to prevent pollution of the Nation's waters, the Corps adopted new regulations governing 1899 Act permits which required the consideration of a number of environmental factors.

These regulations, which marked the beginning of the Corps' public interest review, were upheld by the Fifth Circuit in Zabel v. Tabb. The court concluded that the lack of substantive standards in the 1899 Act and the authority of new laws such as the National Environmental Policy Act (NEPA) and the Fish and Wildlife Coordination Act (FWCA) authorized denial of a permit on the basis of environmental grounds alone. As emphasis in administration of the 1899 Act shifted from navigation to water pollution control, it became apparent that the simple authorization mechanism of the 1899 Act provided an inadequate basis for dealing with environmental problems. Accordingly, in December 1970, President Nixon directed the Secretary to establish a permit program to regulate the discharge of pollutants and other refuse into navigable waters. The program, administered by the Corps, did not include standards limiting the discharge of pollutants into navigable waters and did not regulate discharges into non-navigable waters. There was a need for new legislation to fill these gaps, and the Federal Water Pollution Control Act of 1972 (FWPCA) was therefore enacted.

57. 33 Fed. Reg. 18,670 (1968). The regulations provided, inter alia, that:
"The decision as to whether a permit will be issued must rest 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."
Id. at 18,671.
58. See notes 70–72 and accompanying text infra.
With regard to the discharge of dredged and fill material, the FWPCA contains only two general standards. First, Section 404(b) provides that each discharge site must be specified on the basis of guidelines developed by EPA. The guidelines must be based on criteria “comparable” to the criteria under Section 403(c), which are applicable to ocean discharges. Where application of such guidelines would prohibit specification of a site, the economic impact on navigation and anchorage must also be considered. Section 404(c) provides that EPA may prohibit or withdraw specification of any area as a disposal site or deny or restrict use of any area for specification as a disposal site whenever it determines the discharge will have an unacceptable adverse impact on municipal water supplies, shellfish beds and fishery areas, wildlife or recreational areas.

The detailed standards which are applicable to dredge and fill permits are, therefore, regulatory standards. They are contained in the Corps’ regulations, EPA’s 404(b) guidelines and EPA’s 404(c) regulations, and a number of additional policies and regulations promulgated, for the most part, pursuant to other statutory authorities.

These various standards for permit review have been broken down by the Corps into twelve so-called general policies. Some are applicable primarily to coastal areas. Others simply reflect statutory requirements under other laws. There are, however, certain policies which fall in

64. Id. § 1344(c).
66. The twelve general policies for evaluating permit applications are:
   a. Public interest review;
   b. Effect of wetlands;
   c. Fish and Wildlife;
   d. Water quality;
   e. Historic, scenic, and recreational values;
   f. Effect on limits of the territorial seas;
   g. Interference with adjacent properties or water resource projects;
   h. Activities affecting coastal zones;
   i. Activities in marine sanctuaries;
   j. Other federal, state, or local requirements;
   k. Safety of impoundment structures;
   l. Floodplains.
neither category and which determine whether a permit will be issued and if so on what conditions. The four most important of these relate to the public interest, wetlands and the aquatic ecosystem, water quality, and fish and wildlife. The remainder of this section will discuss these four important standards.

A. Public Interest Review

Simply put, the public interest review is a device used by the Corps to determine whether a proposed project is in the public interest. A project will be found to be in the public interest if the benefits expected to accrue from the project are greater than the reasonably foreseeable detriments.69 If it is not in the public interest as perceived by the Corps, a permit may not be issued.70

The factors to be considered include conservation, economics, aesthetics, general environmental concerns, historic values, fish and wildlife values, flood damage prevention, water supply, water quality, energy needs, safety, food production and in general, the needs and welfare of the people. The national concern for both the protection and utilization of important resources must also be considered. Under the Corps’ regulations an applicant can successfully satisfy the 404(b) guidelines and still have its application denied on “public interest” grounds.71

The public interest is by definition a virtue in the abstract. When applied by persons or agencies with different values, goals, or judgment, the absence of objective criteria in the standard vests the decision-maker with excessive and uncontrolled discretion. Although there have been few cases of clear abuse of this power, it should be recognized that possession of this power alone significantly alters the strength of the decision-maker vis-a-vis the applicant. It is the authors’

69. 33 C.F.R. § 320.4(a)(2)(1981). The criteria used to determine whether the benefits exceed the detriments are:

(i) the relative extent of the private and public need for the proposed projects;
(ii) the desirability of using alternate locations and methods to accomplish the objective of the proposed project;
(iii) the extent and permanence of the effects of the proposed project on the uses to which the area is suited; and
(iv) the cumulative impact of the proposed project and other similar projects in the same general area. Id.

70. Id. § 320.4(a)(1).

71. Id. § 320.4(a).
opinion that the power has been routinely utilized by the Corps to “blackmail” applicants into mitigation requirements.\textsuperscript{72}

The public interest review arguably served a useful purpose under the 1899 Refuse Act, which contained no standards or guidelines. The Clean Water Act, taken as a whole, established detailed environmental objectives and standards. It does not authorize a public interest review. Nonetheless, the Corps continues to apply the review in the issuance of 404 permits.

\textbf{B. Wetlands and the Aquatic Ecosystem}

The Corps’ wetlands review is used to determine whether a project will unnecessarily alter or destroy valuable wetlands. If a project will result in the unnecessary alteration or destruction of such wetlands, a permit may not be issued.\textsuperscript{73}

In applying the wetlands review, the Corps of Engineers starts with the presumption that “wetlands are vital areas that constitute a productive and valuable public resource, the unnecessary alteration and destruction of which should be discouraged as contrary to the public interest”.\textsuperscript{74} The presumption can be overcome only if “clearly demonstrated otherwise”.\textsuperscript{75} Wetlands are defined in such a manner that they include swamps, bogs, coastal marshes and other true wetlands. However, they may also include artificially irrigated pastures, hardwood forests and mountain meadows. The Corps’ presumption makes no distinction between these types of lands and waters.

Under the wetlands review, the alteration or destruction of a wetland will be considered unnecessary if the benefits of

\textsuperscript{72} See note 119 and accompanying text infra.

\textsuperscript{73} 33 C.F.R. § 320.4(b)(2) (1981). Wetlands are considered valuable if they:

(i) Serve important natural biological functions, including food chain production, general habitat, and nesting, spawning, rearing and resting sites for aquatic or land species;

(ii) are set aside for study of the aquatic environment or as sanctuaries or refuges;

(iii) their destruction or alteration would detrimentally affect natural drainage characteristics, sedimentation patterns, salinity distribution, flushing characteristics, current patterns, or other environmental characteristics;

(iv) are significant in shielding other areas from wave action, erosion, or storm damage;

(v) serve as valuable storage areas for storm and flood waters;

(vi) are prime natural recharge areas; and

(vii) serve to purify water through natural water filtration. Id.

