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Report to the Chairman, Subcommittee on Investigations and Oversight, Committee on Public Works and Transportation, House of Representatives

July 1988

WETLANDS

The Corps of Engineers' Administration of the Section 404 Program

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Resources, Community, and
Economic Development Division

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July 28, 1988

The Honorable James Oberstar
Chairman, Subcommittee on Investigations
and Oversight
Committee on Public Works and
Transportation
House of Representatives

Dear Mr. Chairman:

This report discusses the permit program administered by U.S. Army Corps of Engineers district offices in Baltimore, Maryland; Jacksonville, Florida; Omaha, Nebraska; Portland, Oregon; and Vicksburg, Mississippi, under Section 404 of the Clean Water Act of 1977. The report contains several recommendations to the Secretary of the Army for improving the permitting and enforcement aspects of the program.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time we will send copies to the Secretary of Defense; the Secretary of the Interior; the Administrator, Environmental Protection Agency; the Secretary of Commerce; the Director, Office of Management and Budget; and various congressional committees. Copies will also be made available to other interested parties upon request.

This work was performed under the direction of James Duffus III, Associate Director. Other major contributors are listed in appendix VI.

Sincerely yours,

J. Dexter Peach
Assistant Comptroller General

Executive Summary

Purpose

Wetlands, which generally include swamps, marshes, bogs, estuaries, and similar areas, have been disappearing at the rate of about 300,000 to 500,000 acres a year. In the past, wetlands have been considered unimportant areas to be filled or drained for various uses. Only recently have the important ecological benefits provided by wetlands come to be widely recognized.

Federal regulation of wetlands development is exercised through Section 404 of the Clean Water Act of 1977. In response to a congressional request, GAO reviewed the U.S. Army Corps of Engineers' (Corps) administration of several Section 404 regulatory program elements, including (1) coordination with federal resource agencies during the permitting process, (2) enforcement of permitting requirements, and (3) sanctions imposed on those who fail to adhere to such requirements. GAO also reviewed information on the overall impact of the program in protecting wetlands.

Background

The Corps of Engineers is the primary federal agency responsible for regulating wetlands development under Section 404. Section 404 authorizes the Corps to issue or deny permits for the discharge of dredged or fill materials into U.S. waters.

Other federal agencies and the states have roles in the program's implementation. The other agencies most heavily involved in the program are the Environmental Protection Agency (EPA), the National Marine Fisheries Service in the Commerce Department, and the Fish and Wildlife Service in the Interior Department (so-called resource agencies).

In conjunction with the Secretary of the Army, EPA develops guidelines governing the selection of sites for disposal of dredged or fill materials. EPA can specifically prohibit the disposal of some of these materials. The other federal resource agencies can make advisory comments on permit applications and report suspected permit violations. The states may, in certain circumstances, assume responsibility for issuing Section 404 permits.

If the Corps or EPA finds that projects are not in compliance with permit requirements, they may take enforcement action against the violators. Enforcement action may include civil, criminal, or administrative penalties or permit suspension and revocation sanctions authorized under the act.

Results in Brief

The Section 404 program as currently authorized does not provide the Corps with the authority to regulate activities that result in the majority of wetlands losses each year. However, the Corps and the resource agencies disagree concerning whether the Corps is doing all it can to protect wetlands under existing program authority.

Although the Corps districts generally consider resource agencies' comments on permit applications, they often do not adopt recommendations that would lead to project modifications or denial. Resource agencies are concerned over the Corps' nonacceptance of some recommendations, but they infrequently use their authority to appeal Corps permit decisions.

Corps districts we visited do not systematically seek out violators of Section 404 permit requirements, nor do they always conduct follow-up investigations of suspected violations brought to their attention. Also, EPA exercises limited involvement in the program's enforcement.

In pursuing violators, the Corps rarely uses available civil or criminal remedies and suspends or revokes few permits, preferring instead to seek voluntary correction of the violations observed. This was also true for some of the more serious violations in GAO's samples.

Principal Findings

Program Results

Many activities, such as normal farming and draining that occur in wetlands, are not regulated under Section 404. Although these unregulated activities cause most of the wetlands losses each year, the Corps and the resource agencies do not maintain comprehensive information on the program's impact on wetlands.

The Corps and the resource agencies envision the objectives of the Section 404 program differently and consequently have different views of the program's success. The resource agencies believe, for example, that the Corps is not (1) delineating wetland boundaries broadly enough, (2) considering cumulative impacts of permit decisions, and (3) requiring permit applicants to consider practicable alternatives to development activities in wetlands. The Corps believes that it is acting within the limits of the program's jurisdiction.

Agency Coordination

The Corps districts GAO visited considered resource agency recommendations, but in many cases they used their discretionary authority and did not require changes to permits to address them. These included cases where resource agencies recommended permit denials or project modifications. For example, three resource agencies recommended denial of an application to build a shopping center in a wetland. The Corps issued a permit over the objections of these agencies. The resource agencies, however, rarely appealed cases when they disagreed with district engineer permitting decisions because they believe that the appeal process is cumbersome and ineffective.

Monitoring and Enforcement

Because neither the Corps nor EPA has systematic surveillance programs to detect unauthorized activities, undetected violations of Section 404 permit requirements may be occurring. Also, some suspected unauthorized activities reported to the Corps may not be investigated for months after they are reported, and many projects are not inspected by the Corps for compliance with permit conditions.

The Corps rarely pursues civil or criminal remedies against violators of permit requirements, nor does it often suspend or revoke permits. The Corps prefers to negotiate restoration of the adverse effects or allow submission of permit applications that would then have to undergo public review. This was true in some GAO sample cases that involved repeat offenders or the failure to comply with Corps orders to stop the unauthorized activities.

EPA, which has enforcement authority for unpermitted discharges, has used its authority sparingly even though most reported violations involve the failure to obtain permits.

Recommendations

In order to improve administration of the Section 404 program, GAO recommends that the Secretary of the Army direct the Chief, Corps of Engineers, to

- develop baseline information that will enable the Corps to determine the extent of the Section 404 program's impact on wetlands;
- work with the federal resource agencies to develop consistent and workable procedures for (1) considering practicable alternatives to filling wetlands, (2) delineating wetlands coming under the program's jurisdiction, and (3) allowing resource agencies to appeal district engineers' permit decisions; and

- work with EPA to develop a coordinated enforcement program utilizing resources of both agencies to provide for surveillance, inspection, and penalty assessment when violations occur.

Matter for Congressional Consideration

There are significant differences in the manner in which the Corps and the resource agencies would implement the Section 404 program. For example, fundamental differences or problems were noted in the manner in which the Corps (1) delineates wetlands coming under the jurisdiction of the Section 404 program, (2) considers practicable alternatives to the filling of wetlands, and (3) considers the cumulative impacts of many individual permit decisions. Because it appears that these differences affect the extent to which wetlands are protected and they are unlikely to be fully resolved among these agencies, the Congress may wish to clarify Section 404 of the Clean Water Act.

Agency Comments

The Departments of Defense, Commerce, and the Interior generally agreed with the facts as presented in a draft of this report. Defense concurred with all of GAO's recommendations except the one to develop baseline information on the program's impact on wetlands. Defense believes such a requirement would be unrealistic in light of its limited staff and funding. GAO continues to believe that it is realistic to collect much of the information needed and, in fact, found that some Corps districts already compile such information.

EPA expressed concern that its authority and responsibilities in administering the Section 404 program were not adequately recognized. GAO believes that it has adequately recognized and described EPA's significant role in this area. GAO also pointed out, however, that EPA has used its authority sparingly.

Agency comments and GAO's responses are discussed at the end of chapters 2, 3, and 4 and in appendixes II through V.

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Abbreviations

EPA	Environmental Protection Agency
FWS	U.S. Fish and Wildlife Service
GAO	U.S. General Accounting Office
NMFS	National Marine Fisheries Service

Introduction

Wetlands, which generally include swamps, marshes, bogs, estuaries, and similar areas, provide many benefits. These benefits include providing important habitat for fish, waterfowl, and other birds and wildlife; maintaining water quality and aquatic productivity; aiding flood control, erosion control, and groundwater recharge; and offering recreation opportunities and improved aesthetics. Historically, wetlands have been considered unimportant, even worthless, areas to be filled or drained for various uses. As a result, they have been disappearing to the extent that in some areas few wetlands remain. Recently, however, as evidenced by activities such as the Conservation Foundation's current National Wetlands Policy Forum, wetlands have become a subject of interest and their value has become more widely recognized.

Consequently, wetland losses, which the U.S. Fish and Wildlife Service (FWS) estimates averaged about 458,000 acres per year from the mid-1950s to the mid-1970s, are now a matter of much concern. During this period, wetlands declined from an estimated 108 million acres in the lower 48 states to 99 million acres. (This net loss of 9 million acres considers a gain of about 2 million acres of newly created wetlands.)

The Clean Water Act's Federal Wetlands Protection Authority

The objective of the Clean Water Act of 1977 (33 U.S.C. 1251), which amended the 1972 amendments to the Federal Water Pollution Control Act, is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Although it does not authorize a comprehensive wetlands management program, Section 404 of the act provides the primary legislative authority behind federal efforts to control wetlands use. Since its enactment, the Section 404 program has been the subject of much controversy concerning the extent to which Section 404 is to function as a wetlands protection law.

The Section 404 regulatory program is composed of two basic elements—permitting and enforcement. Permits are issued to regulate discharges of dredged or fill materials into waters of the United States, including wetlands. Corps regulations state that the discharge of dredged material includes the addition of material to specified discharg sites located in waters of the United States and the runoff or overflow from a contained land or water disposal area. Fill material, according to Corps regulations, includes any material used primarily for replacing a aquatic area with dry land or changing the bottom elevation of a body c water. Subsequent to permit issuance, Section 404 requires that permits be enforced and authorizes the use of civil and criminal penalties for failing to adhere to permit requirements.

Some activities are exempt from the Section 404 regulatory provisions; many of these have resulted in significant wetlands losses. Among these activities, which are described in Section 404 (f) of the act, are

- normal agriculture, silviculture (forestry), or ranching;
- maintenance or reconstruction of certain serviceable structures, including dikes, dams, breakwaters, causeways, or bridge abutments;
- construction or maintenance of farm or stock ponds, or irrigation ditches, or the maintenance of drainage ditches;
- construction or maintenance of farm or forest roads, or temporary roads for moving mining equipment; and
- congressionally approved projects for which an environmental impact statement has been filed.

Many of these activities would, however, require a permit according to Section 404(f)(2) of the act if their purpose is to convert an area of U.S. waters to a use to which it was not previously subject and if the flow or circulation of such waters is impaired or their reach is reduced. For example, under a ruling by the U.S. Court of Appeals for the Eleventh Circuit, a Section 404 permit was required to construct a fish farm that was not part of an ongoing operation, but was a new use of the land.[1]

Organizational Responsibilities Under the Section 404 Program

Several federal agencies and the states have roles in implementing the Section 404 program. This participation extends from commenting on various types of permits to the detection of unpermitted activities and the enforcement of permit requirements. The Secretary of the Army, acting through the Corps of Engineers (Corps) has responsibility for issuing permits under the Section 404 program and enforcing permits. Other federal agencies that have roles in the Section 404 permitting and enforcement processes are the Environmental Protection Agency (EPA), the National Marine Fisheries Service (NMFS) under the National Oceanic and Atmospheric Administration, and the FWS. These three federal agencies are known as "resource agencies."

EPA is perhaps the most influential of the resource agencies because under the act, selection of sites for disposal of dredged or fill materials into waters of the United States must be in accordance with guidelines developed by the EPA in conjunction with the Secretary of the Army. These are known as the 404(b)(1) Guidelines. In addition, the Attorney General ruled in 1979 that EPA has the responsibility for construing the

[1]Conant v. U.S., 786 F 2d 1008 (11th Cir. 1986).

term "navigable waters" (waters of the U.S., including the territorial seas) and for making interpretations of the scope of 404(f) exemptions under the Section 404 program.

Also, EPA has what is often referred to as "veto" authority under Section 404(c) of the Clean Water Act. Even where the Corps has already approved a permit, EPA may prohibit the disposal of dredged or fill materials at any site if use of the site will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas, wildlife, or recreational areas. EPA can also take enforcement action, including issuing administrative orders against those who discharge such materials without required Section 404 permits. These administrative orders, which are court enforceable, can impose corrective measures and monetary penalties on those who engage in unauthorized fill activities.

Under the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 662), the Corps is required to consult with FWS and NMFS and to give full consideration to their recommendations in evaluating a permit application. Although the comments from these agencies are advisory, they may serve as the basis for modifying, conditioning, or denying a permit.

The Clean Water Act also authorizes the states to assume certain responsibilities that can directly affect the issuance of 404 permits. Section 401 of the act requires states to issue water quality certificates or waivers of certificates before the Corps can issue a Section 404 permit. In addition, the Coastal Zone Management Act of 1972, as amended (16 U.S.C. 1456 (c)), provides that a timely objection by a state with a federally approved Coastal Zone Management Program to a consistency certification filed by an applicant for a Corps permit precludes the Corps from issuing a Section 404 permit, unless the Secretary of Commerce finds that the activity is either consistent with the objectives of the Act or necessary in the interest of national security.

Finally, under Section 404(g), the states may assume responsibility for issuing permits in certain waters under their jurisdiction in accordance with criteria developed by EPA. Michigan is currently the only state with this authority, although according to EPA officials, other states may soon be prepared to assume such responsibility. (Among the states we visited, Oregon is considering assuming this responsibility.)

The Section 404 Permitting Process

In fiscal year 1986, the Corps issued approximately 10,500 permits. About 3,000 applications were cancelled or withdrawn, and the Corps denied an estimated 500 applications. The decision whether to approve a permit and, if so, the conditions under which it will be authorized, is determined by balancing input from many sources such as the resource agencies, concerned individuals, and the states, among others. This process is referred to as a public interest review, which is conducted simultaneously with the 404 (b)(1) Guidelines evaluation. As part of this review process, the Department of the Army, EPA, and the Departments of the Interior, Agriculture, Commerce, and Transportation have established interagency agreements under which these agencies can comment on permit applications. The agreements allow agencies to request higher level review within the Department of the Army when the agencies disagree with permit decisions made by district engineers. This appeal process is referred to as an agency's "elevation" authority.

The Corps must consider many factors during its public interest review, including wetlands values, conservation, economics, aesthetics, general environmental concerns, historic values, fish and wildlife values, flood damage prevention, land use, navigation, recreation, water supply, water quality, energy needs, safety, food production, and, in general, the needs and welfare of the public. A permit will be granted unless the district engineer determines that it would be contrary to the public interest. In some cases the availability of practicable alternatives to proposed activities and the beneficial effects of proposed mitigative measures to lessen the adverse environmental impacts of projects are considered in this process as well.

Upon receipt of a permit application, the Corps determines whether an individual permit is needed. If so, a public notice is prepared containing information on the nature and magnitude of the project to evaluate the probable impact on the public interest. Copies of the notice are forwarded by the Corps to each federal and state resource agency and distributed to local agencies and the public for review and comment. Generally, the comment period for standard individual permits ranges from 15 to 30 days.

In addition to the 404(b)(1) Guidelines evaluation, the Corps uses three general criteria for evaluating permit applications:

- the relative extent of the public and private need for the proposed structure or work;

- the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed structure or work; and
- the extent and permanence of the beneficial or detrimental effects that the proposed structure or work may have on the public and private uses to which the area is suited.

The specific weight of each factor is determined by its importance and relevance to the particular proposal. Therefore, the weight given to each factor could vary with each proposal.

The Corps organization is highly decentralized. As a result, regulatory program management and administration have been delegated to its 36 district engineers and 11 division engineers. Policy oversight is exercised by the divisions and by Corps headquarters. Under this structure, Corps regulations vest the decision to issue or deny permit applications in its district or division engineers. Except in unusual circumstances, this authorization also allows district engineers to modify, suspend, or withdraw permits without approval from higher Corps authorities.

Fiscal year 1987 expenditures for the Corps regulatory program were about $56 million. The Corps regulatory program is based on authorities and responsibilities in Section 404 of the Clean Water Act; Section 10 of the Rivers and Harbors Appropriation Act of 1899 (33 U.S.C. 403); and Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972, as amended (33 U.S.C. 1413). Section 10 prohibits the obstruction or alteration of navigable waters of the United States without a permit from the Corps. Section 103 authorizes the Corps to issue permits for the transportation of dredged material for the purpose of dumping it into ocean waters. An estimated $38 million to $40 million of the $56 million regulatory program funding was for permit processing activities, and $12 million to $13 million was for enforcement-related activities. The remainder was for miscellaneous studies and regulatory authorities.

In addition to individual permits, district and division engineers have authority to issue alternate types of permits such as letters of permission and regional general permits. If a district engineer makes final permit decisions in accordance with procedures and authorities contained in Corps regulations, no formal administrative appeal of those decisions is available to the applicant.

Letters of permission may be used in lieu of individual permits where, in the opinion of the district engineer, the proposed work would be minor, not have significant individual or cumulative impact on environmental

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values, and not be expected to encounter appreciable opposition. In such situations, the proposal is coordinated with concerned agencies and generally adjacent property owners who might be affected by the proposal, but the public at large is not notified.

The Corps may also issue general permits, which cover activities it has identified as being substantially similar in nature and causing only minimal individual and cumulative environmental impacts. These include the placement of certain navigational aids, bank stabilization activities, and the placement of fish and wildlife harvesting devices such as lobster traps. These permits may cover activities in a limited geographic area, a particular region of the country, or the nation. Processing the initial general permits includes a public notice period and the opportunity for public hearings. Nationwide general permits are issued by the Chief of Engineers through the Federal Register rulemaking process. Corps regulations include 26 nationwide general permits.[2]

At the permit application stage, the Corps often processes Section 404 permit applications concurrently with permits under Section 10 of the Rivers and Harbors Appropriation Act. These joint permit applications will show up in statistical reporting as Section 10/404 permits. Processing of Corps permits generally proceeds through three steps: pre-application consultation (for major projects), formal project review, and decision-making.

Pre-application consultation usually involves one or more meetings between an applicant, Corps district staff, interested resource agencies (federal, state, or local), and sometimes the interested public. The basic purpose of such meetings is to provide for informal discussions about the advantages and disadvantages of a proposal before an applicant makes irreversible commitments of resources. The process is designed to provide the applicant with an assessment of the viability of the project and to discuss possible alternatives that would accomplish the project's purposes with less adverse impacts on the environment.

Once a complete application is received, the formal review process begins. Corps districts operate under what is called a project manager system, with one individual responsible for handling an application from receipt to final decision. The project manager prepares the public notice, evaluates the impacts of the project and all comments received, negotiates necessary project modifications if required, and prepares

[2]The 26 permits are described in 33 C.F.R. 330.5.

appropriate documentation to support a recommended permit decision. The permit decision document includes a discussion of the project's environmental impacts, the findings of the public interest review, and any special evaluation required by the type of activity such as whether the project complies with the Section 404(b)(1) Guidelines that establish criteria for the specification of disposal sites for dredged or fill material. Figure 1.1 shows the normal procedures involved in issuance of a Section 404 permit.

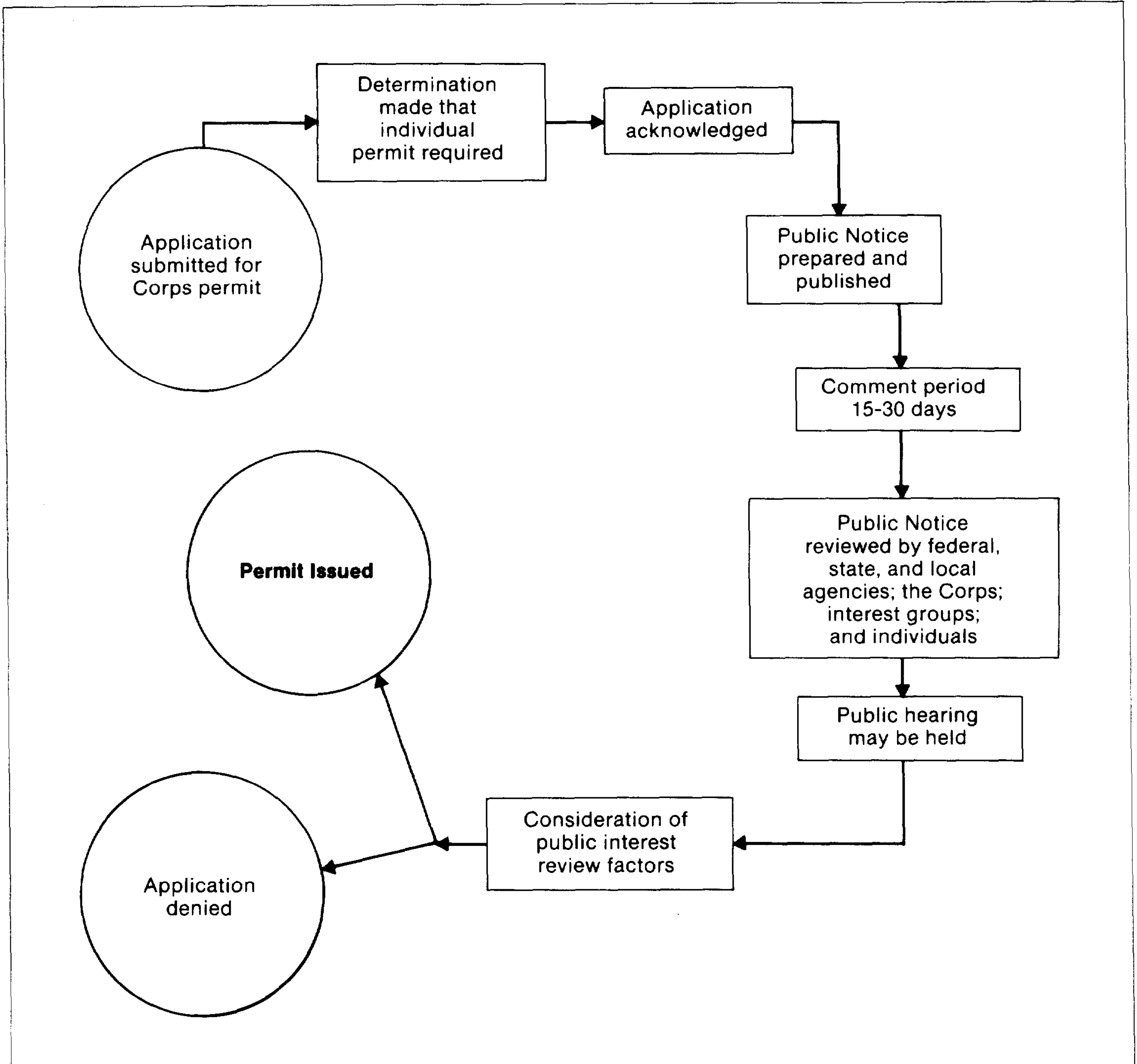
Monitoring and Enforcement of Section 404 Permit Requirements

The Corps and EPA must be concerned with detecting suspected unauthorized (unpermitted) activities and/or violations of conditions in issued permits. The Corps is primarily responsible for violations of permit conditions, but has also been involved in enforcement actions regarding unpermitted discharges. EPA is primarily responsible for the enforcement of the Section 404 program with regard to unauthorized activities by parties who have failed to obtain required permits. Inspection and surveillance activities to detect unauthorized activities are carried out by Corps employees, members of the public, and other interested federal, state, and local agencies. In some cases formal memorandums of agreement exist governing how these activities will be carried out by the agencies involved.

When district engineers become aware of an unauthorized activity, they issue cease-and-desist orders to stop the activity if it is still in progress and investigate the circumstances involved. The district engineer's evaluation contains an initial determination of whether any significant adverse impacts are occurring that would require expeditious corrective measures to protect life, property, or a significant public resource. Once that determination is made, the district engineer can administratively order remedial measures and make a decision about whether legal action is necessary. For those cases that do not require legal action and for which restoration is not in order, the district engineer will accept applications for "after-the-fact" permits, which must undergo the same public interest review process described for individual permits.

Criminal or civil action may be taken when violations are discovered. If legal action is initiated, an after-the-fact permit application cannot be considered until legal action is completed. Legal action is considered appropriate when violations are willful, repeated, flagrant, or of substantial environmental impact and when it is considered essential to the establishment or maintenance of a viable permit program. The Corps refers cases for prosecution directly to local U.S. attorneys. Persons

Figure 1.1: Application Evaluation Process



Source: U.S. Army Corps of Engineers

responsible for violating Section 10 and/or Section 404 permit requirements may be subject to fines and imprisonment.

