

**Chapter 8**  
**Limitations of the 404 Program**  
**for Protecting Wetlands**



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# Limitations of the 404 Program for Protecting Wetlands

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## CHAPTER SUMMARY

There are fundamental differences in the way Federal agencies and various special interest groups interpret the intent of section 404 of the Clean Water Act (CWA). The U.S. Army Corps of Engineers views its primary function in carrying out the law as protecting the quality of *water*. Although wetland values are considered in project reviews, the Corps does not feel that section 404 was designed specifically to protect wetlands. In contrast, the Fish and Wildlife Service (FWS), the Environmental Protection Agency (EPA), the National Marine Fisheries Service (NMFS), and environmental groups contend that the mandate of CWA obliges the Corps to protect the integrity of *wetlands*, including their habitat values.

In terms of comprehensive wetland management, 404 has major limitations. First, in accordance with CWA, the 404 program regulates only the discharge of dredged or fill material onto wetlands. Projects involving excavation, drainage, clearing, and flooding of wetlands are not explicitly covered by section 404 and not usually regulated by the Corps. Yet such activities were responsible for the vast majority of inland wetland conversions between the mid-1950's and the mid-1970's. Rarely have these activities been halted or slowed because of Federal, State, or local wetland regulations.

Second, the Corps does not have adequate resources to regulate activities effectively in "all waters of the United States. Instead, the Corps uses "general" (or nationwide) permits for isolated waters and headwater areas. Because there are few application or reporting requirements for activities within areas covered by general permits, the Corps has limited regulatory control over the use of wetlands covered by general permits.

Third, several administrative problems presently limit the program's effectiveness. These problems include significant variations in the way different districts implement the 404 program, the lack of coordination between some districts and other Federal and State agencies, inadequate public awareness efforts, and the low priority given monitoring and enforcement,

Finally, Federal water projects planned and authorized by Congress prior to environmental protection policies of the last dozen years are generally not considered to pose a significant threat to wetlands, even though they may be exempted from 404 requirements. However, projects authorized 10 to 15 years ago that are now being undertaken often cause significant impacts to wetlands.

## INTRODUCTION

There is widespread agreement that the 404 program has major limitations in terms of providing comprehensive wetland protection. As stated by William R. Gianelli, Assistant Secretary of the Army (Civil Works), before the House Committee on Merchant Marine and Fisheries on section 404 of CWA, August 10, 1982:

It is important to point out that wetlands subject to section 404 can be destroyed in a number of ways without any requirement for a Corps permit. They can be destroyed by excavating, draining, flooding, clearing, or even shading without the need for a Corps permit as long as those activities do not include the discharge of dredged or fill ma-

terial. So, it is clear that section 404 does not serve as the Nation comprehensive wetlands protection law.

This chapter addresses these and other limitations of the program under two parts: "Scope of Coverage" and "Corps Performance. The first part discusses activities that may adversely impact wetlands and areas that are not addressed by section 404 because of either legislative or regulatory language. The second part discusses the implementation of section 404 by the Corps, including regulatory policies, district implementation, and monitoring and enforcement.

## SCOPE OF COVERAGE

With respect to comprehensive wetlands protection, a number of gaps exist in the 404 program's geographical coverage of wetlands, types of development activities on wetlands that require permits, and the standards for determining if a permit will be granted. Resource agencies also contend that gaps have been widened by recent regulatory changes in the 404 program that were made in response to the regulatory reform initiatives of the administration. Because of inadequate data on the 404 permitting process prior to 1982, it is impossible to quantitatively document any changes in the quality of decisions about wetlands use in terms of environmental protection due to these administrative changes.

### *Unregulated Activities*

Several development activities that cause direct wetland conversions or significant impacts on wetlands but do not involve the disposal of dredged or fill material on wetlands are not included in section 404 and thus not regulated by the Corps. They include drainage of wetlands, dredging and excavation of wetlands, lowering of ground water levels, flooding of wetlands, deposition of material other than dredged or fill, removal of wetland vegetation, and activities on nonwetland areas.

ources of information for this chapter include OTA surveys of States and Corps districts as well as information provided in OTA's regional case studies and OTA interviews. The analysis of coverage of the program was prepared by reviewing the language of the legislation and regulations and considering the evaluations provided by these various information sources. The analysis of Corps performance, however, was limited by a lack of quantitative data.

### **Drainage of Wetlands**

Removal of water from wetlands through drainage ditches, tiles, and canals is the primary source of wetland conversion in some parts of the country, such as south Florida (1), prairie potholes (2), North Carolina (9). Drainage of wetlands is not covered under the existing 404 program unless the material removed from the ditches or canals is deposited back in the wetland area. Reasons for drainage include: bringing new areas into agricultural production or improving productivity on existing agricultural land (e. g., prairie potholes (2), Nebraska (4), Florida (1), North Carolina (9), South Carolina (9)); allowing harvest and reforestation of timber stands (which generally requires only partial drainage during critical time periods, e.g., North Carolina (9)); providing sites that can be developed for urban or industrial use (e. g., Florida (1)); and enhancing the use of areas for nonwetland purposes such as lawns (e. g., Washington State (10)).

### **Dredging and Excavation of Wetlands**

While dredged or fill material may not be placed on a wetland covered by the 404 program without a permit or exemption, wetlands themselves may be dredged or excavated without a permit as long

as the resulting dredged material is disposed of on a nonwetland site. The wetland area may be excavated to provide a source of fill, to provide greater storage area for drainage of other wetland areas, or to create reuse pits or dugouts to store water and improve irrigation efficiency (e. g., Florida (1), Nebraska (4)).

### Lowering Ground Water Levels

Reducing the supply of water to wetlands through pumping is not covered under 404. This is an important activity for irrigation of cropland in some regions, such as the Central Platte River Valley and the Sandhills of Nebraska (4). It also may impact wetlands in a few isolated locations, such as the California desert, where limited water supplies are in demand for mining, agriculture, and ranching (3). Pumping to drain wetlands is also a technique that has been used in conjunction with excavation and fill projects by developers to improve the quality of a site prior to construction (1).

### Flooding of Wetlands

Flooding wetlands or creating reuse pits for irrigation is not covered under the 404 program. These practices, which occur in places like the prairie-pothole region (2) and the Rainwater Basin in Nebraska (4), may significantly change the character of a wetland and alter its habitat values. Flooding of wetlands involving construction of an impoundment most likely would involve the discharge of fill material and would require 404 review unless the project was exempted from coverage for some other reason, such as exemption for farm ponds, nationwide permit for headwaters, and exempted Federal construction projects.

### Deposition of Material Other Than Dredged and Fill Material

The Corps regulates the discharge of fill material if ' the primary purpose is to replace an aquatic area with dry land or change the bottom elevation of a water body. ' The Corps' authority to regulate the disposal of waste materials, such as wood waste, construction rubble, and household garbage in wetlands is not clear. The Corps has asserted that these

materials should be regulated by EPA under section 402 of CWA because the primary purpose of the activity is to dispose of waste. EPA contends that the Corps should regulate these activities under section 404. This controversy, which is apparently close to resolution, has been an issue in cases involving disposal of logging slash and expansion of landfills into wetlands.

