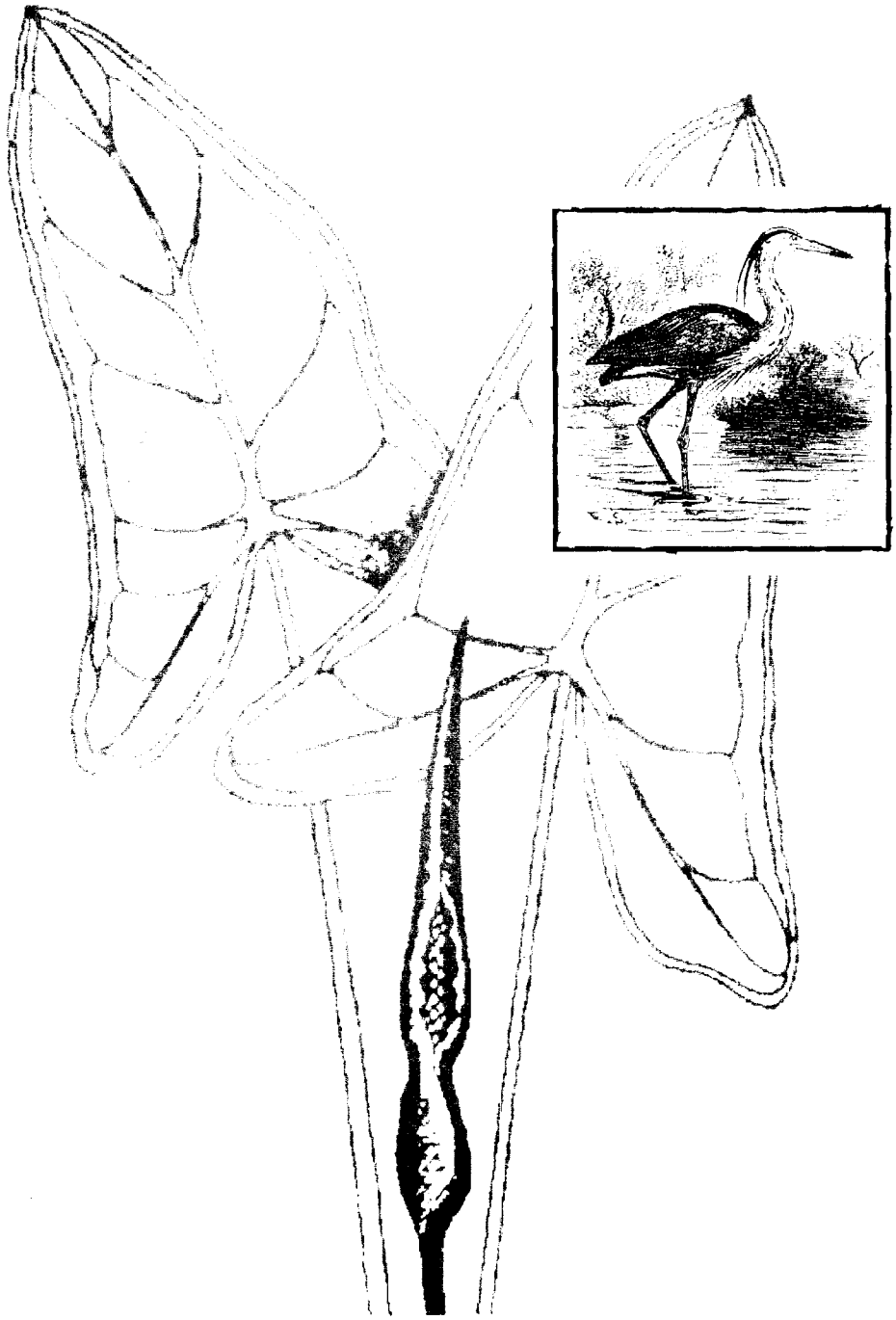
United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001
February 1995

EPA Wetlands Fact Sheets



QH76
.U55
W48
1995

nt copies of these fact sheets, call
Vetlands Information Hotline at
1-800-832-7828 (contractor operated).

Fact Sheets

Table of Contents

Introductory Information

1 Wetlands Protection - Overview

2 Values and Functions of Wetlands

3 Consequences of Losing or Degrading Wetlands

4 Economic Benefits of Wetlands

5 Facts About Wetlands

6 Wetland Quotes

The Administration Wetlands Plan

7 The Administration Wetlands Plan: An Update

8 NRCS to Identify Agricultural Wetlands

9 Alaska Wetlands Initiative

Regulatory Information — Clean Water Act Section 404

10 Section 404 of the Clean Water Act: An Overview

11 How Wetlands Are Defined and Identified

12 Was the Section 404 Program Intended to Regulate Wetlands?

13 Issue Resolution Procedures: Clean Water Act/Section 404(q)

14 EPA's Clean Water Act Section 404(c) "Veto Authority"

15 Wetlands Enforcement

16 Wetlands Mitigation Banking

17 Wetlands Categorization

18 What about Takings?

19 Wetlands on Agricultural Lands: Section 404 and Swampbuster

20 Exemptions to Section 404 Permit Requirements

Other Federal, and State, and Local Programs

21 State, Tribal, Local, and Regional Roles in Wetlands Protection

22 State Wetlands Grant Program

23 State or Tribal Assumption of the Section 404 Permit Program

24 Section 401 Certification and Wetlands

25 Wetlands and Runoff

Planning and Partnerships

26 Wetlands and Watersheds

27 What Is a State Wetland Conservation Plan?

28 Advance Identification (ADID)

29 EPA's Outreach Efforts

30 Partnerships with Landowners

31 Wetlands Acquisition and Restoration: Funding and Technical Assistance

Contacts for More Information

32 Environmental Protection Agency Directory

33 Corps of Engineers Regulatory Program Directory

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

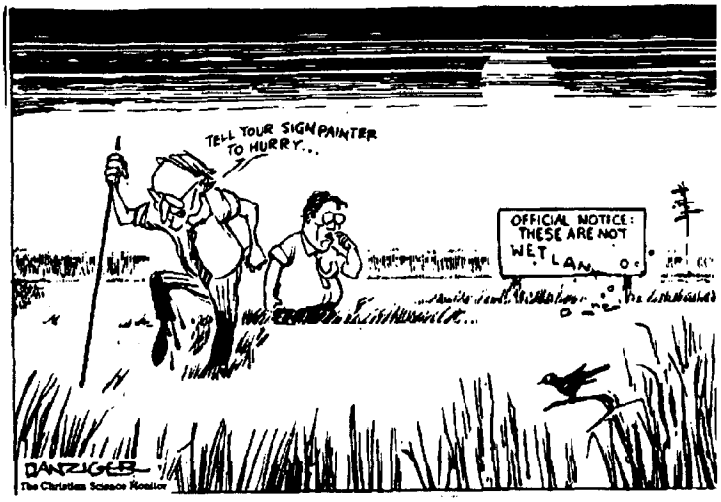
Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001a
February 1995

EPA

1 Wetlands Protection - Overview

Over the past few years, the issue of wetlands protection seems to come up everywhere you turn. It's in the newspapers and on T.V. and radio news and talk shows.



Reprinted with Permission. Danzinger in *The Christian Science Monitor*, 1991 TCSPS

Why all the fuss?

Wetlands are the link between water and land. "Wetlands" is the collective term for marshes, swamps, bogs, and similar areas found in flat vegetated areas, in depressions in the landscape, and between dry land and water along the edges of streams, rivers, lakes, and coastlines. However, water may be on the surface for only a short time and look dry the rest of the year, making it hard to "know it when you see it." The unrecognized "natural" values of wetlands have historically competed with their obvious value as "dry" land converted for purposes such as development or agriculture.

Reprinted with permission. Jerry L. Barrnett, *The Indianapolis News*

We now realize that wetlands are important and valuable ecosystems. They are home to many beautiful and rare species. They filter runoff and adjacent surface waters to protect the quality of our lakes, bays and rivers. Wetlands also protect many of our sources of drinking water. They are the source of many commercially and recreationally valuable species of fish, shellfish and wildlife. They retain flood waters and protect shorelines from erosion.

Property of CSC Library

The U.S. Environmental Protection Agency (EPA) needs partners—including you—to help protect wetland resources. This collection of fact sheets offers some basic information about wetlands and the programs that affect them. Sources of more specific information are listed and the EPA WETLANDS INFORMATION HOTLINE (contractor operated) is there for everyone.

APR 14 1997

US Department of Commerce
NOAA Coastal Services Center Library
2234 South Hobson Avenue
Charleston, SC 29405-2413

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001b
February 1995

EPA

2 Values and Functions of Wetlands

Wetlands provide many benefits, including food and habitat for fish and wildlife; flood protection; shoreline erosion control; natural products for human use; water quality improvement; and opportunities for recreation, education, and research.

Ecological Benefits

Wetlands are among the most biologically productive natural ecosystems in the world. They can be compared to tropical rain forests and coral reefs in the diversity of species they support.

Wetlands are vital to the survival of various animals and plants, including threatened and endangered species like the wood stork, Florida panther, and whooping crane. The U.S. Fish and Wildlife Service estimates that up to 43% of the threatened and endangered species rely directly or indirectly on wetlands for their survival. For many other species, such as the wood duck, muskrat, and swamp rose, wetlands are primary habitats. For others, wetlands provide important seasonal habitats where food, water, and cover are plentiful.

Wetlands and People

Because wetlands are so productive and because they greatly influence the flow and quality of water, they are valuable to us.

Wetlands furnish a wealth of natural products, including fish, timber, wild rice, and furs. For example, in the Southeast, 96% of the commercial catch and over 50% of the recreational harvest are fish and shellfish that depend on the estuary-coastal wetlands system. Waterfowl hunters spend over $600 million annually in pursuit of wetlands-dependent birds.

Wetlands often function like natural tubs or sponges, storing water (floodwater, or surface water that collects in isolated depressions) and slowly releasing it. Trees and other wetland vegetation help slow floodwaters. This combined action, storage and slowing, can lower flood heights and reduce the water's erosive potential. Wetlands thus —

- reduce the likelihood of flood damage to crops in agricultural areas
- help control increases in the rate and volume of runoff in urban areas
- buffer shorelines against erosion.

Wetlands help improve water quality, including that of drinking water, by intercepting surface runoff and removing or retaining its nutrients, processing organic wastes, and reducing sediment before it reaches open water.

Wetlands provide opportunities for popular activities such as hiking, fishing, and boating. For example, an estimated 50 million people spend approximately $10 billion each year observing and photographing wetlands-dependent birds.

Wetlands Support Many Species

Wetlands produce great volumes of food as leaves and stems break down in the water; this enriched material is called *detritus*.

Detritus is food for insects, shellfish, and forage fish, and it provides nutrients for wetlands plants and algae.

Recreational fish such as bluefish and striped bass, as well as mammals, reptiles, and amphibians, eat aquatic invertebrates and forage fish. Wetlands plants provide shelter and food to diverse species.

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States Environmental Protection Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001c
February 1995

EPA

3 Consequences of Losing or Degrading Wetlands

Losing or degrading wetlands can lead to serious consequences, such as increased flooding, extinction of species, and decline in water quality. We can avoid these consequences by maintaining the valuable wetlands we have and restoring wetlands where possible.

Increased Flooding

If wetlands are lost or degraded, we lose their ability to control flooding. (See Fact Sheet #2.)

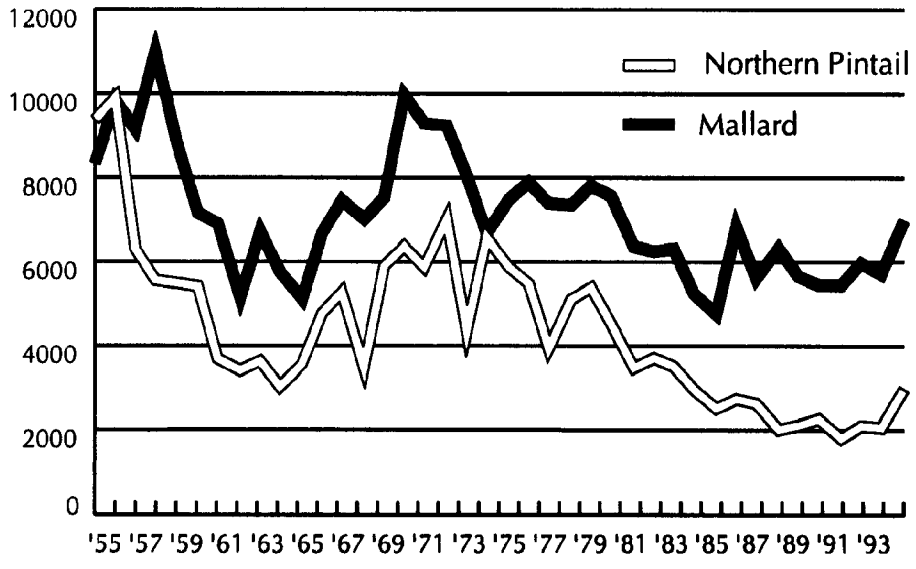
For example, based on a 1972 study comparing parts of the Charles River in Massachusetts, the U.S. Army Corps of Engineers determined that the loss of 8,422 acres of wetlands near Boston within the Charles River Basin would have resulted in annual flood damage of over $17 million. For this reason, the Corps of Engineers elected to preserve the wetlands instead of constructing extensive flood control facilities. (Source: Army Corps of Engineers. 1976. *Water Resources Development Plan, Charles River Watershed, Massachusetts*. Corps, New England Division, Waltham, MA.)

Damage to Species

Because many species depend on wetlands, whatever harms wetlands harms these species. For example, the well-being of waterfowl populations is tied directly to the status and abundance of wetland habitats.