\textsuperscript{74} Id. § 320.4(b)(1).

\textsuperscript{75} 40 C.F.R. § 230.10 (1981).
the proposed project do not outweigh the damage to the wetlands or if the proposed alteration is not necessary to realize the alleged benefits. The latter determination requires consideration of whether the proposed alternative is "primarily dependent" on being located in or in close proximity to the aquatic environment and whether feasible alternative sites are available. If a proposed activity will occur in a wetland and it is not "water dependent" practicable alternatives are presumed to be available.

Furthermore, no discharge is permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem. Where such steps would prohibit the issuance of a permit at a particular site, one additional factor, the economic impact on navigation, may be considered by the Corps.

In any case, EPA Regional Administrators are authorized to deny or restrict use of potential or proposed disposal sites or withdraw permission to use a site previously specified by the Corps or a state if they have reason to believe that a discharge would have an "unacceptable adverse effect" on certain environmental resources. Such an effect may consist of an impact on an aquatic or wetland ecosystem which is likely to result in significant degradation of municipal water supplies.

77. 40 C.F.R. § 230.10(a)(3) (1981). All practicable alternatives are presumed to have less adverse impact on the aquatic ecosystem.
78. Id. § 230.10(d).
79. The Act and regulations use the awkward phrase "specification of a disposal site". It means no more or less than the issuance of a permit for a discharge at a particular location.
80. To deny or restrict use of a site, the Regional Administrator must notify the District Engineer or the state, the owner of record of the site, and the applicant, if any, of his intent to issue a public notice of his proposed determination. If the District Engineer or the state does not establish to the satisfaction of the Regional Administrator that there will be no unacceptable adverse effects, or that action will be taken to prevent such effects, then notice of the proposed determination will be published. After a period for comment, a non-adjudicatory public hearing may be held if requested or if there is a significant degree of public interest. Id. § 231.3(a).
The EPA Administrator must then review the decision of the Regional Administrator, consulting with the Chief of Engineers or the state, the landowner and the applicant. Each party has the opportunity to demonstrate, to the Administrator's satisfaction, that corrective action will be taken which will prevent unacceptable adverse effects. The Administrator's "final determination" constitutes final agency action. Id. § 231.6.
In emergencies the Administrator may "ask" the Corps or a state to suspend a permit if it poses an imminent danger of irreparable harm. Id. § 231.7.
C. Water Quality

Though the FWPCA is the nation’s primary water quality authority, Section 404 regulations devote little attention to the subject. The Act provides that no discharge is permitted which causes or contributes to a violation of state water quality standards, violates a toxic effluent standard or prohibition under the Act, or causes or contributes to significant degradation of the waters of the United States.\(^{81}\) The regulations implementing the Act are primarily devoted to non-water quality concerns such as the public interest, wildlife habitat, and wetland species.

D. Fish and Wildlife

A driving force behind the dredge and fill permit program is the protection of wetlands and other aquatic habitats for fish and wildlife purposes. Fish and wildlife requirements are, therefore, given careful consideration. Two such requirements are clear. The Corps must apply EPA’s 404(b) guidelines, many of which relate to fish and wildlife. Secondly, unless an exemption has been granted, no permit may be issued if it is likely to jeopardize the continued existence of an endangered or threatened species.\(^{82}\)

The role of the U.S. Fish & Wildlife Service (USF&WS) and state wildlife agencies in the Section 404 process is much larger and more powerful than might be immediately apparent. The Corps must give “great weight” to the report and recommendations of the USF&WS and the state wildlife agency.\(^{83}\) These agencies may recommend support for the project.\(^{84}\)

\(^{81}\) 33 U.S.C. § 1341 (1978). The EPA guidelines provide that a Section 404 permit will not be issued if the discharge would cause or contribute to “significant degradation” of the waters of the United States. 40 C.F.R. § 220.10(b)(1) to (2), (c) (1981). Effects contributing to significant degradation include significant adverse effects of the discharge on:

1. human health or welfare (including but not limited to effects on municipal water supplies, plankton, fish, shellfish, wildlife, and special aquatic sites);
2. life stages of aquatic life and other wildlife dependent on aquatic ecosystems;
3. aquatic ecosystem diversity, productivity, and stability; and
4. recreational, aesthetic and economic values. Id. § 220.10(c).

\(^{82}\) Id. § 220.10(b)(2). In the absence of an exemption, where endangered species consultation has occurred, the conclusions of the Secretary of the Interior concerning the impacts of the discharge on threatened and endangered species and their habitat will be considered final by the Corps. Id. § 220.30(c).

\(^{83}\) 33 C.F.R. § 320.4(e) (1981). The Fish and Wildlife Coordination Act also requires the Corps to give the reports of the USF&WS and the state wildlife agency “full consideration”. 16 U.S.C. § 662(b) (1976).

\(^{84}\) 46 Fed. Reg. 7659 (1981). The USF&WS may recommend support of a project in its DEIS or Section 404 comments if it finds that:
but may also recommend that mitigation measures be required of applicants. Such measures may include avoiding discharges, restoring or maintaining filled areas, or actually replacing filled lands and waters.\textsuperscript{85} The Corps must include fish and wildlife reports in the 404 permit report.\textsuperscript{86} It must also urge applicants to modify their proposals to eliminate or mitigate any damage to fish and wildlife resources. Permits may be conditioned to accomplish these purposes.\textsuperscript{87} However, the Corps is not required to follow the recommendations of other agencies, and a permit may be issued over the unresolved objection of the USF\&WS.\textsuperscript{88}

The same is not true of EPA objections. EPA Regional Administrators may deny, restrict the use of, or withdraw particular sites if they have reason to believe that a discharge at such site is likely to result in significant loss or damage to fisheries, shellfish, wildlife habitat or recreation areas.\textsuperscript{89}

\begin{enumerate}
\item It is ecologically sound;
\item The least environmentally damaging reasonable alternative has been selected;
\item Every reasonable effort has been made to avoid or minimize fish and wildlife loss;
\item Important mitigation recommendations have been adopted; and
\item For wetlands habitats, the project is water dependent and there is a demonstrated public need. \textit{Id.}
\end{enumerate}

\textsuperscript{85} 46 Fed. Reg. 7644 (1981). The U.S. Fish and Wildlife Service has established policy governing its mitigation recommendations under all authorities including Section 404, NEPA, and the Fish and Wildlife Coordination Act. The policy is internal to the Service and is not binding on other federal agencies. \textit{Id.} at 7645. Mitigation, as defined by the policy and applied to Section 404 activities, may include the limitation or avoidance of discharges, restoration or maintenance of filled areas and replacement of filled habitat. \textit{Id.} at 7657. The policy focuses on habitat value, as measured by its ability to support fish and wildlife populations, as the primary basis for determining mitigation requirements. \textit{Id.} at 7645. The policy creates four categories of wetlands and establishes goals for the preservation of each category. Goals range from absolute preservation to minimizing losses. \textit{Id.} at 7646. Guidelines then set forth the type of mitigation the Service will recommend based upon the category of wetland affected and goals established for them. \textit{Id.} at 7657-58.