### Removal of Wetland Vegetation

Activities resulting in a gradual transition of an area to nonwetland can take place without 404 review in most regions of the country. For example, during the dry season in western Broward County, Florida, sawgrass has been mowed and chopped into the soil (1). Grass seed and fertilizer are then spread by aerial application. When the sawgrass sends up new shoots, cattle are introduced. Since they feed on the sawgrass preferentially, the seeded grass becomes the dominant species. The area is then no longer a wetland as defined by the Corps, and jurisdiction is lost for regulating development. In other circumstances, removal of vegetation involving the incidental discharge of dredged or fill material from activities with the purpose of bringing an area into a new use may require a permit under section 404(F)(2).

### Activities on Nonwetland Areas

Activities on nonwetland areas also can injure wetlands. For example, in the Platte River Valley and the Sandhills, land-use changes from ranching to irrigated cropland result in seasonal and long-term ground water drawdown and the subsequent conversion of wetlands. Upstream withdrawals of surface water can have adverse impacts on downstream wetlands. Diversions for irrigation and other uses, especially when accompanied by impoundments, reduce peak and average annual flows, which are important for maintaining some wetlands, such as the wet meadows along the Platte River in Nebraska (4). Erosion from land-disturbing activities and runoff containing pesticides and herbicides used on agricultural land can all impact wetlands.

These development activities cannot be viewed in isolation from other gaps in the 404 program for providing wetland protection. A development activ-

<sup>1</sup>33 CFR 323.2 (m).

ity not involving disposal of dredged or fill material in a wetland may take place above the headwaters or be part of an existing farming operation and therefore be excluded from individual permit review under the nationwide general permit or be exempted from 404 jurisdiction entirely under 404 (F)(1). These exemptions are discussed below.

### ***Exempted Activities***

Some development activities are exempted specifically by CWA from coverage by the Corps: **normal** farming, silviculture, and ranching activities such as plowing, seeding, cultivating, minor drainage, harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices; maintenance of 'currently serviceable' structures such as dikes, dams, levees, and transportation structures; construction or maintenance of farm or stock ponds or irrigation ditches, or the maintenance of drainage ditches; and construction or maintenance of farm roads, forest roads, or temporary roads for moving mining equipment where such roads are constructed and maintained in accordance with best management practices (BMPs).<sup>2</sup>

According to Edward Thompson, Jr. (1981), "Congress clarified its original intention to exclude **routine** earth-moving activities of agriculture, forestry, and related industries . . . from case-by-case review under section 404, with the understanding that their water-quality effects will be controlled by the States through the prescription of BMPs, under section 208 of the act. However, during the congressional deliberations on this point, Senator Muskie explained, "It is not expected that section 208(b)(4)(c) exemptions (from sec. 404) will be available for whole classes of activity, such as silviculture (i. e., forestry). Activities would have to be "appropriate' for BMP regulation. Congress decreed under section 404(f)(1)(E) that farm, forest, and mining roads required BMP control apart from many other exempted activities, such as constructing irrigation ditches.

<sup>2</sup>Clean Water Act, sec. 404(f)(1)

### **Normal Farming, Silviculture, and Ranching Activities**

Some routine or normal activities, \* can lead to wetland conversion or deterioration. Agricultural activities were identified by the National Wetland Trends Study (NWTS) as being responsible for about 80 percent of the conversions of inland wetlands from the mid-1950's to the mid-1970's; case study information indicated that normal farming activities were responsible for some of these conversions. For example, in the Central Valley of California, many farming practices actually contribute to the maintenance of some wetlands (3). Changes in these farming practices may impact wetlands. For example, rice cultivation provides a major source of water to wetlands. Conversion of the land to other crops, such as orchards, could eliminate this water source and alter timing of water availability. More efficient farming practices, such as land-leveling techniques and herbicide use, can reduce wetlands acreage and available food for waterfowl.

Normal agricultural activities may also lead to wetland conversions and to other adverse impacts on remaining wetland areas. For example, in the prairie-pothole region, changes in farming methods, increased specialization in crop production, decreased number of farms with livestock, and increasing machinery size were identified as major causes of wetland drainage. These changes in farming methods have decreased the relative value of

"The definition of normal activities is ambiguous and, depending on its interpretation, may result in wetland conversions. The Corps regulations issued on July 22, 1982, state that "to fall under this exemption, activities must be part of an established (i. e., ongoing) farming, silviculture, or ranching operation" (33 CFR 323.4 [a][1][i]). Many wetland areas in the Rainwater Basin of Nebraska and similar areas throughout the prairie-potholes region, for example, are periodically cultivated and farmed before they are more permanently drained. The regulations are not clear as to whether alteration of this sort (even if a discharge of fill material was involved) would come under the normal farming exemption. Another example of this ambiguity problem is whether clearing wooded ponds for aquaculture is an exempted activity.

Ambiguity in the term "normal" has been recognized by the forestry industry in at least two Corps districts. Local forestry associations are working with the Corps' Vicksburg and Wilmington districts and EPA to define normal silviculture activities and to clarify which practices require review under section 404. Forestry practices of concern include conversions of mixed bottom land hardwood stands to hardwood plantations and conversions of pocosins to pine plantations.

wetlands as a source of forage and have increased soil erosion, which gradually causes filling of the wetland, decreasing its wildlife value. The increase in machinery size simultaneously has provided the horsepower to perform much of the drainage activity and increased the nuisance of farming around potholes (2).

### **Farm Ponds/Irrigation Ditches/ Drainage Ditches**

The farm pond exemption is of potential concern, given the freshwater wetland acreage that has been converted to open water, as shown by NWTS. OTA's New England case study(15) cites more detailed analysis of wetland change in 15 Massachusetts towns and notes that impoundments are the most important single cause of man-induced wetland change in inland areas (48 percent). Agriculture-related pond construction on existing wetland sites may be related to the transition of shallow to deepwater wetlands. The New England study further notes that although many of the impoundments are farm ponds, others, probably increasingly, are recreational ponds. This exemption is also of concern in regions (e. g., Playa Lakes and Nebraska) where the creation of irrigation reuse pits has resulted in wetland conversions or a transition to deeper water habitats.

### **Construction of Farm, Forest, or Temporary Mining Roads**

These activities are probably not a major cause of wetland conversion, provided BMP's are actually implemented. In the past, road construction was a major factor responsible for wetland conversions in some parts of the country, and today it continues to encourage wetland conversions indirectly. For instance, exempted logging roads built through wooded coastal swamps near river channels have provided access to areas that were then illegally filled for housing. Road construction may result in wetland drainage by roadside ditches. Also, road construction in or near wetlands often increases pressures for further urbanization and commercial development.