Populations of mallard and northern pintail ducks in North America have declined since 1955 (see graph). The loss and degradation of wetlands is one of the major causes for the decline. In 1994 duck populations had increased by 24% over the 1993 estimate and were the highest since 1980. Scientists believe that improved wetland conditions and increased cover on Conservation Reserve Program lands may be major factors in this increase. (Source: U.S. Fish and Wildlife

Decline in Duck Population: 1955-1994



For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

Service, Office of Migratory Bird Management. 1994. *Waterfowl Population Status 1994*. U.S. Government Printing Office, Washington, DC.)

Degraded wetlands may not be able to support species that make their homes there. Wetlands in the Kesterson National Wildlife Refuge were continuously flooded with irrigation return flow that had high concentrations of selenium. As a result, largemouth and striped bass and catfish disappeared from the refuge in 1982. In the spring of 1983, eggs from water birds at the site hatched less frequently and had more deformities in the embryos. (Source: Harris, T. 1991. *Death in the Marsh*. Island Press, Washington DC.)

Overlogging of mature U.S. bottomland hardwood forests is believed to have caused the extinction of the Ivory-Billed Woodpecker, North America's largest woodpecker. (Source: Gosselink et al., eds. 1990. *Ecological Processes and Cumulative Impacts*. Lewis Publishing, Chelsea, MI.)

Loss in Water Quality

Destroying or degrading wetlands results in lower water quality. For example, forested wetlands reduce nutrient loading into water bodies such as the Chesapeake Bay. Forested riparian (streamside) wetlands in predominantly agricultural watersheds have been shown to remove approximately 80% of the phosphorous and 90% of the nitrogen from the water. If wetlands, however, do not perform this function, results will include an increase in undesirable weed growth and algae blooms. When the algal blooms decompose, large amounts of oxygen are used up, depriving fish and other aquatic organisms. Algal blooms are a major cause of fish kills.

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001d
February 1995

EPA

4 Economic Benefits of Wetlands

Wetlands contribute to the national economy by producing resources and commodities and providing other benefits. Because of the diversity of wetland types and locations, measuring all their benefits is difficult, even for a specific type of wetland. This fact sheet discusses some site-specific studies, but remember that each study measures only one or a few of the benefits.

Wetlands Yield Fish for the Nation

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

In 1991, the dockside value of fish landed in the United States was $3.3 billion, which served as the basis of a $26.8 billion fishery processing and sales industry, which in turn employs hundreds of thousands of people. An estimated 71% of this value is derived from fish species that during their life cycles depend directly or indirectly on coastal wetlands. For example, Louisiana's marshes alone produce an annual commercial fish and shellfish harvest of 1.2 billion pounds worth $244 million in 1991.

Wetlands Provide Recreational Opportunities

More than half of all U.S. adults (98 million people) hunt, fish, birdwatch, or photograph wildlife. These activities, which rely on healthy wetlands, added an estimated $59.5 million to the national economy in 1991. Individual States likewise gain economic benefits from recreational opportunities in wetlands that attract visitors from other States.

Source: U.S. Congress, Office of Technology Assessment. 1993. *Preparing for an Uncertain Climate.* Vol. II, OTA-O-568, U.S. Government Printing Office, Washington, DC.

Wetlands Improve Water Quality

Wetlands help stop pollutants from entering receiving waters. For example, the wetlands of the Congaree Bottomland Hardwood Swamp in South Carolina remove sediment and toxic substances and remove or filter excess nutrients. The least cost substitute for these wetlands benefits would be a water treatment plant costing $5 million (in 1991 dollars) to construct, and additional money would be needed to operate and maintain the plant.

Wetlands Help Control Floods

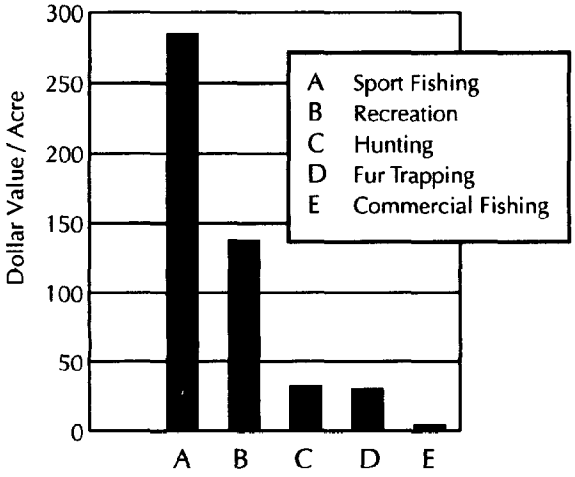
The Minnesota Department of Natural Resources has computed a cost of $300 to replace, on average, each acre-foot of flood water storage. In other words, if development eliminates a one-acre wetland that naturally holds 12 inches of water during a storm, the replacement cost would be $300. The cost to replace the 5,000 acres of wetlands lost annually in Minnesota would be $1.5 million (in 1991 dollars).

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

Value of Michigan Wetlands

A study of Michigan's coastal and forested wetlands valued them as shown in the chart, in addition to their other values, such as storm and flood protection
Source: Hickman, C.A. 1977. "Forested Wetland Trends in the United States: An Economic Perspective." *Forest Ecology and Management* 33(34), June 1. Also see Jaworski, E. 1978. *Fish, wildlife, and recreation value of Michigan's coastal wetlands*. USFWS, Minneapolis, MN.

Economic Value of Wetlands in Michigan



For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001e
February 1995

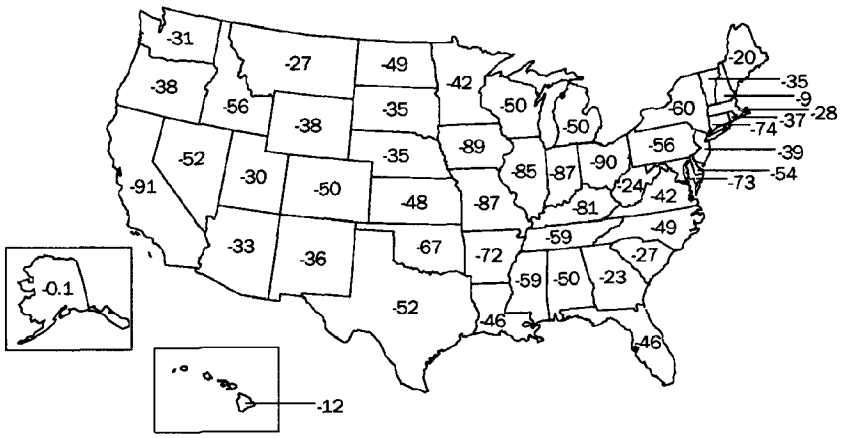
EPA

5 Facts about Wetlands

Over half (53%) of the wetlands in the lower 48 States were lost between the late 1700s and the mid-1980s. About 100 million acres of wetlands remain today in the lower 48 States, representing less than 5% of the land mass in the continental United States. (See map.)

Source: Dahl and Johnson. *Status and Trends of Wetlands in the Conterminous United States*. USFWS, 1989.

Percentage of Wetlands Acreage Lost, 1780s-1980s



Twenty-two States have lost at least 50% of their original wetlands. Seven of those twenty-two States — California, Illinois, Indiana, Iowa, Missouri, Kentucky, and Ohio — have lost more than 80% of their original wetlands.
Source: Mitch and Gosselink. *Wetlands*. 2nd edition. Van Nostrand Reinhold, 1993.

From the mid-1970s to the mid-1980s, wetlands were lost at an annual rate of 290,000 acres per year.
Source: Dahl and Johnson. *Status and Trends of Wetlands in the Conterminous United States, Mid-1970's to Mid-1980's*. USFWS, 1991.

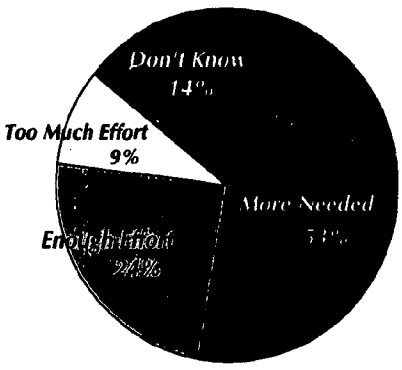
In Fiscal Year 1994, over 48,000 people applied to the Army Corps of Engineers (Corps) for a Section 404 permit. Eighty-two percent of these applications were covered by general permits in an average time of 16 days. Less than ten percent of the applications were subject to the more detailed individual evaluation —which took an average of 127 days. Only 358, or 0.7 percent, of the permits were denied. In the 22-year history of the Section 404 program, EPA has vetoed only 11 permits.

In short, almost all individuals who applied for a Section 404 permit in 1994 got their permits, and the average time for a decision was 27 days.

In addition, general permits cover an estimated 50,000 activities that do not require the public to notify the Corps at all.
Source: U.S. Army Corps of Engineers, U.S. Environmental Protection Agency.

Is Current Wetlands Protection Adequate?

In a 1994 survey, 53% of the respondent said they felt that more wetlands protection efforts were needed, 24% said current efforts struck the right balance, 9% said these efforts had gone too far, and 14% said they didn't know.
Source: "Times Mirror Magazines National Environmental Forum Survey." 1994. Times Mirror Magazines/Roper Starch.



For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001f
February 1995

EPA

6 Wetland Quotes

In a green place lanced through
With amber and gold and blue - -
A place of water and weeds,
and roses pinker than dawn
And ranks of lush young reeds
And grasses straightly withdrawn
From graven ripples of sands.
The still blue heron stands.

"The Blue Heron" by Theodore Goodridge Roberts

3350 25th S.t.S.W.
Vero Beach FL 32968
January 12, 1993

U.S.E.P.A. Headquarters
401 M Street
S.W. Washington, D.C. 20640

Dear Environmentlist,
My name is Justin Green. I am in third grade a Beachland School. I'll make you a deal if you can save all of the existing wetlands I'll earn money to help you do it. And did you know more than 1/3 of the animals depend on the wetlands. So if you can save the wetlands, Please DO!

Your Friend,
Justin Green

A dawn wind stirs on the great marsh. With almost imperceptible slowness, it rolls a bank of fog across the wild morass. Like the white ghost of a glacier, the mists advance, riding over phalanxes of tamarack, sliding across bog meadows heavy with dew. A single silence hangs from horizon to horizon.

-Aldo Leopold, "A Sand County Almanac"

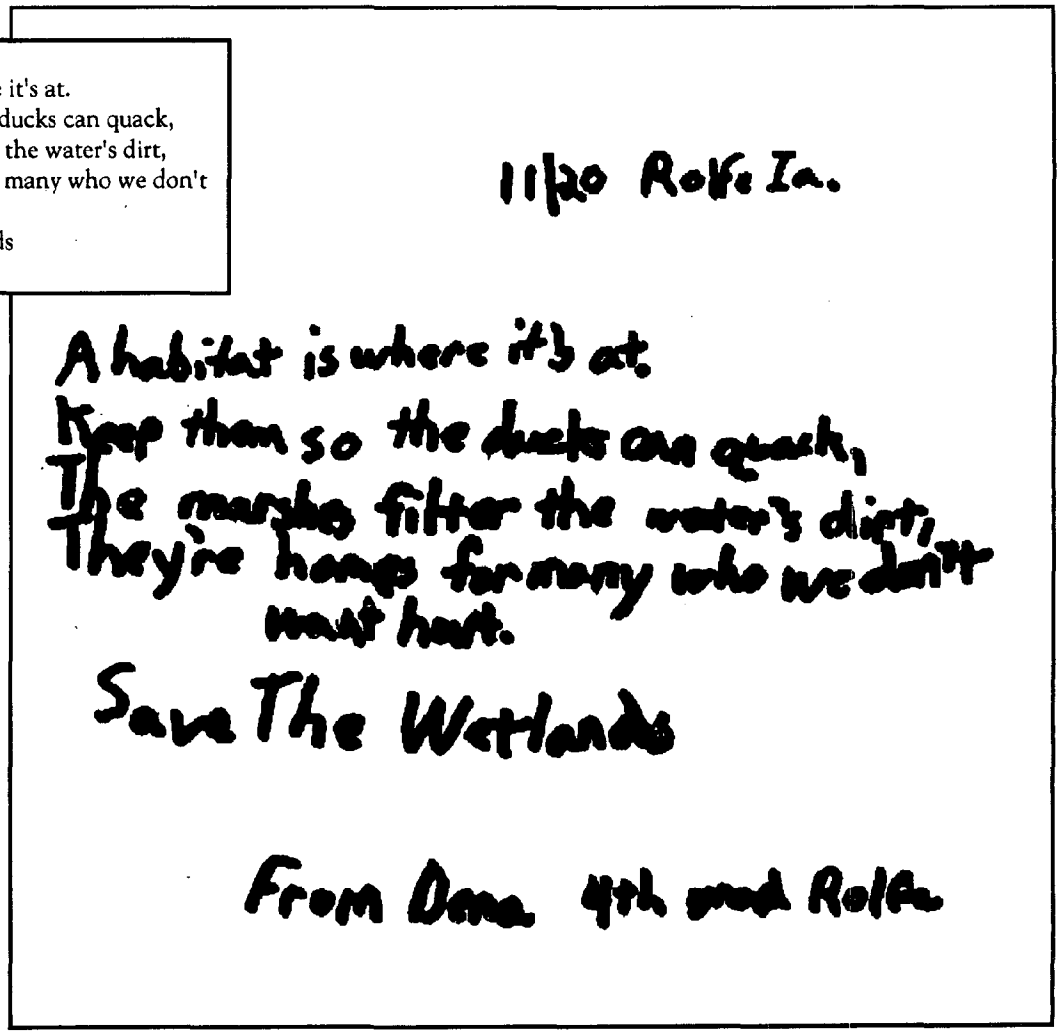
For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

Wetland Quotes Continued...

Greater familiarity with marshes on the part of more people could give man a truer and more wholesome view of himself in relation to Nature. In marshes, Life's undercurrents and unknowns and evolutionary changes are exemplified with a high degree of independence from human dominance as long as the marshes remain in marshy condition. They have their own life-rich genuineness and reflect forces that are much older, much more permanent, and much mightier than man.

