U.S. Environmental Protection Agency Region IV

ANALYSIS OF THE SECTION 404 PROGRAM

Charles R. Jeter
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1. A SUMMARY OF THE LEGISLATIVE AND JUDICIAL HISTORY OF THE SECTION 404 PROGRAM

A. Pre-404 Permitting Concerns

Although federal regulation of activities affecting the nation's waters began in the nineteenth century, its sole purpose up until the last decade was to protect navigability. Acting under authority of the commerce clause of the Constitution, Congress early sought to insure unobstructed navigation on interstate waters by enacting the Rivers and Harbors Appropriation Act of 1899 (RHA), now codified at 33 U.S.C. §401-413 (1976). Under Section 10 of the RHA, projects involving excavation or filling activities in navigable waters must be approved by the Corps of Engineers.

Itself historically the sponsor of many such projects, the Corps has long limited "navigable water" jurisdiction under Section 10 to the mean high water mark (MHW) in tidal areas and to the ordinary high water mark (OHW) in freshwater areas. Although these jurisdictional boundaries (taken from common law demarcations of public and private ownership) have been adequate for the purpose of protecting navigability, they have provided scant protection to wetland areas, which usually are partly or wholly above MHW/OHW. Navigability, however,

remained the sole concern of the Section 10 program until 1968, when Corps regulations were revised to provide that permitting would include consideration of environmental and other "public interest" factors in addition to navigability. This new Corps policy (applied only to areas below MHW/OHW) was approved by the Fifth Circuit Court of Appeals, which held federal regulation of estuarine wetlands based on ecological concerns to be authorized by the commerce clause and within the scope of the RHA [Zabel v. Tabb, 430 F.2d 199 (5th Cir. 1970)].

B. Enactment of Section 404

Section 404 was enacted as part of Public Law 92-500, the Federal Water Pollution Control Act Amendments of 1972. Initially, Section 404 had only three subsections: 404(a), authorizing the Corps to issue permits for discharges of dredged or fill material into navigable waters at specified disposal sites; 404(b), providing that sites must be specified through application of EPA guidelines, unless an economic impact on navigation or anchorage exists; and 404(c), authorizing EPA to restrict or prohibit disposal in any area (including one previously specified for disposal) if EPA determines that discharges of dredged or fill materials there would have an unacceptable adverse effect on municipal

water supplies, shellfish beds and fishery areas, wildlife, or recreational areas. By Section 301(a) of this statute, unpermitted discharges of dredged or fill material were made unlawful, and the Administrator was granted enforcement powers under Section 309.

While the legislative history bearing on Section 404's enactment is not extensive, it is clear that the division of responsibility for the program between EPA and the Corps resulted from a Conference Committee compromise between the Senate bill (which designated EPA as the permit-issuing authority) and the House version (which designated the Corps). This legislative history also sheds some light on Congress' intent in defining "navigable waters" as "the waters of the United States, including the territorial seas" in Section 502(7) of the statute. The House-Senate Conference Report expresses the intent that "navigable waters" should be "given the broadest possible constitutional interpretation unencumbered by Agency interpretations which have been made...". In presenting the Conference version to the House, one of the conferees explained:

...the Conference bill defined the term
'navigable waters' broadly for water quality
purposes. It means 'all the waters of the

United States' in a geographic sense. It does not mean 'navigable waters of the United States' in the technical sense as we sometimes see in some laws...

...Thus, this new definition clearly encompasses all water bodies, including main streams and their tributaries, for water quality purposes. No longer are the old, narrow definitions of navigability, as determined by the Corps of Engineers, going to govern matters covered by this bill. [118 Congressional Record 33756-57 (1972)].

During the first years following 404's enactment, however, the Corps continued to regard the geographical limits of the new program's jurisdiction as identical to those "navigable water" limits of MHW/OHW governing permitting under the RHA. Under this jurisdictional interpretation, opposed by EPA and others, the majority of the nation's wetlands remained unregulated.

C. Judicial Delineation of Section 404 Jurisdiction

The geographic reach of Section 404 was ultimately

determined by the courts. Among the earliest cases

addressing the question of whether the traditional

definition of "navigable waters" limits 404 permitting

authority was United States v. Holland, [373 F. Supp. 665 (M.D. Fla. 1974)], a case initiated by EPA to halt the filling of some Florida mangrove wetlands above The Holland court analyzed the legislative intent of the Federal Water Pollution Control Act Amendments of 1972 (FWPCA), contrasting its objective "to restore and maintain the chemical, physical and biological integrity of the Nation's waters [Section 101(a)] with the RHA's purpose of keeping navigable waters free of physical impediments. After noting Congressional sensitivity to the value of the coastal wetlands, the Court cited scientific evidence that the effects of pollution are not confined to the traditional boundaries of navigability and concluded that the MHW boundary line has no rational connection to the aquatic ecosystems which the FWPCA was intended to protect. Therefore, the Court upheld EPA's assertion that 404 jurisdiction extended into wetlands above MHW.

Shortly after the <u>Holland</u> decision, however, the Corps published regulations retaining the MHW/OHW limits on 404 jurisdiction, [39 Fed. Reg. 12115, 12119 (April 3, 1974)]. These regulatory restrictions on jurisdiction were promptly challanged in court by a private environmental organization, and in N.R.D.C. v. Calloway,

[392 F. Supp. 685 (D.D.C. 1975)], the Corps was ordered to adopt regulations asserting full 404 jurisdication. In compliance with this order, the Corps issued regulations, after consultation with EPA, which phased in 404 regulatory authority over wetlands adjacent to traditionally "navigable waters" ("Phase I Waters," effective in 1975); tributaries, lakes greater than five acres, and their adjacent wetlands ("Phase II Waters," effective in 1976); and other waters up to headwaters of 5 cfs ("Phase III Waters," effective in 1977) [40 Fed. Reg. 31310 et seq. (July 25, 1975)]. This broad assertion of 404 geographical jurisdiction is substantially the same as that now in effect.

D. The Clean Water Act of 1977

Seventeen new sub-sections were added to Section 404 by Public Law 95-217, the Clean Water Act of 1977 (CWA). Among the more significant of these CWA additions are provisions establishing procedures for transferring permitting authority to the states over all waters (except "navigable" waters below MHW/OHW and "Phase I" wetlands adjacent thereto), at the option of the states and upon the Administrator's approval [402(g)-(1)]; provisions exempting discharges related to certain activities such as "normal farming, silviculture, and ranching" from 404 regulation and authorizing Corps

issuance of general permits for any category of activities having minimal adverse effects on the environment [404(e) & (f)]; and a requirement for agreements between the Corps and other agencies, including EPA, directed toward minimizing duplication, paperwork and delays in permit issuance [404(q)].

Perhaps the most significant aspect of these CWA amendments, however, is the fact that they made no substantive changes in the three original sub-sections of 404. In particular, Congress took no action to restrict the judicially-determined breadth of jurisdiction over "waters of the United States". This issue was extensively debated, however, and a bill eliminating 404 jurisdiction over "Phase II" and "Phase III" waters, which include as much as 85 per cent of the nation's wetlands, passed in the house and was defeated in the Sepate by only a narrow margin. The fact that Congress gave plenary consideration in CWA debates to jurisdiction without changing it provides a strong legal argument that 404's current jurisdictional breadth is consistent with the intent of Congress.

Post-CWA judicial decisions addressing the scope of activities exempted from regulation under Section 404(f) have tended to limit the exemptions strictly.

In Avoyelles Sportsmen's League, Inc. v. Marsh. [715 F. 2d 897 (5th Cir. 1983)], the Fifth Circuit Court of Appeals upheld a lower court determination that the "normal" farming activities exemption is limited to "established" farming, and does not preclude 404 regulation of activities converting wetlands to farmland. The Avoyelles court upheld the Corps/EPA interpretation of the current regulatory definition of "wetlands":

those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas [33 C.F.R. §323.2(c)(1982)].

This court also acknowledged Attorney General Civiletti's September 5, 1979, opinion that EPA has ultimate administrative authority for determining both 404 geographical jurisdiction and the limits of 404(f) exemptions.

E. Corps Regulatory Reform

The most recent administrative action having the potential to eliminate large portions of the nation's wetlands from the 404 permitting process was the Corps' issuance of 1982 amendments to its 404 regulations [47]

Fed. Reg. 31794 et seq. (July 22, 1982)]. In response to suggestions by the Reagan Administration's Task Force on Regulatory Relief, the 1982 regulations, among other things, greatly expanded the coverage of general permits under 404(e). Among the 27 general nationwide permits issued in 1982 were two permits generally allowing discharges into particular categories of waters [47 Fed. Reg. 31821 (July 22, 1982)]. The "headwaters general permit" authorized discharges into nontidal rivers, streams, and their lakes and impoundments, including adjacent wetlands, located above headwaters. The "isolated waters general permit" authorized discharges into other nontidal waters not part of a surface tributary system. These permits eliminated 10-acre size limitations contained in similar general permits included in the 1977 Corps regulations, and were estimated to exempt several millions of acres of wetlands from individual permitting.

These and other 1982 regulatory revisions were challenged in a lawsuit brought by fifteen private environmental organizations, (National Wildlife Federation v. Marsh

[Civ. Action 82-3632, filed Dec. 22, 1982 (D.C. Dist.)]. The parties elected to settle this suit on terms generally favorable to the environmentalists' position in February 1984. As part of this settlement, the Corps

adopted new regulations [49 Fed. Reg. 39478 et. seq. (October 5, 1984)] limiting the "headwaters" and "isolated waters" general permits to discharges not causing "the loss or substantial adverse modification of 10 acres or more of waters of the United States, including wetlands". Among other concessions flowing from the settlement, the Corps abandoned its earlier position that EPA's 404(b)(1) "guidelines" were merely advisory, and amended its regulations to provide that no 404 permit would be issued without compliance with these "guidelines". [33 C.F.R. 320.4(a)(1)(1984)]

F. Current Legal Question: The "Taking" Issue

As the reach of federal 404 jurisdiction over "waters of the United States" has expanded beyond the MHW/OHW lines of traditional "navigability", regulation has extended to areas beyond the historical boundaries of the public's "navigable servitude" into areas long held to be subject to private ownership. In addition to the political opposition this expansion has generated, a substantial legal issue has arisen over whether such 404 regulation constitutes a "taking" of private property, unconstitutional under the Fifth Amendment unless the government pays the landowner.