About 5,000 alleged violations are processed in Corps district offices each year. The approximate breakdown by authority is Section 404, 40 percent; Section 10 of the Rivers and Harbors Appropriation Act, 30 percent; and Section 10/404, 30 percent. Corps district officials have previously estimated that about 80 percent of the reported alleged violations involve unpermitted discharges; the others are for noncompliance with permit conditions.

Objectives, Scope, and Methodology

Because of concern for the protection of wetlands, the Chairman, Subcommittee on Investigations and Oversight, House Committee on Public Works and Transportation, in a letter dated January 22, 1987, requested us to review the Corps' implementation of its responsibilities under Section 404. The Chairman was particularly interested in determining the extent to which the Corps coordinates with federal resource agencies during the permitting process,[3] seeks to identify unpermitted discharges in wetlands and violations of permit conditions, and imposes sanctions against those who failed to obtain required permits or violated permit conditions.

The decentralized nature of the Corps' administration of its regulatory program prevented us from reviewing activities nationally. Therefore, as agreed with the Chairman's office during subsequent meetings, we conducted our review at the following Corps districts: Baltimore, Maryland; Jacksonville, Florida; Omaha, Nebraska; Portland, Oregon; and Vicksburg, Mississippi. These districts vary in terms of the number of permits issued each year, geographic area of coverage, and the presence of different wetlands types.

In conducting our review, we held extensive discussions with Corps and federal and state resource agency staff, reviewed Corps and EPA policies and procedures, and developed overall statistical data. To assess the Corps' performance in issuing and enforcing permits, we selected random samples from three universes. The three samples addressed Corps' Section 404 and Section 10/404 individual permits for fiscal year 1986 (subsequent review showed one Omaha permit was issued in fiscal year

[3]Although interagency agreements are also required between the Corps and the Departments of Agriculture and Transportation, we were requested to limit our review to the major resource agencies—EPA, FWS, and NMFS.

1985); suspected unpermitted discharges reported or closed during fiscal year 1986; and fiscal year 1986 general permits. A more detailed explanation of our case sampling methodology in the five Corps districts is included as appendix I.

We reviewed our samples of individual permits to determine the extent to which Corps districts were considering resource agency comments during the permit processing procedure and to determine if the Corps was periodically inspecting projects to assure compliance with permit conditions. We interviewed Corps and resource agency officials regarding the extent to which resource agency comments on individual permits, including many in our samples, were considered during the permitting process. We did not attempt to make value judgments about whether agency recommendations were wrongly accepted or rejected by the Corps because of the technical nature of many resource agency comments. We also reviewed samples of general permits in each district to determine the extent of the Corps' monitoring of such permits.

We reviewed our samples of suspected unauthorized activities, which included unpermitted activities and violations of permit conditions, to determine how the Corps became aware of and investigated such activities. Review of these samples also enabled us to follow through on completed cases to determine the conditions under which the Corps imposed legal sanctions against those who conducted unpermitted activities or violated permit conditions. We also contacted U.S. attorney office officials familiar with unauthorized activity cases referred by the five Corps districts to determine whether the Corps was pursuing legal sanctions against violators and adequately documenting cases referred for possible civil or criminal penalties.

The information presented in this report consists, in part, of statistical estimates based on our analysis of the selected samples. The precision specifications of the statistical estimates were developed at the 95-percent confidence level and are shown as the upper and lower bounds of the 95-percent confidence limits. This means that 95 times out of 100, the true universe value of the estimate is covered by the lower and upper bounds of the confidence interval. The bounds of the confidence intervals are shown either in table form or as footnotes to the text.

Our selected samples were also used to develop case examples of permitting activities. These case examples are intended for illustration only. When a result from a district is discussed, in most cases the result is not projectable to the district level, unless otherwise noted.

We conducted our work from February 1987 through December 1987. We did not verify much of the statistical and other information provided by the agencies because backup documentation was not available and regenerating it would be too time-consuming or, in some cases, impossible. We provided a copy of a draft of this report for comment to the Departments of Defense, Commerce, and the Interior and to EPA and have included their comments where appropriate. The complete text of their comments is included in appendixes II through V. Our work was performed in accordance with generally accepted government auditing standards.

Section 404 Program Not Controlling Most Wetlands Losses

Because of the many statutory exemptions and other jurisdictional limits to Section 404 regulatory requirements, permitting and related enforcement actions under Section 404 do not provide the basis for a comprehensive wetlands protection program. As the program is currently structured, the Corps does not regulate most of the activities that result in wetlands losses. For those activities that are regulated, available information suggests some wetlands are being protected. However, neither the Corps, the resource agencies, nor any other group maintains the data necessary to precisely estimate such acreage on a nationwide basis.

While recognizing the significant limits to the program's jurisdiction, resource agencies believe the existing program could better control wetlands losses if, among other things, wetland boundaries were delineated more broadly and greater consideration were given to practicable alternatives to placing dredged and fill materials in wetlands. Corps officials believe that they are acting within the jurisdictional limits established for the Section 404 program.

Limitation on Jurisdiction of Section 404 Program

Many activities resulting in substantial wetlands losses are not regulated by the Corps Section 404 program. Under the program, conversions of wetlands for normal agricultural, silvicultural, or ranching purposes may be specifically exempted from Section 404 permitting requirements. Although, as reported by the Office of Technology Assessment, the definition of what constitutes normal farming, silviculture, and ranching activities can be interpreted in different ways and Section 404(f)(2) precludes the exemption of many wetlands conversions, there is little doubt that such activities have resulted in large and unregulated wetlands losses.[1] In addition, the Corps' regulatory authority extends only to the placement of dredged and fill material in U.S. waters. Activities such as clear-cutting existing forests, ditching that drains wetlands, and certain plowing that does not deposit substantial dredged or fill materials have at times been interpreted by the Corps as not coming under its regulatory purview.

[1] For further information about the major factors that have contributed to wetlands losses, see Wetlands: Their Use and Regulation (Washington, D.C.: U.S. Congress, Office of Technology Assessment, OTA-0-206, March 1984).

For example, a September 1986, Environmental Management Report prepared by EPA region VII entitled Environmental Action Plan for Rainwater Basin Wetlands Project stated that the Rainwater Basin is in danger of total destruction. It further stated that

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

According to the Corps, the resource agencies, and other analysts, most of the annual wetland losses, which several resource agency officials estimate to be between 300,000 and 500,000 acres, have been a result of conversions of wetlands to agricultural uses. For example, in its 1984 report the Office of Technology Assessment stated that between the mid-1950s and mid-1970s, the vast majority of actual wetland losses—about 80 percent—involved draining and clearing inland wetlands for agricultural purposes.

Data Lacking to Precisely Measure Impact of Section 404 Regulations on Wetlands

While many activities affecting wetlands are beyond the scope of the Section 404 regulatory process, permitting and other program requirements govern a host of developmental activities that can destroy wetlands if they are allowed to proceed unchecked. However, no definitive data are available to measure with precision the impact of the Section 404 regulatory program in terms of wetlands acreage protected or lost. Moreover, permit documents do not always include the information necessary to begin compiling such data. Estimates that have been prepared by the Corps, resource agencies, and other organizations range widely, but all agree that some wetlands have been protected as a result of preapplication meetings with permit applicants, modifications to or withdrawal of permit applications, or denial of permit applications by the Corps.

Estimates From Corps Districts and Resource Agencies Show Some Wetlands Protected

With few exceptions, officials at the Corps districts and the resource agencies we spoke with did not maintain comprehensive information on the number of wetlands acres protected or lost as a result of the Section 404 permitting program. Further, our examination of a sample of permit files confirmed that the permits often do not record the amount of wetlands to be affected by the proposed activity. Data we obtained from the

Corps districts and the local resource agencies differed substantially, but all agreed that the Corps program, although not regulating most wetland losses, is serving to protect some wetlands.

For example, although the Chief of the Regulatory Branch, Vicksburg district, said the district has never attempted to assess program performance on the basis of the number of wetlands acres protected or lost, his staff estimated that for fiscal year 1986, permit applications could have affected about 1,373 acres. Of these, they estimated that 534 acres were protected through denial of permits, and 839 acres were lost or altered as a result of issued permits. According to these officials' estimates, only 10 acres of mitigation were required for these permitted activities. The FWS, in contrast, estimated that Vicksburg district projects, including Corps construction projects, adversely affected about 55,000 acres of wetlands. We discuss reasons for these disparate estimates later in this chapter.

In the Jacksonville district, officials provided statistics showing that in fiscal year 1986, Section 404 permit decisions affected few of the district's estimated 11 million wetlands acres. For the 171 Section 404-related individual permits that involved fill in wetlands, applicants proposed to fill 1,557 wetland acres; the district authorized fill of 1,187 acres. District statistical information showed that these permittees were to create 168 new wetland acres and enhance 3,998 existing acres. These statistics are based on approved permits rather than actual work performed, and they do not include wetland acres affected by the district's general permits.

Of the 104 Section 404-related individual permits that were commented on by the resource agencies dealing with the Omaha district from which we drew our sample, only 10 involved discharge of fill material into wetlands, according to Corps records. We identified two additional permits that involved wetlands during our sample review. We found that individual permits issued under Section 404 in fiscal year 1986 affected less than 1 percent of the district's estimated 6 million acres of wetlands. We identified about 70 acres of wetlands that were lost as a result of individual permits involving wetlands. In 7 of these cases, the district required the permittee to create a combined total of about 52 acres of new wetlands through mitigation measures.

Corps officials from the other two districts we visited talked only in general terms about the effect of the program on wetlands. According to

some officials from the Corps and the resource agencies in these districts, it is difficult to measure actual acreage protected or lost as a result of Section 404 program decisions. NMFS has compiled information on estimated wetland impacts resulting from permitted activities on which it has commented. However, because NMFS is primarily concerned with coastal wetlands, the agency may not comment on many applications dealing with inland wetlands. We discuss the NMFS estimates later.

FWS officials in Maryland explained that discussions held among the Corps, applicants, and resource agencies during preliminary stages of the permitting process can reduce the wetland acreage ultimately affected by a project. Any estimate of wetlands acres protected must include acres protected as a result of these pre-permit negotiations and modification of initial proposals, as well as permit denials and applications that are withdrawn, the officials said.

Furthermore, FWS officials told us that because preliminary discussions in the permitting process are often informal and go undocumented, it is impossible to accurately assess the wetland acreage protected or lost as a result of the program. Some Corps and resource agency officials believe that the mere existence of the program and its requirements for getting approval to fill wetlands deter landowners and developers from proceeding directly with projects involving wetlands prior to considering other alternatives.

Other Estimates

We obtained some information on the Section 404 program's impact on wetlands from the Office of Technology Assessment, NMFS, and EPA that was not restricted to the Corps districts we visited. The information, however, either did not give comprehensive estimates for the effects of the Section 404 program or was based on preliminary study findings.

In its March 1984 study, the Office of Technology Assessment stated that it is difficult to present an accurate picture of the program's effects primarily because very little quantitative information on it has been compiled. Recognizing this caveat, the study used Corps information for 1980 and 1981 to estimate that the acreage protected as a result of the program was probably less than 50,000 acres annually; how much less was uncertain.

For the 7,446 public notices received for comment by NMFS nationwide in calendar year 1986, it estimated that about 111,000 acres of habitat were proposed for alteration by permit applicants. NMFS estimated that

ultimately about 17,000 acres were affected by Corps' permitting decisions. The NMFS estimates include effects of Corps Section 10 program decisions.

EPA has recently developed preliminary estimates of the program's impact in one of its regions. In a study entitled Environmental Indicators of Effectiveness From the Environmental Protection Agency, Wetlands Protection Section, Region 10, which is based on EPA evaluations of 2,300 Corps Public Notices from October 1983 to September 1987, EPA estimated that about 200 acres have been protected in Washington, Oregon, and Idaho as a result of the Section 404 permitting requirements. EPA's analysis indicates two trends: (1) a downward trend in net wetland loss from 1984 to 1986 (1987 data indicate an increase in wetland losses, but this is due to unresolved mitigation on a few major projects) and (2) an increase in mitigation acreage in the last 4 years. For 1986, the EPA study identified 211 acres that were affected by the Section 404 program in Oregon. Mitigation totalling 154 acres was required, resulting in a net loss of 57 acres.

Extent of Regulatory Jurisdiction Could Change With Different Interpretations of Regulations and Guidance

While there is little doubt that the Corps program is protecting some wetlands, the Corps and the resource agencies disagree over whether the Corps is using the full range of its authority to protect as much wetlands acreage as it could. The disagreement involves interpretations of several key provisions of regulations and guidance. Included among the areas of disagreement are determinations on how to (1) delineate wetlands boundaries, (2) assess the cumulative impacts of individual permit decisions, and (3) consider alternatives to development in wetlands. Depending on whether these and other provisions are interpreted narrowly or broadly, Section 404's regulatory impact can be decreased or increased and the assessment of Corps districts' performance in implementing the program could change appreciably.

Wetlands Delineation

Section 404 of the Clean Water Act regulates the deposition of dredged and fill materials in "waters of the United States," which include wetlands. Controversy remains, however, over exactly how to establish wetland boundaries in any given area.

The Corps and the resource agencies sometimes delineate wetland boundaries differently, and this can result in wetlands determinations that vary by thousands of acres. This in turn could affect the degree to which the Corps assumes Section 404 program jurisdiction in an area.

This was evidenced by the disparate estimates of wetland impacts prepared by the Corps and FWS in Vicksburg, where the Corps determined that the program allowed the loss of about 800 acres of wetlands in fiscal year 1986, whereas FWS estimated that about 55,000 acres were adversely affected. These figures are not completely comparable because the FWS estimate includes federal construction projects undertaken by the Corps whereas the Corps estimate does not.

This large difference in estimated wetlands impacts can be primarily attributed to the different manner in which the Corps district and FWS field office delineated wetlands that should come under the jurisdiction of the Section 404 program. The current approach to delineating wetlands used by FWS would bring a considerably larger area under the program's jurisdiction, according to the officials we talked to in the Corps and the resource agencies.

For example, the Regulatory Branch Chief in the Vicksburg Corps district agreed that the wetland delineation methodologies of the agencies differ. He pointed out that in a court case the district's method, which primarily focuses on the area's vegetative cover and has been in use during the last 8 years, designated about 20 to 25 percent of a bottomland hardwood site as a wetland. The methods used by EPA and FWS designated about 80 percent of the site as a wetland. According to Corps headquarters officials, EPA has the authority to make wetland boundary determinations under the Section 404 program, but has, for the most part, deferred to the Corps to make such determinations due to a lack of staff. They also said that, generally, the EPA wetland delineations more closely match those done by the Corps than do those done by the FWS.

Both the Corps and the resource agencies agreed that such a large disparity in wetlands boundaries might be found in areas such as the bottomland hardwood area covered by the Vicksburg district, but much smaller variations would likely be observed in other areas of the nation, especially in coastal wetlands. Department of Commerce officials concurred that the Corps and the resource agencies are generally in agreement on the delineation of coastal wetlands. They said that these areas generally receive greater scrutiny for a variety of reasons.

However, according to an EPA official in region VIII, the Corps has been too restrictive in delineating some wetlands in other areas of the nation. For example, in the more arid part of the country where there is a lack of rain in the fall, the Corps might determine that a particular site is not a wetland even though the lack of water is temporary. The EPA official

believes areas should be classified as wetlands in such situations. According to Corps headquarters officials, EPA could designate such areas as wetlands coming under the jurisdiction of the Section 404 program; however, it has not done so.

The following examples, cited by resource agency officials, illustrate how differences in wetlands delineations in an area can result in varying jurisdictional boundaries for the Section 404 program:

- In fiscal year 1985, a Louisiana agriculture company applied for a permit to clear and convert about 1,300 acres of bottomland hardwood to agricultural use. The Vicksburg district designated 80 of these acres as wetlands subject to Section 404 requirements. The FWS in Vicksburg concluded that all 1,300 acres were bottomland hardwood wetlands and recommended permit denial. The applicant agreed not to clear the acres designated as wetlands by the Corps and was informed that no permit was needed. FWS officials point out that, as a result, the approximately 1,220 acres outside the wetland jurisdictional limits set by the Corps were cleared and eventually lost.
- In the Omaha Corps district, EPA questioned the Corps' failure to assert Section 404 jurisdiction in a case involving unpermitted activities in an area that the Corps considered irrigated land, but which EPA considered a wetland. The Corps did not take any action since it took the position that the area in question was outside Section 404 jurisdiction. However, EPA asserted its authority to make jurisdictional decisions and issued an administrative order to halt the unpermitted activity.

According to Corps and EPA headquarters officials, the two agencies are independently field testing delineation methodologies for use in delineating areas as wetlands and therefore potentially under the jurisdiction of the Section 404 program. Neither agency had completed field testing at the conclusion of our fieldwork. In commenting on a draft of this report, the Department of the Interior stated that the federal resource agencies should continue to work together toward developing a consistent methodology for delineating an area as a wetland for purposes of determining jurisdiction under the Section 404 program. The methodology should be scientifically defensible and reflect the goals of the Clean Water Act, according to the Department.

Practicable Alternatives

Under the 404(b)(1) Guidelines prepared by EPA in consultation with the Corps, no permit for discharge of dredged or fill material can be issued if there are practicable alternatives to the project as proposed that

would be less environmentally damaging. The Guidelines further require that no discharge should be permitted unless appropriate and practicable steps have been taken to minimize potential adverse impacts of the discharge on the aquatic ecosystem. To be considered "practicable," an alternative must be feasible in terms of the cost, existing technology, and logistics considered in light of the overall project purposes. Under the Guidelines, alternative project sites not presently owned by an applicant but which could reasonably be obtained, utilized, expanded, or managed may be considered to be practicable alternatives. According to Corps guidance, the discussion of practicable alternatives should be guided by the rule of reason and should consider alternatives in terms of both the applicant's wishes and capabilities and the need for or purpose to be served by the proposed activity.

The resource agencies believe that the 404 (b)(1) Guidelines provide an environmental basis for permit denial, and they have disagreed with the Corps on the extent to and manner in which alternatives to proposed projects should be considered. For example, the Department of the Interior believes that the Corps should apply the Guidelines as a threshold determination rather than as a lesser weighted component of the public interest determination. The disputes between the Corps and the resource agencies most often concern projects that are not considered water dependent. The Guidelines establish a presumption that practicable, less environmentally damaging alternatives exist for activities that are not dependent on being located on the water's edge to fulfill their basic purpose. For example, a restaurant does not have to be sited on the waterfront to fulfill its basic purpose of feeding people, while a marina must be located at the water's edge to be functional.

Several resource agency officials told us that the Corps has been relying on permit applicants to determine whether practicable alternatives to their proposals are available. The Corps or an independent authority needs to verify project purpose as stated by applicants if wetlands loss is to be reduced, according to the Department of Commerce. FWS headquarters officials cited a letter dated March 26, 1986, in which the Lower Mississippi Valley Division of the Corps made the following observations in commenting on a permit application:

> "I call your attention to the requirement that in order for an alternative to fulfill the 'practicable' requirement, it must fulfill the 'basic purpose' of the applicant. . . .Whatever information is offered by [the applicant] should be accepted as his basic purpose, since he is the only authoritative source for that information."

The Regulatory Branch Chief, Vicksburg district, acknowledged that the effect of this policy is to rarely deny a permit on the basis of the practicable alternatives test because applicants can easily state their purpose in a way that circumvents the analysis. He explained, however, that the district issues or denies permits based on a full evaluation of a project and not just on whether the project's stated purpose complies with the 404(b)(1) Guidelines.

In a May 26, 1987, memo to the EPA Office of Wetlands Protection, EPA region VI staff commented on this problem, saying

"In our experience for the majority of cases we have seen, the Corps practice is to issue permits for whatever the applicant wants with very little consideration given to the 'tests' within the Guidelines that address prohibition and alternatives, or EPA stated concerns."

Examples of district-approved projects that EPA region VI officials took exception with because they did not meet the practicable alternatives test included the deposition of rock, concrete, asphalt, and other materials in wetlands to create commercial property and the deposition of fill in wetlands associated with the construction of lakefront residential and recreational developments.

According to EPA officials in region VIII, the Corps and EPA differ on the meaning of basic project purpose and the manner in which practicable alternatives should be considered. EPA looks at project purpose in a broad sense, which provides more project alternatives, whereas the Corps' more narrow viewpoint provides fewer alternatives to proposed projects. The EPA officials view practicable alternatives from an environmental standpoint even when such alternatives are more costly to the applicants, whereas the Corps places more emphasis on the economic impact from the applicant's standpoint, EPA officials said.

In commenting on a draft of this report, the Department of Commerce told us that the Corps' emphasis on economic impact often overlooks the long-term economic contributions of habitat to the commercial and recreational fishing industry. According to a FWS field office official in Pierre, South Dakota, FWS considers any alternative that avoids adverse environmental impacts to be a practicable alternative, whereas the Corps considers an alternative to be practicable only if it seems reasonable from the applicant's standpoint.

The Department of the Interior, in its comments on a draft of this report, told us that rather than insist on compliance with the 404(b)(1) Guidelines as a threshold determination prior to permit issuance, the Corps makes a "public or economic interest determination," which is authorized by 33 C.F.R. 323. Thus, the goal of the Clean Water Act to restore and maintain the nation's water quality becomes involved in a variety of other considerations. The Guidelines specifically prohibit discharges that will cause or contribute to significant degradation of the waters of the United States. In order to meet the goal of the Clean Water Act, the FWS supports a goal of "no net loss" of valuable wetland habitat.

Corps headquarters officials advised us that the Corps relies on applicants to provide information on the purpose of their proposal and alternatives considered, but not to make the determinations regarding whether practicable alternatives to their proposals are available. The Corps carefully considers the effects of an applicant's proposal, taking into account the verifiability and credibility of any information supplied by the applicant. In commenting on a draft of this report, the Department of Defense stated that while the Corps continues to base the denial of some permit applications on the availability of less environmentally damaging practicable alternatives, it is not reasonable to take a stance that would result in a denial of all non-water-dependent Section 404 applications on the basis of the lack of proof that no practicable alternatives exist.

According to Corps district officials, they must consider many variables during each individual permit review, including economic as well as environmental aspects of a project. This can result in conflicts with resource agency points of view, the officials said.

Cumulative Impacts

According to the Section 404(b)(1) Guidelines, cumulative impacts are changes that take place in aquatic ecosystems (including wetlands) that are attributable to the collective effect of a number of individual discharges of dredged or fill material. These effects are to be predicted to the extent reasonable and practical. The Corps and resource agency officials we spoke to generally agreed that cumulative impacts have not been adequately addressed because they are not sure how to establish the criteria to be considered. Instead, they said, it is easier to consider each project individually.

According to the Corps' Regulatory Guidance Letter No. 84-9, the geographic size of the area in which cumulative impacts are to be considered should be established by the district engineer. Within this selected area, a history of permitting activity should be developed, along with anticipated future activities in the area. This will provide the decisionmaker with some sense of the rate of development in the area.

According to some resource agency officials, however, even when they make their specific concerns about the cumulative impacts of permit decisions known to the Corps, the Corps districts may issue permits that ultimately destroy more wetlands. For example, on a fiscal year 1985 application to clear-cut and convert 12 acres of wetlands to agricultural use, EPA recommended that the Corps deny the permit because relatively few areas of bottomland hardwoods remain in the Lower Mississippi Valley. These areas provide functions important to the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Therefore, the loss of additional areas of bottomland hardwoods contributes to the adverse cumulative effect on the overall system.

The district's statement of findings for this project included the following statement:

> "This work will convert 12 acres of wetlands into agricultural production. Several tracts of land in this vicinity are in agricultural production. There will be a reduction in water quality functions in this area; however, the impacts will not be significant."

In commenting on a draft of this report, Corps officials told us that an estimated 11 million acres of bottomland hardwoods remain in the Lower Mississippi Valley.

The Department of Defense, in commenting on a draft of this report, agreed that determining the threshold for denial of future permits in an area is the subject of much controversy and speculation. The Department noted that while it is correct to say the Corps may issue permits that allow the destruction of wetlands in areas that the resource agencies would like to protect, it must also be recognized that the Corps denies permits in areas the agencies want to see protected and places conditions in permits or denies permits to respond to concerns about cumulative impacts. The evaluation of permit applications must be made taking into account many factors in the public interest. The Department

pointed out that the Corps must not adopt a narrow view that all wetlands must be equally protected without consideration of their value or the lack of value and without consideration of public and private needs. No exact methodology exists concerning cumulative impact assessment; however, Corps resource professionals exercise judgment in a credible manner, according to the Department of Defense.