\textsuperscript{86} 16 U.S.C. § 662(b) (1976). It is unclear whether the FWCA also requires a non-federal project plan to "include such justifiable means and measures for wildlife purposes as the reporting agency finds should be adopted to obtain maximum overall project benefits". \textit{Id.}

\textsuperscript{87} The statute appears to apply this requirement only to federally funded projects. \textit{See, e.g., BEAN, THE EVOLUTION OF NATIONAL WILDLIFE LAW 197-98 (CEQ Report No. 041-011-40033-5, 1977). However, USF\&WS proposed regulations to implement the FWCA would apply this requirement to both federally funded and federally authorized projects. 45 Fed. Reg. 85,412 (1980).

\textsuperscript{88} 33 C.F.R. § 320.4 (1981). The Corps' proposed Section 404 regulations more clearly enunciate but limit Corps authority to condition permits for fish and wildlife mitigation purposes. 45 Fed. Reg. 82,768 (1980) (to be codified in 33 C.F.R. §§ 325.4(c) to (d)). The proposed regulations recognize that certain cases will require the "dedication" of land to mitigate fish and wildlife losses. Where such lands are on or in the immediate vicinity of the project area the Corps may become involved in mitigation negotiations. However, where the land is "not associated with the impacts of the proposed work", and negotiations concerning such lands are for the purpose of obtaining another agency's concurrence or "tilting the balance in favor of issuing a permit in the public interest", the Corps will not become involved in the negotiations. \textit{Id.}

\textsuperscript{89} Sierra Club v. Alexander, 484 F. Supp. 455, 469 (N.D.N.Y. 1980).

\textsuperscript{80} 33 U.S.C. § 1344(c) (1976).
The permitting standards which must be met by a 404 applicant present a classic example of the need for regulatory reform. This is not surprising since the Act itself is confusing. Section 404(a) requires the Corps to apply EPA’s 404(b) guidelines as the standards for disposal site specification. The 404(b) guidelines “shall be based upon criteria comparable to the criteria” for ocean discharges under Section 403(c). The technical feasibility of deriving rational disposal criteria for wetland areas which are comparable to those established for ocean disposal must be questioned.

Congress’ only instructions to the Corps was to apply the Section 404(b) guidelines. The Corps’ self-imposed regulatory review requirements exceed that command. It has adopted its own extensive review requirements, the most notable being the public interest review and wetlands review discussed above. Those are only two of the twelve reviews required to obtain an individual Section 404 permit.

Each review element of Corps regulations is also required by one or more statutes or Executive Orders which regulate activities or require special consideration of certain factors.

90. 33 U.S.C. § 1343(c) (1976). These criteria include:
(a) the effect of disposal of pollutants on human health or welfare, including but not limited to plankton, fish, shellfish, wildlife, shorelines, and beaches;
(b) the effect of disposal of pollutants on marine life including the transfer, concentration, and dispersal of pollutants or their by-products through biological, physical, and chemical processes; changes in marine ecosystem diversity, productivity, and stability; and species and community population changes;
(c) the effect of disposal of pollutants on esthetic, recreation, and economic values;
(d) the persistence and permanence of the effects of disposal of pollutants;
(e) the effect of the disposal at varying rates, of particular volumes and concentration of pollutants;
(f) other possible locations and methods of disposal or recycling of pollutants including land-based alternatives; and
(g) the effect on alternate uses of the oceans, such as mineral exploitation and scientific study.

91. The comparability requirement provides some further evidence of congressional intent to regulate discharges only into truly wet areas.

92. The following table, prepared by the authors, dramatizes the existence of unnecessary duplication.

<table>
<thead>
<tr>
<th>Review Element</th>
<th>Corps Regulation</th>
<th>404(b) Guidelines</th>
<th>EA/EIS</th>
<th>USFS or BLM special use permits</th>
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<td>1. public interest</td>
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<td>yes</td>
<td>yes</td>
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<td>2. wetlands</td>
<td>yes</td>
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<td>yes</td>
<td>yes</td>
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<td>3. fish &amp; wildlife</td>
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<td>4. water quality</td>
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<td>5. historic, scenic and recreational values</td>
<td>yes</td>
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<td>6. limits of the territorial sea</td>
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For instance, fish and wildlife considerations are reflected in the Fish and Wildlife Coordination Act, the Endangered Species Act, and the Marine Mammal Protection Act.

To the extent that some of these review items are covered by the Section 404(b) guidelines, there is no logical reason for duplication in the 404 regulations. To the extent they are regulated by other federal, state or local entities, it would seem that the Corps has no legitimate interest in duplicating those efforts.

Permit applicants are forced to address multitudinous concerns. The result is increased costs, longer delays, deep citizen frustration and staggering paperwork requirements.

IV. PERMIT PROCESSING PROCEDURES

Permit processing procedures may generally be divided into those which apply to all permit applications and those which are triggered only when an application becomes controversial. The former are fairly straightforward and are set forth in the Corps regulations. The first step involves a determination that an application is complete. If it is complete the District Engineer must within 15 days publish a notice advising all interested parties of the proposed activity for which a permit is being sought. The notice normally provides a 30-day period during which interested parties may express their views on the permit application.

Notice must also be sent to the U.S. Fish & Wildlife Service and to the head of the state fish and wildlife agency. These actions will satisfy initial requirements under the Fish

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<th>interference with adjacent property or water resource project</th>
<th>effects on Coastal Zone</th>
<th>effects on marine life</th>
<th>other federal, state or local requirements</th>
<th>safety of impoundment structures</th>
<th>floodplains</th>
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93. 33 C.F.R. § 325.2(a) (1981). If it is incomplete, additional information may be requested.
94. Id. § 325.2(d)(1).
95. Id. § 325.3(a)(10).
96. Id. § 325.3(c).
and Wildlife Coordination Act. The USF&WS must then respond within ninety (90) days. The Corps must also request information from the Secretary of the Interior on whether any species which are listed or proposed to be listed under the Endangered Species Act as threatened or endangered may be present in the project area.

