

U.S. Environmental Protection Agency

# Wetlands



# Seminar

March 28 -29, 1990

Washington, D.C. / Alexandria, VA

## INDEX

### Inside Front Cover

Protecting America's Wetlands:  
An Action Agenda - The Final  
Report of the National  
Wetlands Policy Forum

### TAB

- A     Agenda
- B     Huntley Meadows Field Trip - Background
- C     Background on Case Studies
- D     The President's Challenge
- E     Summary of Major Recommendations of the National Wetlands  
Policy Forum
- F     Office of Wetlands Protection Organization Chart
- G     Wetlands Fact Sheet
- H     Section 404 Program
  - 1.   Highlights of Section 404
  - 2.   Migratory Bird Memo
  - 3.   MOA's: mitigation, enforcement, jurisdiction
  - 4.   Corps' (q) guidance: Plantation Landing and Hartz  
Mountain
- I     EPA's Non-regulatory Programs
  - 1.   State, Tribal and Local
  - 2.   Federal Agencies
  - 3.   International
  - 4.   Internal EPA
  - 5.   Wetland Strategic Initiatives
  - 6.   Wetlands Science

### Inside Back Cover:

Booklet: America's Wetlands -  
Our Vital Link Between Land  
and Water





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

MAR 22 1990

OFFICE OF  
WATER

MEMORANDUM

SUBJECT: Seminar on Wetlands

FROM: LaJuana S. Wilcher  
Assistant Administrator

*LaJuana S. Wilcher*

TO: Regional Administrators I-X

Assistant Administrator  
Office of Research and Development

Assistant Administrator  
Office of Enforcement and Compliance Monitoring

General Counsel

Attached is a proposed agenda for the March 28-29 seminar on wetlands in Headquarters. We want to get as much benefit as we possibly can out of this opportunity. Therefore, the agenda is fairly intensive, and involves dinner together on the evening of March 28 with discussion to follow.

You will be receiving background materials for the seminar under separate cover. You will first receive information we have already assembled, with a second delivery to follow of materials that are still being prepared.

I am looking forward to a highly productive discussion. Please call me, Alan Fox (382-5700) or John Meagher (382-5043) if you have any questions.

Attachment

cc: William K. Reilly  
F. Henry Habicht II  
Gordon Binder  
Judy Gleason

## SEMINAR ON SECTION 404: AGENDA

### MARCH 28

LOCATION: GANGPLANK RESTAURANT (Halyard Room)

- 1:00 - 1:15 Introduction (LaJuana Wilcher)
- 1:15 - 2:15 Background presentation on Wetlands (Dave Davis)  
-- Wetland types (ecological and geographic diversity)  
-- Functions and values  
-- Activities and impacts  
-- Status (losses and trends)
- 2:15 - 3:15 Section 404 Program Background (Suzanne Schwartz)  
-- Program overview (how the pieces fit)  
-- Basic permitting process (individual and general permits, public notice, public interest review, NEPA)  
-- Jurisdiction (geographic, activities)  
-- (b)(1) Guidelines (alternatives, mitigation, significant degradation)
- 3:15 - 3:30 Scientific aspects of mitigation (Erich Bretthauer) (Tentative)
- 3:30 - 4:00 Current Legal Issues (Don Elliott) (Tentative)
- 4:15 DEPART for Field Site (Huntley Meadows, Alexandria, Virginia)
- 5:15 - 6:30 Wetlands Walk - a guided nature walk to provide on the ground wetland experience
- 6:30 - 8:00 Dinner -- Cedar Knoll Inn (Log Room)  
(703) 360-7880  
George Washington Parkway  
Mt. Vernon, Virginia
- 8:00 - 8:30 Section 404 Program Background - Continued  
-- Elevation and veto (404 (q) and (c))  
-- Advance identification  
-- Enforcement
- 8:30 - 9:00 Enforcement Issues (Jim Strock)
- 9:00 Return trip back to D.C.

### MARCH 29

LOCATION: Room 1103 West Tower

- 8:00 - 11:00 Case Studies - group discussions facilitated by written cases. (Bill Reilly and all participants)
- 11:00 - 11:30 Wrap-up





## FACT PATTERN - CASE 1

TAB C

The Water Resources Development Act of 1980 authorized the Corps of Engineers to pursue a multipurpose reservoir project on the Calfpasture River, in Vista County, subject to the recommendations and conditions in a Chief of Engineers' Report prepared in 1965. While the Civil Works proposal included other features, the primary benefit of the project would be the storage of water in an arid western state where precipitation is seasonally limited. As proposed in the 1965 report, the stored water would be used principally for future municipal water supply and industrial applications. The site of the proposed impoundment was, to a large degree, on Bureau of Reclamation land which experienced limited use as grazing land during the 1930s and 40s. In 1945, Vista County petitioned the Bureau to set the site aside in anticipation of creating a water supply impoundment, and the area has since experienced little change.

As a result of the WRDA 80 authorization, the Corps prepared a draft Environmental Impact Statement in 1982 which disclosed that the proposal would inundate 20 miles of highly productive coldwater stream containing a self-sustaining fish population, would flood several abandoned mines, and would limit use of the river valley by a small herd of big horn sheep. The DEIS contained a brief review of the project's compliance with the Section 404(b)(1) Guidelines. EPA formally commented on the DEIS noting that the project would likely result in the loss of 12 acres of wetland and wildlife habitat and could adversely impact water quality both within the impoundment area and downstream due to drainage from the mine waste. EPA stated the position that the Agency had environmental objections to the project as proposed in the DEIS (an EO rating). As a result of comments on the DEIS from EPA and other Federal agencies, the Corps determined that preparation of a supplemental EIS was necessary. Due to fiscal constraints, however, funding for further work was not included in subsequent Corps budgets.

In 1988, after several years of abnormal nationwide precipitation deficits, renewed concern regarding adequacy of future water supplies prompted the Vista County Board of Water Planners to approach the Corps and request a Section 404 permit to construct a dam and reservoir of virtually the same design and configuration as the proposed Civil Works project. Under the new proposal the project would be completed using only State and local funds. Upon reviewing the Vista County proposal, the Corps determined that additional EIS studies were not necessary because the project was no longer a multi-purpose Federal proposal and as such did not constitute a major Federal action for the purpose of NEPA. Vista County submitted a permit application which incorporated much of the needs analysis provided in the previous Corps EIS and updated information on potential adverse environmental impacts.

The public notice on the permit application stated that the purpose and need of the project was the construction of a water supply impoundment on Calfpasture River to satisfy future municipal and industrial water demand in the area served by the Vista County Water Authority. Alternatives to satisfy that need would be considered by the Corps.



In addition to environmental issues raised in the previous DEIS, comment on the proposed Section 404 permit raised issues regarding environmental values associated with extensive riparian habitat which would be lost as a result of the reservoir. Riparian areas are a dwindling resource in Vista County and surrounding areas due to poor range management practices allowing cattle unrestricted use of streams. As a result water quality has declined substantially in other local waters and Calfpasture River is one of the few remaining free flowing streams with good water quality and superior natural aquatic and terrestrial wildlife habitat. The coldwater fish population is unique to the County, and one of only three such streams in the State. Both EPA and Fish and Wildlife Service noted that the impoundment would significantly alter the downstream water quality through reductions in flow and alterations of water chemistry from mine waste drainage. EPA also commented that the basic project purpose and need should be reviewed because of possible changes in both the volume of industrial and municipal water use, innovations in industrial and municipal water conservation, and the possibility that groundwater has not been adequately reviewed as a potential alternative. EPA has recommended that as proposed, the permit should be denied and that the Agency may consider action to prevent the project impacts. The State Water Quality Board approved 401 certification for the project. The Bureau of Reclamation has deferred a decision regarding use of the land to the Corps as the lead Federal Agency.

EPA and the Corps have entered discussions regarding the permit application. Because the project remains an authorized public works project the District Engineer has both his planning and regulatory divisions advising him on various aspects of the project. In response to meetings with EPA and the applicant the Corps has made the following draft findings and forwarded them to EPA for consideration. 1) The project will impact only 12 acres of wetlands and is therefore not significant in terms of resources protected by Section 404. 2) While water quality will be impacted, the State has issued 401 certification and further discussion of issues related to water quality are irrelevant. 3) The project purpose is an impoundment for the storage of water and analysis of alternatives is justifiably limited to structural options of similar yield. 4) Because the project has received Congressional authorization, EPA's authority to stop the project is limited at best. Further, the Corps' planning division would consider proceeding with the project if the County decides not to.

#### Issues

- What options are available regarding NEPA compliance?
- In commenting on the §404 permit, can EPA raise issues other than impacts to wetlands?
- Can EPA take action to protect valuable riparian habitat that does not meet the definition of "wetlands"?
- Can EPA raise water quality issues despite the State's 401 Certification?
- Can EPA continue to raise alternatives issues?
- Is EPA's §404(c) authority applicable in this case?

## FACT PATTERN - CASE 2

An enforcement action has been brought to you for immediate attention. Mr. D.A. Crop and his attorney have requested a meeting to bring to your attention harassment and misapplication of the enforcement procedures on the part of your staff. Your staff is in the process of preparing the necessary paperwork to refer the case to DOJ.

The alleged violation occurred in a large prairie pothole located within a major waterfowl flyway. According to Mr. Crop, during four excessively dry years, he proceeded to plow and plant corn within the depression (as he terms it) without farming down to the wetter areas. When seasonal rains this year threatened to significantly shorten the desired growing season and, therefore, threaten Mr. Crop's corn, he proceeded to deepen an old drainage ditch, with deposition of the ditch material adjacent to the ditch.

Mr. Crop maintains that the depression is now part of his farming operation, and he should be allowed to use the drainage ditch to keep it in corn. He's afraid that loss of the corn in the depression may make his farming operation unprofitable for the year.

Mr. Crop's attorney informs you that Mr. Crop has been farming up to the edges of the old ditch for at least eight years. There has been no indication of any wetlands vegetation growth on that area for that time period. The attorney argues, therefore, that the hydrology has been altered, the vegetation is no longer normally hydrophytic, and the banks of the ditch are therefore not wetlands. Therefore, he claims that we have no Clean Water Act jurisdiction where the fill was deposited. With respect to the pothole, he argues that we should only regulate the always - wet parts of it, since the old ditch modified the hydrology, even though hydrophytic vegetation has returned to the other parts of it in this year's rainy season. Further, he claims that the pothole and the land adjacent to the ditch are part of Mr. Crop's ongoing farming operation, and so even if we do find that there was a discharge into waters of the U.S., the activity was exempt under Section 404(f).

Your staff advises that Mr. Crop may have, indeed, been farming wetlands during the dry years, but that the hydrology of the pothole and the land next to the ditch was never significantly modified. The ditch in question is old and has not been regularly maintained. Mr. Crop says that when he deepened the ditch it was normal farming practice, and he was only maintaining an existing ditch. Your staff say that Mr. Crop was removing material from the ditch which had accumulated over 25 years, and was also increasing the capacity of the ditch by 1/3 to 1/2, in order to drain the pothole for the first time.

Finally, Mr. Crop's attorney says that without the deepened ditch, Mr. Crop will lose that part of his corn and will not make a profit this year. Further, the Farmer's Almanac predicts very heavy rains over the next decade, and so Mr. Crop believes that if he can't finish this project he will no longer be able to make a living on his farm.

His attorney assures you that if the ditch is not deepened soon they will sue for a temporary taking; if he can't deepen the ditch at all, they will sue for compensation for the full value of the farm.

### Issues

- Which, if any, parts of Mr. Crop's farm are regulated waters of the U.S. ?
- Is there a Section 404 discharge?
- Is Mr. Crop's ditching activity exempt under 404(f) ?
- How legitimate do the takings allegations appear to be? How should they affect the decision?

### FACT PATTERN - CASE 3

Philip "Phil" Smith has applied for a Section 404 permit to construct a driveway and garage on his land in Backwater County, one of the "swampiest" counties in the State. Mr. Smith's house and lot lie at the corner of Easy Street, a main thoroughfare north of Phil's house which passes over Aural canal (which bounds his property on the east), and Pothole Path, a dead end street west of Phil's house which intersects Easy Street. His plan calls for a 100 yard driveway off of Easy street along Aural canal to the back of his property. The driveway would terminate at the rear of Phil's house where he plans to build a garage and mudroom for his wife Peg, who is currently in a wheelchair because of a recurring bunion problem, which regularly requires surgery. Phil's house is in a development which is relatively new and in an area that has no public services, such as sewer connections. Because of potential water quality problems associated with septic systems and runoff from lawn treatment, lots are only sold in 10 acre increments at a price which Phil was just barely able to afford a year ago when mortgage rates were at 3%. Most lots are jurisdictional wetlands, but a few remaining unsold lots, including the one just south of Phil, contain uplands. While Phil's lot is all "wetland," the southwest portion of the lot is lower quality rat reed *Rattus grassus*, and the area along the back of his lot, along Aural canal, supports a sterling band of American Flag grass *Saluticus alwaysius*. The builder who developed the area was required to develop a wetlands mitigation bank for losses associated with home construction. Despite the high proportion of wetlands in this area, the County zoned the area for residential use, in part to offset conservation set-asides of high-value wetlands of other types in other parts of the County.

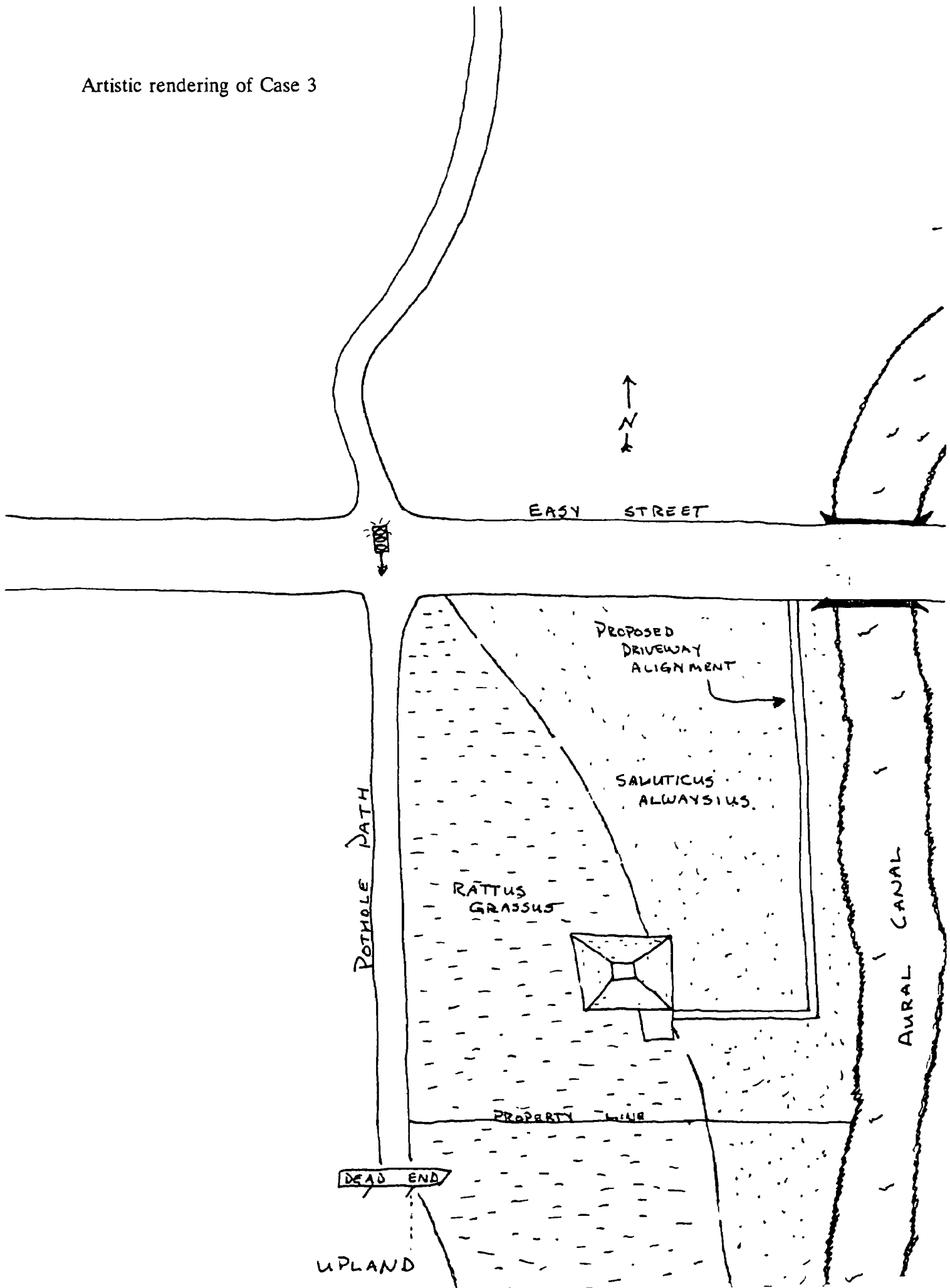
Phil has planned his driveway to allow him to turn off of Easy Street rather than wait at the street light at the intersection with Pothole Path. He also wants to place his garage adjacent to the house in order to be able to get Peg as close to the house as possible. It seems her wheelchair is relatively useless in the "mucky" yard. In all, the proposal would take 3.5 acres of high quality wetland for the driveway, and .5 acres of rat reed for the garage. Phil notes that other houses have garages and not allowing him to build one will decrease the value of his house, and that any upland lots are too far away and too expensive. If he cannot build a drive and garage adjacent to the house, he says he may have to sell his lot at a loss.

The Corps is in a quandary because of their general misgivings about any further loss of wetlands in the area, particularly *Saluticus alwaysius* wetlands, but they understand Peg's problem. They have issued the public notice, but have suggested an interagency meeting to try to address the issues they expect the other agencies to raise.

#### Issues

- Does the permit have to be denied because there are uplands in the vicinity (in fact, on an adjacent plot)?
- Are there possible options other than issue as proposed or deny? ...regarding alternatives? ...regarding mitigation?
- How much weight should be accorded the County's zoning of this area?

Artistic rendering of Case 3



## FACT PATTERN - CASE 4

The project is proposed in the Smith estuary. Having been accepted in EPA's National Estuary Program, studies have been done, public meetings and workshops held and a Management Committee formed which includes EPA on its membership. The Committee has produced a document of its findings and recommendations. The Committee found that, although the Smith estuary sustains a large commercial and recreational fish and shellfish industry, BOD inputs, combined with the estuary's hydrology, causes the DO concentration to fall below the level of 5.0 mg/l established by the State Water Quality Department as necessary to maintain the designation of Fish and Wildlife Waters under state statute. In addition, in recognition of the established urban decay currently taking place in Smithville, which is adjacent to the estuary, the Committee recognized that opportunities should be provided for reasonable economic development, consistent with maintaining the fish and shellfish population and improving the water quality. No specific plans for these have yet been developed.

Smithville has had plans tabled for years for two projects, a convention center and a sports complex. The regionally recognized firm of Fill, Inc. has approached Smithville with a proposal for an integrated convention center/sports complex with a water-based component to increase the complex's tourist draw and enhance the public's appreciation of Smith Estuary. In return for its services, which include obtaining the necessary permits as well as the design, construction and management of the complex, Fill, Inc. will obtain site ownership.

The project involves the filling of approximately 125 acres of high quality wetlands which, in conjunction with the adjacent 100 acres of uplands (resulting from Corps dredging and disposal operations) will provide sufficient area for the project. The water-based component includes a maritime museum, a restaurant, shoreline walkway and slips for an estuary tour boat and historic marine craft. The wetlands at issue are vegetated with regularly inundated emergent and secondary emergent and scrub shrub vegetation in addition to approximately 25 acres of forested wetlands which are part of an additional 150 acres of forested wetlands outside the project's boundaries. The entire 275 acre wetland area is separated by an old road and dilapidated industrial section from a wetlands complex which is adjacent to a National Wildlife Refuge.

As mitigation for wetlands losses, Fill, Inc. has offered to raze the dilapidated buildings and the associated road, reestablish historic hydrological connections and effectively reconnect the remaining 150 acres of forested wetlands as well as the aforementioned wetlands adjacent to the National Wildlife Refuge. This will substantially increase the total wildlife carrying capacity (excluding fish and shellfish) of all the remaining areas and benefit a Federally endangered species which does not utilize those habitat values which dominate the proposed project site. Fill, Inc. has also proposed to create 50 acres of emergent wetlands, although not within the estuary as shoreline development precludes this option.

As a result of the project, there will likely be increased BOD loadings and may be other chemical pollutants which could adversely affect water quality. The fishery in the area would suffer, with some recreational and commercial species likely disappearing from the area, and reductions in the population size of other valuable species. It is expected that, due to the chemical pollutants, the shellfish in the area would no longer be safe for human consumption.

Fill, Inc. has stated that alternatives for their project do not exist for the following reasons:

- \* The project purpose requires that the project be located within the municipal boundaries of Smithville, since property outside those boundaries would have to be purchased.

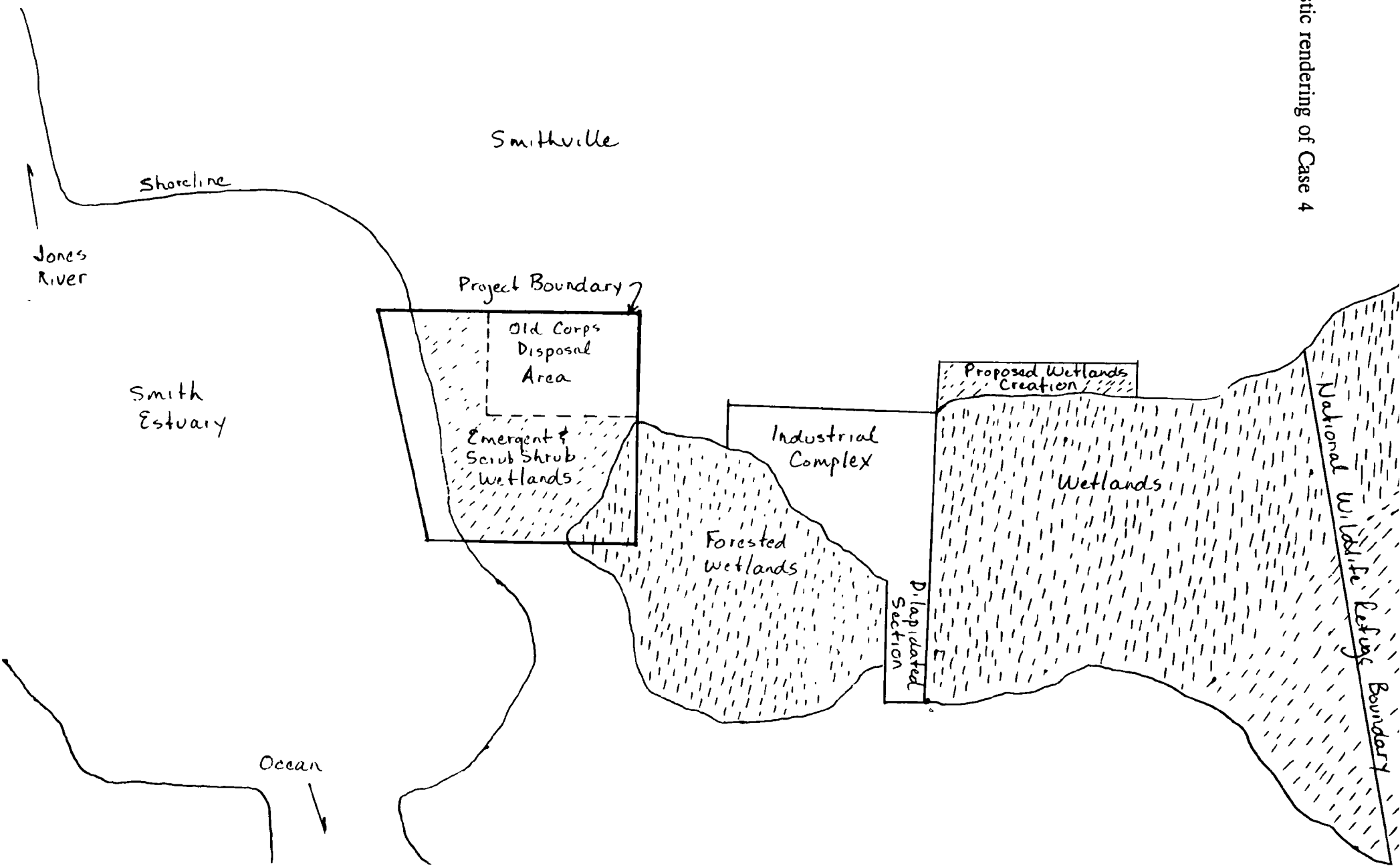
- \* All but one of the potential upland alternatives do not provide sufficient area for the project footprint; none of the other alternatives will provide opportunities for the water - based component. The one potential alternative site that is large enough has no existing sewer and water service, is surrounded by dilapidated, abandoned buildings and is not served by sufficient roads; therefore, a substantial amount of money would have to be spent to provide infrastructure already present at the proposed project site.

NMFS has recommended denial based on adverse impacts to the estuarine fishery, but FWS has bought off on the proposed mitigation. Because of the presence of the endangered species, The Nature Conservancy and the State Heritage Program have listed the restoration and acquisition of the 175 acres of forested wetlands as one of their top priorities in the State. They support the project and have expressed their support to the EPA Administrator. However, the local chapter of the Audubon Society is enraged by the proposed project, as it would interfere with their ability to observe a number of wading birds which frequent the emergent system. The National Audubon Society has indicated that they are carefully watching EPA's actions in this case for consistency with national policy.

The project has received Coastal Zone Consistency Certification and a Water Quality Certification conditioned to require additional storm water retention and treatment if it is determined that the project is exacerbating the aforementioned water quality problems. The applicant's consultant has opined that, on balance, construction of the project with the proposed mitigation will provide more continuous habitat and, therefore, be of more overall environmental benefit than the current circumstances. He further stated that if the project is "killed" the area will likely succumb to random tacky development on the uplands and in the wetlands under general permits.

#### Issues

- Do you accept the mitigation package without regard for the alternatives ?
- Do you comment on the water quality issues ?







# The President's Challenge

*"I believe this should be our national goal--no net loss of wetlands. We can't afford to lose the half of America's wetlands that still remain"*

George Bush, February, 1989  
Budget Statement

*"You may remember my pledge, that our national goal would be no net loss of wetlands. Together, we're going to deliver on the promise of renewal. I will keep that pledge."*

George Bush, June, 1989  
Ducks Unlimited

*"My position on wetland is straightforward: All existing wetlands, no matter how small, should be preserved."*

George Bush, October, 1988  
Sports Afield Magazine

*"From this year forward, anyone who tries to drain the swamp is going to be up to his ears in alligators"*

George Bush, June, 1989  
Ducks Unlimited

*I proposed, for example, that we find a way to stem the alarming loss of America's wetlands. As a fisherman, I appreciate how valuable this resource is to our wildlife.*

George Bush, November, 1988  
Republican Governors Association

*At the President's direction the Domestic Policy Council, which has created a Task Force on wetlands, is in the process of examining how best to implement the President's goal of no net loss. In addition, the Task Force will examine other methods to achieve the goal of no net loss and make recommendations to the President in late 1990.*

Statement by the Press Secretary, January, 1990  
The White House

*"I want to ask you today what the generations to follow will say of us forty years from now. It could be that they will report the loss of many million acres more of wetlands. Or they could report something else. They could report that, sometime around 1989, things began to change. That we began to hold on to our parks and refuges. That we protected our species. And that, in that year, the seeds of a new policy about our valuable wetlands were sown--a policy summed up in three simple words: 'no net loss.' I prefer the second vision of America's environmental future."*

George Bush, June, 1989  
Ducks Unlimited



## SUMMARY OF MAJOR RECOMMENDATIONS OF THE

## NATIONAL WETLANDS POLICY FORUM

The Forum developed over 100 recommendations to implement this goal. They have also developed three follow-up concept papers which attempt to clarify their recommendations for three primary audiences:

**Congress** - legislative recommendations;

**Administration** - a draft Wetlands

**Executive Order**; and

**States** - a paper on state wetland conservation plans and assumption of the Clean Water Act Section 404 program.

*The Forum recommended a national goal for wetlands "to achieve no overall net loss of the nation's remaining wetlands base, as defined by acreage and function; and to restore and create wetlands, where feasible, to increase the quality and quantity of the nation's wetlands resource base".*

The Forum made recommendations in many areas including:

### REDUCING LOSSES:

- Provide incentives to private landowners to permanently protect wetland resources;

- Expand acquisition programs;

- Reduce losses from government programs that directly affect wetlands or encourage landowners to alter them;

- Institute more effective regulatory programs to ensure that all types of wetlands alterations are reviewed.

### WETLANDS RESTORATION:

- Require government agencies to provide full compensation for any wetland alterations by facilities they construct or support;

- Establish a wetlands restoration initiative seeking out opportunities to restore wetlands;

- Implement an agricultural wetlands reserve program to protect 5 million existing wetlands, and restore 2.5 million acres over the next 10 years.

### PLANNING FOR PROTECTION AND MANAGEMENT:

- Increase the emphasis on wetlands planning and management including the development of state wetland conservation plans demonstrating how a state will achieve the goal through integration of all its programs.

**MITIGATION POLICY:**

The Forum recommends many components of mitigation policy including: sequenced decision making to avoid, minimize, and finally compensate for wetland alterations; wise use of mitigation banks, clarify responsibility for monitoring and enforcement; coordinate government decisions on mitigation; to the extent feasible, compensate before wetlands are altered, on or near the site of alterations, and consistent with advance planning efforts.

**REGULATORY PROGRAMS:**

Make changes to the Clean Water Act §404 program to encourage and support states having primary responsibility in wetlands regulation;

Adopt a single wetlands definition;

Consider regulating small conversions of ecologically low value wetlands through regional general permits with full compensation for any wetlands altered.

Improve the federal agency implementation of the Clean Water Act §404 program.