The Department of Commerce advised us that even if the Corps had the capability to assess cumulative impacts, not all Corps districts are able to determine how many or which projects are within a given geographic area because of incomplete record keeping and inconsistent designation of waterways. In particular, this problem has been noted in the National Oceanic and Atmospheric Administration's Alaska region and resulted in permit tracking difficulties.

The Department of the Interior said that a key problem with the Corps' approach to cumulative impact assessment and management appears to be the absence of resource goals for its program so that comparisons of resource trends and status can be made. The public interest review that the Corps conducts generally does not reflect any goal to restore and maintain the nation's water resources, according to the Interior Department.

The following observations were made by Corps and resource agency officials we spoke to concerning the limited consideration of cumulative impacts in Section 404 permit decisions. These officials almost unanimously agreed that there were problems in assessing cumulative impacts.

Baltimore District

According to officials in the Baltimore district, no state-of-the-art process for determining cumulative impacts exists, and no thresholds have been established to indicate when to stop issuing permits in a specific area. While conducting cumulative impact studies could be helpful, it might prolong the permitting process by 2 to 3 years for major projects, the officials said.

Resource agency officials that work with the Baltimore district agree that cumulative impacts of projects are generally not considered. Some officials were particularly concerned about projects authorized under nationwide permits. Once such permits are approved, the resource agencies do not get the opportunity to comment, although they believe the

projects authorized under the permits could result in significant loss of wetlands over time.

Jacksonville District

Jacksonville district officials concurred that assessing cumulative impacts of projects can present problems. The considerations that affect Corps decisions concerning cumulative impacts include problems with trying to project future events in given wetlands areas, restrictions that might be placed on development by other agencies, and the availability of alternatives. A case from our sample illustrates some of the problems encountered in trying to assess cumulative impacts of individual permit decisions.

An applicant proposed to fill wetlands to construct an access road to a planned commercial and residential complex. The road, however, would provide access to only a portion of a much larger planned development. The Jacksonville district, therefore, initially considered the application incomplete because the applicant did not request permits for the entire project.

The applicant responded by deleting a portion of the wetland fill, and the district issued a public notice. In response to the notice, both EPA and FWS recommended that the district deny the permit until the applicant submitted plans for the total project. The applicant responded by stating that an agreement with the state of Florida limited development to the requested access area and that it was premature to determine what future development would be allowed at the site.

After evaluating the comments, the district issued a permit for this non-water-dependent project because no practicable alternative existed that satisfied the applicant's basic purpose. Further, since at the time the state had approved development in only a portion of the area, the district considered the proposed project complete.

Omaha District

According to FWS officials in Pierre, South Dakota, and Grand Island, Nebraska, the Corps has not, in the past, given adequate consideration to the documentation of potential cumulative impacts. Specifically, over 300 projects have been permitted on the Platte River and its adjacent wetlands since 1977, the Grand Island official said. Because there are up to five endangered species on the Platte River, she said, all proposed projects should be assessed by the Corps both individually and cumulatively.

Corps district officials agreed on the need to conduct such studies in this area. The Corps initiated a study of the Platte River in August 1987. The study is scheduled for completion in 1990, at which time its data will be used in (1) making permitting decisions in that area, (2) addressing environmental concerns relating to existing and future conditions on the river, and (3) developing guidelines for Section 10/404 permit actions.

Portland District

According to officials from EPA and NMFS who work with the Portland district, cumulative impacts are a neglected aspect of the permitting process; however, they also told us that permit actions in the district have not involved significant wetland acreage. A NMFS official, while acknowledging the difficulty of the process, stated that, to date, no one involved with the Section 404 program has considered or has documented the potential cumulative impacts of projects. A FWS official who deals with the district stated that the Corps should be responsible for determining cumulative impacts and that FWS has done little in this area, primarily because of staffing limitations. The district does not have the resources to address the issue of cumulative impacts, according to the Chief of the district Regulatory Branch. He said, however, that efforts are being made to improve cumulative impact assessments through the use of a microcomputer management program.

Vicksburg District

The Regulatory Branch Chief for the Corps Vicksburg district acknowledged that while the district is required to consider cumulative impacts of each proposed permit, it has no data or specific basis for the assessment of cumulative impacts. The official noted that the district staff do not know what effects are to be considered or the extent of the impact to consider in making such an analysis.

Conclusions

The Section 404 permit program is protecting some wetlands. However, many activities, such as normal farming and ranching and the ditching and draining of wetlands, are not regulated under Section 404. These activities result in most wetlands losses each year. Although there is general agreement that many activities that result in wetlands losses are not regulated under Section 404, there is little agreement between the Corps and the resource agencies concerning whether the current program should protect more of the nation's wetlands. Resource agencies believe, among other things, that more wetlands could be protected if the Corps delineated wetland boundaries more broadly and gave greater

consideration to practicable alternatives to placing dredged and fill materials in wetlands.

Quantitative information measuring how effective the Section 404 program has been in protecting wetlands is scarce. Some officials we spoke to believe it would be extremely difficult to develop accurate estimates in this regard. Also, there are disagreements between the Corps and the resource agencies or problems regarding the implementation of certain key elements in the administration of the Clean Water Act Section 404 program as it relates to protecting wetlands. For example, the Corps and the resource agencies either disagree or have problems concerning (1) the manner in which wetland delineations are made, (2) the extent to which practicable alternatives to proposed projects are considered, and (3) how to address the cumulative impacts of proposed projects.

Matter for Consideration by the Congress

There are significant differences in the manner in which the Corps and the resource agencies would implement the Section 404 program. For example, fundamental differences or problems were noted in the manner in which the Corps and the resource agencies delineated wetlands coming under the program's jurisdiction, considered alternatives to filling wetlands, and assessed the cumulative impacts of numerous permit decisions. These differences appear to be affecting the degree to which the nation's wetlands are protected, and they are unlikely to be fully resolved among these agencies.

Therefore, the Congress may wish to establish clearer criteria regarding the (1) scope of wetlands delineation under the program, (2) extent to which alternatives to filling wetlands must be considered, and (3) extent and circumstances under which cumulative impacts of permit decisions must be considered.

Recommendations to the Secretary of the Army

In order to provide the Congress and others with information on the effects of the Section 404 program for restoring and maintaining the integrity of the nation's waters and to provide for more consistent management of the program, we recommend that the Secretary of the Army direct the Chief, Corps of Engineers, to take the following actions:

- Develop a data reporting mechanism that will enable the Corps to provide baseline information on the extent to which the granting of Section 404 permits is protecting or resulting in the filling of wetlands and otherwise restoring and maintaining the integrity of the nation's waters.

- Work with the resource agencies to develop consistent definitions and procedures for implementing basic program requirements such as considering practicable alternatives, assessing cumulative impacts, and making wetland delineations.

Agency Comments and Our Evaluation

The Department of Defense does not believe that a study to provide a baseline assessment of the Section 404 program's performance in wetland protection/use and maintaining water quality can be done on a realistic or cost-effective basis. According to the Department, such a study would have to take into consideration a wide variety of factors that are difficult to describe and quantify, much less measure. For example, according to the Department, the very existence of the program may produce wetland preservation that cannot be measured. This could occur when the Corps' denial of permits in one area results in the development community's not applying for permits for similar projects at other locations.

To report only the acreage affected by denied permits would be misleading, according to the Department. While the acreage of wetlands filled under individual permits could be measured, the Department said that this too would be misleading because most permits result in secondary impacts that can enhance, create, harm, or destroy other wetland acreage.

The Department of Defense said that the Corps regulatory staff is at the minimum necessary to accomplish its current mission and is in fact struggling in the face of an increasing work load. To charge that program with an increased mission for monitoring the program's impacts is an unrealistic expectation, according to the Department. The Department attributed part of the problem to the Congress' recent decision not to allow the Corps' regulatory program budget to be augmented by funds from other Corps sources. Finally, the Department believes that the return for dollars spent to develop and operate such a monitoring program would be minimal.

We agree with the Department of Defense that some factors affecting wetland protection would be difficult or impossible to describe and quantify. However, we do not believe that the current monitoring effort provides sufficient oversight of program performance. Although the Department commented that a study would be needed prior to initiating a Section 404 program monitoring effort and that our recommendation could not be accomplished with the resources available to the Corps'

regulatory program, we do not believe that reporting the type of baseline information we envisioned when we made our recommendation would be a major undertaking for many Corps districts. For example, we noted during our review that certain Corps districts were able to provide information on wetland acres protected or lost as a result of their permitting actions and on required mitigation actions. We also reviewed district statements of findings on permit applications that addressed the water quality impacts of the proposed projects. We discuss some of these projects in this report.

The Department of Defense's contention, that it could be misleading to report only on the more directly observable impacts of the program, such as wetlands filled under individual permits, is true to some extent. However, we believe that if the information is properly explained and qualified, it would provide more meaningful program performance information than the information currently available and that the major impacts of the program would be included. For example, the Corps historically has denied only about 3 to 4 percent of the permit applications it receives; therefore, it does not appear that the denial of permits in an area would necessarily have a significant effect on attempts to proceed with similar projects at other locations.

We also note that the Department of Commerce, in agreeing with our recommendations, suggested the need to develop a data base to track the effect of the Section 404 program on conserving wetlands that accurately documents the amount and type of acreage converted and conserved under the program. The Department suggested the need to monitor (1) acreage discussed at the pre-project level, (2) acreage proposed in the public notice, (3) acreage recommended by federal and state

program initiatives. Within the next 3 months, a meeting will be held to jointly decide what can be done to better address the issues highlighted by the report, according to the Department.

EPA stated that the effort to clarify definitions and procedures for implementing Section 404 should include mitigation and the definition of fill material. Both EPA and the Department of the Interior expressed concern that the Corps was not requiring the use of the mitigation techniques that result in the greatest protection of wetland resources, and EPA was concerned that the Corps' definition of "fill material" is too narrow.

The text of the agencies' comments, and additional GAO responses, are included in appendixes II through V.

Corps Districts Consider but Often Do Not Implement Resource Agency Recommendations

Our review of five Corps districts' policies for involving resource agencies in the pre-permit application process indicates that, even though these procedures vary by district, the Corps is generally receiving and considering resource agency views during the Section 404 permitting process. However, during its public interest reviews, the Corps is frequently not accepting the suggestions offered by the resource agencies in making its final permitting judgments. We estimate that the Corps issued permits over the denial recommendations of resource agencies in 37 percent of the estimated 111 cases involving denials. Corps district acceptance of other recommendations of resource agencies ranged from 58 percent to 100 percent, with a weighted average of 80 percent.

Resource agency field office officials seldom used authorized procedures for appealing decisions of district engineers when they disagreed with their disposition of the resource agency recommendations. The consensus among the resource agency field office officials was that the appeal process was too time-consuming and it rarely resulted in overruling district engineer determinations.

Pre-Permit Coordination Varies by Corps District

Corps regulations require district engineers to establish local procedures that allow potential applicants to consult with Corps regulatory personnel on proposed projects. After receiving a potential applicant's consultation request, the district is to involve federal and state resource agencies in assessing the proposed project and the viable alternatives. The resource agencies may become involved in the permitting process at various stages, including prior to formal submission of applications and at other points leading up to and including the public notice comment period. The resource agencies we visited generally looked favorably on the concept of pre-permit consultations, but some agencies were concerned about the quality of information provided by the Corps districts in public notices and during the pre-permit consultation period.

Scheduling of Pre-Permit Consultations Varies by Corps District

As discussed below, Corps districts we visited varied in the extent to which they involved resource agencies in pre-permit consultations, and the resource agencies differed in their assessments of the Corps districts' means of involving them in the early stages of permit consideration. Corps headquarters officials advised that the variations in pre-permit consultation procedures are not surprising because its districts are allowed considerable freedom in aligning resources to meet mission requirements.

Baltimore District

The Corps' Baltimore district holds bimonthly meetings at which time permit applications can be discussed. At these meetings, the Corps and the resource agencies discuss proposed projects' potential economic and environmental impacts. According to resource agency officials, one of the benefits associated with such meetings is that major concerns, such as reducing the scope of a project, can be resolved prior to the "formal" application process. Reducing the scope of a project can sometimes be an effective way to limit the loss of wetlands.

FWS and NMFS officials dealing with the Baltimore district expressed concern, however, that the bimonthly meetings are not being used to their full potential. NMFS staff have been experiencing difficulty in getting projects of interest to them included in the meeting agendas, they said. Although staff have made these concerns known to the Corps Baltimore district, they remain unaddressed, staff members said.

Jacksonville District

Although the Jacksonville district does not hold numerous pre-application meetings, it does conduct what it refers to as interagency meetings with federal and state resource agency representatives, and on some occasions with individual applicants, approximately every 6 weeks. These meetings are held to discuss current Corps permitting policies and selected individual applications as well as pre-application proposals as requested by potential applicants. At one time, the district was trying to hold regular pre-public notice conferences (on-site and involving the agencies) on projects that required dredging of more than 50,000 cubic yards or filling of more than 2 acres. According to district officials, about 2 percent of proposed projects would meet these criteria. Although a permit application would already have been received by the district at the time of these conferences, they are intended to resolve potential conflicts. However, limitations on manpower and travel have reduced the number of these conferences to an absolute minimum.

According to NMFS officials, the district interagency meetings are ineffective in addressing their concerns on proposed projects. Prior to the Corps' regulatory reform emphasis in 1982, the district coordinated more frequently with resource agencies through pre-application and interagency meetings, the officials said. Since that time, however, the district has emphasized service to applicants and faster issuance of permits rather than resource agency coordination, they said. FWS officials said the meetings occur after they have already submitted their comments on proposed projects.

Omaha District

The Omaha Corps district does not hold regular pre-application meetings during the course of normal permitting activity. Pre-application meetings are usually held on an exception basis, such as for larger projects or projects where significant issues or problems are anticipated. According to EPA and FWS officials, if the Corps district anticipates problems, it will have applicants contact the resource agencies involved so that potential problems can be addressed early. NMFS officials believe that such an approach would be beneficial if it were used nationwide. Corps officials agreed that such early contact with the applicant speeds the permit application process. In the Omaha district, distances to project sites prevent the joint pre-application consultations from taking place more regularly, Corps officials said.

Portland District

The Portland Corps district, federal resource agencies, and state agencies such as the Oregon Division of State Lands, the Oregon Department of Fish and Wildlife, and the Oregon Department of Environmental Quality attend monthly meetings. The meetings are sponsored by the Corps and the Oregon Division of State Lands, and they take turns scheduling the agenda. The meetings are not intended to result in individual permit decisions, but are to discuss projects and provide the resource agencies the opportunity to suggest ways to strengthen the applications and reduce adverse impacts. These meetings result in a faster application process and fewer permit denials, according to several of these agencies' representatives.

Vicksburg District

According to the Regulatory Branch Chief in the Vicksburg district, pre-application matters are generally addressed in informal meetings or over the telephone. He estimates that only three or four pre-application meetings involving the applicant and other agency representatives are held annually. Generally, meetings are held only on an as-needed basis for large projects. Starting in September 1986, however, the Vicksburg district began conducting quarterly enforcement meetings with state and federal resource agency staff. These meetings address a broad range of Section 404 matters of current interest, including enforcement problems, changes in Corps policies, and permit processing.

An FWS official dealing with the Vicksburg district told us that pre-application meetings, when held, are extremely helpful to all of the agencies involved. However, the meetings are held infrequently and only when large projects are involved, he said.

Resource Agencies Question the Accuracy of Public Notices

The Corps uses public notices as the primary means of advising interested parties and soliciting their comments on proposed permit activity. Corps regulations require the public notices to include information sufficient to give a clear understanding of the proposed activity in order to generate meaningful comments. A typical public notice includes (1) the applicant's name and address; (2) the location of the proposed project; (3) a brief description of the proposed activity, its purpose, and intended use; and (4) a plan and elevation drawing showing the general and specific site location relative to the affected waterway or wetland area.

According to some resource agency officials, public notices sometimes contain inaccurate information, such as the wrong project location, or insufficient information on project scope. The following comments by Corps and resource agency officials in the Baltimore, Jacksonville, and Vicksburg districts' areas of coverage describe some of the problems encountered with public notices.

FWS officials in Annapolis, Maryland, said that in some cases incomplete or illegible information has prevented them from locating sites or knowing what work was being proposed. EPA region VI staff who interact with the Vicksburg district told us that their ability to respond meaningfully to permit applications is frequently limited by insufficient information regarding the scope of proposed projects in the Corps' public notice information. The EPA staff estimated that on about one-half of the public notice packages, they must spend resources to clarify information provided by the Corps. Besides the Vicksburg district, region VI staff must coordinate work with seven other Corps districts. Because of staff shortages and limited travel funds, the staff can make few site visits to verify project information. In the 10 months ending July 30, 1987, EPA staff made only six site visits. Therefore, they must rely on the accuracy of public notices and supplemental information.

The Chief of the Regulatory Division's Permits Branch in Jacksonville acknowledged that in some instances its public notices may contain inaccurate information. According to the Chief, this is because they use unverified data submitted by applicants when the district does not have sufficient personnel to verify the applicants' information. When the Jacksonville district uses unverified data, however, it states so in the public notice. NMFS officials believe that this practice should be adopted nationwide so that reviewers would know which proposals may require additional scrutiny.

Corps Districts Vary in Their Acceptance of Resource Agency Recommendations

The Corps' public interest review includes consideration of resource agency recommendations on the proposed projects. Resource agencies' comments may range from no major concerns with proposed projects to recommendations for permit denial. In most cases, the resource agencies do not have major concerns with proposed projects and do not object to permit issuance; however, they may sometimes object to issuing permits for proposed projects.

On the basis of our sample results, we estimate that the resource agencies made 111 initial permit denial recommendations for the estimated 1,419 applications on which they commented. We estimate that the five Corps districts we visited issued permits over these denial recommendations in 37 percent of these cases. The districts varied in the extent to which they required project modifications based on the resource agencies' other recommendations.

Resource Agencies Do Not Object to the Majority of Permit Applications

In the majority of permit application cases, the resource agencies either do not object to or do not comment on proposed projects. For example, in the Jacksonville district, from a random sample of 114 fiscal year 1986 permit applications, we estimate that for 62 percent of the applications,[1] none of the 3 federal resource agencies we visited objected to or commented on the applications. In some cases, the resource agencies do not formally comment on proposals because of a lack of resources, they said. In such cases they make in-house judgments based on prior knowledge of the areas involved and the type of projects, and they conclude that the projects are unlikely to have major environmental impacts.

Information concerning the other Corps districts we visited also indicated that in the majority of cases the resource agencies do not make recommendations to deny or modify projects, or they take no action on public notices issued by the Corps. For example, NMFS information for calendar year 1986 showed that NMFS regions made recommendations on about 23 percent of the public notices they received. In some cases where resource agencies commented on permit applications, we were unable to distinguish between formal recommendations that resource agencies felt strongly should be included as permit conditions and suggestions that the resource agencies raised for consideration by the Corps or applicants.

[1] The lower and upper bounds of the 95-percent confidence interval are 53 percent and 71 percent, respectively.

Some Permits Are Issued Over Resource Agency Denial Recommendations

On the basis of our sample results, the resource agencies made 111 initial denial recommendations.[2] Although the Corps and the resource agencies frequently arrange for applicants to modify their plans so that their projects no longer warrant denial recommendations by resource agencies, we estimate that the Corps districts issued permits over the resource agency denial recommendations in 37 percent of these cases.[3]

Resource agencies usually recommended permit denial when they believed that projects were not water-dependent, less damaging alternatives were available, applicants were not doing all they could to minimize adverse effects to aquatic ecosystems, or mitigation measures to offset projects' harmful effects were inadequate. Sometimes the Corps and the resource agencies differed regarding whether resource agencies' concerns were addressed. In other cases districts did not fully document reasons for issuing permits over the denial recommendations of resource agencies.

Some districts did not provide feedback to resource agencies on how their recommendations were considered. Consequently, we could not document whether the resource agencies were satisfied with the Corps' resolution of these cases.

The Omaha and Portland Corps districts were able to resolve through permit modification or other action the problems that resource agencies noted in initial denial recommendations in all of the sample projects we reviewed. In the Jacksonville district, the resource agencies made a total of 17 denial recommendations on 9 permit applications. The district rejected 8 of the 17 denial recommendations that applied to 4 permits. Resource agency officials told us that since 1982, when the Corps initiated regulatory reform efforts emphasizing permit processing over extensive informal coordination with the resource agencies, the number of permits the district issued over their objections has increased.

In commenting on a draft of this report, the Department of Defense explained that Corps policy allows district engineers to issue permits over the unresolved objections of federal resource agencies if issuance is accomplished in accordance with the memorandums of agreement with those agencies. The agreements provide the agencies the right to request elevation of the project decisions, and the Vicksburg district considers

[2]The lower and upper bounds of the 95-percent confidence interval are 79 and 143, respectively.

[3]The lower and upper bounds of the 95-percent confidence interval are 23 percent and 51 percent, respectively.

did not include documentation as to how the agencies' denial recommendations were addressed by the Corps, and district officials could not provide additional information.

- A Vicksburg district case involved an FWS-recommended denial of an application to construct a dam in a wetland. FWS objected to issuance of a permit because the proposed project was not in compliance with the 404(b)(1) Guidelines, less damaging alternatives were available, all appropriate measures to minimize impacts were not included, and the project would result in significant and cumulative degradation of the aquatic ecosystem.

Despite this view the Corps approved the permit. The rationale for not denying the permit was not explained in the summary of findings. The Corps rejected other alternatives because they would increase turbidity during maintenance dredging, result in increased expense and environmental damage, or cause undesirable cumulative effects. Also, the Corps realized that the applicant could selectively clear the wetland and remove silt deposits regardless of whether a permit was issued for the dam construction. The district acknowledged that the loss of the wetlands would result in a slight lessening of water quality in the downstream aquatic environment.

Few Overall Statistics Available on District Acceptance of Agency Recommendations

Except for NMFS, the Corps and the resource agencies we visited do not accumulate verifiable data on the extent to which Corps districts are adopting resource agency recommendations. NMFS data for calendar year 1986 show that Corps districts adopted major recommendations in 85 percent of the 432 permits issued on which NMFS commented. According to most other resource agency officials, they do not have the staff to conduct such studies or to conduct follow-up on whether their recommendations have been incorporated in the permits. Also, they said many Corps districts do not provide them with sufficient information, such as copies of issued permits, to determine if their recommendations have been accepted.

In the Portland district, the resource agencies believe that they have a good working relationship with the Corps and that the Corps adequately considers and adopts their recommendations. According to most resource agency supervisors, however, they do not formally follow up on whether all of their conditions have actually been included in permits because they do not have the personnel or funding to do so or they do not receive copies of all Corps-issued permits.

The Jacksonville district does not maintain statistics on the frequency with which it accepted resource agency recommendations on permit applications. However, NMFS studies or analyses covering permit actions from 1981 to 1986 showed that the percentage of recommendations made by NMFS that were totally accepted by the district declined from 69 percent to 16 percent of those actions reviewed. The percentage of recommendations that were not accepted by the Corps rose from 31 percent for the 1981 permit actions to 65 percent for the 1986 actions. NMFS concluded from its analyses that the district is accepting fewer of its recommendations because the agency's memorandum of agreement with the Corps limits NMFS' ability to elevate decisions to higher levels for review when it disagrees with district handling of its recommendations.

Neither the Omaha Corps district nor any of the resource agencies we visited have a districtwide summary of resource agency recommendations and the Corps' actions on those recommendations. At the EPA regional office in Denver, Colorado, staff initiated an effort to track such information at the start of the 1986 fiscal year. However, officials there expressed concern over the accuracy of that data because of record-keeping problems.

An official at the FWS field office in Pierre, South Dakota, had some data on resource agency recommendations and Corps actions. However, the official questioned the accuracy of the data because cases involved "judgment calls." The available data indicated that from fiscal year 1981 to 1986 the Corps accepted 114 (91 percent) of the 125 recommendations on which Corps action could be ascertained.

According to EPA region VIII officials, they have not conducted any studies to determine their success at getting the Corps to implement their recommendations or at gaining applicants' compliance with permit conditions and mitigation requirements. The resource agencies do not always have the funds or personnel to devote to this kind of follow-up effort. Because these agencies lack travel funds, their staff do not visit project sites to see if their recommendations are being followed, one EPA official said.

EPA region VI and FWS officials dealing with the Vicksburg district have not conducted studies to assess the extent to which the district was adopting their recommendations. EPA acknowledged that during the past 8 years, region VI had not provided adequate support for the program. Since the completion of our fieldwork, the Section 404 program has been

receiving greater emphasis in the region, according to EPA headquarters officials.