Thus far, leading cases addressing the issue have held that 404 permit denials for particular wetland development projects did not constitute a "taking" sufficient to require compensation [e.g., Deltona v. United States, 657 F. 2d 1184 (Ct. Claims, 1981)]. In Deltona, the court found it to be significant that the complaining corporation owned some upland property and had earlier been permitted to fill some of its The court ruled that its property, taken as a whole retained "economically viable use", notwithstanding the fact that the 404 permit was denied for one portion of the property. In another Florida case now pending before the Court of Claims, Florida Rock Industries, Inc. v. United States [No. 266-821], the judge has orally indicated that he intends to rule that denial of a 404 permit for the mining of limerock on Everglades wetlands acquired solely for that purpose constitutes a compensible "taking." When such a written decision is finally entered, Justice Department attorneys have indicated that they intend to appeal it. Ultimately, this issue of "taking" will no doubt have to be decided by the Supreme Court.

2. IMPORTANCE OF WETLAND REGULATION

A. Historic Wetland Losses

Approximately 215 million acres of wetlands existed in the lower 48 states at the time of the Nation's settlement. In the mid-1970's, only 99 million acres remained, leaving just 46% of our original wetland acreage (Fig. 2-1). These wetlands consisted of 93.7 million acres of palustrine wetlands (non-tidal marsh, swamp, bog, fen, and prairie) and 5.2 million acres of estuarine wetlands. (Fig. 2-2).

Between the mid-1950's and mid-1970's, approximately 11 million acres of wetlands were lost and approximately 2 million acres of wetlands were created. The net loss of 9 million acres during this period of rapid development equates to an area about twice the size of New Jersey (Fig. 2-3).

Annual wetland losses averaged 458,000 acres during this period, including 440,000 acres of palustrine losses and 18,000 acres of estuarine wetland losses. Agricultural development was responsible for 87% of these recent national wetland losses. Urban development and other development caused approximately 8% and 5% of the losses respectively. Major causes of wetland losses and degradation are given in Table 1.

The most extensive wetland losses occurred in Louisiana, Mississippi, Arkansas, North Carolina, North Dakota, South

Dakota, Nebraska, Florida and Texas. Greatest losses of forested wetlands occurred in the lower Mississippi Valley through conversion of bottomland hardwood forests to farmland. Shrub wetlands were the major type destroyed in North Carolina where pocosin wetlands were converted to cropland or pine plantations, or mined for peat. Inland marsh drainage for agricultural use was severe in the Prairie Pothole Region of the Dakotas and Minnesota, Nebraska's Sandhills and Rainwater Basin, and the Florida Everglades.

Between the mid-1950's and mid-1970's, estuarine wetland losses were heaviest in the Gulf states, Louisiana, Florida and Texas.

Most of Louisiana's coastal marsh losses were attributed to submergence by coastal waters. In other areas, urban development was the major cause of coastal wetland loss. Dredge and fill residential development in coastal areas was most significant in Florida, Texas, New Jersey, New York and California.

B. Continuing Wetland Losses

In the Southeast, agricultural drainage is continuing in large tracts, especially in the Lower Mississippi Delta, Florida, and along the coastal plain of North Carolina. Bottomlands are being clearcut for timber, and then cleared and drained for crop production, chiefly soybeans. Pocosin wetlands are similarly being converted, as well as being mined for peat.

Many inland wetlands are being converted to pine plantations throughout the Southeast. Phosphate mining in Florida and North Carolina is destroying considerable wetland acreage. New reclamation rules require an attempt to replace these communities, but do not guarantee success. While coastal wetland destruction has slowed in most states with the passage of wetland regulations, many enforcement problems continue. A summary of recent losses is given in Table 2.

While wetland losses and degradation continue throughout the country, there are several areas where wetlands are in greatest jeopardy. These include: (1) estuarine wetlands of the coastal zone, (2) Louisiana's coastal marshes, (3) Chesapeake Bay's submerged aquatic beds, (4) South Florida's palustrine wetlands, (5) Prairie potholes, (6) wetlands of Nebraska's Sandhills and Rainwater Basin, (7) forested wetlands of the Lower Mississippi Alluvial Plain, (8) North Carolina pocosins, and (9) western riparian wetlands. Most of these regions are under intense pressure from agricultural interests, while the effect of urbanization and industrial development is more localized.

C. Limitations of the Section 404 Program

The major effects of the 404 program are the reduction of wetland conversions through permit denials, modification of permits to reduce the number of wetland acres affected, and conditions attached to permits that lessen the impact of activities on wetlands.

Only a small percentage of Section 10/404 permit applications are denied: 291 of 10,718 applications received nationwide in 1981 (2.7%). A much greater percentage (31% nationwide) are modified in the permit process.

According to Corps statistics for 1980 and 1981, its districts (excluding Alaska) processed permits for filling approximately 100,000 wetland acres per year. The Corps authorized projects resulting in approximately 50,000 acres of wetland destruction, a 50% reduction achieved through modifications, withdrawals and denials of 404 permits.

D. Functions of Wetlands

Although wetlands were historically used for hunting, trapping and fishing, they were largely considered wastelands which could be improved through "reclamation projects," such as drainage for agriculture and filling for industrial and residential sites. Today, it is widely recognized that wetlands in their natural state provide a wealth of values to society (Table 3). Wetland benefits can be divided into three basic categories: (1) fish and wildlife values, (2) environmental quality values, and (3) socio-economic values. A detailed discussion of all these values is given in Tiner (1984). Corps of Engineers Regulations (July 22, 1982) define wetland functions as follows:

Wetlands considered to perform functions important to the public interest include:

- (i) Wetlands which serve significant natural biological functions, including food chain production, general habitat, and nesting, spawning, rearing and resting sites for aquatic or land species;
- (ii) Wetlands set aside for study of the aquatic environment or as sanctuaries or refuges;
- (iii) Wetlands the destruction or alteration of which would affect detrimentally natural drainage characteristics, sedimentation patterns, salinity distribution, flushing characteristics, current patterns, or other environmental characteristics;
- (iv) Wetlands which are significant in shielding other areas from wave action, erosion, or storm damage. Such wetlands are often associated with barrier beaches, islands, reefs and bars;
- (v) Wetlands which serve as valuable storage areas for storm and flood waters;
- (vi) Wetlands which are prime natural recharge areas. Prime recharge areas are locations where surface and ground water are directly interconnected; and
- (vii) Wetlands which through natural water filtration processes serve significant and necessary water purification functions.

215 MILLION ORIGINAL ACRES

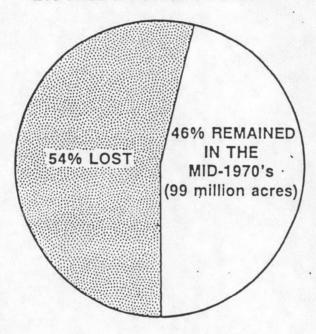


Figure 2-1. Original and remaining wetlands in the conterminous U.S.

Estimates of original wetland acreage present at the time of this country's settlement vary. However, a reliable account places this acreage at 215 million acres (Roe and Ayres, 1954).

MILLIONS OF ACRES

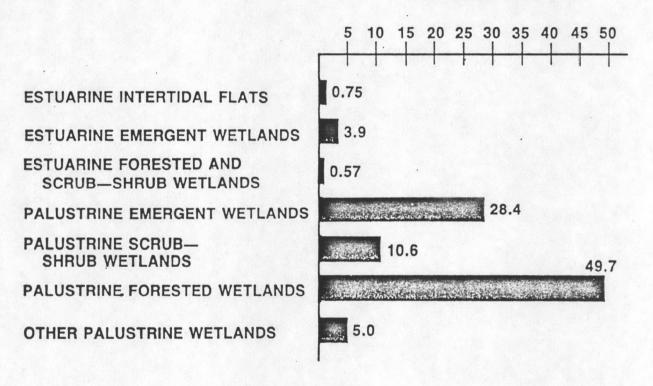
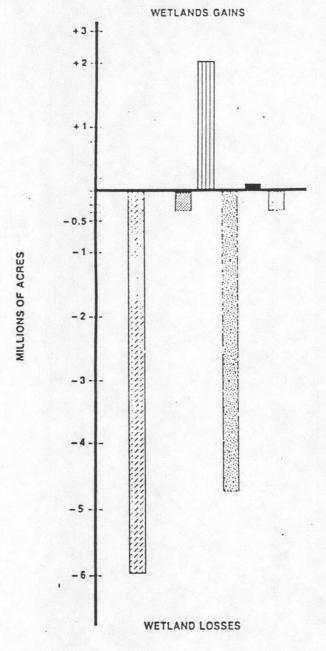
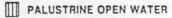


Figure 2-2. Extent of wetlands in the conterminous U.S. in the mid-1970's.



LEGEND



PALUSTRINE FLAT

ESTUARINE WETLAND

PALUSTRINE EMERGENT WETLAND

PALUSTRINE SCRUB—SHRUB WETLAND

PALUSTRINE FORESTED WETLAND

Figure 2-3. Net losses and gains in wetland types in the conterminous U.S. between the mid-50's and mid-70's.

Table 2-1. Major causes of wetland loss and degradation.

Human Threats

Direct:

- 1. Drainage for crop production, timber production and mosquito control.
- 2. Dredging and stream channelization for navigation channels, flood protection, coastal housing developments, and reservoir maintenance.
- 3. Filling for dredged spoil and other solid waste disposal, roads and highways, and commercial, residential and industrial development.
- Construction of dikes, dams, levees and seawalls for flood control, water supply, irrigation and storm protection.
- Discharges of materials (e.g., pesticides, herbicides, other pollutants, nutrient loading from domestic sewage and agricultural runoff, and sediments from dredging and filling, agricultural and other land development) into waters and wetlands.
- 6. Mining of wetland soils for peat, coal, sand, gravel, phosphate and other materials.

Indirect:

- Sediment diversion by dams, deep channels and other structures.
- 2. Hydrologic alterations by canals, spoil banks, roads and other structures.
- 3. Subsidence due to extraction of groundwater, oil, gas, sulphur, and other minerals.

Natural Threats:

- 1. Subsidence (including natural rise of sea level)
- 2. Droughts
- 3. Hurricanes and other storms
- 4. Erosion
- Biotic effects, e.g., muskrat, nutria and goose "eat-outs,"

Table 2-2. Examples of recent wetland losses.