- Paul L. Errington, "Of Men and Marshes"

A habitat is where it's at.
Keep them so the ducks can quack,
The marshes filter the water's dirt,
They're homes for many who we don't want hurt.
Save The Wetlands



For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001g
February 1995

EPA

7 The Administration Wetlands Plan: An Update

Wetlands protection—especially the Federal regulatory program under Section 404 of the Clean Water Act—has been controversial over the past few years. Much continues to be said about the Federal regulation of wetlands, but what is really happening?

Shortly after coming into office, the Clinton Administration convened an interagency working group to address legitimate concerns with Federal wetland policy.

After hearing from States, developers, farmers, environmental interests, members of Congress, and scientists, the working group developed a comprehensive, 40-point plan to enhance wetland protection while making wetland regulations more fair, flexible, and effective. This plan was issued on August 24, 1993.

The Clinton Administration's Plan emphasizes improving Federal wetlands policy by

- streamlining wetlands permitting programs
- increasing cooperation with private landowners to protect and restore wetlands
- basing wetland protection on good science and sound judgment
- increasing participation by States, Tribes, local governments, and the public in wetlands protection.

Accomplishments

The Clinton Administration has already taken a number of actions to implement the Wetlands Plan, including—

- clarified, through regulation, that prior converted croplands are *not* wetlands under both the Swampbuster and Clean Water Act programs
- issued policies that have increased flexibility in wetland permitting and reduced burdens on permit applicants
- given USDA the responsibility for identifying all wetlands on agricultural lands for *both* the Swampbuster and Clean Water Act programs
- made it easier for permit applicants to use mitigation "banks"
- allowed for greater flexibility in permitting requirements in Alaska, due to the unique circumstances in that State
- authorized New Jersey to operate its own wetlands program, in place of the Clean Water Act Section 404 program
- requested increased funding for the Wetlands Reserve Program, to assist farmers who want to restore wetlands
- increased funding to States, Tribes, and local governments for wetlands programs.

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

Next Steps

These efforts are only the first steps that the Clinton Administration is taking to reduce the burden of Federal wetlands regulations, to minimize Federal overlap, and to encourage greater participation by State, Tribal and local governments in protecting wetlands. Activities currently under development include—

- developing an administrative process to minimize the regulatory burden on small landowners and farmers for small projects on their land
- establishing clear and firm deadlines for Corps of Engineers permit decisions
- allowing administrative appeals of permit denials and wetland jurisdictional determinations as an alternative to expensive and time-consuming litigation
- establishing a wetland delineator certification program to increase the government's reliance on wetlands delineations performed by private experts, providing greater certainty and flexibility to applicants
- improving wetlands assessment techniques to allow for better consideration of wetlands functions in permit decisions;
- clarifying exemptions of manmade wetlands from jurisdiction
- developing guidance that will facilitate the use of programmatic general permits—giving State and local governments more flexibility in wetlands protection and reducing unnecessary duplication
- expanding the Wetlands Reserve Program into all 50 States and allowing more types of land into the program.

Further Information

A copy of the Administration Wetlands Plan titled "Protecting America's Wetlands: A Fair, Flexible, and Effective Approach" may be requested from the EPA Wetlands Information Hotline (contractor operated).

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001h
February 1995

EPA

8 NRCS to Identify Agricultural Wetlands

Four Federal agencies involved in wetlands protection have agreed to recognize the Natural Resources Conservation Service (NCRS) (formerly the Soil Conservation Service) as the lead agency for identifying wetlands on agricultural lands. Farmers can now rely on a single wetlands determination by the NCRS for both the Clean Water Act Section 404 program and the Food Security Act (Farm Bill) Swampbuster program. This will simplify procedures for farmers by allowing one evaluation for both programs. The EPA, the Army Corps of Engineers (Corps), the NRCS, and the Fish and Wildlife Service signed a memorandum of agreement on January 6, 1994, which outlines this approach.

What Lands are Included?

The NRCS will identify wetlands on agricultural lands. For this purpose, "agricultural lands" means those lands intensively used and managed for the production of food or fiber to the extent that the natural vegetation has been removed and therefore does not provide reliable indicators of wetland vegetation. Areas that meet this definition may include intensively used and managed cropland, hayland, pasture land, orchards, vineyards, and areas which support wetland crops (e.g., cranberries, taro, watercress, rice).

Other types of land (e.g., range lands, forest lands, woodlots, tree farms) generally will continue to be evaluated by the Corps, using the 1987 *Corps Wetland Delineation Manual.* However, there are two exceptions to this: (1) NRCS may do wetland delineations on non-agricultural lands that occur as small inclusions within agricultural lands, and on lakes, ponds, and streams that occur on agricultural lands; and (2) NRCS will be the lead Federal agency for delineating wetlands on non-agricultural lands where the delineation is requested by the landowner/operator who is a USDA program participant. (NRCS will give the Corps or EPA the opportunity to review these delineations before making the delineation final.)

How Does This Improve Procedures?

Under this agreement, farmers will be able to rely on NRCS wetland delineations for determining the extent of wetlands under both the Farm Bill Swampbuster program and Section 404 of the Clean Water Act. Formerly, a farmer received a wetland map from the NRCS for Swampbuster purposes only. If that farmer needed a Section 404 permit, the EPA and the Corps required an additional wetland delineation. The agreement eliminates this duplication of effort and gives the farmer one wetland determination from the Federal government.

What Does Not Change?

The Section 404 permitting process does not change. EPA and the Corps will continue to administer the Section 404 program. In addition, the Section 404(f) exemptions for the continuation of ongoing, normal farming practices remain in effect (see Fact Sheet #20 for information on Section 404(f) exemptions).

Publications of Interest:

Memorandum of Agreement Among the Department of Agriculture, the Environmental Protection Agency, the Department of Interior, and the Department of Army Concerning the Delineation of Wetlands for Purposes of Section 404 of the Clean Water Act and Subtitle B of the Food Security Act, January 6, 1994, 11 pp.

Updated Questions and Answers Related to the Implementation of the January 6, 1994, Interagency Memorandum of Agreement Concerning the Delineation of Wetlands for Purposes of Section 404 of the Clean Water Act and Subtitle B of the Food Security Act, from EPA, DOA, NRCS, and FWS to Regional Agency Staff, December 12, 1994, 25 pp.

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001i
February 1995

EPA

9 Alaska Wetlands Initiative

As part of the Administration's 1993 Wetlands Plan, EPA and the U.S. Army Corps of Engineers convened stakeholders and solicited public input in Alaska to identify and address concerns with implementing the Clean Water Act Section 404 program in Alaska. The seven-month process resulted in a report issued on May 13, 1994, which identified 26 action items to be implemented by the Federal agencies, many in coordination with the State, Natives, and other participating stakeholders.

Alaska's Wetlands

Alaska is estimated to have approximately 175 million acres of wetlands, comprising approximately 43% of the surface area of the State—more wetlands acreage than the rest of the United States combined. The State is also characterized by high levels of Federal, State, and Native Corporation land ownership, a small population (over a third of which lives in Anchorage), relatively large Native and subsistence populations, and Arctic and sub-Arctic climates.

Alaska's diverse array of wetlands possess a variety of functions and values that contribute substantially to the Nation's economy and well-being. For example, wetlands serve as valuable habitat for wildlife and fisheries (the salmon industry in Alaska is the State's largest nongovernmental employer).

Stakeholder Participation

The Initiative was developed in consultation with a diverse and comprehensive group of Alaskan stakeholders and the public. Stakeholders representing such interests as commercial fishing, environment, Natives, oil and gas, and the State, as well as the Department of Energy, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service, participated in a series of meetings around the State. The public was invited to attend all stakeholder meetings, submit written comments, and participate in a Statewide teleconference linking 20 locations throughout Alaska. Stakeholders and the public identified concerns with the wetlands program, focusing on how circumstances in Alaska, such as climate and the extent of wetlands, affect implementation of regulatory requirements in the State.

Actions

The Initiative report summarizes the results of the effort and presents the recommendations and actions, in combination with the initiatives identified in the Administration's Wetlands Plan, that will be undertaken in Alaska to address concerns raised during the Initiative. Conclusions are built upon the factual information and technical data identified during the Initiative. Strong agreement among the Federal agencies provides the basis to implement the actions in a manner that ensures effective protection of Alaska's valuable wetlands while providing appropriate regulatory flexibility to reflect circumstances in Alaska. Key actions include —

- implementing abbreviated permit processing procedures for the construction of water, wastewater, and sanitation facilities in wetlands in Alaskan villages
- continuing to develop general permits, which efficiently allow activities with minimal impacts to proceed without the need for individual permit authorization
- strengthening relationships with the State, local governments, and Native Corporations and villages through such measures as establishing written partnerships regarding the regulatory program and placing greater emphasis on providing assistance for local wetlands planning mechanisms as they relate to the regulatory program
- clarifying "practicability" and "flexibility" considerations that allow implementation of the regulatory program to reflect circumstances in Alaska.

Copies of the report, titled "Alaska Wetlands Initiative: Summary Report," may be obtained from the EPA Wetlands Information Hotline.

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001j
February 1995

EPA

10 Section 404 of the Clean Water Act: An Overview

Section 404 of the Clean Water Act establishes a program to regulate the discharge of dredged and fill material into waters of the United States, including wetlands. Activities in waters of the United States that are regulated under this program include fills for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports), and conversion of wetlands to uplands for farming and forestry.

What does Section 404 Require?

The basic premise of the program is that no discharge of dredged or fill material can be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. In other words, when you apply for a permit, you must show that you have

- taken steps to avoid wetland impacts where practicable
- minimized potential impacts to wetlands
- provided compensation for any remaining unavoidable impacts through activities to restore or create wetlands.

Regulated activities are controlled by a permit review process. An **individual permit** is usually required for potentially significant impacts. However, for most discharges that will have only minimal adverse effects, the Army Corps of Engineers often grants upfront **general permits**. These may be issued on a nationwide, regional, or state basis for particular categories of activities (for example, minor road crossings, utility line backfill, and bedding) as a means to expedite the permitting process.

Section 404(f) exempts some activities from regulation under Section 404. These activities include many ongoing farming, ranching, and silviculture practices.

Agencies' Responsibilities

Army Corps of Engineers

- administers the day-to-day program, including individual permit decisions and jurisdictional determinations
- develops policy and guidance
- enforces Section 404 provisions.

Environmental Protection Agency

- develops and interprets environmental criteria used in evaluating permit applications
- determines scope of geographic jurisdiction
- approves and oversees State assumption
- identifies activities that are exempt
- reviews/comments on individual permit applications
- has authority to veto the Corps' permit decisions (Section 404[c])
- can elevate specific cases (Section 404[q])
- enforces Section 404 provisions.

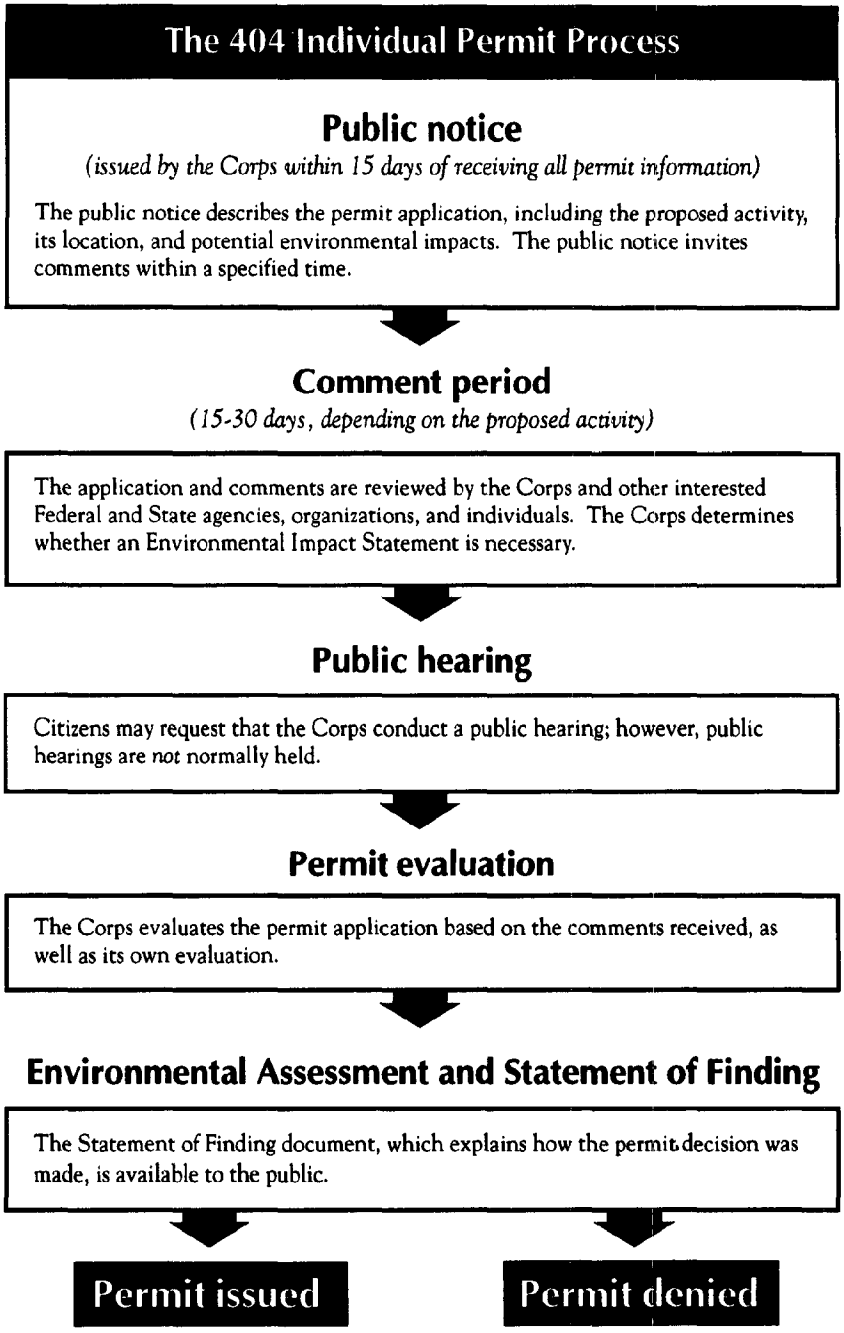
For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

Individual Permit Process Under the Clean Water Act, Section 404

Who's Involved in Regulation?