According to an official at FWS headquarters, a study is currently underway to develop a methodology for use by its field offices to follow up on recommendations on permits issued under Section 404. The focus of the study is to track the success of FWS recommendations concerning mitigation in permit areas.

Corps Districts' Acceptance of Permit Modifications Recommended by Resource Agencies in Sample Cases

In addition to denial recommendations, the resource agencies make recommendations that permits be modified or that certain conditions be placed in permits to lessen the adverse environmental effects of the proposed work. These recommendations include relocating bulkheads, mitigation measures, limitations on dredging, and others. The districts we visited varied in the extent to which they required applicants to modify their projects on the basis of resource agency recommendations. Acceptance of such recommendations ranged from about 58 percent to 100 percent, with a weighted average of about 80 percent. Table 3.1 shows the rate at which the Corps accepted recommendations from the resource agencies based on projections from our sample results in the five Corps districts we visited.

Table 3.1: Resource Agency Modification Recommendations Accepted by the Corps

Corps district	Estimated number of modifications recommended[a]		Percent of estimated modifications accepted[a]	
Baltimore	**518**	(433,603)	**62**	(51,74)
Jacksonville	**459**	(382,536)	**58**	(41,74)
Omaha				
Wetlands	**98**	(64,132)	**100**	(65,100)
Other water bodies	**908**	(677,1139)	**100**	(75,100)
Portland	**83**[b]		**89**[b]	
Vicksburg	**211**[b]		**68**[b]	
Total	**2,277**	**(2017,2637)**	**80**	**(68,91)**

[a]The numbers in parentheses represent the lower and upper bounds of a 95-percent confidence interval.

[b]The entire universe was examined in Portland and Vicksburg. Thus, there is no sampling variability.

It appeared that the Corps districts were generally willing to accept and consequently require permit modifications for changes recommended by resource agencies when the changes concerned their areas of expertise. For example, recommendations by FWS that involved habitat protection

were usually accepted by the Corps. Conversely, recommendations dealing with matters such as the shape of bulkheads were often not accepted.

In many of our sample cases, the Corps required applicants to modify their projects to accommodate all of the recommendations made by the resource agencies. For example, in a Jacksonville sample case, an applicant proposed constructing a marina that would result in destroying 3.8 wetland acres. All three resource agencies recommended that the project be modified. The district deactivated the project on three occasions and issued two public notices to allow the applicant to modify the project. The applicant made major modifications and included additional mitigation, thereby quelling the resource agencies' objections. The district issued the permit on the basis of the approved modifications.

Corps officials identified a variety of reasons concerning why in other cases they did not include resource agency recommendations as permit conditions or modifications. These reasons included the following: (1) recommendations already were included in state permits, (2) recommendations were included in transmittal letters to applicants for their consideration because the Corps project managers believed the recommendations were not enforceable; (3) Corps project managers believed that no practicable alternatives were feasible; and (4) some suggestions were based on policy differences between the Corps and the resource agencies—for example, how to consider practicable alternatives or delineate wetland boundaries and the extent to which land clearing should be regulated—that the Corps will not consider in permit decisions. In some cases where resource agencies questioned whether their recommendations were included as permit conditions, the Corps believed the recommendations were included, albeit with slightly different wording.

In commenting on a draft of this report, the Department of Defense acknowledged that with only about 600 project managers it is not always possible for every district to accomplish the degree of coordination, feedback, and record keeping desired by the resource agencies. The Department said that the Corps has very little control over the number of applications it receives each year, but the Corps must evaluate each application in addition to its other duties. Individual applications may range from a simple bank protection fill to a large fill involving complex environmental, socioeconomic, legal, and other issues. Further, the Department believes that the number of more difficult applications is increasing.

Infrequent Use of Elevation and "Veto" Authority

The Corps and the federal resource agencies have negotiated memorandums of agreement that include procedural guidelines under which the resource agencies refer disagreements with district engineers to higher review levels within the Department of the Army. In addition to its elevation authority, EPA can prohibit disposal of dredge or fill material in certain situations, in effect vetoing permit decisions made by the Corps. The resource agencies have used the elevation procedures infrequently even though they sometimes disagreed with district engineers' decisions involving projects affecting large wetlands, as shown by our sample cases. EPA had completed veto action five times nationally, according to EPA headquarters officials.

Resource Agencies Seldom Use Elevation Authority

Among the resource agencies we visited, few appeal disagreements with Corps districts. According to resource agency officials, this is because the elevation procedures are very cumbersome and time-consuming, appeals rarely result in changes to district engineer decisions, their own agencies discourage use of the elevation authority, and most disagreements involve wetlands fills of comparatively small size. For example, an FWS headquarters official told us that since 1985, when the latest memorandum of agreement with the Corps was negotiated, one of the six elevations has resulted in overturning a district engineer's decision. The resource agencies, rather than elevate decisions, often negotiate with the Corps or applicant to arrive at some compromise that modifies the project while allowing the permit to be issued.

Table 3.2 shows the number of times the resource agencies we contacted in the respective Corps districts initiated elevation actions. The elevations include those that reached at least the division engineer level.

Table 3.2: Resource Agency Use of Elevation Authority by Fiscal Year

	Permit elevations initiated				
Corps district	**1986**	**1985**	**1984**	**1983**	**1982**
Baltimore	0	0	0	0	0
Jacksonville	17	9	1	3	14
Omaha	0	0	0	0	0
Portland	1	0	0	0	0
Vicksburg	0	0	0	4	3

Elevating Decisions Can Be Time-Consuming and Cumbersome

The current agreements between the Corps and the resource agencies allow only certain resource agency officials to elevate permit decisions.

According to the agreements, unless one of these designated individuals signs the agency's comment letter, the agency gives up its right to elevate the district's final decision. However, except for FWS, the resource agency officials with signature authority are not usually involved in evaluating and commenting on district public notices. According to memorandums of agreement with the resource agencies, they must comment within the comment period stipulated in the public notice, which means that NMFS and EPA must decide within that period whether their disagreements are significant enough to warrant the involvement of the regional administrator or regional director, the officials with signature authority.

According to many resource agency officials, the elevation process is resource-intensive, and they must ensure that timely actions occur in accordance with memorandums of agreement procedures. Since their personnel must respond to thousands of public notices each year in addition to performing other duties, they elevate only those decisions that have the best chance for reversal and involve significant wetlands or natural resources, the officials said.

The Department of Defense agreed that while the process provided for in the memorandums of agreement is cumbersome and time-consuming, it nonetheless gives the resource agencies a powerful tool to ensure that their interests are given full consideration. The threat of elevation has been an effective tool for the agencies to use in convincing applicants to modify their projects. The Department of Defense contends that the resource agencies do not make more formal use of elevation out of a lack of conviction rather than lack of authority. According to the Department, the development of different mechanisms for resolving differences of opinion will not resolve the basic differences between the Corps and resource agencies because the resource agencies are charged with protecting the resource without consideration of the other factors that comprise the public interest, while the Corps must balance many factors in the public interest in making decisions about permit applications.

District Engineers' Decisions Are Rarely Overturned

According to resource agency officials who interact with several Corps districts, when they have referred cases for review, the higher Corps review levels rarely reverse the district permit decisions. For example, in a Jacksonville district case that was referred by FWS, the Acting Director of Civil Works concluded that the district evaluated and issued the permit using incorrectly developed criteria. The Acting Director required the district to reevaluate its decision using the proper criteria.

The district's reevaluation, however, determined that the project benefits outweighed the detriments to the wetland resources, and the permit was issued over FWS' objections. This was the only case we found for fiscal years 1985 and 1986 that was initially ruled in a resource agency's favor.

During fiscal years 1982 and 1983, Vicksburg FWS officials attempted to appeal seven disagreements with the Vicksburg district. Six of these appeals were rejected by the Corps, although one was later reconsidered. In the seventh case, which involved a disagreement over spacing of oil and gas exploration wells in wetlands within a wildlife management area, the FWS withdrew its appeal.

The Vicksburg district Regulatory Branch Chief explained that the district's decisions are generally not overturned by higher levels because appeals are, for the most part, based on policy differences between the resource agencies and the Corps. In disagreeing with the Corps' policies and practices, FWS believes that the district (1) is reluctant to regulate land clearing activity within wetlands, (2) uses faulty rationale in applying the water dependency practicable alternative test, and (3) places low values on factors such as wildlife habitat in making permit decisions. According to the Regulatory Branch Chief, public input to the permitting process often reflects a misunderstanding of the program's purpose, and the public tries to get activities other than the deposition of dredged and fill material included under the regulatory purview of Section 404.

Most Disagreements Involve Small Wetland Acreage

In our sample permits from the Portland district, only one of the three cases where resource agencies recommended denial was elevated, and only to the Corps division level. EPA did not elevate this case beyond the division level because the Corps assured EPA that it did not view its decision to issue a permit in the case as precedent-setting, and the EPA determined that the case did not involve wetlands of significant acreage. The other two cases were not appealed because the resource agencies initially did not know permits had been issued and the issues involved were not significant enough to pursue.

According to the Chief, Water Resource Assessment Section, EPA region X, the agency has not elevated district decisions because none of the projects has been of sufficient size (over 5 acres) to warrant the effort

involved in pursuing a denial. Anytime a threat of elevation is perceived, the Chief of the district's Regulatory Branch calls his counterpart in the resource agency to discuss the issue and work out the problem. This communication often serves to eliminate the problem before the resource agency starts the elevation process and keeps good working relationships between the agencies, according to these officials.

EPA Uses Its Veto Authority Infrequently

In addition to its appeal rights, EPA, under Section 404(c) of the Clean Water Act, has the authority to veto a Corps permit decision and prohibit disposal of dredged or fill material at any site it determines would have unacceptable adverse effects on municipal water supplies, shellfish beds or fishery areas, and wildlife or recreational areas. As with appeals, EPA officials stated that their veto actions require extensive use of limited staff. Consequently, the agency uses this authority only after exhausting all other resolution options.

According to EPA headquarters officials, since passage of the Clean Water Act, the agency has completed veto action in only five cases nationwide; EPA region IV initiated three of the five veto actions. One EPA official stated, however, that because of current difficulties in processing successful elevations, the region will probably use more veto actions in the future to carry out its legislative responsibilities for protecting wetlands.

In commenting on a draft of this report, the Department of Defense stated that the threatened use of Section 404(c) veto authority can be as effective as actually using it. Department officials told us that use of Section 404(c) earlier in the application process would save the Corps and the EPA considerable time spent over disagreements about permit decisions.

Conclusions

The five Corps districts we reviewed used various means to involve resource agencies in the early stages of the permitting process. Generally, it appears that once the resource agencies formally comment on a proposed project, the Corps considers the resource agency recommendations. Because resource agency comments are advisory and the Corps must balance many factors in its public interest reviews, not all resource agency recommendations are adopted in Corps permitting decisions.

As evidenced by some of our sample cases and resource agency officials' comments, not all Corps districts provide the resource agencies with

feedback on the reasons for rejecting their recommendations. While we recognize that Corps district engineers must balance comments from many sources during the public comment period and this can result in the rejection of some resource agency recommendations, we believe that some Corps districts could establish more formal feedback procedures to advise resource agencies concerning the rationale behind the issuance of permits that do not include the resource agency recommendations.

Overall, however, the number of major disagreements involving Section 404 permit decisions between the Corps and the resource agencies appears to be small relative to the number of applications it receives, and it appears that the Corps generally accepts resource agency recommendations when the Corps considers them to be within the agencies' area of expertise. However, Corps districts sometimes issue permits even when resource agencies appear to have serious concerns with proposed projects. We estimate that the Corps districts issued permits over the denial recommendations of resource agencies in 37 percent of our sample cases. The Corps gave a variety of reasons for not adopting the resource agency recommendations, including their belief that no practicable alternatives were available to applicants and following Corps policies that may contrast with resource agency policies.

Despite the fact that, in several cases we reviewed, resource agencies believed that the Corps issued permits over their unresolved denial recommendations, the resource agencies rarely used procedures to get higher level review of district decisions. They used this elevation authority rarely because they believe that current formal procedures for resolving disagreements with the districts are ineffective. The agencies point out that elevating disagreements to higher levels for review requires extensive use of their limited staff, and they sometimes cannot get the support of their own agencies in such matters. Furthermore, according to resource agency officials, the procedures are cumbersome, and the higher review levels rarely reverse district permit decisions. In light of the low number of elevations by resource agencies and the general impression on their part that the process is not workable, it appears that the Corps and the resource agencies could establish a process through which differences of opinion concerning permitting decisions can be resolved.

Recommendations to the Secretary of the Army

In order to provide for a more effective public interest review in which environmental and developmental concerns receive full consideration as required by law, we recommend that the Secretary of the Army direct the Chief, Corps of Engineers, to

- work with the resource agencies to develop a feedback mechanism to provide the resource agencies with documentation that shows how their recommendations were addressed during the application review process, and, where applicable, reasons why recommendations were not accepted and
- develop, with the participation of the resource agencies, a mutually acceptable and simplified process under which district engineer permitting decisions can be appealed.

Agency Comments and Our Evaluation

The Department of Defense agreed with our recommendations, noting that feedback mechanisms are already in place and that resource agencies can review Corps permit documentation, including the disposition of agency comments at all district offices, on their own initiative. The Department stated that the Corps recognizes that documentation of and providing the rationale for rejecting comments or suggestions are important and that such issues are often the subject of contention in legal proceedings. The Department believes, however, that sometimes changes in projects that were made as a result of agency comments are not recognized by the agencies. Also, the Department said that to provide the resource agencies with the type of feedback that occurs during elevation actions for all permit actions would add to the already difficult job of project managers.

Although permit documentation is available at Corps districts for resource agency review, we believe that it would facilitate coordination between the Corps and the resource agencies if the Corps routinely provided the agencies with feedback on its handling of their public notice comments. This is especially true in those cases for which the Corps does not adopt the resource agencies' recommendations. Such a procedure could include, as a minimum, providing the agencies with copies of issued permits and the districts' statements of findings that address the Corps' disposition of their comments. As there is already considerable interagency discussion of permit applications and Corps districts generally require the preparation of statements of findings, which include information on the resolution of agency comments, we do not believe that it would add substantially to the work load of project managers to routinely share this information with the resource agencies.

Regarding the current procedure for elevating permit decisions, the Department of Defense stated that as one option the Corps would propose eliminating the formal memorandums of agreement appeal process and substituting a more informal process based on joint agency guidance documents. Other options that could be considered by the Corps and resource agencies include issuance of joint agency guidance on the current memorandums of agreement and/or revisions to those agreements. The Corps has already started a dialogue with the EPA and will approach the other agencies, according to the Department. EPA stated that any modifications to the elevation process must consider the respective roles and authorities of the agencies. We believe that if they can result in a mutually agreeable process for resolving conflicts, that any one of the above approaches would be a step in the right direction and that the dialogue with the resource agencies should continue.

The text of the agencies' comments, and additional GAO responses, are included in appendixes II through V.

The Corps Does Not Emphasize Monitoring and Enforcement Activities

The Corps districts we visited did not routinely perform surveillance to detect unauthorized activities or inspect all permits to ensure that permittees adhere to permit conditions. Also, some investigations of reported unauthorized activities did not occur for months after they were reported or not at all. Consequently, some unauthorized activities may have gone undetected and adverse effects in wetlands may have occurred. According to district officials, their personnel are primarily involved in permit processing, and monitoring has received a low priority. The Department of Defense contends that the Corps does as much as should be expected with the limited resources available.

In pursuing violators of permit requirements, the Corps rarely used available civil or criminal remedies, preferring instead to rely on administrative procedures to attempt problem resolution. The Corps districts also suspended and/or revoked few permits because permittees did not comply with permit conditions. These policies and practices may have contributed to cases of prolonged noncompliance with permit requirements.

EPA, which has independent enforcement authority for unauthorized and unpermitted activities, also has performed limited surveillance and has used its enforcement authority sparingly. EPA states that current manpower and funding levels affect the extent to which it can participate in the enforcement of Section 404. The other resource agencies we visited are not specifically charged with enforcement authority under the Clean Water Act and do not routinely engage in monitoring or enforcement activities.

Unauthorized Activities May Not Be Detected

Corps regulations authorize district engineers to conduct surveillance to detect unauthorized activity. However, surveillance, including aerial surveillance to detect unauthorized filling of wetlands, is not a high priority in the Corps districts we visited. None of the districts had systematic ways to detect unauthorized activities, opting instead to devote most staff time to permit processing. Some states may have programs that would assume some of this responsibility; however, we did not review state programs, and the Corps and resource agencies we visited did not have extensive information on state program effectiveness. Some district officials admitted that some violations may go undetected, but they were not able to estimate the magnitude of the problem. While the Department of Defense concurred that unauthorized activities may be going undetected, it said that surveillance and pursuit of unauthorized activities are the responsibility of EPA.

Department of Defense and Resource Agency Officials Agree That Surveillance Is a Low-Priority Activity

Corps regulations encourage district engineers to involve Corps employees; other federal, state, and local agencies; and the public in reporting suspected violations. The majority of the unauthorized fills in the districts we visited were reported by Corps officials, individuals, and state or local officials.

According to officials in each of the five Corps districts we visited, surveillance to detect unauthorized activities receives less priority than permit processing in their offices. In many cases, surveillance and monitoring takes place only when it can be combined with some high-priority district activity such as site investigations during permit processing. Although some states appear to have extensive wetland protection programs, we did not assess their effectiveness, and the Corps districts and resource agencies we visited could only provide general information on the extent to which these programs might be monitoring activities occurring in wetlands. In some cases, they disagreed on the effectiveness of state programs. The following comments on surveillance are indicative of those obtained from officials in the five districts.

- The Assistant Chief of the Regulatory Branch, Baltimore district, told us that if staff in the region actively looked for violations, district staff would find "many more cases of unpermitted fills than they would be able to handle." Consequently, surveillance activities are passive within the district.
- According to the Chief of the Jacksonville district's Regulatory Division, those involved in monitoring and enforcement activities spend only about 5 percent of their time on surveillance. As in the other Corps districts, the Chief attributed this to the low priority assigned to surveillance and monitoring in general.
- The Chief of the Regulatory Branch in the Portland district stated that the district does not have the personnel or resources to conduct surveillance. As a result, he said the district responds reactively to public complaints rather than seeking out violations. Also, officials in charge of permitting and enforcement told us that staff are not available to monitor all issued permits nor to investigate all reports of suspected violations.
- Surveillance activities are normally performed by the Omaha district's field office personnel in conjunction with other regulatory duties, according to the Chief of the Enforcement Section. For example, if field personnel need to pre-inspect a potential project site, they will survey the area in the vicinity of the travel route and note any apparent unauthorized activities. While en route, the field personnel will also inspect

any permitted projects in the area that can be readily incorporated into the trip.

- The Chief of the Vicksburg district's Regulatory Branch told us that the biggest problem with the district's Section 404 program is the lack of effective enforcement. This is primarily due to budget limitations that have forced reductions in staff travel for activities such as surveillance and inspections.

The Department of Defense stated that although unauthorized activities may go undetected under current program management arrangements, the Clean Water Act vests the Administrator of EPA with enforcement authority for unauthorized discharges, not the Secretary of the Army, who is empowered to enforce only against permit violations. The Corps has agreed as a matter of comity to use its limited resources as the front line of enforcement for Section 404 since 1976.

Most of the resource agencies we contacted reported few unauthorized fills. This is likely due to the fact that officials of these resource agencies told us that none of them had comprehensive surveillance programs to routinely monitor their respective geographic areas for suspected unauthorized filling in wetlands. Instead, the federal resource agencies report unauthorized activities that they detect while performing their other duties or when they are made aware of them by others.

Aerial Surveillance Not Being Extensively Used

According to Corps district officials, aerial surveillance is more efficient than ground surveillance because it covers more areas in a shorter time frame. This method also gives ready access to remote areas and avoids problems of access to private lands. Aerial surveillance also helps to provide monitoring of an area over a period of time. For example, aerial photographs of an area prior to and after a violation can be compared to show the size, shape, and degree of the violation dramatically, accurately, and effectively. This type of information is an effective tool in supporting and justifying enforcement actions. According to staff in each of the districts we visited, aerial surveillance has been curtailed by budget constraints. The following information was provided by Corps district regulatory officials.

- The Chief Enforcement Officer in the Baltimore district told us that the district has made seven flights in the past three fiscal years, six of which were to inspect specific reported or suspected violations. He told us that he did not anticipate any flights in 1988 due to a lack of funds.

- The Jacksonville district established a goal to conduct aerial surveys districtwide on a quarterly basis. Lack of funding restricted such flights to twice a year in some areas.
- District officials in Omaha said that 13 aerial surveillance flights were made during fiscal year 1986. A $282,000 reduction in the district's regulatory program funding during fiscal year 1987 prompted the elimination of aerial surveillance for that year, according to the Chief of the Regulatory Branch. However, EPA did provide funds for two aerial surveillance flights during the year.
- Portland officials told us that the last aerial investigations in the district occurred in the spring of 1986.
- The Chief of the Regulatory Branch in the Vicksburg district told us that the district has not used aerial surveillance routinely since 1982. According to this official, aerial surveillance generally yields a significant number of minor projects that must be investigated on the ground to determine if violations have occurred. He said the Enforcement Section does not have the resources to devote to such follow-up inspections. However, he did not believe that major projects go undetected because adequate on-the-ground coverage is provided by other Corps personnel, other agency personnel, and the public.

Corps Investigations of Suspected Unauthorized Activities Sometimes Delayed for Long Periods

After unauthorized fills are reported, Corps regulations require that investigations be conducted in a timely manner to confirm whether a violation has occurred and, if so, its extent and the responsible party. Corps district officials should schedule investigations on the basis of the nature and location of the suspected violations, the anticipated impacts, and the most effective use of available resources, according to Corps guidance.

Corps regulations do not define what would be timely investigation of reported unauthorized activity; however, we found that of the 125 suspected cases of unauthorized filling in wetlands that we reviewed, the Corps did not investigate many cases for several weeks or even months after they were reported. Also, we could not determine the timeliness of 34 investigations due to incomplete records maintained in the districts. Twenty-eight of these situations were in the Baltimore and Jacksonville districts. In two districts—Portland and Vicksburg—some reported unauthorized fills were not investigated at all. Table 4.1 shows the number of days it took the Corps to investigate cases for which we could establish the reporting and investigation dates for suspected unauthorized fills. The vast majority of the reported cases involved unpermitted

activities, although a few were for noncompliance with permit conditions.

Table 4.1: Timeliness of Corps' Investigation of Reported Suspected Unauthorized Activities

	Number of days for Corps to investigate activity				
Corps district	Unable to determine	0-5 days	6-20 days	21-60 days	Over 60 days
Baltimore	16	4	1	1	3[a]
Jacksonville	12	8	3	2	0
Omaha	2	8	11	2	2
Portland	2	9	10	3	1
Vicksburg	2	3	5	5	10
Total	**34**	**32**	**30**	**13**	**16**

[a]Some indication of prior investigation was present, but actual visit was not documented.

The longer it takes to investigate suspected unpermitted activities, the more likely it is that additional filling or unauthorized work will result in the loss of valuable wetlands. Although the wetland acreage affected by unauthorized activities we reviewed was usually small and involved projects such as bulkheads and minor dredging rather than major projects such as marina construction, a few potential violations involved large acreages.

In our sample of 25 cases of unauthorized activities in Omaha, all of which involved wetlands, we were able to identify about 2,000 acres of wetlands that were adversely affected as a result of unpermitted activities. Two projects involved the majority of these wetlands. In contrast, in the Portland district, the extent of the violations ranged from placing 50 to 6,600 cubic yards of fill in a wetland. In only two cases did the Corps specifically state the number of acres involved, and these were 1.4 and 3.6 acres. Based on enforcement file documents or district officials' comments, the following information was obtained concerning why some of the investigations of our sample of suspected unauthorized activities took several weeks or months to complete.

- Vicksburg Regulatory Branch officials explained that their practice is to assign top investigative priority to ongoing violations; however, 7 of the 10 suspected violations that took longer than 60 days to investigate were reported as active violations. Four of these were not investigated for more than 200 days after the enforcement section received the initial report of the suspected violation. In practice, violations within remote areas are accumulated so that a single trip can cover multiple investigations, the officials said.

- According to the Portland district enforcement officer, the district was only able to investigate 62 of approximately several hundred reports of suspected unauthorized activities in fiscal year 1986. Some of the reported unauthorized activities that were not investigated were likely duplicate reports of the same suspected violation or were activities not requiring permits, according to Portland district staff. The enforcement officer told us that the district conducts most of its investigations in the western part of the state along the coast and in the Portland area. He agreed that because the district does not conduct inspections in the eastern part of Oregon, undetected unauthorized discharges may be occurring. The enforcement officer also told us that the one sample case that took over 60 days to investigate received a low priority because the fill had already been completed and it was at a distant location. It was grouped with several other violations for later investigation to save on travel funds and staff time, he said.
- No suspected unauthorized activities reported to the Jacksonville district took more than 60 days to investigate. The case that took the longest (43 days) to investigate was initially observed by the Corps during an aerial investigation that was followed up by a ground site inspection.