### **Federal Construction**

Federal construction projects specifically authorized by Congress and entirely planned, financed, and constructed by a Federal agency are also exempted from 404 permitting requirements. However, before such an exemption may apply, the Federal agency involved must prepare an adequate environmental impact statement (EIS) and make it available for congressional review prior to authorization or appropriation of funds. That EIS must consider the impact of the project in light of the section 404(b) guidelines that embody the principal 404 permit standards (404(r)). The exemption for Federal construction, which includes congressionally authorized Federal water projects, is not considered to be a significant threat to wetlands because the requirements of the National Environmental Policy Act (NEPA) must still be met.

Other Federal water projects that are not specifically authorized by Congress, such as the Department of Agriculture's (USDA) small-scale Soil Conservation Service (SCS) watershed projects, still require section 404 permits, compliance with principles and standards of NEPA, and compliance with agency policies on wetlands stemming primarily from Executive Order 11990. In general, these projects are considered to have less impact on wetlands now than they did in the past, owing to all of these environmental protection policies. However, there are many projects, authorized prior to the development of environmental protection policies but now under construction, that are a source of frustration for resource-protection agencies.

Flood control and drainage projects of the Corps that are not specifically authorized by Congress do not require 404 permits; however, the public interest review is still required. These projects may result in the conversion of some wetlands (e. g., fill of bottom land hardwoods); however, the rates of conversion are much less than they were prior to the public interest review.

### ***Nationwide Permits***

Activities in some wetland areas are covered by nationwide permits, thus eliminating the necessity

for individual permit review. Discharges of dredged or fill material in these areas may occur without the need for specific authorization from the Corps. Before the 1982 changes, these areas included:

- . wetlands adjacent to nontidal rivers and streams located above the headwaters (headwaters being defined as less than 5 cubic feet per second (ft<sup>3</sup>/s) average annual flow);
- . natural lakes and adjacent wetlands under 10 acres that are not part of a surface or river stream, or fed by a river or stream above headwaters; and
- . isolated wetlands not part of a surface tributary system to interstate or navigable waters.

The 1982 changes (9) broadened these permits to encompass all isolated wetlands (removing) the 10-acre limit. Several States, opposed to nationwide permits, have denied 401 certification for certain permits. In its May 12, 1983, proposed regulatory changes,<sup>3</sup> the Corps reinstated the 10-acre limit.

Nationwide permits have been criticized on various grounds. First, some sources claim that the Corps has no authority to exempt *areas*, as opposed to *activities*, from coverage; some States have sued the Corps on these grounds.

Second, discharges of dredged and fill material under nationwide permits are supposed to meet the following criteria: they cannot threaten endangered species or be discharged into a component of a State or National Wild and Scenic River System; they must be free of more than trace amounts of toxic pollutants; and falls must be maintained to prevent erosion and other nonpoint sources of pollution.<sup>4</sup> Discretionary authority, regional conditioning, and other measures also improve permit effectiveness. However, various parties contend that nationwide permits prevent the 404 program from stopping or mitigating destruction of much wetland acreage (9). Because there is little monitoring of activities for compliance, neither point of view could be verified with documented evidence.

Third, the Corps does not regulate activities occurring in headwater areas when waterflow is less than 5 ft<sup>3</sup>/s, a standard that has been criticized as being inexact and injurious to wetlands, especially

in areas of seasonal rainfall and in areas with low relief (e. g., Atlantic coastal plain). Higher relief areas subject to intense development pressure (e. g., the lowland creeks of western Washington) are also of concern with respect to the 5-ft<sup>3</sup>/s standard.

In areas with seasonal rainfall, wetlands mayor may not be covered by individual permits, depending on whether mean or median flow is used to define the 5-ft<sup>3</sup>/s boundary. Also, in areas with low relief, the 5-ft<sup>3</sup>/s boundary is difficult to determine and can be changed artificially by diverting streamflows in areas with an existing network of drainage canals.

Corps policies for determining the 5-ft<sup>3</sup>/s boundaries vary among districts, depending on the availability of hydrologic information. More detailed information provided by applicants has been used to change a jurisdictional determination made by the Corps in at least one case in California (3).

Activities taking place in wetlands upstream of the 5-ft<sup>3</sup>/s limit for individual permit jurisdiction that might impact wetlands include, among others, depositing fill for a variety of reasons, including urban development, instream dredging, peat mining, and agricultural conversions. Also, such upstream activities may reduce flows downstream so that the 5-ft<sup>3</sup>/s boundary moves progressively downstream, exposing new areas to coverage under nationwide permits.

Finally, some isolated wetlands are only covered by a nationwide permit. According to the OTA case studies, isolated wetland types that experience controversial regulation under the nationwide permit include vernal pools, isolated mountain wetlands, pocket marshes, and closed basins (including diked areas) in California (3); pocosins and bays of North and South Carolina (9); swamps of southern New Jersey (6); and wetlands of the prairie-pothole region (2); and Nebraska (4).

Regulations allow the district engineer discretionary authority to require individual permits in areas covered under nationwide permits. This authority has been used in a few cases. For example, at the request of FWS and after discussions with the local governments, wildlife agencies, conservation groups, and others, the Los Angeles District of the Corps agreed to accept discretionary authority for the vernal pools of San Diego County because of

<sup>3</sup>*Federal Register*, vol. 48, No. 93, pp. 21, 466-21, 476.  
<sup>4</sup>Clean Water Act, 323.4 -2(b)(1-4).

the presence of endangered species (3). It must be noted, however, that individual permit review does not always result in the preservation of the wetland. In the San Diego case just mentioned, the individual permit process under the Corps' discretionary authority has not preserved as many pools as the city expected. In another case, the New York District considered using discretionary authority to regulate a planned-unit development project next to a national wildlife refuge. The threat of section 404 requirements prompted the developers to avoid the wetlands (6).

### ***General Permits***

Some development activities are given *limited* coverage by regulations in the form of general permits, which are developed within each district and may apply to all or part of the district. (General permits that apply to all districts are called nationwide permits. ) Most general permits are for activities that cause little or no impact on wetland areas (e.g., mooring buoys) and do not require individual project permits. While some general permits provide some protection to wetlands, through the use of BMPs, the lack of monitoring of permit conditions means that many such activities may have greater impacts than officially allowed.

Some districts provide greater protection to wetlands than do other districts through language in their general permits designed to protect wetlands. For example, Wilmington District general permits for discharges into diked disposal areas; maintenance and repair of private bulkheads; and maintenance, repair, construction, or use of boat ramps all include language for the specific protection of vegetated wetlands. General permits for similar activities in the Charleston District do not include such explicit language for avoiding vegetated wetlands (9).