EPA and the Army Corps of Engineers (Corps) jointly administer the program. In addition, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and State resource agencies have important advisory roles.

A Federal permit is required to discharge dredged or fill material into wetlands and other waters of the United States. The flow chart tells what the Corps does once it receives an individual permit application.



Modified from Kathleen Rude, "Conservation: You Can Make a Difference," *Ducks Unlimited*, September/October 1990, 26-28.

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001k
February 1995

EPA

11 How Wetlands are Defined and Identified

"Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

-Definition of wetlands as used by the U.S. Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA) since the 1970s for regulatory purposes.

In more common language, wetlands are areas where the frequent and prolonged presence of water at or near the soil surface drives the natural system — meaning the kind of soils that form, the plants that grow, and the fish and/or wildlife communities that use the habitat. Swamps, marshes, and bogs are well-recognized types of wetlands. However, many important specific wetland types have drier or more variable water systems than those familiar to the general public. Some examples of these are vernal pools (pools that form in the spring rains but are dry at other times of the year), playas (areas at the bottom of undrained desert basins that are sometimes covered with water), and prairie potholes.

Characteristics of Wetlands

When the upper part of the soil is saturated with water at growing season temperatures, soil organisms consume the oxygen in the soil and cause conditions unsuitable for most plants. Such conditions also cause the development of soil characteristics (such as color and texture) of so-called "hydric soils." The plants that can grow in such conditions, such as marsh grasses, are called "hydrophytes." Together, hydric soils and hydrophytes give clues that a wetlands area is present.

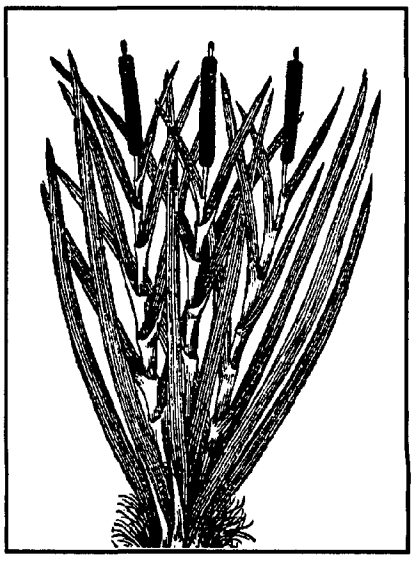
The presence of water — by ponding, flooding, or soil saturation — is not always a good indicator of wetlands. Except for wetlands flooded by ocean tides, the amount of water present in wetlands fluctuates as a result of rainfall patterns, snow melt, dry seasons and longer droughts.

Some of the most well-known wetlands, such as the Everglades and Mississippi bottomland hardwood swamps, are often dry. In contrast, many upland areas are very wet during and shortly after wet weather. Such natural fluctuations must be considered when identifying areas subject to Federal wetlands jurisdiction. Similarly, the effects of upstream dams, drainage ditches, dikes, irrigation, and other modifications must also be considered.

Manual for Defining Wetlands

The EPA and the Corps use the 1987 *Corps of Engineers Wetlands Delineation Manual* to define wetlands for the Clean Water Act Section 404 permit program. Section 404 requires a permit from the Corps or authorized State for the discharge of dredged or fill material into the waters of the United States, including wetlands. The 1987 manual will remain in use pending review of public comments on the 1991 proposed manual and the ongoing National Academy of Sciences study of wetlands definition.

The 1987 manual organizes environmental characteristics of a potential wetland into three categories: soils, vegetation, and hydrology. The manual contains criteria for each category. With this approach, an area that meets all three criteria is considered a wetland.



For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-0011
February 1995

EPA

12 Was the Section 404 Program Intended to Regulate Wetlands?

Questions about which and how wetlands are regulated have been widely discussed and debated over the years. This fact sheet explains what the U.S. Army Corps of Engineers, Congress, and the U.S. Supreme Court have said about these topics.

Section 404 Program History

In 1972, Congress passed the Federal Water Pollution Control Act Amendments, also known as the Clean Water Act, "to restore and maintain the chemical, physical, and biological integrity" of the Nation's waters. The Act defined "navigable waters" as "waters of the United States." The legislative history made plain that Congress intended the broadest possible Federal jurisdiction, expanding beyond traditionally navigable waters.

Section 404 of the Clean Water Act established a permit program regarding discharges of dredged and fill material. In 1974, when the Corps issued regulations to implement the Section 404 program, they limited the program's jurisdiction to traditionally navigable waters, including adjacent wetlands, *excluding* many small waterways and most wetlands.

In 1975, a Federal district court directed the Corps to revise and expand its regulations to be consistent with Congressional intent. In response, the Corps issued interim final regulations to include waters that are not adjacent to navigable waters ("isolated waters") in the program's jurisdiction.

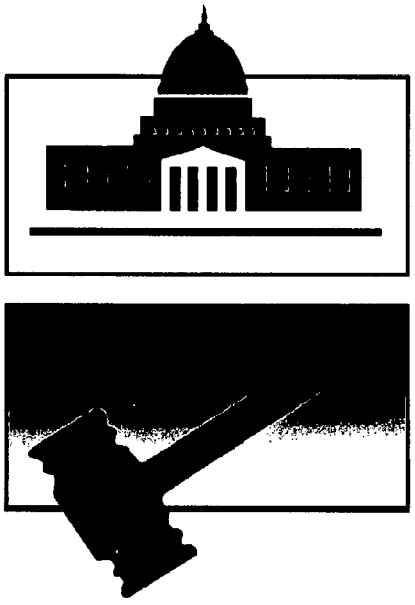
In 1977, the Corps issued final regulations and explicitly included "isolated wetlands and lakes, intermittent streams, prairie potholes, and other waters that are not part of a tributary system to interstate waters or to navigable waters of the United States, the degradation or destruction of which could affect interstate commerce." *The definition promulgated in 1977 is substantially the same as the one in effect today.*

What Has Congress Said?

When Congress amended the Act in 1977, it was aware of the Corps' recent assertion of jurisdiction over wetlands. In fact, this issue was extensively debated. *In the end, Congress rejected attempts to narrow the scope of that jurisdiction, in large part because of concern that to do so would unduly hamper protection of wetlands.* Other 1977 amendments, such as the Section 404(f) exemptions, general permitting authority, and the provision for States to assume the 404 program for some waters, responded to concerns regarding the scope of jurisdiction. In allowing States to assume the 404 program for some waters, Congress made specific reference to wetlands in the Act itself.

What Has the Supreme Court Said?

Regarding the issue of jurisdiction for wetlands adjacent to rivers, lakes, streams, estuaries, etc., the Supreme Court has unanimously held that the Corps acted reasonably in interpreting the Act's geographic jurisdiction to extend to wetlands adjacent to other "waters of the U.S.," even if those wetlands are saturated only by ground water sources (as opposed to surface water flooding). However, the Supreme Court has not yet ruled on the issue of non-adjacent, isolated wetland jurisdiction.



For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001m
February 1995

EPA

13 Issue Resolution Procedures: Clean Water Act/Section 404(q)

Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (Corps) has the primary authority for determining whether or not to issue a permit for the discharge of dredged or fill materials. In making a permit decision, the Corps solicits and considers the views of the public as well as State and Federal resource agencies. At times, EPA may oppose the Corps' intent to issue a Section 404 permit for a particular project. This fact sheet describes the process to resolve these differences.

Process for Resolving Section 404(q) Permit Issues

EPA objection

EPA formally determines that issuance of the permit will result in unacceptable adverse effects to Aquatic Resources of National Importance.

Notice of intent to proceed

The Corps District Engineer notifies the EPA Regional Administrator if the Corps intends to issue the permit over EPA objections. The EPA Regional Administrator has 15 days to respond to the request.

Further Action Unwarranted

Case elevation

The EPA Regional Administrator recommends to EPA's Assistant Administrator for Water that the permit application be reviewed at a higher level within the Department of the Army.

Decline Further Elevation

Review of Corps decision

Within 20 days of receiving the EPA Regional Administrator's request, the EPA Assistant Administrator decides whether to seek higher level review of the District permit decision by the Assistant Secretary of the Army (Civil Works).

Army Declines Elevation

Army review

EPA Headquarters' case elevation is reviewed by the Assistant Secretary of the Army (Civil Works). That review results in either a determination that the decision will be made at a higher level than the District Engineer, or the Assistant Secretary can issue policy guidance applicable to the case under review.

The process and time frame for resolution are spelled out in the Section 404(q) Memorandum of Agreement signed by EPA and the Department of the Army in August of 1992. Under this Agreement, EPA may request that a certain permit application receive a higher level of review within the Department of the Army, as shown at right.

In addition to this process, either the Corps or EPA can also formally raise issues related to Section 404 general program policies and procedures. Because this kind of review does not directly relate to a specific permit, it does not delay the review of pending permit applications.

Case Elevation Statistics: Since the 1992 Section 404(q) Memorandum of Agreement was signed, EPA has asked for a higher review by the Department of the Army on seven individual permit cases. Under the previous Section 404(q) Memorandum of Agreement of 1985, EPA elevated sixteen individual permit cases to the Department of the Army.

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States Environmental Protection Agency

Office of Water, Office of Wetlands, Oceans and Watersheds (4502F)

EPA843-F-95-001n
February 1995

EPA

14 EPA's Clean Water Act Section 404(c) "Veto Authority"

Section 404(c) of the Clean Water Act authorizes EPA to restrict or prohibit the use of an area as a disposal site for dredged or fill material if the discharge will have unacceptable adverse effects on municipal water supplies, shellfish beds and fishery areas, wildlife or recreational areas. The process is shown to the right.

Because Section 404(c) actions have mostly been taken in response to unresolved permit applications, this type of action is frequently referred to as an EPA "veto" of the U.S. Army Corps of Engineers permit. EPA has completed only 11 "veto" actions out of an estimated 150,000 permit applications received since the regulations went into effect in October 1979.

An EPA Regional Administrator initiates the action if he or she determines that the impact of a proposed permit activity is likely to result in

- significant degradation of municipal water supplies (including surface or ground water) or
- significant loss of or damage to fisheries, shellfishing, or wildlife habitat, or recreation areas.

Section 404(c) "Veto" Process

Intent to issue notice of Proposed Determination

The EPA Regional Administrator states his or her intention to issue a public notice of a Proposed Determination to withdraw, prohibit, deny, or restrict the specification of a defined area for discharge of dredged or fill material.

Notice of Proposed Determination

(within 15 days)

If the Regional Administrator is not satisfied that no unacceptable adverse effects will occur, a notice of the Proposed Determination is published. The Proposed Determination begins the process of exploring whether unacceptable adverse effects will occur.

Public comment period

(generally between 30 and 60 days)

A public hearing is usually held during the comment period.

Recommended Determination or withdrawal

(within 30 days of the public hearing or, if no public hearing is held, within 15 days of the end of the comment period)

The Regional Administrator prepares a Recommended Determination to withdraw, prohibit, deny, or restrict the specification of a defined area for disposing of dredged or fill material. Alternatively, he or she withdraws the Proposed Determination.

Review of Recommended Determination

(30 days)

The EPA Regional Administrator forwards the Recommended Determination and the administrative record to the EPA Assistant Administrator for Water.

Final Determination

(60 days after receipt of the Recommended Determination)

The EPA Assistant Administrator affirms, modifies, or rescinds the Recommended Determination and publishes notice of the Final Determination in the *Federal Register*.

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001o
February 1995

EPA

15 Wetlands Enforcement

In addition to jointly implementing the Clean Water Act Section 404 program, EPA and the U.S. Army Corps of Engineers (Corps) share Section 404 enforcement authority. This fact sheet gives an overview of how the agencies implement this shared authority.

Types of Violations

Section 404 violations fall into two broad categories:

- failure to comply with the terms or conditions of a Section 404 permit
- discharging dredged or fill material to waters of the United States without a permit.

In 1989, EPA and the Corps entered into a Memorandum of Agreement (MOA) on enforcement to ensure efficient and effective implementation of this shared authority. Under the MOA, the Corps, as the Federal agency that issues permits, has the lead on Corp-issued permit violation cases. For unpermitted discharges, EPA and the Corps determine the appropriate lead agency based on criteria in the MOA.

Enforcement Goals and Tools

EPA's Section 404 enforcement program has three goals: protect the environment and human health and safety, deter violations, and treat the regulated community fairly and equitably. EPA's enforcement program achieves these goals through voluntary compliance and by using the enforcement tools provided under Sections 309 and 404 of the Clean Water Act.

In *administrative* enforcement, under Section 309(a), EPA can issue administrative compliance orders requiring a violator to stop any ongoing illegal discharge activity and, where appropriate, to remove the illegal discharge and otherwise restore the site. Under Section 309(g), EPA and the Corps can assess administrative civil penalties of up to, but not exceeding, $125,000 per action.

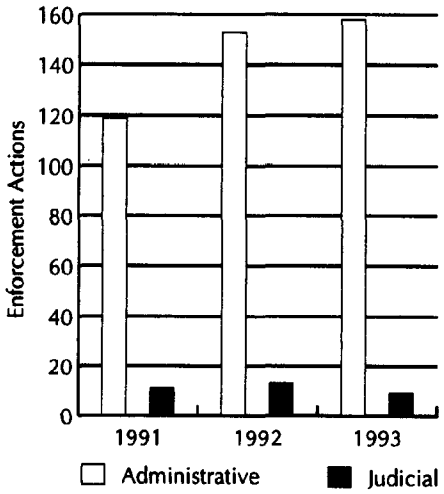
In *judicial* enforcement, Sections 309(b) and (d) and 404(s) give EPA and the Corps the authority to take civil judicial actions, seeking restoration and other types of injunctive relief, as well as civil penalties. The agencies also have authority under Section 309(c) to bring criminal judicial enforcement actions for knowingly or negligently violating Section 404.