State or Region	Loss Rate (acres/year)	Source
Lower Mississippi Alluvial Plain	165,000	MacDonald, et al. (1979)
Louisiana's Forested Wetlands	87,200	Turner and Craig (1980)
North Carolina's Pocosins	43,500	Richardson, et al. (1981)
Prairie Pothole Region	33,000	Haddock and DeBates (1969)
Louisiana's Coastal Marshes	25,000	Fruge (1982)
Great Lakes Basin	20,000	Great Lakes River Basin Comm. (1981)
Wisconsin	20,000	Wisconsin Department of Natural Resources (1976)
Michigan	6,500	Weller (1981)
Kentucky	3,600	Kentucky Department of Fish & Wildlife Resources (1983)
New Jersey's Coastal Marshes	3,084 50*	Ferrigno, et al. (1973) JACA Corporation (1982)
Palm Beach County, Florida	3,055	U.S. Fish and Wildlife Service (1982)
Maryland's Coastal Wetlands	1,000 20*	Redelfs (1983)
New York's Estuarine Marshes	740	O'Connor and Terry (1972)
Delaware's Coastal Marshes	444 20*	Hardisky and Klemas (1983)
 Loss rate after passage of state coastal wetland protection laws. 		

Table 2-3. List of major wetland values.

FISH AND WILDLIFE VALUES

- Fish and Shellfish Habitat
- Waterfowl and Other Bird Habitat
- Furbearer and Other Wildlife Habitat

ENVIRONMENTAL QUALITY VALUES

- Water Quality Maintenance
 - Pollution Filter
 - Sediment Removal
 - Oxygen Production
 - Nutrient Recycling
 - Chemical and Nutrient Absorption
- Aquatic Productivity
- Microclimate Regulator
- World Climate (Ozone layer)

SOCIO-ECONOMIC VALUES

- Flood Control
- Wave Damage Protection
- Erosion Control
- Groundwater Recharge and Water Supply
- Timber and Other Natural Products
- Energy Source (Peat)
- Livestock Grazing
- Fishing and Shellfishing
- Hunting and Trapping
- Recreation
- Aesthetics
- Education and Scientific Research

3. EPA'S ROLE IN THE SECTION 404 PERMIT PROGRAM

EPA has the responsibility to:

- develop the Section 404(b)(1) Guidelines in conjunction
 with the Corps;
- 2) review permit applications and provide comments to the permitting authority;
- 3) make jurisdictional calls when necessary;
- 4) approve and oversee State 404 programs;
- 5) enforce violations under Section 309;
- 6) prohibit any defined area's specification as a discharge site, or restrict its use, by following procedures given in Section 404(c) whenever certain unacceptable adverse environmental effects would be caused by discharges

In addition, EPA supplies technical assistance to the Corps, other Federal or State agencies, or local governments concerning issues of water quality, fish and wildlife resources, and aquatic ecosystem structure and functions.

A. Development of 404(b) Guidelines

Section 404(b) of the Clean Water Act states that each disposal site should be specified for each permit by the Secretary of the Army through application of Guidelines developed by the Administrator of EPA in conjunction with the Secretary of the Army. EPA first published interim final guidelines on

September 5, 1975, for the purpose of providing guidance to be applied in evaluating proposed discharges of dredged or fill material into navigable waters. The Guidelines were revised and published on December 24, 1980, and now appear at 40 C.F.R. 230.

B. Application of 404(b) Guidelines

Final Guidelines apply to all 404 permit decisions made after March 23, 1981. In the case of civil works projects of the Corps of Engineers involving the discharge of dredged or fill material for which there is no permit application as such, the Guidelines apply to all projects for which construction or dredging contracts are issued, or for which dredging is initiated for Corps operations not performed under contract, after October 1, 1981. In the case of Federal construction projects meeting the criteria of Section 404(r), the Guidelines apply to all projects for which a final environmental impact statement is filed with EPA after April 1, 1981.

Fundamental to the Guidelines is the precept that dredged or fill material should not be discharged into the aquatic ecosystem unless it can be demonstrated that the discharge will not have an unacceptable adverse impact, either individually or in combination with known and/or probable impacts of other activities affecting the ecosystem. The guiding principle of the application of the Guidelines is that degradation or

destruction of special aquatic sites (sanctuaries and refuges, wetlands, mud flats, vegetated shallows, coral reefs, and riffle and pool complexes) may represent an irreversible loss of valuable aquatic resources.

General step-by-step procedures to be followed in applying the Guidelines are given in 230.5(a-1). The permitting authority must address all relevant provisions of the Guidelines before reaching a Finding of Compliance in an individual case. These procedures are illustrated in a flow chart shown in Figure 3-1.

The following is a summary of the basic Guideline precepts:

- No discharge shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem.
- 2) Where the activity associated with a discharge does not require access or proximity to a special aquatic site to fulfill its basic function (i.e., is not water dependent), practicable alternatives are presumed to be available, unless clearly demonstrated otherwise.
- 3) No discharge of dredged or fill material shall be permitted if it:
 - a) causes or contributes to violations of any applicable
 State water quality standard;
 - b) violates any toxic effluent standard;

- c) jeopardizes the continued existence of an endangered or threatened species;
- d) violates requirements to protect a marine sanctuary; or
- e) causes or contributes to significant degradation of waters of the United States. Significant degradations include adverse effects on life stages of aquatic life and other water dependent wildlife, ecosystem diversity, productivity and stability, recreational, aesthetic and economic values.
- 4) No discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken to minimize potential adverse impacts on the aquatic ecosystem.

The Corps, during recent regulatory reform review, questioned whether EPA Guidelines were mandatory or advisory to the Corps administration of the 404 permitting program. The Office of Management and Budget reviewed this issue and concluded that EPA Guidelines should be treated as mandatory within certain limits (June 14, 1983). The Corps acknowledged this ruling and included appropriate language recognizing the mandatory nature of the Guidelines in their revised regulations dated October 5, 1984, which were prepared in response to the settlement agreement for the NWF v. Marsh suit. OMB also

found that the current guidelines mandate much more than they should and should be substantially revised and simplified to restore a proper division of labor between EPA and the Corps.

Regardless of any shortcoming of current guidelines, they are the basis for specification for disposal sites, and must be used by permitting and review agencies alike. The Corps' October 1984 Regulations state that compliance with the Guidelines is mandatory for all permit actions. The Corps performs their public interest review only in those cases where compliance with the Guidelines has first been determined. In fact, however, there frequently are still major disagreements between resource agencies and the Corps districts regarding conformance with the Guidelines. Many permits are being issued that do not in the opinion of EPA. However, the Corps has the responsibility for determining "conformance".

C. Jurisdiction of the 404 Program

There has been a continuing controversy concerning which agency has the ultimate authority in determining the scope of jurisdiction of the 404 program. Official opinion on this controversy was given by U.S. Attorney General Benjamin Civiletti in his letter to Clifford L. Alexander, Jr. dated September 5, 1979. He stated that Congress intended to confer upon the Administrator of EPA the final administrative

authority to make these determinations. The Attorney General said that it is the Administrator who interprets "navigable waters" in carrying out pollution control responsibilities under sections of the CWA apart from Section 404, and found no support in the statute or its legislative history for a conclusion that a water body would have one set of boundaries for purposes of dredged and fill permits under Section 404 and a different set for purposes of other pollution control measures of the Act.

Since EPA lacks the staff to make routine field jurisdictional determinations for all dredge and fill applications, and since it is the Secretary of the Army's responsibility to administer the Federal permit program under Section 404, EPA and the Corps signed a Memorandum of Understanding regarding the jurisdiction of the Section 404 program on April 23, 1980.

It was agreed that District Engineers are authorized to make final jurisdictional determinations for pre-application inquiries, permit situations, and enforcement situations without consultation with EPA. EPA has the authority to identify Special Cases, where the environmental consequences of jurisdiction are significant. EPA has published a list of special cases in the Federal Register and has the authority to determine the jurisdictional scope of the program in those designated areas. At present, the list of Special Cases is limited to 73 counties in the Mississippi River floodplain where

bottomland hardwood wetlands predominate (48 in Mississippi, 7 in Kentucky, and 18 in Tennessee).

D. State 404 Programs

Section 404(g) outlines the procedures a state may initiate to assume the Section 404 program for waters of the United States within the State, except those waters used for interstate or foreign commerce shoreward to their ordinary high water mark, including all tidal waters shoreward to their mean high water mark and adjacent wetlands. Those interstate, or foreign commerce, waters must remain under Federal jurisdiction.

Draft Final Regulations governing the State assumption of the program were published in the Federal Register in October 1984.

E. Enforcement

Discharge of a pollutant into waters of the United States without a permit is unlawful. Section 404(s) gives the Secretary of the Army the authority to enforce permit violations including commencement of civil actions, temporary or permanent injunctions, and fines. Regulations governing Corps enforcement are given in 33 CFR 326. The District Engineer should, in appropriate cases, depending upon the potential impacts of the illegal work, solicit the views of the Regional Administrator of the EPA, the Regional Director

of the U.S. Fish and Wildlife Service, and the Regional Director of the National Marine Fisheries Service, and other Federal, state and local agencies.

The Corps may accept an after-the-fact permit application in lieu of immediately commencing an enforcement action. Such after-the-fact permits may be issued only if they comply with the 404(b) Guidelines as well as other requirements set out in Corps' regulations. EPA provides written comments when appropriate to the Corps on Cease and Desist Orders and/or after-the-fact permit applications.

EPA technical personnel are available to assist the Corps in evaluating effects of violations on water quality, fish and wildlife habitat, and ecosystem dynamics. Regional Office personnel routinely gather field data and testify at federal trials as expert witnesses for the Government.

EPA enforcement options for Section 404 are given in Section 309 of the CWA. If a state with an approved permit program is not actively pursuing enforcement action, EPA may issue an order requiring compliance or bring civil action (federally assumed enforcement). EPA may issue an Administrative Order under Section 309 for any unpermitted discharge of pollutants into waters of the United States which is a violation of Section 301 of the CWA. Early in the 404 program, EPA took this action

in cases where the Corps failed to issue Cease and Desist Orders for work in areas where the Corps felt its jurisdiction did not apply. More recently, issuance of Administrative Orders has been confined to serious violations when the Corps is either slow to act, or when EPA wishes to take the lead in requiring restoration or civil penalties. Section 404(k) provides that nothing in Section 404 should be construed to limit the Administrator's Section 309 authority.