Criticisms of general permits include:

- the general-permit process eliminates both the normal public interest review and the opportunity for other agencies to comment on a project-by-project basis;
- public notice is not required, which eliminates a means for informing State and local agencies of activities that may require non-Federal permits;

- general permits may lead to cumulative conversion of wetland habitat to small-scale development; and
- general permits are not closely monitored to ensure that BMPs are followed.

Since there are no reporting requirements for most general permits, many projects covered by a general permit can be undertaken without checking with the Corps. If someone reports a suspected violation, the Corps will investigate and determine if an individual permit is necessary. To avoid potential violations, letters of authorization for specific projects can be obtained from the Corps. In fact, some communities in New Jersey, for example, require such a letter from the Corps before local approvals are obtained for construction.

General permits can reduce regulatory requirements for both applicants and the Corps. The most frequently noted successful use of the general permit was in reducing regulatory overlap between the requirements of the North Carolina Coastal Area Management Act and the Wilmington District. This general permit has broad support by applicants, the Corps, and other resource agencies. The permit covered 80 percent of all major projects in 1981 and still involves review by the NMFS, FWS, and the Corps (9).

Current efforts to grant general permits for State programs that do not have as stringent or encompassing review requirements as the Corps program are being met with resistance. Also, EPA has been reluctant to agree to general permits that would allow disposal of fill material in wetlands covered by special area management plans, such as the one developed for Grays Harbor, Washington (10).

General permits have been adopted in some cases that explicitly allow fill in wetlands. For example, the Wilmington District has a general permit for vegetative fill in wetlands from selective snagging operations by the Government. Exceptions include endangered or threatened species habitat, structures in the National Register of Historic Places, and National Wild and Scenic Rivers. The Wilmington District also currently is working to develop a general permit for the discharge of dredged and fill materials for drainage systems and for land clearing to convert lands to agricultural use. Stringent conditions (yet to be developed) would have to be met,

and probably would meet all conditions. However, such an effort could potentially prevent the extensive delays and costs associated with the permit process for large agribusiness operations (9).

### ***Cumulative Impacts***

Generally, permits are not denied unless substantial individual impacts can be shown; the combination or cumulation of minor impacts of many small projects is extremely difficult to evaluate in making permit decisions. It is difficult to deny a project for reasons of cumulative impacts alone, especially if it is in an area where similar projects already have been approved. These cumulative impacts are overlooked in many districts.

No clear nationwide guidance exists on how, where, and when to deny applications, and there is no legal basis for denying permits based on cumulative impacts of possible future projects. Most Corps districts try to minimize the impacts of specific projects. The result appears to be an incremental conversion of wetlands, without projections of cumulative impacts based on good scientific studies that entail adequate field investigations.

### ***Decisionmaking Criteria***

Corps regulations state that the unnecessary alteration or destruction of important wetlands should be discouraged as contrary to the public interest.<sup>5</sup> The regulations state that no permit will be granted that involves the alteration of important wetlands unless the district engineer concludes that the benefits of the proposed alteration outweigh the damage to the wetlands resource. This guidance is considered by some to be inadequate and leads to variability in the degree of protection provided to wetlands.

Although the water dependency test (described on p. 2 of ch. 3) is considered to be well implemented in tidal wetlands, decisions based on the test are controversial for projects where permits are awarded for nonwater-dependent projects on the

basis of no practicable alternatives. For example, the New York District recently granted a permit for townhouses in a wetland area in the Passaic River Basin (3). Under the permit, 8 wetland acres will be converted, while 15 manmade wetland acres will be required as compensation. Before this was agreed to, the New York Corps of Engineers required the applicant to study all possible alternative sites of a similar size within 5 miles of the proposed project. (Alternative sites do not need to be on property owned by the applicant.) For various reasons, the applicant ruled out all alternative sites. The Corps agreed after conducting its own verification process. The reasons cited were unfavorable zoning, inability to market the expensive townhouses, sewer bans, unavailability of the land, and large incremental developmental costs. Another district engineer could have used a different standard to define what was practicable. Lack of guidance on applying the practicable alternatives test was also noted as a problem when evaluating agricultural conversions of bottom land hardwoods by the New Orleans District.

In its proposed changes to the existing regulations published on May 12, 1983,<sup>6</sup> the Corps stated its desire to include property ownership as a factor in its decisionmaking process. As stated in the *Federal Register*,

Section 320.4-(a)(l): "Considerations of property ownership' would be explicitly expressed as a factor of the public interest. This has always been a basic tenet of Corps policy and has been implicit in previous regulations. The statement that "No permit will be granted unless its issuance is found to be in the public interest, would be changed to "A permit will be granted unless its issuance is found to be contrary to the public interest. The intent of this change is to recognize that within the context of the public interest review, an applicant's proposal is presumed to be acceptable unless demonstrated by the Government not to be.

This provision in essence would shift the burden of proof from the applicant to the Federal Government.

<sup>5</sup>Clean Water Act, sec. 320.4(b)(l).

<sup>6</sup>*Federal Register*, vol. 48, No. 93, op. cit.

## CORPS PERFORMANCE

As described elsewhere in this report, the 404 program has protected wetlands in many areas. Evaluations of the performance of different Corps districts by sources consulted by OTA varied greatly, however. Some districts were singled out by States for being outstanding in their implementation of the program, while some others were consistently criticized, especially for lack of action. \* This lack of action may be a result of unclear regulatory policies and guidance established by the Corps leadership in Washington, D. C., or ineffective implementation of policies at the district level. Monitoring and enforcement also are important because no regulatory program can be effective without adequate monitoring of compliance with regulations and enforcement of sanctions against violators.

### ***Regulatory Policies***

Three major aspects of Corps policy are criticized with respect to the degree of protection provided to wetlands under the 404 program: interpretation of the intent of section 404, interpretation of interstate commerce, and jurisdiction over incidental discharges related to clearing and excavation.

#### **Interpretation of the Intent of Section 404**

The extent to which section 404 can be used to protect biological systems is at the heart of the controversy over the Corps interpretation of water quality. The objective of CWA is to protect the chemical, physical, and biological integrity of the Nation's waters.<sup>7</sup> The interpretation of biological integrity is the major issue. Broad interpretation of the concept of biological integrity and the objective of CWA would include protection of wetland habitat values. Federal resource agencies and environmental groups believe that the mandate of CWA obliges the Corps to protect the integrity of

wetlands, including their habitat values, and not just the quality of the water.

The Corps, following a narrower interpretation of CWA, views its primary function in carrying out the law as protecting the quality of water; protecting other wetland values is a secondary concern. The Corps does, however, consider fish and wildlife habitat values under its general public interest review that is part of the overall balancing process used to determine whether to grant a permit. However, habitat values are not afforded any special status over other factors that are also considered in the public interest review except to the extent that Corps regulations state that the unnecessary alteration or destruction of important wetlands should be discouraged.