Case Selection

EPA and the Corps consider a wide variety of factors when deciding whether to initiate an enforcement action and, if so, what kind. These factors include the amount of fill, the size of the water body (acres of wetlands filled and the environmental significance), the discharger's previous experience with Section 404 requirements, and the discharger's compliance history.

In most instances, EPA and the Corps prefer to resolve Section 404 violations through voluntary compliance or administrative enforcement.

EPA Section 404 enforcement actions (initiated)



For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

Wetlands Criminal Enforcement

Since enactment of the Clean Water Act, EPA and the Corps have used their criminal enforcement authorities sparingly in response to Section 404 violations. As demonstrated by the following examples, EPA and the Corps reserve their criminal enforcement authority for only the most flagrant and egregious Section 404 violations.

United States v. Pozsgai

In December 1989, a Philadelphia jury convicted John Pozsgai on 40 counts of knowingly filling wetlands in Bucks County, Pennsylvania, without a Section 404 permit. Mr. Pozsgai was sentenced to three years in jail, ordered to restore the site upon his release, and assessed a fine. His conviction and sentence have been affirmed by the U.S. Supreme Court.

Even prior to purchasing the 14-acre tract in 1987, Mr. Pozsgai was told by private consultants that the site contained wetlands subject to the permitting requirements of Section 404. He purchased the property at a reduced price due to the presence of wetlands, and then proceeded to ignore no fewer than ten warnings from EPA and Corps field staff to stop filling the wetlands without first getting a Section 404 permit. He also defied a temporary restraining order (TRO) issued by a Federal court judge. In fact, the government documented violations of the TRO on videotape, thanks to the cooperation of neighbors whose homes were being flooded as a result of Mr. Pozsgai's filling in his wetlands.

United States v. Ellen

In January, 1991, William Ellen was found guilty by a Maryland jury of knowingly filling 86 acres of wetlands without a Section 404 permit. He was sentenced to six months in jail and one year supervised release. The U.S. Supreme Court denied review of the conviction and sentence.

Mr. Ellen is a consultant who was hired by Paul Tudor Jones to assist in the location and creation of a private hunting club and wildlife preserve on Maryland's Eastern Shore. With Mr. Ellen's assistance, Jones selected a 3,000-acre site in Dorchester County that bordered Chesapeake Bay tributaries and consisted largely of forested wetlands and tidal marshes. As project manager, Mr. Ellen was responsible for acquiring environmental permits and complying with all applicable environmental rules and regulations. His own consulting engineers repeatedly told him that a Section 404 permit would be required. Nevertheless, he supervised extensive excavation and construction work, destroying wetlands at the site, without first obtaining a Section 404 permit. Despite repeated warnings to Mr. Ellen from the Corps, this unpermitted activity did not stop until the Corps contacted the subcontractors directly.

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001p
February 1995

EPA

16 Wetlands Mitigation Banking

Mitigation banking has the potential to play a significant role in the Section 404 regulatory program by reducing uncertainty and delays, as well as improving the success of wetlands mitigation efforts. Landowners needing to "mitigate" or compensate for authorized impacts to wetlands associated with development activities may have the option of purchasing credits from an approved mitigation bank rather than restoring or creating wetlands on or near the development site.

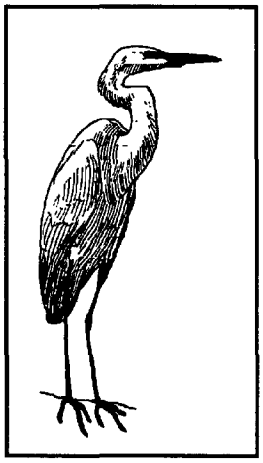
A wetlands mitigation bank is a wetland area that has been restored, created, enhanced, or (in exceptional circumstances) preserved, which is then set aside to compensate for future conversions of wetlands for development activities. A wetland bank may be created when a government agency, a corporation, or a nonprofit organization undertakes such activities under a formal agreement with a regulatory agency. The value of a bank is determined by quantifying the wetland values restored or created in terms of "credits."

Benefits of Mitigation Banking

- Banking can provide more cost effective mitigation and reduce uncertainty and delays for qualified projects, especially when the project is associated with a comprehensive planning effort.
- Successful mitigation can be ensured since the wetlands can be functional in advance of project impacts.
- Banking eliminates the temporal losses of wetland values that typically occur when mitigation is initiated during or after the development impacts occur.
- Consolidation of numerous small, isolated or fragmented mitigation projects into a single large parcel may have greater ecological benefit.
- A mitigation bank can bring scientific and planning expertise and financial resources together, thereby increasing the likelihood of success in a way not practical for individual mitigation efforts.

Status

The Administration supports mitigation banking and is currently developing interagency guidance for the establishment and use of mitigation banks. Approximately 100 mitigation banks are in operation or are proposed for construction in 34 States across the country, including the first private entrepreneurial banks.



For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001q
February 1995

EPA

17 Wetlands Categorization

There has been interest over many years in revising the Section 404 regulatory program to base decisions more on the relative values of wetlands as determined in advance based on the type or condition of the wetland. In response, several approaches have been proposed to classify or "categorize" wetlands based on their relative value, with commensurate levels of regulatory protection assigned to each wetland category.

Issues

Categorization proponents believe wetlands regulation would be improved by focusing agency resources on protection of the most valuable wetlands. Categorization proponents also believe this approach could provide greater consistency and predictability in the permit review process and reduce regulatory burden for activities in lower value wetlands.

However, there is concern that such a hierarchical approach to wetlands protection may result in "writing off" low value wetlands and increase the potential for wetlands "takings" claims for high value wetlands (see Fact Sheet #18). Related concerns include the complexity of evaluating wetland functions and values and the inadequacy of existing methods to do so. In addition, some feel that categorization would lead to increased reliance on mitigation (See Fact Sheet #16).

State experience indicates that categorization programs require substantial time and financial resources to implement.

Current Status

Wetland values are currently assessed on a case-by-case basis in the Section 404 permit review process. The level of review is commensurate with severity of the environmental impact, requiring consideration of both the relative value of the wetland *and* the impacts of the proposed activity. For many in the regulated community, however, this approach does not provide sufficient predictability or certainty.

In the mid-1980s, efforts to categorize wetlands nationally were abandoned because of scientific uncertainties. Some States, including New York, Maine, and Vermont, have applied categorization within their wetlands protection programs. Alternatively, some States are establishing wetland categories as they incorporate wetlands into their water quality standards programs.

It has been found that categorization works most effectively in the context of local or regional watershed planning initiatives where the relative value of wetlands within the context of a particular watershed can be more accurately assessed.

United States Environmental Protection Agency

Office of Water, Office of Wetlands, Oceans and Watersheds (4502F)

EPA843-F-95-001r
February 1995

EPA

18 What About Takings?

The Issue: When does a government action affecting private property amount to a "taking," and what are the takings implications of wetland regulation?

Legal Background

The concept of takings comes from the Fifth Amendment (see box below), which prohibits the taking of private property by the government for a public use without payment of just compensation. This fact sheet briefly explores the issue of takings as it relates to wetlands regulation.

The Supreme Court and lower courts have established a body of law used to determine when government actions affecting use of private property amount to a "taking" of the property by the government. When private property is "taken" by the government, the property owner must be fairly compensated.

Initially, the courts recognized takings claims based on government actions that resulted in a physical seizure or occupation of private property. The courts subsequently ruled that, in certain limited circumstances, government regulation affecting private property also may amount to a taking.

In reviewing these "regulatory" takings cases, the courts generally apply a balancing test; they examine the character of the government's action and its effect on the property's economic value. Government actions for the purpose of protecting public health and safety, including many types of actions for environmental protection, generally will not constitute takings. The courts also look at the extent to which the government's action interferes with the reasonable, investment-backed expectations of the property owner.

In *Lucas v. South Carolina Coastal Council* (1992), the U.S. Supreme Court ruled that a State regulation that deprives a property owner of *all* economically beneficial use of that property can be a taking. The court further clarified, however, that a regulation is not a taking if it is consistent with "restrictions that background principles of the State's law of property and nuisance already placed upon ownership." As an example of "background principles," the court referred to the right of government to prevent flooding of others' property.

Dolan v. City of Tigard (1994), a more recent Supreme Court takings case, involved a requirement by the City of Tigard in Oregon that, to prevent flooding and traffic congestion, a business owner seeking to expand substantially onto property adjacent to a floodplain create a public greenway and bike path from private land. The Supreme Court ruled that the City's requirement would be a taking if the City did not show that there was a "reasonable relationship" between the creation of the greenway and bike path and the impact of the development. As compared to the facts in *Dolan*, the Clean Water Act Section 404 program generally does not require property owners to provide public access across or along their property.

Current Status

The presence of wetlands does not mean that a property owner cannot undertake any activity on the property. In fact, wetlands regulation under Section 404 does not necessarily even result in restricting the use of a site. Many activities are either not regulated at all, explicitly exempted from regulation, or authorized under general permits.

Moreover, in situations where individual permits are required, the Federal agencies can work with permit applicants to design projects that meet the requirements of the law and protect the environment and public safety, while accomplishing the legitimate individual objectives and protecting the property rights of the applicant. Overall, more than 95% of all projects receive Section 404 authorization.

The Fifth Amendment to the Constitution of the United States of America

No person shall...be deprived of...property without due process of law, nor shall private property be taken for public use, without just compensation.

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001s
February 1995

EPA

19 Wetlands on Agricultural Lands: Section 404 and Swampbuster

Farmers who own or manage wetlands are directly affected by two important Federal programs: (1) Section 404 of the Clean Water Act, which requires individuals to obtain a permit before discharging dredged or fill material into waters of the United States, including most wetlands, and (2) the Swampbuster provisions of the Food Security Act, which withholds certain Federal farm program benefits from farmers who convert or modify wetlands. Together, these two programs have helped to reduce the rate at which wetlands are converted to agriculture and other uses.

Check with your local Corps district office if you are unsure whether your ongoing or planned activities occurring in wetlands are regulated under the Section 404 program.

Check with the Natural Resources Conservation Service (formerly the Soil Conservation Service) before clearing, draining, or manipulating any wet areas on your land to make sure you maintain your farm program benefits.

The Federal agencies involved (EPA, the U.S. Army Corps of Engineers, the U.S. Department of Agriculture, and the U.S. Fish and Wildlife Service) are actively seeking to coordinate their activities and to clarify the relationship between the programs. For example, "prior converted croplands" have been excluded from regulation under Section 404 to be consistent with Swampbuster—and one wetland identification can be used for *both* the Section 404 program and the Swampbuster program.

Section 404 Provisions

Most routine ongoing farming activities do not require Section 404 permits. This is perhaps the most important information for farmers regarding the Section 404 program. Section 404 permitting requirements apply only to discharges of dredged or fill materials in wetlands, streams, rivers, and "other waters of the United States." In general, farming activities that do *not* occur in wetlands or other waters of the United States or do *not* involve dredged or fill material do *not* require Section 404 permits.

In addition, many normal farming, silviculture, and ranching activities that involve discharges of dredged or fill materials into waters of the United States are exempted from Section 404; that is, they do not require a permit. In order to be exempt, the farming activity must be part of an ongoing farming operation and cannot be associated with bringing a wetland into agricultural production or converting an agricultural wetland to a non-wetland area (see Fact Sheet #20).

Swampbuster Provisions

Similar to the Section 404 program, the Swampbuster program generally allows the continuation of most farming practices so long as wetlands are not converted or wetland drainage increased. However, certain activities such as clearing, draining, or otherwise converting a wetland are activities addressed by the Swampbuster program. The program discourages farmers from altering wetlands by withholding Federal farm program benefits from any person who—

- plants an agricultural commodity on a converted wetland that was converted by drainage, dredging, leveling, or any other means (after December 23, 1985)
- converts a wetland for the purpose of or to make agricultural commodity production possible (after November 28, 1990).

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001t
February 1995

EPA

20 Exemptions to Section 404 Permit Requirements

In general, Section 404 of the Clean Water Act requires permits for the discharge of dredged or fill material into waters of the United States, including wetlands. However, certain activities, detailed below, are exempt from permit requirements under Section 404(f).

Exemptions

You do *not* generally need a permit under Section 404 if your discharges of dredged or fill material are associated with normal farming, ranching, and forestry activities such as plowing, cultivating, minor drainage, and harvesting for the production of food, fiber, and forest products or upland soil and water conservation practices. This exemption pertains to normal farming and harvesting activities that are part of an established, ongoing farming or forestry operations.

Activities Not Exempt

If an activity involving a discharge of dredged or fill material represents a *new use* of the wetland, and the activity would result in a *reduction in reach or impairment of flow or circulation* of regulated waters, including wetlands, the activity is *not* exempt. Both conditions must be met in order for the activity to be considered non-exempt. In general, any discharge of dredged or fill material associated with an activity that converts a wetland to upland is not exempt, and requires a Section 404 permit.

Examples

- Activities that bring a wetland into farm production where the wetland has not previously been used for farming are not considered part of an established operation, and therefore *require a permit.*
- Introduction of a new cultivation technique such as discing between crop rows for weed control may be a new farming activity, but because the farm operation is ongoing, the activity is *exempt* from permit requirements under Section 404.
- Planting different crops as part of an established rotation, such as soybeans to rice, is *exempt.*
- Discharges associated with ongoing rotations of rice and crawfish production are also *exempt.*

To find out whether specific activities are exempt, contact your local Corps or EPA office.

Ask for a free copy of "Agriculture and Wetlands: A Compilation of Factsheets" when you call the EPA Wetlands Information Hotline (contractor operated).