F. Use of 404(c)

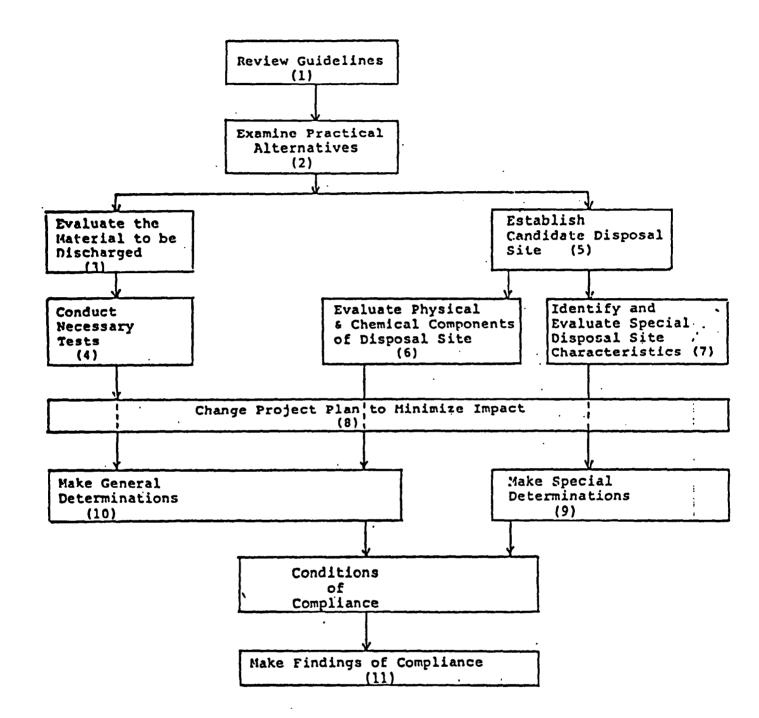
The Corps may issue a permit, even if EPA comments adversely, after consultation takes place. In the case of state programs, the State director may not issue a permit over EPA's unresolved objection. Under either a Federal or State program, the Administrator may prohibit the specification of a discharge site, or restrict its use, by following procedures given in Section 404(c) of the CWA. Such action may be initiated if the Administrator determines that the discharge would have an unacceptable adverse effect on fish and shellfish areas, municipal water supplies, and for wildlife or recreation areas. He may do so in advance of a planned discharge or while a permit application is being evaluated, or even after the issuance of a permit.

If the Administrator uses 404(c), he may block issuance of a permit by the Corps or a State 404 program. His action may

not be overridden under Section 404(b)(2) which allows the Corps to make some permit decisions based on the economic impact of the site on navigation and anchorage.

The fact that EPA has 404(c) authority does not lessen EPA's responsibility for developing 404(b) Guidelines for use by the permitting authority. Indeed, if the Guidelines are properly applied, EPA will rarely have to use its 404(c) veto. Its use in Region IV is discussed in Section 7 of this report.

Figure 3-1. Flow chart summarizing application of Section 404(b)(1) Guidelines.



4. CORPS' ROLE IN THE SECTION 404 PERMIT PROGRAM

In Section 404, Congress clearly placed the permit issuance responsibility with the Corps of Engineers. Logistically, the Corps was well suited for such role since their in-place District/Divisional organizational structure geographically covered the United States. As an example, within Region IV there are eleven Districts and five Divisions administering the 404 permit issuance program.

A. Public Notices

The Corps regulations require all Districts to issue Public Notices of applications received for 404 permits. Time limits and a central point of contact for comments are established. Individual permits are not required for certain activities having only minor environmental impacts. These are covered under General Permits.

B. Public Interest Review

Unlike other federal or state agencies commenting on proposed projects within a fairly narrow perspective (such as the U.S. Fish and Wildlife Service), the Corps' review process must include a broad range of affected interests in order to determine whether issuance of a permit would be in the public interest. A flow chart summarizing the steps in the permitting process is given in Figure 4-1.

C. Jurisdictional Determinations

Through a Memorandum of Understanding, EPA and the Corps have agreed that unless EPA identifies "special cases," the Corps determines the limits of wetlands covered under 404 permits. EPA has the final call for "special cases"; however, resource limitations have severly restricted EPA's role in making such calls.

D. Regulated Activities

The Corps also has identified various activities that are not subject to 404 permitting. This has led to major problems, especially in bottomland hardwood situations, since EPA does not agree with the Corps in some instances. Generally, the Corps' calls are satisfactory to EPA and close cooperation has been effective. Typical landclearing operations in jurisdictional wetland areas, however, have usually not been regulated by the Corps. EPA believes they should be regulated since much wetland destruction is occurring without control. This fundamental difference of opinion is a major impediment to an effective program, and can only be resolved at the Washington level.

E. Permit Volume

The volume of public notices received from all Corps

Districts within Region IV was between 3000-4000 per year following the Corps' expanded program in 1975. Subsequently, with the advent of General Permits and recessionary trends of the national economy during the late 70's, the volume stabilized around 2100-2200. The latest figures indicate that a rising level of nearly 3000 will be received in FY'85. (Figure 4-2) In comparison to similar figures from other Regions, Region IV continues to process one of the heaviest permit application work—loads in the country (Figure 4-3)

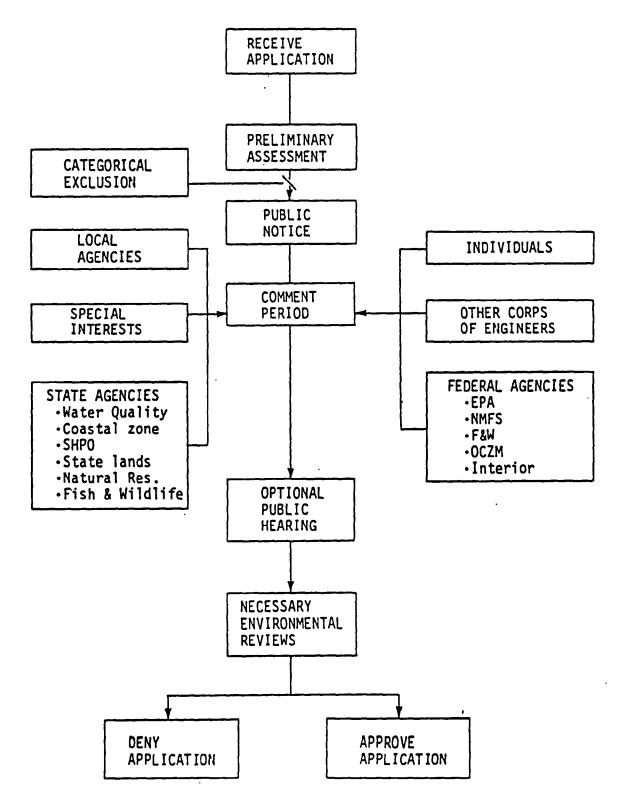
F. Corps Projects

In addition to processing 404 permits, the Corps responsibilities also include navigational dredging and civil works projects that constitute major wetland impacts, surpassing by far those impacts resulting from issued permits. Authority of EPA to prevent spoiling in wetlands in association with such projects is limited. Civil works projects, such as the Tennessee-Tombigbee Waterway, the Cross Florida Barge Canal, and the Kissimmee River channelization projects, frequently adversely impact wetland resources. If EPA objects to such projects, we immediately are branded as "obstructionists." Rarely do mitigation efforts efforts result in resource parity for these large scale projects. Rather, net losses of wetland resources

generally occur. Of particular significance is the historical method of disposing of dredged material from navigational projects (both maintenance and channel deepening) in wetlands or on productive, shallow estuarine bottoms. For several years EPA Region IV has attempted, unsuccessfully, to require the Corps to dispose of such material in the ocean or Gulf where minimal environmental damage would result.

Figure 4-1. Flow chart summarizing Corps of Engineers Section 404 permitting process.

CORPS OF ENGINEERS PERMITTING PROCESS



Corps of Engineers Permitting Process.

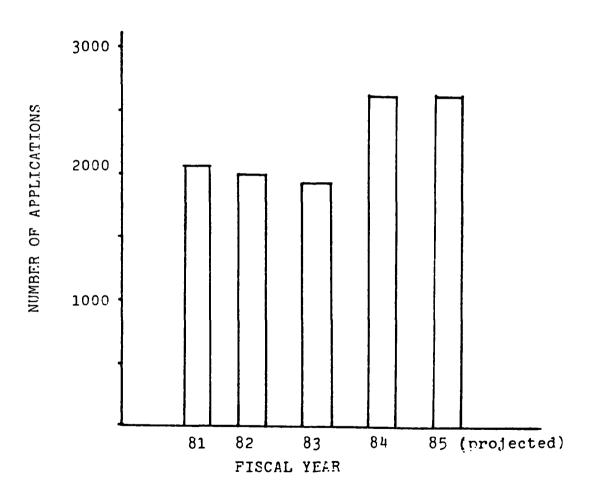


Figure 4-2. Region IV permit load, FY 1981-1985 (projected).

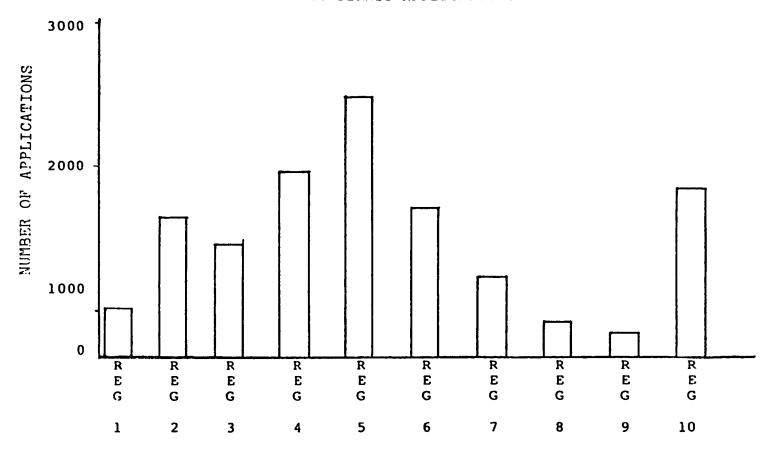


Figure 4-3. Comparison of Section 10/404 permit applications of EPA Regions, FY 1983.

5. CORPS/EPA INTERACTION

In view of the large number of permit applications processed and permits issued each year, the Section 404 program has demonstrated that it is functioning, procedurally. Its effectiveness in preserving wetlands, however, is marginal at best. In spite of significant differences between EPA and the Corps, there has been a generally good interaction and relationship with the various Corps Districts and Divisions.