#### **Interpretation of Interstate Commerce**

The Corps interpretation of the scope of interstate commerce issues that arise when a district engineer considers whether to use discretionary authority and to require individual permit review for an isolated wetland has been criticized as too restrictive. One source stated that the Corps leadership is pressing districts to apply section 404 only where interstate commerce issues, narrowly defined, are involved. In response, some districts are not considering impacts on migratory waterfowl from filling of inland wetlands and are only sparsely regulating such activity. \* Other aspects of interstate commerce that are not considered but could provide greater opportunities for wetland protection under section 404 include water withdrawal for interstate industry, crop production, visitation by interstate and international visitors, mining and oil extraction (regardless of whether the activity is wetland-dependent), and land development for interstate purchases (3).

#### **Jurisdiction Over Incidental Discharges**

In the past, the Corps has been generally reluctant to exert authority over land-clearing and excavation activities that involve discharges into wetlands from the drippings of dragline buckets, bull-

\*For example, "The C. O. E. (Corps) offers minimal protection to wetlands with the 404 Program. The degree of concern and quality of the 404 Program varies with each C. O. E. District Office. For example, the Omaha C. O. E. District appears *not* to be concerned about protecting anything, and runs an inefficient program; while the Salt Lake City Regional Unit of the Sacramento District Office is very active and concerned about all the activities (Wyoming).

<sup>7</sup>Clean Water Act, sec. 101(a).

\*California response to OTA's questionnaire.

dozers, and the like, even though such jurisdiction has been authorized through court decisions (14).

#### CLEARING

The Corps clarified its position on vegetation clearing in Regulatory Guidance Letter 82-11. The policy states that the removal of vegetation is not a discharge of dredged or fill material (except in the Western Judicial District of Louisiana). The placement of vegetative matter into waters of the United States requires a 404 permit if the "primary purpose" is "replacing an aquatic area with dry land or changing the bottom elevation of a water body." "8 Incidental soil movement related to the planting or removal of vegetation is not considered to be a discharge. However, if accompanied by land leveling that alters topographic features of waters of the U.S. through significant soil movement, it is subject to section 404.

The variation in this policy for the Western Judicial District of Louisiana is a result of the court decision for *Avoyelle's Sportsmen League v. Alexander*.<sup>83</sup> The court determined that the clearing of bottom land hardwood trees for agricultural use and the removal of their roots by plowing was held to be a discharge of dredged or fill material within the scope of regulation under section 404(f)(2). This section states that, if the discharge of the dredged or fill material is incidental to an activity (except those specifically exempted by sec. 404) designed to bring an area of water of the United States "into a use to which it was not previously subject, where the flow or circulation of navigable waters (waters of the United States) may be impaired or the reach of such waters be reduced, a section 404 permit is required. The U.S. Fifth Court of Appeals in New Orleans recently upheld the lower court ruling.

Prior to this decision by the appeals court, Corps leadership held that the district court decision would be adhered to only in the portions of the Corps districts that are within the Western Judicial District of Louisiana, where the lower court decision was made. The rationale for this position is that the judge's decision in the case was not a broad-based decision attacking the validity of section 404 regula-

tions (as has been the case in other Federal district court decisions recognized nationally by the Corps), but that the *Avoyelles Sportsmen's League* case was an action to force the Corps to regulate (under section 404) the specific activities occurring on the specific tract involved. Also part of the rationale is the idea that, in a similar situation, a judge in another Federal judicial district might decide differently.

Actual implementation of this vegetation-removal policy in the Western Judicial District of Louisiana is also being criticized. These criticisms relate to the issues discussed previously regarding the Corps' interpretation of water quality. Although 404 permits are required, they are generally being issued because significant incremental water quality degradation relative to existing levels cannot be adequately demonstrated (12).

#### EXCAVATION

Drainage of wetlands by excavation can seldom be accomplished without directly or incidentally discharging dredged or fill material into the wetland area. However, the Corps rarely regulates drainage that occurs during the conversion of wetlands to agricultural or urban use.

### *District Implementation*

Because of the nature of the Corps' organization, there is a great deal of variability in the manner in which the 404 program is implemented among the semiautonomous districts. Of the 33 States that described weak inland wetland protection in response to OTA's questionnaire, 7 said that the 404 program is ineffective in providing additional coverage. Most of the problems were related to Corps resources and attitudes. Several States commented that some districts are hampered by lack of manpower and funding—for monitoring of violations, for instance. In many cases, only a few field personnel are available to cover large areas. \*

The Corps would agree with this assessment of manpower/funding constraints. After the 1975 court decision requiring the Corps to expand its jurisdiction, the Corps requested additional funding

<sup>83</sup> CFR, sec. 323.2(m).

<sup>84</sup> 73 F. Supp. 525 W. D. La., 1979.

\* States commenting on Corps resources include Alaska, Vermont, and Wyoming.

and manpower. This request was denied by the Office of Management and Budget (OMB). Thus, the Corps had to reallocate resources to comply with the court order. According to some States, a few districts place a low value on wetland protection and are inactive by choice. For example, some districts favor a broad interpretation of nationwide and general permits and are reluctant to assert discretionary jurisdiction for individual permits. \*

The case studies revealed two major styles used by Corps districts to deal with objections to 404 permit applications. In some districts, the Corps plays an active role as mediator in disputes between applicants and resource agencies with wetland-protection concerns. Resource agencies are positive about this approach in districts where it is used. Although the process can be time-consuming, there is general agreement by the agencies that better decisions and better working relationships have resulted. In fact, one Corps regulatory chief commented to OTA that regulatory reform measures that limit the time available for this kind of decisionmaking may result in more permits being denied. Other districts suggested these time limits would result in more “rubber-stamp” approvals of permit applications.

In other districts, the Corps plays a more passive role in resolving the objections of resource agencies to permit applications. The applicants are directed to work out the objections of other agencies on their own. The Corps generally will approve the permit when differences are resolved. Two problems were noted in the case studies that can make this approach difficult. First, the applicant may be faced with conflicting recommendations from different agencies. For example, a compensation measure

to enhance fish resources may conflict with one to enhance wildlife resources. These conflicts generally are resolved by negotiation and compromise between the agencies and project proponents before permits are issued; however, this does little to avoid frustration for applicants. The second problem is that of finalizing agreements that were made without the presence of the Corps, the major decisionmaker. The results of meetings between objecting agencies and permit applicants are often interpreted differently, especially if the decisionmaking agency is not present to verify compromises or changed permit conditions.

The OTA case studies also noted problems that reviewing agencies have had with the Corps. Inadequate information on public notices was noted with respect to at least one district. Incomplete or inaccurate information necessitates requests for additional information and prolongs the review process. Poor communication with review agencies, especially on unauthorized activities, was noted as a problem in two studies (3,6).