OFFICE OF WETLANDS PROTECTION (475-7791)

Director, DAVID G. DAVIS

Secretary, JANICE WINGFIELD

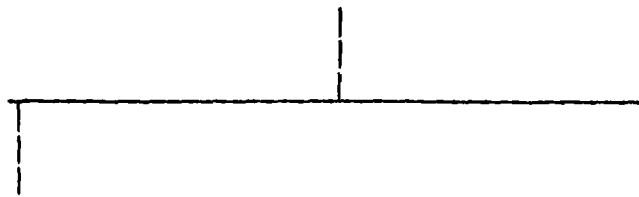
Program Analysis Officer, JOAN WARREN

Administrative Officer, MARY HINTON

Receptionist, GENEVA FUNDERBURK \*

Clerk-Typist, DONALD JEAN

Clerk-Typist, ROGER COLLYMORE

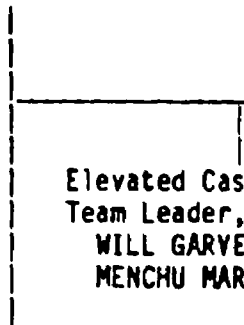


REGULATORY ACTIVITIES DIVISION (475-7799)

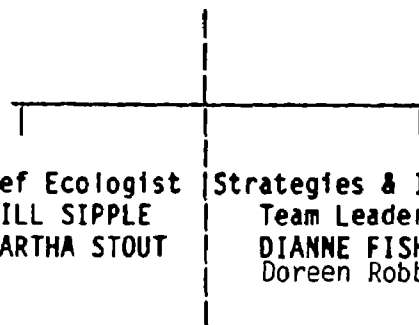
Director, SUZANNE SCHWARTZ  
Secretary, STEPHANIE NOBLE

WETLANDS STRATEGIES & STATE PROGRAMS DIVISION (382-5043)

Director, JOHN MEAGHER  
Secretary, VIRGINIA FICKLING  
Clerk-Typist, STAN FRANCAZAK \*



Elevated Cases Team  
Team Leader, KIRK STARK  
WILL GARVEY  
MENCHU MARTINEZ



Chief Ecologist  
BILL SIPPLE  
MARTHA STOUT

Strategies & Initiatives Team  
Team Leader, JOHN MAXTED  
DIANNE FISH  
Doreen Robb

ENFORCEMENT & REGULATORY POLICY STAFF

Chief, GREGORY PECK  
HAZEL GROMAN  
Mike Fritz  
CLIFF RADER  
JOE DAVIA  
VACANCY

OUTREACH & STATE PROGRAMS STAFF

Chief, JOHN STUDD  
LORI WILLIAMS  
JEANNE MELANSON  
MARJORIE WESLEY  
Cory Giacobbe  
Curtis Clark \*

\* Senior Environmental Employee Program





# FACTS ABOUT THE WETLANDS RESOURCE

## EXTENT OF THE RESOURCE

It is estimated that there are approximately 99 million acres of wetlands in the continental U.S. (as of the mid-1970's). This amounts to an area equal to the size of California. Estimates of Alaska's wetlands vary, but 200 million acres probably exist.

### By Major Type (in continental U.S.):

- Inland wetlands  
(including freshwater marshes and swamps).....95%
  - Coastal wetlands.....5%
- (Office of Technology Assessment, 1984)

### Land Area

- Wetlands occupy 5% of the land area of the continental U.S.  
(Frayer et. al., 1983)

### Ownership

- It is estimated that about 75 - 80% of wetlands in the continental U.S. are privately owned; the remaining 20 to 25% is owned by federal and State governments. (U.S.F.W.S., 1989)

## LOSS OF WETLANDS

### Aggregate Losses (contiguous U.S.)

- Estimated wetland acreage at time of European settlement..... 215 million acres  
(Roe and Ayres, 1954)
- Estimated acreage in mid-1970's.....99 million acres
- Percentage lost through mid-1970's..... 54%  
(Frayer et. al., 1983)

### Recent Losses

- Between the mid-1950's and the mid-1970's, an average of 458,000 acres were lost annually in the continental U.S. This totaled about 10% of the remaining wetlands over this twenty year period.
  - The percentage of losses attributable to various activities between the mid-1950's and mid-1970's:
    - Agriculture.....87%\*
    - Urban development..... 8%
    - Other Development..... 5%
- (Frayer et. al., 1983)
- \* Note: Because this figure may have changed substantially since the mid-1970's, agricultural interests object to its use without mentioning this qualification.

### Geographical Concerns

- Iowa has lost 99% of its wetlands. (Frederickson)
- California has lost over 90% of its wetlands. (U.S.F.W.S., 1977)
- Only 20% of the bottomland hardwood forests of the Lower Mississippi Valley remain; the loss rate of these wetlands was three times the national average between the mid-1950's and mid-1970's. (MacDonald et. al., 1979)
- 33% of North Carolina's pocosin wetlands were totally converted to non-wetland uses between 1962 and 1979. (Richardson et. al. 1981)
- Louisiana is losing 30,000 to 40,000 acres of coastal wetlands per year due to subsidence, sediment starvation, saltwater intrusion through oil and gas and navigation canals, and sea level rise. (Gosselink et. al., 1979 and Gagliano et. al., 1981)
- Over 90% of Nebraska's Rainwater Basin wetlands are gone. These are heavily used by migratory birds, and habitat over-crowding results in outbreaks of disease (In 1980, about 80,000 waterfowl died due to avian cholera). (Farrar, 1982)

### VALUE OF THE WETLANDS

#### Waterfowl and Wildlife

Coastal and inland wetlands provide essential breeding, nesting, feeding and predator escape habitats for many forms of waterfowl, mammals, and reptiles.

Example: Although wetlands constitute only about 5% of the nation's lands, at least 35% of all rare and endangered species are either located in wetland areas or are dependent on them. (Kundell and Woolf, 1986)

Example: As other habitat is lost, wetlands are increasingly becoming the last refuge of animals we do not normally think of as wetland dependent, such as black bear and the Florida panther. (Richardson et. al., 1981 and Tiner, 1984)

Example: Nationally, 80% of America's breeding bird population require bottomland hardwoods for survival. (Wharton and Kitchens, 1982)

#### Fish and Shellfish

Wetlands are important spawning and nursery areas and provide plant food for commercial and recreational fin and shellfish industries.

Example: On the Atlantic and Gulf coasts, the Department of Commerce has estimated that from 66% to 90% of the commercially important fish and shellfish species depend on coastal marshes or estuaries for at least part of their lifecycle. (U.S. Dept. of Commerce, N.O.A.A., 1981)

Example: Louisiana's marshes produce an annual commercial harvest of 1.6 billion pounds worth \$680 million. (U.S.A.C.O.E., 1987)

### Water Quality

Wetlands improve water quality by removing excess nutrients and many chemical contaminants; because of this function, they have been called "nature's kidneys."

Example: In Georgia, the Alcovy River's forested wetlands significantly improve stream water quality affected by wastes discharged upstream. An equivalent amount of pollution removal in a sewage treatment plant would cost \$1 million per year. (Wharton, 1970)

Example: Wetlands have been found to remove up to 60-90% of the suspended sediments in waters flowing through them. (Tchobanoglaus and Culp, 1980)

### Flood and Erosion Control

Wetlands absorb peak flood flows and release them more slowly to streams, thereby reducing downstream flood damages to cities and farms. They also absorb wave energy from storm events and decrease the erosive force of water along rivers, lakes and coastal shores.

Example: In 1982 a dam in Rocky Mountain National Park, Colorado, broke releasing a surge of flood waters. The wetlands below the dam absorbed and slowed the peak waters and significantly reduced the extent of damage to the downstream town of Estes Park.

Example: In the 1970's, the Corps of Engineers decided to preserve wetlands in the Charles River Basin in Massachusetts instead of building expensive dams or dikes. The loss of those wetlands would have resulted in an annual cost of \$17 million in flood losses. (Thibodeau and Ostro, 1981)

A cumulative reference list is attached for all citations.

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## Wetlands Protection

*The United States is losing one of its most valuable, and perhaps irreplaceable, resources—our nation's wetlands. This natural heritage of swamps, marshes, bogs, or other wetlands, known by many local names, is rapidly disappearing.*

Once there were over 200 million acres of wetlands in the lower forty-eight states; now only 95 million remain. In the two decades between 1955 and 1975, over 11 million acres were lost entirely. Moreover, this figure does not include wetlands degraded by pollution to the point where they cannot fulfill their ecological functions. Even worse, these national figures mask much greater losses of particular types of wetlands in specific Regions.

When we lose our wetlands we also lose many vital functions performed by these systems. These include wildlife habitat, water quality enhancement, flood storage and desynchronization, aquifer recharge, stream baseflow stabilization, organic material production which supports estuarine food chains, protection of fragile coastal areas from storm surges, and even control of local climates.

We have a number of tools available to us for protecting our wetlands. All levels of government—Federal, state, and local—administer programs of one sort or another that help minimize or eliminate damage to wetlands. Probably the best known of these is the Federal program under section 404 of the Clean Water Act for regulating the discharge of dredged or fill material into

waters of the United States, including most wetlands. Some states have similar permit programs. Various governmental economic incentive programs and land management programs complement these regulatory programs.

The Environmental Protection Agency plays an *important role* in wetlands protection. The cornerstone of these efforts is the section 404 program, which EPA *jointly administers* with the Army Corps of Engineers. EPA's regulatory activities, however, are supplemented by important efforts in other areas such as working with States and local governments, enhancing public awareness of wetland values, and conducting research in key scientific areas. EPA's wetland protection activities are carried out by the Headquarters Office of Wetlands Protection and wetland staffs in the ten Regional offices.

For more information on EPA's Wetland Protection Program, write: Office of Wetlands Protection (A-104-F), Attention: Public Information Officer, U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460.



## The Wetlands Resource

*In the simplest sense wetlands are just wet places where land and water mingle in novel and intricate ways to create a remarkably diverse assortment of habitat types. Water is the life blood of wetlands and is the dominant influence on soil structure and the kinds of plants and animals characterizing a wetland.*

We generally define and describe wetlands in terms of the combination of wet (or hydric) soils, **hydrology** (that is, inundation or soil saturation by water), and **vegetation** (that is, plants specially adapted to tolerate saturation or inundation.) Each wetland type is a unique amalgam of these three factors and other characteristics.

**Wetlands span a broad spectrum with regard to their diversity.** They may be tens of thousands of acres in extent or as small as a tabletop. They are found from the cold tundra of the Arctic to the lush, humid tropics of the mid-latitudes. They may be dark and densely wooded or sunny, open wet grasslands. Many are associated with rivers, streams, lakes, or sea, but many others are found far from any open-water bodies. Some wetlands are uniform stands of one or a few plant species, while others may contain dozens of important plant species and represent a mixture of several discrete vegetation communities.

Wetlands are known by many names reflecting both their actual diversity and the cultural and linguistic patterns where they are found. There is no universally accepted system of naming or classifying wetlands, and this has led to a great deal of confusion. The National Wetland Inventory, a project of the U.S. Fish and Wildlife Service, uses a standardized, hierarchical system for classifying, mapping, and monitoring wetlands, but the system is not readily amenable to popular usage. While there are no truly standardized common names for wetland types, there is a set of terminology that is generally used and understood by professional workers in the field. These are grouped into two broad classes depending on the **amount of peat** (that is, unconsolidated soil material consisting largely of undecomposed or slightly decomposed plant materials) present. These types are broken down as follows:

**Peatlands** - wetlands that accumulate appreciable peat deposits. Peatlands are generally, but not exclusively, associated with northern climates and glaciated terrain. They may be dominated by herbaceous or woody vegetation, or both. Included are:

**Bogs** that depend primarily on precipitation for their water source and are usually acidic and poor in certain nutrients

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***Fens*** that derive most of their water from groundwater and are less acidic and richer in mineral nutrients.

**Non-peat accumulating wetlands.** These include:

***Marshes*** which are dominated primarily by herbaceous (non-woody) vegetation, and

***Swamps*** which are dominated primarily by woody vegetation in the form of trees or shrubs.

**Wetlands can be found in every part of the United States.** Many are associated with the sea and are particularly notable as the great tidal marshes of the mid and south Atlantic coast. Large areas are also found along rivers and streams, especially in the Southeast and Southcentral states with their typical bottomland hardwood forests. Others are isolated from major water bodies — particular concentrations being found in the Alaskan tundra, the prairie pothole region of the upper Great Plains, and the





## Wetlands Functions and Values

*Wetlands provide many values to society and larger natural ecosystems of which they are a part. These values derive from a variety of wetlands functions; that is, physical and biological processes intrinsic to all natural systems. Most wetland functions are perceived by an informed public as having positive value — a good example being the production of commercially harvested shellfish. A small minority of functions, such as providing breeding habitat for mosquitos, are widely perceived as having negative value*

Wetlands are extremely complex systems, and until fairly recently, they were not extensively studied. As a result, there is still much to learn about wetland functions and we may even find significant other values as research proceeds. We have, however, identified and characterized an impressive number of beneficial functions which are outlined below.

**Physical Protection.** Wetlands protect shorelines from wave or storm erosion by dissipating wave or storm energy, and they protect downstream areas from damaging effects of flood flows through slowing and temporarily storing floodwaters, thus reducing peak flows.

**Water Quality Enhancement.** Wetlands remove pollution from waters that flow through them by way of physical adsorption to plants or bottom sediments, chemical precipitation, or biochemical breakdown or uptake. In effect, they function as biological sewage treatment plants.

**Water Supply.** In some areas wetlands serve as groundwater recharge zones for underlying or adjacent aquifers. Many store water during the wetter parts of the year and release it at relatively constant rates helping to maintain regular stream flows.

**Wildlife Habitat.** Wetlands provide critical breeding, nesting and rearing, and wintering habitat for many species of fish and wildlife. A large proportion of Federally-listed threatened or endangered animals (45%) and plants (26%) depend directly or indirectly on wetlands to complete their life cycle successfully.

**Food-Chain Support.** Coastal and riverine wetlands produce large quantities of plant-derived food materials that are exported to estuaries and other coastal areas where they support marine food webs, many of which are critical to commercial fisheries.

**Commercial Products.** Wetlands serve as important sources of fish and shellfish, furbearers, timber, forage, wild rice, cranberries, blueberries and other useful materials.

**Recreation and Aesthetics.** Wetlands contribute these values by providing places for hunting and fishing, nature study and photography, canoeing and boating, and outdoor education. Increasingly, wetlands are also coming to be viewed as valuable simply for the natural beauty they offer.

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**Climatic Influences.** Wetlands are believed to play an important role in the global cycles of nitrogen, sulfur, methane, and carbon dioxide. In this way wetlands may help to control atmospheric pollution by removing excess nitrogen and carbon produced through man's activities.

Assessing wetland values for a particular wetland tract or region is a vital step in planning and regu-

latory activities. Because the science of wetland functions and values is still maturing, such assessments are challenging. Considerable progress has been made in the last several years, and the key Federal agencies are collaborating on the development of a uniform assessment methodology known as the Wetland Evaluation Technique (WET).



## Wetlands Impacts and Losses

*Despite their many values, wetlands continue to be lost in the United States. Unfortunately, relatively few people are aware of or understand the values of wetlands and equally few are familiar with the laws and regulations governing their protection. This situation is significantly compounded by a long history and tradition in the Western World of fear and loathing of wetlands and the creatures they harbor. This, in turn, is reinforced by our nation's doctrine of manifest destiny that, among other things, places a positive value on "reclaiming" such "wastelands".*

Private property philosophy also plays a role since **most wetlands are privately owned** and the role of government in protecting such public values on private land is not widely accepted and supported.

**Wetlands are relatively fragile ecosystems that can be easily damaged or destroyed, particularly when their hydrology is altered.** Because wetlands are often the only remaining undeveloped parcels of land, particularly in urban areas, the social and economic pressures to convert them to developable farmland are enormous. Because wetlands are most commonly situated in topographic low spots, they have traditionally been used for all manner of waste disposal, including sewage effluent discharge, garbage dumps, hazardous waste dumps and irrigation return flow collectors. Finally, because certain floodplain and prairie wetlands contain good agricultural soils, they have been systematically drained and diked to convert them to cropland.

**The major threats to wetlands today come from agriculture and commercial or residential development.** Estimates point strongly to agriculture as the major human activity that destroys wetlands. Many agricultural activities are exempt from key Federal and state programs, and the vast land area involved makes surveillance very difficult. In urban and coastal areas, major losses of wetlands are attributable to the construction of such facilities as housing, shopping centers, marinas and other recreational facilities and supporting infrastructure of roads, utility corridors, and sewage treatment plants.

Historically, federally-subsidized water resource, flood control, and highway projects have been responsible for major impacts, but these impacts are declining as a fraction of the total as Federal support for such projects declines. Increasing impacts are being felt in some areas such as the Arctic and the Gulf Coast as a result of oil and gas exploration and production while the mining of coal, minerals, and peat **continues to destroy or degrade large areas** of the Nation's interior.

**Other activities also continue to chip away at our wetland resources.** These include small fills, stream diversions or impoundments, and bank stabilization associated with homeowner improvements, impacts of forestry operations and grazing on both public and private lands, groundwater extraction with attendant surface water depletion for irrigation and offshore petroleum operations, mosquito control ditching and insecticide application, and waste disposal

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We are also coming to realize that outright destruction from filling and draining, while highly visible and recognizable, is not the only way in which we are losing our wetlands. **Degradation in other forms is a more subtle, but equally pervasive destroyer of wetlands.** Such degradation may involve sedimentation from non-point source pollution, chemical contamination from stormwater, irrigation returns, waste disposal or physical destruction from uncontrolled use of off-road vehicles and other destructive recreational activities.

Stemming wetlands losses and destruction requires both *regulatory sanctions* to control

avoidable impacts and an increased ability *to mitigate* unavoidable impacts. Both *restoration* of degraded wetlands and *creation* of new wetlands may play a major role in future efforts to maintain, or even increase, the wetland base. The concepts and methods for successfully restoring and creating wetlands are as yet uncertain and these techniques cannot be relied upon as the whole solution to wetland loss. Much exciting work is being done to develop and demonstrate methods for restoration and creation. Because wetland science in general is still young, this is an area of very great challenge but there is reason to be hopeful.



## Programs for Protecting Wetlands

*The protection of our Nation's wetlands resources depends on a concerted effort by all levels of government, private industry, conservation organizations, the scientific community, and the public. There is no "omnibus" wetlands protection law in the United States, so protection necessarily requires the employment of a variety of approaches in a coordinated, thoughtful, and effective manner.*

Wetlands are affected by a great many public and private programs and activities. Some of these actions benefit the wetlands resource, but many of them affect wetlands adversely. Some programs may have both effects depending upon the actual situation in a given case and/or in the objectives and attitudes held by the principal decision-makers. In the aggregate the broad array of government policies and programs work at odds: some create incentives for protection while others create incentives for conversion. These mixed incentives and messages add to the confusion and contribute to our continued problem of wetland loss. Add to this the varied activities of the private sector and the public at large—some of which benefit wetlands while others impact them adversely—and it becomes readily apparent that the remedies must be as varied and as carefully crafted as the problems they are designed to address.

At the Federal level, the available tools can best be outlined under four general areas. First, direct regulation of wetlands destruction or degradation is available

under sections 402 (effluent discharges) and 404 (discharge of dredged or fill material) of the Clean Water Act and the 1899 Rivers and Harbors Act. The Endangered Species Act can also play an important role where wetlands serve as critical habitat for threatened or endangered species.

Activities impacting wetlands can be affected through the application of economic sanctions designed to limit destructive actions. Important examples include "swampbuster" provisions of the 1985 Food Security Act (which remove agricultural subsidies and loan guarantees when wetlands are converted) and the 1982 Coastal Barrier Resources Act (which removes Federal supports when designated barrier islands are developed). Recent changes in the Federal Tax Code have also removed many incentives for land conversion.

The third, very broad area is the amalgam of Federal programs that involve planning, public land management, and development of infrastructure such as highways, water resources facilities, and flood control. Particularly in the West, Federal lands comprise such a large fraction of the total that land management policies and practices alone can tip the balance for or against wetlands protection. Guided by the Executive Orders on Wetlands Protection and Floodplain Management and the National Environmental Policy Act (NEPA), most major land managing agencies are developing responsible policies for managing and conserving wetlands resources under

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their stewardship. NEPA and the Executive Orders also apply to most activities involved in highway construction and water resources development. The Coastal Zone Management Act and the National Estuary Program (section 320 of the Clean Water Act) provide both an institutional framework and funding for the development of comprehensive resource management plans at the estuary or comparable level.

**The final and critical area is *Federal land acquisition*.** Regulation, planning, and other approaches can only go so far. In some circumstances, the only sure way to protect the wetland resource is for the Federal government to simply buy the land and manage it in a protected status, or to obtain a conservation easement that ensures natural values will be preserved. The most notable example of this is our network of National Wildlife Refuges most of which include significant wetland acreage. The 1986 Emergency

Wetlands Resources Act has broadened Federal authorities in this area and set up a formal process for establishing acquisition priorities.

**At the State level, many legislatures have enacted wetland acquisition or protection statutes which complement Federal programs.** States also administer a variety of land use and water quality management programs that significantly affect wetlands protection. Local zoning and land use planning, if done wisely, can also be vital factors in protection of wetland resources. Private organizations, industry, and landowners also contribute in important ways through education, acquisition, and wise management of wetland resources they own. Increasingly, the role of private industry in protecting wetlands is becoming a more central one since many wetlands are found on corporate land and since government will never have the resources to do the whole job alone.



## The Section 404 Program

*In 1972, Congress substantially amended the Federal Water Pollution Control Act, providing for the first time a Federal regulatory scheme with real teeth in the form of standards, attainment deadlines, enforcement authorities, and permit requirements. Section 404 of the Act established a new permit program to control the discharge of dredged material (spoil) or fill material into waters of the United States. Because of the Army Corps of Engineers' (COE) extensive experience in regulating modifications of navigable waters, Congress charged the Secretary of the Army with responsibility for the basic permit program. In recognition of EPA's expertise and responsibilities for protecting the environment, Congress charged the Administrator of EPA with developing, in conjunction with the Army, environmental guidelines for specifying disposal sites, known as the 404(b)(1) Guidelines.*

Section 404(b)(2) also provided for a limited override of the Guidelines by the Secretary where the economics of anchorage and navigation warrant. In section 404(c), the Act gave EPA authority to prohibit, withdraw, or restrict (popularly known as "veto") specification of sites for discharge where unacceptable adverse effects would occur to certain classes of aquatic values.

In 1977, Congress again overhauled the Act (renaming it the *Clean Water Act*), adding a number of new provisions, some of which codified the administrative practices used by the implementing agencies at the time while others reflected political compromises. The more significant new

provisions provided for transfer of the permit program for certain waters (generally the non-navigable waters) to qualified states; exempted from permitting certain activities believed to have minimal impacts (404(f)) and certain Federal projects where the 404(b)(1) Guidelines are considered in an Environmental Impact Statement (404(r)); and authorized general permits for categories of activities with minimal individual and cumulative impacts. In 1987, further amendments created new authority for both the Corps and EPA to issue administrative civil penalties for section 404 violations and authorized EPA to treat Indian tribes as states where certain qualifications are met.

Section 404 regulates those discharges of dredged or fill material not exempted by statute into all waters of the U.S., including most wetlands. Such discharges are commonly associated with projects such as channel construction and maintenance, port development, fills to create fastland for development sites, and water resources projects like dams and levees. Other kinds of activities such as channelization and land-clearing are regulated under Section 404 where there is an associated discharge of soil or other materials into waters. Many other activities which can adversely affect or even destroy wetlands, such as drainage and groundwater pumping, are not regulatable under section 404 unless they involve discharges of dredged or fill material. The term "waters of the U.S.," which sets the geographical scope of the program, is defined to include all surface waters and their tributaries, adjacent wetlands, and isolated

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waters or wetlands the use, degradation, or destruction of which could affect interstate or foreign commerce. As a practical matter most isolated waters and wetlands are brought into the jurisdictional ambit of section 404 under this "commerce clause test."

**The Section 404 program is administered by both the Corps of Engineers and EPA.** The U.S. Fish and Wildlife Service and the National Marine Fisheries Service have important advisory roles, and other governmental agencies, industry, and the public can all play an important role in commenting on public notices of permit applications or participating in hearings or other information-collecting activities. The Corps, operating through its 37 District offices receives up to 14,000 individual permit applications per year. After notice and opportunity for public hearing, the District Engineer may issue or deny the appli-

cation. In recent years approximately 5% have been denied; most of the remainder are issued with binding conditions requiring project alteration and mitigation to reduce environmental impacts, and/or monitoring. Tens of thousands of other discharges are authorized by general permits issued on a regional or nationwide basis; these do not require individual permits as long as the discharger complies with the conditions issued by the Corps. Section 301 and 309 of the Act give EPA and the Corps authority to act against persons who discharge without a 404 permit and also to enforce against violators of 404 permit conditions. In particular, Section 309(g) authorizes both agencies to assess administrative *civil penalties* for violations of Section 404. EPA or the Corps may also seek monetary penalties, injunctive relief and even prison sentences through judicial referrals.





## EPA'S Wetlands Protection Program

*The U.S. Environmental Protection Agency has been involved in wetlands protection since the passage of the 1972 amendments to the Federal Water Pollution Control Act, which established the dredged or fill material permitting program under Section 404*

Since 1981, the wetlands program had been assigned to the Office of Federal Activities. In October 1986, partly in response to a major strategic study of wetlands protection, EPA management increased and underscored its commitment to wetland protection by elevating the function from division to office level. The new Office of Wetlands Protection was placed under, and reports directly to, the Assistant Administrator for Water. As part of EPA's water program, wetlands efforts are integrated more effectively into EPA's overall water resource protection activities, including those dealing with estuaries and near coastal waters, non-point source pollution, and groundwater.

The Administrator approved the following areas of emphasis for the new office, as laid out in the strategic plan:

- expedite Section 404 policy development
- enhance state and local wetland protection
- increase anticipatory approaches to wetlands protection
- increase coordination with and consistency of Federal and state policies
- enhance public awareness of wetlands values
- expand scientific knowledge of wetland functions

The regulatory responsibilities of Section 404 will continue to serve as the cornerstone for EPA's wetland protection activities; however, the Agency is committed to moving forward along a variety of both regulatory and non-regulatory fronts, aimed at increasing public understanding and support and enhancing complementary or related non-regulatory programs, while seeking innovative ways to make the traditional Section 404 program more efficient, more predictable, more consistently applied across the country, and more environmentally effective.

The Office of Wetlands Protection is organized in two Divisions. The **Regulatory Activities Division** manages all section 404 (dredged or fill material permit program) activities except State program assumption. These include the development of policy, guidance and regulations; most general section 404 program development, management and Regional assistance; and handling of elevated cases under 404(q), preparation of final 404(c) determinations, and case-related assistance to the Regions. The **Wetlands Strategies and State Programs Division** manages state and local program development activities and all other non-administrative functions. These include work with other government agencies (other than section 404 actions), public information and education, initiatives in such areas as comprehensive planning, ecosystem-level protection projects, development of technical methods and information, and liaison with the research community.

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Field activities are carried out by wetlands staff in EPA's ten Regional Offices. Organization level and structure vary by Region, but each Region has designated a "*Wetlands Coordinator*", usually a Section or Branch Chief, who serves as the general point of contact and activity for that Region. The Agency's Wetland Research Program is administered by the Office of Environmental Processes and Effects Research. The Corvallis (Oregon) Environmental Research Labo-

ratory manages the actual research work. Other key supporting roles are played by the Office of General Counsel and the Office of Enforcement and Compliance Monitoring. **The Office of Wetlands Protection also works very closely with the Office of Federal Activities** since that office manages the review of all Federal Environmental Impact Statements and other major plans and assessments, many of which involve wetlands resources or impacts.



# SECTION 404 OF THE CLEAN WATER ACT: AN OVERVIEW

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## INTRODUCTION

- Section 404 of the Clean Water Act regulates the discharge of dredged\* or fill\* material into waters of the United States.
- The Section 404 permit program is administered jointly by EPA and the U.S. Army Corps of Engineers (Corps).
- Although the Corps is responsible for permit processing, EPA is responsible for several key aspects of the program, including development of the program's environmental standards (Section 404(b)(1) Guidelines), determining the scope of geographic jurisdiction and the applicability of permit exemptions under Section 404(f), state program assumption, and enforcement.

## THE PERMIT PROCESS (see attached flowchart)

### *Individual Permits*

- Discharges can be authorized by either individual or general permits.\*
- If an individual permit is required, the Corps issues a public notice containing the information needed to evaluate the potential impacts of the proposed activity.
- Notice is sent to EPA and all interested parties, including other Federal, State, and local government agencies, adjacent property owners, and others as requested. Any person may request that a public hearing be held to consider the application.
- The Corps' evaluation of a Section 404 permit application is a two part test which involves determining whether the project complies with the Section 404(b)(1) Guidelines and a public interest review. A permit must be denied if the project fails to comply with the Guidelines or is found to be contrary to the public interest.

### *General Permits*

- General permits, issued on a State, regional or nationwide basis, are authorized for specific activities which are similar in nature and will cause minimal adverse environmental effects individually or cumulatively.

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\*Terms that are marked with an asterisk are defined in a Glossary found at the end of this document.

- All general permits contain conditions and limitations on the authorized activities intended to ensure that the impacts are minimal.
- Examples of activities authorized by nationwide permits which are generally not of concern to EPA are navigation buoys, discharges for minor road crossings of non-tidal water bodies, and bank stabilization less than 500 feet in length that does not impact wetlands.\*

### *Issues*

- EPA and environmental groups have expressed concern over a number of broad nationwide permits, including one for isolated waters and headwaters under 10 acres and a number of activities authorized by other Federal programs. The Corps has initiated a review of the nationwide permit program, in which EPA will be participating.

### **GEOGRAPHIC JURISDICTION (see attached diagram)**

- EPA has the ultimate responsibility for determining the scope of geographic jurisdiction of the Clean Water Act, including the Section 404 program ("waters of the United States").
- The Section 404 program's geographic jurisdiction is comprehensive, extending to all "waters of the United States," including
  - waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce;
  - all tidal waters;
  - all interstate waters and wetlands;
  - all other waters (such as intrastate lakes, rivers, streams and wetlands), if their use, degradation or destruction could affect interstate or foreign commerce;
  - tributaries to waters or wetlands identified above;
  - the territorial sea; and
  - wetlands adjacent to waters (other than wetlands) identified above.

- EPA and the Corps assert jurisdiction over isolated waters where it can be demonstrated there will be an effect on interstate or foreign commerce. Working with OGC, we have developed a list of examples of isolated waters which are under Section 404 jurisdiction. These examples include waters which are or would be used as habitat by birds protected by Migratory Bird Treaties or by other migratory birds which cross state lines.
- Wetlands subject to regulation under Section 404 are delineated using a three-parameter approach, i.e., positive indicators of wetlands vegetation, hydrology, and hydric soils.

### *Issues*

- Many of the major issues associated with geographic jurisdiction were resolved as a result of agreements reached with Army, including the 1989 Jurisdiction/404(f) MOA and the interagency Wetland Delineation Manual. However, the Manual has generated some new concerns, particularly where the Corps had previously asserted jurisdiction more narrowly.

## **ACTIVITIES REGULATED BY SECTION 404**

- Discharges of dredged and fill material are commonly associated with activities such as:
  - port development;
  - channel construction and maintenance;
  - fills to create development sites;
  - transportation improvements; and
  - water resource projects (such as dams, jetties and levees).
- Other kinds of activities, such as landclearing, are regulated as Section 404 discharges if they involve discharges of dredged or fill material (e.g., soil) into waters of the United States.
- In addition, Congress, in the 1977 CWA amendments, included specific exemptions (Section 404(f)) from permitting requirements for certain activities. EPA is ultimately responsible for determining the applicability of the Section 404(f) exemptions. These activities include:

- normal farming, silviculture, and ranching practices;
  - maintenance, including emergency reconstruction of recently damaged parts of currently serviceable structures such as dikes, dams, levees, groins, rip rap, breakwaters, causeways, bridge abutments or approaches, and transportation structures;
  - construction or maintenance of farm or stock ponds or irrigation ditches or the maintenance (but not construction) of drainage ditches;
  - construction of temporary sedimentation basins on a construction site which does not include placement of fill material into waters of the United States; and
  - construction or maintenance of farm or forest roads or temporary roads for moving mining equipment if best management practices are followed.
- The Section 404(f) exemptions are applied narrowly (pursuant to the restrictions in Section 404(f)(2)) and are not intended to exempt activities with more than minor impacts on aquatic resources. Under Section 404(f)(2), an otherwise exempted activity is "recaptured" (i.e., the activity requires an individual permit) if there is a change in use and water flow/circulation is impaired or the reach of waters is reduced.