The District Engineer must then prepare an Environmental Assessment on most applications. However, where an activity requires more than one federal permit, license, or approval, another agency may have already been designated as the lead agency for NEPA purposes. In such situations, pursuant to law or agreement, the Corps will become a cooperating agency and assist the lead agency in its preparation of the necessary documents. The Corps will normally rely on and incorporate another agency's environmental documents in its public interest review. It will issue no permit until the NEPA process has been completed.

A certification that the discharge will not cause a violation of water quality standards must be obtained from the applicant. Where appropriate, state agencies responsible for Coastal Zone Management Act programs must also be consulted.

A non-adjudicatory public hearing on an application will be held whenever a request, on substantial grounds, has been received, or when it would otherwise aid decision making. All interested parties will be permitted to submit statements which will become part of the administrative record.

The Corps must make certain factual determinations, in writing, on the short and long term effects of each proposed

97. 16 U.S.C. § 662(a) (1976). The Fish and Wildlife Coordination Act (FWCA) requires federal agencies to consult with USF&WS prior to authorizing the construction of impoundment and diversion structures in streams.
99. 16 U.S.C. § 1536(c)(1) (1976). The Act requires federal agencies to request information with respect to "any agency action of such agency."
102. Id. § 1501.6.
103. Id. § 1506.1.
105. 33 C.F.R. § 325.2(b)(2) (1981). Permits for activities inconsistent with the Coastal Zone Management Act will not be issued except in the interests of national security. Id.
106. Id. § 327.4.
discharge.\textsuperscript{107} The degree to which the discharge will introduce, relocate, or increase contaminants must be determined.\textsuperscript{108} Cumulative and secondary effects of discharges must be documented and considered by the Corps prior to permit issuance.\textsuperscript{109} When these actions have been completed, the District Engineer must prepare a Finding of Fact and determine, based on the record and applicable law, whether or not a permit should be issued.\textsuperscript{110}

Congress added subsections (m) and (q) to Section 404 in 1977 to assure, to the maximum extent practicable, that the permit decision will be made within 90 days. Section 404(m) directs the USF\&WS to submit its comments within 90 days of receiving notice of permit application. Section 404(q) directs the Corps to enter into various interagency agreements for the purpose of minimizing to the extent practicable, duplication and needless paperwork and delays in the processing of permits.\textsuperscript{111}

The Secretary of the Army has entered into Memoranda of Agreements (MOAs) with several federal agencies. The MOAs establish procedures for agency review and appeal of Section

\textsuperscript{107} 40 C.F.R. \textsection 230.11 (1981). The Corps must determine the nature and degree of effect the proposed discharge will have, individually and cumulatively on:
(a) the characteristics of the substrate at the proposed disposal site;
(b) water, current patterns, circulation including downstream flows, and normal water fluctuation;
(c) changes in the kind and concentrations of suspended particulate/turbidity in the vicinity of the disposal site; and
(d) the structure and function of the aquatic ecosystem and organisms. \textit{Id.}

\textsuperscript{108} \textit{Id.} \textsection 230.11(d). The smallest practicable mixing, or discharge zone, must be determined for each site. \textit{Id.} \textsection 230.11(f).

\textsuperscript{109} \textit{Id.} \textsection 230.11(g), (h). The guidelines describe in detail the effects on the physical, chemical, and biological characteristics of the aquatic system, special aquatic sites and human use, which must be considered in making required determinations. \textit{Id.} \textsection 230, Subparts C-F. Methods for evaluation and testing of these effects are then suggested. \textit{Id.} \textsection 230, Subpart G. EPA has proposed mandatory testing requirements for specification of dredged or fill disposal sites. 45 Fed. Reg. 38,360 (1980). Finally, the guidelines specify steps that can be taken to minimize potential adverse impacts of the discharge on the aquatic ecosystem.

\textit{Id.} \textsection 230, Subpart F (1981).

\textsuperscript{110} 33 C.F.R. \textsection 325.2(a)(6) (1981).

\textsuperscript{111} Section 404(b) requires the Secretary of the Army to enter into agreements with EPA, the Departments of the Interior (DOI), Agriculture (USDA), Commerce, and Transportation, and the heads of other appropriate federal agencies to minimize duplication, needless paperwork and delays in the issuance of permits. 33 U.S.C. \textsection 1344(q) (Supp. III 1979).

In all agreements the agencies have agreed to encourage the joint processing and evaluation of pending permit applications which relate to the same activity. This may include the issuance of joint public notices, joint public hearings and joint review and analysis of information. 45 Fed. Reg. 62,764, 62,765, 62,768, 62,770 (1980).
404 permit applications. They provide if there are unresolv-
ed objections by the agency and the District Engineer decides
a permit should be issued, the agency may request review of
that decision by higher authority, namely the Division
Engineer. The Division Engineer may issue a permit over
unresolved objections unless the regional level of the objecting
agency refers the application to the Departmental level. A per-
mit may thereafter be issued only in accordance with instruc-
tions from the Departmental level. In certain instances, Sec-
tion 404 applications must be referred directly to the Chief of
Engineers.

At each review level the reviewing officer has the author-
ity either to decide that the permit should be issued or denied,
or to decide only the issue that has been raised and send the
application back for a decision on permit issuance. A determina-
tion at each level is subject to constraints imposed by other

112. 45 Fed. Reg. 62,763, 62,767, 62,769, 62,772 (1980). Where an agency objects to a permit, the applicant may:
1. Resolve the objections by agreeing to recommended modifications;
2. Request continued processing despite objections, either with or without providing
counter arguments;
3. Request suspension of processing to provide time either for negotiations with the ob-
jecting agency or for preparation of counter arguments; or
4. Withdraw the application.

113. Id. For purposes of this review, permits are divided into three classes as follows:
1. CLASS I: Permit applications where an EIS has been prepared and (1) the Corps is
the lead agency for conducting NEPA review, or (2) the Corps is not the lead agency
but the dredge and fill activities are of concern to the objecting agency.
2. CLASS II: Permit applications for projects that:
a. Relate to emerging policy issues, alleged violations or erroneous application of
existing policy, or involve some other precedent-setting potential program;
b. Have substantial individual impacts; or
c. Contribute to a cumulative impact of demonstrably substantial proportions.
3. CLASS III: All other permit applications.
In determining whether an impact is "substantial" and thus determining whether a
case is within Class II rather than Class III, the agencies must consider the actual
physical extent and quality of the area to be affected, the degree of public interest in
the proposal, and the positions of other federal and state resources agencies.
Each Class I application may be subject to four sequential reviews by increasing
senior Corps officials. If an application is found to be Class II, it may be subject to
two levels of review and if Class III, to one level of review. Time limits are pro-
vided for each step in the review process. Each sequential review by a senior Corps of-
official will only be initiated upon request by that official's counterpart in the objecting
agency. At each level of review the Corps official must consult and exchange written
views with his counterpart in the objecting agency in an attempt to develop a
mutually acceptable resolution of the case.