Activities Exempt under the Clean Water Act, Section 404(f)

- Established (ongoing) farming, ranching, and forestry activites:
  - plowing
  - seeding
  - cultivating
  - harvesting food, fiber, and forest products
  - minor drainage
  - upland soil and water conservation practices.
- Maintenance (but not construction) of drainage ditches
- Construction and maintenance of irrigation ditches
- Construction and maintenance of farm or stock ponds
- Construction and maintenance of farm and forest roads, in accordance with best management practices
- Maintenance of structures, such as dams, dikes, and levees

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001u
February 1995

EPA

21 State, Tribal, Local, and Regional Roles in Wetlands Protection

States, Tribes, regional, and local governments are becoming more interested and active in comprehensive wetlands protection through the authorities granted to them in existing legislation. This fact sheet discusses how these governments can be involved in wetlands protection.

"Assuming" Permitting Authority

One of the ways State and Tribal governments can strengthen their roles in wetlands protection is to "assume" permitting authority under the Clean Water Act, Section 404 program. This means that States or Tribes have the authority to issue Section 404 permits. This program regulates the discharge of dredged and fill material in wetlands and other waters. To date, Michigan and New Jersey have assumed such authority, and several States and Tribes are working toward this end. EPA will work with any government interested in assuming such authority.

Other Options

Other options available to States and Tribes to strengthen their roles in wetlands protection include-

- undertaking comprehensive State Wetland Conservation Plans
- obtaining State Program General Permits from the Corps for discharges of dredged and fill material in wetlands
- developing wetland water quality standards
- applying the Clean Water Act Section 401 Water Quality Certification program more specifically to wetlands
- incorporating wetlands protection into other State and Tribal water programs.

Regional and local participation in wetland protection can also be strengthened through comprehensive resource planning that targets specific geographic areas. Examples of such areas are river corridors for which governments and communities have identified many objectives for their use. Regional and local governments can also protect watersheds (a watershed is the area in which all water, sediments, and dissolved materials flow or drain from the land into a common body of water) and identify in advance suitable and unsuitable sites for discharges.

EPA Assistance Available

EPA helps by providing information and program guidance and by sponsoring national forums on State program development. Financial assistance may also be available from EPA to pursue some of these activities through EPA's State Wetlands Protection Grants Program.

All levels of government must work together to determine how to best protect wetland resources and what the appropriate roles and programs are for each type of government. EPA supports the strengthening of State, Tribal, and local roles in wetlands protection.

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001v
February 1995

EPA

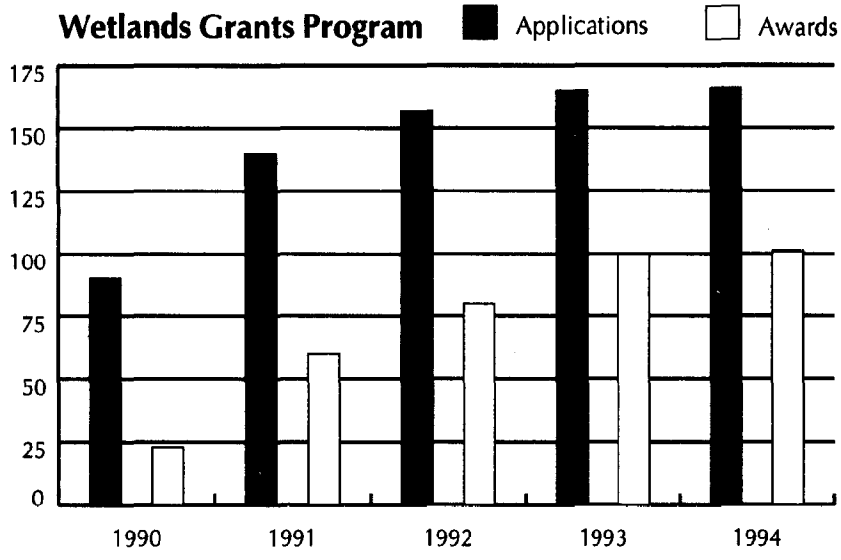
22 State Wetlands Grants Program

Since 1990, a Federal grant program has supported State and Tribal efforts to protect wetlands by providing funds to enhance existing programs or develop new programs. This grant program provides an important opportunity for States and Tribes, who have been interested and involved in wetlands protection for a long time, but who have been hampered by a lack of funds.

Current Program

The State Wetlands Protection Grant Program was initiated in FY90 with $1 million appropriated. In FY95 Congress appropriated $15 million to support the grant program. State interest in the grant program continues to grow.

- States usually request more than double the amount of grant funds available each year.
- Each State has received at least one grant to develop or enhance wetlands protection programs.
- In FY94, 101 grants were awarded from the 166 applications received.



Grant funds can only be used to *enhance existing* and *develop new* wetlands protection programs. Grants cannot be used for operational support of State wetlands protection programs. Lack of funds for operational support will likely continue to be a serious impediment to State involvement in wetlands protection.

Examples

The grants program is currently supporting—

- development of *State Wetland Conservation Plans* for States and Tribes (see Fact Sheet #27)
- *Watershed Protection Approach Demonstration Projects* on State/ Tribal lands
- development of *wetland water quality standards* in States and Tribes (see Fact Sheet #24)
- incorporation of *wetlands into Section 401 Water Quality Certification* programs in States and Tribes (see Fact Sheet #24).

For more information about the Grant Program

Contact your EPA Regional Wetland Coordinator. Note that only State agencies and Tribes are eligible to apply.

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001w
February 1995

EPA

23 State or Tribal Assumption of the Section 404 Permit Program

The Clean Water Act provides States and Tribes the option of assuming administration of the Federal Section 404 permit program in certain waters within State or Tribal jurisdiction. This fact sheet describes reasons why States and Tribes might assume administration of the Section 404 program from the Federal government, which waters could be administered by States or Tribes under this program, and the process for assuming administration of these waters.

Why Assume Administration of the Section 404 Program?

More than a dozen States already are currently administering aquatic resources/wetlands protection programs similar to the Federal Section 404 program. This makes sense because State and Tribal regulators are, in many cases, located closer to the proposed activities and are often more familiar with local resources, issues, and needs than are Federal regulators. By formally assuming administration of the Federal regulatory program, States or Tribes can eliminate unnecessary duplication between programs. If States or Tribes assume program administration, Section 404 permit applicants would need only a State or Tribal permit for dredged or fill material discharges in certain waters.

Which Waters Can States/Tribes Administer under the Section 404 Program?

States and Tribes can assume the Federal Section 404 program only in certain "non-navigable" waters. The U.S. Army Corps of Engineers retains jurisdiction in—

- tidal waters and their adjacent wetlands
- navigable waters and their adjacent wetlands.

The Corps continues to regulate navigable waters under Section 10 of the Rivers and Harbors Act of 1899.

How to Assume the Section 404 Program

To assume the Section 404 program, States or Tribes need to develop a wetlands permit program similar to the Federal program and submit to the EPA an application to assume the program. (See the box on page 2 for details on this process.) Even for States or Tribes with an existing wetlands regulatory program, this process can require the passage of new legislation. To be eligible to assume the Federal program, State or Tribal programs must—

- have an equivalent scope of jurisdiction as the Federal program
- regulate at least the same activities as the Federal program
- provide for sufficient public participation
- ensure compliance with the Section 404(b)(1) guidelines, which provide environmental criteria for permit decisions
- have adequate enforcement authority.

What Happens After States or Tribes Assume the Program?

When States or Tribes assume administration of the Section 404 program, the Corps no longer processes Section 404 permits in waters under State or Tribal jurisdiction. The State or Tribe assumes responsibility for the program, determines what areas and activities are regulated, processes individual permits for specific proposed activities, and carries out enforcement activities. EPA reviews the program annually to ensure the State or Tribe is operating its program in compliance with requirements of the law and regulations. In addition, for some activities, which generally include larger discharges with serious impacts, EPA and other Federal agencies review the permit application and provide comments to the State or Tribe; the State or Tribe cannot issue a permit over EPA's objection.

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

Status of State/Tribal Section 404 Program Assumption

To date, two States, Michigan and New Jersey, have assumed administration of the Federal permit program. Other States and some Tribes are working toward or investigating the possibility of assuming the permit program. Reasons States have expressed for not more actively pursuing assumption of the program include lack of funding, limit of program administration to "non-navigable waters," concerns regarding Federal requirements and oversight, availability of alternative mechanisms for State/Tribal wetlands protection, and the controversial nature of regulation of wetlands and other aquatic resources.

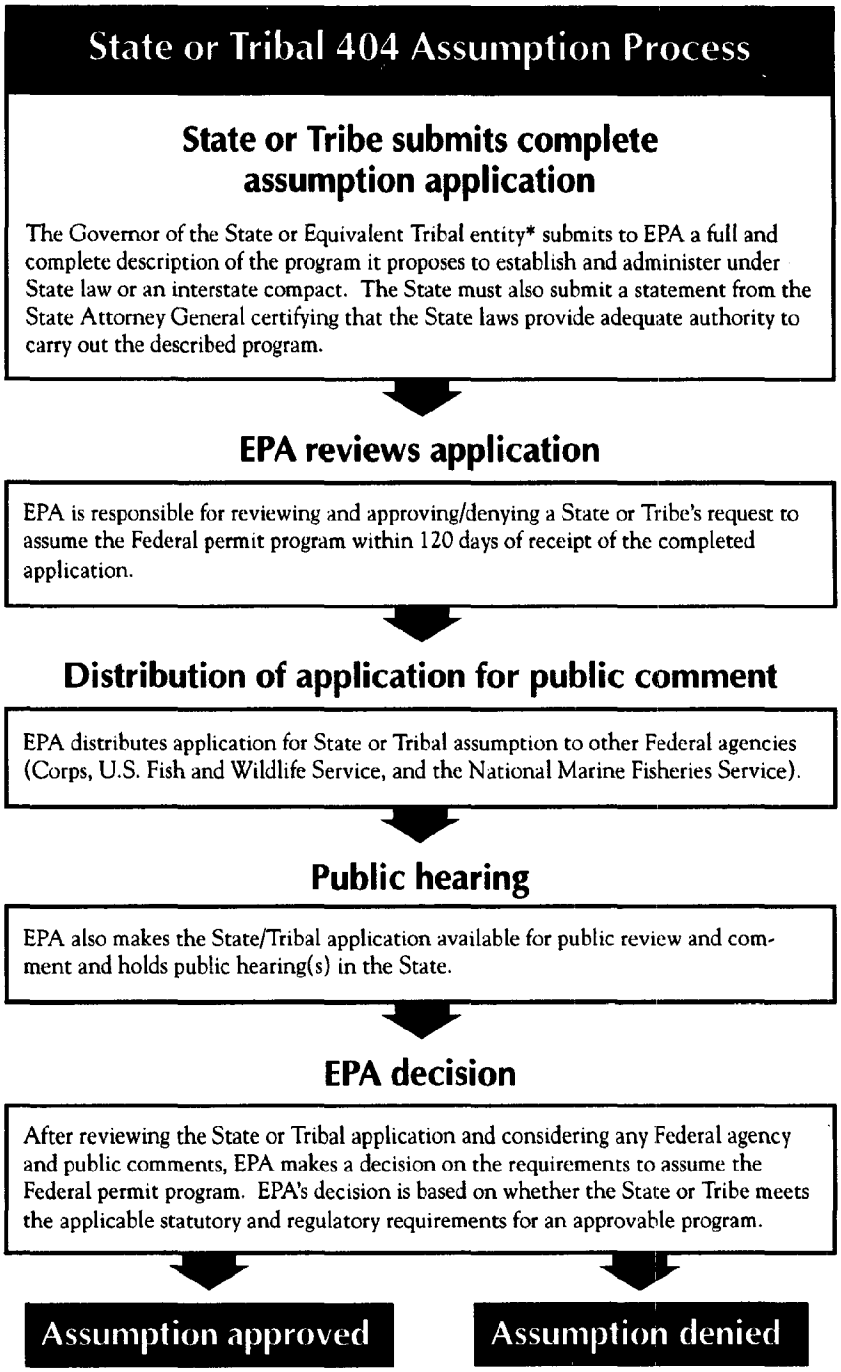
For More Information

If your State or Tribe is interested in assuming administration of the Federal Section 404 permit program, contact the EPA Regional Office in your area. Call the EPA Wetlands Information Hotline (contractor operated) to determine the appropriate EPA contact. EPA also can provide technical assistance (and may also be able to provide some financial assistance through the State Wetlands Grants Program) to help States and Tribes develop the authority, capability, and documentation needed to assume the Federal permit program.

Publications of Interest

- Clean Water Act, Section 404 Program Definition and Permit Exemptions; Section 404 State Program Regulations, June 6, 1988, *Federal Register*, 40 CFR Parts 232 and 233.

- Clean Water Act, Section 404 Tribal Regulations, February 11, 1993, *Federal Register*, 40 CFR Parts 232 and 233.



* NOTE: Tribes are eligible to apply to assume the Federal permit program after they have met requirements for "treatment as a state." See the February 11, 1993, *Federal Register* notice. (See Publications of Interest for details.)

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001x
February 1995

EPA

24 Section 401 Certification and Wetlands

This fact sheet describes State and eligible Tribal authority under Section 401 of the Clean Water Act (CWA). It also discusses how EPA can assist States and Tribes in taking more active roles in making wetland decisions and how States and Tribes can use their water quality standards in Section 401 certifications to protect wetlands.

State/Tribal Authority under Section 401

Under Section 401, States and Tribes can review and approve, condition, or deny all Federal permits or licenses that might result in a discharge to State or Tribal waters, including wetlands. The major Federal licenses and permits subject to Section 401 are Section 402 and 404 permits (in non-delegated States), Federal Energy Regulatory Commission (FERC) hydropower licenses, and Rivers and Harbors Act Section 9 and 10 permits. States and Tribes may choose to waive their Section 401 certification authority.

States and Tribes make their decisions to deny, certify, or condition permits or licenses primarily by ensuring the activity will comply with State water quality standards. In addition, States and Tribes look at whether the activity will violate effluent limitations, new source performance standards, toxic pollutants, and other water resource requirements of State/Tribal law or regulation.