### *Issues*

- There are several major unresolved issues in this area, including the "solid waste" problem and inconsistent EPA/Corps interpretation of regulated activities (e.g., landclearing, pilings).

## **DREDGED MATERIAL DISPOSAL**

- Section 404 also regulates dredged material disposal into open waters and wetlands within its jurisdiction, which is similar to the regulation of dredged material disposal in ocean waters under Section 103 of the Marine Protection, Research, and Sanctuaries Act.
- The regulation of dredged material in Section 404 waters has recently increased in environmental significance due to a number of factors, including:
  - more dredged material disposal as a result of port improvement projects authorized under the Water Resources Development Act of 1986;

- about 3% of dredged material is highly contaminated with pollutants such as metals and organic chemicals and disposal of such material is generally expensive;
- finding suitable disposal sites (including upland sites) is becoming more difficult;
- the Navy's proposed homeporting project in Puget Sound at Everett, Washington as well as the proposed dredging in conjunction with the Port of Oakland in San Francisco Bay raised contaminated dredged material issues; and
- GAO recently concluded an investigation of the management of dredged material disposal in the San Francisco Bay area.

### *Issues*

- A national framework is needed to ensure a coordinated review of dredged material under the Section 404 and Section 103 programs.
  - Currently the requirements (particularly, the testing requirements) are perceived to be more stringent for ocean disposal than for disposal in Section 404 waters.
  - Unlike the ocean dumping program, there are no national requirements on sediment testing and evaluation under Section 404, although the Section 404(b)(1) Guidelines provide general guidance on evaluation of dredged material disposal.
- We are tentatively planning to adopt ocean dumping testing manual for use in the Section 404 program whenever possible.
- We are also developing a joint strategy document which will provide a decision-making framework for determining an environmentally acceptable disposal option.

### **SECTION 404(b)(1) GUIDELINES (see attached flowchart)**

- EPA's Section 404(b)(1) Guidelines contain the substantive environmental criteria used in evaluating discharges of dredged or fill material.
- The fundamental precept of the Guidelines is that "dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be



demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern." (Section 230.1(c))

- In addition, one of the primary requirements of the Guidelines is that no discharge can be permitted if there is a practicable\* alternative with less adverse impact on the aquatic environment (unless the identified alternative poses other significant environmental problems).
- This alternatives test is applied more rigorously (i.e., alternatives are presumed to exist) for projects that are proposed to be located in special aquatic sites when the project is not water dependent.\* Special aquatic sites include: wetlands, coral reefs, mud flats, riffle pool complexes in streams, vegetated shallows, and sanctuaries and refuges.
- No discharge can be permitted under the Guidelines if it would violate other applicable laws, such as State water quality standards, toxic effluent standards, or the Endangered Species Act.
- No discharge can be permitted under the Guidelines if it would cause or contribute to significant degradation of waters of the U.S.
- In addition, discharges may be permitted under the Guidelines only if all appropriate and practicable steps are taken to minimize (i.e., mitigate) the adverse impacts of the discharge on the aquatic ecosystem, including compensating for unavoidable impacts.

## ADDRESSING UNACCEPTABLE ADVERSE IMPACTS

### *Section 404(q)*

- EPA works with the Corps of Engineers during the permit decision process whenever possible to ensure unacceptable adverse impacts are avoided, and most concerns are resolved through this interagency consultation.
- The Corps and EPA have developed a process (the Memorandum of Agreement under Section 404(q)) to resolve any differences over permit decisions.
- Disputes not resolved in the field may ultimately be elevated to the Assistant Administrator level and Army's Assistant Secretary for Civil Works.

- We have initiated discussions with the Corps concerning potential revisions to the Section 404(q) MOA, and will work this year on developing any necessary modifications.

#### *Section 404(c)*

- Under the authority of Section 404(c), EPA may prohibit, withdraw, or restrict disposal of dredged or fill material into waters of the United States if the discharge would have unacceptable adverse effects on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas.
- This authority may be used before, during or after Corps action on a permit application. EPA may also exercise this authority in the absence of a specified permit application or Corps regulatory action.

#### *Advance Identification*

- The Guidelines also provide for an Advance Identification (ADID) process, where EPA and the Corps work together to designate areas as generally suitable or unsuitable for the discharge of dredged or fill material. This process does not represent a final regulatory decision. Instead, ADID is used only as an informational tool to facilitate future permit processing.

## **ENFORCEMENT**

#### *Authorities*

- EPA and the Corps share Section 404 enforcement authority.
- Section 309 authorizes the Administrator to enforce against persons discharging without a permit or in violation of the terms of a permit.
- Under Section 404(s), the Corps has authority to enforce against violations of Corps-issued permits. In addition, the Corps has exercised enforcement authority against unpermitted dischargers and these actions have been upheld by the courts.
- Given the Corps' larger field presence and its role as the federal permit-issuing authority, EPA has focused its enforcement efforts against unpermitted dischargers.

- This division of responsibility is formalized in the 1989 Enforcement MOA. EPA is the lead enforcement agency (i.e., its determinations as to what, if any, enforcement actions to pursue are final) for the most important unpermitted discharge cases. The Corps is the lead enforcement agency with regard to Corps-issued permit violations.

### *Mechanisms*

- Under Section 309(a), EPA is authorized to issue an administrative compliance order (AO) requiring a violator to cease an ongoing violation, refrain from committing a future violation, and where appropriate, to remove unauthorized fill and otherwise restore the site.
- Section 309(g) gives EPA (and the Corps) the authority to assess administrative civil penalties for violations of Section 404. Under the provisions of the Enforcement MOA, EPA is the lead enforcement agency for unpermitted discharge cases where an administrative penalty may be the appropriate enforcement response.
- In the judicial arena, Section 309(b) authorizes EPA to initiate civil judicial actions for violations of Section 404. In such actions, the government may seek injunctive relief and/or monetary penalties.
- Section 309(c) gives EPA the authority to bring criminal actions for knowing and negligent violations of Section 404. Under the new federal Sentencing Guidelines, which apply to violations occurring after November 1, 1987, Section 404 violators generally will be required to serve some jail time.

### *Issues - Administrative Penalty Settlement Guidance*

- OWP and OECM-Water continue to work towards completion of interim Section 404 administrative penalty settlement guidance.
- Recognizing the differences between Section 404 and Section 402 enforcement, OWP determined that the Section 404 program should not be subject to the 402 program's administrative penalty policy. (Similarly, the Section 404 program is not subject to the Clean Water Act civil judicial penalty policy.)

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## GLOSSARY

### *Dredged Material*

Materials (generally bottom sediments) that are excavated or extracted from waters of the United States.

### *Fill Material*

Any pollutant which replaces portions of waters of the United States with dry land or changes the bottom elevation of a water body for any purpose. This term generally includes, but is not limited to, the building of any structure or impoundment requiring rock, sand, dirt or other materials for its construction; site-development fills for recreational, industrial, commercial, residential, or other uses; causeways or road fills; and property protection and/or reclamation devices such as riprap, groins, seawalls, breakwaters, and revetments. (This is the EPA definition that focuses on discharges with the "effect" of fill. The Corps definition is different and focuses on discharges with the "primary purpose" of fill.)

### *General Permit*

A permit authorizing a category of discharges of dredged or fill material under Section 404. General permits are permits for categories of discharge which are similar in nature, will cause only minimal adverse environmental effects when performed separately, and will have only minimal cumulative adverse effect on the environment.

### *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 circumstance do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

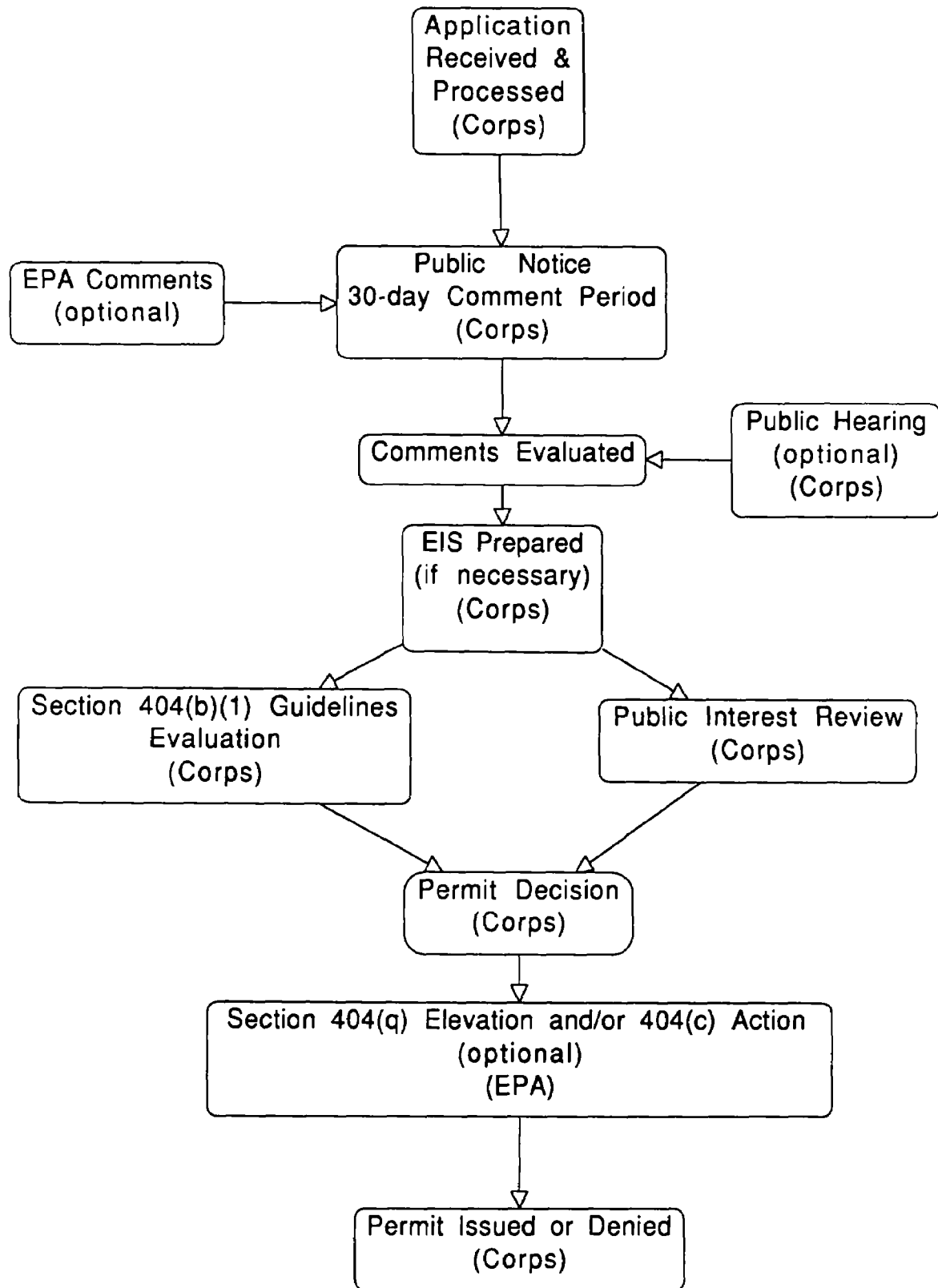
### *Water Dependency*

An activity which requires access or proximity to, or siting within, a special aquatic site to fulfill its basic purpose. Water dependent activities may include marinas, boat docks, and port landfills; non-water dependent activities include restaurants, parking lots, and real estate developments.

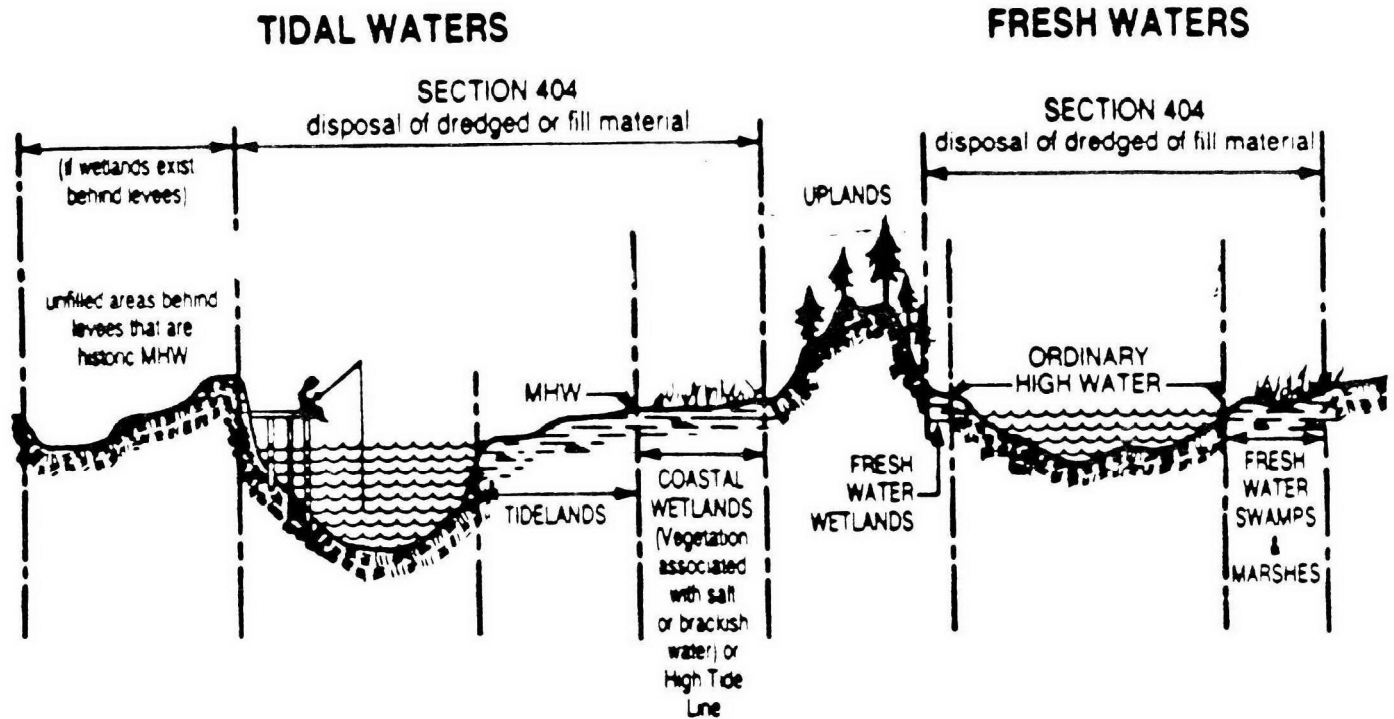
### *Practicable*

An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by an applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered as practicable.

## GENERALIZED SECTION 404 PERMIT PROCESS



# GENERALIZED DIAGRAM - GEOGRAPHIC SCOPE OF CLEAN WATER ACT



## GENERALIZED SECTION 404(B)(1) GUIDELINES EVALUATION PROCESS

No Discharge Will Be Permitted If Any One Of  
the Following Is True:

Practicable Alternatives Exist Which Would Have Less  
Adverse Impact On The Aquatic Ecosystem  
(unless the alternative would have other significant  
adverse environmental consequences )

*"Practicable" means available and capable of  
being done after taking into consideration costs,  
existing technology, and logistics*

*If a non-water dependent discharge affects a  
special aquatic site,\*\* practicable alternatives  
are presumed to exist*

It Causes or Contributes to Violation of Applicable  
State Water Quality Standards

It Causes or Contributes to Violation of Applicable Clean Water  
Act Toxic Effluent Standards

It Jeopardizes the Continued Existence of Endangered or Threatened Species

It Violates Any Requirements Imposed To Protect Federally  
Designated Marine Sanctuaries

It Causes Or Contributes To Significant Degradation of  
Waters of The United States

All Appropriate And Practicable Steps Have Not Been Taken To  
Minimize Potential Adverse Impacts To the Aquatic Ecosystem

*\*\*Special Aquatic Sites" include wetlands, mudflats, vegetated shallows,  
sanctuaries/refuges, riffle/pool complexes, and coral reefs*

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# HIGHLIGHTS OF SECTION 404<sup>1</sup>

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## FEDERAL REGULATORY PROGRAM TO PROTECT WATERS OF THE UNITED STATES

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### INTRODUCTION

The U.S. Congress enacted the Clean Water Act to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Section 404 of the Clean Water Act regulates the discharge of dredged and fill material into waters of the United States, and establishes a permit program to ensure that such discharges comply with environmental requirements. The Section 404 program is administered at the federal level by the U.S. Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA). The U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) have important advisory roles. The Corps has the primary responsibility for the permit program and is authorized, after notice and opportunity for a public hearing, to

issue permits for the discharge of dredged or fill material. States can assume a portion of the permitting program from the federal government (for some waters only), but there has been limited interest by the States. EPA has primary roles in several aspects of the Section 404 program including development of the environmental guidelines by which permit applications must be evaluated; review of proposed permits; prohibition of discharges with unacceptable adverse impacts; approval and oversight of State assumption of the program; establishment of jurisdictional scope of waters of the United States; and interpretation of Section 404 exemptions. Enforcement authority is shared between EPA and the Corps.

Waters of the United States  
protected by the Clean Water Act

include rivers, streams, estuaries, the territorial seas, and most ponds, lakes and wetlands. The term wetlands includes swamps, marshes, bogs and similar areas. Wetlands are a particularly important and sensitive segment of our waters, and therefore merit special attention. Wetlands provide critical habitat for many important species of fish and wildlife, and export plant particles (called detritus) that serve as food for aquatic organisms in adjacent waters. Peak floodwaters are absorbed by wetlands, reducing damage to downstream property, often farms and municipalities. Water quality is improved as a result of a number of natural processes that remove pollutants from water flowing through wetlands. In addition, aesthetic, recreational, scientific, and educational values are provided by these natural aquatic areas. While not every wetland performs all of

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<sup>1</sup>The information contained in this document is intended to provide a basic understanding of the Section 404 program. It is not a form of policy guidance and should not be relied on as such. For official guidance on Section 404 policy, the reader should go to the specific documents (such as the Clean Water Act and the MOA's between EPA and the Army Corps of Engineers) or contact the appropriate EPA or Corps office.



these functions, healthy wetlands provide one or more of these or other valuable services.

Throughout history, wetlands have been misunderstood as "wastelands" to be drained or filled for conversion to other uses. Within the last 200 years, over half of the wetlands in the lower 48 States have been lost to agriculture, mining, forestry, oil and gas production, water resource development and urbanization. High rates of loss are continuing; about ten percent of remaining wetlands were lost in a recent 20 year interval.

The Section 404 Program is broadly recognized as the most significant federal regulatory program affecting wetlands. However, Section 404 is not a comprehensive wetlands protection program; it does not regulate all activities that harm or affect wetlands (see Appendix 1 for details on Section 404).

## GEOGRAPHIC SCOPE OF SECTION 404

Like other Clean Water Act programs, the jurisdiction of Section 404 extends to all waters of the United States. This phrase includes waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including:

- all waters which are subject to the ebb and flow of the tide;
- the territorial sea;
- interstate waters and wetlands;
- all other waters (such as intrastate lakes, rivers, streams and wetlands), if their use, degradation or destruction could affect interstate or foreign commerce;
- tributaries to waters or wetlands identified above; and
- wetlands adjacent to waters identified above.

In determining waters that are within the scope of the Clean Water Act, Congress intended to assert federal jurisdiction to the broadest extent permissible under the commerce clause of the Constitution. One factor that establishes a commerce connection is the use or potential use of waters for navigation. Other factors include (but are not limited to) use of a wetland (or other water) as habitat by migratory birds, including waterfowl, use by federally listed endangered species or for recreation by interstate visitors.

As defined in Section 404 program regulations, wetlands are "those areas that are inundated or saturated with surface or groundwater 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." In applying this definition in the field, government agency scientists use indicators of vegetation, soils and hydrology to identify wetlands and to establish their boundaries. Wetlands can be coastal or inland; saltwater or freshwater. Around the country, wetlands may be known by a variety of names, including swamps, marshes, bogs, potholes, sloughs, fens, mangroves, pocosins, wet meadows, savannahs, wet tundra, playa lakes and vernal pools.

## ACTIVITIES REGULATED BY SECTION 404

Discharges of dredged and fill material are commonly associated with activities such as port development, channel construction and maintenance, fills to create development sites, transportation improvements, and water resource projects (such as dams, jetties and levees). Other kinds of activities, such as landclearing, are regulated as

Section 404 discharges if they involve discharges of dredged or fill material (e.g., soil) into waters of the United States. However, some activities which can adversely affect and even destroy wetlands, such as drainage and groundwater pumping, are often conducted without discharging dredged or fill material into waters of the United States, and in those circumstances, are not regulated under Section 404.

The Federal Clean Water Act also includes specific exemptions from permitting requirements for certain activities (§404(f)(1)). These activities include:

1. Normal farming, silviculture, and ranching practices;
2. Maintenance, including emergency reconstruction of recently damaged parts of currently serviceable structures such as dikes, dams, levees, groins, rip rap, breakwaters, causeways, bridge abutments or approaches, and transportation structures;
3. Construction or maintenance of farm or stock ponds or irrigation ditches or the maintenance (but not construction) of drainage ditches;
4. Construction of temporary sedimentation basins on a construction site which does not include placement of fill material into waters of the United States; and
5. Construction or maintenance of farm or forest roads or temporary roads for moving mining equipment if best management practices are followed.

Section 404(f)(1) is applied narrowly and is not intended to exempt activities with more than minor impacts on aquatic resource. Under the recapture provision at Section 404(f)(2), the exemptions do

not apply if the discharge is part of, or incidental to, an activity whose purpose is to convert an area of the waters of the United States into a use to which it was not previously subject, where the flow or circulation of waters of the United States may be impaired or the reach of such waters reduced. This limitation on the Section 404(f) exemptions would, for example, require a farmer to obtain a permit for a discharge to convert a wetland area to produce upland crops.

The Clean Water Act provides another limited exemption under Section 404(r) for projects specifically authorized by Congress. To be covered under this exemption, an Environmental Impact Statement under the National Environmental Policy Act must be prepared on the project and submitted to Congress. The Statement must contain information on the effects of the discharge on environmental values protected by Section 404, including consideration of the Section 404(b)(1) Guidelines.

## INTRODUCTION TO THE PERMIT PROCESS

Discharges can be authorized by either individual or general permits. If an individual permit is required, an application form describing the proposed activity is submitted to the Corps (or to a State agency if the program has been assumed from the federal government). Once a complete application is received, the permitting agency issues a public notice containing the information needed to evaluate the likely impact of the proposed activity. Notice is sent to all interested parties including adjacent property owners, appropriate government agencies at the Federal, State, and local level, and others as requested. Any person may request that a public hearing be held to consider the application.

## *Advance Identification of Disposal Sites*

*The individual permit process under Section 404 is sometimes an intensive, time consuming and controversial case-by-case evaluation process. Section 230.80 of the Section 404(b)(1) Guidelines provides for a planning process that can result in a more predictable decision making process. In this planning process, information is developed that can be used by the regulated and general public to plan and consider potential projects. Such information can include general locations and values of waters of the U.S. and potential threats and impacts to those values. This process usually results in maps which provide information on where discharges to waters of the U.S., including wetlands, may be generally suitable or unsuitable.*

*The Advance Identification (ADID) process is conducted by the EPA and the Corps of Engineers (or any State that has assumed the Section 404 permitting responsibilities) and includes consultation with the affected State. Active State and local involvement result in a much better product and are encouraged by both EPA and the Corps.*

*Since the ADID process can require a substantial amount of staff time and funds, it is usually conducted for areas that have important resource value and are under development pressure. Further, the area that is studied and mapped is usually a very limited portion of a watershed. Attempts are made to limit the geographic extent of the ADID to a manageable size.*

*The ADID process may involve collecting existing data and generating new data on the aquatic system and its value to surrounding and downstream aquatic ecosystems. This information is then used to determine which areas are the most valuable and, therefore, in need of the highest levels of protection.*

*The products that result from the ADID process include, at a minimum, designation of areas as generally suitable or unsuitable for use as a discharge site. Additional actions quite often result, such as some anticipatory method of protecting the most valuable areas. For example, ADIDs may result in State or local land use or regulatory restrictions, or use of EPA's Section 404(c) authority to restrict or prohibit discharges to a defined area. The Corps may issue general permits for certain activities in portions of the area designated as suitable for disposal.*

General permits eliminate the need for individual permits for some activities which conform to specified terms and conditions. General permits may be issued on a State, regional or nationwide basis. Section 404(e) authorizes general permits for activities which are similar in nature and will cause minimal adverse environmental effects individually or cumulatively. General permits are developed through the same public notice and opportunity for public hearing process that is used for an individual permit. Once issued, a general permit may be modified or revoked if the permitted activities are found to have an adverse environmental impact. In some instances, the discharger must notify the Corps prior to discharging under the authority of the general permit. On a case-by-case basis, the permitting agency may invoke discretionary authority and require a discharger that would otherwise be covered by a general permit to apply for an individual permit.

## MAKING THE PERMIT DECISION

The Corps' evaluation of a Section 404 permit application is a two part test which involves determining whether the project complies with the Section 404(b)(1) Guidelines and a public interest review. A permit must be denied if the project fails to comply with the Guidelines or is found to be contrary to the public interest.

The Corps' public interest review is a balancing test in which the public and private benefits of a project are weighed against its adverse impacts to the environment. It includes such considerations as aesthetics, recreation, historic values, economics, water supply, water quality, energy needs and flood damage prevention. The Corps also

considers all comments received in the permit process, whether in response to a public notice or a public hearing, in arriving at a final permit decision. As part of this evaluation, the Corps conducts an environmental assessment under the National Environmental Policy Act (NEPA) to determine whether the project has significant environmental impacts.

The Section 404(b)(1) Guidelines (Guidelines), published by EPA in conjunction with the Corps, contain substantive environmental criteria used in evaluating discharges of dredged or fill material. Reflecting the goals of the Clean Water Act, the Guidelines establish key policies for the Section 404 Program:

- Dredged or fill material should not be discharged into waters of the United States unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact (individually or cumulatively) on the aquatic ecosystem.
- From a national perspective, the degradation or destruction of special aquatic sites, such as filling operations in wetlands, is considered to be among the most severe environmental impacts addressed by Section 404.

To implement these policies, the Guidelines include a number of key requirements. One of them states that no discharge can be permitted if there is a practicable alternative with less adverse impact on the aquatic environment (unless the identified alternative poses other significant environmental problems). This alternatives test is applied more rigorously (i.e., alternatives are presumed to exist) for projects that are proposed to be located in special aquatic sites when the project is not water dependent. For example, boat docks in a marina require water

access and are water dependent; a restaurant is not. Special aquatic sites include: wetlands, coral reefs, mud flats, riffle and pool complexes in streams, vegetated shallows and sanctuaries and refuges. However, the Guidelines require a demonstration that no practicable alternatives exist (as discussed above), for both water dependent and non-water dependent projects.

No discharge can be permitted under the Guidelines if it would violate other applicable laws, such as State water quality standards, toxic effluent standards, or the Endangered Species Act. The Guidelines also prohibit any discharge that would cause or contribute to significant degradation of waters of the United States. In addition, discharges can be permitted under the Guidelines only if all appropriate and practicable steps are taken to minimize (i.e., mitigate) adverse impacts of the discharge on the aquatic ecosystem, including compensating for unavoidable impacts (see Appendix 2 for details on the Section 404(b)(1) Guidelines).

In addition to the evaluation conducted by the Corps under the Guidelines and their public interest review, Section 401 of the Clean Water Act must be complied with before a permit can be issued. Section 401 requires that the State in which an activity occurs must certify that the activity complies with the State's water quality standards or waive its right to so certify by not taking action within a specified time. Similarly, coastal States must concur that the activity meets the requirements of the coastal zone management program (CZMP) of the State or waive their right to concur by not taking action within a specified time. CZMPs are developed by States under the Coastal Zone Management Act of 1972.

## ENFORCEMENT

*Enforcement is a necessary component of an effective regulatory program. EPA and the Corps share Section 404 enforcement authority. Section 309 of the Clean Water Act gives EPA the authority to act against persons who discharge without a permit and also to enforce against violations of Section 404 permit conditions. Section 309 also provides EPA with a variety of enforcement mechanisms. For example, an administrative compliance order issued pursuant to Section 309(a) generally requires a violator to stop all illegal discharges and, where appropriate, to remove the fill and/or restore the site. Section 309(g) authorizes EPA to assess administrative civil penalties for, among other things, violations of Section 404. A third enforcement mechanism allows EPA to seek monetary penalties, injunctive relief, and even prison sentences through judicial action pursuant to Sections 309(b) and (c). Under these Sections, EPA may refer cases to the Department of Justice for criminal and/or civil litigation.*

*EPA has focused its resources on identifying and enforcing against unpermitted discharges of dredged or fill material. The Corps has the lead on acting against violations of Corps-issued permits, and has also been responsible for a significant amount of the enforcement efforts against unauthorized discharges.*

*A Section 404 enforcement case frequently begins with EPA receiving information regarding a potential violator from a citizen or local official. Violations are also discovered by State, EPA or Corps staff, or other Federal personnel while in the field on other routine business. Thus, state and local officials/residents can serve as the "eyes and ears" of EPA in recognizing and reporting potential Section 404 violations. States may also assume the Section 404 program, including enforcement; however, even where States assume the program, the Corps maintains permitting authority in traditionally navigable waters.*

## ADDRESSING UNACCEPTABLE ADVERSE IMPACTS

Under the authority of Section 404(c), EPA may prohibit, withdraw, or restrict the discharge of dredged or fill material into waters of the United States if the discharge would have unacceptable adverse effects on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas. This

authority may be used before, during or after Corps action on a permit application. EPA may also exercise this authority in the absence of a specified permit application or Corps regulatory action. In this instance, EPA may conduct a Section 404(c) action in conjunction with an Advance Identification action or a Special Area Management Plan, or where otherwise appropriate.

EPA generally exercises its Section 404(c) "veto" authority when the regulatory process results in a

permit decision that would have unacceptable adverse effects on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas. In those cases, EPA's Section 404(c) decision process may include data collection and analysis, consultation with the applicant and the Corps, and public notice with opportunity for a hearing. EPA is increasing its use of Section 404(c) authority, but to date has used it infrequently.

EPA works with the Corps during the permit decision process whenever possible to ensure unacceptable adverse impacts are avoided, and most concerns are resolved through this interagency consultation. The Corps and EPA have developed a process through a Memorandum of Agreement (MOA) to quickly resolve any differences over permit decisions. In instances where there has been either insufficient interagency coordination, the development of significant new information, or where the proposed project raises environmental issues of national importance, this MOA allows for EPA's Assistant Administrator for Water to request that the Army's Assistant Secretary for Civil Works elevate the proposed permit decision to higher authority for review. The Fish and Wildlife Service and the National Marine Fisheries Service have similar agreements with the Corps.