114. 33 C.F.R. § 325.8(b), (c) (1981).
115. Id. § 325.8(d). These include instances when:
a. MOAs or other statutes require special procedures to be utilized;
b. the Governor of the state in which the discharge will occur has stated a position
against permit issuance;
c. there is substantial doubt as to authority, law, regulations, or policies applicable to
the proposed activity;
d. the activity would affect the baseline used for determining the limits of the ter-
ritory; or
e. whenever the Chief of Engineers requests the case be forwarded for decision. Id.
laws or regulations and to the agency’s right to seek further review. The agencies may seek review only once on a substantive issue.\textsuperscript{116} Careful examination of the MOAs reveal that statutory time frames are recognized more in the breach than in adherence.\textsuperscript{117}

Although Section 404 contains no indication that agencies other than EPA are to be allowed rights of administrative appeal and review over Corps decisions, the Corps through the MOAs has granted these rights to other agencies. Corps regulations gratuitously grant similar review rights to objecting agencies.\textsuperscript{118} These provisions make it impossible for the Corps to remain in control of its permitting program. Corps employees now understand that their counterparts in EPA or the USF&WS have the power to “rock the regulatory boat” by requesting review at a higher level. Such review means that the permit application and all authority and responsibility for further decisions flow up the chain of command.

The ability of an EPA or USF&WS employee to cause such consequences for their Corps counterpart renders all but the

\textsuperscript{116} However, if an application is returned to the District Engineer from higher authority with instructions for action, an agency may gain appeal based on the District Engineer’s misinterpretation of the instructions. 45 Fed. Reg. 62,762, 62,766, 62,769 (1980).

\textsuperscript{117} Id. Deadlines under the MOAs are as follows:

<table>
<thead>
<tr>
<th>Action</th>
<th>Time Limit in working days</th>
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<tbody>
<tr>
<td>1. D\textsc{istrict} E\textsc{ngineer} decides permit should be issued.</td>
<td>Baseline</td>
</tr>
<tr>
<td>- An agency may request review by Division Engineer.</td>
<td>20 days</td>
</tr>
<tr>
<td>- District Engineer must forward application report (case) to the Division Engineer.</td>
<td>20 days</td>
</tr>
<tr>
<td>2. D\textsc{ivision} E\textsc{ngineer} must review and make his determinations.</td>
<td>30 days</td>
</tr>
<tr>
<td>- An agency may request review by the Chief of Engineers.</td>
<td>20 days</td>
</tr>
<tr>
<td>- Division Engineer must forward the case to the Chief of Engineers.</td>
<td>15 days</td>
</tr>
<tr>
<td>3. C\textsc{hief} of E\textsc{ngineers} must review and make his determination.</td>
<td>30 days</td>
</tr>
<tr>
<td>- An agency may request review by the Assistant Secretary of the Army for Civil Works (ASA(CW)).</td>
<td>15 days</td>
</tr>
<tr>
<td>- Chief of Engineers must forward the case to ASA(CW).</td>
<td>15 days</td>
</tr>
<tr>
<td>4. ASA (C\textsc{w}) must review and make his determination.</td>
<td>30 days</td>
</tr>
<tr>
<td>- An agency may request review of Class I applications by the Secretary of the Army.</td>
<td>15 days</td>
</tr>
<tr>
<td>- ASA (C\textsc{w}) must forward the case to the Secretary of the Army.</td>
<td>15 days</td>
</tr>
<tr>
<td>5. The S\textsc{ecretary} of the A\textsc{rmy} must review and make his determination.</td>
<td>45 days</td>
</tr>
<tr>
<td>TOTAL OF REVIEW TIME LIMITS:</td>
<td>280 working days</td>
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</tbody>
</table>

\textsuperscript{118} 33 C.F.R. § 325.3 (1981).
problems of wetlands regulation bravest corps employee powerless in the face of sister agency objections. The corps responds to objections by directing the applicant to “solve” the issue giving rise to the objection. In most cases, applicants are then forced to accept mitigation demands of other agencies, notably USF&WS, or face delays pending appeal. One can hardly conceive of a situation where a corps staffer could obtain similar review of an EPA permit decision.

EPA may also overturn a corps 404 permit and displace the corps as the decision-maker by exercising its powers under Section 404(c). EPA's review includes many of the same factors already considered by the corps and duplicate criteria in the 404(b) guidelines. The EPA Section 404(c) veto power has the same subtle effect on the corps program as the interagency review and appeal rights. It emasculates the corps as a decision-maker. Although the veto power has rarely been used by EPA, that fact provides little evidence of its true impact on the corps. Where objections are voiced by EPA or other consulting agencies, the corps often accepts the objections without investigating their validity. As a result, an applicant is faced with the choice of having the permit denied or of agreeing to mitigation or other permit conditions as a mechanism for avoiding the objection.\textsuperscript{119}

The corps actively encourages applicants to compromise with EPA and the USF&WS even before submittal of an application. The corps, therefore, has little responsibility for the successes or failures of its permitting system. Until a single agency is clearly responsible for the Section 404 program, reforms designed to address today's problems may have little success in preventing new ones.

V. EXECUTIVE ORDER 11990

Dredge and fill activities which are conducted in federal wetlands or in wetlands pursuant to federal programs will not only be subject to Section 404, and its problems, but also to the more stringent requirements of Executive Order 11990.\textsuperscript{120} The

\textsuperscript{119} The proposed corps regulations come very close to detailing this procedure. See 45 Fed. Reg. 62,732, 62,758 (1980) (to be codified in 33 C.F.R. §§ 325.4(c) to (d)). The USF&WS mitigation policy provides further insight to that agency's use of Section 404 for its own goals. 46 Fed. Reg. 7644 (1981).