A. Resolution of Conflicts

Many Districts frequently hold interagency meetings where information is shared among the several local, state, and federal agency personnel. Many decisions affecting potentially significant project proposals are made at such meetings, often involving mitigation measures, plan modifications, or, in some instances, alternate locations. For those few projects having major wetland impacts that cannot be resolved through interagency/applicant negotiations, additional efforts are required.

B. Memorandum of Agreement - 404(q)

In accordance with the 1977 Clean Water Act Amendments, the Corps entered into an MOA with EPA. This agreement set time limits for decisions relating to permit applica-

tions and established a protocol for resolving differing viewpoints. From EPA's perspective, this MOA generally proved to be misguided since it clearly gave ultimate authority to the Secretary of the Army (Corps) and seldom allowed an environmental review of significant adverse actions pertaining to a permit application. Mr. Ruckelshaus terminated the agreement last year. Efforts to renegotiate the agreement have not been successful to date. This is a major problem area for the Regions because significant conflicts can now be resolved only through initiation of EPA's veto authority under Section 404(c).

C. Section 404(c)

Under this section, EPA can veto the issuance of a Corps permit. To date, there have only been two such actions completed. Two more are in process in Region IV. Since well over 100,000 permit applications have been processed by the Corps since enactment of the Clean Water Act, it is clear that EPA has been judicious in execution of this authority. Only rarely, when policy matters or very significant adverse impacts are anticipated from a proposed project, has this authority been employed. Given the current situation of strained relationships between EPA and the Corps relative to review procedures, it is likely that EPA may be forced to resort to increasing use of

404(c) if it desires to remain effective in protecting important wetlands.

Additional information regarding specific application of this procedure is provided Section 7 of this document.

6. ROLE OF OTHER FEDERAL AGENCIES IN PERMITTING

A. Fish and Wildlife Service

1. Permit Review

Based on the Fish and Wildlife Coordination Act of 1956, opportunity must be given to the U.S. Fish and Wildlife Service (FWS) for review of any federal activity which may result in impacts to fish and wildlife resources. Any Corps dredge/fill project, or an individual activity requiring a Corps permit, is subject to the FWS's review under this Act. The FWS evaluates such projects and offers recommendations to the Corps on how to adequately protect fish and wildlife resources.

A Memorandum of Agreement (MOA) exists between the FWS and the Corps, much the same as EPA's 404(q) MOA with the Corps, providing the opportunity for the FWS to request elevation of any Corps district-level 404 permit decision where significant, unresolved differences remain between the FWS and the Corps. Projects for which an EIS has been prepared may be referred to CEQ by the FWS should it feel that resources have not been adequately considered.

2. Mitigation Policy

As published on January 23, 1981, the FWS's mitigation policy provides guidance at the federal level for protection,

preservation, enhancement, and compensation of fish and wildlife resources. This policy is designed to enable other government agencies and private developers to anticipate the FWS's recommendations early in the initial phases of construction projects. Usually the FWS recommends a mitigation plan during the early stages of agency consultation, based on potential changes in the project site's biological value to fish and wildlife. The policy provides for habitat valuation. Four value categories are identified in the policy ranging from the highest category of unique and irreplaceable habitat of high value to the fourth and lowest level consisting of minimal to low value habitat. Mitigation strategies are specified for each of these categories and provisions are identified for avoiding losses and replacing or compensating for unavoidable losses.

B. National Marine Fisheries Service

The National Marine Fisheries Service also provides comments to the Corps on proposed permits, based on the Fish and Wildlife Coordination Act. In addition, the Service also has responsibilities under the Marine Protection, Research and Sanctuaries Act of 1972 to provide evaluation and input on projects which may impact the marine environment. That agency, like EPA and the FWS, may refer/elevate conflict cases to CEQ/Corps higher authority through provisions of NEPA and an MOA with the Corps.

7. 404(c) ACTIONS

A. General

Under Section 404(c) of the Clean Water Act (CWA), the

Administrator of the Environmental Protection Agency (EPA)
is authorized to prohibit the specification (including the
withdrawal of specification) of any defined area as a disposal
site, and he is authorized to deny or restrict the use of any
defined area for specification (including the withdrawal of
specification) as a disposal site. The decision can be made
whenever the Administrator determines, after notice and
opportunity for public hearings, that the discharge of such
materials into such area will have an unacceptable adverse
effect on municipal water supplies, shellfish beds and fishery
areas (including spawning and breeding areas), wildlife, or
recreational areas. Before making such a determination, the
Administrator shall consult with the Chief of Engineers, the
landowner, and the applicant, if any.

Authority granted under Section 404(c) has been viewed by EPA as a "last ditch" effort to protect the resource, invoked only after all other administrative options for resolving EPA/Corps decision conflicts are exhausted (intensive coordination, CEQ referral, elevation under the 404(q) MOA, etc.).

B. Specific Cases

Since the passage of the Clean Water Act in 1972, and promulgation of EPA's 404(b)(l) Guidelines in 1975, it is estimated that more than 100,000 applications for permits to perform dredge and/or fill activities in wetlands have been received nationwide by the Corps of Engineers. Of this number, EPA has denied the use of only two wetland sites for disposal under the 404(c) authority (Munisport and Norden). EPA has invoked the 404(c) authority at two additional wetland sites within Region IV. The evaluation and decision procedures provided under the 404(c) regulations are underway at this time for these two cases (Reeves and Maybank).

Following are brief descriptions of each of these cases.

1. Munisport

On January 19, 1981, EPA Administrator Douglas Costle withdrew specification of a 70-acre Miami, Florida, tidal wetland for use as a disposal site. The Corps of Engineers had issued a Section 10/404 permit for disposal in wetlands, failing to acknowledge that disposed material would be solid waste. Literally, the valuable tidal swamp was to be used as a garbage disposal site. After water quality data were obtained, EPA determined that use of the area as a landfill would result in gross contamination from leachates reaching the adjacent aquatic resources, and would thereby result in an unacceptable adverse effect on shellfish and fishery areas, wildlife and recreational areas.

2. Norden

On June 15, 1984, EPA Administrator William Ruckelshaus made the decision to prohibit the deposition of fill materials in a 25-acre tidal wetland in Mobile, Alabama, under the authority granted to him by Section 404(c) of the Clean Water Act (CWA). This was the second such use of the 404(c) authority since the passage of the Clean Water Act.

A 25-acre tidal swamp had been proposed for development for a non-water dependent business within the City of Mobile, Alabama. After consideration of the record in this case, which included public comments, the public hearing record, a Special Task Force Report, and comments from the Office of the Chief of Engineers, and after consultation with the M.A. Norden Company's representatives, EPA determined that the discharge of the fill materials into the site proposed by the M.A. Norden Company would have had an unacceptable adverse effect on shellfish beds, fishery areas, and wildlife areas.

In this case, EPA conducted an alternatives survey in the Mobile area designed to determine the availability of non-wet-land sites suitable for the proposed Norden facility. Several sites were found which met all criteria, including comparable costs. Mr. Ruckelshaus based his decision to prohibit the site as a disposal area on this alternatives survey and the extensive ecological data which were collected. EPA received

strong support from the environmental community for taking this decisive action.

3. Reeves

Mr. Graham Reeves proposed to impound approximately 550 acres of wetlands on Minim Creek near the Intracoastal Waterway in South Carolina. The primary purpose of the project is for a private waterfowl shooting impoundment. After thorough evaluation of the proposal, Region IV determined that the project would have a severe impact on water quality and fisheries resources. Region IV initiated a 404(c) action on April 18, 1984. A public hearing was held in Charleston, South Carolina, on September 5, 1984.

The applicant has recently proposed that the project be used as a site for a major study of the environmental effects of impoundments, and the public hearing record will be open until March 11, 1985, to consider the merits of that proposal.

The Reeves' proposal has received support from a number of impoundment owners in the Georgetown area. EPA has received strong support from the environmental community and the South Carolina Attorney General.

4. Maybank

Mr. Jack Maybank proposed to impound approximately 900 acres of wetlands on Jehossee Island adjacent to the South Edisto River

in South Carolina. The primary purpose of the project is for a waterfowl shooting impoundment. The project would have a severe impact on water quality and fisheries resources. Region IV initiated a 404(c) action on April 18, 1984. A public hearing was held in Charleston, South Carolina, on September 6, 1984. On January 18, 1985, a Recommended Determination was sent to the EPA Assistant Administrator for External Affairs for final action.

The Maybank project has some support among local impoundment owners; however, EPA has received strong support from the environmental community.

8. ROLE OF STATES IN PERMITTING

A. State General Permits

Several Corps Districts in Region IV are contemplating the use of a State General Permit to further streamline the Section 404 permitting process. Under this plan, State Dredge and Fill Programs would administer issuance of a dredge and fill permit for certain specified activities.

This Region has three major concerns over the issuance of such general permits. It appears that this program conflicts with the State Assumption Program of EPA because it promotes state assumption in a piecemeal fashion. This apparent conflict between the Corps and EPA over the mechanism of the State's assumption of the program must be resolved.

Our second concern is that the CWA and EPA guidelines require that activities which qualify for permitting under a general permit be of a similar nature and have minimal individual and cumulative adverse impacts. Although we support the concept of general permits when they are properly developed, delegation of the permit function for many activities to the state under a general permit may not meet these criteria.

Finally, our third concern with the Corps' general permit is the exclusion of federal agency concerns in the review process. The Wilmington District, which has a State General Permit Program, has alleviated this concern by including a "kick-out" clause in the permits process. This procedure allows federal review agencies to comment on permit applications. In cases where there is an unresolved objection from a federal agency, the permit application is withdrawn from the process and a Corps of Engineers individual public notice is published for comment.

It is our hope that all Corps Districts contemplating a state-wide general permit program will incorporate a similar "kick-out" clause. This would allow states to take advantage of federal expertise on environmental problems in protecting their resources.

B. North Carolina Coastal Area Management Act (CAMA)

In 1982, the Wilmington Corps District and the State of North Carolina instituted use of a single application form and joint permit processing for those applications in which both state and federal permits are required within an "Area of Environmental Concern." This area was defined in the State's Coastal Area Management Act (CAMA).

The Corps issued a General Permit in 1981 for activities in 20 coastal counties comprising the area of environmental concern. The North Carolina Office of Coastal Management (OCM)

publishes public notices for CAMA permits, and distributes them to State review agencies. The Corps sends these public notices to federal review agencies.