## ENFORCEMENT

As a jointly administered program, the Corps and EPA share responsibility for enforcing the Section 404 program. The Corps, as the permitting agency, has primary responsibility for monitoring and enforcement of compliance with Section 404 permit conditions. EPA can also enforce against non-compliance with permit conditions;

however, EPA generally focuses its resources towards discovering and enforcing against unpermitted (unauthorized) discharges. Anyone in violation of the Section 404 program, either by conducting an unauthorized activity or by violating permit conditions, is subject to civil or criminal action or both. Penalties can be imposed by the agencies administratively, that is, without use of judicial procedures. When judicial action is pursued, the violator may be required to restore the site and may be subject to payment of fines, imprisonment or both. The agencies and the courts also frequently require restoration of the site and/or mitigation at the expense of the violator, often in addition to other penalties.

## STATE PROGRAMS

The Clean Water Act provides that States may assume a portion of the Section 404 permitting responsibility. EPA is responsible for approval or denial of State program assumption requests and for oversight of State programs subsequent to approval. States may assume the program in all waters within the State except (1) those which are subject to the ebb and flow of the tide, plus adjacent wetlands and (2) waters which are presently used or may be susceptible to use (through reasonable improvement) to transport interstate or foreign commerce, plus adjacent wetlands. The Corps retains jurisdiction over all waters which the State cannot assume.

States must meet specific statutory and regulatory requirements for an approvable State program. Some of these requirements are that the State must: establish jurisdictional limits equivalent to the federal rules; regulate at least the full scope of activities regulated by Section 404; deny permits which do

not comply with the Section 404(b)(1) Guidelines; provide sufficient public notice and opportunity for public hearing; have the authority to enforce compliance with the program through civil and criminal penalties and other means; and be able to terminate or modify permits for cause. In addition to the States and territories, Indian tribes may be considered a "State" for purposes of the Clean Water Act, including Section 404, if they meet certain requirements.

A number of States actively exercise their authority under Section 401 of the Clean Water Act, and coastal states under Section 307 of the Coastal Zone Management Act, to certify whether a proposed activity complies with State water quality standards, or is consistent with the State's coastal zone management plan, respectively. Both of these actions by the State apply to activities regulated by the federal government and give the State an effective veto of the proposed activity.

## THE CITIZEN'S ROLE IN SECTION 404

Aquatic resources, including wetlands, play an important role in our lives. They perform valuable ecological, water quality, hydrologic and economic functions. Yet these areas are rapidly disappearing or being degraded to the point that their important benefits can no longer be realized. Increased awareness and appreciation of the values and benefits of these natural areas can lead to a greater willingness and ability to protect what is left of them.

The concerned and informed citizen can play an important role in the protection of wetlands in American communities. Once familiar with nearby wetlands and

other aquatic resources, citizens can provide meaningful comments on public notices on applications for Section 404 permits. In addition, one of the most effective enforcement mechanisms for the Corps and EPA is notification of either agency when citizens believe wetland filling is not permitted or the permit conditions are being violated. Comments are also encouraged on proposed regulations implementing environmental programs at the Federal, State or local level.

Citizens can also form activist groups to protect and possibly even purchase sensitive aquatic environments such as wetlands, free flowing streams, lakes, or estuaries that are subject to development pressure. Once formed, the group can work with local governments to establish protective zoning or State government to use water quality laws for protection of these aquatic ecosystems. In addition to these efforts, a citizens group can encourage EPA and the Corps to help the protection effort through advance planning such as advance identification or special area management planning.

## ADDITIONAL INFORMATION

Because the Section 404 program is complex, and application of regulations and policies to specific cases is often fact-specific, the reader may want to contact local offices of EPA or the Corps for additional information (see attached office contacts). For more information on wetlands, contact EPA Headquarters, Office of Wetlands Protection (A-104F), Attention: Public Information Officer, 401 M Street S.W., Washington, D.C. 20460.

# **APPENDIX 1**

## **Federal Water Pollution Control Act Renamed Clean Water Act, 1977 Amendments**

The 1972 Amendments to the Federal Water Pollution Control Act included the addition of the Section 404 regulatory program.

Section 301(a): States that any discharge of a pollutant (including dredged or fill material) is unlawful unless permitted under other sections of the Act, including Section 404.

### **Sections 309**

404(s): Provide that the EPA and Corps may initiate administrative or judicial enforcement action against violations, including discharging dredged or fill material without a Section 404 permit, or violating the conditions of an issued permit.

Section 404(a): Provides that the Corps may issue permits, after public notice and opportunity for a public hearing, for the discharge of dredged or fill material into waters of the United States, at specified disposal sites.

Section 404(b): Each disposal site shall be specified by the Corps through application of guidelines developed by the EPA in conjunction with the Corps. The guidelines (known as the Section 404(b)(1) Guidelines) shall be based upon criteria comparable to those applicable to ocean discharges under Section 402 (National Pollutant Discharge Elimination System) permits defined at Section 403(c).

Section 404(c): EPA is authorized to prohibit the specification (including withdrawal of specification) of any disposal site and to deny or restrict the use of any disposal site. This prohibition or restriction is based, after public notice and opportunity for public hearing, on unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas.

The 1977 amendments to the FWPCA included additions to Section 404. Subsections (d) through (t) were added; notable changes were:

Section 404(e): Provides authority to the Corps to issue general permits for a period of up to 5 years provided the activities covered are similar in nature and will have only minimal adverse environmental effects individually and cumulatively. The general permit may be issued on a nationwide, regional or statewide basis and is subject to application of the Section 404(b)(1) Guidelines and public notice and opportunity for public hearing procedures.

Section 404(f): Exempts discharges associated with certain limited activities, most dealing with minor agricultural or silvicultural activities, from requirement to obtain a permit. Discharges associated with activities that convert a water of the United States to upland use are not exempt.

**Section**

**404(g)-(l):** Establishes a mechanism for States to assume administration of the Section 404 regulatory program in certain waters of the United States. Those waters that are subject to tidal action and their adjacent wetlands and waters which are presently used, or with reasonable improvement could be used, to transport interstate or foreign commerce and their adjacent wetlands are not assumable (these waters are the same as those the Corps determines to be subject to Section 10 of the Rivers and Harbors Act of 1899, except for historical Section 10 waters, plus adjacent wetlands).

**Section 404(q):** Requires that the Corps enter into memoranda of agreement with EPA, Department of Commerce, Department of the Interior, Department of Agriculture and Department of Transportation to minimize duplication and delay in decisionmaking.

**Section 404(r):** Provides that the discharge of fill material as part of a federal project specifically authorized by Congress is not subject to the requirements of Section 404, provided that information on the effects of the discharge, including consideration of the Section 404(b)(1) Guidelines, is included in the environmental impact statement under the National Environmental Policy Act provided to Congress prior to authorization.

## APPENDIX 2

### Section 404(b)(1) Guidelines Restrictions on Discharges

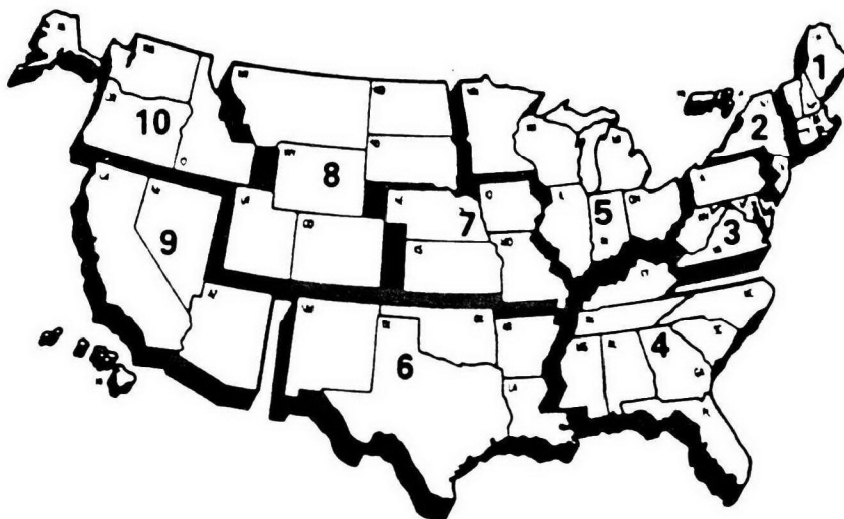
In order to be permitted under Section 404 of the Clean Water Act, an activity must be found to be in compliance with the Section 404(b)(1) Guidelines (40 CFR 230). There are several specific restrictions on discharges listed in 40 CFR 230.10.

- 40 CFR 230.10(a): States that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge that would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences." A practicable alternative is defined as one that "is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes." An alternative does not have to be owned by an applicant to be considered practicable. The burden of proof is always on the applicant to demonstrate that there are no available practicable alternatives. Moreover, the alternatives test includes two presumptions when discharges are proposed for special aquatic sites, including wetlands:
1. for activities which are not water dependent, "practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise," and
  2. "where a discharge is proposed for a special aquatic site, all practicable alternatives to the proposed discharge which do not involve a discharge into a special aquatic site are presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise."
- 40 CFR 230.10(b): This restriction is based on compliance of the proposed activity with several other environmental laws, including: applicable water quality standards, toxic effluent standards, Endangered Species Act, and marine sanctuaries designated under the Marine Protection, Research, and Sanctuaries Act of 1972.
- 40 CFR 230.10(c): This restriction states that "no discharge of dredged or fill material shall be permitted which will cause or contribute to significant degradation of the waters of the United States." This determination involves a consideration of impacts on human health; aquatic life and wildlife dependent on aquatic ecosystems; aquatic ecosystem diversity, productivity and stability; and recreational, aesthetic, and economic values of the aquatic ecosystem.
- 40 CFR 230.10(d): This restriction states that "no discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize [mitigate] potential adverse impacts of the discharge on the aquatic ecosystem."





OFFICE OF WETLANDS PROTECTION  
PROGRAM OFFICE CONTACTS  
IN REGIONS



<b>Region 1</b> Douglass Thompson, Chief U.S. EPA - Region I Wetlands Protection Section (WWP-1900) John F. Kennedy Federal Building Boston, MA 02203-1911	<u>Phone #</u> (617) 565-4430	<b>Region 6</b> Michael Jansky U.S. EPA - Region VI Technical Assistance Section (6E-FT) 1445 Ross Avenue Dallas, TX 75202	<u>Phone #</u> (214) 655-2260
<b>Region 2</b> Dan Montella, Chief U.S. EPA - Region II Wetlands Section (2WM-MWP) 26 Federal Plaza, Room 837 New York, NY 10278	(212) 264-5170	<b>Region 7</b> Diane Hershberger, Chief U.S. EPA - Region VII Wetlands Protection Section 726 Minnesota Avenue Kansas City, KS 66101	(913) 236-2823
<b>Region 3</b> Barbara D'Angelo, Chief U.S. EPA - Region III Wetlands and Marine Policy Section (JES42) 841 Chestnut Street Philadelphia, PA 19107	(215) 597-9301	<b>Region 8</b> Sarah Fowler U.S. EPA - Region VIII Water Quality Requirement Section (8WM-SP) 999 18th Street, Suite 500 Denver Place Denver, CO 80202-2405	(303) 293-1575
<b>Region 4</b> Thomas Welborn, Chief U.S. EPA - Region IV Chief, Wetlands Unit (4WM-MEB) 345 Courtland Street, N.E. Atlanta, GA 30365	(404) 347-2126	<b>Region 9</b> Phil Oshida, Chief U.S. EPA - Region IX Wetlands Section (W-7-2) 215 Fremont Street San Francisco, CA 94105	(415) 974-2318
<b>Region 5</b> Doug Khorn, Chief U.S. EPA - Region V Planning and Standards Division Wetlands Protection Section (5W-TUBS) 230 South Dearborn Street Chicago, IL 60604	(312) 353-2079	<b>Region 10</b> Bill Reilly, Chief U.S. EPA - Region X Water Resources Assessment Section (WD-138) 1200 Sixth Avenue Seattle, WA 98101	(206) 442-1412



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D C 20460

SEP 12 1985

OFFICE OF  
GENERAL COUNSEL

MEMORANDUM

TO: Richard E. Sanderson  
Acting Assistant Administrator  
Office of External Affairs (A-100EA)

FROM: Francis S. Blake *F. S. Blake*  
General Counsel (LE-130)

SUBJECT: Clean Water Act Jurisdiction over Isolated Waters

At the section 404 oversight hearings before the Senate Committee on Environment and Public Works on July 15, 1985, Senator Mitchell asked that you confer with the Office of General Counsel concerning a jurisdictional question under the Clean Water Act. Specifically, he asked whether, in asserting jurisdiction over isolated waters on the basis of use by migratory birds or endangered species, EPA required proof that a particular water body was actually used by such birds or endangered species prior to recognizing jurisdiction or whether EPA would be satisfied with evidence that such water body could be so used.

The jurisdiction of the Clean Water Act extends to "waters of the United States." EPA's regulations define waters of the United States to include, inter alia:

(c) All other waters such as intrastate lakes, rivers, streams, (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

- (1) Which are or could be used by foreign or interstate travelers for recreation or other purposes;
- (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
- (3) Which are used or could be used for industrial purposes by industries in interstate commerce.

These regulations implement the Congressional intent that Clean Water Act jurisdiction be asserted to the maximum extent permitted under the Commerce Clause. See, e.g., 1 Leg. Hist., at 178 and 250-51; Avoyelles Sportsmen's League v. Marsh, 715 F.2d 897 (5th Cir. 1983); Leslie Salt Co. v. Froelke, 578 F.2d 742 (9th Cir. 1978). Therefore, the regulations should be broadly construed, subject of course to the limitations of the Commerce Clause and the actual language of the regulations.

The specific definition of waters of the United States in EPA's regulations has evolved over the years, and it is not necessary to trace here its entire history since passage of the Act in 1972. However, it is relevant to note that in 1979 the agency changed the prior definition, which simply referred to waters used by, inter alia, industry in interstate commerce, to add the phrase "waters the use, degradation, or destruction of which would affect or could affect" commerce.<sup>1/</sup> As explained in the preamble, this language was intended to broaden the definition of waters of the United States based on the susceptibility of a stream of use by industries in interstate commerce (44 Fed. Reg. 32854, June 7, 1979).

[T]he regulations now focus, not on the nature of the stream's users, but on the characteristics of the stream itself, and it will no longer be necessary to show actual industrial use for a stream to fall within the definition.

Id. at 32858.2/

It is now generally accepted that migratory birds and endangered species may be regulated under the Commerce Clause, and that this regulation extends to protection of habitat. See, e.g., Utah v. Marsh, 740 F.2d 799 (10th Cir. 1984); Hughes v. Oklahoma, 441 U.S. 322 (1979); Bailey v. Holland, 126 F.2d 317 (4th Cir. 1942); Palila v. Hawaii Dep't of Land and Natural Resources, 471 F. Supp. 985 (D. Ha. 1979), aff'd 639 F.2d 495 (9th Cir. 1981). The impact on commerce of the destruction of any one isolated wetland need not itself be

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<sup>1/</sup> This change was made after an Office of General Counsel opinion interpreted the old definition as not covering intrastate waters at or below a discharge point where there was no actual use by a downstream industrial user. Decision of the General Counsel No. 73 (Dec. 15, 1978).

<sup>2/</sup> In addition, the regulation was reworded to make explicit the long-held view that the waters specifically mentioned were not an exclusive list of waters of the United States.

significant; Congress has the authority to regulate activities which cumulatively could have a significant effect even if a particular individual activity would not. Perez v. United States, 402 U.S. 146 (1971); Wickard v. Filburn, 317 U.S. 111 (1942); U.S. v. Earth Sciences, Inc., 599 F.2d 368 (10th Cir. 1979).

With this background, I now turn to the specific question at hand. In simplified terms, the answer is that if the evidence reasonably shows that the waters "are used or would be used" by migratory birds or endangered species, it is covered by EPA's regulation. Of course, as the preamble to the 1979 regulation points out, the clearest evidence would be evidence showing actual use in at least a portion of the stream. In addition, if a particular waterbody shares the characteristics of other waters whose use by and value to migratory birds is well established and those characteristics make it likely that the waterbody in question will also be used by migratory birds, it would also seem to fall clearly within the definition (unless, of course, there is other information that indicates the particular waterbody would not in fact be so used).

Endangered species are, almost by definition, rare. Therefore, in the case of an endangered species, if there is no evidence of actual use of the waterbody or similar waters in the area by the species in question, presumably one would usually assume that the waterbody was not susceptible to use by such species, notwithstanding the particular characteristics of the waterbody. Again, a specific determination of jurisdiction would turn on the particular facts.

Corps of Engineers Preamble Language  
33 CFR Parts 320 through 330  
51 FR 41217 (November 13, 1986)

*Section 328.3: Definitions* This section incorporates the definitions previously found in § 323.3 (a), (c), (d), (f) and (g). Paragraphs (c), (d), (f) and (g) were incorporated without change. EPA has clarified that waters of the United States at 40 CFR 328.3(a)(3) also include the following waters:

- a. Which are or would be used as habitat by birds protected by Migratory Bird Treaties, or
- b. Which are or would be used as habitat by other migratory birds which cross state lines; or
- c. Which are or would be used as habitat for endangered species; or
- d. Used to irrigate crops sold in interstate commerce.

EPA Preamble Language  
40 CFR Parts 232 and 233  
53 FR 20765 (June 6, 1988)

Several questions have arisen about this application of this definition to isolated waters which are or could be used by migratory birds and endangered species. As the Agency explained in an opinion by the General Counsel dated September 12, 1985, if evidence reasonably indicates that isolated waters are or would be used by migratory birds or endangered species they are covered by EPA's regulation. Of course, the clearest evidence would be evidence showing actual use in at least a portion of the waterbody. In addition, if a particular waterbody shares the characteristics of other waterbodies whose use by and value to migratory birds is well established, and those characteristics make it likely that the waterbody in question would also be used by migratory birds, it would also seem to fall clearly within the definition (unless, of course, there is other information that indicates the particular waterbody would not in fact be so used). Endangered species are almost by definition, rare. Therefore, in the case of endangered species, if there is no evidence of actual use of the waterbody (or similar waters in the area) by the species in question, one could actually assume that the waterbody was not susceptible to use by such species, notwithstanding the particular characteristics of the waterbody. However, in each case a specific determination of jurisdiction would have to be made, and would turn on the particular facts.

For clarity and consistency, we are adding the following language from the preamble to the Corps' regulations published on November 13, 1986 (51 FR 41217). This language clarifies some cases that typically are or are not considered "waters of the United States."

"Waters of the United States" typically include the following waters:

- Which are or would be used as habitat by birds protected by Migratory Bird Treaties, or
- Which are or would be used as habitat by other migratory birds which cross State lines, or
- Which are or would be used as habitat for endangered species, or
- Used to irrigate crops sold in interstate commerce



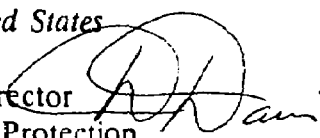
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D C. 20460

JAN 25 1990

OFFICE OF  
WATER

MEMORANDUM

SUBJECT: Clean Water Act Section 404 Jurisdiction Over Isolated Waters in Light of  
*Tabb Lakes v. United States*

FROM: David G. Davis, Director   
Office of Wetlands Protection

TO: Regional Wetlands Division Directors  
Office of Regional Counsel Water Branch Chiefs

As a result of the Fourth Circuit Court decision in *Tabb Lakes v. United States*, the attached Environmental Protection Agency/Corps of Engineers memorandum was developed to provide guidance on the regulation of isolated waters pending completion of rulemaking on this subject.

Please direct any questions or comments concerning this memorandum to Steve Neugeboren in the Office of General Counsel (FTS 382-7703), or to Suzanne Schwartz, Greg Peck, or Cliff Rader of my staff (FTS 475-7799).

Attachment

cc w/attachment: Regional Wetlands Coordinators



DEPARTMENT OF THE ARMY  
U S Army Corps of Engineers  
WASHINGTON, D C 20314-1000

REPLY TO  
ATTENTION OF

24 JAN 1990

CECW-OR

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Clean Water Act Section 404 Jurisdiction Over Isolated Waters in Light of *Tabb Lakes v. United States*

1. As a result of the Fourth Circuit Court decision in *Tabb Lakes v. United States*, the enclosed Corps of Engineers/Environmental Protection Agency memorandum was developed to provide guidance on the regulation of isolated waters pending completion of rulemaking on this subject.

2. Questions or comments concerning this guidance should be directed to Dr. John Hall (202) 272-0201 or Mr. Lance Wood (202) 272-0035.

FOR THE DIRECTOR OF CIVIL WORKS:

Encl

A handwritten signature in black ink, appearing to read "John P. Elmore", is written over a horizontal line.

JOHN P. ELMORE  
Chief, Operations, Construction and  
Readiness Division  
Directorate of Civil Works



# United States Environmental Protection Agency

## United States Department of the Army



**SUBJECT:** Clean Water Act Section 404 Jurisdiction Over Isolated Waters in Light of  
*Tabb Lakes v. United States*

1. On September 22, 1989, in an unpublished opinion, the United States Court of Appeals for the Fourth Circuit held that the Corps of Engineers may not rely upon memoranda issued on November 8, 1985, and February 11, 1986, by Brigadier General Kelly, then Deputy Director of Civil Works, to assert jurisdiction over isolated waters under section 404 of the Clean Water Act. *Tabb Lakes v. United States*, (No. 89-2905, 4th Cir.). This memorandum provides direction on the continued assertion of jurisdiction over isolated waters, as required by 33 CFR 328.3(a)(3), in the wake of the *Tabb Lakes* decision.

2. *Tabb Lakes* focused on an EPA and Corps interpretation of the definition of "waters of the United States" including isolated waters, described at 33 CFR 328.3(a)(3), as follows:

All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce, including any such waters:

(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or

(ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(iii) Which are used or could be used for industrial purpose by industries in interstate commerce . . . .

The EPA General Counsel issued guidance on September 12, 1985, interpreting this regulation to include isolated waters which are or could be used as habitat by birds protected by Migratory Bird Treaties, migratory birds which cross state lines, and by endangered species. Brigadier General Kelly adopted this interpretive guidance in the Corps guidance memoranda cited above which were the subject of the *Tabb Lakes* litigation. In *Tabb Lakes*, the Court held that the Corps may not rely on this



interpretive guidance in making a jurisdictional determination because the guidance was a substantive rule that should have been, but was not, proposed for public comment prior to its adoption by the agencies. The United States does not intend to appeal the Fourth Circuit's *Tabb Lakes* decision. Instead, the EPA and the Corps intend to undertake as soon as possible an APA rulemaking process regarding jurisdiction over isolated waters. This memorandum provides guidance on how Corps FOAs and EPA Regional Offices should continue to assert CWA jurisdiction over isolated waters in light of the Court of Appeals decision in *Tabb Lakes*, and pending completion of the rulemaking process.

3. The United States believes that the Fourth Circuit's *Tabb Lakes* decision was incorrect and we reserve the right to re-litigate the legal questions decided in the *Tabb Lakes* case in other circuits. Because this decision is not binding on courts outside of the Fourth Circuit, we will not implement the decision outside the area constituting the Fourth Circuit (i.e., outside the states of South Carolina, North Carolina, Virginia, West Virginia, and Maryland).

4. Within the Fourth Circuit, we will follow the holding of *Tabb Lakes*, which was limited to the procedural notice-and-comment issue discussed above. Thus, within the Fourth Circuit, we will not rely upon or cite the above-referenced memoranda in making jurisdictional determinations. However, we will continue to assert jurisdiction, as required by the "waters of the United States" regulatory definition, over all waters, the use, degradation or destruction of which could affect interstate or foreign commerce, as is required by our existing regulations adopted through the Administrative Procedure Act rulemaking process. Corps FOAs and EPA Regions will apply this regulatory definition to each site on a case-by-case basis, and will evaluate all available information in a manner consistent with the language of the regulations and the expressed Congressional intention that Clean Water Act jurisdiction be exercised over all waters to the fullest extent legally permissible under the Commerce Clause of the Constitution.


5. The following applies to CWA jurisdiction over all isolated waters within the Fourth Circuit. The definition of "waters of the United States" at 33 CFR 328.3(a)(3) was promulgated through the APA rulemaking process and remains in full force and effect notwithstanding the *Tabb Lakes* decision. This definition encompasses "isolated" waters, including isolated wetlands, since it specifically cites as examples of jurisdictional waters "...prairie potholes, wet meadows, [and] playa lakes...", all of which are normally "isolated." We fully intend to implement the *Tabb Lakes* decision within the Fourth Circuit; however, we interpret that decision as allowing the Corps and EPA to continue to assert CWA jurisdiction over isolated waters. Accordingly, we expect Corps FOAs and EPA Regional offices within the Fourth Circuit to continue to regulate isolated


waters, including isolated wetlands, as required by existing regulations. Consultation with your Office of Counsel is advisable for doubtful cases.

6. If there are any questions with regards to implementation, Corps Divisions should contact Mr. Lance Wood (CECC-E, (202) 272-0035) or the Chief, Regulatory Branch (CECW-OR, (202) 272-1785). EPA Regions should contact Mr. Steve Neugeboren (Office of General Counsel, (202) 382-7703) or Ms. Suzanne Schwartz (Office of Wetlands Protection, (202) 475-7799).

For the Chief of Engineers:

For the Environmental Protection Agency:

  
JOHN P. ELMORE  
Chief, Operations, Construction,  
and Readiness Division  
Directorate of Civil Works  
1/24/90  
Date

  
DAVID G. DAVIS  
Director  
Office of Wetlands Protection  
1-19-90  
Date



**MEMORANDUM OF AGREEMENT  
BETWEEN THE ENVIRONMENTAL PROTECTION AGENCY  
AND THE DEPARTMENT OF THE ARMY CONCERNING  
THE DETERMINATION OF MITIGATION UNDER THE  
CLEAN WATER ACT SECTION 404(b)(1) GUIDELINES**



*I. Purpose*

The United States Environmental Protection Agency (EPA) and the United States Department of the Army (Army) hereby articulate the policy and procedures to be used in the determination of the type and level of mitigation necessary to demonstrate compliance with the Clean Water Act (CWA) Section 404(b)(1) Guidelines ("Guidelines"). This Memorandum of Agreement (MOA) expresses the explicit intent of the Army and EPA to implement the objective of the CWA to restore and maintain the chemical, physical, and biological integrity of the Nation's waters, including wetlands. This MOA is specifically limited to the Section 404 Regulatory Program and is written to provide guidance for agency field personnel on the type and level of mitigation which demonstrates compliance with requirements in the Guidelines. The policies and procedures discussed herein are consistent with current Section 404 regulatory practices and are provided in response to questions that have been raised about how the Guidelines are implemented. The MOA does not change the substantive requirements of the Guidelines. It is intended to provide guidance regarding the exercise of discretion under the Guidelines.

Although the Guidelines are clearly applicable to all discharges of dredged or fill material, including general permits and Corps of Engineers (Corps) civil works projects, this MOA focuses on standard permits (33 CFR 325.5(b)(1))<sup>1</sup>. This focus is intended solely to reflect the unique procedural aspects associated with the review of standard permits, and does not obviate the need for other regulated activities to comply fully with the Guidelines. EPA and Army will seek to develop supplemental guidance for other regulated activities consistent with the policies and principles established in this document.

This MOA provides guidance to Corps and EPA personnel for implementing the Guidelines and must be adhered to when considering mitigation requirements for standard permit applications. The Corps will use this MOA when making its determination of compliance with the Guidelines with respect to mitigation for standard permit applications. EPA will use this MOA in developing its positions on compliance with the Guidelines for

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<sup>1</sup>Standard permits are those individual permits which have been processed through application of the Corps public interest review procedures (33 CFR 325) and EPA's Section 404(b)(1) Guidelines, including public notice and receipt of comments. Standard permits do not include letters of permission, regional permits, nationwide permits, or programmatic permits.

proposed discharges and will reflect this MOA when commenting on standard permit applications.

## **II. Policy**

A. The Council on Environmental Quality (CEQ) has defined mitigation in its regulations at 40 CFR 1508.20 to include: avoiding impacts, minimizing impacts, rectifying impacts, reducing impacts over time, and compensating for impacts. The Guidelines establish environmental criteria which must be met for activities to be permitted under Section 404.<sup>2</sup> The types of mitigation enumerated by CEQ are compatible with the requirements of the Guidelines; however, as a practical matter, they can be combined to form three general types: avoidance, minimization and compensatory mitigation. The remainder of this MOA will speak in terms of these more general types of mitigation.

B. The Clean Water Act and the Guidelines set forth a goal of restoring and maintaining existing aquatic resources. The Corps will strive to avoid adverse impacts and offset unavoidable adverse impacts to existing aquatic resources, and for wetlands, will strive to achieve a goal of no overall net loss of values and functions. In focusing the goal of no overall net loss to wetlands only, EPA and Army have explicitly recognized the special significance of the nation's wetlands resources. This special recognition of wetlands resources does not in any manner diminish the value of other waters of the United States, which are often of high value. All waters of the United States, such as streams, rivers, lakes, etc., will be accorded the full measure of protection under the Guidelines, including the requirements for appropriate and practicable mitigation. The determination of what level of mitigation constitutes "appropriate" mitigation is based solely on the values and functions of the aquatic resource that will be impacted. "Practicable" is defined at Section 230.3(q) of the Guidelines.<sup>3</sup> However, the level of mitigation determined to be appropriate and practicable under Section 230.10(d) may lead to individual permit decisions which do not fully meet this goal because the mitigation measures necessary to meet this goal are not feasible, not practicable, or would accomplish only inconsequential reductions in impacts. Consequently, it is recognized that no net loss of wetlands functions and values may not be achieved in each and every permit action. However, it remains a goal of the Section 404 regulatory program to contribute to the national goal of no overall net loss of the nation's remaining wetlands base. EPA and Army are committed to working with others through the Administration's interagency task force and other avenues to help achieve this national goal.

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<sup>2</sup>(except where Section 404(b)(2) applies).

<sup>3</sup>Section 230.3(q) of the Guidelines reads as follows: "The term practicable means available and capable of being done after taking into consideration *cost, existing technology, and logistics in light of overall project purposes.*" (Emphasis supplied)

C. In evaluating standard Section 404 permit applications, as a practical matter, information on all facets of a project, including potential mitigation, is typically gathered and reviewed at the same time. The Corps, except as indicated below, first makes a determination that potential impacts have been avoided to the maximum extent practicable; remaining unavoidable impacts will then be mitigated to the extent appropriate and practicable by requiring steps to minimize impacts and, finally, compensate for aquatic resource values. This sequence is considered satisfied where the proposed mitigation is in accordance with specific provisions of a Corps and EPA approved comprehensive plan that ensures compliance with the compensation requirements of the Section 404(b)(1) Guidelines (examples of such comprehensive plans may include Special Area Management Plans, Advance Identification areas (Section 230.80), and State Coastal Zone Management Plans). It may be appropriate to deviate from the sequence when EPA and the Corps agree the proposed discharge is necessary to avoid environmental harm (e.g., to protect a natural aquatic community from saltwater intrusion, chemical contamination, or other deleterious physical or chemical impacts), or EPA and the Corps agree that the proposed discharge can reasonably be expected to result in environmental gain or insignificant environmental losses.