Order was issued by President Carter in May 1977, purportedly in furtherance of NEPA. It applies to Federal agencies which: (1) acquire, manage or dispose of Federal lands and facilities, (2) provide Federally undertaken, financed or assisted construction and improvements, or (3) conduct Federal activities and programs affecting land use.121 It does not apply to the issuance by Federal agencies of permits or licenses for activities involving wetlands on non-Federal property.122

The Order requires each Federal agency, to the extent permitted by law, to avoid undertaking or providing assistance for new construction located in wetlands123 unless the head of the agency finds that there is no practicable alternative to such construction and that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.124 When Federally-owned wetlands are proposed for lease, easement, right-of-way or disposal to non-Federal public or private parties, the Federal agency must reference in the conveyance any uses that are restricted under Federal, state or local law, attach other appropriate conditions to the use of the property by the grantee and his successor, or withhold such properties from disposal.126

We believe that there are three primary problems with the Order. The first is that the Order assumes that all wetlands are valuable and deserve protection, and requires agencies to elevate wetlands protection above other environmental, social, and economic values. The Order was issued under the authority of NEPA. However, NEPA requirements are primarily procedural.126 They cannot be utilized as authority to elevate specific environmental concerns where to do so would violate other statutes or where other considerations of national policy are involved. In requiring the subordination of other considera-

121. Id. § 1(a).
122. Id. § 1(b).
123. The term "wetlands", for purposes of the Order, means areas that are inundated by surface or ground water with a frequency sufficient to support and under normal circumstances do or would support a prevalence of vegetative or aquatic life that requires saturated or seasonably saturated soil conditions for growth and reproduction. It includes swamps, marshes, bogs and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats and natural ponds. Id. § 7(c).
124. Id. § 2(a). In making this determination, both economic and environmental factors are to be taken into account.
125. Id. § 4.
tions of national policy, the Order exceeds NEPA authority and to that extent is probably unlawful.\textsuperscript{127}

The second problem with the Order is that it applies to federal actions which are not necessarily major and which do not necessarily involve significant impacts on the environment. Even activities with \textit{de minimis} effects on wetlands are subject to the stringent requirements of the Order.

Finally, the Order's limited exemptions mean that a number of activities are covered which should logically be excluded. Activities on public lands which are permitted under Section 404 or are authorized by nationwide permit are also subject to and can be prohibited by the Order. Activities which under 404(f) are exempt from all permit requirements may be prohibited by the Order. For instance, a farmer seeking a federal guaranty for a loan to be used to conduct normal farming activities on lands which contain a prevalence of wetland species may find his application denied even though Congress specifically exempted such activities in Section 404(f). Activities on private lands which are permitted by a state pursuant to delegated authority under Section 404 are subject to the Order, while the same activities, if permitted by the Corps, would not be subject to the Order.

\textbf{VI. Practice Aides and Considerations}

The practitioner or project proponent can avoid some of the problems in the wetlands/404 program through advance identification and consideration of several particularly significant issues. One of the more distressing features in the current program is that those areas which are least likely to be perceived as involving a wetland or water pollution problem are the same areas which often involve the most difficult permitting requirements.

The dredge and fill program has been identified as one of the areas deserving of special attention by the administration's Task Force on Regulatory Relief headed by Vice President Bush.\textsuperscript{128} There will undoubtedly be major administrative reforms, and possibly legislative relief, as the complex and

\textsuperscript{127} Vergara \textit{v.} Hampton, 581 F.2d 1281 (7th Cir. 1978), \textit{cert. denied}, 441 U.S. 905 (1979).
\textsuperscript{128} [1981] 12 ENVIR. REP. (BNA) 503.
often illogical nature of the current program becomes better understood. Until reformed the federal wetlands program will remain a trap for the unwary. This section is designed to provide a step-by-step analytical framework for the project proponent and his or her attorney. The final section of the paper will discuss options for legislative reform.

Developers should initially be concerned with the nature of the physical properties involved, and more specifically, with determining whether the area contains wetlands. This will often require a persistent and careful pursuit of information. Given the complexity of determining wetland status, perhaps the most inappropriate inquiry of a landman or field representative would be the simple question, "Are there any wetlands involved?" This question is of little help because it must be carefully supplemented with explanations and guidance concerning the regulatory concepts and definitions of wetlands. To the extent that regulatory wetlands are determined to exist, early consideration should be given to project design or location alternatives to avoid them.

If any wetland areas must be affected by the project, the 404(f) permit exemptions should be reviewed. One should note here that the statutory exemptions have been strictly construed by EPA and the Corps.

If a permit exemption is unavailable, the proposed activities should then be reviewed to determine whether they qualify for a general or nationwide permit. The risks of reliance on a nationwide permit should be carefully assessed and communicated to the client or project decision-maker. Those risks may be made acceptable by file documentation of compliance with the requisite conditions and management practices combined in the nationwide permit regulations. The danger of "overlooking" potential impacts on endangered species habitat should be kept in mind.129

129. The dangers of overlooking endangered species problems is highlighted by the pending case of Riverside Irrigation District v. Stipo, Civil Action No. 80K624 (D. Colo., filed May 12, 1980). The case involves the Public Service Company of Colorado which is in the process of constructing a new coal-fired power plant on the eastern plains of Colorado. All federal, state and local permits have been obtained and several were successfully defended in litigation. Through a complex process, the plant is to obtain its process cooling water from an irrigation ditch company in accordance with state water rights requirements. The water is to be carried by pipeline from a pumping station on the South Platte River, approximately three miles away.
If an individual 404 permit will be required, information will have to be acquired for the application. A factual checklist can be generated from the Corps’ regulatory review criteria and the EPA guidelines. Issuance of a 404 permit involves federal action which will be subject to some level of analysis to comply with NEPA. Involvement by EPA, USF&WS, and state wildlife agencies will also be triggered by permit application. Consequently, any decision to apply for a 404 permit should not be made lightly. Where a legitimate claim of coverage by nationwide permit is available, it should be seriously considered. Where an individual permit is necessary, the strategy for securing the necessary information for the application and the timing of an application will require good planning, careful consideration, professional judgment, and the assistance of Lady Luck.

VII. CHANGING THE LAW: ALTERNATIVE SUGGESTIONS

The preceding discussion has identified a number of serious problems with the federal wetlands program. The sobering reality is that this crazy quilt pattern of regulations and requirements has been constructed on a statutory foundation which does not even contain words such as “wetlands”, “public interest review” or “mitigation”.

Identification of the existing problems in the program also suggest solutions. The authors recognize that the federal wetland program may be changed or developed through legislative, administrative and judicial processes. The remaining discussion will be limited to legislative options, however, as the most appropriate alternative to either confirm or revise a

Reservoirs were being constructed for the water by damming arroyos which are bone dry for all but several weeks in the spring. The company believed that no individual Section 404 permit was necessary since its activities clearly fell under the nationwide permit, if it was subject to Section 404 at all.