If a CAMA permit is denied by OCM, there is no need for any federal action. However, the Corps retains the authority to withdraw any permit application from the joint review process if requested by a federal review agency or the Corps itself. Such a project would receive individual public notice review.

This program works well, and field reports supplied by the State inspection agencies are available and very useful.

C. Coastal Zone Management Act (CZMA)

The goal of the Federal CZMA is to provide for comprehensive and balanced management of coastal resources. The original act was passed in 1972, was amended in 1980, and is up for reauthorization in 1985. The Act applies to coastal states, states bordering the Great Lakes, and the U.S. Territories.

The basic operating mechanism is the development of a federally approved state program. Participation is voluntary. Once a program is approved, the states qualify for federal funds for program implementation. Generally, the federal government provides 80% of the funds and the states provide 20%. For the states that have an approved CZM program, the state issues a consistency determination for each COE Section 10/404 dredge

and fill permit application. The consistency determination states whether the permit, if issued, would be consistent with the goals of the state CZMA program. The Corps will not issue a 404 permit for a project inconsistent with these goals.

D. Special Management Areas

A section of the Coastal Zone Management Act provides for the delineation of Special Management Areas (SMA). The purpose of the SMA program is to provide long range planning and balanced development in a discrete area. All of the forseeable dredge and fill projects for a certain time period (10 years or more) are evaluated at one time. The environmental impacts are analyzed and mitigation plans are prepared. The concept has received the widest application for the development of port expansion plans along the coast of Alabama and Mississippi. A "task force" approach is used and all concerned local, state and federal agencies are involved in the development of the management plans.

E. 401 Certification

Under Section 401 of the Clean Water Act, each state must certify that a Section 10/404 permit issued by the COE will not violate the Water Quality Standards. If the certification is denied, the COE can not issue the permit.

F. State Dredge and Fill Programs

Some states have dredge and fill programs that regulate activities in waters of the United States. The jurisdictional limits of the state programs vary widely. Some states only have jurisdiction below the plane of mean high water, while others have jurisdiction over all coastal waters and wetlands. Others regulate all coastal wetlands and all freshwater wetlands. The quality of the programs also varies widely. Aerial surveillance for enforcement of unauthorized activities is a key element of successful state programs.

9. STATE ASSUMPTION OF THE SECTION 404 PROGRAM

The 1977 amendments to the Clean Water Act included provisions for State assumption of the 404 program. This revision was intended to allay fears that the Federal Government was encroaching on state authority, resulting in duplication and delays, while retaining the 404 program as an important aspect of the nationwide effort to improve water quality and protect valuable water resources.

Section 404(g) of the Clean Water Act presents the rationale and criteria for assumption of Phases II and III of the Section 404 program by the states. State program regulations were first promulgated in May 1980 (consolidated permit regulations). These regulations were criticized for many reasons including rigid mandatory requirements, excessive paperwork, and lack of flexibility. The 404(g) regulations were removed from the consolidated permit regulations in April 1983 and reformated. Proposed revisions to the 404(g) regulations were published in October 1984. The revisions should assuage most of the concerns about the 404(g) regulations. All states are concerned, however, with the lack of federal funding for the state assumption program. Some states are also concerned that under the existing legislation they can only assume Phases II and III.

A major responsibility of EPA's 404 program is to ensure that the 404 program is an effective national water quality and

wetlands protection program. New state 404 programs, in conjunction with the Corps of Engineers' regulatory program, may better control the indiscriminate discharge of dredge or fill materials, and thereby protect wetland resources. To further this goal, EPA is assisting interested states with the development of state 404 programs. State programs are essentially to mirror the federal program, and, like the federal program, must ensure that all activities will comply with the technical standards contained in the environmental guidelines issued by EPA, in conjunction with the Corps, under Section 404(b)(1).

Michigan is the only state that has assumed the 404 program. In Region IV, the States of South Carolina, North Carolina, and Tennessee have received grants to investigate the possibility of state assumption. Kentucky has expressed strong interest and has been sent a similar grant application. The lack of substantive federal funding will probably continue to be a serious hindrance to state assumption.

10. RELATIONSHIP OF SECTION 404 WITH OTHER EPA PROGRAMS

A. NEPA

Approximately 75% of all NEPA documents received by Region IV are initiated because of the need for Section 10/404 permits. This figure is approximately 100% for water resource projects where Section 10/404 permitting is almost always the major federal action.

There are many similarities between the NEPA review process and the 404 review process, the goals of which are to minimize damage to important resources. Staff personnel interact daily in Region IV. Review of NEPA documents and 404 applications requires a comprehensive knowledge of the resource which will be impacted. Technical understanding of system processes and functions are necessary to recognize potential impacts and to recommend alternative designs and locations which would result in less environmental impacts. Both review processes require active, interagency coordination with the same federal offices. Thus, there is an element of continuity of concerns which can be recognized and anticipated. There is also a need to coordinate both review processes within the Agency and involve the CZM coordinator, groundwater and surface water hydrologists, and other technical staff to achieve optimum review.

In addition, for those special studies and EIS's conducted by

Region IV's NEPA EIS preparation staff, expertise on 404 matters is readily available since all personnel share one office. The fact that both NEPA and 404 staffs report to the same supervisor results in a consistency of review of water resource and wetland projects which might not be possible to achieve with a different organizational structure.

B. NPDES

Most states within Region IV have assumed the NPDES program. Thus, these issues rarely trigger NEPA documents or involve 404 review, with several important exceptions. Florida has chosen not to assume the NPDES program. A major industry in that state is phospate mining which occurs over vast areas containing many wetlands. For new source NPDES permits requiring an EIS, EPA is the lead agency in preparing the document. These documents contain a wetland evaluation of the proposed mine site and a recommended mining plan to minimize wetland losses and preserve regionally important wetlands from mining. In addition, the EIS for mining will detail specific reclamation plans to provide for a diversity of aquatic habitat after mining. Incorporation of wetland preservation, impact minimization, and restoration of wetlands in the EIS does not preclude the requirement for a Section 404 permit from the Corps. EPA 404 personnel must coordinate closely with the EIS writers, Corps personnel and other federal and state agencies to assure consistency of

project goals and design. Coordination is maximized in Region IV by having EIS preparation staff and 404 program staff under the same Branch Chief.

Other areas which require interaction are siting of waste treatment facilities and fish farming operations. Receipt of approval from EPA to site, construct, and implement a treatment facility does not preclude the requirement for a Section 10/404 permit if the facility, or discharge structure, is located in waters of the United States. Commercial fish farms may require both a 404 permit to build the structure (dikes, ponds, etc.) and a 402 permit to release effluent. Close coordination is again required to assure an environmentally acceptable project. Excellent relationships between the 404 staff and Water Division has resulted in effective review of these facilities.

C. Superfund

There are limited occasions when EPA's own Superfund activities can create administrative problems for the Section 404 program. While emergency response activities in wetlands may be handled under Nationwide Permit No. 20 of the Corps' permit regulations, there is no formal protocol for remedial measures addressing chronic problems. We believe that close intra-agency coordination among the principals and between EPA and the Corps is necessary. We anticipate that as the number of remedial

activities increases throughout the nation, the number of sites involving wetlands will increase, requiring the adoption of procedural agreements to avoid administrative delays in effecting the remedial cleanup measures.

11. THE ROLE OF CONSERVATION ORGANIZATIONS IN THE SECTION 404 PROGRAM

A. Representatives of Local Issues

Conservation organizations represent local, state, or national special interest groups in areas dealing with resource management, conservation, and wildlife and account for a very significant constituency in Region IV. Opinions of these groups can be very influential in permitting decisions, especially on the local and State level. Routinely, a special group of conservation group representatives from each of the eight states within the Region meet with the RA and senior staff personnel to discuss significant environmental issues. Invariably, 404 issues are raised. This forum allows an excellent exchange of information and assures close coordination with major interest groups.

Interested conservation organizations are on the mailing list to receive Corps public notices and routinely provide written comments. Because these groups have many dedicated people with detailed knowledge in their area of expertise and in the local ecology, their comments can be very beneficial to the permit review process and Corps decisions on public interest.

B. Shaping National Policy

Several conservation agencies have been extremely effective

in shaping the jurisdiction and scope of the 404 program by bringing suit in federal court. For example, the suit NRDC v. Callaway resulted in expanded coverage of the Corps' wetland program and Avoyelles Sportsmen's League v. Marsh resulted in formalization of the three parameter approach to deciding wetlands jurisdiction, namely vegetation, soils and hydrology.

C. Suit over Revised Corps Regulations

On July 22, 1982, the Corps published Interim Final Regulations which replaced their July 19, 1977, regulations. Major changes of the regulations are in reduction of processing time and expansion of the nationwide permit program. Both of these areas were goals of regulatory reform to streamline the permitting process.

On December 22, 1982, fifteen environmental organizations filed suit against the Department of Army and EPA (National Wildlife Federation v. Marsh) over several provisions of the Interim Final Regulations. The suit contended that six of the 27 nationwide permits granted by the regulaton expanded the scope of the general permit program beyond the bounds set by Section 404. The "headwaters general permit" and the "isolated waters general permit" were challenged in part because they are for "categories of water", while 404(e) authorizes general permits only for activities that are "similar in nature."

The surface mining general permit and the categorical exclusions general permit were claimed likely to cause far more than the "minimal individual or cumulative impacts" permitted by Section 404(e). Furthermore, no EIS was prepared and the environmental assessment failed to provide sufficient data to adequately determine the impacts of the general permits, in violation of the National Environmental Policy Act.

NWF also challenged several definitions contained in the new regulations. Section 404(f) exempts certain dredge and fill activities from the requirements of Section 404, including discharges for the "...construction or maintenance of farm or stock ponds or irrigation ditches, or the maintenance (but not construction) of drainage ditches". However, the regulations expanded the exemption beyond the statute to include discharges associated with any irrigation facility. "Fill material" is defined to exclude the regulation of discharge of material that in fact "fills" an aquatic area if such filling is not the primary purpose of the discharge. This definition was alleged by plaintiffs to be inconsistent with EPA regulations.

On February 10, 1984, the court approved a settlement agreement whereby the Army agreed to publish regulations proposing several policy and procedural changes and modifications to certain nationwide permits. This agreement was endorsed by the Army, EPA, Department of Justice and the environmental organizations,

and resulted in changes in Corps Regulations published October 5, 1984.

It is important to note that the settlement does not address all EPA's concerns, but rather only those issues raised by the environmental groups in their lawsuit. EPA will continue discussion with the Army on the remaining issues.