EPA Assistance to States

In 1988, the National Wetlands Policy Forum recommended that States "make more aggressive use of their certification authorities under Section 401 of the CWA to protect their wetlands from chemical and other types of alterations." In response, in 1989, EPA issued guidance to States on applying Section 401 certification to protect wetlands. A year later, EPA issued guidance on developing water quality standards specifically for wetlands. Wetland water quality standards are important because they are the primary tool used in water quality certification decisions. (See the box on page 2 for details.) Twenty States and Tribes have been awarded State Wetlands Protection Grants to support use of Section 401 Certification to protect wetlands.

Does Section 401 certification add another layer of bureaucracy or cause delays?

It shouldn't. Instead, Section 401 certification allows States to take a more active role in wetland decisions. In most cases, Section 401 certification review is conducted at the same time as the Federal agency review. Many States have established joint permit processing to ensure this occurs. In addition, the Section 401 review allows for better consideration of State-specific concerns.

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

Status of State Actions

Over the past several years, States have made progress in applying Section 401 certification to wetlands. Some States rely on Section 401 certification as their primary mechanism to protect wetlands in the State. In addition, most States denied or conditioned Section 401 certification for some Section 404 nationwide permits general permits to reduce certain problematic losses in their States. In particular, many States denied certification of nationwide permit 26 because they believe that individual review of projects in isolated and headwater wetlands is critical to achieving CWA goals in their States.

EPA asked States to develop or improve their wetland water quality standards by the end of September 1993. Wisconsin is now using its wetlands standards in Section 401 certification decisions on wetlands. Other States are using their Section 401 authority to condition some of the more than 300 dams that are coming up for relicensing by FERC. Section 401 certification allows States to address associated chemical, physical, and biological impacts such as low dissolved oxygen levels, turbidity, inundation of habitat, stream volumes and fluctuations, filling of habitat, impacts on fish migration, and loss of aquatic species as a result of habitat alterations.

For more information, contact the EPA Wetlands Information Hotline (contractor operated) for copies of the following:

- Wetlands and 401 Certification, 1989
- Water Quality Standards for Wetlands, 1990
- Statement of Martha G. Prothro, May 1992
- *PUD No. 1 of Jefferson County and City of Tacoma, petitioner v. Washington Department of Ecology et al.*, 114 S. Ct. 1900 (1994).

How can water quality standards protect wetlands?

Water quality standards have three primary components: designated uses, criteria to protect those uses, and an antidegradation policy. States designate uses based on the functions and values of their wetlands. At a minimum, these uses must meet the CWA goals to protect and propagate fish, shellfish, and wildlife, and for recreation in and on the water. States may also designate uses associated with unique functions and values of wetlands such as floodwater storage and ground-water recharge.

States also adopt criteria to protect those uses. Criteria can be general narrative statements such as "maintain natural hydrologic conditions, including hydroperiod, hydrodynamics, and natural water temperature variations necessary to support vegetation which would be present naturally." Criteria may also include specific numeric values, such as a dissolved oxygen concentration of 5.0 mg/l.

State antidegradation policies include provisions for full protection of existing uses (functions), maintenance of water quality of high-quality waters, and a prohibition against lowering water quality in outstanding resource waters. In addition, a State's antidegradation policy addresses fill activities in wetlands by ensuring no significant degradation occurs as a result of the fill activity.

Narrative criteria in conjunction with antidegradation policies can provide the basis for addressing hydrologic and physical impacts to wetlands (not discerned through numeric criteria) caused by nonpoint source pollution, storm water discharges, ground-water pumping, filling, and other sources of wetland degradation. When combined with a strong implementation policy, wetland water quality standards can provide the basis for such tools as best management practices, monitoring programs, and mitigation plans, as well as serve as the primary basis for Section 401 certification decisions.

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001y
February 1995

EPA

25 Wetlands and Runoff

Since wetlands are typically the lowest area on the landscape, they often receive runoff from surrounding land. Several of the key programs that address such pollution are discussed in this fact sheet.

Runoff (sometimes called "stormwater" or "nonpoint source pollution") is caused by rainfall or snow melt moving over and through the ground. Runoff carries natural and manmade pollutants into low areas such as wetlands, lakes, streams, and eventually into ground water. In addition, atmospheric deposition and hydrological modifications can contribute pollutants to runoff as well as directly into surface water. The quality of U.S. wetlands and other water resources is related to the quality of the environment contributing to these waters. However, programs have historically focused on single goals or small sets of goals. These programs have succeeded in identifying and controlling, to some degree, the larger point sources of pollution. EPA has expanded its focus to use an approach that addresses the interconnections between water resources and the land, air, and water environment surrounding the resources.

Untreated Runoff Impacts to Wetlands

Untreated runoff from agricultural land, urban areas, and other sources is a leading cause of water quality impairment. Siltation; pollutants; excess nutrients; and changes to water flows, such as more frequent inundation, and increased turbidity, are responsible for most of the impacts to wetlands from runoff.

Impacts to wetlands have resulted in consequences such as changed species composition, increased pollutant loadings (e.g., heavy metals), and replacement of complex wetland systems with less desired open water. Modifications of wetlands associated with some runoff management practices have resulted in significant impacts to wetlands. Some impacts have been particularly tragic, such as in Kesterson and Stillwater Wildlife Refuges, where untreated, contaminated runoff resulted in mortality and deformities of wildlife populations, particularly fish and migratory birds.

Current Status

EPA has developed technical information that landowners can use to protect the many functions of wetlands, including water quality improvement. An issue paper highlighting the impacts of stormwater on wetlands, entitled *Natural Wetlands and Urban Stormwater: Potential Impacts and Management*, is available through the EPA Wetlands Information Hotline (contractor operated). Other information that can be obtained includes a guide describing best management practices to pretreat stormwater runoff before it enters a natural wetland (in press). Additional materials on wetlands protection and restoration for nonpoint source benefits will be developed to assist in implementation of the wetlands and riparian areas chapter in the CZARA Management Measures Guidance (see box on page 2). EPA will continue to work to address potential opportunities and conflicts regarding wetlands and programs addressing runoff.

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

To Use or Not To Use Wetlands for Treatment?

Because wetlands have a natural water quality improvement function, there has been a tremendous amount of interest in using wetlands to treat runoff from urban areas, agricultural lands, and other pollutant sources. However, the critical question is, *"What can wetlands safely handle before they are contaminated or their functions degraded?"* There are significant opportunities to protect and restore wetlands and riparian areas as one part of programs addressing runoff. While wetlands do provide valuable water quality protection for downstream rivers, lakes, and estuaries, the quality of the wetlands, as waters of the United States, should also be protected.

Decisions that might route runoff into wetlands, either inadvertently or by design, should be carefully evaluated, and adequate wetlands protection should be provided, including avoidance of the wetlands, use of best management practices (BMPs), and monitoring to observe how well the BMPs work.

For additional information regarding the Section 319 program or the CZARA guidance, contact the EPA Nonpoint Source Control Branch at (202) 260-7100.

For additional information about the Section 402 stormwater program, contract the Stormwater Hotline at (703) 821-4823.

EPA Programs that Address Runoff

Clean Water Act Section 402(p)

Section 402(p) requires stormwater permits for four major classes of stormwater discharges: (1) discharges for which a permit has been issued under Section 402 before the date of the enactment of this subsection; (2) discharges associated with industrial activity; (3) discharges from a municipal separate stormwater sewer system serving an incorporated or unincorporated, urbanized population greater than 100,000; and (4) discharges that contribute to a violation of a water quality standard or are significant contributors of pollutants to waters of the United States. This program has issued guidance for preparation of permit applications for regulated municipal and industrial stormwater discharges. In addition, it stresses the use of best management practices (BMPs) to minimize or eliminate the contribution of pollutants to stormwater discharges to waters of the United States, including wetlands.

Clean Water Act Section 319

Section 319 established a national program to control nonpoint sources of pollution. The program stresses a watershed-based approach to nonpoint source management which can include protection or restoration of wetlands and riparian areas to reduce nonpoint source pollution. EPA has funded a number of these projects under Section 319(h).

Coastal Zone Act Reauthorization Amendments of 1990 (CZARA)

Under Section 6217 of CZARA, EPA and the National Oceanic Atmospheric Administration (NOAA) have developed guidance specifying management measures for nonpoint source pollution affecting coastal waters. Included in the guidance (released in January 1993) is a chapter on protection and restoration of wetlands and riparian areas, and use of vegetated treatment systems for nonpoint source control. Coastal States are now developing programs to implement the management measures in coastal areas.

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001z
February 1995

EPA

26 Wetlands and Watersheds

Wetlands are important elements of a watershed because they serve as the link between land and water resources. Wetlands protection programs are most effective when coordinated with other surface and ground-water protection programs and with other resource management programs, such as flood control, water supply, protection of fish and wildlife, recreation, control of stormwater, and nonpoint source pollution. This fact sheet discusses the "why" and "how" of integrating these programs.

Why Use an Integrated Approach?

The quality of the Nation's wetlands and other water resources is directly linked to the quality of the environment surrounding these waters. However, resource protection programs have historically focused on single goals or a small set of goals. These programs have succeeded in identifying and controlling, to some degree, the larger point sources of pollution. Now it's time to use an approach that addresses the interconnections between water resources and the land, air, and water environment surrounding the resources.

What's a Watershed?

A watershed, also called a drainage basin, is the area in which all water, sediments, and dissolved materials flow or drain from the land into a common river, lake, ocean, or other body of water.

A watershed-based approach to water and wetlands protection considers the whole system, including other resource management programs that address land, air, and water, to successfully manage problems for a given aquatic resource.

The watershed approach thus includes not only the water resource, but also the surrounding land from which the water drains. This area can be as large as the Mississippi River drainage basin or as small as a back yard.

How Does EPA Encourage an Integrated Approach?

EPA's Office of Water is actively pursuing a Watershed Protection Approach within EPA and with other agencies. EPA's Wetlands Division incorporates a watershed approach in much of its work with other agencies, States, and organizations. Current activities include the following:

- developing guidance linking wetlands protection programs to watershed planning efforts
- funding State watershed projects through State Wetland Protection Grants
- integrating a watershed approach into Federal floodplain management activities
- supporting a series of national and regional meetings on wetlands and regional watershed planning.

• An Integrated, Holistic Approach •

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States Environmental Protection Agency

Office of Water, Office of Wetlands, Oceans and Watersheds (4502F)

EPA843-F-95-001aa
February 1995

EPA

27 What is a State Wetland Conservation Plan?

A tool that States, Territories, and Tribes are using to protect wetlands is the State Wetland Conservation Plan (SWCP). A State Wetland Conservation Plan is not meant to create a new level of bureaucracy. Instead, it improves government and private sector effectiveness and efficiency by identifying gaps in wetland protection programs and finding opportunities to make wetlands programs work even better.

State Wetland Conservation Plan are strategies for States to achieve no net loss and other wetland management goals by integrating both regulatory and nonregulatory approaches to protecting wetlands.

Advantages

A large number of land- and water-based activities impact wetlands. These activities are not addressed by any single Federal, State or local agency program. While many public and private programs and activities protect wetlands, these programs are often limited in scope and not well coordinated. Neither do these programs address all of the problems affecting wetlands.

States, Territories, and Tribes are well positioned between Federal and local government to take the lead in integrating and expanding wetland protection and management programs. They are experienced in managing Federally mandated environmental programs under the Clean Water Act and the Coastal Zone Management Act. They are uniquely equipped to help resolve local and regional conflicts and identify the local economic and geographic factors that may influence wetlands protection.

What are States doing?

- **Texas'** SWCP will focus upon non-regulatory and voluntary approaches to wetland protection to complement its regulatory program. The plan will encourage development of economic incentives for private landowners to protect wetlands and educational outreach for State and local officials.
- **Tennessee's** plan focuses on a strategy to collect wetland information for outreach and education to private owners of wetlands as well as to regional and local decision-makers. Current implementation efforts include identification of critical functions of major wetland types, priority sites for acquisition and/or restoration, as well as maintenance and restoration of natural floodplain hydrology through digitization and use of remote sensing.
- **Maine's** SWCP will focus on ways to establish better coordination between State and Federal regulatory programs, as well as new non-regulatory mechanisms to foster voluntary stewardship. In addition, the State expects to use an ecosystem framework to guide the prioritization of wetlands for comprehensive protection, and review and improve compensatory mitigation policies.

FOR MORE INFORMATION:

- See the *Statewide Wetlands Strategies* guidebook, which is available from Island Press (1-800-828-1302).
- Ask for copies of the SWCP brochure "Why Develop a State Wetland Conservation Plan?" from the EPA Wetlands Information Hotline (contractor operated).

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001bb
February 1995

EPA

28 Advance Identification (ADID)

This fact sheet describes the advance identification of disposal areas (ADID), a planning process used to identify wetlands and other waters that are generally suitable or unsuitable for the discharge of dredged and fill material. It highlights how the ADID process works and the status of ongoing projects.

How the ADID Process Works

The ADID process involves collecting and distributing information on the values and functions of wetland areas. EPA conducts the process in cooperation with the U.S. Army Corps of Engineers and in consultation with States or Tribes. Local communities can use this information to help them better understand the values and functions of wetlands in their areas. It also serves as a preliminary indication of factors likely to be considered during review of a Section 404 permit application.

The ADID process is intended to add predictability to the wetlands permitting process as well as better account for the impacts of losses from multiple projects within a geographic area.

Although an ADID study generally classifies wetland areas as suitable or unsuitable for the discharge of dredged or fill material, the classification does not constitute either a permit approval or denial and should be used only as a guide by community planners, landowners, and project proponents in planning future activities. The classification is strictly advisory.

Status of ADID Projects

As of February 1993, 38 ADID projects had been completed and 33 were ongoing. The projects ranged in size from less than 100 acres to more than 4,000 square miles and are located from Alaska to Florida, as shown in the map on page 2. ADID projects can be resource-intensive activities, although some have been completed in as little as six months.