Finally, some States see Corps offices as making inadequate efforts to publicize the program. \* Other districts are considered to have effective programs for public awareness. A well-publicized program can accomplish several things. First, it can help ensure that project proponents apply for necessary permits. Publicity *on* what will or will not be permitted under 404 can help ensure that projects submitted for review are designed so that the permit can be obtained readily. Some districts have cited a marked improvement in the quality of permit applications, noting that the majority of applicants no longer request filling coastal wetlands for non-water-dependent uses. In addition, increased publicity leads to better monitoring and enforcement, as discussed in more detail below.

### ***Monitoring and Enforcement***

The Corps has authority under section 404 to monitor and enforce the conditions of its permits. But the 404 program has experienced many problems in monitoring permitted activities and enforcing permit conditions. Owing to inadequate fund-

\*Several States responding to the OTA survey made comments along these lines: ‘Permitting by the Corps of Engineers under section 404 has had no importance in the control of wetlands in the State of New Hampshire. The State program issues between 1,000 and 2,000 permits a year and has for the last 8 years. Federal permits in New Hampshire are currently running at a level of approximately 100 per year. One of the significant reasons for this difference is that the State permit program has no exemptions for any type of applicant (government agencies, agriculture, etc.), and has issued no general or statewide permits for any size projects. The 404 program administered by the Corps of Engineers lacks publicity in New Hampshire and eliminates half of the projects in New Hampshire by national permits’ (New Hampshire). Also, ‘Freshwater wetlands in the coastal zone could be better protected by the Corps of Engineers than by the Coastal Council because of differences in authority, but the Corps uses the general permit to let all freshwater wetlands be filled unless the Coastal Council objects very strenuously’ (South Carolina).

\*“The Corps efforts to inform the public of permit requirements are also limited and haphazard’ (Vermont).

ing **and** manpower, and in some cases, reflecting internal priorities, many districts cannot or do not effectively monitor the areas under their jurisdiction for violations. In particular, relatively few projects are field-checked in many districts for compliance with permit conditions after a permit is granted. The Corps authority to take action against unauthorized activities is also limited. Because EPA has greater enforcement authority to take action against unpermitted and therefore illegal discharges of dredged or fill material under sections 301, 308, and 309, the Corps is often forced to rely on EPA and the Justice Department for obtaining injunctions against illegal activities,

### Compliance With the Program

Two basic types of violations of the 404 program occur: discharge of dredged or fill material without a permit and discharge in violation of conditions placed on permits. According to the Corps, 3,724 violations of sections 404 and 10/404 were reported or detected during fiscal year 1980 (13). This figure was not broken down by type of violation. OTA asked districts to estimate the number of violations detected annually involving: 1) permit conditions, and 2) discharging material without a permit. Though percentages varied greatly among districts, more than 80 percent of estimated violations overall were of the second category, unpermitted activities. Because there are no requirements to demonstrate that a project qualifies for permitting exemptions, the use of general and nationwide permits may contribute to this high percentage of violations from unpermitted activities.

It is difficult to establish the percentage *rate* of compliance from this information. If 20 percent of violations concerned violation of permit conditions and the figure given by the Corps is correct, then about 745 such violations took place in fiscal year 1980. In that year, 8,013 permits and letters of permission were issued, giving a compliance rate of roughly 91 percent. This rate is compatible with the estimates of the four districts reporting percentages of compliance to the OTA survey. The percentage of violations estimated ranged from 1 to 15 percent, with a mean of 8 percent, giving a compliance rate of 92 percent. The Corps Institute of Water Resources (IWR) report estimated that compliance with **general** permit conditions was 95 per-

cent (5). The NMFS Southeast region found that of the 80 individual permits that were completed or under way (of 110 permits examined), at least 58, or 73 percent, complied with permit conditions recommended by NMFS. Rates of compliance for completed projects varied from 100 percent in two districts (Charleston, Savannah) to 36 percent in one district (Mobile) (7).

The degree of compliance also varies from year to year within each district. For example, although NMFS determined that in 1981 the Charleston District had achieved nearly 100-percent compliance with permit conditions, in 1982 NMFS did a similar analysis and discovered that applicants appeared to have disregarded permit conditions in 33 percent of the completed, permitted projects that were evaluated. On the other hand, according to the Corps, the percentage of those permitted projects in the Seattle District that deviated from what had been permitted declined from 15 percent in 1980 to 8 percent in 1981 and to 4 percent in 1982. This increase in compliance has been attributed to increased public awareness of the program and the knowledge that it is being implemented more consistently and completely.

It is not enough, however, to compare the results of such analyses to evaluate the performance of the different districts without knowing the nature of the conditions that are included in the permit. Some districts do not incorporate controversial conditions such as mitigation and compensation measures into the permit. Instead, agreements are made between the applicant and concerned agencies. The Corps does not evaluate whether the agreed-on mitigation has been implemented successfully (10).

Enforcing wetland regulations can be difficult. In some districts, the Corps sends teams to investigate suspected violations because of threats made to district personnel in wetland cases (4). The most frequent types of noncompliance found by one observer were as follows:

- Unpermitted activities: loose-fill projects (e.g., trash dumping), minor erosion-control projects (bulkheads, riprap), and construction of boat ramps and access roads. Major projects, such as marinas and canal dredging, were rarely undertaken without permits.
- Violations of permit conditions: failure to perform sedimentation control (e. g., revegetation,

turbidity screening), violation of size/dimension limits placed on structures, and placement of dredged and fill material.

Inland States experienced greater problems than coastal States, with more violations from dredging than from fill or construction projects; more violations took place with individual permits than corporate permits.

#### Extent of Monitoring

Districts differ in the amount of time and expense they devote to monitoring of permitted activities and enforcing of permit conditions. Some districts undertake site investigations of all permitted developments at least once during construction and again after completion of work, and they frequently survey their jurisdictions for unpermitted activities. Other districts are basically reactive in monitoring and enforcement: if a violation is reported to district personnel, it will be investigated; however, the district does not search for violations itself.

Corps districts were asked by the OTA survey to estimate the percentage of permits field-checked by Corps personnel and by personnel from other agencies to monitor compliance with permit conditions after a permit is granted. Estimates of the percentage checked by Corps personnel ranged from near 0 to 100 percent, with an average of 56 percent. About a third of the districts said that they check all permits. Several of these districts said that a much smaller percentage are checked in detail, however. Most major projects are checked periodically.

Of the 16 districts estimating the percentage of permits checked by other Federal agencies, estimates ranged from 1 to 80 percent. All but three districts estimated 10 percent or less, with most estimates at 5 percent or below.<sup>10</sup>

Districts also were asked by the survey how and how often wetland areas are monitored for violations. Districts use combinations of aerial surveys and photography, autos, and boats. The frequency of inspections varies greatly with the district and

the type of wetland concerned. Roughly a third of the districts do not have a specific program of monitoring. Instead, they rely on reports of suspected violations from citizens, organizations, and State and other Federal agencies. In addition, monitoring is done by Corps personnel in the course of performing other duties—e.g., during inspection of permitted projects for compliance. Personnel flying over an area for other reasons may also check to see if unpermitted development activities are occurring.