In commenting on a draft of this report, the Department of Defense agreed that Corps investigation of suspected unauthorized activities sometimes is delayed for long periods; however, under the Clean Water Act, they said, the mission of the Corps is evaluating applications and enforcing against permit violations. Again they pointed out that EPA has the authority for acting against those who discharge material without a permit.

Limited Involvement of EPA in Enforcing Section 404

The Clean Water Act of 1977 provided EPA with independent enforcement responsibility for unauthorized unpermitted discharges. This authority was strengthened with passage of the Water Quality Act of 1987. The 1987 act authorizes EPA to issue administrative orders imposing corrective conditions and/or monetary penalties against parties who engage in unauthorized unpermitted fill activities. The Corps has similar authority to issue administrative orders for violations of permit conditions. According to EPA and Corps headquarters officials, they are developing a memorandum of agreement defining how their new authority for administrative penalties under the Water Quality Act of 1987 will be implemented.

Our work shows that EPA's involvement in Section 404 enforcement activities covered by our review has been selective and has varied by

EPA region. For example, EPA region VI officials said that the region has had no functioning Section 404 enforcement program over the last 8 years. Therefore, EPA has relied on the Corps and other agencies to carry out surveillance and enforcement. In May 1987, region VI reemphasized its enforcement initiatives, but as yet does not have sufficient staff to do the job within its five-state region, according to region VI officials. As evidence of the new emphasis now being placed on enforcement of Section 404 in the region, EPA headquarters officials told us that region VI issued its first administrative order during the past year and has work in process on several others. EPA headquarters officials, however, indicated that staff and funding levels for the Section 404 program affect the extent to which they can participate in enforcement activities.

According to EPA region III officials, the region is one of the most active in enforcement of the Section 404 program; however, they told us, they have a "gentlemen's agreement" with the Baltimore district that has resulted in the bulk of the enforcement work involving unpermitted fill detection and resolution falling on the Corps. EPA is currently emphasizing advanced identification studies. These studies are attempts to identify specific areas—including wetlands—in advance of permitting decisions that are not likely to be approved as dredge and fill sites. EPA is using the results of the studies to educate the public about wetlands in their regions.

Nationally, EPA regions varied considerably in their issuance of enforcement actions pursuant to Section 404. Although EPA headquarters officials told us that they cannot provide specific information on the number of administrative orders its regions issue, EPA does report on aggregate enforcement actions by the regions. (According to EPA headquarters officials, these numbers would roughly equal the number of administrative orders issued.) For fiscal years 1986 and 1987 combined, EPA regions III and IV had 57 and 33, respectively, of the 194 total EPA enforcement actions for the 2 years. In contrast, region VI had one enforcement action and region VIII had six for the 2 years.

We reviewed recent information that shows that EPA has already utilized its powers under the Water Quality Act of 1987 to impose fines in certain areas of the country. The act authorizes administrative penalties that could reach $125,000 per violation depending on the nature and gravity of the violation. If properly implemented, these provisions could serve as deterrents to violations of Section 404 requirements, especially those involving smaller projects.

According to EPA, another possible means to increase the enforcement presence for the Section 404 program would be to encourage more states to assume those program responsibilities that are allowed by law. They said that final revised regulations setting forth the requirements and procedures for states to take over certain aspects of the program were recently issued. However, it should be noted that incentives, such as administrative funds, may be necessary before many more states would be encouraged to assume this responsibility, according to EPA.

The Corps Does Not Inspect All Permits for Compliance With Conditions

Corps regulations leave inspection of permitted activities for determining compliance with permit terms and conditions to the discretion of Corps district engineers. As table 4.2 shows, the Corps districts we visited do not inspect all permitted sites, and we found that documentation of site visits is sporadic.

Table 4.2: Corps' Compliance Inspections at Sample Sites

Corps district	Sample size	Documented compliance inspections
Baltimore	42	1[illegible]
Jacksonville	40	[illegible]
Omaha	40	2[illegible]
Portland	43	1[illegible]
Vicksburg	32	

Although it appears that some districts we visited conduct very few compliance inspections, the projects included in our review may not have been completed at the time of our fieldwork, and some may not have been started. For some of the sample projects, we were unable to determine when projects were started or completed because some districts did not record such dates. Therefore, some of the projects above may yet receive appropriate compliance inspections. For these reasons we did not attempt to make estimates about the number of projects needing inspections.

According to Corps officials, statistics on site inspections may be misleading because some inspection visits may not be documented. Further the states and resource agencies may visit sites and advise the Corps of their findings, which may not be documented in Corps files.

The Department of Commerce believes that Corps districts need to do a better job of recording data for each permit, including (1) the date construction started, (2) the date construction was completed, (3) the project priority rating for inspection, and (4) the date and results of site compliance inspection. The officials said that this information is seldom recorded by Corps districts.

The results of our review at the five Corps districts are discussed below.

Baltimore District

Determining whether the Baltimore sites we reviewed were inspected was difficult because project managers did not always maintain records of site visits, the district has no specific procedures for conducting compliance inspections, and no form has to be completed for such inspections. Project managers are required to prepare written documentation for any activity involving a project, but they admitted that this is often not done for compliance inspections. They also told us that, because of time constraints, not all individual projects are inspected for compliance with conditions set forth in permits, and lack of staff prohibits routine monitoring of general permits.

Monitoring efforts are mostly reactive, stemming from a complaint or conflict during the permitting process, project managers said. Some compliance inspections are conducted when the officials visit the permit area for other reasons. Project managers' criteria for determining which sites they visit include the following:

- sites being developed by problem contractors,
- cases that are controversial with the resource agencies,
- large-scale and visible projects,
- projects whose plans have been radically modified, or
- projects about which the district has received complaints.

Jacksonville District

The Jacksonville district infrequently inspects projects to assure compliance with permit conditions either during or after construction. District estimates of the frequency of various branch office regulatory personnel group inspections ranged from 0 to 15 percent during construction and from 0 to 30 percent for projects after completion of construction. The district is developing procedures to follow up on permit conditions to determine compliance, according to district officials.

No follow-up inspections were shown in the 40 individual permit sample cases we reviewed in Jacksonville. In many instances field personnel do not formally document inspection visits, and district policy does not require such reports, district officials said. However, individual inspectors may maintain personal records on inspection results that do not become part of the case record, according to the officials.

An NMFS study of individual permits issued by 7 Corps districts, including the Jacksonville district, for the period 1981 through 1985 showed that in 425 projects that were completed or underway, the applicants complied with conditions in 79.5 percent of the permits. The compliance rate shown for the Jacksonville district was 78.5 percent; however, we did not verify this NMFS information.

Omaha District

At the Omaha Corps district, 26 inspections at the 40 projects we sampled were documented. The 26 inspections occurred on 20 projects. Of the 20 Omaha projects we reviewed that were authorized under regional general permits, 1 received a compliance inspection. Compliance inspections are not done for all permitted projects because of a lack of funds, according to the Chief of the Monitoring and Enforcement Section.

In March 1986, the Omaha Corps district distributed to its field offices written criteria and procedures on conducting compliance inspections. The directive, which was to become effective at the beginning of fiscal year 1987, required compliance inspections on individual permits within 1 year of the date of issuance and upon completion of the project, if applicable. Because the district had not implemented a system to track project status, including start and completion dates, this inspection procedure had not been initiated at the time of our fieldwork.

Portland District

According to the Chief, Permit Evaluation Section, Portland district project managers' time is used to process permits rather than conduct routine permit follow-up inspections. However, a project manager occasionally will drive by a permitted site and, if unauthorized activity is taking place, will file a complaint report, the Chief said. Although the district documented 11 compliance inspections on the 43 individual permits we reviewed, no inspections were conducted on the 20 general permits we reviewed.

According to the Chief, Permit Evaluation Section, and the Enforcement Officer in Portland, there is no program to ensure compliance with permit conditions. The Enforcement Officer agreed that violations may be occurring, but he could not document how severe a problem may exist.

Vicksburg District

The Regulatory Branch Chief of the Vicksburg district indicated that the district does not have the staff resources or the funds to routinely carry out compliance inspections. Only 1 documented compliance inspection was included in the 32 individual permit files we reviewed, and none of the general permits we reviewed contained documentation of compliance inspections.

According to the Chief, compliance monitoring is initiated on the basis of the scope of the permitted project, with large or environmentally sensitive projects receiving a higher priority for compliance visits. Generally, the Regulatory Branch notifies the Corps' area offices of permits issued in their areas and sends a compliance checklist that area office staff are supposed to complete on each compliance visit. The Regulatory Branch Chief acknowledged that since the area offices request funding from the Regulatory Branch to conduct these inspections and there have been budget cutbacks, they may not be done.

Corps Districts Use Administrative Rather Than Civil and Criminal Remedies Even When Violations Appear Serious

Corps district engineers have several options they can pursue after they establish that unauthorized activities have taken place. They can negotiate restoration or mitigation agreements, issue after-the-fact permits, or seek administrative, civil, or criminal remedies. In pursuing its enforcement responsibilities, the Corps districts and EPA rarely used available civil and criminal remedies, including administrative penalties, preferring instead to rely on the voluntary actions of violators to rectify the problems observed. This was also true for some of the more serious violations in our samples.

Civil and Criminal Penalties Used Infrequently

Under the Clean Water Act, any person who willfully or negligently violates any condition or limitation in a permit is to be punished by a fine of up to $25,000 per day of violation or by imprisonment for not more than 1 year, or both. If a violator is convicted more than once, the fine could reach $50,000 per day of violation, and imprisonment could be for up to 2 years.

Besides federal convictions under the Clean Water Act, some Corps districts also refer cases to state agencies for prosecution. For example, the Baltimore district, which covers at least part of several states including Pennsylvania, refers some cases to the Pennsylvania Fish and Game Commission, which is authorized to impose on-the-spot fines ranging from $25 to $2,500. Also, a sample case from the Jacksonville district was closed by the Corps when the state of Florida successfully sued a violator and imposed a $13,000 fine.

Despite these available authorized legal actions, the five Corps districts we visited generally pursued administrative solutions with violators even if it took months or years to resolve problems. Although most violations of permit requirements we reviewed involved relatively minor infractions and some individuals may not have been aware of Section 404 permit requirements, some cases involved more serious violations and violators who did not abide by Corps orders to stop activities that violated permit standards.

In the five districts, six civil actions and no criminal actions were documented as having been pursued by the Corps districts during the 3 fiscal years 1984 to 1986. Both the Portland and Vicksburg districts reported no civil or criminal actions for the 3-year period. In the Baltimore district, two civil actions were reported in each of the years 1984 and 1985, but none was reported in 1986. In the Omaha district there were two civil actions in 1985 and none in 1984 or 1986. Jacksonville does not maintain information on such enforcement matters, according to the Acting Chief Counsel.

In addition to the few civil and criminal proceedings, only two monetary fines imposed as a result of Corps-initiated action were documented in the districts. One in the amount of $10,000 occurred in the Vicksburg district, and one for $2,500 represented action taken on one of our Jacksonville sample cases.

Administrative Remedies Emphasized Even When Unauthorized Fills Appeared to Warrant Referral to U.S. Attorneys

Upon substantiating violations of Section 404 permitting requirements, Corps district officials we contacted were not inclined to pursue legal remedies for several reasons, including the high costs of adjudication, limited environmental impact of most violations, perceived adversarial nature of some courts to the Section 404 program, and tendency of violators to voluntarily restore affected areas. Although most of these actions appeared justified, we found that the Corps districts pursued administrative remedies with violators in several cases that involved

large unauthorized fill areas or open defiance of Corps cease-and-desist orders.

The two methods most often used to resolve unauthorized activity cases in the enforcement files we reviewed were requiring violators to restore affected areas to their original condition and issuing after-the-fact permits. For example, of the 125 suspected unauthorized activities that we reviewed (87 of which were found to be actual violations), restoration was required in 36 cases and after-the-fact permit applications were accepted in 25 cases. Mitigation was seldom required in the sample cases.

The following comments by Corps district officials or others who deal with the five districts concern the rationale for relying on administrative rather than legal remedies when violations are detected. Also, we discuss some of our sample cases from each district that appeared to involve open defiance of Corps cease-and-desist orders or large unauthorized fills.

Baltimore District

According to a U.S. attorney who coordinates Baltimore Corps district legal activities in Maryland, no cases have been forwarded to them by the district for formal prosecution and/or litigation in the past 5 years. A process called "minor listing" has become the standard method that the Baltimore district uses to deal with unpermitted fill violations. According to the Chief of the Baltimore district's Enforcement Section, minor listing is a procedure that was developed for use when violations with minimal environmental impact occur, but a permit would not normally have been granted if required permitting procedures had been followed. Under the minor listing procedure, the U.S. attorney sends violators a letter citing them for violating Section 404 and warning them that any other violations may be subject to prosecution by the federal government. Although officials from the U.S. attorney's office told us that minor listing is a relatively weak sanction, it does provide public awareness of the Section 404 program and is a likely deterrent to future violations by so-called "Mom and Pop" violators.

In the Baltimore district six of the cases in our enforcement sample were minor listed or designated for such action. However, three of these cases had previously been categorized by Corps enforcement officers as major infractions. Reasons provided by Corps enforcement officials for designating these cases for minor listing rather than pursuing other legal remedies included (1) upon further investigation the unauthorized fill

was considered too small and the situation was not precedent-setting, (2) restoration or mitigation was impossible since the fill had been completed long before the violation was investigated by the Corps, and (3) the Corps' attempt to refer the case to the state of Pennsylvania for prosecution failed because the state's statute of limitations had expired.

Jacksonville District

Jacksonville district regulatory personnel refer potential legal actions to the district's counsel after they have exhausted all means to obtain voluntary compliance. The district counsel initially attempts to negotiate acceptable restoration agreements with violators. If acceptable agreements cannot be reached, the counsel refers the cases to the U.S. attorneys. Two of our sample cases were referred to the U.S. attorney.

A U.S. attorney obtained a $2,500 fine and an injunction from further unauthorized activity against one violator. In the other case, the violator complied with a consent decree that required total restoration of the wetland site. A U.S. attorney told us that the Jacksonville district refers cases that usually result in prosecution and the district provides adequate evidence demonstrating careful review prior to referral for prosecution. We believe, however, that some of our other sample cases such as the following may have been appropriate candidates for referral.

- A Florida development company deposited fill in wetlands without obtaining a Section 404 permit. Jacksonville district field investigators issued a cease-and-desist order in September 1985. NMFS, EPA, and FWS recommended that all unauthorized fill be removed and that the area be regraded to wetland elevations and allowed to revegetate naturally. FWS further stated that the violator was aware of permit requirements. EPA recommended that the case be referred to the U.S. attorney if the violator did not comply with the FWS-recommended restoration plan. The district, however, issued an after-the-fact permit for fill material in wetlands.

Omaha District

In pursuing its enforcement responsibilities, the Omaha district has seldom used available civil and criminal remedies or administrative penalties. In most cases the district has obtained compliance through administrative means such as voluntary restoration rather than resorting to legal action. Within the last 3 years, the district pursued legal

action through the U.S. attorneys in only three cases. However, the following case from our Omaha sample involved a large unpermitted wetland fill for which EPA, with the consent of the district, was pursuing restoration or mitigation rather than taking legal action.

- Unpermitted activities in the Sandhills area of Nebraska resulted in the destruction of an estimated 165 acres of prime wetlands. The unpermitted filling lasted for 5 years after the district became aware of them. In 1981, the Omaha district's counsel notified the U.S. attorney's office of this situation. However, an assistant U.S. attorney notified the district that the case was being closed due to insufficient evidence. The case went into an inactive status for over 4 years, but enforcement action was reopened in 1985 after Corps aerial surveillance revealed additional filling in the area. The Corps issued a cease-and-desist order, and since December 1985 the district and EPA have been negotiating a settlement with the landowners to provide mitigation measures if the landowners can prove that full restoration is not feasible. EPA does not plan to seek fines against the landowners.

Portland District

District officials in Portland, including the Chief of the Environmental and Inspection Section, the Special Assistant to the U.S. Attorney,[1] and project managers all believe that there is little or no incentive to seek civil or criminal penalties. The Chief of the Environmental and Inspection Section told us that fines have not been levied by the district since 1981, and only four cases in 1980 and 1981 could be identified; none of the fines exceeded $2,500. According to the Special Assistant, certain factors work against pursuing legal action. Given the low amount of assessed fines and the fact that pursuing legal action is time- consuming and costly, it is uneconomical to seek legal remedies when voluntary compliance can generally be achieved. Further, if the action does not affect a significant wetland, and none have to date, the Corps probably would not get much support from the courts or the public, he said.

The Special Assistant had two cases in process, one involving a repeat offender. However, he told us that he would not seek fines or other legal remedies in either case because he believes they can best be handled through voluntary compliance measures. In one of these cases, the Portland Corps district had to issue two cease-and-desist orders to a fuel processing company that had deposited about 5,000 cubic yards of

[1] An attorney in the Corps' Portland district counsel's office has been appointed Special Assistant to the U.S. Attorney.

unauthorized fill material in wetlands. After issuance of the first cease-and-desist order, the company made no effort to avoid further wetland fill and consequently fresh fill continued to accumulate on the wetland. Currently, the Corps is pursuing voluntary restoration and plans to issue an after-the-fact permit.

Vicksburg District

According to the Regulatory Branch Chief of the Vicksburg district, the district's practice has been to continue the use of administrative means to resolve enforcement problems, even when violators are uncooperative. This approach has been taken because, during recent years, the district's counsel has frequently discouraged the use of legal action in enforcement matters, the chief said. In his opinion, the district's reluctance to pursue litigation against uncooperative violators has sent a clear message to the public that there is little risk of penalty for violating Section 404, and as a consequence some cases may continue unresolved for years.

The district's counsel explained that the criterion for referring enforcement cases for litigation is to select only those cases that can clearly be won because the regulation of private land is not readily accepted in the district's area and judges have indicated they will be adversarial toward Section 404 cases. One area judge told the district's counsel that he viewed the Section 404 program as unconstitutional. While acknowledging that regulation of private land may not be readily accepted by the courts, the Department of Commerce believes that it is important to keep in mind that, in many states, coastal wetlands are property of the state.

Two U.S. attorneys we contacted who deal with the Vicksburg district varied in their criteria for selecting cases for legal action. A U.S. attorney in Louisiana's eastern district explained that Section 404 cases referred by the Corps are considered in the selection process against the merits of cases submitted by other federal agencies. Selection for litigation is based on choosing cases that provide taxpayers the most for the federal resources expended on litigation. The attorney noted three criteria that may be applied to select Section 404 cases for legal action. They are (1) cases involving large wetlands, (2) cases viewed as precedent-setting and involving large commercial development projects in wetlands, and (3) cases where a clear and significantly detrimental environmental impact is an issue. In contrast, a U.S. attorney in Louisiana's western district indicated that any case, large or small, referred by the

Vicksburg district would likely be accepted because the government's intent to enforce Section 404 needs to be demonstrated.

The following case from our sample demonstrates how lengthy negotiations between the Corps and violators of Section 404 permit requirements can complicate enforcement action.

- In July 1981, the Vicksburg district denied a permit for the construction of levees to develop a catfish farm within certain wetlands. In September, an investigation revealed that levee construction was being done in the wetlands despite the district's permit denial. The district issued a cease-and-desist order directing that the work be stopped. The violator disregarded the order and continued the work. The Regulatory Branch referred the matter to the Vicksburg district counsel for consideration of legal action. The matter, however, was not referred to a U.S. attorney's office, apparently because the violator subsequently encountered financial problems that prevented him from further construction or restoration of the area.

  In November 1985, the district renewed administrative actions with a new owner who had acquired the property through a foreclosure sale. The new owner agreed to restore the area by March 1986, but subsequently received three extensions of the order. In January 1987, the Corps accepted the owner's offer of a perpetual wildlife easement on about 90 acres in another county in exchange for the Corps' withdrawing its restoration order.

In commenting on a draft of this report, the Department of Defense concurred with our observations regarding limited use of civil and criminal penalties against violators; however, they explained that there are several underlying reasons for not using judicial action, including the following:

- Years of experience with the Department of Justice have resulted in most districts' taking administrative action to get a quicker resolution of the problem, rather than pursuing the involved paperwork and delay necessary to attempt to convince the U.S. attorney to take the case.
- The U.S. attorneys are for the most part as overloaded as the Corps enforcement program and are willing to pursue only the most significant violations. Civil cases involving the filling of a few acres of wetlands cannot compete for attention with drug enforcement and other criminal cases.

- The Corps has traditionally viewed seeking voluntary compliance rather than punitive legal action as "good government." The issues and controversies surrounding government regulation of the use of privately owned properties are not easily resolved on a national or individual case basis.

The Department believes that the EPA administrative fine authority authorized under the Water Quality Act of 1987 is a way to shore up a recognized weakness in deterrence of unauthorized activities.

We agree that the pursuit of legal action is not appropriate in all cases involving violations of the Section 404 program; however, some cases in our samples involved serious violations of program requirements that warranted referral to U.S. attorneys. In addition, Section 404 is a regulatory program that we believe warrants a strong enforcement presence if it is to prevent the unnecessary loss of valuable wetlands.

Few Permits Are Suspended or Revoked

District engineers may reevaluate permits and their conditions on their own, at the request of permittees, at the request of third parties, or on the basis of periodic compliance inspections. On the basis of the reevaluation, they can initiate action to modify, suspend, or revoke a permit if such action is in the public interest. When district engineers determine that permittees have violated the terms or conditions of their permits, the district engineers can attempt to resolve the violation through any of several means, including (1) getting permittees to voluntarily bring their projects into compliance, (2) allowing permits to be modified, or (3) issuing compliance orders that specify a time period of not more than 30 days for bringing the project into compliance. If permittees fail to adhere to such orders within the specified time, district engineers may consider suspending or revoking their permits, or they may recommend legal action.

The districts we visited suspended or revoked permits infrequently, preferring instead to pursue administrative remedies for bringing about compliance with permit conditions or allowing permits to be modified. According to Corps headquarters officials, many permit modifications are made throughout the year, which might explain the low number of suspensions and revocations.

The five Corps districts we visited could not identify any permit revocations during fiscal years 1984 to 1986. The Omaha district did not maintain records of suspensions or revocations prior to fiscal year 1986,

when it reported six suspensions. There were 10 documented suspensions in the other 4 districts. Of these, Baltimore had one; Jacksonville, five; Portland, none; and Vicksburg, four. The five Jacksonville suspensions date back to 1977; the Baltimore, Portland, and Vicksburg suspensions reflect data from fiscal years 1984 to 1986.

Conclusions

Surveillance to detect potential unauthorized activities in their areas of jurisdiction is not a high priority in any of the five Corps districts we visited. Corps district officials place primary emphasis on the processing of permits. The districts also did not investigate many suspected unauthorized fills for weeks or months after they were reported, and many issued permits were not monitored for compliance with permit conditions. Although the lack of records prevented us from documenting the full extent of the potential problem, this frequent lack of monitoring could be resulting in the loss of valuable wetland resources if unauthorized activities are not discovered and dealt with in a timely manner.

Lack of staff and budget constraints at Corps district offices and the resource agencies are the primary reason given by agency officials for the limited surveillance and monitoring. However, it appears that if the Corps and EPA better coordinated their combined resources, they could bring about a more comprehensive and systematic monitoring and enforcement effort.

When unauthorized activities were identified, rather than seeking legal sanctions against those who did not comply with permit requirements, district officials usually chose to seek voluntary compliance and other administrative remedies. These most often included restoring areas or issuing after-the-fact permits. Although this may be appropriate action in many cases, the districts pursued administrative procedures in some cases where violators openly defied Corps cease-and-desist orders. It appeared that some of these cases warranted referral to U.S. attorneys for possible legal actions.

The Corps districts we visited also suspended and revoked few permits. Part of the explanation for the low number of suspensions and revocations could be the lack of routine compliance inspections by the Corps districts to determine if permittees are adhering to permit conditions. Without such inspections it would be difficult to substantiate suspension or revocation actions.

EPA, which has independent enforcement authority under the Clean Water Act, has used its authority sparingly. While there is some preliminary indication that the 1987 amendments to the act, which give both EPA and the Corps increased enforcement authority, are being used by EPA, it is too early to judge how effective an enforcement tool this new authority will be over time.