12. PROBLEM AREAS

A. Policy Issues

1. Compliance With Section 404(b)(1) Guidelines

The Corps has interpreted Section 404(b) of the Clean Water Act to give the Corps authority to determine compliance with the 404(b)(1) Guidelines. EPA has authority to review and comment on permit applications, and routinely prepares comments based on applicability of the proposed action to the 404(b)(1) Guidelines. The Assistant Secretary of the Army has directed Corps offices (Regulatory Guidance Letter 84-6, March 24, 1984) to give full consideration to the views of EPA with respect to the environmental effects of Corps permit applications. However, the Corps has concluded that EPA determinations of compliance are to be considered advisory only. addition, the Corps concludes that since application of the Guidelines involves technical and factual determinations and does not involve unresolved issues requiring national policy review, District Engineers will consider invalid any recommendations for permit denial and request for elevation under the Section 404(q) MOA based on EPA or any other agency determination of non-compliance with the Section 404(b)(1) Guidelines.

This decision by the Corps diminishes the important role of EPA in the permit process, i.e., to supply meaningful independent review of compliance of applications with the Guidelines. The Corps may ignore EPA's views on compliance, with no possibility of elevation. The Corps' attitude, coupled with the restricted scope of the MOA between the two Agencies, may well require increased use of 404(c) vetos by EPA. There is no other current mechanism to resolve major differences of opinion between the two agencies.

2. Solid Waste Discharges Into Waters of the United States

Although EPA has authority under Section 402 of the CWA to regulate discharges of solid waste into waters of the United States, it has been expedient to rely upon the Corps to find and take enforcement action on 402 violations as part of their 404 enforcement supervision and inspection. Recently, however, the Corps has indicated that violations involving building wastes and other waste materials are not subject to their Section 404 enforcement procedures, since such discharges do not meet their primary purpose test. The Corps defines "fill material" as any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a waterbody. The term does not include any pollutant discharged into the water primarily to dispose of waste, as that activity is regulated under Section 402 of the Clean Water Act.

Substantial staff time will be required if EPA has to take legal and corrective actions on all minor fill violations resulting from the deposit of refuse into waters of the United States. We must continue to rely on Corps field offices for discovering the violations and on local Corps districts for effecting restoration. Continuing discussion of this matter at the Washington level is required for a resolution. We suggest that the Corps discard the primary purpose test for minor fill violations and use their Section 404 enforcement procedures to restore the aquatic resource.

3. Mitigation Policy

Subpart H of the Section 404(b)(1) Guidelines discusses actions which can be undertaken to minimize the adverse effects of discharges of dredged or fill material. Some of the ways to accomplish this are:

- Locating and confining the discharge to minimize smothering of organisms;
- 2) Designing the discharge to avoid disruption of periodic water inundation patterns;
- Selecting a disposal site that has previously been used for dredged material discharge;
- 4) Selecting a disposal site where the substrate is composed of material similar to that being discharged;

- 5) Selecting a disposal site, the discharge point, and the method of discharge to minimize the extent of any plume; and
- 6) Designing the discharge of dredged or fill material to minimize or prevent the creation of standing bodies of waters in areas of normally fluctuating water levels, and minimize or prevent the drainage of areas subject to such fluctuations.

Although the word "mitigation" does not appear in the Corps Regulations, mitigation has become an important part of Corps permits. Federal commenting agencies have routinely requested replacement of wetlands to be destroyed through the permitting process. This has become so commonplace since regulatory reform measures have been imposed that wetlands creation has become synonomous with mitigation.

In many instances the Corps has issued permits for projects which review agencies feel do not conform to the Section 404(b) Guidelines because there are practicable, less environmentally damaging alternatives. Because elevation of disputes under the current MOA's has proven futile (since reasons for elevation are restrictive and the Corps makes the final determination on whether if the elevation will be heard, and at what level) and 404(c) is labor intensive and reserved for disagreements over major projects, requiring wetland replacement has become a practicable way to attempt to replace the environmental

impacts of wetland losses. However, many such projects with proposed mitigation should not receive permits, and successful replacement through planting is risky and may result in the destruction of functional upland habitats to replace filled wetland acreage.

Thus, there is a growing need for a uniform, national mitigation policy, especially if there is no practicable recourse for disputing poor permitting decisions. A suggested mitigation policy follows.

Only after the following three conditions are met should a permit be issued. (This is merely strict application of the Corps public interest review and basic Guideline precepts.)

- The public benefits of a project must exceed the loss of benefits normally accrued by the specific wetland area involved.
- 2) The project must be located in a wetland to fulfil its basic function.
- 3) There are no practicable alternatives available that involve uplands or wetlands that function to a lesser degree.

On-site mitigation measures should be considered first and may include alternate construction or disposal techniques or

creating wetlands from uplands. Off-site mitigation should be considered only when on-site mitigation is impossible or in-adequate.

Off-site mitigation generally involves creation of equivalent wetlands. They should be created on a greater than 1:1 ratio to offset functional losses experienced during the period required to create fully functional wetlands and because of the uncertainty of success.

The concept of mitigation banks requires discussion at the Washington level to assure uniformity of Agency policy concerning this issue. Mitigation banking should be considered only if a project meets the three-pronged test given above.

Up-front mitigation should be encouraged since project permitting can be contingent upon successful replacement of wetland values and functions before destruction of existing resources.

4. Wetlands Protection Bill

The Section 404 program is a wetlands regulation which permits wetland destruction. Given the historic wetland losses, and continuing losses under the current permitting program (see Section 2 of this document), it is appropriate to consider a legislative mechanism to eliminate further losses of important public resources. We are rapidly approaching the point where this issue must be addressed. How many more acres of important wetlands can we continue to lose through the permitting process

and maintain commercial and sport fisheries, water quality and other essential wetland functions? What is the minimum, or optimum, quantity of wetlands necessary to provide these essential functions? It is probable that the nation is currently well below optimum acreage of many wetland types.

B. Resource Issues

1. Bottomland Hardwood Wetlands

The conversion of floodplain forests (usually known as bottom-land hardwoods) to agricultural use by draining, leveeing, clearing and leveling has resulted in a catastrophic loss of this natural resource, particularly in the Lower Mississippi River Valley. These once extensive forests, which occupied essentially the entire floodplains of most southeastern rivers, have been reduced from an estimated 23 million original acres to approximately 5 million acres at present. Projections indicate that an additional 1 million acres will be lost by 1995. Much of the bottomland hardwoods exist in isolated tracts surrounded by agricultural lands which were once floodplain forests.

These floodplain forests are permanently or periodically inundated by floodwaters and/or rainwater. Because of the unique hydrologic regime they are subjected to, a significant portion of the remaining bottomland hardwoods (60-80%) may be

considered regulatory wetlands as defined in the Section 404 program (Avoyelles v. Marsh). These wetlands contain a rich diversity of plant and animal life, provide habitat crucial in the life cycles of both aquatic and terrestrial organisms, enhance water quality by purifying floodwaters and agricultural runoff waters, function as floodwater storage and flood buffering areas where not extensively leveed, and supply forest products and recreational opportunities.

A number of problems, both environmental and socio-economic, have resulted from this floodplain development and include: loss of valuable wetland habitat and wetland water quality benefits; erosion of rich topsoils; increased stream turbidity and siltation; pesticides and nutrient contamination of receiving streams; expensive flood management problems that result in the requirements for further alteration of natural systems to provide flood protection; and, coincidentally, lowering of farm commodity prices. Historically, the process of draining forested swampland and converting it for agriculture has gone unchecked. However, due to the array of problems, the public sector, as well as the involved federal and state agencies, is faced with unacceptable environmental conditions, eroding and/or flooded farmland, and enormously expensive levee and channel maintenance requirements.

Section 404 of the Clean Water Act is not being used effectively to curtail bottomland hardwood wetland losses. Two main forces limit the effective use of Section 404 in this regard.

First, although the <u>Avoyelles</u> decision made clear that mechanized landclearing (clearing with a "V" blade bulldozer, and other means which disrupt significant amounts of the substrate) in wetlands constitutes a dredge and fill activity subject to regulation under Section 404, thus far the Corps has not commenced enforcement of dredge and fill regulations on land-clearing activities except in extremely limited areas of the judicial district where the <u>Avoyelles</u> decision was rendered.

Second, geographic jurisdictional determination in bottomland hardwood wetlands is complicated. The Corps' interpretation of the wetlands definition and their interpretation of vegetation, soils and hydrological data typically lead to a more conservative wetland boundary determination than intepretations of other resource agencies, such as EPA and the Fish and Wildlife Service. Therefore, the Corps exerts jurisdiction over considerably less BLH wetlands than EPA feels should be regulated. The Civiletti opinion granted EPA the ultimate authority to make these wetland jurisdiction determinations, but this authority has not been exercised by EPA due to numerous reasons relating to policy and staff/travel resources.

Other factors which contribute to BLH conversion include local and congressional support for federally funded drainage projects and farm commodity prices, especially for soybeans.

A specific case which dramatically illustrates the present fate of BLH wetlands occurs in the Mississippi/Yazoo Basin. In this area, BLH wetlands have been reduced from 1,514,000 acres in 1957 to a scant 387,000 acres in 1982. Massive drainage projects in the basin and headwater areas typify the role that these projects play in wetland clearing. A currently planned and partially constructed Corps drainage project in the basin entails a 30-year effort to construct 179 miles of channel modification, over 200 miles of levees and floodwalls, and 108 drainage structures. The project is designed to reduce flooding on 1,236,000 acres of lands, of which an estimated 227,000 acres are bottomland hardwoods. Project impacts acknowledged by the Corps in its EIS for this project include induced BLH wetland conversion to agricultural croplands. Essentially, this project, while affording flood protection to existing agriculture, will facilitate the economical clearing of segments of the 227,000 acres of floodplain forests.

2. Lack of Section 404 Regulation of Civil Works Projects

Civil works projects result in more direct and/or indirect destruction of wetlands and water quality degradation than all other activities covered under Section 404, with the possible exception of land conversion for agriculture and silviculture. Even land conversion is largely facilitated

through Corps-sponsored flood control levee construction or stream channelization. Navigational access to and within inter/intracoastal waterways and major port facilities is maintained through Corps dredging operations. These projects many times result in highly significant environmental problems. Although major projects are addressed through the NEPA/EIS process, this has not provided an adequate mechanism in the past for EPA to influence the Corps' project priorities and plans for implementation. A glaring example is the failure of many Districts to seriously consider deep ocean disposal of vast quantities of materials routinely dredged for navigation maintenance. Complicating the issue are the Corps' plans to significantly deepen and extend present channels which will generate many additional million cubic yards of dredged material. Often, the Corps' solution to these problems is fastland creation for industrial development at the expense of productive, shallow estuarine waters. Such a solution is clearly contrary to explicit tenets of the Section 404(b)(1) guidelines.