The company received a cease and desist order from the Corps and was notified that it needed an individual permit. The Corps’ action was triggered by a USF&WS “determination” that the critical habitat of the whooping crane, an endangered species, would be jeopardized more than 300 river miles away in Nebraska as a result of consumptive use of South Platte River water. The USF&WS “determination” was made without notice or hearing. The Corps accepted that determination as conclusive. The USF&WS indicated that it would withdraw its determination if the company mitigated its impacts by finding additional water which would be supplied to the South Platte River and dedicated to the whooping cranes. The company sued the Corps and USF&WS for arbitrary and capricious behavior. Meanwhile, the Company has suffered contract losses.

The government took the position in the litigation that courts have no jurisdiction to review these types of agency actions. The Tenth Circuit has recently ruled that the Corps’ determination, that an individual permit is necessary, constitutes final agency action subject to review.
program that is seemingly unsupported by any explicit evidence of Congressional intent.

A. Legislative Reform of Section 404

As described in preceding chapters, problems with the Section 404 program stem from three sources: (1) excessive claims of geographic jurisdiction; (2) imprecise and confusing permit standards; and (3) complex and unnecessary permit processing procedures.

Jurisdictional Reform: Many problems can be avoided by leaving the Corps' jurisdiction intact but eliminating the need for a permit for work which affects small waterbodies. The focus of such an approach would be the interstate water quality impact of the proposed discharge. The legislation could simply expand upon the present Section 404(f) approach under which certain activities and waters are exempt from the permit requirements.

Navigable and interstate waters, by definition, affect more than one state. The discharge of dredged or fill material into such waters or their tributaries may, therefore, cause interstate water pollution. Accordingly, federal permits for discharges in such waters should logically be required. There may be a point, of course, with respect to interstate waters and their tributaries where the stream flow or soil saturation is so insubstantial that there is little risk of significant downstream pollution. Consequently, the burdens of a federal regulatory program for such areas may outweigh any benefits.

130. This approach is to be distinguished from another viable approach embodied in a bill sponsored by Senator Tower (R-Tex.) which would restrict the scope of the Corps' program. The bill, S.777, was introduced on March 24, 1981, and referred to the Committee on Environment and Public Works, 102 CONG. Rsz. S2575 (daily ed. March 24, 1981). The Tower Amendment is patterned after the so-called "Wright Amendment" which passed the House in 1977.

The Tower Amendment, like the Wright Amendment, would eliminate the need for a permit to discharge dredged or fill material except in navigable waters unless a state Governor, with the concurrence of the legislature, requests extension of the Corps program to other designated waters within the state. The term "navigable waters" would be defined for Section 404 purposes to mean all waters which are 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. Id.

Thus, the term would have two separate definitions in the Act. By excluding from the definition waters which were navigable in the past but are not currently navigable, the Tower definition is arguably more restrictive than the definition established by case law under the Rivers and Harbors Appropriations Act.

131. The Corps appears to have reached the same conclusion since, under its regulatory program, individual permits are not ordinarily required for dredge or fill activities above the headwaters of an interstate water.
Dredge and fill activities in intrastate waters and most wetlands will not, for the most part, cause interstate water pollution. They may cause other adverse impacts (e.g., the destruction or alteration of wildlife habitat) which may be locally significant. It is at least arguable that such effects do not constitute a national concern. Under normal circumstances, the goal of obtaining water quality is not a reason to require a federal permit for the discharge of dredged or fill material into such waters.

Furthermore, interstate and navigable waters below the headwaters are generally larger than waters which are isolated or above the headwaters. Discharges of dredged or fill material into larger water bodies tend to change the character of the water body, while discharges into isolated waters often entirely replace the water body with land. Though not a precise distinction, a discharge into navigable or interstate waters may have its effects on the character of the remaining water while a discharge into a smaller isolated water often manifests itself as a land use decision.

Accordingly, a legislative solution to the jurisdictional problem would be to specify that a Section 404 permit should not be required for the discharge of dredged and fill material into (1) navigable and interstate waters above their headwaters; (2) intrastate waters; and (3) wetlands which are not within the ebb and flow of the tide or in the case of inland wetlands above the ordinary high water mark unless the discharge would cause a violation of an approved state or federal water quality standard. The determination of potential violations should be made pursuant to Section 401 certification procedures. Under normal circumstances there will be no federal interest in such "waters". Indeed, the real issue in situations involving smaller water bodies is land use, not water pollution.

*Permit Standards Reform:* A resolution of the jurisdictional problem would reduce the need for permits but would not affect the standards applicable to issuance of permits. It would not, therefore, address the public interest review or the wetlands review problems previously discussed. Legislative relief could encompass these problems without resulting in lessened environmental protection.
Our proposed legislative solution is straightforward. Section 404(a) should specify that a permit shall be granted when the 404(b) guidelines are satisfied. The Corps would no longer be authorized to conduct its public interest review or other reviews except in a NEPA context. The Corps would then be responsible for denying a permit for activities which could not satisfy the guidelines. The 404(b) guidelines are presently governed by few clear legislative standards. If the guidelines are to serve as the sole basis for permit review, it will be necessary for Congress to provide specific standards and criteria for the guidelines to ensure that they reflect consideration of important federal values.

Permit Procedures Reform: Congressional resolution of the jurisdictional and permit standards problems should resolve or diminish many of the procedural problems. The only remaining significant procedural problem inherent in the statute would be EPA’s veto authority under Section 404(c).

Two obvious legislative options are outright repeal of Section 404(c), or repeal coupled with amendments to Section 404(b) to ensure that the special concerns in Section 404(c) continue to be addressed. In either case the Corps would finally become responsible for applying the guidelines without fear of EPA threat or veto. Where aggrieved persons believe that a permit should have been denied under the guidelines, they may seek judicial review of the decision. This form of legislative revision would make Section 404 permitting procedures consistent with other environmental laws.

The problem of agency appeal rights under the MOAs may be addressed by specific legislation. On the other hand, the problem has been created by the agencies and the most logical solution lies at that level.

B. Wetland Protection Alternatives

While the legislative approach described above reflects what we perceive as a proper delineation of state and federal water quality interests, it can be argued that the areas left unprotected, particularly wetlands, constitute in the aggregate a significant national resource which requires federal protec-
In fact, Congress has repeatedly indicated that it is in the public interest to preserve wetlands for a variety of reasons, including water quality, fish and wildlife habitat, and flood control. Therefore, it may be appropriate to consider coupling reforms in dredge and fill permit authority with the creation of a regulatory or non-regulatory scheme for protection of truly significant wetlands. Any resulting wetlands protection program would then be firmly anchored to express legislative authority rather than bootstrapped by water quality statute.