Recommendations to the Secretary of the Army

In order to strengthen enforcement of the Section 404 program, we recommend that the Secretary of the Army direct the Chief, Corps of Engineers, to do the following:

- Develop, with the participation of EPA, a coordinated enforcement program utilizing the combined resources of both agencies and others to deal with violations of Section 404 permit requirements. Such a program should involve routine surveillance, compliance inspections, timely investigation and reporting of unauthorized activities, and appropriate penalties where authorized.
- Establish a national oversight program to evaluate Corps district performance in enforcing the Section 404 program.

Agency Comments and Our Evaluation

While the Department of Defense supports the need for more coordinated use of Corps and EPA resources in enforcing the Section 404 program, it does not believe that even the combined resources of the agencies are sufficient to handle an inspection and after- permit follow-up for the estimated 30,000 individually permitted actions (Section 10 and/or Section 404) that are in an authorized construction period at any given time. According to the Department, the logistics and cost of inspecting each of these would be considerable, given that the Corps has only about 150 enforcement project managers who are overloaded with program jurisdictional determination decisions and other duties and the EPA has less resources. The Department contends that the Corps does as much as should be expected with the limited resources available.

Regarding the Department of Defense concern that about 30,000 individual permit actions may be present in the 36 Corps districts at any given time, we believe that the number needing inspections during a year would be significantly less because, for example, construction would not have started on many projects. If the Corps developed a system similar to the proposed Omaha district compliance inspection system, which would include a tracking mechanism, the districts could make more

informed judgments regarding the need for project compliance inspections.

EPA, while agreeing that specific emphasis on increasing the enforcement effort is needed, was concerned that enforcement activities, including surveillance, are time and resource intensive. EPA believes that any significant increase in enforcement activity may result in a decrease in some other program activity such as permit processing. Nonetheless, EPA was in favor of increasing enforcement efforts even if an adjustment of existing resources was required.

The Department of the Interior stated that enforcement should be made a higher priority by the Corps. They also believe that the Corps may need to realign its current resources or seek additional ones for such an effort to be effective.

The Department of Defense agreed with the need to increase oversight of the Section 404 enforcement program and stated that the Corps has taken steps to increase its oversight of district enforcement efforts. For example, the Corps has (1) revised its enforcement reporting requirement from an annual to a quarterly basis to strengthen its oversight, (2) developed new enforcement training as a part of the overall regulatory training effort, (3) revised its enforcement regulations to provide more flexibility in resolving enforcement cases, and (4) encouraged more action by EPA. Also, the Corps and EPA are working on an enforcement memorandum of agreement to better define the role of each agency.

We commend the efforts of the Corps and EPA to improve enforcement of the Section 404 program. We believe that in developing the new enforcement memorandum of agreement, the Corps and EPA should include procedures commensurate with the authority and responsibility of each agency to conduct routine surveillance, compliance inspections, timely investigation of reported suspected unauthorized activities, and penalty assessment when appropriate. We believe that, by working together, the Corps and EPA can develop an enforcement program that optimizes use of the current resources available to them.

The text of the agencies' comments, and additional GAO responses, are included in appendixes II through V.

Additional Details on Sample Selection

The five Corps districts we visited did not maintain records for the Section 404 program in a consistent manner. Therefore, we used various selection methods for our random samples of individual permits, suspected unauthorized activities, and general permits. The following table shows the universe and sample sizes in the five districts, followed by a description of how we proceeded with our sample selection in each district.

Table I.1: Sample Cases

	Individual permits			Unauthorized activities		General permits	
Corps district	Total permits	GAO sample	Number in sample with comments	Universe	Sample	Universe	Sample
Baltimore	356	117	42	154	25	676	20
Jacksonville	582	177	40	195	25	1,633	20
Omaha	250	104	40	59[a]	25	42	20
Portland	79	43	43	62	25	96	20
Vicksburg	152[b]	77	32	68	25	150	20

[a]These represented those reported activities that involved wetlands.

[b]In the case of Vicksburg, the district's individual permits actually represent "sites" permitted.

Baltimore District

Individual Permits

To select our sample of individual permits for the Baltimore district, we randomly numbered 356 permits. This was the total number of Section 10, Section 404, and 404/10 permits issued within the district in fiscal year 1986. District computer-generated records included permits where resource agencies had responded in any manner, including no objections and no comments. Corps computer listings also did not distinguish between Section 10 and Section 404 permits.

In order to obtain our sample of 42 individual permit files, we reviewed 117 of the 356 permit files. Twenty-five of these files were eliminated from the sample because they were permits for Section 10 work only. Another 48 files were excluded from the sample because resource agencies had either no comment or no objections to the project. Two other permits were excluded because Baltimore staff could not locate the files when requested.

Omaha District

Individual Permits

Corps records showed that 250 individual permits were issued in fiscal year 1986, of which 104 permit applications were commented on by the resource agencies. The Corps' coding indicated that of the universe of 104 permits with resource agency comments, only 10 permits applied to areas the Corps defined as wetlands. We reviewed all 10 cases, but subsequently discovered that 1 permit was actually issued in fiscal year 1985. We also randomly selected an additional 30 cases that required permits under Section 404. We identified 2 other permits that affected wetlands in these additional 30 cases.

Enforcement Cases

In arriving at the universe of alleged violations reported or detected, we identified 59 reported activities that involved wetlands from a Corps log of 200 reported activities in fiscal year 1986. The other activities did not involve wetlands as defined by the Corps; therefore, we drew our sample of 25 cases from the 59 cases that involved wetlands.

General Permits

We randomly selected a sample of 20 regional general permit cases from a universe of 42 Section 404 activities authorized under regional general permits in fiscal year 1986.

Portland District

Individual Permits

The Portland district provided a computer printout identifying a universe of 79 Section 404 and Section 10/404 individually issued permits in fiscal year 1986. District officials had coded each case by resource agency comments, such as approved or no comment/no action, conditions recommended, denial recommended, or elevation likely. We determined that 43 fiscal year 1986 Section 404 or Section 10/404 individually issued permits were commented on by at least 1 resource agency. We sampled the entire universe of 43 cases.

Enforcement Cases

Corps Portland officials do not keep detailed documentation on reports of alleged unauthorized discharges. Although several hundred reports of

suspected violations annually come to the district, documentation is kept only when the Corps actually conducts an inspection. The enforcement officer identified and provided us with each fiscal year 1986 Corps-inspected violation case file as our universe of unauthorized discharge reports. This universe consisted of 62 cases with reports of unauthorized discharges, violations of permitted activities, and cases that were immediately resolved or had no violation. We numbered the cases from 1 to 62 and randomly selected 25 Section 404 or Section 10/404 cases.

General Permits

The Portland district provided us with a computer printout for fiscal year 1986 identifying a universe of 96 written inquiries regarding the use of nationwide or regional permits. We numbered the inquiries from 1 through 96 and randomly selected 20 Section 404 or Section 10/404 cases.

Vicksburg District

Individual Permits

The Vicksburg district Annual Report showed that 152 Section 404 and Section 10/404 sites were permitted. We found that 77 applications had comments from at least 1 of the resource agencies. Because the Vicksburg district often issues permits to cover multiple sites, the actual number of permits we included in our sample was 32.

Enforcement Cases

We drew the sample of alleged violations from a universe of 68 violations of Section 404 and Section 10/404 reported during fiscal year 1986. This universe was derived from an official log of reports maintained by the Vicksburg district. From this universe we randomly selected 25 cases to review.

General Permits

For the sample of general permits, Vicksburg officials provided us with a computer listing of 150 general permits issued in fiscal year 1986. We randomly ordered the list and selected the first 20 for our sample.

Comments From the Department of Defense

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
WASHINGTON, DC 20310

09 JUN 1988

Mr. James Duffus III
Associate Director
Resource, Community, and
Economic Development Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Duffus:

This is the Department of Defense (DOD) response to the General Accounting Office (GAO) draft report, GAO/RCED-88-110 "WETLANDS: The Corps of Engineers Administration of the Section 404 Program," dated April 20, 1988 (GAO Code 140608), OSD Case 7612.

The DOD generally concurs with the report. Several points, however, should be clarified. It should be clearly recognized, however, that the Corps staffing and funding resources are not adequate to meet the requirements of the regulatory program. The DOD must work within these limitations because the Congress recently singled out the Corps regulatory appropriation as one which could not be supplemented by other Corps funding. The DOD, nevertheless, emphasizes that the current program exhibits remarkable performance in light of these resource limitations.

The DOD also notes that, if the Environmental Protection Agency (EPA) role in enforcement would be increased consistent with its statutory responsibility, the Corps could concentrate more of its enforcement resources on preventing and correcting violations of permits. Experience has shown that increasing the coordination and oversight roles of the EPA and other Federal resource agencies does not necessarily improve program management. Instead, it can cause additional duplication and unnecessary paperwork without commensurate environmental benefits.

Sincerely,

Robert W. Page
Assistant Secretary of the Army
(Civil Works)

Enclosure

GAO DRAFT REPORT DATED APRIL 20, 1988
(GAO CODE 140608) OSD CASE 7612

"WETLANDS: THE CORPS OF ENGINEERS' ADMINISTRATION OF THE SECTION 404 PROGRAM"

DEPARTMENT OF DEFENSE COMMENTS

* * * * *

FINDINGS

FINDING A: Wetlands--The Clean Water Act Federal Wetlands Protection Authority. The GAO reported that wetlands, which generally include swamps, marshes, bogs, and similar areas, have been disappearing at the rate of about 300,000 to 500,000 acres a year. The GAO observed that, in the past, wetlands have been considered unimportant areas to be filled or drained for various uses, and only recently, have the important ecological benefits provided by wetlands come to be widely recognized. Specifically, the GAO reported wetland losses, which the U.S. Fish and Wildlife Service (FWS) estimates averaged about 458,000 acres per year from the mid-1950s to the mid-1970s, are now a matter of concern. The GAO reported that the Corps of Engineers is the primary Federal agency responsible for regulating wetlands development under Section 404 of the Clean Water Act of 1977. The GAO further reported that, although it does not authorize a comprehensive wetlands management program, Section 404 provides the primary legislative authority behind Federal efforts to control wetlands use. The GAO noted that the Section 404 regulatory program is composed of two basic elements--permitting and enforcement. The GAO explained that permits are issued to regulate discharges for dredged or fill materials into waters of the United States, including wetlands. The GAO also noted that subsequent to permit issuance, Section 404 requires that permit requirements be enforced, and authorizes the use of civil and criminal penalties for failing to adhere to such requirements. The GAO concluded that, since its enactment, the Section 404 program has been the subject of much controversy concerning the extent to which Section 404 is to function as a wetlands protection law. (p. 2, pp. 11-21/GAO Draft Report)

Now on p. 2 and pp. 8-16.

DOD RESPONSE: Concur. The report, however, fails to recognize that the Environmental Protection Agency (EPA) has the primary responsibility for the enforcement of the Act against unauthorized discharges. The Corps may explicitly enforce against violations of permit conditions only. Also, the basis of the 300,000 to 500,000 acres per year estimate for wetland loss should be indicated in the report for clarity. For example, the 458,000 acre figure has little relevance since it was based on the Fish and Wildlife Service estimate of loss before 404 was fully implemented in 1977.

See comment 1.

Enclosure

FINDING B: Limitation on Jurisdiction of Section 404 Program. The GAO found that many activities resulting in substantial wetland losses are not regulated by the Corps Section 404 program. The GAO reported that, under the program, conversion of wetlands for normal agricultural, silvicultural, or ranching purposes, are specifically exempted from Section 404 permitting requirements. Although, as reported by the Office of Technology Assessment, the definition of what constitutes normal farming, silviculture, and ranching activities can be interpreted in different ways, the GAO observed that there is little doubt such activities have resulted in large and unregulated wetland losses. In addition, the GAO further found that the regulatory authority of the Corps extends only to the placement of dredged and fill material in waters in the U.S.--such activities as clear cutting existing forests, ditching that drains wetlands, and certain plowing, which does not deposit substantial dredged or fill materials, have at times been interpreted by the Corps as not coming under its regulatory purview. The GAO noted that, according to the Corps, the resource agencies, and other analysts, most of the annual wetland losses (which the most recent estimates show to be between 300,000 and 500,000 acres) have been as a result of conversions of wetlands to agricultural uses. The GAO concluded that, while the Section 404 permit program is protecting some wetlands, many activities (such as normal farming and ranching and the ditching and draining of wetlands), which result in most wetland losses each year, are not regulated under Section 404.
(pp. 24-25, p. 39/GAO Draft Report)

Now on pp. 19, 20, and 32.

DOD RESPONSE: Concur. The report should, however, clarify that the EPA, not the Corps, is responsible for defining the nature of those activities exempt by the Act from permitting requirements.

See comment 2.

FINDING C: Data Lacking To Precisely Measure Impact of Section 404 Regulations on Wetlands. The GAO observed that, while many activities affecting wetlands are beyond the scope of the Section 404 regulatory process, permitting and other program requirements govern a host of developmental activities that can destroy wetlands if they are allowed to proceed unchecked. The GAO found, however, that no definitive data is available to measure, with precision, the impact of the Section 404 regulatory program in terms of wetlands acreage saved or lost. Specifically, the GAO found that, with few exceptions, officials at the Corps districts and the resource agencies did not maintain comprehensive information on the number of wetland acres saved or lost as a result of the Section 404 permitting program. The GAO further reported that a sample of permit files confirmed the permits often did record the amount of wetlands to be affected by the proposed activity. The GAO observed that, while the data obtained from the Corps districts and local resource agencies differ substantially,

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all agreed that the Corps program, although not regulating most wetland losses, is serving to protect some wetlands. The GAO noted, however, that the resource agencies have developed preliminary estimates of program impact as a result of the Section 404 permitting requirements. The GAO concluded that, with respect to those activities that are regulated, available information suggests some wetlands are being saved; however, neither the Corps, the resource agencies, nor any other group maintains the data necessary to precisely estimate this savings. (pp. 24-29, p. 39/GAO Draft Report)

Now on pp. 19-23 and p. 33.

DOD RESPONSE: Concur. (Also see the DOD response to Recommendation 1.)

FINDING D: Extent Of Regulatory Jurisdiction Could Change With Different Interpretations Of Regulations And Guidance. The GAO found that, while there is little doubt that the Corps program is saving some wetlands, there is disagreement between the Corps and the resource agencies over whether the Corps is using the full range of its authority to protect as much wetland acreage as it could. The GAO reported that the disagreement involves interpretation of several key provisions of regulations and guidance involving determinations on how to:

- delineate wetland boundaries;
- assess the cumulative impacts of individual permit decisions; and
- consider alternatives to development in wetlands.

The GAO concluded that, depending on whether these provisions are interpreted narrowly or expansively, the Section 404 regulatory impact can be decreased or increased and the assessment of Corps districts performance in implementing the program could change appreciably. (pp. 29-30/GAO Draft Report)

Now on pp. 23-25.

DOD RESPONSE: Concur.

FINDING E: Wetland Delineation. The GAO reported that the Corps and the resource agencies may delineate wetlands differently and this can result in wetlands determinations that vary by thousands of acres. The GAO observed that this, in turn, could affect the degree to which the Corps assumes Section 404 program jurisdiction in an area. As an example, the GAO noted that this was evidenced by the disparate estimates of wetland impacts prepared by the Corps and U.S. Fish and Wildlife Service (FWS) in Vicksburg, where the Corps determined that the program allowed the loss of about 800 acres of wetlands in FY 1986, whereas the FWS estimated that about 56,000 acres were adversely impacted. The GAO found that this large difference in estimated wetland impacts can be primarily attributed to the different manner in which the Corps District and the FWS Field Office delineated those wetlands that should come under the jurisdiction of the Section 404 program. The

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See comment 2.

DOD RESPONSE: Partially concur. Not only have the Corps and the resource agencies disagreed on practicable alternatives, but in some cases the resource agencies disagree among themselves and have even disagreed between regions of the same resource agency. The practicable alternatives test has long been the focus of many differences of interpretation. It needs to be clarified, however, that the Corps does not rely on permit applicants to determine whether there are practicable alternatives to their proposals. The Corps relies on applicants to provide information on the purpose of their proposal and alternatives considered. The Corps may also ask applicants for information on other alternatives that may be practicable. The Corps then takes a hard look when evaluating the effects of an applicant's proposal, taking into account the verifiability and credibility of any information supplied by the applicant. While the Corps continues to base the denial of some permit applications on the availability of less environmentally damaging practical alternatives, it is not reasonable to take a stance that would result in a denial of all non-water dependent 404 applications based on the lack of proof that no practicable alternatives exist.

FINDING G: Cumulative Impacts. The GAO reported that, according to the Section 404(b)(1) Guidelines, cumulative impacts are changes that take place in aquatic ecosystems that are attributable to the collective effect of a number of individual discharges of dredged or fill material. The GAO noted that, according to the Corps and resource officials, generally cumulative impacts have not been adequately addressed because they are not sure how to establish the parameters to be considered--instead, it is easier to consider each project individually. The GAO further noted that, according to some resource agency officials, even when they make their specific concerns about the cumulative impacts of permit decisions known to the Corps, the Corps districts may issue permits that ultimately destroy more wetlands. The GAO reported several observations made by the Corps districts and resource agencies officials concerning the limited consideration of cumulative impacts in Section 404 permit decisions. As a specific example, the GAO noted the Regulatory Branch Chief for the Corps, Vicksburg District, acknowledged that, while the District is required to consider cumulative impacts of each proposed permit, it has no data or specific basis for the assessment of cumulative impacts. The official further noted that the District staff does not know what effects are to be considered or the extent of the impact to consider in making such an analysis. The GAO reported similar observations for the Baltimore District, the Jacksonville District, the Omaha District, and the Portland District. The GAO concluded there is almost unanimous agreement that there are problems in assessing cumulative impacts. (pp. 35-39/GAO Draft Report)

Now on pp. 28-32.

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DOD RESPONSE: Concur. The determination about what constitutes the threshold for denial of all future permits in an area is the subject of much controversy and speculation. While it is correct to say the Corps may issue permits that allow the destruction of wetlands in areas that the agencies would like to protect, it must also be recognized that the Corps denies permits in areas the agencies want to see protected, and conditions or denies permits to respond to concerns about cumulative impacts. The evaluation of permit applications must be made taking into account many factors of the public interest. The Corps must not adopt a narrow view that all wetlands must be equally protected without consideration of value or the lack thereof, and without consideration of public and private needs. No exact methodology exists concerning cumulative impact assessment; however, it is the DOD position that the Corps resource professionals exercise judgment in a credible manner.

See comment 2.

FINDING H: Pre-Application Coordination Varies by Corps Districts. The GAO reported the Corps regulations required district engineers to establish local procedures that allow potential applicants to consult with Corps regulatory personnel on proposed projects. The GAO found that resource agencies generally looked favorably on the concept of pre-permit consultations, but some agencies were concerned about the quality of information provided by the Corps districts in public notices, and during the pre-permit consultation period. The GAO further found that the Corps districts varied in the extent to which they involved resource agencies pre-permit consultation, and the resource agencies also differed in their assessments of the Corps districts means of involving them in the early stages of permit consideration. As an example, while the Corps Baltimore District holds bi-monthly meetings, at which time permit applications can be discussed, the Jacksonville District does not hold pre-application meetings, but does conduct what it refers to as pre-public notice conferences, and in the Vicksburg District pre-application matters are generally addressed in informal meetings over the telephone. The GAO observed that the Corps uses public notices as the primary means of advising interested parties and soliciting their comments on proposed permit activity. The GAO reported that the Corps regulations require the public notices to include information sufficient to give a clear understanding to the proposed activity, in order to generate meaningful comments. The GAO noted, however, that according to some resource agency officials, public notices sometimes contain inaccurate information, such as the wrong project location or insufficient information on project scope. The GAO nonetheless concluded that policies for involving resource agencies in the pre-permit application process indicates the Corps is generally receiving and considering resource agency views during the Section 404 permitting process, even though these procedures vary by district. (pp. 42-47, p. 61/GAO Draft Report)

Now on pp. 37-40 and p. 51.

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See comment 2.

DOD RESPONSE: Partially concur. The Jacksonville District does not hold many pre-application meetings, but does conduct some. These generally occur during interagency meetings held every six weeks. Some of the proposals discussed during these meetings are from potential applicants. The variation in the Corps pre-application coordination procedures is not surprising. The Corps is a decentralized agency, which allows the field offices considerable freedom in best aligning resources to meet mission requirements.

FINDING I: Corps Districts Vary In Their Acceptance Of Resource Agency Recommendations. The GAO reported that the Corps public interest review includes consideration of resource agency recommendations on the proposed projects and comments may range from no major concerns with the proposed projects to recommendations for permit denial. The GAO found that, in the majority of permit application cases, the resource agencies either do not object to or do not comment on proposed projects, primarily due to the lack of resources. The GAO further found that some permits are issued over a resource agency denial recommendation. The GAO observed that, because some districts did not provide feedback to resource agencies on how their recommendations were considered, it could not document whether the resource agencies were satisfied with the Corps resolutions of these denial cases. The GAO noted that, according to a Vicksburg District official, the Corps policy provides that permits will not be issued over the unresolved denial recommendations of Federal agencies; however, the District considers a decision by an agency not to appeal disagreements as acceptance of its decision. The GAO further observed, however, that the resource agencies seldom resort to elevating projects to higher levels when they disagree with district engineers decisions, primarily because they do not believe that the elevation process results in changes to district engineer decisions. The GAO also found that, except for the National Marine Fisheries Service (NMFS), the Corps and the resource agencies do not accumulate verifiable data of the extent to which the Corps districts are adopting resource agency recommendations. The GAO noted that, according to most resource agency officials, they do not have the staff to conduct such studies or to conduct followup on whether their recommendations have been incorporated in the permits. The GAO also reported that, in addition to denial recommendations, the resource agencies make recommendations that permits be modified or that certain conditions be placed in permits to lessen the adverse environmental effects of the proposal. The GAO found that the districts varied in the extent to which they required applicants to modify their projects based on resource agency recommendations, with acceptance of such recommendations ranging from 58 percent to 100 percent, with a weighted average of 80 percent. The GAO observed that it appeared the Corps districts were generally willing to accept and consequently require permit modifications for changes recommended by resource agencies when the changes were concerned with the

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agency area of expertise. The GAO concluded that, while recognizing the Corps district engineers must balance comments from many sources during the public comment period and this can result in the rejection of some resource agency recommendations, some Corps districts could establish more formal feedback procedures to advise resource agencies concerning the rationale behind the issuance of permits that do not include the resource agency recommendations. (pp. 47-56, p. 62/GAO Draft Report)

Now on pp. 41-48 and p. 52.

DOD RESPONSE: Concur. The Corps has very little control over the number of applications it receives each year (about 14,000 individual applications). By law the Corps must evaluate and act to some degree on each of these applications. Individual applications may range from a simple bank protection fill to a large fill involving complex environmental, socioeconomic, legal and other issues. With only about 600 project managers, whose duties include more than just evaluating applications, staff resources are not always available so that every district can accomplish the degree of coordination, feedback, and record keeping desired by the resource agencies. Much has been done through general permitting, and streamlined processing to reduce workload, but that effort must be accomplished by those same project managers. It should also be recognized that the annual number of individual applications has remained relatively stable, while the number of minor actions covered by general permits has increased, indicating an increasing number of the more difficult applications to be evaluated. The statistics about the Corps acceptance or rejection of agency recommendations do not provide any meaningful insight into the dynamics or substance of interagency coordination. Only by reviewing the relevant circumstances of each case could a reviewer decide if an agency recommendation was wrongly accepted or rejected by the Corps. In addition, Corps policy

See comment 2.

reported that, in addition to its appeal rights, the EPA, under Section 404(c) of the Clean Water Act, has the authority to "veto" a Corps permit decision and prohibit disposal of dredged or fill material at any site it determines would have unacceptable adverse effects on municipal water supplies. The GAO found, however, that according to the EPA headquarters officials, since passage of the Clean Water Act, the agency has completed action in only five cases nationwide (with the EPA Region IV initiating three of the five veto actions). The GAO concluded that, in light of the low number of elevations by resource agencies and the general impression on their part that the process is not workable, it appears that the Corps and the resource agencies could establish a process under which differences of opinion concerning permitting decisions can be resolved. (pp. 56-63/GAO Draft Report)

Now on pp. 48-53.