About a fifth of the districts indicated that they do not regularly monitor inland wetlands but do follow a monitoring schedule for wetlands located adjacent to coastal or major riverine waterways, the areas in which most development regulated by 404 occurs. Last, about half of the districts indicated that they monitor all the wetlands in their jurisdictions, often monitoring activities around coastal areas or major streams more frequently. Frequency of monitoring of the wetlands near major waterways by those districts with a monitoring program varies from daily to once every few years. Most districts monitor such areas several times a year. Those districts that regularly monitor inland wetlands usually do so on a yearly or multiyear cycle.

As mentioned above, districts rely heavily on non-Federal sources (private citizens, conservation groups, State agencies) to report violations. In fiscal year 1980, about 18 percent of all violations discovered by the Corps were first reported by private citizens and another 4 percent by environmental groups (13). When asked by the OTA survey to estimate the proportion of violations reported by private citizens and organizations, estimates by districts ranged from 5 percent to 95 percent, with a mean of 40 percent. With reductions in the budgets of State and Federal agencies, reliance on citizen input is likely to increase. Such reliance does not necessarily mean that districts are negligent in monitoring. Citizen involvement varies according to perceptions of wetlands and awareness of the 404 program. Different areas of the United States differ greatly in these respects.

One source found the most effective monitoring and enforcement efforts took place when State agencies and Corps districts cooperated closely. 'By backstopping one another and by pooling resources,

<sup>10</sup>EPA funding levels have enabled EPA personnel to review only a small percentage of permits (10 percent in 1979), from J. A. Zinn and C. Copeland, "Wetland Management," Congressional Research Service, CP1451, 1982, p. 95.

the agencies make up for each other's deficiencies and create a more vigorous enforcement posture that neither could establish alone (8). "

The OTA prairie-pothole case study (2), for example, presents two contrasting State responses to coordination with the Corps on monitoring and enforcement, which in part reflect these States' capabilities to control wetland use. In Minnesota, the State regional network of hydrologists and game wardens detects and reports potential 404 violations. The Minnesota Department of Natural Resources also sends the Corps notices of applications for State permits, which gives the Corps an opportunity to determine whether 404 permits are also required. North Dakota, however, has no regional network of State agencies for reporting potential violations, and North Dakota agencies do not inform the Corps of activities over which the State has jurisdiction and that the Corps may also have authority to regulate under section 404.

### Problems in Monitoring

Many districts devote most of their efforts to wetlands in the vicinity of historically navigable waters. While this is the area in which most permit applications originate and which has potentially the most serious violations, such attention has resulted, in some cases, in the lack of attention to permitted activities in inland areas. Inland wetlands that are only periodically inundated receive the least attention; in some cases, districts make little effort to verify whether the area is a wetland (4,8). \*

The Corps in Nebraska has been challenged in at least one case on its determination about an area as a wetland. Upon reevaluation, the Omaha District concluded that the area in question was indeed a type I wetland, and 404 authorization was required, although the fill eventually was authorized under a nationwide permit,

Another State reported that, owing to the remoteness of the Corps offices, neither Corps nor FWS personnel cover a large portion of the State and therefore must depend on the State to supply information. "The Corps does not know if compliance with section 404 and section 10 is high or low and is not attempting to increase compliance. Sev-

eral States believe that Corps district resources are insufficient to carry out adequate monitoring efforts (e. g., Rhode Island, Tennessee). A few districts indicated that monitoring efforts have been curtailed as a result of budgetary cutbacks.

Another disincentive to conducting a vigorous monitoring of permitted activities is the knowledge that in most cases, the Justice Department is reluctant to prosecute violators, especially if permit violations only involve a few acres.

### Enforcement

When a permit violation is discovered, Corps districts have several options. A cease-and-desist order can be issued. For projects that have been initiated without going through the permitting process, negotiations with violators to accept modifications are common. If the project is deemed to be essentially in compliance with environmental guidelines and with minor impacts, it is often granted an after-the-fact permit. Last, the violator can be taken to court, the project dismantled, and fines imposed. Litigation is often favored in cases where permit holders egregiously violate the conditions of their permit. In less serious violations, the permit holder may be required to stop the activity in dispute and to provide mitigation of some sort.

Generally, every effort is made to resolve violations short of actual prosecution. In many cases, subsequent investigation determines that suspected violations are, in fact, legal activities—e. g., falling under a general permit or not requiring a 404 permit. The Corps estimated that in fiscal year 1980, 2,273 such cases occurred—61 percent of the number of violations listed. After-the-fact permits are also common: 872 in fiscal year 1980, or 23 percent of violations (13). In many districts, after-the-fact permits are far more common. Twelve districts reported on the OTA survey that over 60 percent of violations receive such permits, and five other districts said that "most" violations are permitted after the fact.

Finally, violators are not prosecuted if voluntary restoration is made, although restoration is often made under the threat of prosecution. Voluntary restoration or even offsite mitigation may be made in the context of after-the-fact permitting. For example, in a case in North Carolina, a developer

\*Response of Washington State to OTA questionnaire.

already had cleared approximately 30 acres of bottom land hardwood swamp and partially erected a dam to build a lake before the violation was reported. In this instance, restoration was so difficult that the developers were open to any other alternative. To avoid litigation, and at the suggestion of the Wilmington District, the owner of the land purchased a previously unregulated 60-acre Carolina bay and deeded it to the Nature Conservancy. The Corps agreed to take no legal action and then granted an after-the-fact permit. The landowner could then claim a charitable contribution, and the Nature Conservancy purchased a priority site at less than one-third of its value. Although some lauded this creative resolution of the problem, others in both public agencies and private conservation groups said the penalty was not appropriate. They point out that no wooded swampland was restored, although 30 acres were converted. Replacement of one wetland type for another could set a precedent for the conversion of one wetland type with certain wildlife habitat values, while preserving another with different resource and habitat values (9).

In many districts, most or all violators agree to voluntary restoration. \* Some Corps districts may be more successful than others in obtaining voluntary restoration. One technique used by the Wilmington District is to coordinate closely with the U.S. Attorney's Office, which in turn sends a letter to the violator stating that a file has been opened on the case. Such measures add weight to the negotiations for voluntary restoration. In some cases, however, such agreements are not made in good faith by violators, and further action must be taken by districts. \* \* In some districts, voluntary restoration takes place in less than a quarter of violations.

In the opinion of some observers, some Corps districts have been too ready to grant after-the-fact permits or dismiss violations in other ways and too sparing in instituting litigation against violators.\*\*\*

● As stated by one district, 'The majority of our violations are resolved by granting after-the-fact permits. We have not prosecuted any violators. All violators to date have agreed to perform necessary restoration work without prosecution' (Albuquerque).

\* ● As put by another district, "Of those (violators) who agree to restore, a large percentage really have no intention of restoring and will delay indefinitely if allowed to, which cumbersome legal procedures allow them to do (Little Rock).