**Regulatory Alternative for Wetlands Protection:** To be effective and equitable, a regulatory program should contain a number of elements not contained in the present program. Federal goals and objectives in protecting wetlands should be clearly stated. The circumstances requiring preservation of those wetlands necessary to serve one or more Congressional goals should be defined. Based upon these definitions, important wetlands could be identified and mapped. These maps could then be subject to public hearings prior to promulgation on a regional basis.

Statutory standards would be established which address only the federal objective or objectives in furtherance of which the wetland is to be designated as important. The "public interest" test and other subjective criteria would be eliminated. These or similar procedures would serve to designate federally important wetlands and thereby provide notice of their existence to all interested parties.

A permit system would then be established for dredge and fill activities in wetlands identified as important. The wetlands protection permit program would be vested in a single agency, with participation by other agencies limited to the initial functions of wetlands identification and standards setting. Administrative appeals would be permitted only by the applicant.

This sketch of a federal regulatory program for wetlands protection is intended only as an outline of essential principles. These elements could, of course, be implemented in several different ways. However, a program based on these principles should avoid the problems now inherent in the Section 404 pro-
gram, while providing a mechanism for protection of important wetlands.

Non-Regulatory Alternatives for Wetlands Protection: Non-regulatory programs can also be established to address any perceived national interests in wetlands. These programs can be structured in a way which recognizes and provides for the strong interest of state and local governments in land use decision-making.

A non-regulatory wetlands protection program could be based on any one, or a combination of three basic patterns: (1) a block grant program making federal funding available for state wetlands management plans; (2) a wetlands bank program authorizing term agreements with landowners to preserve valuable wetlands; or (3) a wetlands tax program providing incentives for wetlands contribution or dedication.

There are many precedents for programs of federal grant assistance to states to address federally perceived needs. These include the Coastal Zone Management Act and the construction grant program authorized by Section 201 of the Clean Water Act. A program could be structured to provide grant assistance to states for the development of state wetlands preservation plans. Each plan would identify and prioritize the need for preserving wetlands within the state. Federal matching grants could be authorized for acquisition of wetlands or interests in wetlands in accordance with approved plans. Federal land managers could be required to coordinate their identification and preservation activities with state plans.

The second non-regulatory approach is an expansion of the present Water Bank Act. That Act authorizes the Secretary

134. This approach is patterned after the proposed Natural Diversity Act which was introduced as S. 1820 in the 95th Congress by Senators Metcalf, Randolph, Brooks, Helms, Hollings, Jackson, Morgan, Moynihan, Ribicoff, and Thurmond. 123 Cong. Rec. S11,446 (daily ed. July 1, 1977). The bill was jointly referred to the Senate Committees on Environment and Public Works and Energy and Natural Resources. It did not receive consideration by either Committee.
of Agriculture to enter into ten year renewable agreements with landowners to preserve valuable wetlands in exchange for federal payments. Wetlands must first be identified in a conservation plan developed by the Soil and Water Conservation District in which the lands are located. Only areas designated as important migratory waterfowl nesting and breeding areas are presently eligible for participation in the program. The program could be expanded to include more areas or a wider range of fish and wildlife concerns, as determined by Congress.

Wetlands preservation could also be encouraged through federal tax incentives. Currently, the contribution of land or interests in land to non-profit organizations, such as the Nature Conservancy, may result in a reduction in taxable income equal to the appraised value of the wetland. Use of this incentive is limited. Only a few organizations accept such gifts, and their criteria for acceptance is rigid. Moreover, the appraised value of wetlands is typically low because appraisers consider regulatory restrictions on development, but fail to consider the wetland's value for flood control or fish and wildlife habitat. Additional incentive for wetlands preservation could be provided by establishing federal or state trusts to accept and manage gifts of important wetlands. Also, the value of wetlands for federal tax purposes could be increased to reflect their undeveloped value to the Nation as a whole.

A problem common to each of these approaches, or any combination of them, is the difficulty of identifying wetlands which are sufficiently valuable to warrant protection. Various types of wetlands have been identified and categorized by federal agencies.137 At a minimum, a non-regulatory wetlands protection program must identify the general types of wetlands worthy of protection. These could be further defined, and locally prioritized, if necessary, by the states pursuant to block grant program or by federal agencies pursuant to other approaches.

At first blush, it appears that the most practical approach would be a combination of certain elements of each alternative.

137. The Department of Agriculture has categorized wetlands in regulations implementing the water bank program. See 7 C.F.R. § 762.2 (1981). The U.S. Fish and Wildlife Service has categorized wetlands generally in its CIRCULAR 39 (Shaw and Fredine, 1956).
This combination would focus on the development of state wetlands protection plans, encouraged by both federal grant assistance and the phased withdrawal of any federal regulatory program. In this way, truly valuable wetlands could be identified and the importance of their preservation established, prior to the emergence of development conflicts. Critical wetlands identified by state plans, or development rights in them, could be acquired through a limited matching grant program. Preservation of other valuable wetlands could be encouraged through the creation of a National Trust for Wetlands Preservation, administered by the U.S. Fish and Wildlife Service, to accept and manage donations of wetlands made under new, more favorable, tax treatment. The Water Bank Act and Wetlands Loan Extension Act of 1976 could be repealed, and programs under these Acts folded into the new program.138

CONCLUSION

The regulatory program for dredge and fill activities has been stretched far beyond those waters of the United States which Congress had in mind when it established statutory authority for the Section 404 program. Although some of these areas may contain wetlands, or wildlife habitat of significant national interest, we believe such areas are the exception and would be protected or at least could be protected through other specific statutes. The existing program looks and has an effect similar to a program of federal land use control. There should be little doubt that Congress did not intend such a result.

It is time that we step back from the regulatory swamp and make sure that the Section 404 and wetlands program are firmly grounded in policy and authority. This article has focused on the problems with the current program and admittedly has ignored its virtues. The problems have reached the point where cries for reform have been and will continue to be made. The recommendations for legislative reform are our offering for the coming debate.

138. The difficulty with such an approach is that to be enacted it would require the coordination of a number of congressional committees. For instance, in the Senate, the Committee on Environmental and Public Works must consider amendments to Section 404, the Finance Committee would review the tax aspects of the program, and the Committee on Agriculture, Nutrition and Forestry has jurisdiction over the Water Bank Act and Wetlands Loan Extension Act of 1976. Forty six members of the Senate, almost one half the total, sit on those three committees.