DOD RESPONSE: Concur. While the process provided for in the MOAs is cumbersome and time-consuming, it gives the resource agencies a powerful tool to insure that their interests are given full consideration. The threat of elevation has been an effective tool for the agencies to use in convincing applicants to modify their projects. The threat of the 404 (c) "veto" authority has also been effective in the same manner. The DOD contends the EPA and the other agencies do not make more formal use of these tools due to lack of conviction rather than lack of authority. The use of the 404 (c) "veto" earlier in the application process or in special aquatic areas before applications are even submitted, would save the Corps and the EPA considerable time spent in arguing about decisions. The development of different mechanisms for resolving differences of opinion will not resolve the basic differences between the Corps and resource agencies. Resource agencies have a narrow charter and are charged to protect the resource without consideration of the other factors that comprise the public interest. The Corps, on the other hand, must balance many factors of the public interest in making decisions about permit applications.

See comment 2.

FINDING K: Unauthorized Activities May Not Be Detected. The GAO reported that the Corps regulations authorize district engineers to conduct surveillance to detect authorized activity. The GAO found, however, that the Corps districts did not routinely perform surveillance to detect unauthorized activities, or inspect all permits to ensure that permittees adhere to permit conditions. The GAO noted that, according to officials in each of the five Corps districts visited, surveillance to detect unauthorized activities receive less priority than the permit process in their offices. In many cases, surveillance monitoring takes place only when it can be combined with some priority district activity, such as site investigations during permit processing. The GAO reported that, according to Corps officials, aerial surveillance is more efficient than ground surveillance because it covers more areas in a shorter time frame, gives access to remote areas, and

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avoids problems of access to private lands. The GAO further noted, however, that according to staff in each of the districts visited, aerial surveillance has been curtailed due to budget constraints. As an example, the GAO noted that according to Portland officials, the last aerial investigations in the District occurred in the spring of 1986. The GAO concluded that surveillance is not a high priority in any of the five districts visited. (pp. 64-68, p. 87/GAO Draft Report)

Now on pp. 55-58 and p. 73.

DOD RESPONSE: Concur. Surveillance and pursuit of unauthorized activities is the responsibility of the EPA. The Clean Water Act vests the Administrator of the EPA with enforcement authority for unauthorized discharges, not the Secretary of the Army, who is empowered to enforce only against permit violations. Since 1976, the Corps has agreed, as a matter of comity, to use its limited resources as the front line of enforcement for Section 404.

See comment 2.

FINDING L: Corps Investigations Of Suspected Unauthorized Activities Sometimes Delayed for Long Periods. The GAO reported that, after unauthorized fills are reported, the Corps regulations require that investigations be conducted in a timely manner to confirm whether a violation has occurred and, if so, its extent and the responsible party. While the Corps regulations do not define what would be a timely investigation of reported unauthorized activity, the GAO found that, of the 125 suspected cases of unauthorized filling in wetlands, the Corps did not investigate many cases for several weeks or even months after they were reported. Also, the GAO found that it could not determine the timeliness of 34 district investigations due to incomplete records (28 of these were in the Baltimore and Jacksonville Districts) and, in two districts, some reported unauthorized fills were not investigated at all. The GAO reported that, in its sample of 25 cases of unauthorized activities in Omaha, all of which involved wetlands, it identified about 2,000 acres of wetlands that were adversely affected as a result unpermitted activities. The GAO noted, however, that according to district officials, their personnel are primarily involved in permit processing and monitoring has received a low priority. The GAO concluded that the longer it takes to investigate suspected unpermitted activities the more likely it is that additional filling or unauthorized work will result in the loss of valuable wetlands. (pp. 68-71/GAO Draft Report)

Now on pp. 58-60.

DOD RESPONSE: Concur. As provided by the Act, the mission of the Corps is evaluating applications and enforcing against ermit violations. It is again pointed out that the EPA has the authority for acting against those who discharge without a permit. (Also see the DOD response to Finding K.)

See comment 2.

FINDING M: Limited Involvement Of The EPA In Enforcing Section 404. The GAO reported that the Clean Water Act of 1977 provided the EPA with independent enforcement authority for

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The GAO noted the following, however, as a result of its review at the five Corps districts:

- determining whether the Baltimore sites reviewed were inspected was difficult because (1) project managers did not always maintain records of site visits, (2) the District has no specific procedures for conducting compliance inspections, and D(3) no form has to be completed for such inspections;

- the Jacksonville District infrequently inspects projects to assure compliance with permit conditions either during or after construction;

- at the Omaha Corps District, 26 inspections at the 40 projects sampled were documented--the inspections occurred on 20 projects;

- according to the Chief, Permit Evaluation Section, Portland District, a project manager's time is used to process permits rather than conduct routine permit followup inspections--however, a project manager will occasionally drive by a permitted site and, if unauthorized activity is taking place, will file a complaint report; and

- the Regulatory Branch Chief of the Vicksburg District indicated the District does not have the staff resources or the funds to carry out compliance inspections routinely.

Now on pp. 62-65 and p. 73.

The GAO concluded that, if the Corps and the EPA better coordinated their combined resources, they could bring about a more comprehensive and systematic monitoring and enforcement effort. (pp. 74-78, p. 88/GAO Draft Report)

See comment 2.

DOD RESPONSE: Concur. A combination of the Corps and EPA enforcement resources would not, however, be sufficient to handle an inspection and after action followup for every permitted activity. An estimated 30,000 individually permited actions (Section 10 and/or Section 404) are in an authorized construction period at any given time. The logistics and cost of inspecting each of these would be considerable, given that the Corps has only about 150 enforcement project managers, and the EPA much less. While the Corps has statutory enforcement authority for these types of actions, it has also agreed to carry most of the load for unauthorized activities, as well, thus dividing and overloading its enforcement resources. Those same Corps enforcement project managers must also provide support for making jurisdiction determinations and other regulatory related duties, all of which continue to increase in number and complexity. The DOD contends that the Corps does as much as hould be expected with the limited resources available.

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FINDING O: <u>Corps Districts Use Administrative Rather Than Civil And Criminal Remedies Even When Violations Appear Serious</u>. The GAO reported that the Corps district engineers have several options they can pursue after it is established unauthorized activities have taken place, as follows:

- negotiate restoration or mitigation agreements;
- issue after-the-fact permit; or
- seek administrative, civil or criminal remedies.

The GAO found that, in pursuing its enforcement responsibilities, the Corps districts and the EPA rarely used available civil and criminal remedies including administrative penalties, referring instead to rely on the voluntary actions of violators to rectify the problems observed. The GAO also found this true even with some of the more serious violations. The GAO noted, in part, the following comments by the Corps district officials or other districts concerning the rationale for relying on administrative rather than legal remedies when violations are detected:

- according to a U.S. attorney who coordinates Baltimore Corps District legal activities in Maryland, no cases have been forwarded to them by the district for formal prosecution and/or litigation in the past 5 years--a process called "minor listing" has, instead, become the standard method that the Baltimore District uses to deal with unpermitted fill violations;
- Jacksonville District regulatory personnel refer potential legal actions to the District Counsel after they have exhausted all other means to obtain voluntary compliance;
- in pursuing its enforcement responsibilities, the Omaha District has seldom used available civil and criminal remedies or administrative penalties--in most cases the district has obtained compliance through administrative means, such as voluntary restoration, rather than resorting to legal action.
- District officials in Portland, including the District Enforcement Office, the Special Assistant to the U.S. Attorney, and the project managers, all believe that there is little or no incentive to seek civil or criminal penalties--fines have not been levied by the District since 1981; and
- according to the Regulatory Branch Chief of the Vicksburg District, the practice of the District has been to continue the use of administrative means to resolve enforcement problems, even when violators are uncooperative.

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The GAO concluded that, when unauthorized activities are identified, rather than seeking legal sanctions against those who did not comply with permit requirements, district officials usually choose to seek voluntary compliance and other administrative remedies. Although this may be an appropriate action in many cases, the GAO further concluded that the districts pursued administrative procedures in some case where violators did not take the Corps imposed corrective actions. Finally, the GAO concluded it appeared that, in some of these cases, if the Corps had pursued legal actions, it would encourage other individuals to comply with permit requirements. (pp. 78-88/GAO Draft Report)

Now on pp. 65-73.

DOD RESPONSE: Concur. There are several underlying reasons for not using judicial action, and these should be recognized.

- Years of experience with the Department of Justice has resulted in most districts taking administrative action to get a quicker resolution of the problem, rather than pursuing the involved paperwork and delay necessary to attempt to convince the U.S. Attorney to take the case.

- The U.S. Attorneys are, for the most part, as overloaded as the Corps enforcement program and are willing to pursue only the most significant violations. Civil cases involving the filling of a few acres of wetlands cannot compete for attention with drug enforcement and other criminal cases.

See comment 2.

- The Corps has traditionally viewed seeking voluntary compliance rather than punative legal action as good Government. The issues and controversies surrounding Government regulation of the use of privately owned properties are not easily resolved on a national or individual case basis. The Corps remains unconvinced that more court cases will improve the program.

Notwithstanding the reasons above, the Corps welcomes the EPA administrative fine authority as a way to shore up a recognized weakness in deterrence.

FINDING P: Few Permits Are Suspended Or Revoked. The GAO reported that district engineers may reevaluate permits and their conditions either on their own, at the request of permittees, at the request of third parties, or based on periodic compliance inspections. The GAO further reported that, based on the reevaluation, they can initiate action to modify, suspend, or revoke a permit, if such action is in the public interest. The GAO found that the districts visited infrequently suspend or revoked permits preferring, instead, to pursue administrative remedies for bringing about compliance with permit conditions or allowing permits to be modified. The GAO observed that the five Corps districts it visited could not identify any permit revocations during the period FY 84-86.

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The GAO concluded that part of the explanation for the low number suspensions and revocations could be the lack of routine compliance inspections by the Corps districts to determine if permittees are adhering to permit conditions. The GAO further concluded that without such inspections, it would be difficult to substantiate suspension or revocation actions. (pp. 87-89/GAO Draft Report)

Now on pp. 73-74.

DOD RESPONSE: Concur. (See also DOD Response to Finding O.)

RECOMMENDATIONS

RECOMMENDATION 1: The GAO recommended that the Secretary of the Army direct the Chief, Corps of Engineers, to develop a data reporting mechanism to enable the Corps to provide baseline information on the extent to which the granting of Section 404 permits is protecting or resulting in the filling of wetlands, and otherwise restoring and maintaining the integrity of the nation's waters. (p. 40/GAO Draft Report)

Now on p. 33.

DOD RESPONSE: Nonconcur. A study to provide a baseline assessment of the Section 404 program's performance in wetland protection/use and maintaining water quality cannot be done on a realistic or cost effective basis.

See comment 2.

Such a study would have to take into consideration a wide variety of factors that are difficult to describe and quantify much less measure. For example, the very existence of the program produces wetland preservation that cannot be measured. One denial of a permit to fill coastal wetlands for say housing, puts restraints on the development community on similar projects at other locations. No applications will be filed for these other projects for the Corps to measure against. To report only the acreage for the denied permit would be misleading. While the footprint acreage of fills allowed under individual permits could be measured, this too would be misleading. Most permits result in secondary impacts that either enhance, create, harm or destroy other wetland acreage. For example a flood control dike may enable a landowner to clear and farm on an unknown acreage of bottomland hardwoods that can be removed without triggering 404. A water supply reservoir with a 404 permit may eventually produce fringe wetlands. As the report notes, most wetlands are lost through unregulated activities, a factor which must be included in any evaluation of the performance of the 404 program.

Enforcement actions have similar spin off effects that are not readily identified or captured as meaningful statistics. Other actions have been exempted by Section 404 (f) or 404 (r) of the Act. Still others occur under general permits, which for the most part do not require reporting, as the permits are designed to reduce paperwork under 101 (f) and 404 (q).

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Finally, EPA would have to keep track of other wetland effects when the program is transferred to the states under Sections 404 (g) through (l), or through agency action pursuant to 404 (c) and EPA's advanced identification program.

Water quality impacts of 404 activities are even more difficult to describe and measure than the acreages of wetland impacts. Considerable new research would be needed just to initiate such a study in this area.

Implementation of this recommendation could not be accomplished with the resources available to the Corps regulatory program. As discussed in the responses to Findings I, K, and N, the Corps regulatory staff is at a minimum available to accomplish the current mission, and is in fact struggling in the face of an increasing work load. To charge that program with an increased mission for monitoring the program's impacts is an unrealistic expectation. The Congress recently singled out the Corps regulatory budget as one which could not be augmented by funds from other Corps sources, so to expect the program to bear the cost of such monitoring is also unreasonable. Finally the return for dollars spent to develop and operate such a monitoring program would be minimal. The information generated by the monitoring program would not address the broader issues associated with wetland loss, because of the focus on the Corps regulatory program.

RECOMMENDATION 2: The GAO recommended that the Secretary of the Army direct the Chief, Corps of Engineers, to work with the resource agencies to develop consistent definitions and procedures for implementing basic program requirements, such as considering practicable alternatives, assessing cumulative impacts, and making wetland delineations. (p. 40/GAO Draft Report)

Now on p. 33.

DOD RESPONSE: Concur. The Corps and Federal resource agencies headquarters staff meet periodically to discuss current issues and program initiatives. Within the next three months a meeting will be held to jointly decide what can be done to better address the issues highlighted by the report.

See comment 2.

RECOMMENDATION 3: The GAO recommended that the Secretary of the Army direct the Chief, Corps of Engineers, to work with the resource agencies to develop a feedback mechanism to provide the resource agencies with documentation to show how their recommendations were addressed during the application review process and, where applicable, reasons why recommendations were not accepted. (p. 63/GAO Draft Report)

Now on p. 53.

DOD RESPONSE: Concur. Feedback mechanisms are already in place. The Corps permit documentation includes information on how substantive agency comments were considered during the decision process. Agencies may review these documents at all district offices. It should be noted, however, that often

See comment 2.

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during the review of unfimiliar permit documents investigators do not recognize changes in projects that were made as a result of agency comments. Sometimes this leads to the conclusion that no action was taken on an agency comment, when in fact the project drawings or description may reflect a change that responded to the comment. The Corps recognizes that documentation of, and providing the rationale for, rejecting comments or suggestions is important. At a minimum, such things are often the subject of contention in legal proceedings. However, in view of the constraints and limitations inherent in the program, time is not always available to highlight such items. The current system allows agencies to use their own initiative to explore how comments were viewed on non-objectionable permits. The MOAs provide the agencies both an informal and a formal review of how comments are considered during the elevation process. Such feedback mechanism is time consuming and requires considerable staff and clerical work. However, it is available now. To extend the same consideration to all actions adds to the already difficult job of the Corps project manager (as discussed in the DOD response to Finding I.)

Now on p. 53.

RECOMMENDATION 4: The GAO recommended that the Secretary of the Army direct the Chief, Corps of Engineers to develop, with the participation of the resource agencies, mutually acceptable and simplified process under which district engineer permitting decisions can be appealed. (p. 63/GAO Draft Report)

See comment 2.

DOD RESPONSE: Concur. The current procedure provides for a formally structured appeal process. As one option, the Corps would propose eliminating the formal MOA appeal process and substitute in its stead a more informal process based on joint agency guidance documents. Other options to be considered include issuance of joint agency guidance on the current MOAs and/or revisions to the current MOAs. Dialogue has already started with the EPA. The Corps also will approach the other resource agencies as indicated in the DOD response to Recommendation 2.

Now on p. 74.

RECOMMENDATION 5: The GAO recommended that the Secretary of the Army direct the Chief, Corps of Engineers, to develop, with the participation of the EPA, a coordinated enforcement program utilizing the combined resources of both agencies and others to deal with violations of Section 404 permit requirements. (The GAO suggested such a program should involve routine surveillance, compliance, inspections, and timely investigations and reporting of unauthorized activities. p. 89/GAO Draft Report)

See comment 2.

DOD RESPONSE: Concur. The Corps supports the need for a better use of the Corps and the EPA resources in enforcing the program. The Corps and the EPA are working on an enforcement MOA to better define the role of each agency. That effort should be complete in the next three months. (Also see the DOD responses to Findings K, L, M, N and O.)

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Now on p. 74.

RECOMMENDATION 6: The GAO recommended that the Secretary of the Army direct the Chief, Corps of Engineers, to establish a national oversight program to evaluate the Corps district performance in enforcing the Section 404 program. (p. 89/GAO Draft Report)

See comment 2.

DOD RESPONSE: Concur. The Corps has already taken steps to increase oversight of the enforcement program. The Corps has been monitoring enforcement actions nationally on an annual basis. In October 1987, the Corps revised its enforcement reporting requirement to a quarterly basis as a way of adding more intensity to its oversight. The Corps has (1) developed new enforcement training as a part of the overall regulatory training effort, (2) revised its enforcement regulations providing more flexibility of action in resolving enforcement cases and (3) encouraged more action by the EPA. The Congress recently provided the EPA administrative fine authority for unpermitted discharges under 404, and gave the Corps similar authority for violations of permits. The Corps and the EPA are developing an MOA addressing enforcement of 404, and these new authorities, as stated above.

MATTERS FOR CONGRESSIONAL CONSIDERATION

Now on p. 33.

SUGGESTION TO THE CONGRESS: The GAO observed that the Congress may wish to establish clearer criteria regarding the (1) scope of wetlands delineation under the program, (2) extent to which alternatives to filling wetlands must be considered, and (3) extent and circumstances under which cumulative impacts of permit decisions must be considered. (p. 40-41/GAO Draft Report)

DOD RESPONSE: No comment.

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The following are GAO's comments on the Department of Defense's letter dated June 9, 1988.

GAO Comments

1. We have revised the pages noted to clarify EPA's responsibility for enforcement against unauthorized discharges. As was indicated in our draft report, the estimates of annual wetlands losses were obtained from various resource agency sources. The Fish and Wildlife Service estimate of 458,000 acres, which incidentally falls within the 300,000 to 500,000 acre estimate, was followed up with the Fish and Wildlife Service. An FWS official told us in October 1987 that the 458,000 acre figure, which was only an estimate, is the latest and best estimate of wetlands lost.

2. We have revised the report in order to reflect these comments. In some cases we have added GAO's position on the Department of Defense's comments at the end of the appropriate chapter.

Comments From the Environmental Protection Agency

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 10 1988

OFFICE OF
POLICY, PLANNING AND EVALUATION

Mr. Hugh J. Wessinger
Senior Associate Director
Resources, Community, and
Economic Development Division
General Accounting Office
441 G Street, N.W.
Washington, D.C. 20548

Dear Mr. Wessinger:

On April 20, the General Accounting Office (GAO) sent the Environmental Protection Agency (EPA) a draft report for our review and comment. The report is entitled "Wetlands: The Corps of Engineers' Administration of the Section 44 Program" (GAO/RCED-88-110). In accordance with Public Law 96-226, we are pleased to provide the comments on the enclosed.

The Section 404 program is very complex and we understand how difficult the effort of evaluating its implementation and effectiveness must be. In addition, we believe that documents such as your report can serve as the vehicle to initiate significant improvements in the Section 404 program.

See comment 1.

After a close review of the report, Agency staff is concerned that the significance of EPA's authority and responsibilities in administering the 404 program were not discussed in sufficient detail. As administrative Agency for the Clean Water Act and recognizing our specific statutory responsibilities under Section 404, EPA's role in the program extends beyond that of other "resource agencies" and should be clarified. For example, while the report mentions the 404(b)(1) Guidelines in several places, we suggest that additional emphasis and explanation be placed on the requisite nature of Guidelines in the permit process. Because many underlying issues such as mitigation are tied directly to the Guidelines, we request that EPA's authority in their interpretation be emphasized in all discussions and recommendations. In addition, I suggest that additional information be included in the report on (1) EPA's authority in the areas of geographical jurisdiction and the 404(f) exemptions and (2) how staffing and funding causes or contributes to the problems identified in the report.

Environmental Protection Agency
GAO Draft Report Comments

Margin note	Page No.	Paragraph No.	Comments
Now on p. 2, paragraph 5. See comment 3.	3	2	Emphasis on the requisite nature of the Guidelines should be added in this paragraph(see comments for page 13, paragraph 2).
Now on p. 3, paragraph 5. See comment 3.	4	4	This paragraph should address the most recent efforts of EPA and the Corps in the area of enforcement. Further, funding and manpower, both of which significantly impact the enforcement effort, should be mentioned.
Now on p. 4, paragraph 1. See comment 3.	5	2	This paragraph should distinguish between activities not regulated because they involve no discharge, and those activities which are exempt. Not all normal farming, ranching, draining etc. activities are exempt. Reference the 404(f)(2) recapture clause.
Now on p. 4, paragraph 2. See comment 4.	5	3	Other major areas of disagreement such as "mitigation" and the "definition of fill material" should be mentioned.
Now on p. 4, paragraph 5. See comment 5.	7	4	Recommendations should include the development and utilization of a clearer definition of EPA's and the Corps authorities and responsibilities in the 404 program. Item 2 should include the topics of mitigation and the definition of fill. Recommendations throughout the report generally, do not accurately reflect the roles of EPA and the Corps. Final resolution must clearly be based on the authority and responsibilities of the respective agencies.
Now on p. 5, paragraph 1. See comment 6.	8	1	A recommendation that both the Corps and EPA more fully implement their

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statutory enforcement responsibility in the area of unpermitted discharges and permit condition violations should be included in this report.

Now on p. 5, paragraph 2.

See comment 4.

8 2 The authority to interpret the Guidelines, develop mitigation policy and how to apply the definition of fill may be matters that Congress should also consider. These issues play a significant role in protection of wetland resources.

Now on p. 8, paragraph 4.

See comment 7.

12 1 The definition of "fill material" used by GAO is the Corps. EPA's definition states, "fill material means any 'pollutant' which replaces portions of the 'waters of the United States' with dry land or which changes the bottom elevation of a waterbody for any purpose." The significant difference is the Corps "primary purpose" and EPA's "any purpose". The Corps definition does not include pollutants discharged into the water primarily to dispose of waste. The level of protection afforded the waters of the United States is, in many cases, directly related to which definition is utilized. The GAO report should consider in some detail the impact that the Corps current "fill" policies and regulations have on protecting wetland resources. Issues such as instream treatment and the discharge of pre-cast concrete pilings could possibly be resolved by broader application of the term "fill material."

Now on p. 9, paragraph 1.

See comment 2.

12 2 In reference to the 404(f) exemptions (first four items) the report should mention that many of the activities listed are subject to the 404(f)(2) 'Recapture' clause. 404(f)(2) states," Any discharge of dredged or fill material into the navigable waters incidental to any activity having as its purpose

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bringing an area of the navigable waters into a use to which it was not previously subject, where the flow or circulation of navigable waters may be impaired or the reach of such waters be reduced, shall be required to have permit under this section."

Now on p. 9, paragraphs 4-5.

13 1,2

Since EPA has statutory responsibility to administer the Clean Water Act, including specific authority under Section 404, EPA's role in the program should be emphasized in this section. Grouping EPA with the other "resource agencies" is not an accurate reflection of the level of responsibility EPA has in the administration of the 404 program.

See comment 8.

Now on p. 9, paragraph 5.

13 2

In terms of environmental protection the 404(b)(1) Guidelines are the cornerstone of the 404 program. The fundamental precepts of the Guidelines are that dredged or fill material should not be discharged into the aquatic ecosystem unless it can be demonstrated that (1) such a discharge will not have an unacceptable adverse impact either alone or when viewed in terms of its cumulative impact on wetlands or other waters, and (2) there are no less environmentally damaging practicable alternatives. The Guidelines further require that no discharge should be permitted unless appropriate and practicable steps have been taken to minimize potential adverse impacts of the discharge on the aquatic ecosystem. In light of the above the report should clearly recognize that the Guidelines are regulatory in nature and establish an environmental basis for permit denial. Further, EPA's authority to interpret the Guidelines should be mentioned in this section as many underlying problems have resulted from different interpretations by the

See comment 9.

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Corps and EPA.

Now on p. 11, paragraph 1.

See comment 10.

14 4 The Corps Regulations state that no permit will be issued unless the proposed discharge complies with the 404(b)(1) Guidelines. The balancing process used by the Corps does not obviate the requirements to comply with the Guidelines.

Now on p. 11, paragraph 4.

See comment 11.

15 4 If, as the report implies, the Corps uses only the "three general criteria" then they are not in compliance with their own Regulations which require that discharges comply with the 404(b)(1) Guidelines. The failure to emphasize what is arguably the single most important element of the 404 program, the Guidelines, is a serious concern of EPA's.

Now on p. 19, paragraph 3.

See comment 2.

24 3 The 404(f)(2) recapture clause precludes the exemption of many wetlands conversions. EPA's authority to interpret the scope of 404(f) exemptions should be discussed. The 1979 legal opinion by Attorney General Benjamin Civiletti clearly established EPA as the authority in these matters.