In determining "appropriate and practicable" measures to offset unavoidable impacts, such measures should be appropriate to the scope and degree of those impacts and practicable in terms of cost, existing technology, and logistics in light of overall project purposes. The Corps will give full consideration to the views of the resource agencies when making this determination.

1. **Avoidance.**<sup>4</sup> Section 230.10(a) allows permit issuance for only the least environmentally damaging practicable alternative.<sup>5</sup> The thrust of this section on alternatives is avoidance of impacts. Section 230.10(a) requires that no discharge shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact to the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences. In addition, Section 230.10(a)(3) sets forth rebuttable presumptions that 1) alternatives for non-water dependent activities that do not involve special aquatic sites<sup>6</sup> are available and 2) alternatives that do not involve special aquatic sites have less adverse impact on the aquatic environment.

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<sup>4</sup>Avoidance as used in the Section 404(b)(1) Guidelines and this MOA does not include compensatory mitigation.

<sup>5</sup>It is important to recognize that there are circumstances where the impacts of the project are so significant that even if alternatives are not available, the discharge may not be permitted regardless of the compensatory mitigation proposed (40 CFR 230.10(c)).

<sup>6</sup>Special aquatic sites include sanctuaries and refuges, wetlands, mud flats, vegetated shallows, coral reefs and riffle pool complexes.

Compensatory mitigation may not be used as a method to reduce environmental impacts in the evaluation of the least environmentally damaging practicable alternatives for the purposes of requirements under Section 230.10(a).

**2. Minimization.** Section 230.10(d) states that appropriate and practicable steps to minimize the adverse impacts will be required through project modifications and permit conditions. Subpart H of the Guidelines describes several (but not all) means for minimizing impacts of an activity.

**3. Compensatory Mitigation.** Appropriate and practicable compensatory mitigation is required for unavoidable adverse impacts which remain after all appropriate and practicable minimization has been required. Compensatory actions (e.g., restoration of existing degraded wetlands or creation of man-made wetlands) should be undertaken, when practicable, in areas adjacent or contiguous to the discharge site (on-site compensatory mitigation). If on-site compensatory mitigation is not practicable, off-site compensatory mitigation should be undertaken in the same geographic area if practicable (i.e., in close physical proximity and, to the extent possible, the same watershed). In determining compensatory mitigation, the functional values lost by the resource to be impacted must be considered. Generally, in-kind compensatory mitigation is preferable to out-of-kind. There is continued uncertainty regarding the success of wetland creation or other habitat development. Therefore, in determining the nature and extent of habitat development of this type, careful consideration should be given to its likelihood of success. Because the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, restoration should be the first option considered.

In the situation where the Corps is evaluating a project where a permit issued by another agency requires compensatory mitigation, the Corps may consider that mitigation as part of the overall application for purposes of public notice, but avoidance and minimization shall still be sought.

Mitigation banking may be an acceptable form of compensatory mitigation under specific criteria designed to ensure an environmentally successful bank. Where a mitigation bank has been approved by EPA and the Corps for purposes of providing compensatory mitigation for specific identified projects, use of that mitigation bank for those particular projects is considered as meeting the objectives of Section II.C.3 of this MOA, regardless of the practicability of other forms of compensatory mitigation. Additional guidance on mitigation banking will be provided. Simple purchase or "preservation" of existing wetlands resources may in only exceptional circumstances be accepted as compensatory mitigation. EPA and Army will develop specific guidance for preservation in the context of compensatory mitigation at a later date.

### *III. Other Procedures*

A. Potential applicants for major projects should be encouraged to arrange preapplication meetings with the Corps and appropriate federal, state or Indian tribal, and local authorities to determine requirements and documentation required for proposed permit evaluations. As a result of such meetings, the applicant often revises a proposal to avoid or minimize adverse impacts after developing an understanding of the Guidelines requirements by which a future Section 404 permit decision will be made, in addition to gaining an understanding of other state or tribal, or local requirements. Compliance with other statutes, requirements and reviews, such as NEPA and the Corps public interest review, may not in and of themselves satisfy the requirements prescribed in the Guidelines.

B. In achieving the goals of the CWA, the Corps will strive to avoid adverse impacts and offset unavoidable adverse impacts to existing aquatic resources. Measures which can accomplish this can be identified only through resource assessments tailored to the site performed by qualified professionals because ecological characteristics of each aquatic site are unique. Functional values should be assessed by applying aquatic site assessment techniques generally recognized by experts in the field and/or the best professional judgment of federal and state agency representatives, provided such assessments fully consider ecological functions included in the Guidelines. The objective of mitigation for unavoidable impacts is to offset environmental losses. Additionally for wetlands, such mitigation should provide, at a minimum, one for one functional replacement (i.e., no net loss of values), with an adequate margin of safety to reflect the expected degree of success associated with the mitigation plan, recognizing that this minimum requirement may not be appropriate and practicable, and thus may not be relevant in all cases, as discussed in Section II.B of this MOA.<sup>7</sup> In the absence of more definitive information on the functions and values of specific wetlands sites, a minimum of 1 to 1 acreage replacement may be used as a reasonable surrogate for no net loss of functions and values. However, this ratio may be greater where the functional values of the area being impacted are demonstrably high and the replacement wetlands are of lower functional value or the likelihood of success of the mitigation project is low. Conversely, the ratio may be less than 1 to 1 for areas where the functional values associated with the

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<sup>7</sup>For example, there are certain areas where, due to hydrological conditions, the technology for restoration or creation of wetlands may not be available at present, or may otherwise be impracticable. In addition, avoidance, minimization, and compensatory mitigation may not be practicable where there is a high proportion of land which is wetlands. EPA and Army, at present, are discussing with representatives of the oil industry, the potential for a program of accelerated rehabilitation of abandoned oil facilities on the North Slope to serve as a vehicle for satisfying necessary compensation requirements.

area being impacted are demonstrably low and the likelihood of success associated with the mitigation proposal is high.


C. The Guidelines are the environmental standard for Section 404 permit issuance under the CWA. Aspects of a proposed project may be affected through a determination of requirements needed to comply with the Guidelines to achieve these CWA environmental goals.

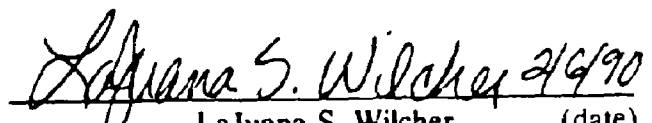
D. Monitoring is an important aspect of mitigation, especially in areas of scientific uncertainty. Monitoring should be directed toward determining whether permit conditions are complied with and whether the purpose intended to be served by the condition is actually achieved. Any time it is determined that a permittee is in non-compliance with mitigation requirements of the permit, the Corps will take action in accordance with 33 CFR Part 326. Monitoring should not be required for purposes other than these, although information for other uses may accrue from the monitoring requirements. For projects to be permitted involving mitigation with higher levels of scientific uncertainty, such as some forms of compensatory mitigation, long term monitoring, reporting and potential remedial action should be required. This can be required of the applicant through permit conditions.

E. Mitigation requirements shall be conditions of standard Section 404 permits. Army regulations authorize mitigation requirements to be added as special conditions to an Army permit to satisfy legal requirements (e.g., conditions necessary to satisfy the Guidelines) [33 CFR 325.4(a)]. This ensures legal enforceability of the mitigation conditions and enhances the level of compliance. If the mitigation plan necessary to ensure compliance with the Guidelines is not reasonably implementable or enforceable, the permit shall be denied.

F. Nothing in this document is intended to diminish, modify or otherwise affect the statutory or regulatory authorities of the agencies involved. Furthermore, formal policy guidance on or interpretation of this document shall be issued jointly.

G. This MOA shall take effect on February 7, 1990, and will apply to those completed standard permit applications which are received on or after that date. This MOA may be modified or revoked by agreement of both parties, or revoked by either party alone upon six (6) months written notice.

 2/6/90  
\_\_\_\_\_  
Robert W. Page (date)  
Assistant Secretary of the Army  
(Civil Works)

 2/6/90  
\_\_\_\_\_  
LaJuana S. Wilcher (date)  
Assistant Administrator for Water  
U.S. Environmental Protection Agency





**MEMORANDUM OF AGREEMENT  
BETWEEN THE DEPARTMENT OF THE ARMY AND  
THE ENVIRONMENTAL PROTECTION AGENCY CONCERNING  
FEDERAL ENFORCEMENT FOR THE SECTION 404 PROGRAM  
OF THE CLEAN WATER ACT**



## **I. PURPOSE AND SCOPE**

The United States Department of the Army (Army) and the United States Environmental Protection Agency (EPA) hereby establish policy and procedures pursuant to which they will undertake federal enforcement of the dredged and fill material permit requirements ("Section 404 program") of the Clean Water Act (CWA). The U.S. Army Corps of Engineers (Corps) and EPA have enforcement authorities for the Section 404 program, as specified in Sections 301(a), 308, 309, 404(n), and 404(s) of the CWA. In addition, the 1987 Amendments to the CWA (the Water Quality Act of 1987) provide new administrative penalty authority under Section 309(g) for violations of the Section 404 program. For purposes of effective administration of these statutory authorities, this Memorandum of Agreement (MOA) sets forth an appropriate allocation of enforcement responsibilities between EPA and the Corps. The prime goal of the MOA is to strengthen the Section 404 enforcement program by using the expertise, resources and initiative of both agencies in a manner which is effective and efficient in achieving the goals of the CWA.

## **II. POLICY**

A. *General.* It shall be the policy of the Army and EPA to maintain the integrity of the program through federal enforcement of Section 404 requirements. The basic premise of this effort is to establish a framework for effective Section 404 enforcement with very little overlap. EPA will conduct initial on-site investigations when it is efficient with respect to available time, resources and/or expenditures, and use its authorities as provided in this agreement. In the majority of enforcement cases the Corps, because it has more field resources, will conduct initial investigations and use its authorities as provided in this agreement. This will allow each agency to play a role in enforcement which concentrates its resources in those areas for which its authorities and expertise are best suited. The Corps and EPA are encouraged to consult with each other on cases involving novel or important legal issues and/or technical situations. Assistance from the U.S. Fish and Wildlife Service (FWS), the National Marine Fisheries Service (NMFS) and other federal, state, tribal and local agencies will be sought and accepted when appropriate.

B. *Geographic Jurisdictional Determinations.* Geographic jurisdictional determinations for a specific case will be made by the investigating agency. If asked for an oral decision, the investigator will caution that oral statements regarding jurisdiction are not an official agency determination. Each agency will advise the other of any problem trends that they become aware of through case by case determinations and initiate interagency discussions or other action to address the issue. (Note: Geographic jurisdictional determinations for "special case" situations and interpretation of Section 404(f) exemptions for "special Section 404(f) matters" will be handled in accordance with the Memorandum of Agreement Between the Department of the Army and the Environmental Protection Agency Concerning the Determination of the Geographic Jurisdiction of the Section 404 Program and the Application of the Exemptions Under Section 404(f) of the Clean Water Act.)

C. *Violation Determinations.* The investigating agency shall be responsible for violation determinations, for example, the need for a permit. Each agency will advise the other of any problem trends that they become aware of through case by case determinations and initiate interagency discussions or other action to address the issue.

D. *Lead Enforcement Agency.* The Corps will act as the lead enforcement agency for all violations of Corps-issued permits. The Corps will also act as the lead enforcement agency for unpermitted discharge violations which do not meet the criteria for forwarding to EPA, as listed in Section III.D. of this MOA. EPA will act as the lead enforcement agency on all unpermitted discharge violations which meet those criteria. The lead enforcement agency will complete the enforcement action once an investigation has established that a violation exists. A lead enforcement agency decision with regard to any issue in a particular case, including a decision that no enforcement action be taken, is final for that case. This provision does not preclude the lead enforcement agency from referring the matter to the other agency under Sections III.D.2 and III.D.4 of this MOA.

E. *Environmental Protection Measures.* It is the policy of both agencies to avoid permanent environmental harm caused by the violator's activities by requiring remedial actions or ordering removal and restoration. In those cases where a complete remedy/removal is not appropriate, the violator may be required, in addition to other legal remedies which are appropriate (e.g., payment of administrative penalties) to provide compensatory mitigation to compensate for the harm caused by such illegal actions. Such compensatory mitigation activities shall be placed as an enforceable requirement upon a violator as authorized by law.

### III. PROCEDURES

A. *Flow chart.* The attached flow chart provides an outline of the procedures

EPA and the Corps will follow in enforcement cases involving unpermitted discharges. The procedures in (B.), (C.), (D.), (E.) and (F.) below are in a sequence in which they could occur. However, these procedures may be combined in an effort to expedite the enforcement process.

B. *Investigation.* EPA, if it so requests and upon prior notification to the Corps, will be the investigating agency for unpermitted activities occurring in specially defined geographic areas (e.g., a particular wetland type, areas declared a "special case" within the meaning of the Memorandum of Agreement Between the Department of the Army and the Environmental Protection Agency Concerning the Determination of the Geographic Jurisdiction of the Section 404 Program and the Application of the Exemptions Under Section 404(f) of the Clean Water Act). Timing of investigations will be commensurate with agency resources and potential environmental damage. To reduce the potential for duplicative federal effort, each agency should verify prior to initiating an investigation that the other agency does not intend or has not already begun an investigation of the same reported violation. If a violation exists, a field investigation report will be prepared which at a minimum provides a detailed description of the illegal activity, the existing environmental setting, initial view on potential impacts and a recommendation on the need for initial corrective measures. Both agencies agree that investigations must be conducted in a professional, legal manner that will not prejudice future enforcement action on the case. Investigation reports will be provided to the agency selected as the lead on the case.

C. *Immediate Enforcement Action.* The investigating or lead enforcement agency should inform the responsible parties of the violation and inform them that all illegal activity should cease pending further federal action. A notification letter or administrative order to that effect will be sent in the most expeditious manner. If time allows, an order for initial corrective measures may be included with the notification letter or administrative order. Also, if time allows, input from other federal, state, tribal and local agencies will be considered when determining the need for such initial corrective measures. In all cases the Corps will provide EPA a copy of its violation letters and EPA will provide the Corps copies of its §308 letters and/or §309 administrative orders. These communications will include language requesting the other agency's views and recommendations on the case. The violator will also be notified that the other agency has been contacted.

D. *Lead Enforcement Agency Selection.* Using the following criteria, the investigating agency will determine which agency will complete action on the enforcement case:

1. EPA will act as the lead enforcement agency when an unpermitted activity involves the following:

- a. Repeat Violator(s);
  - b. Flagrant Violation(s);
  - c. Where EPA requests a class of cases or a particular case; or
  - d. The Corps recommends that an EPA administrative penalty action may be warranted.
2. The Corps will act as the lead enforcement agency in all other unpermitted cases not identified in Part III D.1. above. Where EPA notifies the Corps that, because of limited staff resources or other reasons, it will not take action on a specific case, the Corps may take action commensurate with resource availability.
3. The Corps will act as the lead enforcement agency for Corps-issued permit condition violations.
4. Where EPA requests the Corps to take action on a permit condition violation, this MOA establishes a "right of first refusal" for the Corps. Where the Corps notifies EPA that, because of limited staff resources or other reasons, it will not take an action on a permit condition violation case, the EPA may take action commensurate with resource availability. However, a determination by the Corps that the activity is in compliance with the permit will represent a final enforcement decision for that case.

E. *Enforcement Response.* The lead enforcement agency shall determine, based on its authority, the appropriate enforcement response taking into consideration any views provided by the other agency. An appropriate enforcement response may include an administrative order, administrative penalty complaint, a civil or criminal judicial referral or other appropriate formal enforcement response.

F. *Resolution.* The lead enforcement agency shall make a final determination that a violation is resolved and notify interested parties so that concurrent enforcement files within another agency can be closed. In addition, the lead enforcement agency shall make arrangements for proper monitoring when required for any remedy/removal, compensatory mitigation or other corrective measures.

G. *After-the-Fact Permits.* No after-the-fact (ATF) permit application shall be accepted until resolution has been reached through an appropriate enforcement response as determined by the lead enforcement agency (e.g., until all administrative, legal and/or corrective action has been completed, or a decision has been made that no enforcement action is to be taken).

#### IV. RELATED MATTERS

A. *Interagency Agreements.* The Army and EPA are encouraged to enter into interagency agreements with other federal, state, tribal and local agencies which will provide assistance to the Corps and EPA in pursuit of Section 404 enforcement activities. For example, the preliminary enforcement site investigations or post-case monitoring activities required to ensure compliance with any enforcement order can be delegated to third parties (e.g., FWS) who agree to assist Corps/EPA in compliance efforts. However, only the Corps or EPA may make a violation determination and/or pursue an appropriate enforcement response based upon information received from a third party.

B. *Corps/EPA Field Agreements.* Corps Division or District offices and their respective EPA Regional offices are encouraged to enter into field level agreements to more specifically implement the provisions of this MOA.

C. *Data Information Exchange.* Data which would enhance either agency's enforcement efforts should be exchanged between the Corps and EPA where available. At a minimum, each agency shall begin to develop a computerized data list of persons receiving ATF permits or that have been subject to a Section 404 enforcement action subsequent to February 4, 1987 (enactment date of the 1987 Clean Water Act Amendments) in order to provide historical compliance data on persons found to have illegally discharged. Such information will help in an administrative penalty action to evaluate the statutory factor concerning history of a violator and will help to determine whether pursuit of a criminal action is appropriate.

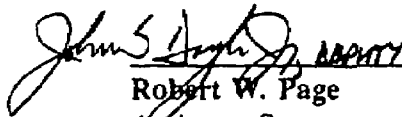
#### V. GENERAL

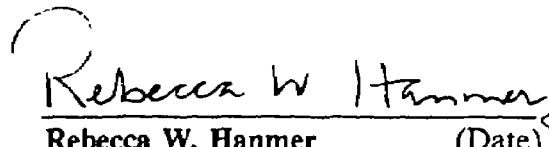
A. The procedures and responsibilities of each agency specified in this MOA may be delegated to subordinates consistent with established agency procedures.

B. The policy and procedures contained within this MOA do not create any rights, either substantive or procedural, enforceable by any party regarding an enforcement action brought by either agency or by the U.S. Deviation or variance from these MOA procedures will not constitute a defense for violators or others concerned with any Section 404 enforcement action.

C. Nothing in this document is intended to diminish, modify or otherwise affect the statutory or regulatory authorities of either agency. All formal guidance interpreting this MOA shall be issued jointly.

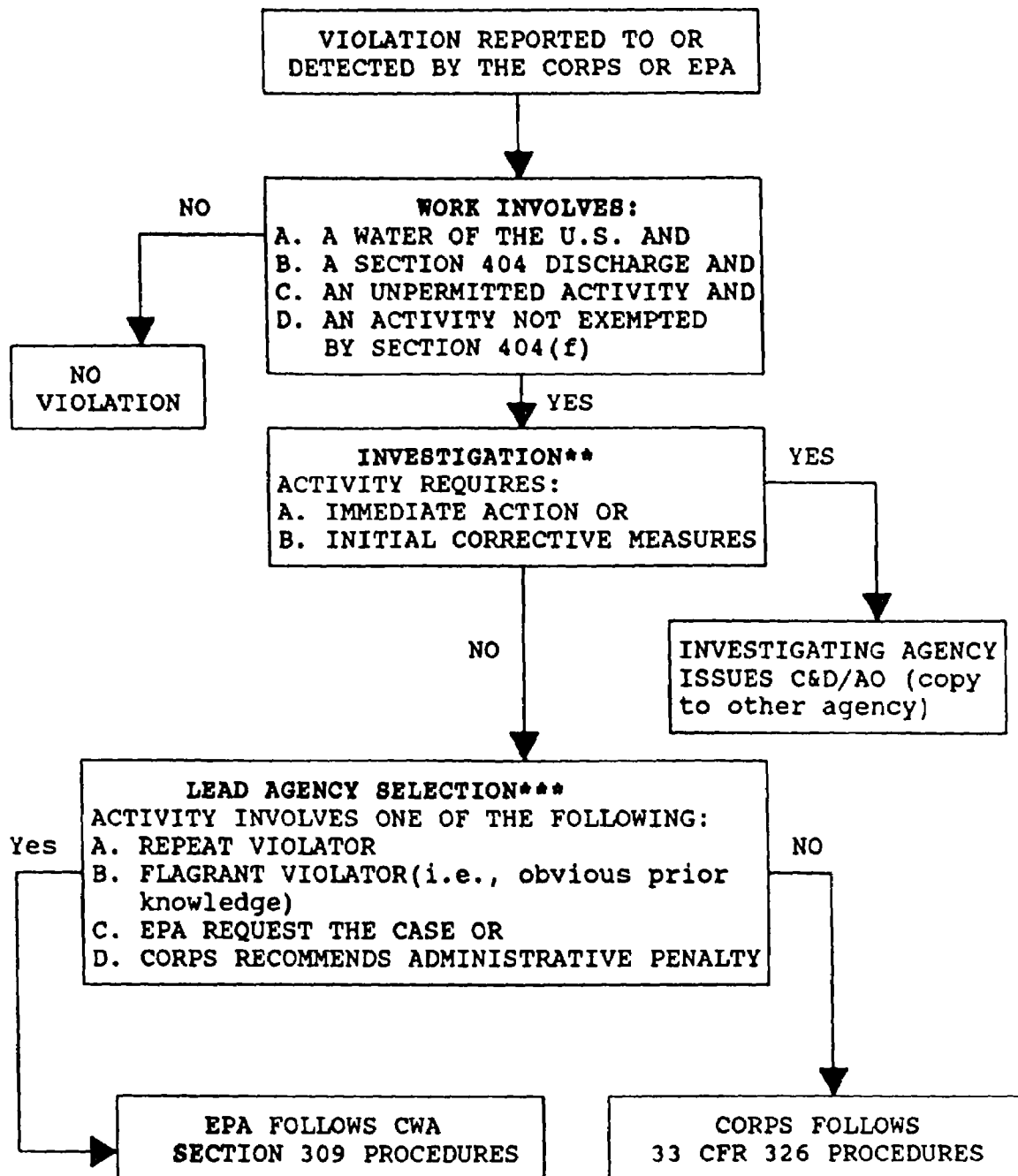
D. This agreement shall take effect 60 days after the date of the last signature below and will continue in effect for five years unless extended, modified or revoked by agreement of both parties, or revoked by either party alone upon six months written notice, prior to that time.

 Jan. 19, 1989  
Robert W. Page (Date)  
Assistant Secretary of  
the Army (Civil Works)

 Jan. 19, 1989  
Rebecca W. Hanmer (Date)  
Acting Assistant Administrator  
for Water  
U.S. Environmental Protection Agency

**CORPS/EPA ENFORCEMENT PROCEDURES  
FOR SECTION 404 UNPERMITTED VIOLATIONS\***

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- \* Enforcement procedures for permit condition violation cases are set forth at Part III.D.3. and III.D.4.
  - \*\* Procedures for investigating unpermitted activity cases are set forth at Part III.B.
  - \*\*\* Examples of situations in which "C" & "D" might arise include cases which are important due to deterrent value, due to the violation occurring in a critical priority resource or in an advanced identification area, involving an uncooperative individual, etc.



## DEPARTMENT OF THE ARMY



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

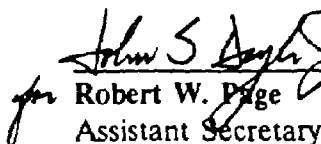
SUBJECT: Section 404 Enforcement Memorandum of Agreement (MOA)  
Procedures Regarding the Applicability of Previously-Issued  
Corps Permits

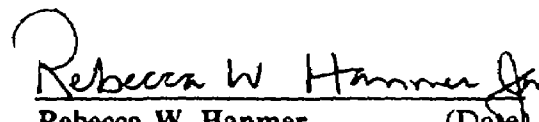
1. The MOA Between the Department of the Army and the Environmental Protection Agency (EPA) Concerning Federal Enforcement for the Section 404 Program of the Clean Water Act (Section 404 Enforcement MOA) establishes policy and procedures pursuant to which EPA and Army will undertake federal enforcement of the dredged and fill material permit requirements of the Clean Water Act.
2. For purposes of effective administration of the statutory enforcement authorities of both EPA and the U.S. Army Corps of Engineers (Corps), the MOA sets forth an appropriate allocation of enforcement responsibilities between EPA and the Corps. Given that the Corps is the federal permit-issuing authority, for purposes of implementation of the provisions of the Section 404 Enforcement MOA the Corps will be responsible for determining whether an alleged illegal discharge of dredged or fill material is authorized under an individual or general permit.
3. When EPA becomes aware of an alleged illegal discharge, it will contact the appropriate Corps district and request a determination as to whether the discharge is authorized by an individual or general permit.
4. A Corps determination that the discharge is authorized by an individual or general permit represents a final enforcement decision for that particular case. Likewise, a Corps determination that the discharge is not authorized by an individual or general permit (i.e., it is an unpermitted discharge) is final for that particular case.
5. In order ~~to promote~~ effective and expeditious action against possible illegal discharges, ~~the~~ Corps district upon request from EPA is responsible for providing a determination ~~within~~ two working days in those cases where EPA provides the Corps with sufficient information to make this determination in the office. However, if sufficient information is not available to the Corps so that additional investigation by the Corps is needed before it is able to respond to the EPA request, the Corps will provide a determination to EPA within 10 working days. If the Corps does not provide a determination to EPA within the applicable time frame, EPA may continue to investigate the case and determine whether the activity constitutes an unauthorized discharge, and the EPA determination will be final for that particular case.



6. Notwithstanding the above provisions, in situations where an alleged illegal discharge is ongoing and EPA reasonably believes that such discharge is not authorized, EPA may take immediate enforcement action against the discharger when necessary to minimize impacts to the environment. However, EPA will also contact the appropriate Corps district and request a determination as to whether the discharge is authorized by an individual or general permit. A subsequent determination by the Corps, pursuant to paragraph five above, that the discharge is authorized represents a final enforcement decision for that particular case.

7. This guidance shall remain in effect for as long as the Section 404 Enforcement MOA is in effect, unless revisions to or revocation of this guidance is mutually agreed to by the two signatory agencies.

 JAN. 19, 1981  
Robert W. Page (Date)  
Assistant Secretary of  
the Army (Civil Works)

 Jan. 19, 1981  
Rebecca W. Hanmer (Date)  
Acting Assistant Administrator  
for Water  
U.S. Environmental Protection Agency



**MEMORANDUM OF AGREEMENT  
BETWEEN THE DEPARTMENT OF THE ARMY  
AND THE ENVIRONMENTAL PROTECTION AGENCY  
CONCERNING THE DETERMINATION OF THE  
GEOGRAPHIC JURISDICTION OF THE SECTION 404 PROGRAM  
AND THE APPLICATION OF THE EXEMPTIONS  
UNDER SECTION 404(f) OF THE CLEAN WATER ACT**

**I. PURPOSE AND SCOPE.**

The United States Department of the Army (Army) and the United States Environmental Protection Agency (EPA) hereby establish the policy and procedures pursuant to which they will determine the geographic jurisdictional scope of waters of the United States for purposes of section 404 and the application of the exemptions under section 404(f) of the Clean Water Act (CWA).

The Attorney General of the United States issued an opinion on September 5, 1979, that the Administrator of EPA (Administrator) has the ultimate authority under the CWA to determine the geographic jurisdictional scope of section 404 waters of the United States and the application of the section 404(f) exemptions. Pursuant to this authority and for purposes and effective administration of the 404 program, this Memorandum of Agreement (MOA) sets forth an appropriate allocation of responsibilities between the EPA and the U.S. Army Corps of Engineers (Corps) to determine geographic jurisdiction of the section 404 program and the applicability of the exemptions under section 404(f) of the CWA.

**II. POLICY.**

It shall be the policy of the Army and EPA for the Corps to continue to perform the majority of the geographic jurisdictional determinations and determinations of the applicability of the exemptions under section 404(f) as part of the Corps role in administering the section 404 regulatory program. It shall also be the policy of the Army and EPA that the Corps shall fully implement EPA guidance on determining the geographic extent of section 404 jurisdiction and applicability of the 404(f) exemptions.

Case-specific determinations made pursuant to the terms of this MOA will be binding on the Government and represent the Government's position in any subsequent Federal action or litigation regarding the case. In making its determinations, the

Corps will implement and adhere to the "Federal Manual for Identifying and Delineating Jurisdictional Wetlands," EPA guidance on isolated waters, and other guidance, interpretations, and regulations issued by EPA to clarify EPA positions on geographic jurisdiction and exemptions. All future programmatic guidance, interpretations, and regulations on geographic jurisdiction, and exemptions shall be developed by EPA with input from the Corps; however, EPA will be considered the lead agency and will make the final decision if the agencies disagree.

### **III. DEFINITIONS.**

A. Special Case. A special case is a circumstance where EPA makes the final determination of the geographic jurisdictional scope of waters of the United States for purposes of section 404.

Special cases may be designated in generic or project-specific situations where significant issues or technical difficulties are anticipated or exist, concerning the determination of the geographic jurisdictional scope of waters of the United States for purposes of section 404 and where clarifying guidance is or is likely to be needed. Generic special cases will be designated by easily identifiable political or geographic subdivisions such as township, county, parish, state, EPA region, or Corps division or district. EPA will ensure that generic special cases are marked on maps or some other clear format and provided to the appropriate District Engineer (DE).

B. Special 404(f) Matters. A special 404(f) matter is a circumstance where EPA makes the final determination of the applicability of exemptions under section 404(f) of the CWA.

A special 404(f) matter may be designated in generic or project-specific situations where significant issues or technical difficulties are anticipated or exist, concerning the applicability of exemptions under section 404(f), and where clarifying guidance is, or is likely, to be needed. Generic special 404(f) matters will be designated by easily identifiable political or geographic subdivisions such as township, county, parish, state, EPA region, or Corps division or district and by specific 404(f) exemption (e.g., 404(f)(1)(A)).

### **IV. PROCEDURES.**

A. Regional Lists. Each regional administrator (RA) shall maintain a regional list of current designated special cases and special 404(f) matters within each region, including documentation, if appropriate, that there are no current designated special cases or special 404(f) matters in the region.

The RA shall create an initial regional list and transmit it to the appropriate DE within 30 days of the date of the last signature on this MOA. In order to be eligible for a regional list, the designated special cases and special 404(f) matter must be approved by the Administrator. (NOTE: Those geographic areas designated as current special cases pursuant to the 1980 Memorandum of Understanding on Geographic Jurisdiction of the Section 404 Program, may be incorporated into the initial regional lists without additional approval by the Administrator based on township, county, parish, state or other appropriate designation, as described in paragraph III. A. of this MOA but will no longer be designated by forest cover type.)

B. Changes to the Regional Lists. Changes to the regional lists shall be proposed by the RA and approved by the Administrator and may include additions to, amendments to, or deletions from the regional lists. When the RA proposes an addition, amendment, or deletion to the regional list, the RA shall forward the proposal to EPA Headquarters for review and approval. When the RA proposes an addition or amendment in writing or by phone to the appropriate Corps DE, the Corps will not make a final geographic jurisdictional determination within the proposed special case area for a period of ten working days from the date of the RA's notification. The Corps may proceed to make determinations in the proposed special case area after the ten day period if it has not been provided final notification of EPA Headquarters approval of the RA's proposed changes. Deletions to the regional list do not become effective until a revised regional list, approved by EPA Headquarters, is provided to the appropriate DE.