3. Lack of Suitable Disposal Sites for Dredged Material

Throughout the coastal perimeter of Region IV, there appears to be a steady and potentially increasing demand for federally sponsored dredging for maintenance and deepening of navigational channels. This is resulting in the generation of tremendous quantities of dredged material. The lack of environmentally

suitable disposal sites for these materials is a significant problem. Historically, dredged materials were disposed at upland sites, used to fill wetlands, or discharged in adjacent aquatic areas. EPA has discouraged disposal in vegetated wetlands or in productive aquatic sites and has recommended disposal in deep ocean waters beyond the shallow, productive coastal zone when upland sites are unavailable. Problems emerge over the Corps of Engineers' continued disposal in valuable vegetated wetlands, destruction of shallow water bottoms through the creation of spoil islands, and discharges into open estuarine water areas.

Similar problems with civil works maintenance dredging projects exist elsewhere. The Cooper River rediversion project in South Carolina, maintenance and expansion of port facilities in Jacksonville, Miami, Tampa and Pascagoula, and other civil works projects are all adversely impacting wetlands and aquatic resources.

Studies by the Corps show that the technology for ocean disposal of dredged material exists and that in many cases ocean disposal is a cost-effective option. EPA should continue to encourage use of designated ocean disposal sites, designate additional sites if needed, and encourage the Corps to assure availability of ocean-going disposal vessels. Discussions with the Corps at the Headquarters level are needed to emphasize Agency concerns

and to develop more acceptable options for resolving these significant problems. The Corps needs to focus greater emphasis on realistic planning of small-scale projects and on the use of advanced dredging and disposal technology.

4. Impacts of Surface Mining in Wetlands

One of the major problems in Region IV involves phosphate and peat mining in Florida and North Carolina. Problems associated with surface mining in wetlands include destruction of wetlands, discharge of nutrients to adjacent waterbodies, and inability to restore large-scale mining sites to previous wetland conditions. Existing regulations should provide adequate protection for high value wetlands; however, we are frequently placed in the position of arguing for long-term maintenance of a high value ecosystem versus shortterm economic gains from phosphate mining. Suggested solutions include prohibiting mining of high value wetlands, and permitting mining in wetlands of lesser value contingent upon demonstrated reclamation and wetland community restoration success. Demonstration projects are underway in Region IV to assess the practicability and probability of success of restoration of these mined wetlands.

Miami Oolite limestone is the only significant construction material in south Florida, and it is estimated that annual

demand will approach 33 million tons in 1985. The mining of limestone typically exchanges natural and stressed wetlands for large, deep water-filled excavation lakes which are of questionable value as fish and wildlife habitat. These excavation lakes traditionally have been characterized as (1) steep sided with little or no littoral zone, (2) devoid of organic substrate, and (3) surrounded by a berm with non contiguous wetlands. In Dade County alone, there are over 120 km² of limestone excavations (based on 1978 aerial photographs), approximately 2% of the entire county. In addition, permit applications from 1978-80, as required by the U.S. Army Corps of Engineers, were filed for mining another 13 km² (U.S. Army Corps of Engineers 1981).

5. Rockplowing

Recent wetland surveys in the U.S. indicate that 87% of wetlands are lost to agricultural conversion and 97% of these losses are freshwater wetlands. Rockplowing and the use of crushed rock as a substrate to grow crops plays a unique and significant role in the destruction of wetland resources in south Florida. Several thousand acres of prime East Everglades sawgrass are threatened with conversion to tomato fields and citrus/mango groves in the near future.

6. Cumulative Loss of Wetlands Through Filling Activities

It is estimated by the Corps that 2500 acres of regulated wetlands within Region IV, largely in the coastal zone, are destroyed annually by filling operations. Prior to implementation of the Clean Water Act, wetland losses were far greater. However, pressures for residential and recreational encroachment into wetlands continue, largely due to the population shift to the South. The cumulative impact of this continued, gradual wetland and shallow water destruction is resulting in losses of important wildlife habitat, fish and shellfish productivity, filtration of water-borne pollutants and shoreline protection. Filling wetlands for non-water dependent activities is clearly contrary to the Section 404(b)(1) Guidelines and Corps' regulations. A problem arises from inconsistent application of the Guidelines both within and among Corps Districts. EPA's ability to influence Corps' decisions is greatly hindered under the current Memorandum of Agreement (MOA).

13. REGIONAL PROGRAM SUMMARY

Region IV is especially sensitive to the Section 404 program because of several factors:

- Region IV has an estimated 33% of the coastline in the continental United States.
- Region IV has a estimated 2.2 million acres of saltwater wetlands.
- Region IV has an estimated 33.7 million acres of freshwater wetlands.
- Trends over the last several years clearly demonstrate the nation is losing productive wetlands at an alarming rate.
- Many states and local communities are dependent on such wetlands as major elements for their growth and economy, i.e., recreation, tourism, fishing, hunting, nature studies, etc.
- Several cities/states are somewhat undeveloped and view wetland areas as potentially cheap economic bonanzas to stimulate a sagging economy through industrial (port development, etc.) and residential development.
- Especially apparent are private landowners/corporations
 in the Mississippi River floodplain area interested
 in obtaining federal assistance/subsidies in developing

agricultural potentials through flood protection projects that would allow the conversion of bottomland hardwoods (floodplains) to tillable areas (protected from floods by dikes) for the production of rowcrops, soybeans, etc.

Concerned, organized, sophisticated and environmentally aware citizens, who recognize the national significance of wetland areas, represent a major constituency in the Region. To them, wetlands play a major role in their expected quality of life.

They are also aware of the economic burdens involved in rectifying bad decisions made in the past (e.g., restoration of the Kissimmee River floodplain after an ill advised channelization attempt; cessation of the Cross Florida Barge Canal after commencement of construction), and an endless expenditure of financial resources in attempting to maintain eroding coastlines.

A. General Program Evaluation

The Region has taken a conservative approach to the many problems relating to this program, an approach that has balanced our efforts between permitting development in wetlands and the preservation of significant wetland areas. Still, the long-range trend appears to favor

short-range economic gains instead of stewardship of aquatic resources for future generations. Decisions which are being made now will inexorably limit future generations to fewer resource-based alternatives than would have been possible with a 404 program that is more environmentally sensitive and aware of the irreversible nature of permitting the destruction of our nation's wetlands.

B. External Coordination

We believe our efforts of coordination with the Corps and other federal, state, and local agencies have been effective but need to be improved, especially with Washington Corps offices. Without a basic philosophical agreement between the two agencies, we will continue to have major dissensions on specific projects that could reflect adversely on this Administration.

C. Internal Coordination

We feel that Region IV's organizational structure, whereby we have grouped all of the Office of Federal Activities (OFA) functions under one Assistant Regional Administrator, has benefited the agency.

Close coordination by staff has eliminated many problems that surfaced in the past when program elements were fractured between several organizational units. The

creation of the position of an Assistant Administrator for External Affairs, under whom the OFA staff responsibilities for 404, EIS, and Federal Activities are concentrated, has proven to be very helpful. In essence, we have the same program structure in Region IV.

For the first time, OFA has an identity that supports its responsibilities. A close relationship between 404, the NEPA-EIS process, and EPA's relationships with other federal agencies is more likely to result in a well-cooordinated, overall program than would be possible under other administrative arrangements. With programs as controversial and as sensitive as are the OFA programs, we believe that combining them under one Assistant Administrator has resulted in optimum staff use and consistent decision making.

D. Bottomland Hardwoods

Our active presence in the Mississippi River bottomland hardwood area is an issue that requires careful consideration. To be effective, we must reach a philosophical and operational agreement with the Corps. Given the present position of the Corps, it appears unlikely that such is possible without external influence. If EPA is to carry out legislative/statutory mandates, we must implement an

increased effort in making jurisdictional calls and attempt to persuade the Corps to regulate clearing of bottomland hardwoods in a cooperative effort with EPA and the Department of the Interior. Initially, this may be difficult, but with Headquarters support we can influence the decisions being made by the Corps and possibly avoid litigation from environmental interests concerned because of a lack of initiative on our part.

E. 404(c) Implementation

EPA has used this tool extremely conservatively. While Region IV has historically resorted to this approach more often than other Regions, some of these decisions were due, in fact, to the Corps' position that the issues involved in such an action were of a more technical nature than a policy or national issue (e.g., the denial of elevation of the Norden project by the Assistant Secretary of the Army for Civil Works). It should be noted, however, that only the most controversial projects ever reach a veto stage. By the very nature of the statute, most disagreements are resolved at the Regional level. The ineffectiveness of the MOA with the Corps has, however, significantly reduced or limited the ability of EPA to resolve some issues. Without some change in the Corps' position regarding the MOA, EPA may well find it necessary to rely increasingly on the 404(c) process to carry out its statutory mandates.

F. Long Range Goals

We have made significant advances in the past year in developing an effective program. Regretably, most of our actions have been to respond to other agencies, or individuals, rather than establishing our own criteria, enforcement programs, and public educational programs to minimize adverse environmental impacts. Improvements are needed in new initiatives to better educate the public about the role of wetlands in restoring and maintaining the chemical, physical, and biological integrity of the nation's waters, the national objective of the Clean Water Act. While EPA has consistently placed wetlands protection as a high agency priority effort, the overall effectiveness of the program is rather low. More enforcement actions relating to illegal filling operations, an increased effort in bottomland hardwoods clearing operations (with Corps' cooperation), and a stronger agency wetlands policy statement and commitment are needed to improve effectiveness. A serious look at existing resource constraints is also required.

The single, most compelling constraint against an effective program, however, is the basic unwillingness of the Corps to give adequate consideration to comments of EPA, and other federal resource agencies, in evaluating whether to issue permits or not. Until our philosophical

differences are ameliorated, or until statutory improvements are made to give EPA greater authority in the 404 permit process, we believe the program will continue to be essentially ineffective in preventing the loss of wetlands resources. While major, large, projects may receive some attention, hundreds of smaller permit actions will continue to result in significant, cumulative wetland losses that can only adversely affect the nation's environment.