Now on p. 23, paragraph 3.

See comment 2.

30 1 Additional major items such as "mitigation" and the "definition of fill" directly impact the level at which 404 protects wetlands. An example is the Corps/EPA disagreement on the sequence of mitigation. EPA has taken the position (and other resource agencies have concurred) that mitigation should occur in the sequence of avoidance first, then minimization and lastly compensation of unavoidable impacts. EPA considers the specific elements to represent the required sequence of steps in the mitigation planning process as it relates to the Section 404 Program and adheres to the requirements set forth in the 404(b)(1) Guidelines. The Corps has

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GAO note	Page	Paragraph	Line	Comment
				been unwilling to require a clear sequential process for evaluating Section 404 mitigation requirements.
Now on p. 23, paragraph 4. See comment 2.	30	2		EPA has final authority in the area of geographical jurisdiction determinations. The 1979 legal opinion by Attorney General Benjamin Civiletti clearly established EPA as the authority in this area. This should be stated in this section.
Now on p. 34, paragraph 1. See comments 2 and 7.	40	2		Item 2 should include mitigation and the definition of fill as areas to work on. Development of definitions and procedures should fully consider the existing authority of the respective agencies.
Now on p. 33, paragraph 3.	41		1	A number of issues which need clarification are highly technical. Resolution of these issues would be easier if EPA's and the Corps' responsibilities in the program were clearly defined.
Now on p. 43, paragraph 2. See comment 12.	50		3	Actual data on the outcome of all elevated cases would be helpful in evaluating the effectiveness of the 404(q) MOA's.
Now on p. 53, paragraph 3. See comment 2.	63		2	Item 2 - Clear definition of EPA vs. Corps roles and authorities would likely facilitate the preparation of a more efficient elevation process.
Now on p. 55, paragraph 3; p. 56, paragraph 2; and p. 58, paragraph 3. See comment 2.	64 65 69		3,4 3 1	This section of the report should consider how current manpower and funding levels impact the enforcement program.
Now on p. 60, paragraph 3. See comment 1.	72		1	The Corps does not generally agree that they have the authority to issue administrative orders and/or penalties for the unauthorized discharge of fill. Both EPA's and the Corps' interpretation and implementation of the Act should be discussed.
Now on p. 74, paragraph 3.	89		2	Recommendations for improving the

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See comment 2.

404 program should include clear directions for increasing the emphasis on enforcement. It is important to note that most enforcement actions are extremely time and resource intensive. In addition, any comprehensive surveillance program would be both difficult and highly resource intensive. Thus, within existing resources, any significant increase in enforcement activity may result in a decrease in some other program activity such as permit processing. However, specific emphasis on increasing surveillance and compliance inspections should be included. Production of quality, well documented decisions and adjustment of existing resources into the enforcement area should also be recommended.

6

The following are GAO's comments on EPA's letter dated June 10, 1988.

GAO Comments

1. We have revised the report in several places to clarify EPA's and the Corps' authorities and responsibilities in administering the Section 404 program.

2. We have included the suggested discussion in the report.

3. The suggested language is included in the report chapter discussion.

4. We have included a discussion of the suggested material in the report.

5. We believe that our recommendations accurately reflect the authority and responsibility of EPA and the Corps. Our recommendations, although directed to the Secretary of the Army, include numerous references to the need to involve resource agencies in corrective action and, in the case of the recommendation to develop a coordinated enforcement program, specific reference is made to EPA's prominent role.

6. We believe that this is the thrust of our recommendation for developing a coordinated enforcement program utilizing the combined resources of the Corps and EPA.

7. We have clarified the report to indicate that the definition of "fill material" used is the Corps' definition. However, it should be noted that the 404(b)(1) Guidelines, as developed by EPA, reserved Section 230.3(l) of the Guidelines for EPA's definition of fill material in order to cooperate with the Corps in resolving the Corps' concerns about such a definition. Our discussion of resource agency concerns about the Corps' narrow interpretation of certain key provisions in the administration of the Section 404 program was not intended to be all-inclusive. Concerns regarding requirements for mitigation and the definition of fill material are issues that could be included in future Corps and resource agency deliberations.

8. We state that EPA is perhaps the most influential of the federal resource agencies and further describe its authorities and responsibilities throughout the report. We believe that the discussion of EPA's authorities and responsibilities, including revisions incorporated to respond to EPA's comments on a draft of this report, accurately reflects the level of EPA involvement in the Section 404 program.

9. We have included further discussion of the 404(b)(l) Guidelines in the report. Although we do not question EPA's authority to interpret the Guidelines, we call attention to the following statement in the Preamble to the Guidelines:

"The fact that EPA has 404(c) authority does not lessen EPA's responsibilities for developing the 404(b)(1) Guidelines for use by the permitting authority. Indeed, if the Guidelines are properly applied, EPA will rarely have to use its 404(c) veto."

As we point out in the report, since passage of the Clean Water Act, EPA had completed 404(c) action only five times nationwide. Hence, one might assume that EPA has generally been satisfied with the Corps' application of the Guidelines. However, we discuss several reasons why the resource agencies, including EPA, have not been entirely satisfied with the Corps' application of the Guidelines.

10. We have revised the report to indicate that the Corps conducts the 404(b)(1) Guidelines evaluation simultaneously with the public interest review.

11. We have revised this paragraph to show that in addition to consideration of the three general criteria, the Corps evaluates applications using the 404(b)(1) Guidelines.

12. As the Corps states in its comments on page 97, information concerning its consideration of resource agency comments is available at all Corps districts, and the agencies can avail themselves of this information.

Comments From the Department of the Interior

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

June 3, 1988

Mr. James Duffus, III
Associate Director
Resources, Community, and Economic Division
U.S. General Accounting Office
Washington, D.C. 20548

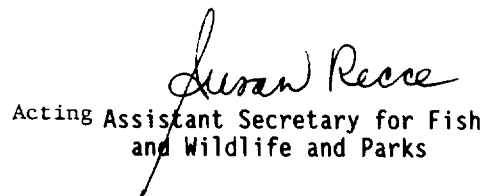
Dear Mr. Duffus:

Enclosed are the Department of the Interior's (Department) comments on the General Accounting Office's draft report entitled "Wetlands: The Corps of Engineers' Administration of the Section 404 Program."

Federal regulation of wetlands development is administered through section 404 of the Clean Water Act with the Corps of Engineers (Corps) being the agency having primary responsibility. Resource agencies disagree with the Corps concerning the Corps' effectiveness in the administration of the program. The Department's primary concerns address Clean Water Act standards, priority mitigation actions, and cumulative impact assessments. As you may be aware, there has been increasing concern among Federal and State legislative bodies in protecting wetland resources, evidenced by the Emergency Wetland Resources Act and several recent State laws. The Corps' program appears to lag behind this current trend, thus not adequately protecting the Nation's wetland resources.

The enclosure addresses the subject report's recommendations.

Sincerely,



Acting Assistant Secretary for Fish and Wildlife and Parks

Enclosure

Department of the Interior
Comments on the Draft Report Entitled
"Wetlands: The Corps of Engineers' Administration of the Section 404 Program" (GAO/RCED-88-110)

General Comments

The subject draft report is, in our opinion, an accurate analysis of the section 404 program as it is administered by the U.S. Army Corps of Engineers (Corps). As the report points out, numerous policy differences exist between the Corps and the Federal resource agencies, including the U.S. Fish and Wildlife Service (Service). As the report notes, the result of these policy differences is that the Corps' program is less effective in protecting wetlands than the Service would like it to be.

The report correctly states that the intent of the Clean Water Act is to restore and maintain the chemical, biological, and physical integrity of the waters of the United States. The Corps was given the responsibility to administer the program by issuing permits for the deposition of dredged or fill material in waters of the United States, which include many wetlands.

Specific Comments

The 404 (b)(1) Guidelines (40 CFR 230)

The primary goal of the Clean Water Act, to restore and maintain the waters of the United States, appears diminished by the manner in which the Corps evaluates permit applications to discharge fill material into wetlands. Issuance of permits for filling in waters of the United States should be consistent with the provisions of the 404 (b)(1) Guidelines (Guidelines) prepared by the Environmental Protection Agency. Since these are only Guidelines the Corps does not strictly adhere to them as a threshold determination prior to permit issuance. Rather, the Corps exercises more of a "public or economic interest determination" as authorized by 33 CFR 323. Thus, the goal of the Clean Water Act to restore and maintain the Nation's water quality involves a variety of other considerations.

The 404 (b)(1) Guidelines were adopted under the Clean Water Act and are therefore the appropriate standards to apply to permit applications. The Guidelines specifically prohibit discharges that will cause or contribute to significant degradation of the waters (including wetlands) of the United States. The Guidelines specifically monitor wetlands of areas in which degradation or destruction may represent an irreversible loss of valuable aquatic resources 40 CFR 320.1(d). In order to meet this high standard of protection for wetlands the Service supports a goal of "no net loss" of valuable wetland habitat.

2

Mitigation

The Service makes its resource protection recommendations to the Corps based upon established criteria. In most cases the Service recommends a goal of "no net loss" of habitat value. The Service believes its recommendations are consistent with the Clean Water Act and 404(b)(1) provisions to protect and restore wetlands.

The Service has adopted the definition of mitigation developed by the President's Council on Environmental Quality. This definition, contained in 40 CFR 1508.20, provides the various techniques for minimizing or eliminating adverse environmental impacts. Consistent with the intent of the Clean Water Act, the most environmentally sound technique is to avoid impacts. If such technique is not possible, the second most effective measure is to minimize impacts; the third and fourth to eliminate impacts over time. The least protective technique is to compensate for unavoidable impacts and, although some degree of protection is afforded, it is nonetheless a substitute. Unfortunately this last step, which usually involves creating or improving habitat, is what many people limit their efforts to when they address mitigation.

Compensating for impacts by creating substitute habitats is a relatively new and unproven technique that should be considered as experimental and used carefully. Avoiding impacts wherever possible is the surest way to protect valuable fish and wildlife habitats. The Corps has not consistently applied mitigation with emphasis on the most protective techniques. The Corps has too quickly moved to compensation, which should be a last resort to achieve the Service's "no net loss" goal.

Cumulative Impacts

The Service believes, the intent of the National Environmental Policy Act and other Federal laws that mandate consideration of cumulative impacts is not simply to assess cumulative impacts, but rather to evaluate development proposals "in context" so that cumulative impacts can be avoided through the appropriate design, citing, timing, and operation of projects. The context of project evaluation is determined by establishing appropriate geographical boundaries and timeframes (extended into the "reasonably foreseeable future"), and then by analyzing resource and development trends and status.

It is a general misconception that an impact only becomes cumulatively significant when the next increment of habitat degradation will precipitate environmental disaster. That idea is inappropriate under 40 CFR 230.11 (g). It is incorrect to assume that we can identify clearly and with confidence the various factors limiting a population. We cannot continue to eliminate supposedly non-critical components of the ecosystem until the assumed critical point is reached.

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A key problem with the Corps' approach to cumulative impact assessment and management appears to be the absence of resource goals for its program with which to compare the results of resource trend and status analysis. The public interest review that the Corps conducts generally does not reflect any goal to restore and maintain the Nation's water resources, as mandated by the Clean Water Act.

Recommendations

The following recommendations would greatly improve the effectiveness of the section 404 program in protecting wetlands:

See comment 1.

1. To reduce workload and allow the Corps to focus on priority issues, the Corps should issue "general denials" for categories of activities that are universally contrary to the Clean Water Act (e.g., filling special aquatic sites for non-water dependent purposes). This approach would be similar to the Corps' current "general permission" for activities determined consistent with the intent of the Act.

See comment 2.

2. Enforcement should be made a higher priority by the Corps. The current approach described in the report of not looking for illegal or unauthorized activities because of the administrative burden should be changed. It is not consistent with the level of emphasis implied by their regulations contained in 33 CFR 326. Current activities by the Service regarding mitigation followup should provide assistance to the Corps in this area. The Corps may also need to realign its current resources or seek additional ones for the effort to be effective.

See comment 3.

3. The Corps should more aggressively adopt the goal of the Clean Water Act to restore and maintain the waters of the United States as the foundation upon which the entire section 404 permit program is based. Although incorporated in 33 CFR 323.6, the 404 (b)(1) Guidelines should be applied as a threshold determination rather than as a lesser weighted component of the public interest and economic analysis.

See comment 4.

4. The Federal resource agencies should continue to work together to develop a method of wetland delineation that is scientifically defensible and that reflects the goals of the Clean Water Act, which is necessary to ensure that the Corps receives uniform and current information.

See comment 5.

5. A reasonable appeal process is needed that focuses dialogue on the goals of the Clean Water Act, rather than on the public interest review conducted by the Corps.

The following are GAO's comments on the Department of the Interior's letter dated June 3, 1988.

GAO Comments

1. We believe that the current EPA effort to conduct advanced identification studies offers an opportunity to achieve the intent of this Interior Department recommendation. Under this approach, areas are identified as unsuitable for a potential discharge site, thus indicating to applicants that they would have a relatively difficult time qualifying for a permit. Such advance notice has the advantage of facilitating applicant planning.

2. We agree that enforcement of the Section 404 program must receive greater emphasis, and that is the thrust of our recommendation to the Secretary of the Army to develop, with the cooperation of EPA, a coordinated enforcement program. This may, as Interior states, require the Corps to realign its current resources.

3. We have recognized in the final report that the Corps conducts its public interest review and the 404(b)(1) Guidelines evaluation simultaneously and that the selection of sites for disposal of dredged and fill material must be in accordance with the Guidelines.

4. We believe that this recommendation is similar to our recommendation to the Secretary of the Army that he direct the Corps to work with the resource agencies to develop consistent definitions and procedures for implementing the Section 404 program.

5. We believe that this recommendation is similar to our recommendation to the Secretary of the Army that he direct the Corps to develop, with the participation of the resource agencies, a simplified process for appealing district engineers' permitting decisions.

Comments From the Department of Commerce

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

UNITED STATES DEPARTMENT OF COMMERCE
The Assistant Secretary for Administration
Washington, D.C. 20230

JUN 17 1988

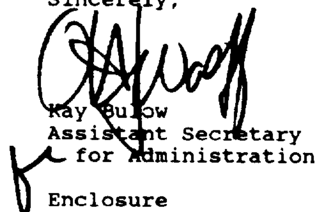
Mr. John H. Luke
Associate Director
Resources, Community and
Economic Development Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Luke:

This is in reply to GAO's letter of April 20, 1988, requesting comments on the draft report entitled "Wetlands: The Corps of Engineers' Administration of the Section 404 Program."

We have reviewed the enclosed comments of the Under Secretary for Oceans and Atmosphere and believe they are responsive to the matters discussed in the report.

Sincerely,



Kay Bulow
Assistant Secretary
for Administration

Enclosure

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UNITED STATES DEPARTMENT OF COMMERCE
The Under Secretary
National Oceanic and Atmospheric Administration
Washington, D.C. 20230

JUN 9 1988

Mr. John H. Luke
Associate Director
Resources, Community and
Economic Development Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Luke:

Thank you for your letter requesting the Department's review on the draft General Accounting Office report entitled, "Wetlands: The Corps of Engineers' Administration of the Section 404 Program" (GAO/RCED 88-110). We are pleased to present the following comments.

Wetlands, in particular coastal and estuarine wetlands, provide habitat essential to the maintenance and enhancement of productivity of the Nation's living marine resources. Consistent with the Clean Water Act and the Fish and Wildlife Coordination Act, the NOAA Habitat Conservation Program routinely evaluates and comments on Section 404 public notices, compliance, and other features related to the administration of the Section 404 Program. The majority of the acreage affected by Section 404 actions is wetland. The continued conversion of wetlands and the Corps consideration of NOAA's recommendations to conserve these areas are of concern to us.

Based upon our extensive Section 404 experience, we believe that the report is generally accurate, with some exceptions noted in the enclosed Appendix. In some situations, where difficulties in the administration of the Section 404 program have been overlooked, we point them out. While we agree with the recommendations made to the Secretary of the Army, we believe that additional specification is needed.

See comment 1.

In particular, it is important that the Corps develop a data base to track the effect of the Section 404 Program on conserving wetlands that accurately documents the amount and type of acreage converted and conserved under the program. To assess wetland habitat losses and gauge the effectiveness of all agencies in minimizing those losses, we suggest that the following be monitored by the Corps: (1) the type and amount of acreage discussed at the pre-project level; (2) the type and amount of acreage proposed in the public notice; (3) the type and amount of acreage recommended by Federal and state resource agencies; and (4) the type and amount of acreage authorized for modification. NOAA tracks public notices using the accepted standard Cowardin et. al. (1979) habitat classification (see Appendix). To the extent that the Corps can adopt appropriate components of this classification, the Corps would provide a compatible data base.

THE ADMINISTRATOR

See comment 2.

The recommendation "to work with the EPA to develop a coordinated enforcement program utilizing resources of both agencies to provide for surveillance, inspection, and assessment when violations of Section 404 permitting requirements occur" should be strengthened to include appropriate action where necessary. If violators are to be routinely provided "after-the-fact" permits, then the enforcement policy should include guidance for reviewing "after-the-fact" applications consistent with efforts to minimize adverse impacts to habitat.

NOAA will continue to support the development of a more comprehensive approach to the management of wetlands, in particular, tidally influenced wetlands. We believe this report is a step in that direction and commend the objective and accurate approach taken in this document.

We appreciate the opportunity to comment on the draft report.

Sincerely,

Paul M Wolff

for William E. Evans

Enclosure

Appendix

General Comments:

See comment 3.

For consistency with the Army/DOC Section 404(q) Memorandum of Agreement, we recommend that the word "appeal" used in the document be replaced with the word "elevate".

Specific Comments:

Now on p. 8.
See comment 1.

Page 11. Insert "estuaries" in the list of areas which make up wetlands.

Now on p. 9, paragraph 4.
See comment 1.

Page 13, paragraph 1. The last sentence should read "These three federal agencies are known..."

Now on p. 10.
See comment 1.

Page 14. State Coastal Zone Management Act (CZMA) authority is stronger than expressed here. Paragraph 1 should read "In addition, the CZMA 16 U.S.C. 1456(c), provides that a timely objection by a state with a Federally approved Coastal Zone Management Program to a consistency certification filed by an applicant for a Corps's Section 404 permit precludes the Corps from issuing a Section 404 permit, unless the Secretary of Commerce finds that the activity is either consistent with the objectives of the CZMA or necessary in the interest of national security."

Now on p. 14, paragraph 3.
See comment 2.

Page 20, paragraph 2. Wetland loss may be encouraged if permitting is easier and more expeditious when applicants discharge fill material and <u>then</u> apply for authorization. The ease of obtaining "after-the-fact" permits must be reduced if the rate of wetland loss is to be decreased.

Now on p. 16, paragraph 4.
See comment 4.

Page 21, paragraph 2. We suggest "...and resource concerns." be added to the end of the last sentence.

Now on p. 19, paragraph 1.
See comment 5.

Page 24, paragraph 1. "saved" should be changed to "conserved" in the third sentence.

Now on p. 19, paragraph 1.
See comment 6.

Page 24, paragraph 1. NOAA maintains an electronic data base for tracking public notice/permit acreage and related information. Examples of these systems are cited in NMFS publications Mager and Thayer (1986) and Faris et.al. (1987). This information is available for Section 404 related activities alone, as well as Section 10 and Section 10/404 for combined data.

Now on p. 24.
See comment 1.

Page 31. There are several reasons for pursuing habitat-related policy agreements between the Corps and Resource Agencies on coastal wetlands first, then tackling agreement on interior wetlands: (1) the Corps and the Resource Agencies are generally in agreement on the delineation of coastal wetlands; (2) these areas generally have greater habitat

values for commercially and recreationally valuable fish and shellfish; (3) coastal wetlands are more scarce, making up about 3/10 of one percent of U.S. surface area versus five percent for interior wetlands; (4) coastal wetlands are threatened most often by non-water dependent, non-industrial uses such as residential development; whereas the relatively abundant interior wetlands are usually lost to agriculture or ranching; and, (5) coastal wetlands are generally reviewed under Section 10 as well as Section 404, and therefore given additional scrutiny.

Now on p. 25, paragraph 5.
See comment 1.

Page 32, paragraph 2. It is our understanding the Corps is now testing a method for delineating wetlands. That method should be cited here.

Now on p. 26, paragraph 3.
See comment 1.

Page 33, paragraph 3. The Corps, or an independent authority, needs to verify project purpose if wetlands loss is to be reduced.

Now on p. 27, paragraph 5.
See comment 1.

Page 34, paragraph 3. The Corps' emphasis on economic impact often overlooks the long-term economic contributions of habitat to commercial and recreational fishing industry.

Now on p. 28, paragraph 4.
See comment 1.

Page 35, paragraph 2. Even if the Corps had the capability to assess cumulative impacts, not all Corps districts are able to determine how many or which projects are within a given geographic area due to incomplete record keeping and inconsistent designation of waterway numbers. In particular, this problem has been noted in our Alaska Region and resulted in tracking difficulties.

Now on p. 33.
See comment 1.

Page 40. We agree with these recommendations. The first recommendation, however, for a data reporting mechanism to provide baseline information on the extent of wetlands impacts relative to Section 404 permits action, should state specifically the reporting of the type and acreage of wetlands involved.

Now on p. 33.
See comment 1.

Page 40. The recommendation to the Secretary of the Army regarding the data reporting requirements, should include analysis of the entire Section 404 permit process (i.e., denial as well as approval of applications).

Now on p. 39.
See comment 1.

Page 45. We commend the pre-application approach used by the Omaha Corps District when problems are anticipated. It is unfortunate that the Corps is not yet able to use this approach nationwide.

Now on p. 40.
See comment 1.

Page 47. The Jacksonville District's practice of stating when public notice data are unverified should be adopted nationwide, thus giving the public and resource agencies an indication of which proposals may require additional scrutiny.

Now on p. 42, paragraph 4.
See comment 7.

Page 50, paragraph 1. What is meant by "resolve" in the first sentence?

Now on p. 44.
See comment 1.

Page 53. The problem of not receiving copies of issued permits is a problem in other Corps Districts as well.

Now on p. 53.
See comment 1.

Page 63. The preamble to the Recommendations should read: "...receive full consideration as required by law, we recommend.."

Now on pp. 63 and 65.

See comment 1.

Pages 74 and 77. As noted, in order for permitted projects to be inspected and tracked for compliance, data are needed for each permit on: 1) the date construction started, 2) the date construction was completed, 3) the project priority rating for inspection, and 4) the date and results of site compliance inspection. This information could be easily obtained and projects tracked if the Corps required permittees to provide 1 and 2 above. Presently, however, this information is seldom recorded.

Now on p. 70, paragraph 3.
See comment 1.

Page 85, paragraph 2. While regulation of private land is not readily accepted by the courts, it bears pointing out that in many states, coastal wetlands are property of the state.

Now on p. 72, paragraph 4.
See comment 7.

Page 87, paragraph 1. The difference between suspensions and revocations and how these actions affect wetlands should be clarified.

REFERENCES CITED:

Cowardin, L.M., V. Carter, F.C. Golet, E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service, Office of Biological Services, FWS/OBS-79/31. 103 pages.

Mager, A. and G.W. Thayer. 1986. National Marine Fisheries Service Habitat Conservation Efforts in the Southeast Region of the United States from 1981 through 1985. Marine Fisheries Review, 48(3) pages 1-8.

Faris, T.L., J.B. Hamilton, and R.L. Stone. 1987. Report on the Alaska Region Section 10/404 Permit Coordination 1981 through 1985. NOAA Technical Memorandum NMFS F/AKR-6. U.S. Department of Commerce. 46 pages.

The following are GAO's comments on the Department of Commerce's letter dated June 9, 1988.

GAO Comments

1. We have recognized these comments in the final report.

2. Corps regulations require that in those cases where district engineers determine that after-the-fact permits are appropriate, the applications will be processed in accordance with procedures governing other Department of the Army permit applications. These procedures include review by federal resource agencies, as described in our report.

3. We define our use of "appeal" and "elevate" in the introductory chapter of this report; therefore, we have not made this change.

4. We have described our findings at five Corps districts, including any differences in their administration of the Section 404 program, in chapters 2, 3, and 4.

5. We have changed the word "saved" to "protected" in order to provide consistency throughout the report.

6. We have clarified the report to indicate that information on the amount of wetlands acreage protected as a result of Section 404 permitting requirements is not available for all Corps permitting actions. Although NMFS provided us with considerable information on Corps permitting actions, we were advised that NMFS is primarily concerned with coastal wetlands and may not have information on all Corps public notices.

7. We have added an explanation to the report.

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