C. Project Reviews. The DE shall review section 404 preapplication inquiries, permit applications, and other matters brought to his attention, which involve the discharge of dredged or fill material into waters of the United States to determine if a current designated special case or special 404(f) matter is involved.

(1) Special Cases/Special 404(f) Matters.

For those projects involving a current designated special case or special 404(f) matter, the DE shall request that the RA make the final determination of the geographic jurisdictional scope of waters of the United States for purposes of section 404 or applicability of the exemptions under section 404(f). The RA shall make the final determination, subject to discretionary review by EPA Headquarters, and transmit it to the DE, and to the applicant/inquirer.

(2) Non-Special Cases/Non-Special 404(f) Matters.

For those projects not involving a current designated special case or special 404(f) matter, the DE shall make final determinations and communicate those determinations without a requirement for prior consultation with EPA.

D. Determination of Special Cases or Special 404(f) Matters. When the special case or special 404(f) matter has been designated on a project-specific basis, issuance of the final determination by the RA will serve as guidance relevant to the specific facts of each particular situation, and will terminate the special case or special 404(f) matter designation. When the special case or special 404(f) matter has been designated on a generic basis, EPA Headquarters will develop, in consultation with Army, relevant programmatic guidance for determining the geographic jurisdictional scope of waters of the United States for the purpose of section 404 or the applicability of exemptions under section 404(f). Special cases and special 404(f) matters designated on a generic basis remain in effect until (1) a deletion from the regional list is proposed and processed according to paragraph IV-B of this MOA, or (2) EPA Headquarters issues programmatic guidance that addresses the relevant issues and specifically deletes the special case or special 404(f) matter from the regional list(s), whichever occurs first.

E. Uncertainties Regarding Special Cases/Special 404(f) Matters. Should any uncertainties arise in determining whether a particular action involves a current designated special case or special 404(f) matter, the DE shall consult with the RA. Upon completion of the consultation, the RA will make the final determination as to whether the action involves a current designated special case or special 404(f) matter.

F. Compliance Tracking. In order to track the DE's compliance with EPA guidance, the DE shall make his files available for inspection by the RA at the district office, including field notes and data sheets utilized in making final determinations as well any photographs of the site that may be available. Copies of final geographic jurisdictional determinations will be provided to the RA upon request at no cost to EPA unless the sample size exceeds 10 percent of the number of determinations for the sample period. Copies in excess of a 10 percent sample will be provided at EPA expense. To ensure that EPA is aware of determinations being made for which notification is not forwarded through the public notice process, the Corps will provide copies to EPA of all final determinations of no geographic jurisdiction and all final determinations that an exemption under Section 404(f) is applicable. Should EPA become aware of any problem trends with the DE's implementation of guidance, EPA shall initiate interagency discussions to address the issue.

## **V. RELATED ACTIONS.**

A. Enforcement Situations. For those investigations made pursuant to the 1989 Enforcement MOA between Army and EPA concerning Federal enforcement of section 404 of the CWA, which involve areas that are current designated special cases, the RA shall make the final determination of the geographic jurisdictional scope of waters of the United States for purposes of section 404. The RA's determination is subject to discretionary review by EPA Headquarters, and will be binding regardless of which agency is subsequently designated lead enforcement agency pursuant to the 1989 Enforcement MOA. For those investigations not involving special cases, the agencies will proceed in accordance with the provisions of the 1989 Enforcement MOA.

For those investigations made pursuant to the 1989 Enforcement MOA between Army and EPA concerning Federal enforcement of section 404 of the CWA, which involve current designated special 404(f) matters, the RA shall make the final determination of the applicability of the exemptions under section 404(f). The RA determination is subject to discretionary review by EPA Headquarters, and is binding regardless of which agency is subsequently designated lead enforcement agency pursuant to the 1989 Enforcement MOA. For those investigations not involving special 404(f) matters, the agencies will proceed in accordance with the provisions of the 1989 Enforcement MOA.

B. Advanced Identification. EPA may elect to make the final determination of the geographic jurisdictional scope of waters of the United States for purposes of section 404, as part of the advanced identification of disposal sites under 40 CFR 230.80, subject to discretionary review by EPA Headquarters, and regardless of whether the areas involved are current designated special cases, unless the DE has already made a final geographic jurisdictional determination. Any determinations under this section shall be completed in accordance with paragraph IV of this MOA.

C. 404(c) Actions. EPA may elect to make the final determination of the geographic jurisdictional scope of waters of the United States for purposes of section 404(c) of the CWA.


## **VI. GENERAL PROVISIONS.**

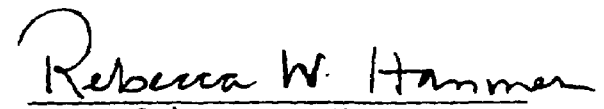
A. All final determinations must be in writing and signed by either the DE or RA. Final determination of the DE or RA made pursuant to this MOA or the 1980 Memorandum of Understanding on Geographic Jurisdiction of the Section 404 Program, will be binding on the Government and represent the Government's position in any subsequent Federal action or litigation concerning that final determination.

B. The procedures and responsibilities of each agency specified in this MOA may be delegated to appropriate subordinates consistent with established agency procedure. Headquarters procedures and responsibilities specified in the MOA may only be delegated within headquarters.

C. Nothing in this document is intended to diminish, modify, or otherwise affect the statutory or regulatory authorities of either agency.

D. This agreement shall take effect and supercede the April 23, 1980, Memorandum of Understanding on Geographic Jurisdiction of the Section 404 Program on the 60th day after the date of the last signature below and will continue in effect for five years, unless extended, modified or revoked by agreement of both parties, or revoked by either party alone upon six months written notice, prior to that time.

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

  
Rebecca W. Hanmer  
Acting Assistant Administrator  
for Water  
U. S. Environmental Protection  
Agency

January 19, 1989  
Date

January 19, 1989  
Date



DEPARTMENT OF THE ARMY

U.S. Army Corps of Engineers  
WASHINGTON DC 20314-1000

21 APR 1989

REPLY TO  
ATTENTION OF

CECW-ZA

MEMORANDUM THRU Commander, U.S. Army Engineer Division, Lower  
Mississippi Valley

FOR Commander, U.S. Army Engineer District, New Orleans

SUBJECT: Permit Elevation, Plantation Landing Resort, Inc.

1. By memorandum dated 3 February 1989, the Assistant Secretary of the Army (Civil Works) advised me that he had granted the request of the Environmental Protection Agency (EPA) and the Department of Commerce (DOC) to elevate the permit case for Plantation Landing Resort, Inc., to HQUSACE for national policy level review of issues concerning the practicable alternatives and mitigation provisions of the 404(b)(1) Guidelines. My review of the case record provided by the New Orleans District (NOD) leads me to conclude that Corps policy interpreting and implementing the 404(b)(1) Guidelines should be clarified in certain respects. Of course, general guidance interpreting the 404(b)(1) Guidelines ideally should be prepared and promulgated jointly by the Corps and the EPA. (See 40 CFR 230.2(c)). Consequently, representatives of the Office of the ASA(CW) and the Corps from time to time have worked with EPA attempting to develop joint interpretive guidance on important issues under the 404(b)(1) Guidelines, but no final inter-agency consensus has resulted to date. Although I hope and expect that eventually we will be able to promulgate joint Army/EPA guidance, in the interim I believe the guidance provided in the attachment is necessary and will serve a useful purpose.

2. Please re-evaluate the subject permit case in light of the guidance provided in the attachment, and take action accordingly.

FOR THE COMMANDER:

Attachment

*Patrick J. Kelly*  
PATRICK J. KELLY  
Brigadier General, USA  
Director of Civil Works

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Attachment

1. The Corps of Engineers permit regulations state the following at 33 CFR 320.4(a):

"For activities involving 404 discharges, a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b)(1) guidelines."

2. The 404(b)(1) Guidelines constitute one of the primary regulatory directives requiring the Corps' 404 program to protect wetlands and other special aquatic sites (defined at 40 CFR 230.3 (q-1)) from unnecessary destruction or degradation. Consequently, proper interpretation and implementation of the Guidelines is essential to ensure that the Corps provides the degree of protection to special aquatic sites mandated by the Guidelines and required by the Corps of Engineers wetlands policy (33 CFR 320.4(b)).

3. One key provision of the 404(b)(1) Guidelines which clearly is intended to discourage unnecessary filling or degradation of wetlands is the "practicable alternative" requirement, 40 CFR 230.10(a), which, in relevant part, provides that:

"... no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem ..."

As explained in the preamble to the Guidelines, this provision means that:

"... the Guidelines ... prohibit discharges where there is a practicable, less damaging alternative ... Thus, if destruction of an area of waters of the United States may reasonably be avoided, it should be avoided." (45 Fed. Reg. 85340, Dec. 24, 1980)

4. The 404(b)(1) Guidelines have been written to provide an added degree of discouragement for non-water dependent activities proposed to be located in a special aquatic site, as follows:

Where the activity associated with a discharge which is proposed for a special aquatic site (as defined in Subpart E) does not require access or proximity to or siting within the special aquatic site in question to fulfill its basic purpose (i.e., is not "water dependent"), practicable alternatives that do not involve special aquatic

sites are presumed to be available, unless clearly demonstrated otherwise. (40 CFR 230.10(a)(3))

The rebuttable presumption created by this provision is intended to increase the burden on an applicant for a non-water-dependent activity to demonstrate that no practicable alternative exists to his proposed discharge in a special aquatic site. This presumption is added to the Guidelines' general presumption against discharges found at 40 CFR 230.1(c), which already places the burden of proof on the applicant to demonstrate that his proposed discharge complies with the Guidelines, including the practicable alternative requirement of 40 CFR 230.10(a). (See 45 Fed. Reg. 85338, Dec. 24, 1980)

5. One essential aspect of applying the "practicable alternative" and "water dependency" provisions of the Guidelines to a particular 404 permit case is to decide what is the "basic purpose" of the planned activity requiring the proposed discharge of dredged or fill material. The preamble to the Guidelines provides the following guidance on the meaning of "basic purpose":

"Non-water-dependent" discharges are those associated with activities which do not require access or proximity to or siting within the special aquatic site to fulfill their basic purpose. An example is a fill to create a restaurant site, since restaurants do not need to be in wetlands to fulfill their basic purpose of feeding people. (45 Fed. Reg. 85339, Dec. 24, 1980; emphasis added)

6. The 404(b)(1) analysis for the Plantation Landing Resort, Inc., application, even when read in conjunction with the Statement of Findings (SOF) and the Environmental Assessment (EA), does not deal with the issues of practicable alternatives and water dependency in a satisfactory manner. The 404(b)(1) evaluation itself is essentially a standard form "checklist" with very little analysis or project-specific information. Nevertheless, when one reads the Statement of Findings and Environmental Assessment for the project, one can determine how the New Orleans District (NOD) analyzed the project for purposes of the 404(b)(1) review.

7. One significant problem in the NOD's approach to the 404(b)(1) review is found in the following, which is the only statement in NOD's 404(b)(1) evaluation document presenting a project-specific reference to the Plantation Landing case with respect to the practicable alternative requirement of the Guidelines:

Several less environmentally damaging alternatives were identified in the Environmental Assessment.

The applicant stated and supplied information indicating that these alternatives would not be practicable in light of his overall project purposes. Recent guidance from LMVD states that the applicant is the authoritative source of information regarding practicability determinations, therefore no less environmentally damaging practicable alternatives are available. (NOD's "Evaluation of Section 404(b)(1) Guidelines," Attachment 1, Paragraph 1.a.)

This statement appears to allow the applicant to determine whether practicable alternatives exist to his project. Emphatically, that is not an acceptable approach for conducting the alternatives review under the 404(b)(1) Guidelines. The Corps is responsible for controlling every aspect of the 404(b)(1) analysis. While the Corps should consider the views of the applicant regarding his project's purpose and the existence (or lack of) practicable alternatives, the Corps must determine and evaluate these matters itself, with no control or direction from the applicant, and without undue deference to the applicant's wishes.

8. In the instant case, the NOD administrative record gives the appearance of having given too much deference to the way the applicant chose to define the purpose of his project; this led to characterization of project purpose in such a way as to preclude the existence of practicable alternatives. First, the NOD's Statement of Findings (SOF) concludes the following regarding practicable alternatives:

"... alternative site analysis resulted in no available sites occurring on or near Grand Isle that would allow the applicant to achieve the same purpose as that intended on the property he now owns." (SOF at page 7)

Similarly, NOD's Environmental Assessment (EA) makes the following statement:

"Results of the investigation revealed that a practicable and feasible alternatives site did not exist on Grand Isle or vicinity that would satisfy the purpose and need of the recreational development as proposed on the applicant's own property." (EA at page 85)

9. A reading of the entire record indicates that NOD accepted the applicant's assertion that the project as proposed must be accepted by the Corps as the basis for the 404(b)(1) Guidelines practicability analysis. The applicant proposed a fully-integrated, waterfront, contiguous water-oriented recreational complex, in the form the applicant proposed.

Consequently, NOD apparently presumed that no alternative site could be considered if it could not support in one, contiguous waterfront location the same sort of fully integrated recreational complex that the applicant proposed to build. The EA addresses this point specifically, as follows:

There appear to be alternative sites for the placement of each component of the project. However, alternate sites are not preferable by the applicant because he owns the project site and wishes to realize commercial values from it. Real estate investigations revealed that Grand Isle at present does not offer a less damaging alternative site which satisfies the applicants purpose and need as proposed on his own property. (EA at pages 89-90)

10. The clearest statement from NOD on this point is the following statement from the SOF, which specifically addresses the practicable alternative issue:

In a letter dated August 19, 1988, EPA provided to the Corps verbal and graphic descriptions of their identified alternative project designs and/or sites. EPA requested the Corps and the applicant to consider and evaluate the possibility of utilizing one or a combination of their suggested alternatives for the proposed Plantation Landing Resort. The Corps by transmittal letter dated August 29, 1988, forwarded a copy of the EPA alternatives to the applicant's authorized agent, Coastal Environments, Inc. Coastal Environments, Inc. by letter dated September 12, 1988, provided to the Corps the applicant's response regarding the feasibility of the EPA alternatives. The applicant's response stated that implementation of any of the EPA alternative project designs and/or sites would result in a disarticulated project ... Corps policy states that "an alternative is practicable if it enables the applicant to fulfill the basic purpose of the proposed project." After reviewing the applicant's response and evaluating the alternatives myself I have determined that EPA proposed alternatives are not feasible or practicable because they would not allow the applicant to fulfill his intended purpose of establishing a contiguous, fully-integrated waterfront resort complex. (SOF at page 10 emphasis added)

11. The effect of NOD's deferring to and accepting the applicant's definition of the basic purpose of his project as a contiguous, fully-integrated, and entirely waterfront resort

complex in the form the applicant had proposed was to ensure that no practicable alternative could exist. Nevertheless, the administrative record nowhere provides any rationale for why the applicant's proposed complex had to be "contiguous" or "fully integrated" or why all features of it had to be "waterfront." The only reason appearing on the record to indicate why NOD presumed that the project had to be contiguous, fully integrated, and entirely waterfront is that the applicant stated that that was his proposal, thus by definition that was the official project purpose which the Corps must use. That is not an acceptable approach to interpret and implement the 404(b)(1) Guidelines. Only if the Corps, independently of the applicant, were to determine that the basic purposes of the project cannot practicably be accomplished unless the project is built in a "contiguous", "fully integrated," and entirely "waterfront" manner would those conditions be relevant to the 404(b)(1) Guidelines' alternative review. The fact that those conditions may be part of the proposal as presented by the applicant is by no means determinative of that point. Once again, the Corps, not the applicant, must define the basic purpose underlying the applicant's proposed activity.

12. When an applicant proposes to build a development consisting of various component parts, and proposes that all those component parts be located on one contiguous tract of land (including waters of the United States), a question of fact arises: i.e., whether all component parts, or some combination of them, or none, really must be built, or must be built in one contiguous block, for the project to be viable. The applicant's view on that question of fact should be considered by the Corps, but the Corps must determine (and appropriately document its determination) whether in fact some component parts of the project (e.g., those proposed to be built in waters of the United States) could be dropped from the development altogether, or reconfigured or reduced in scope, to minimize or avoid adverse impacts on waters of the United States. For example, in the Hartz Mountain Development Corporation application case the Corps' New York District was faced with a "block development project" proposed to be built on one contiguous tract as an integrated project. Quite properly, the Corps refused to accept the applicant's proposal as a controlling factor in our 404(b)(1) analysis. As the U.S. District Court for New Jersey stated approvingly:

The applicant argued that the shopping center-office park-warehouse distribution center was an inextricably related project which required development on a single interconnected site. This critical mass theory would require any alternative to have the capability of handling the entire multi-faceted project. The Corps of Engineers rejected this theory. The Corps of Engineers considered the project as three separate activities, that is to say, shopping center, office

park, and warehouse distribution center. (National Audubon Society v. Hartz Mountain Development Corp., No. 83-1534D, D.N.J., Oct 24, 1983, 14 ELR 20724; case is cited only for the above-stated point.)

Similarly, the Corps must not presume that the Plantation Landing Resort necessarily needs to be built in one contiguous tract of land, or that it must be "fully integrated", or that all components of it must be "waterfront", or otherwise that the project must be built in the form or configuration proposed by the applicant. Once again, the applicant bears the burden of proof for all the tests of 40 CFR 320.10 to demonstrate to the Corps that his project, or any part of it, should be built in the waters of the United States. The Corps will evaluate the applicant's evidence and determine, independently of the applicant's wishes, whether all the requirements of the Guidelines have been satisfied.

13. The "[r]ecent guidance from LMVD" referred to the NOD's 404(b)(1) evaluation apparently was the 11 March 1987 document whereby the LMVD Commander transmitted to his four District Commanders the HQUSACE guidance letter of 22 April 1986. Clarification of our intentions in the HQUSACE guidance letter of 22 April 1986 is appropriate herein.

14. The language from the 22 April 1986 letter from HQUSACE relevant to this discussion is the following:

"Our position is that LWF v. York requires that alternatives be practicable to the applicant and that the purpose and need for the project must be the applicant's purpose and need."

The essential point of the HQUSACE policy guidance of 22 April 1986 was that under the 404(b)(1) Guidelines an alternative must be available to the applicant to be a practicable alternative. Thus, in the context of LWF v. York, where the applicant proposed to clear his wetland property to grow soybeans, the fact that other farmers might be able to supply the United States with an adequate soybeans supply would not necessarily preclude the applicant in that particular case from obtaining a 404 permit to clear his land to raise soybeans. On the other hand, if affordable upland farmland was available to the applicant, which he could buy, rent, expand, manage, or otherwise use to grow soybeans, that upland tract might constitute a practicable alternative under the Guidelines. The significance of the HQUSACE 22 April 1986 policy guidance regarding project "purpose" was that project purpose would be viewed from the applicant's perspective rather than only from the broad, "public" perspective. For example, in the LWF v. York case (761 F.2d at 1047) the Corps defined the basic purpose for the applicants' land clearing project as being "to increase soybean production or to increase net returns on assets owned by the company." That approach to project purpose, viewed from the

applicant's perspective, was upheld as permissible under the 404(b)(1) Guidelines. In contrast, the plaintiffs had urged that the Corps view project purpose only from the broad, public perspective, i.e., presumably by defining project purpose as "providing the U.S. public a sufficient supply of soybeans, consistent with protection of wetlands". (Obviously, the U.S. public arguably might get sufficient soybeans from other sources even without conversion of wetlands to soybean production.) The Court held that the Corps is not required by the Guidelines to define project purpose in the manner most favorable to "environmental maintenance", or only from the "public" perspective. However, the Court clearly indicated that the Corps was in charge of defining project purpose and determining whether practicable alternatives exist. Similarly, the HQUSACE guidance of 22 April 1986 was intended to follow the reasoning of the Court in LWF v. York that the Corps' 404(b)(1) analysis should include consideration of project purpose and practicable alternatives from the applicant's perspective. That guidance was not intended to allow the applicant to control those two or any other aspect of the 404(b)(1) Guidelines review, nor to require the Corps to accept or use the applicant's preferred definition of project purpose or to adopt without question the applicant's conclusion regarding the availability of practicable alternatives. One must remember that the Guidelines' "practicability" provision (40 CFR 230.10(a) uses the expression "basic purpose". Although the Corps may try to view a project's basic purpose from the applicant's perspective, that cannot change the Guidelines' mandate to use every project's basic purpose for the Guidelines' practicability review. The Guidelines' concept of "basic purpose" was quoted at paragraph 5, above: e.g., "restaurants do not need to be in wetlands to fulfill their basic purpose of feeding people." The concept of basic purpose is further discussed in paragraphs 19 through 21, infra.

15. In addition, the LMVD transmittal letter of 11 March 1987 contains the following statement:

"... minimization of cost is a legitimate factor in determining the applicant's purpose and the purpose of the project."

While the applicant's wish to minimize his costs is obviously a factor which the Corps can consider, that factor alone must not be allowed to control or unduly influence the Corps' definition of project purpose or "practicable alternative", or any other part of the 404(b)(1) evaluation. The preamble to the Guidelines states the following on this point:

The mere fact that an alternative may cost somewhat more does not necessarily mean it is not practicable ..." (45 Fed. Reg. at 85339, Dec. 24, 1980)

This is an important point, because often wetland property may be less expensive to a developer than comparably situated upland property. The Guidelines obviously are not designed to facilitate a shift of development activities from uplands to wetlands, so the fact that an applicant can sometimes reduce his costs by developing wetland property is not a factor which can be used to justify permit issuance under the Guidelines. On the other hand, the 404(b)(1) Guidelines do address the factor of cost to an applicant in the concept of the "practicability" of alternatives, defined at 40 CFR 230.10(a)(2). As the Guidelines' preamble states on this point, "If an alleged alternative is unreasonably expensive to the applicant, the alternative is not "practicable"." (45 Fed. Reg. at page 85343, Dec 24, 1980)

16. The 404(b)(1) Guidelines define the concept of practicable alternative as follows:

An alternative is practicable if it is available consideration cost, existing technology, and logistics in light of overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered.  
(40 CFR 230.10(a)(2); emphasis added)

This provision indicates that a site not presently owned by the applicant but which could be obtained, utilized, etc., to fulfill the basic purpose of the proposed activity qualifies as a practicable alternative. Consequently, the definition of "basic purpose" and "overall project purposes" is central to proper interpretation and implementation of the Guidelines' "practicable alternative" test. Moreover, part of the "practicable alternative" test of 40 CFR 230.10(a) is the "water dependency" provision, quoted in paragraph 4, supra, which also is based upon the concept of a project's "basic purpose." That is, the water dependency test states that a practicable alternative is presumed to exist for any proposed activity which does not have to be sited within or require access or proximity to water to fulfill its basic purpose (thus a 404 permit could not be issued unless the presumption is rebutted). (40 CFR 230.10(a)(3))

17. Acceptance of the applicant's proposal to build a fully-integrated, contiguous, waterfront recreational resort complex led NOD to conclude that:

" ... the Corps considers the project to be water dependent in light of the applicant's purpose  
(SOF, page 7)



This determination had the effect of finding that 339 condominium dwellings, 398 townhouse units, a motel, a restaurant, a cafe, a bar, a diving and fishing shop, and a convenience store, were all "water dependent," merely because they were said to be "integrated" with and "contiguous" to marina facilities. This approach is unacceptable, and contrary to Corps policy since 1976. If the approach used by NOD in the instant case were to gain general acceptance, then proponents of virtually any and all forms of development in wetlands could declare their proposals "water dependent" by proposing to "integrate" them with and to build them "contiguous" to a marina, or simply by adding the expression "waterfront" as a prefix to words such as "home", "motel", "restaurant", "bar", etc. The approach used by NOD in the instant case would render completely meaningless the water dependency provision of the Guidelines.

18. NOD's basis for declaring all aspects of the Plantation Landing Resort proposal to be water dependent was the following:

Individually most components comprising the proposed recreational complex are not dependent upon water to function. However, waterfront availability of proposed facilities is demanded by the public as clearly demonstrated by the success of similar waterfront facilities in adjoining gulf coastal states. Also local demand for waterfront housing is evident by the proposed expansion of Pirates Cove on Grand Isle and the presently ongoing installation of Point Fourchon at Fourchon. (EA at page 85)

One of the primary reasons why regulation of the filling of wetlands is an important Corps environmental mission is precisely because a strong economic incentive (i.e., "demand") exists to fill in many coastal wetlands for housing developments, condominium resorts, restaurants, etc. The fact that "demand" exists for waterfront development, and even the fact that "demand" exists for the filling in of wetlands for waterfront development, is irrelevant to the question of whether any proposed development in a special aquatic site is water dependent under the 404(b)(1) Guidelines. Waterfront development can take place without the filling in of special aquatic sites.

19. Significantly, in 1976 the HQUSACE dealt with essentially the same issues presented in the instant case (i.e., the meaning of "basic purpose" and "water dependency" and the nature of the practicable alternatives review) in the context of a permit case similar to the proposed Plantation Landing Resort case. That 1976 case involved the application of the Deltona Corporation to fill coastal wetlands at Marco Island, Florida, for what at that time was also proposed to be a fully integrated, contiguous, waterfront recreational resort and

housing complex. Although the wording of both the Corps regulations and the 404(b)(1) Guidelines have changed in certain technical respects since 1976, the essential mandate of both remains unchanged. Consequently, the following language quoted from the Chief of Engineers' 1976 decision document for the Marco Island case provides the essential guidance for analyzing the instant case. The Corps will apply the following to the "practicable alternatives" test of the Guidelines:

The benefits of the proposed alteration must outweigh the damage to the wetlands resource, and the proposed alteration must be necessary to realize those benefits. In determining whether a particular alteration is necessary, our regulations require that we primarily consider whether the proposed activity is dependent upon the wetland resources and whether feasible alternative sites are available. ... I recognize that these ... applications involve part of an overall, master planned development, and that it has been suggested that the location of this particular housing development with its related facilities is dependent on being located in this particular wetlands resource in order to complete the overall planned development. Such, however, is not the intended interpretation of this wetlands policy as the Corps perceives it. The intent, instead, was to protect valuable wetland resources from unnecessary dredging and filling operations to fulfill a purpose such as housing, which generally is not dependent on being located in the wetlands resources to fulfill its basic purpose and for which, in most cases, other alternative sites exist to fulfill that purpose. ... The basic purpose of this development is housing, and housing, in order to fulfill its basic purpose, generally does not have to be located in a water resource. Some have suggested that recreational housing requires such a location. But while a derived benefit of "recreational" housing may be the opportunity to recreate in or near the water resource, the basic purpose of it still remains the same: to provide shelter. (Report on Application for Department of the Army Permits to Dredge and Fill at Marco Island, Collier County, Florida, 6th Ind., 15 April 1976, pages 91-92)

20. It follows that the "basic purpose" of each component element of the proposed Plantation Landing Resort must be analyzed in terms of its actual, non-water-dependent function.

The basic purpose of the condominium housing is housing (i.e., shelter); the basic purpose of the restaurant is to feed people; etc. The Corps will not conclude that housing, restaurants, cafes, bars, ~~retail~~ facilities, or convenience stores are water dependent; they are essentially non-water-dependent activities. Moreover, they do not gain the status of water-dependent activities merely because the applicant proposes to "integrate" them with a marina, or proposes to build them on a piece of land contiguous to a marina, or proposes that any of these non-water-dependent facilities should be "waterfront" or built on waterfront land. The concepts of "integration", "contiguity", and "waterfront" must not be used to defeat the purpose of the "water dependency" and "practicable alternatives" provisions of the Guidelines, nor to preclude the existence of practicable alternatives.

21. In light of the foregoing guidance, your re-evaluation of the proposed Plantation Landing Resort (and comparable future proposals) should proceed as follows. First, determine whether each component part of the project is water dependent or not in light of that component's basic purpose. For example, the proposed marina is water dependent, but the proposed housing units, motel, restaurant, etc., are not. Second, for component parts of the project which are not water dependent, a presumption arises that an alternative, upland site is available. The applicant may be able to rebut that presumption with clear and convincing evidence. Closely related to this inquiry is the question whether the non-water-dependent components of the project actually must be integrated with or contiguous to the water dependent part(s) in such a manner as to necessitate their location in a special aquatic site. Once again, a presumption exists that the non-water-dependent components of the project do not have to be contiguous to or integrated with water-dependent parts (e.g., the marina) to be practicable (e.g., economically viable). As stated before, the applicant may be able to rebut the presumption with clear and convincing evidence. Only if the applicant rebuts these presumptions can the Corps conclude that some (or all) of the non-water-dependent components of the overall project pass the tests of 40 C.F.R. 230.10(a)(3).

22. Another problem in NOD's approach to the plantation landing case is the District's assertion that the loss of wetlands which the project ~~would cause~~ is inconsequential, because "... project alterations ~~of wetlands~~ represents a very small portion of similar habitat within the project vicinity and coastal Louisiana... only 2.39% of the saline marsh on Grand Isle and only 0.005% of the saline marsh in coastal Louisiana..." (SOF at page 7). While this consideration may have some relevance to the decision of this case, it ignores the fact that the cumulative effects of many projects such as Plantation Landing can add up to very significant wetlands loss. The 404(b)(1) Guidelines and the Corps wetlands policy at 33 CFR 320.4(b) both



deal with cumulative losses of special aquatic sites as a significant concern. For example, the Guidelines define cumulative impacts at 40 CFR 230.11(g)(1) as follows:

Determination of cumulative effects on the aquatic ecosystem. Cumulative impacts are the changes in an aquatic ecosystem that are attributable to the collective effect of a number of individual discharges of dredged or fill material. Although the impact of a particular discharge may constitute a minor change in itself, the cumulative effect of numerous such piecemeal changes can result in a major impairment of the water resources and interfere with the productivity and water quality of existing aquatic ecosystems.

Among the mandatory provisions of the Guidelines which deal with cumulative effects is 40 CFR 230.10(c), which prohibits discharges "which will cause or contribute to significant degradation of the waters of the United States." It follows that the proposed destruction of 22 acres of special aquatic sites by the subject proposed development cannot be dismissed as unimportant.

23. An additional rationale given by NOD in this case to justify issuance of the permit with minimal required compensatory mitigation is the assertion that "the project site is eroding at a rapid rate and will be lost regardless of project implementation..." (SOF at page 7). To the extent that erosion rates can be reliably and accurately determined, the ongoing and predicted erosion of a wetland may be a legitimate consideration under the Corps public interest review. However, NOD's reliance on predicted erosion rates in the instant case is problematical, for at least two reasons. First, substantial doubt and disagreement apparently exist regarding how rapidly the marshland at issue here is likely to erode. Second, even if the more rapid projected rate of erosion is accepted as valid, that fact cannot negate the ecological value of the special aquatic site over time. That is, even if the marsh were to erode at the projected rate of the Environmental Assessment, it would still provide valuable detritus and fish and wildlife habitat for more than fifty years into the future, and would be replaced by ecologically valuable shallow water habitat even after erosion. Consequently, the marsh's status as a special aquatic site under the 404(b)(1) Guidelines remains, regardless of the erosion factor.