\* \* \* \* The Corps seldom takes violators to court. Thus, there is little deterrent to noncompliance (Vermont).

The Corps has experienced significant problems in prosecuting violators. If violators do not respond to Corps orders to cease projects that violate 404 standards, districts may request U.S. district attorneys to prosecute. However, district attorneys are often reluctant to take on 404 cases, regarding them as being of lesser importance than other crimes and, as such, of low priority in the tens of thousands of cases that are handled each year by the Department of Justice. Corps districts file about 4 percent of violations with the Justice Department for prosecution. However, outside observers say that many additional cases are never forwarded, in the knowledge that prosecution, especially in small cases, is unlikely. \*

Some cases referred to the U.S. Attorney are never resolved, for example, when there is insufficient evidence to convict. According to the Philadelphia District, personnel turnover is also a big problem in dealing with violations because new personnel may not be familiar enough with a violation to get it resolved.

Of the cases that are resolved through the U.S. Attorney, penalties may consist of fines, restoration, or some combination of the two. One case study revealed some variations in how penalties are handled in two Corps districts. In negotiated settlements, the Wilmington District generally resolves the violation with both fines and restoration. Fines are assessed based on past violation records and the degree to which restoration is possible. For example, after its fifth violation in 2 years, Texasgulf Co. voluntarily restored 6.5 acres in the Pamlico-Albermarle estuary at a cost of approximately \$200,000 and paid a fine of \$5,000. The Charleston District noted that it seldom requires fines. In both North Carolina and South Carolina, courts generally have been reluctant to impose fines. When the restoration is costly, courts believe that this alone constitutes an adequate penalty. Penalties and attorneys' fees are typically viewed as a cost of do-

\*One study concluded that "A major finding of the Urban Institute Study with respect to enforcement practice is that a substantial disjunction exists between detection of violations and effective legal followup. The record of administrative-prosecutorial cooperation revealed by our study is quite poor. While there are a few well-known cases of outstanding coordination between U.S. Attorneys and the Corps . . . U.S. Attorneys have not accepted wetlands cases as a major priority many cases that can and should be prosecuted either fall between the cracks or are handled by default on an 'after-the-fact permit' basis." Rosenbaum(15).

ing business, according to another case study, and restoration requirements are crucial to an effective program. If restoration is imposed, then the violator stands to gain nothing. Some districts are often reluctant to prosecute offenders. Because Corps personnel do not see themselves as policemen, the monitoring and enforcement aspects of the program are unattractive.

However, personnel from several agencies and interest groups think that fines should be imposed in addition, because restoration often doesn't replace the original resource. They also think that fines should be large enough to serve as a deterrent.

Districts differ markedly in the number of cases they submit for litigation and in the results of prosecution. At least five districts said they did not submit any violations for prosecution in the 1980-82 period. A few districts said litigation produced good results. \* More districts were frustrated by lack of action from the Justice Department, low fines or lack of restoration ordered by courts, or slowness in the legal process. As stated by one, "The legal

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● "The results from prosecutions have been excellent. Consent decrees have obtained restoration on numerous cases and civil penalties from \$500 to \$10,000" (Norfolk).

system affords very low-priority service, and because of extensive delays and frustrations, we seek other solutions.

One technique is for the Corps to coordinate its enforcement efforts with those of a State program. For example, the Baltimore District reported in an interview with OTA that for cases in which voluntary restoration was not successful and after-the-fact permits not appropriate, the State could prosecute under the State wetlands law more readily than the Corps could obtain court assistance under section 404. Coordination with the State is enhanced with monthly enforcement conferences. State programs with administrative law judges, as in New York, are able to handle some 404 violations expeditiously.

However, State enforcement may also be problematic. The Philadelphia District had difficulties when New Jersey took the lead on enforcement because of slowness or reluctance by the State Attorney General. Florida is considered to be less equipped than the Federal Government to prosecute some wetland cases owing to the lack of experience of the State's legal staff and lack of funds to hire expert witnesses and to conduct site-specific fieldwork required to prepare solid professional opinions.

## CHAPTER 8 REFERENCES

1. Center for Governmental Responsibility, "Wetlands Loss in South Florida and the Implementation of Section 404 of the 'Clean Water Act,'" University of Florida College of Law, contract study for OTA, September 1982.
2. Department of Agricultural Economics, "Wetlands in the Prairie Pothole Region of Minnesota, North Dakota, and South Dakota—Trends and Issues," North Dakota State University, contract study for OTA, August 1982.
3. ESA/Madrone, "Wetlands Policy Assessment: California Case Study," contract study for OTA, September 1982.
4. Great Plains Office of Policy Studies, "Wetland Trends and Protection Programs in Nebraska," University of Nebraska, contract study for OTA, September 1982.
5. Institute of Water Resources, *Impact Analysis of the Corps' Regulatory Program*, unpublished report, 1981, p. 215.
6. JACA Corp., "A Case Study of New Jersey Wetlands Trends and Factors Influencing Wetlands Use," contract study for OTA, September 1982.
7. Lindall, W. N., Jr., and Thayer, G. W., "Quantification of National Marine Fisheries Service Habitats Conservation Efforts in the Southeast Region of the United States," *Marine Fisheries Review*, vol. 44, No. 2, 1982, pp. 18-22.
8. Rosenbaum, Nelson, "Enforcing Wetlands Regulations," in *Wetland Functions and Values: The State of Our Understanding*, P. E. Greeson, J. R. Clark, and J. E. Clark (eds.), American Water Resources Conservation, Minneapolis, Minn., 1979, pp. 44-49.

9. School of Forestry and Environmental Studies, "Wetland Trends and Policies in North and South Carolina, Duke University, contract study for OTA, August 1982.
10. Shapiro & Associates, Inc., "An Analysis of Wetland Regulation and the Corps of Engineers Section 404 Program in Western Washington, contract study for OTA, September 1982.
11. Thompson, E., Jr., "Section 404 of the Federal Water Pollution Control Act Amendments of 1977: Hydrologic Modification, Wetlands Protection and the Physical Integrity of the Nation's Waters," *Harvard Environmental Law Review*, vol. 2, 1977, pp. 264-287.
12. U.S. Army Corps of Engineers, Regulatory Branch, personal communication,
13. Corps of Engineers, Regulatory Board, FY 1980 Regulatory Summary Report.
14. U.S. v. *Holland*, 373 F. Supp. 665 (M.D. Fla. 1974), U.S. v. *Fleming Plantations*, 12 E.R.C. 1705 (E.D. La. 1978), *Weiszman v. Corps of Engineers*, 526 F. 2d 1302.1306 (5th Cir. 1976), and *Avoyelles Sportsmen League v. Alexander*, 473 F. Supp. 525 (W.D. La. 1979).
15. Water Resources Research Center, 'Regional Assessment of Wetlands Regulation Programs in New England,' University of Massachusetts, contract study for OTA, September 1982.