24. Of course, notwithstanding all of the above, in a particular, given case (which might or might not be the Plantation Landing Resort application) the Corps public interest review and the 404(b)(1) Guidelines may allow the District Engineer to grant a permit for the filling of wetlands, even for a non-water-dependent activity. This would occur only if the applicant has clearly rebutted the presumptions against filling



wetlands found at 40 CFR 230.10, and has clearly rebutted the presumptions of 230.10(a) with convincing evidence that no practicable alternative exists which would preclude his proposed fill. In such a circumstance the mitigation requirements of 40 CFR 230.10(b), (c), and (d) come into play. For some time the Corps has been working with the EPA to negotiate a mutually agreeable mitigation policy under the 404(b)(1) Guidelines. While no such common policy has yet been promulgated, the circumstances of the instant case demonstrate that some sort of interim guidance on mitigation is important.

25. In the Plantation Landing Resort case the NOD proposed to issue Corps permits authorizing the filling of 22 acres of tidal marsh and 37 acres of shallow bay bottom, according to NOD's Public Notice of 7 Dec 1987 (page 1). The EPA and NMFS contend that the proposed project would adversely impact a total of approximately 102 acres of wetlands and shallow open water bay bottom, considering both direct and indirect project impacts. Regardless of which figure for project impacts is more relevant, the fact remains that the total mitigation requirement which NOD proposed to satisfy 40 CFR 230.10 was to dispose of dredged material from the project's channel dredging operations in a manner which would create five acres of marsh, and to add thereto with subsequent dredged material from future maintenance dredging operations for the resort's channel. For impacts on wetlands and productive shallow bay bottom areas of a project such as the instant case presents, NOD's proposed mitigation requirement appears inadequate.

26. Pending the promulgation of further guidance on mitigation, NOD should require mitigation measures which will provide compensatory mitigation, to the maximum extent practicable, for those values and functions of the special aquatic site directly or indirectly adversely impacted by the proposed development activity. Of course, such mitigation measures should be developed after appropriate consultation with Federal and state natural resource agencies, but the decision regarding how much mitigation to require and regarding the form and nature of the mitigation will be made by the District Engineer.

27. The general conclusion to be drawn from the guidance given above is that the Corps should interpret and implement the 404(b)(1) Guidelines, and for that matter the Corps public interest review, in a manner which recognizes that most special aquatic sites serve valuable ecological functions, as specified at 33 CFR 320.4(b). Such valuable special aquatic sites should be protected from unnecessary destruction. Consequently, the Corps regulatory program should give potential developers of special aquatic sites the proper guidance to the effect that special aquatic sites generally are not preferred sites for development activities. Moreover, for ecologically valuable wetlands such as those at stake in the instant case, developers should understand that proposed non-water-dependent development activities will generally be discouraged.



DEPARTMENT OF THE ARMY

U S Army Corps of Engineers  
WASHINGTON, D C. 20314-1000

REPLY TO  
ATTENTION OF

CECW-OR

17 AUG 1989

MEMORANDUM THRU COMMANDER, NORTH ATLANTIC DIVISION

FOR COMMANDER, NEW YORK DISTRICT

SUBJECT: Permit Elevation, Hartz Mountain Development Corporation

1. By memorandum dated 26 May 1989, the Assistant Secretary of the Army (Civil Works) advised me that he had granted the request of the Environmental Protection Agency (EPA) and the Department of Interior (DOI) to elevate the permit case for Hartz Mountain Development Corporation. In this regard, the case was elevated to HQUSACE for national policy level review of issues concerning the mitigation and practicable alternatives provisions of the 404(b)(1) Guidelines.
2. Based on our review of the administrative record and meetings with your staff, the applicant, EPA and DOI, we have determined certain aspects of interpreting and implementing the guidelines should be clarified. Our conclusions are stated in the enclosed report titled Hartz Mountain 404(q) Elevation, HQUSACE Findings.
3. Please re-evaluate the subject permit in light of the guidance provided in our findings and take action accordingly. In order for us to comply with paragraph 8 of the Department of the Army/EPA Memorandum of Agreement, please notify HQUSACE Regulatory Branch as soon as you reach a permit decision. Questions or comments concerning this elevated case may be directed to Mr. Michael Davis of my regulatory staff at (202) 272-0201.

FOR THE COMMANDER:

Enclosure

*Patrick J. Kelly*  
PATRICK J. KELLY  
Brigadier General (P), USA  
Director of Civil Works

Mike Davis  
504 4197

17 AUG 1989

## MEMORANDUM FOR THE DIRECTOR OF CIVIL WORKS

SUBJECT: Hartz Mountain Permit Elevation Case

This is in reply to your memorandum of July 26, 1989, concerning the subject elevated permit case. We have reviewed your draft findings and concur with your conclusions. You should notify the New York District to proceed in light of the guidance provided in your findings.

The findings provide an excellent analysis of the issues in a complex case. We particularly like the format used to present your analysis and recommend it be used as a model in the future. Mr. Michael Davis, the case action officer, is to be commended for his efforts.

Since much of the guidance and information contained in the findings is applicable to all Section 404 permit applications, please distribute to Corps FOAs.

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



DEPARTMENT OF THE ARMY

U S Army Corps of Engineers  
WASHINGTON, D C 20314-1000

REPLY TO  
ATTENTION OF

CECW-OR

17 AUG 1989

Ms. Rebecca Hanmer  
Acting Assistant Administrator  
for Water  
Environmental Protection Agency  
Washington, DC 20460

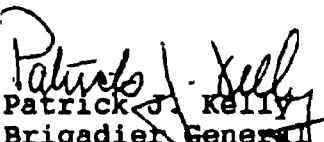
Dear Ms. Hanmer:

Pursuant to the Section 404(q) Memorandum of Agreement (MOA) between the Department of the Army and the Environmental Protection Agency, we are enclosing a copy of our "Findings" which addresses the policy issues you raised in reference to the Hartz Mountain permit case.

We have directed the Army Corps of Engineers, New York District to undertake additional review of the Hartz Mountain permit application in light of the conclusions presented in our findings. Specifically, additional information on practicable alternatives and the baseline values of the existing wetland and proposed wetland enhancement is required before a permit decision can be made. In accordance with paragraph 8 of the MOA we will notify you of the District's decision.

Your interest in this matter and the cooperation of your staff is appreciated. Questions or comments concerning this elevated case may be directed to Mr. Michael Davis of my regulatory staff at (202) 272-0201.

Sincerely,

  
Patrick J. Kelly  
Brigadier General (P), U. S. Army  
Director of Civil Works

Enclosure



# ***HARTZ MOUNTAIN 404(q) ELEVATION***

## **HQUSACE FINDINGS**

PREPARED BY CECW-OR  
25 JULY 1989

## HQUSACE REVIEW FINDINGS HARTZ MOUNTAIN PERMIT ELEVATION

The purpose of this document is to present the findings of the Headquarters Corps of Engineers (HQUSACE) review of policy issues associated with a permit application before the New York District (District). This review was undertaken in accordance with the 1985 Memoranda of Agreement (MOAs) between the Department of the Army and the Environmental Protection Agency (EPA) and the Department of Interior (DOI).

### I. BACKGROUND

On 4 August 1986 the Hartz Mountain Development Corporation requested Department of the Army authorization to discharge fill material into 97.41 acres of tidal wetlands within the New Jersey Hackensack Meadowlands District for the purpose of constructing a 3,301 unit residential housing development. Specifically, the project involves the discharge of approximately 950,000 cubic yards of fill material into wetlands dominated by common reed (*Phragmites communis*). A public notice describing the proposal was issued on 22 May 1987, and a public hearing was conducted in June of 1987. A number of comments both for and against the project were received in response to the public notice and hearing. Three Federal agencies, EPA, Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) all objected to the issuance of a permit for the proposed project.

Interagency coordination on the permit application proceeded for approximately 18 months during which time additional information was submitted by Hartz Mountain and their consultants. In July 1988 the District completed the preliminary permit decision process and determined that the project was not contrary to the public interest provided that Hartz Mountain comply with certain restrictions and conditions aimed at minimizing the environmental impacts of the project. Since the Federal resource agencies continued to object to permit issuance, a meeting was held with each agency in accordance with the procedures of the MOAs. As a result of these meetings, each agency provided detailed written comments on their specific concerns. In general each agency's concerns centered on the application of the 404(b)(1) Guidelines practicable alternative requirements, the District's contention that the wetland was of very low value, and the adequacy of the mitigation plan to offset environmental impacts. The District forwarded these comments to Hartz Mountain for response and/or rebuttal. After considering the information contained within the

administrative record, the District completed decision-making in January 1989. Again, the District determined that the permit should be issued. In response to the District's decision, EPA, FWS and NMFS requested meetings with the North Atlantic Division Engineer (NAD) to discuss the permit decision in accordance with Paragraph 6 of the MOAs. As a result of these meetings, NAD forwarded comments and suggestions to the District on 8 March 1989. The comments and suggestions concerned the language of four special conditions which NAD recommended be reworded to increase the viability of the mitigation requirements. The District incorporated these recommendations into the permit conditions and a decision to issue the permit was made on 28 March 1989. On 28 March 1989, EPA, FWS and NMFS were given written notice of the District's "Intent to Issue" the permit.

In accordance with the MOAs, in letters of April 24 and 25, the DOI and EPA, respectively, requested that the Assistant Secretary of the Army (Civil Works) [ASA(CW)] elevate the Hartz Mountain permit decision for higher level review. NMFS, while continuing to object to the project, did not request elevation. On 26 May 1989, ASA(CW), based on recommendations from HQUSACE, granted the DOI and EPA elevation request. ASA(CW) granted the request and forwarded the action to HQUSACE for national policy level review of 404(b)(1) Guidelines issues concerning mitigation and the analysis of practicable alternatives. The elevation request was not based on insufficient interagency coordination.

The information in the following sections presents the results of the HQUSACE review of the complete administrative record of the Hartz Mountain permit application. Clarification of information contained in the record was obtained through meetings with the applicant and associated consultants, the District and NAD staff, the FWS and EPA.

In terms of environmental protection, the 404(b)(1) Guidelines (Guidelines) form an essential component of the Corps' 404 regulatory program. The Guidelines (40 CFR 230) are the substantive environmental criteria to be used in evaluating the impacts of discharges of dredged or fill material. In accordance with the Corps regulations (33 CFR 320 - 330), a 404 permit cannot be issued unless it complies with the Guidelines. HQUSACE's review of this case focused on the policy issues concerning compliance with the Guidelines.

## **II. PRACTICABLE ALTERNATIVES**

A key provision of the Guidelines is the practicable alternative test which provides that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse

impact on the aquatic ecosystem" [40 CFR 230.10(a)]. In this respect, if a 404 discharge may reasonably be avoided, "it should be avoided."

In addition to the basic alternatives test, 230.10(a)(3) establishes a rebuttable presumption against discharges into "special aquatic sites" for non-water dependent activities. A non-water dependent activity does not require access or proximity to or siting within a special aquatic site to fulfill its "basic purpose." Practicable alternatives to non-water dependent activities are presumed to be available and to result in less environmental loss unless clearly demonstrated otherwise by the applicant. The Hartz Mountain project (housing) is clearly a non-water dependent activity. This fact is well documented in the District's decision documents and has not been contested by the applicant. Therefore, the burden of proving that no practicable alternative exists is the sole responsibility of Hartz Mountain, not the District or resource agencies.

A prerequisite to evaluating practicable alternatives is the establishment of the "basic purpose" of the proposed activity. It is the responsibility of the Corps districts to control this, as well as all other aspects of the Guidelines analysis. While the Corps should consider the applicant's views and information regarding the project purpose and existence of practicable alternatives, this must be undertaken without undue deference to the applicant's wishes. These general issues were discussed and guidance provided in the HQUSACE findings for the "Permit Elevation, Plantation Landing Resort, Inc." dated 21 April 1989, a copy of which has been provided to all Corps divisions and districts. Much of the legal and policy guidance in that document is generally applicable to this case, and need not be repeated herein.

In this case, Hartz has clearly stated that their project purpose was to construct 3,301 units of residential housing in the IR-2 area. In fact, a July 86 "planners report" submitted with the permit application stated that "a site geographically located outside the Meadowlands District would not fulfill the 'basic project purpose' of 401(b)(1) [sic] of the Permit program." The IR-2 site is an area designated by the Hackensack Meadowlands Development Commission's (HMDC) master plan as "Island Residential" housing. Hartz acquired ownership to 194 acres of the 238 acre site in 1979. Based on concerns of the District, Hartz ultimately modified the project purpose to expand the potential project area to New Jersey Housing Region 1 (Hudson, Passaic and Bergen Counties). However, Hartz asserts that its purpose remains the construction of a large scale (3,301 units) housing development. While it appears that the District made a conscious effort to view the project from a more basic purpose perspective, this was not the approach taken by Hartz in evaluating potential alternative sites [404(b)(1) evaluation page 5]. This was verified by Dr. Harvey

Moskowitz, Community Planner and consultant for the applicant, who conducted the analysis of alternative sites. This approach seriously flaws the validity of the alternatives analysis and is inconsistent with the Guidelines. Limiting project sites to those that can facilitate a 3,301 unit development may preclude the evaluation of otherwise practicable alternatives. Acceptance of this very restrictive alternatives analysis negates all attempts to otherwise more generically define basic project purpose. In this case, in the "Summary Discussion of the Availability of Practicable Alternatives" [404(b)(1) evaluation page 13] the District states that "There are no practicable alternative sites that are reasonably available to the applicant for the proposed construction activities within the Northeastern New Jersey Region which would meet the applicant's project purpose and the stated need for the project" (emphasis added).

The Guidelines alternatives analysis must use the "basic project purpose", which cannot be defined narrowly by the applicant to preclude the existence of practicable alternatives. On the other hand, the Corps has some discretion in defining the "basic project purpose" for each Section 404 permit application in a manner which seems reasonable and equitable for that particular case. It is recognized that this particular case may be unusual, because it involves unique issues of zoning and land use planning by the HMDC and the apparent scarcity of undeveloped land in the Region 1 area. However, federal concerns over the environment, health and/or safety will often result in decisions that are inconsistent with local land use approvals. In this respect, the Corps should not give undue deference to HMDC or any other zoning body.

At the request of the District, Hartz conducted a search for potential alternative sites in Region 1. Ultimately, 43 sites were identified and evaluated by Hartz's consultant, Dr. Moskowitz. Each site was evaluated based on a set of criteria developed by Hartz. The District reviewed the criteria and concluded that they were "appropriate for reviewing sites for practicability with regard to the Section 404(b)(1) Guidelines." While this approach may be an acceptable method for evaluating alternative sites, we are concerned that some of the criteria were biased to the extent that only sites that meet the applicant's purpose were considered. For example, alternative sites less than 50 acres were not considered practicable because they would not facilitate a 3,301 unit development and therefore "achieve the applicant's stated project goals" [404(b)(1) evaluation page 8]. On this subject the District states:

"Based on the applicants goal's for a profit, it must be presumed that the size of a potential alternative site is of primary importance. A smaller parcel of land could be considered a practicable alternative for a residential housing project although it could not accommodate a

project nearly the size that is the subject of the present permit application." [404(b)(1) evaluation page 7]

In this case the District's administrative record gives the appearance of having given too much deference to the applicant's narrowly defined project purpose. This may have very well resulted in the exclusion of otherwise practicable alternatives.

The District goes to great length to explain the criteria utilized by the applicant and the justification for each [404(b)(1) evaluation page 8]. However, no information is provided in the decision documents on the specific sites, the ratings they received, or why they failed as practicable alternatives. At a minimum, a table of the sites listing this information should have been included in the 404(b)(1) evaluation. In regard to the actual evaluation of the 43 potential sites, we observed at least a few discrepancies in the data submitted by the applicant. For example, two adjacent sites (4 and 5) were given different ratings on accessibility to public transportation. Of more significance, is the fact that the IR-2 site was not evaluated against the criteria used for the other sites. Our estimates indicate that the site may in fact not pass as a practicable alternative based on the applicant's own system for analyzing alternatives. Failing to evaluate the project site when using this type of evaluation system is inappropriate and indicates that the applicant has not rebutted the presumption against the discharge of fill material into special aquatic sites.

Throughout the decision documents the District mentions the need for housing in the Region and references New Jersey Council on Affordable Housing (COAH) information [Statement of Findings (SOF) page 14, 404(b)(1) evaluation page 11, Environmental Assessment (EA) page 2]. While the need for all types of housing in the Region may be very real, we are concerned that the administrative record does not clearly demonstrate the existence of such a need. The COAH information focuses on the need for low to moderate income housing and this portion of the housing need is not questioned. However, it appears that the District relied on the COAH data to substantiate the need for housing above the moderate income level. Admittedly the COAH information translates an actual need of 42,534 low/moderate units to an overall figure of 213,000 housing units. This is based on the number of market rate units that may be required to support the actual low/moderate housing needs. Use of this information to justify an overall housing need may not be appropriate. Further, reference to a COAH letter on page 11 of the 404(b)(1) evaluation is misleading if not inaccurate. The District states:

"The 27 September 1988 correspondence from the State of New Jersey's Council on Affordable Housing (COAH) substantiates the applicant's showing that no reasonably available

practicable alternative sites to the proposed development exist by focusing on the 'compelling need' for locating the housing in Secaucus at the Mill Creek site, at the densities mandated by the Hackensack Meadowlands Development Commission zoning regulations."

What the referenced COAH letter really states is that there is a need for 42,534 low to moderate income units and that it may take four market units per low/moderate unit to support such housing. In regard to the "compelling need" at the Mill Creek site (IR-2), the COAH letter states:

"The COAH supports the development of affordable housing units at the Mill Creek site as a meaningful step toward addressing the compelling need for such housing in Secaucus and Region 1." (emphasis added)

The proposed project will provide a maximum of 330 (10% of total) low to moderate income units at the IR-2 site. The administrative record and discussions with the applicant indicate that it is likely that only one half of the 330 units will actually be built at the IR-2 site. The decision documents consistently state that 10% to 20% of the project will be dedicated to low to moderate housing. This is clearly not the case and the record should reflect such. Further, the need for housing of any type and the zoning requirements of HMDC cannot override the Guideline's requirement to select the least damaging practicable alternative.

#### CONCLUSIONS:

1. For purposes of this case only, the basic project purpose should be defined as "construction of a large scale, high density housing project in the Region 1 area." That does not necessarily mean a project of 3,301 units in one contiguous location as proposed by Hartz. The District should determine the minimum feasible size, circumstances, etc., which characterize a viable large scale, high density housing project. The District may require the applicant to provide information that facilitates completion of this determination. Clearly Hartz has previously determined that a development of 2,748 units would be feasible. It may very well be that a smaller development (i.e., < 2,748 units) would also be viable. The permit decision documents should be corrected to reflect the project purpose noted above (i.e., references to satisfying the applicant's project purpose should be deleted).

2. Once the minimum feasible size, etc. has been determined in accordance with (1.) above, a revised alternative analysis should be completed by Hartz. The District must carefully evaluate the criteria used to compare alternative sites. The alternatives analysis must be objective and balanced, and not be used to provide a rationalization for the applicant's preferred result (i.e., that

no practicable alternative exists). The IR-2 site must be included in the alternatives evaluation and added to the administrative record.

3. The alternative site data should be made part of the decision documents. This should include a listing of all sites, their evaluation scores and a summary of the final determination of practicability.

4. Information on the need for housing must be accurately cited in the decision documents and additional information on the overall housing need (i.e., above moderate level) should be provided.

### **III. MITIGATION<sup>1</sup>**

As previously discussed, the Guidelines establish the substantive environmental criteria to be applied in the evaluation of potential impacts associated with discharges of dredged or fill material into waters of the United States. In addition to the "practicable alternative" test in 230.10(a), the Guidelines state that a discharge cannot be approved, except as provided under 404(b)(2), if it results in significant degradation of waters of the United States and, unless all appropriate and practicable steps have been taken to minimize potential adverse impacts on the aquatic ecosystem [230.10 (c) and (d)]. These form an important part of the current approach of requiring mitigation in the 404 regulatory program. Mitigation is also a required consideration under the Corps' Public Interest Review [33 CFR 320.4(r)].

As a general rule, once the least damaging practicable alternative has been selected, appropriate and practicable steps must be taken to mitigate the project impacts. Determining the amount and type of mitigation is often difficult at best. In particular, compensatory mitigation for wetlands loss engenders a considerable amount of controversy and discussion among regulatory and resource agencies and the development community. In order to improve consistency, Army and EPA are currently working on a 404 mitigation policy.

Pending the promulgation of the joint mitigation policy, the Corps should require mitigation measures which will provide compensation, to the maximum extent practicable, for all values and functions that are lost or adversely impacted as a result of

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<sup>1</sup>The discussion of mitigation that follows, and any subsequent requirements, have no bearing on the previous discussion and requirements concerning the availability of practicable alternatives.



a proposed development in waters of the United States. As with other permit specific Guidelines and public interest decisions, a determination of mitigation requirements will be made by the Corps. Such decisions should be made after appropriate consultation with Federal and state resource agencies. The Corps decision must be made in a manner that recognizes the ecological functions of special aquatic sites, in this case wetlands.

A prerequisite to developing a wetlands compensatory mitigation plan is the establishment of values and functions of the existing wetland system. Without the benefit of baseline information, the permit decision-maker cannot determine an appropriate mitigation level to find compliance with the Guidelines. As a matter of policy, the Corps should not make permit decisions before obtaining the necessary and appropriate information on the value of the specific resource that would be lost to a proposed discharge of dredged or fill material if the permit is granted. This information may be obtained from the applicant, in-house studies, technical assistance from experts at the Corps Waterways Experiment Station (WES) or universities and previously published reports to mention only a few sources. It is incumbent upon the Corps to review the data carefully to ensure that the information is scientifically sound and can be supported if challenged.

In the Hartz Mountain case an extensive mitigation "concept" was proposed by the applicant. The District relied heavily on the potential success of this concept in reaching a decision to issue the permit. The basic premise of the Hartz mitigation concept was that the existing wetland system was highly degraded and of very low value. In this regard, Hartz maintained that they could enhance low value wetlands (both on-site and at two off-site locations) to a point where they could compensate for the direct loss of 97.41 acres. This assumption is based on a presumed "successful" mitigation project currently under way by Hartz on another part of the IR-2 site. This 63 acre mitigation project was required as part of a 1983 Department of the Army Permit to fill 127 acres of wetlands for commercial and industrial development. To date, no comprehensive evaluations have been completed to substantiate the claims of success on this mitigation project in terms of overall wetland values. For the current project, Hartz determined, using the FWS Habitat Evaluation Procedure (HEP), that they would have to enhance 93.74 acres of wetland and create 22.12 acres of open water canals to compensate for the loss of 97.41 acres. In addition, Hartz proposed 8.84 acres of "raised islands" for upland habitat and 9.40 acres of wetlands preservation.

Throughout the District's review of this case there as been significant disagreement between Hartz and the resource agencies on the actual value of the *Phragmites* dominated wetlands within the project area. The applicant's HEP, which was modified several times, concluded that the area has "relatively low existing fish

and wildlife and ecological value" (emphasis added) (EA page 6). An Advanced Identification field team from the District, EPA, FWS, NMFS, New Jersey Department of Environmental Protection and HMDC conducted a analysis of the Hackensack area using the Corps Wetland Evaluation Technique (WET). According to the District, the "draft WET documents have shown that the general regions encompassing the proposed development site and mitigation areas have high value potential for fish and wildlife, as well as the potential for having moderate to high general ecological value ..." (emphasis added) (EA page 6). The District has indicated that the WET analysis was not specific to the project area and was more of a "windshield" survey. EPA and FWS requests for permit elevation were based, in part, on the lack of definitive data on the values of the project and mitigation sites. FWS continues to question the validity of the applicant's application of the HEP (a FWS methodology) process.

Based on the decision documents for this application, it appears that the District generally concurred with Hartz on the low wetland value of the project area. Their position was based on the HEP evaluation and other environmental data collected by the applicant. However, the addition of Special Conditions (A.) and (D.) seem to indicate that their support was somewhat tacit and that questions on the wetland values remained. Condition (A.) requires Hartz to perform a site specific WET using environmental data from other agencies and the HEP generated information. This information is to be used to "confirm that the proposed wetland mitigation values compensate for the aggregate value of the wetland functions lost to the filling activities..." Special Condition (D.) requires Hartz to undertake a comprehensive sampling and data collection program which includes the establishment of baseline information for the project area. While Hartz has provided biological, chemical and physical data in the form of various surveys and studies conducted over the years, an updated comprehensive scientific report on the existing conditions does not exist in the administrative record. From a policy perspective, we believe that a valid Guidelines determination cannot be made without the benefit of an appropriate assessment of the pre-project values of the impacted resource. This information is equally important in making the Corps public interest determination. Further, this assessment should be completed before a final permit decision is reached. The level and sophistication of information required will vary from application to application depending on the size and nature of the project. It is recognized that in a small number of cases (e.g., unauthorized fill), baseline information may not be readily obtainable and best professional judgement must prevail. However, the piecemeal approach of assessing current wetland values and the reliance on such information as an "April 1986 comprehensive, natural resources survey of the subject parcels and the Hackensack River" are causes for concern.

According to Hartz, completing the proposed mitigation would result in a 20% net increase in overall estuarine value in the project area. For purposes of the mitigation discussion the project area is defined as the 231.51 acre universe of the IR-2 site and the two off-site mitigation areas. The existing estuarine value of the project area was estimated at 38% of its potential. A 20% increase would result in a project area that functions at 46% of its potential estuarine value. When the 97.41 acres of project fill, 8.84 acres of "islands" and the 9.40 acres of preservation are removed from the project area<sup>2</sup>, 115.86 acres remain for marsh enhancement and open water. In order to obtain their estimated 20% overall increase Hartz will have to enhance the 115.86 acres to 91% of their potential estuarine value. In this respect, we are concerned about Hartz's, or anyone's, ability to increase values to such a level. If the open water is subtracted, the remaining 93.74 acres of wetland would have to be enhanced to 113% of its potential estuarine value. Clearly, this would not be possible. In either case additional acreage may be required to achieve the 20% net increase in values required.

Another issue that is of concern is the inclusion of "fringe" wetlands and open water in the mitigation plan. Over 33 acres of the mitigation credit consist of a series of canals and adjacent narrow strips (fringe) of intertidal plantings among 3,301 housing units. The overall wetland value of this part of the mitigation should be documented. The HEP evaluation looked at this area as one 33.85 acre tract and not as one that was dissected by a large residential development. The applicant's main purpose for this part of the plan may very well be aesthetics.

An issue that was initially discussed in the HQUSACE permit elevation recommendations to ASA(CW), was the proposed issuance of the Hartz permit prior to receipt of a detailed mitigation plan. In this case, permit conditioning appears sufficient to ensure that a detailed plan will be submitted for District approval prior to the discharge of fill material. However, at a minimum, the permit plans should have provided enough information to accurately reflect the work proposed (e.g., typical cross sections, etc.).

#### CONCLUSIONS:

1. Hartz should be required to complete a comprehensive baseline study of the IR-2 site, off-site mitigation areas, and the previous 63 acre mitigation site before a final permit decision is made. The District, in consultation with FWS, EPA and NMFS will determine the scope of the study and the methods used. The final call on the study will be the District's.

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<sup>2</sup>Correctly, these areas were not counted by the applicant or the District in determining the amount of marsh enhancement required.

2. The District, not Hartz, should complete a site specific WET evaluation before making a permit decision. We strongly encourage the District to utilize experts from WES to undertake this task. Funding for work of this nature has previously been provided to WES by HQUSACE and initial discussions have confirmed the availability of the appropriate WES staff.

3. The wetland replacement value of the fringe wetlands and open water at the IR-2 site should be reevaluated. Documentation of its value should be included in the record.

4. Once information is obtained from the studies noted in paragraphs one through three above, a determination of the value of the existing *Phragmites* marsh and, as appropriate, the amount of compensatory mitigation required to compensate for the lost resource should be completed. Based on those determinations, a final permit decision should be made.

5. After completion of the above, if a decision is made to issue the permit, Hartz should be required to submit more detailed permit plans. While we do not expect final drawings, basic information such as access between islands at the IR-2 site and typical pre and post project cross sections at all mitigation sites should be included.

#### IV. GENERAL CONCLUSIONS

A review of the voluminous administrative record reveals the extensive amount of effort on the part of the District to evaluate this application. Severely understaffed and working in a difficult geographic area, they should be commended for their overall accomplishments in the regulatory program.

From the guidance presented in this document, the general conclusion should be drawn that the Army Corps of Engineers is serious about protecting waters of the United States, including wetlands, from unnecessary and avoidable loss. The Corps districts should interpret and implement the Guidelines in a manner that recognizes this. Further, the Corps should inform developers that special aquatic sites are not preferred sites for development and that non-water dependent activities will generally be discouraged in accordance with the Guidelines. When unavoidable impacts do occur, the Corps will ensure that all appropriate and practicable action is required to mitigate such impacts. The mitigation must be properly planned with stringent permit conditions to ensure that it accomplishes stated objectives. Compliance monitoring by Corps districts must be an integral part of this process.



## NON-REGULATORY WETLANDS ACTIVITIES

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### INTRODUCTION

In 1985 Administrator Thomas initiated a Strategic Policy Initiative on Wetlands. This fundamental review of EPA's wetlands program concluded that EPA should expand its program beyond traditional Section 404 permit review and enforcement to take advantage of other opportunities to protect wetlands. New or expanded efforts were recommended:

- Influence federal agency policies and programs
- Develop State, Indian and local programs
- Public information and education
- International activities
- Integrate consideration of wetlands into EPA programs
- Wetlands Strategies
  - national directions
  - ecosystem strategies
  - wetlands planning
- Improve the scientific information base

The Office of Wetlands Protection was formed in 1986, and the Wetland Strategies and State Programs Division was charged with carrying out the new initiatives. One additional recommendation resulted from the Strategic Policy Initiative - increase the use of Advance Identification in the Section 404 Program. This was integrated with EPA's traditional Section 404 responsibilities in the Regulatory Activities Division.

## FEDERAL AGENCY POLICIES AND PROGRAMS

*Objective: To encourage and assist other federal agencies to manage programs to avoid adverse impacts on wetlands and to take advantage of opportunities to contribute in a positive way to the protection of wetlands*

*Priorities:*

- Floodplain Management-- In past years federal floodplain management programs have emphasized approaches to reducing flood losses that have been detrimental to sensitive natural resources located in the floodplain. The majority of the Nation's wetlands are located in floodplains. Floodplain management policies need to be amended to address flood loss reduction in a manner that better protects the natural values of floodplains. Key activities:

- EPA, OWP, as a member of the Interagency Floodplain Management Task Force, is participating in an intensive multi-year review of the federal floodplain management program. The results are expected to establish program directions for the next decade. OWP has been an increasingly active member of the task force, and other task force members (e.g. COE, FEMA, SCS, TVA) are increasingly responsive to the need for responsibly addressing ecological issues (specifically wetlands) in the program review. EPA, OWP, at the Taskforce's request, is leading a project to hold a prototype workshop in Knoxville, Tennessee bringing various state and federal agencies together to identify ways to protect natural values of the floodplain while reducing flood losses. Region IV staff have indicated an interest in participating in workshop planning and implementation.

- Working through the same Taskforce and with the National Park Service, EPA is providing information and assistance for local river corridor management approaches. We have sponsored three conferences on river corridor management planning over the past two years: Washington, DC; Colorado Springs, CO; and Knoxville, TN, and a fourth is planned for April 25-28 1990 in Portland, OR. We also supported a series of public meetings around the country in January 1989 to gather public input to assist Congress in drafting legislation (Headquarters and Region I in New England). The resulting bill, HR 4250 "The State and Local Multi-Objective River Corridor Assistance Act of 1990", was introduced in March. We are conducting a pilot river corridor project (emphasizing wetlands in the watershed) with the National Park Service to link the Park Service's Delaware River Program and OMEP's National Estuary Program on Delaware Bay. Region III is involved in this effort.

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- **Wetlands Management on Public Lands--** Many wetlands are in public ownership and policies that better address wetland protection and restoration need to be developed. Current policies of various public land management agencies may conflict with or ignore wetlands protection. The no net loss goal needs to become an integral piece of public land management policy and the agencies appear receptive at the staff level. Key activities:

- OWP has initiated efforts with key federal land management agencies to encourage and coordinate wetlands protection activities. These agencies include Forest Service, Bureau of Land Management, Bureau of Reclamation, Soil Conservation Service, Corps of Engineers, and National Park Service. OWP and the Forest Service have also encouraged dialogue at the regional level by sponsoring joint meetings between headquarters and regional staff to discuss issues of regional concern in Regions V and VIII.

- EPA sponsored a wetlands and land management workshop in October 1990, in Harpers Ferry, West Virginia. At the workshop nine federal agencies developed a set of recommendations identifying future cooperative activities. An informal group, called the Interagency Wetlands Coordinating Body began meeting regularly following the workshop to begin carrying out the recommendations. The federal land management agencies are interested in setting an example for the country on how to implement the President's no net loss goal.

- **Agricultural policy--** perhaps the most promising arena for advancing protection of wetlands. Key activities:

- OWP is an active member of the EPA Agriculture Policy Committee and we are working with OPPE, USDA, FWS and outside agricultural and environmental interests on conservation provisions for the 1990 reauthorization of the Farm Bill.

- During the fall of 1989, OWP participated on a USDA Wetland Analysis Team to develop recommendations for the Conservation Title of the 1990 Farm Bill. In February 1990 OWP began participating on an internal SCS committee to develop a wetlands restoration initiative.

- We are engaged in ongoing discussions with USDA concerning programs and policies, and public outreach to the agricultural community on wetlands.



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*Issues:*

- After many years of budget pressures on federal domestic agencies, many feel squeezed in carrying out their current programs. It will be difficult to persuade them to divert resources to new initiatives for wetlands protection, and OMB may resist any budget requests from the agencies for increased funding for wetlands protection.
- Strong leadership from the Domestic Policy Council to re-direct agency priorities is important, but it remains to be seen if it will be forthcoming.

*Regional Opportunities:*

- The 404 Program cannot, even under the best of circumstances, achieve the President's no net loss goal by itself. OWP has identified a great deal of additional progress that can be accomplished working with federal agencies in areas unrelated to the 404 Program. The federal agencies have expressed substantial interest in working with EPA to accomplish this : at headquarters, and we would like to extend these growing cooperative relationships to the Regional level. Headquarters staff will work with interested Regions to identify strategies for initiating and implementing these activities. Examples include:
  - Work with SCS to encourage enrollment of wetlands into the Conservation Reserve Program.
  - Encourage wetlands restoration on private lands in cooperation with SCS and FWS.
  - Hold a regional workshop on wetlands on Federal lands to develop an agenda for regional cooperation similar to the Harper's Ferry Workshop.
  - Meet with the Forest Service and/or BLM to discuss land exchange policies, riparian restoration initiatives, and any other issues of concern identified.
  - Work with flood loss reduction program staff within COE, FEMA, SCS and other Federal agencies to identify ways to achieve flood loss reduction while protecting the natural values of the floodplain, including wetlands.
  - Hold a regional conference on multiobjective river corridor management focussing on innovative methods for restoring rivers and wetlands.

# STATE, LOCAL, AND TRIBAL WETLANDS PROGRAMS

*Objective: To provide encouragement, guidance and assistance to other levels of government to develop programs and improve protection of wetlands within their jurisdiction*

**Priorities:**

- Serve as clearinghouse to provide useful information on State programs. Key activities:
  - We are working with the Conference of State Legislatures to produce a brochure on the values of wetlands (why protect wetlands) and various options available to protect wetlands.
  - We have a contractor working on a State wetlands protection funding study. This study will show what States are doing to finance their wetlands protection programs. States will have a range of options available for them to consider within their State.
  - We are working with the Association of Wetlands Managers to simplify and update the State wetlands data files. These files describe what each State is doing to protect their wetlands resources. They will include a summary of statutory and regulatory authorities, scope of jurisdiction, definition of wetlands, activities regulated, permit processing procedures, environmental review guidelines, program contact, and any other pertinent information.
- Provide regulations, guidance and assistance on State and Tribal programs.
  - We have published proposed regulations on treating Indian Tribes as States for the purpose of assuming the Section 404 permit program. Final regulations are expected in the fall of 1990.
  - We have published joint guidance with Office of Water Regulations and Standards (OWRS) on developing water quality standards for wetlands. This will help States strengthen their Section 401 water quality certification programs. This is especially useful in those States that do not have specific statutory authority to develop a wetlands protection program.
  - We have developed joint guidance with OWRS for linking the wetlands protection program with the non-point source program.

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- We have initiated our new grant program to support development of new State programs or enhancement of existing programs. The reaction to the first year of the grant program (over 30 States applied) was encouraging and should help get the additional funding (total of \$5 million) requested in the Administration's budget request.
  - We have developed an Indian Tribe wetlands program implementation strategy. OWP will work to include Indian Tribes in the partnership (Federal/State/local) to protect our national wetlands resources.
  - We will encourage States to become more involved in the Section 404 regulatory program by encouraging joint permit processing, development of appropriate State program general permits, and other means that will encourage direct involvement of States in the program.
  - We initiated a local government outreach program to encourage local wetlands protection programs.
  - We are developing a wetlands educational strategy for local governments through the University of New Orleans. This will include a guidance strategy to be used by States or Regions to help local governments develop wetlands protection programs, and a handbook for the local government to use.
  - We are preparing detailed case studies of 3 local programs for distribution to interested local governments.
  - We will work with States as they try to implement the goal of no net loss either by enacting new or revised legislation or regulations, or as they develop and implement their existing wetlands protection programs
  - We will continue to monitor State activity in regard to wetlands protection efforts. There is considerable activity at the State level:
    - 1 State has assumed the 404 program (MI)
    - 1 State is preparing assumption documents (NJ)
    - 4 States are studying assumption (WI, AL, DE, NH)

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-15 States have comprehensive wetlands protection programs (CN, FL, ME, MD, MA, MI, NH, NJ, NY, OR, PA, RI, VT, WA, WI)

-24 States have limited wetlands protection programs (mostly coastal States)

-7 States are working on wetlands legislation (DE, IL, NC, NY, PA, SC, VT)

-7 States are working to build on or improve existing wetlands protection programs (AZ, DE, ME, MD, MO, NY, PA,

-5 States are improving their 401 water quality certification process (OH, MI, NC, SC, VA)

***Issues:***

- States are becoming more interested and involved in the wetlands protection program. Fiscal constraints and interest group backlash are problems that face the States as they develop and implement their wetlands protection programs.
- Wetlands protection is not just a Federal program. State, Tribal, and local governments must join with the Federal government to effectively protect the resource. Each level of government has an array of tools available to it; working together increases the protection of the resource.

***Regional Opportunities:***

- Advocate the new State wetland grant authority to enhance State wetlands programs. We have received strong applications from many States -- Regional efforts to make sure grant money is spent on time and productively will assist in gaining future funding.
- Some regions are working closely with the Corps and the States to integrate the Section 404 program with existing and developing State regulatory programs. This is an opportunity to protect wetlands better, reduce burdens on the regulated public and deflect some of the negative views of the more active Section 404 program at the Federal level.

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- Many Regions are actively working with States as the States develop wetlands protection programs. Some States seem receptive to establishing no net loss goals and regulatory programs that cover a broader range of activities than the Section 404 program. This is an opportunity to fill some of the regulatory gaps in the Section 404 program, especially the limitation in coverage only to discharges of dredged and fill material.
  - There is considerable interest among local governments in some areas to enhance their protection of natural resources, including wetlands. This is an opportunity that Regions can take advantage of. Such programs would not take the place of either Federal or State programs, rather they can be another link in the total patchwork of wetlands protection. If strong local programs exist, Regions should work with the Corps to integrate them into the existing programs.

## PUBLIC INFORMATION AND EDUCATION

*Objective: to improve the public's understanding of what wetlands are, their functions and values, ways to protect them, and EPA's role in wetlands protection*

### *Priorities:*

- Over the past few years we have prepared a variety of materials for use in our public outreach program: a wetlands booklet (Vital Link); a bibliography; slide shows; a mailing list; fact sheets; a wetlands display; Public Service Announcements, and an update of the Golden Guide Series book "Pond Life" to better address wetlands (to be published in 1990).
- While there is certainly a heightened awareness of the value and importance of wetlands, we believe that continued focus is needed to educate the general public. Many of our activities will be targeted towards youth, for example, through educational curricula and adopt-a-wetland programs.

### *Regional Opportunities:*

- Regions have been active in distributing existing information such as Vital Link and the Wetlands are Wonderlands poster to the public and we encourage that this effort continue. Many Regions have also been involved in developing and distributing regional public information products. One particularly important area of outreach in the immediate future is to get accurate information out on the Section 404 program. There is considerable misinformation on this program that has many constituencies, such as agriculture, concerned about problems that may not exist or may not be as serious as perceived. We suggest a broad dissemination of the brochure "Highlights of Section 404" that we provided to each Region in January of this year.
- Encouraging communities or other groups to "adopt a wetland" or encouraging States to establish an adopt a wetland program is another opportunity. We will distribute copies of the brochure on adopt a wetland that we are developing for Earth Day 1990 to each Region in the near future.

## INTERNATIONAL ACTIVITIES

*Objective: To provide assistance to other nations and multi-national initiatives to protect wetlands, and to use international agreements effectively to improve protection of U.S. wetlands*

***Priorities:***

- Over the last year we have identified opportunities for EPA to participate effectively in the international arena. Key activities:
  - we are promoting the concept of ecotourism as a way to allow local economic development in a way that protects sensitive natural resources. We have developed Guidelines for public participation in ecotourism projects and participated in the Ecotourism Conference in Yucatan, Mexico, April 1989.
  - we are developing links with the Convention on Wetlands of International Importance Especially as Waterfowl Habitats (Ramsar Convention) and are working with other agencies in developing a Ramsar Interagency Task Force and U.S. National Ramsar Committee for Non-Government Organizations (NGO's). We plan to reinforce our participation with a small grant.
  - we are establishing small grants with the Asian Wetland Bureau and the International Union for Conservation of Nature and Natural Resources.
- OWP plans to seek opportunities to influence the kinds of projects that are planned in developing countries to avoid the massive wetlands destruction that has sometimes occurred in the past. Key activities:
  - try to influence multilateral development banks on their environmental policies and the projects that they fund
  - serve as a clearinghouse for technical expertise for environmental analysis of wetland impacts of development projects
  - promote the concept of sustainable use of natural resources

## INTERNAL EPA PROGRAMS

*Objective: to make EPA a model federal agency for avoiding adverse impacts to wetlands and for using our programs creatively and effectively to advance the cause of wetlands protection*

*Priorities:*

- To integrate wetlands into the water quality management program that has in the past emphasized open waters and point source controls. We are working to bring wetlands into the mainstream of the water program. Key Activities:

- we are extending State water quality standards (WQS) to wetlands. OWP and OWRS are coordinating on several related activities, including (1) the revision of the WQS regulation to require the inclusion of wetlands in the definition of "State waters" and the application of the minimum requirements, (2) the development of national guidance on WQS for wetlands to be included in the FY 91 Operating Guidance, (3) inclusion of wetland standards in the WQS Framework, (4) direct support to selected pilot states (WA, LA, NC) and (5) regional workshops.

- We are encouraging States to extend monitoring programs to wetlands. Consistent nationwide monitoring of wetland quality and quantity (acreage) can provide the basis for a wide range of regulatory and non-regulatory activities. One priority is to develop a system to track progress in meeting the "no net loss goal." OWP and OWRS are working to address wetlands in the Section 305(b) reporting process, both through the 1988 report and the Guidelines for the 1990 reports. OWP and OMEP are coordinating to apply the Waterbody System (OWRS's computerized system for tracking waters for 305(b)) to wetlands and estuaries.

- To integrate wetlands protection into water program activities which share a landscape/watershed approach to protection. Key Activities:

- OWP and OWRS are developing national guidance on the coordination of the wetlands and nonpoint source (NPS) control programs. Many wetlands provide water quality benefits. Within the landscape, the protection and restoration of wetlands can help us to achieve our NPS control objectives. In return, information on those wetlands that provide water quality functions can then be used by wetland programs (Federal 404 and State programs) as the basis for taking regulatory actions.

- OWP and OMEP are incorporating wetland considerations more



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effectively into National Estuary Program (NEP) conferences and Near Coastal Water (NCW) programs. Activities include review and additions to the NEP primer, review of NEP nominations, review of NCW demonstration project proposals and a series of OMEP / OWP brown bags to raise awareness of habitat issues in the coastal zone.

o To work with the RCRA and CERCLA programs to address the ecological effects of waste sites on wetlands in addition to traditional human health concerns. Key Activities:

- With funding from Superfund and ORD, we are developing a data base that will identify the ecosystem type found in and around all sites on the National Priority List (NPL). The database will identify whether the site is in a wetland, deepwater habitat, or upland ecosystem. It will also identify the type of wetland. The National Wetlands Inventory maps developed by the U.S. Fish and Wildlife Service are the primary source of information. The data will be available on computer and hard copy provided to HQ and the Regions. The information will help both programs conduct screening to determine whether sites have a high potential for impacting wildlife.
- We review and comment on Superfund and RCRA regulations, policies and guidance regarding the treatment of ecological issues.
- We are working with OPPE to encourage the use of wetlands mitigation banking to offset the impacts of wetland losses at Superfund sites.

**Issues:**

- There is very limited wetlands staffing available in the Regions for participating in non-404 related activities. We have to rely on other program staffs to implement many activities.
  - Current Superfund legislation severely limits any use of the Fund to remediate the ecological damages from hazardous waste discharges to wetlands.
- o There are institutional barriers that hinder coordination between programs at the Federal and State levels. For example, wetland programs are often within a different regional division or State agency than water quality management or hazardous waste programs.

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**Regional Opportunities:**

- There is potentially a high payoff from even a minimal involvement of Regional wetlands staff in other EPA programs, for example, in coastal activities such as the NEP and NCW programs. Some of the NEP conferences would benefit substantially from some general direction on aquatic habitat protection and restoration. One avenue for protecting wetlands is through Action demonstration projects that can be funded. For example, the San Francisco Bay NEP has funded eight wetland restoration sites. In addition, considerable funding is available for demonstration projects under the NCW program. Regions could suggest or review projects from States which incorporate an aquatic habitat component. Examples of past projects funded include: restoration techniques for coastal Louisiana wetlands and constructed wetlands for wastewater and stormwater treatment.

## WETLAND STRATEGIC INITIATIVES

*Objective: to influence national policies and laws to improve wetlands protection and restoration; and to develop and implement new approaches to provide more comprehensive protection of wetlands.*

*Priorities:*

- Assist in the development of national policies and laws to increase protection and restoration of wetlands. Key activities:
  - Most of our effort in this area over the last several years has been through the National Wetlands Policy Forum and in follow-up activity to implement recommendations in the Forum report and subsequent papers on legislation, administrative action, and state programs. Our first step in this regard was issuing a short-term "Wetlands Action Plan" in January 1989 which adopts the Forum's wetland goals and begins work on many of the actions. To the extent that it remains a viable effort, we will participate in the Domestic Policy Council's wetlands task force to work on revisions to the Wetlands Executive Order 11990.
  - Congress is reauthorizing existing laws and considering many new bills which impact wetlands. We look for opportunities to impact wetlands through upcoming legislative decisions and work with other offices and agencies to develop EPA and Administration positions on legislative proposals for presentation to Congress. Key legislative reauthorizations coming up are Coastal Zone Management Act, Farm Bill, Coastal Barriers Resources Act, and Federal Flood Insurance Act. In addition, new legislation affecting wetlands has been proposed in areas such as coastal Louisiana wetlands, general coastal legislation, and tax and other incentives to protect wetlands.
- Work with the Regions to develop ecosystem strategies for geographical areas where wetland losses are particularly high and resistant to traditional approaches for solving the problem. Key activities:
  - Coastal Louisiana has unique coastal wetlands loss problems resulting from past Corps of Engineers projects to control the Mississippi; navigation and oil and gas activity; and sea level rise. We are working with Region VI to develop an EPA strategy for coastal Louisiana.

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- Western riparian habitat is environmentally important, scarce and highly threatened. We are contributing to initiatives to address this problem by providing guidance on grazing management, developing a technique to evaluate the functions of riparian habitat, and co-sponsoring a workshop on the problem.
  
  - Encourage better environmental planning for wetland resources by providing information, guidance, and technical assistance for such approaches. Planning is a potential tool to get ahead of permit by permit decisions, to address wetlands as pieces of larger functioning ecosystems, and to link and target various protection and restoration programs. Key activities:
    - We are conducting case studies of local planning approaches involving wetlands with the Urban Land Institute and the Environmental Law Institute.
  
    - We are examining the concept of State Wetland Conservation Plans (SWCP) put forward by the Wetlands Forum. We will be conducting an initial workshop to further develop the Forum's model for SWCP's, and to identify key components, technical information needs, and similar planning approaches which could be applied. We plan to develop a guidance document to highlight successful approaches and provide techniques which states can use in developing a SWCP.
  
    - We developed through the Conservation Foundation a training curriculum for federal and State staff on negotiation skills and effective participation in wetlands planning.
  
    - We participate in the Urban Land Institute's Federal Permits Workgroup, which examines the use of environmental planning to resolve development/ environment conflicts.

***Issues:***

- It will be a challenge to carry forward with the consensus on directions in wetlands policy that was achieved by the National Wetlands Policy Forum. As we get to the nuts and bolts of implementation, it is difficult to maintain agreement among the interests represented by Forum members, and the views of parties that were not members of the Forum also come into play. The progress

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of the Domestic Policy Council's wetlands task force is very uncertain as a vehicle for implementing some of the Forum's recommendations.

- A major problem impeding the effectiveness of wetlands protection in the U.S. is lack of sound environmental planning that addresses wetlands as an integral component of the landscape. Land use and natural resource planning have not been well accepted in many parts of the U.S., where rugged individualism and unrestrained private development are an ingrained part of our culture. Because of negative perceptions of federal land use planning, it is important to work with and encourage involvement of the state and local governments.

We should also avoid promoting planning as an end in itself, but rather emphasize the need to incorporate implementation agreements and provisions for plan updates as an integral part of a planning process. We should be wary of the pitfalls of expensive and time consuming planning processes which do not achieve results.

### *Regional Opportunities:*

- A first step in considering the need for ecosystem strategies is to identify wetland areas experiencing high loss or degradation which require a broader or different approach than that provided by individual permit review. One consideration is identifying areas where Advance Identification can mesh with other federal, state, local planning mechanisms to help ensure that ADID studies are linked to concrete actions such as full or partial title purchases, zoning restriction, state and local permit decisions, and incentive programs. Headquarters can provide assistance to Regions developing ecosystem strategies in areas that cut across regional boundaries, that have national significance, or to demonstrate new approaches. A good example of recent progress at the Regional level is Region VIII's prairie pothole initiative.

## WETLANDS SCIENCE

*Objective: To improve the scientific basis for EPA wetland decisions and to promote the development of national policies and approaches that are scientifically sound*

**Priorities:**

- Successfully execute EPA's wetlands research program to meet the most pressing needs for scientific information in the areas of wetland restoration and creation, cumulative impacts assessment, and wetlands/water quality, and to transfer this information to the field for practical application in EPA and State wetland programs. ORD's wetlands program manager is in the Corvallis, Laboratory, and the research is conducted primarily at the Corvallis and Duluth Labs. An important component of the program is transferring the results for application by EPA's Regional wetlands staff. The Regions have established a program position at Corvallis exclusively for technology transfer activities. Attachment A describes EPA's wetlands research program.
- Develop technical tools for improving implementation of the Section 404 Program, such as the Federal Manual for Identifying and Delineating Jurisdictional Wetlands. On January 10, 1989, the Environmental Protection Agency (EPA), Corps of Engineers (Corps), Soil Conservation Service (SCS) and U.S. Fish and Wildlife Service (FWS) adopted the "Federal Manual for Identifying and Delineating Jurisdictional Wetlands" (Federal Manual). The Federal Manual, which went into effect for 404 Program purposes on March 20, 1989, supersedes independent methods previously used by different Federal agencies. It clarifies that these four agencies agree on what constitutes vegetated wetlands under the Federal Manual. The Federal Manual presents specific mandatory criteria for hydrophytic vegetation, hydric soils and wetlands hydrology. It also presents field indicators for these criteria, along with consistent, yet flexible, sampling procedures. Many years of technical experience gained from developing earlier agency-specific wetland delineation manuals went into the development of the Federal Manual.

The Interagency Committee for Wetland Delineation (ICWD) that developed the Federal Manual initiated a training program for their technical personnel in 1990. Personnel from each of the agencies participated in a training program for trainers in Houston, Texas on the Federal Manual. They will subsequently train additional personnel at six locations around the country. Additional Federal training is also planned for 1991 and training for the States is planned for the fall of 1990.

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- Another scientific tool currently being developed is a technical reference document on water supply alternatives. Water supply impoundments can have serious adverse impacts on wetlands and special aquatic resources. Impoundments may inundate upstream wetlands, dewater downstream wetlands, or divert critical wetland water sources. EPA initiated vetoes under authority of Section 404(c) of the Clean Water Act for impoundments impacting wetlands and special aquatic resources in Big River, Rhode Island; Pamo Dam, California; Two Forks, Colorado; and Ware Creek, Virginia. Because impoundment projects sometimes impact large acreages of wetlands, EPA recognizes the potential for additional conflicts with the goal of no net loss of America's wetlands, especially in the arid southwest and in rapidly growing coastal areas.

EPA, in cooperation with the Environmental and Energy Study Institute and the Keystone Center held a workshop February 14-16, 1990, to evaluate water supply options, such as conservation, efficient management, and alternative supplies. There were over eighty participants including state and local water supply managers; experts in economics, demography, hydrology, engineering, law, and ecology; conservation groups; and federal agencies (the Institute for Water Resources of the Army Corps of Engineers, the Bureau of Reclamation, Soil Conservation Service, the Forest Service, The U.S. Fish and Wildlife Service, the U.S. Geological Survey, and the Bureau of Reclamation).

Papers, a transcript of discussions, and the technical reference document will be prepared for use in evaluating alternatives to traditional water supply impoundments.

- We are also developing lists of fauna that rely upon wetlands habitat. A computer database of wetland mammals, birds, fish, reptiles and amphibians was generated from Nature Conservancy and state heritage program files. It will be used to evaluate 404 permits and for citizen monitoring efforts. It includes broad wetland categories (marine, estuarine, riverine, lacustrine, palustrine) with bare substrate, herbaceous, shrub, or wooded vegetation as well as isolated wetland ecosystems (playa lakes, salt flats, headwaters streams, temporary pools, bogs, and fens).

The database will facilitate better assessments of non-game species and biotic diversity than has been characteristic in federal efforts to date. Three groups (birds, fish and amphibians) are especially significant for assessing wetland habitat losses and water quality impacts. Fish are acutely sensitive to water quality, especially nonpoint sources hard to measure by traditional chemical specific approaches. Amphibians are very sensitive to the loss of small wetland habitats, and migratory birds to overall losses of wetland habitat. Birds have

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been one of the first indicators of bioaccumulation of toxic substances in wetlands.

The first application of our wetlands species data will be by the Florida Audubon Society to develop a citizen's monitoring program.

**Issues:**

- Although ORD and OW have invested considerable time and energy in a workplan for developing water quality criteria for wetlands, we need to secure the funding for ORD to implement it. Budget initiatives are proposed for Fiscal Years 91 and 92.
- Opposition to the unified federal method for identifying and delineating jurisdictional wetlands has developed in the regulated community. We need to ensure factual information about the method and its scientific basis is broadly communicated. Perhaps the biggest issue is the perceived expansion of jurisdiction. The use of the Federal Manual will, in the great majority of instances, result in jurisdictional determinations similar to those that would have been obtained with the proper application of either the previous Corps of Engineers or EPA method. However, changes in the extent of jurisdiction are occurring as a result of the Manual, mostly because use of the Federal Manual is now mandatory. Previously, field units had the flexibility to either use the Corps and EPA manuals, or substitute their own approach. There was wide variation in the methods used - for example, one field office would not recognize any area dominated by trees as a wetland; another in the same agency would not recognize any area as a wetland unless it were dominated by trees. In areas where field units were previously using methods that resulted in narrowed scope of jurisdiction, the Manual has resulted in changes, some of them substantial. However, this is necessary to ensure consistent and equitable application of the regulatory definition of wetlands nationwide. The joint manual is a significant step forward as it will further assure consistency and repeatability in wetland jurisdictional decisionmaking, which the regulated sector has sought for a long time.

Another concern relates to the misconception that any area with hydric soils is considered wetlands. A related issue is the impact of the Federal Manual in general on agricultural interests. The Federal Manual does consider agricultural fields that have hydric soils and wetland hydrology to be wetlands, if under normal circumstances, they would support hydrophytic vegetation. These are commonly referred to as farmed wetlands. The Soil Conservation Service also acknowledges the existence of farmed wetlands under the Swampbuster



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provisions of the Food Securities Act of 1985. In the absence of tilling, such areas would revert to wetland vegetation since they have hydric soils and wetland hydrology. A very important thing to keep in mind is that wetland hydrology still must exist for a disturbed site to be considered wetlands. Thus, not all areas with hydric soils are wetlands.

- The water supply impoundments issue is controversial and politically charged. While it is important that we develop our technical guidance within a short timeframe, we need to be thorough and careful, as it will be subject to close scrutiny.

## EPA'S WETLAND RESEARCH PLAN

**BACKGROUND:** In 1985, Administrator Lee Thomas requested that the agency develop a strategic framework for wetlands protection. A conclusion of the Strategic Planning Initiative, conducted by OPPE, was that serious deficiencies in scientific understanding of wetlands were impeding sound management of these resources. A major outgrowth of this was the development of EPA's Wetlands Research Plan (November, 1985).

The effort to develop the 1985 plan was guided by ORD with extensive input from EPA Headquarters and Regional Offices, other Federal agencies, the scientific literature, and individual scientists with wetland expertise. Three priority research topics were chosen:

- Wetlands mitigation (i.e., creation, restoration, enhancement).
- Cumulative impact assessment.
- Water quality functions of wetlands.

ORD's wetlands program manager is in the Corvallis Laboratory, and the research is conducted primarily at the Corvallis and Duluth labs.

**CURRENT RESEARCH ACTIVITIES:** A number of products have resulted from the 1985 wetland research plan. Other efforts are still ongoing and some new research topics have been added since the original plan was produced. The topics currently emphasized include:

- Characterizing and evaluating the mitigation of wetland losses.
- Determining the water quality functions of wetlands.
- Establishing the technical foundation for water quality standards necessary to protect wetland function.
- Characterizing the ecological status and trends of inland wetlands.
- Developing and testing methods for assessing the cumulative effects of wetland loss and degradation.

- Transferring wetlands research results to program clients.
- Analyzing wetland functions on a variety of scales, including individual wetlands, regions, and landscapes.

### MAJOR AREAS OF EMPHASIS:

#### **1. Characterization and Evaluation of Wetland Mitigation Efforts.**

This research is timely in light of the fact that EPA recently adopted a "no net loss" policy for the nation's remaining wetland base, and has vowed to initiate projects to restore and create wetlands to increase the quality and quantity of the nation's resources. The steps involved in the mitigation research include: 1) initiation of a literature search to consolidate the current knowledge on created and restored wetlands, 2) analysis and evaluation of 404 permit databases for the states of OR, WA, TX, AR, LA, MS, and AL for trends in wetlands loss, 3) developing a method for comparing functions of created/restored wetlands with natural wetlands and 4) comparison of field data for naturally occurring and created wetlands.

#### **2. Water Quality Functions of Wetlands.**

The Wetlands Research Team developed a comprehensive Water Quality plan entitled Wetlands and Water Quality: EPA's Research and Monitoring Implementation Plan for the Years 1989-1994. The plan addresses EPA's concern that existing surface water quality criteria may be inadequate for protecting the chemical, hydrological, and biological integrity of the wetland resource. The Plan specifically proposes to address the Wetlands Forum's recommendation that "EPA and the state water pollution control agencies review the implementation of the Water Quality programs to ensure that they are offering adequate protection to the chemical integrity of wetlands."

Despite the fact that hundreds of studies have examined the ability of wetlands to process various anthropogenic substances, knowledge does not exist to answer some important questions such as "What are safe loading rates for wetlands?" Research designed by the Wetlands Research Team will address such issues.

A newly initiated research project also examines the ecological status of wetlands--The Inland Wetlands component of EMAP--an environmental monitoring and assessment program. The goal of EMAP is to monitor the health and status of the nation's ecological resources. The objectives of inland wetlands EMAP is to monitor the health and status of the nation's inland wetlands. The Wetlands Research Team, in

collaboration with Environmental Photo Interpretation Center, is currently evaluating sampling schemes and bioindicators for the long term monitoring scheme.

In addition, research designed by the Wetlands Research Team will address the ability of wetlands to process pollutants.

### **3. Cumulative Effects Research.**

This Research addresses the following objectives:

a) develop methods to assess the cumulative impacts of wetland loss on landscape functions, b) document the cumulative impacts of wetland loss on landscape function, c) determine the role of wetlands in landscape function, and d) provide technical support or planning approaches to protect wetland resources. A hierarchy of assessment methods is under development to rank the sensitivity of watersheds to cumulative impacts of wetland loss, including a Synoptic Approach to cumulative effects. The Synoptic Approach is a rapid assessment method which can be used to help 404 personnel evaluate applications to alter wetlands in the context of the landscape. It is an innovative approach to wetlands planning and is currently being tested in a pilot project for Louisiana. It was developed by the Wetland Research Team for the purpose of quickly and cheaply assessing the landscape sensitivity to cumulative effects using national databases.

Another project involved a detailed landscape analysis study in Illinois, which ranks the sensitivity of watersheds to cumulative impacts of wetlands. The objectives of the Illinois study are fourfold: 1) detect cumulative impacts, 2) determine the significance of wetlands to landscape function, 3) determine the value of information in a cumulative impact assessment, and 4) test a standardized methodology for cumulative impact assessment that can be used by state and regional offices for wetland decision making.



