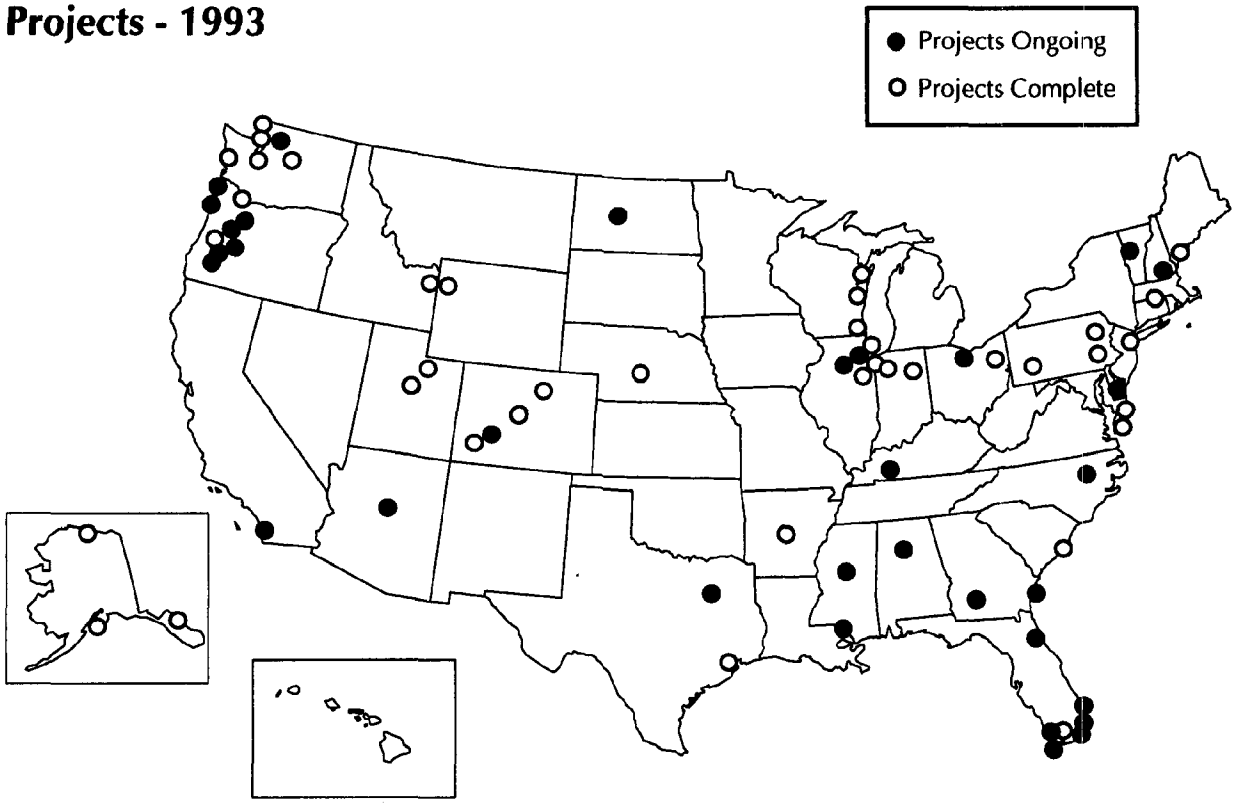
Regional EPA experience indicates that the smaller or more local the ADID project boundaries, the more complete and effective the analysis and results. For example, ADID projects have been initiated by local entities to facilitate planning efforts such as the one described in the Case Study for West Eugene, Oregon (see sidebar). These local efforts have proven to be one of the more successful ways of generating support for wetlands protection. Local cooperation and support are vital to the success of ADID projects.

The number of ADID projects has increased over time, and EPA expects more States, Tribes, localities, and private organizations to become involved in providing funds and otherwise supporting ADID or other comprehensive planning efforts. Because ADID efforts are usually based on watershed planning, they are extremely compatible with geographic and ecosystem initiatives such as EPA's Watershed Protection Approach.

CASE STUDY: *In the West Eugene, Oregon, Wetlands Special Area Study, local ADID efforts led to a Section 404 general permit. Because the ADID was incorporated into the City of Eugene's general comprehensive plan, and because Oregon land-use policies have the effect of local land-use law, the ADID effort streamlined the regulatory process.*

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

Status of EPA Wetlands Advance Identification Projects - 1993



U.S. EPA, Office of Water, Office of Wetlands, Oceans, and Watersheds

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001cc
February 1995

EPA

29 EPA's Outreach Efforts

EPA's Wetlands Division uses various tools to protect wetlands effectively. One of the primary tools is outreach. The goal of outreach efforts is to increase long-term wetlands conservation and management. This goal can be accomplished by enhancing public understanding of the value of wetlands and supporting innovative programs that encourage private, State, and local actions to conserve wetlands. The Wetlands Division and EPA's Regional Offices are actively involved in outreach initiatives as outlined in this fact sheet.

Outreach activities include the following:

- creating partnerships with members of the agricultural community, private landowners, State and local governments, and other Federal agencies
- educating the public, both children and adults
- providing technical assistance to State and local governments as well as private and nonprofit organizations.

EPA's Wetlands Information Hotline (1-800-832-7828)

A toll-free telephone service, operated by a contractor to EPA, responds to public interest, questions, and requests for information about wetlands. From March 1993 to March 1994, the Hotline received and responded to 9,980 calls, or about 832 per month.

American Wetlands Month

Across the country each May, Federal agencies, State and local governments, and private and nonprofit organizations come together voluntarily to increase public awareness of the values and productivity of wetlands; encourage people to enjoy these resources; and to protect, recognize, enhance, commemorate, and restore wetlands.

Audubon's America

EPA supports this program to protect, conserve, restore, enhance, and interpret the natural and cultural resource values of the land and water areas where John James Audubon lived, traveled, wrote, painted, and observed. This will be accomplished by recognizing and establishing a system of connected public and privately owned natural areas in the midwestern and eastern United States.

Workshops and Conferences

EPA sponsors a variety of forums encouraging informed discussion of wetlands issues, including State programs, wetlands and watershed management, categorization, mitigation, altered wetlands, and education.

Publications

These include brochures and fact sheets for the public; teachers and students; landowners and farmers affected by the permitting process; State, Tribal, and local governments; and organizations interested in environmental issues. To date, much of the information has been provided in hard copy. Soon this information may be available on Internet.

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001dd
February 1995

EPA

30 Partnerships with Landowners

All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts. His instincts prompt him to compete for his place in the community, but his ethics prompt him also to cooperate (perhaps in order that there may be a place to compete for). The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, animals, or collectively, the land.

-Aldo Leopold, *A Sand County Almanac*

An increasingly popular way to strengthen wetlands protection is to foster innovative public/private partnerships and promote landowner participation in voluntary stewardship of wetlands. This fact sheet discusses ways the EPA is encouraging partnerships with landowners.

Why Should Landowners Be Interested in Wetlands Protection?

Wetlands conservation has positive, long-term impacts on the environment, commerce, and quality of life. In contrast, continued wetland loss has negative impacts on water quality, biodiversity, the economy, and human health and safety.

Approximately 75% of the remaining wetlands in the lower 48 States are privately owned. Recently, much of the national focus on wetlands protection has been on regulatory programs. However, regulatory programs only provide partial protection. In contrast, numerous voluntary programs in the public and private sectors provide educational, technical, and financial assistance to private landowners in protecting wetlands.

Landowner Assistance Available

Private landowner assistance and partnership programs among government, nonprofit, and private groups are areas of growing national interest. The potential for voluntary programs to protect wetland resources is being recognized by Federal, State, and local governments. EPA has actively promoted landowner assistance and partnership programs through such activities as

- American Wetlands Month
- Audubon's America
- the EPA Wetlands Information Hotline (contractor operated).

EPA also helped develop a pilot project promoting voluntary wetlands programs in the State of Maryland. A report that came out of that project, *Private Landowner's Wetlands Assistance Guide: Voluntary Options for Wetlands Stewardship in Maryland*, is available by calling the EPA Wetlands Information Hotline (contractor operated).

Upcoming Programs

Other States have indicated a strong interest in initiating a program similar to the Maryland program, including California, Arizona, and Oregon.

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001ee
February 1995

EPA

31 Wetland Acquisition and Restoration: Funding and Technical Assistance

Seventy-four percent of the remaining wetlands in the contiguous United States are located on private property. As stewards of the land, private property owners have a tremendous opportunity to safeguard the Nation's wetlands resources through wise land-use decisions.

Many Federal, State, and local programs as well as private and nonprofit organizations offer cost-sharing, technical, and often direct payment assistance to private landowners to protect, restore, and create wetlands. Much of the information and funding involves agricultural-related activities in wetlands; however, ample resources also exist for landowners who engage in other activities. Options for private landowners include land banks, transferrable development rights, deed restrictions, easements to conservation organizations—all of which can provide tax breaks—and leases of rights to hunt, fish, harvest timber, and trap fur-bearing animals on the property.

The EPA Wetlands Information Hotline (contractor operated) can provide you with more information about the agencies and program requirements discussed in this fact sheet, as well as publications and regional contacts in your area. In addition, your local Natural Resources Conservation Service (formerly the Soil Conservation Service) office or county extension agent may know of other State and local programs.

Governmental Assistance

The U.S. Department of Agriculture (USDA) supports many sources of assistance for wetland acquisition and restoration through several offices:

The *Natural Resources Conservation Service (NRCS)* provides technical assistance to landowners and administers programs such as the Wetlands Reserve Program (WRP), the Water Bank Program, and the Forestry Incentives Program (FIP).

- **Contact:** USDA NRCS, National Wetlands Team, P.O. 2890, Washington, DC 20013.

The *Consolidated Farm Service Agency (CFSA)* combines the functions of the Agricultural Stabilization and Conservation Service (ASCS), the Federal Crop Insurance Corporation (FCIC), and the farm-lending activities of Farmers Home Administration (FmHA). The CFSA oversees such programs as the Agricultural Conservation Program (ACP) and the Conservation Reserve Program (CRP).

- **Contact:** USDA CFSA, Conservation and Environmental Protection Division, P.O. Box 2415, Washington, DC 20013.

The *U.S. Forest Service* (USFS) administers the Stewardship Incentives Program (SIP) and the Forest Legacy Program.

- **Contact:** USDA USFS, Cooperative Forestry Staff, Auditor's Building, 201 14th Street, SW, Washington, DC 20250.

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

The U.S. Department of the Interior (USDOI) helps private landowners through the *U.S. Fish and Wildlife Service (USFWS)*. These programs include Partners for Wildlife (Private Lands Assistance and Restoration Program), and the North American Waterfowl Management Plan (NAWMP) Joint Ventures.

- **Contact:** USDOI, USFWS, North American Waterfowl and Wetlands Office, 4401 N. Fairfax Drive, Arlington, VA 22203.

The U.S. Environmental Protection Agency (USEPA), through its *Office of Wetlands, Oceans, and Watersheds, Wetlands Division* and the contractor-operated Wetlands Information Hotline, offers information on current EPA wetland conservation, acquisition, and restoration initiatives.

- **Contact:** US EPA, OWOW, Wetlands Division (4502F), 401 M Street, SW, Washington, DC 20460.

The US EPA's *Office of Wetlands, Oceans, and Watersheds (OWOW)* also provides financial assistance under Section 319(h) of the Clean Water Act for a number of wetland restoration and protection activities.

- **Contact:** US EPA, OWOW, Nonpoint Source Control Branch (4503F), 401 M Street, SW, Washington, DC 20460.

Private/Nonprofit Assistance

In the private sector, *Ducks Unlimited* administers the MARSH (Matching Aid to Restore States Habitat) Program.

- **Contact:** MARSH Program Coordinator, 1155 Connecticut Ave., NW, #800, Washington, DC 20036.

The *Nature Conservancy* provides help through the Natural Areas Registry.

- **Contact:** 2 Wisconsin Ave., Chevy Chase, MD 20815.

The *Izaak Walton League* offers the Partners for Wetlands program.

- **Contact:** 1401 Wilson Blvd., Level B, Arlington, VA 22209.

Private Land Trusts assist landowners in acquiring and restoring wetlands using a master planning process to select a variety of programs based on the landowner's resource needs, goals, and opportunities.

- **Contact:** Trust for Public Lands 312 Massachusetts Ave., NW, Washington, DC 20002

- **Contact:** Land Trust Alliance 900 17th St., NW, Washington, DC 20002

- **Contact:** American Farmland Trust 1920 N St., NW, Washington, DC 20036.

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001ff
February 1995

EPA

32 Environmental Protection Agency: Directory

Office of Water
Office of Wetlands, Oceans, and Watersheds

Robert H. Wayland, III, Director
David G. Davis, Deputy Director
Tel: (202) 260-7166

Wetlands Division (4502F)
401 M Street, SW
Washington, DC 20460
John Meagher, Director
Gregory E. Peck, Acting Deputy Director
Tel: (202) 260-7791
Fax: (202) 260-2356

Wetlands and Aquatic Resources Regulatory Branch
Tel: (202) 260-1799
Fax: (202) 260-7546
Hazel A. Groman, Acting Chief

Enforcement and Regulatory Policy Section
John Goodin, Acting Chief

Elevated Cases Section
Joe DaVia, Acting Chief

Wetlands Strategies and State Programs Branch
Tel: (202) 260-9043
Fax: (202) 260-8000
Phil Oshida, Chief

Outreach and State Programs Section
Stan Austin, Chief

Wetlands Strategies and Initiatives Section
Vacant

Regional Wetlands Contacts

Region I: CT, MA, ME, MH, RI, VT
Douglas Thompson, Chief
Wetlands Protection Section (WWP-1900)
U.S. EPA-Region I
John F. Kennedy Federal Building
Boston, MA 02203-1911
Tel: (617) 565-4421
Fax: (617) 565-4940

Region II: NJ, NY, PR, VI
Daniel Montella, Chief
Wetlands Section (2WM-MWP)
U.S. EPA-Region II
26 Federal Plaza, Room 837
New York, NY 10278
Tel: (212) 264-5170
Fax: (212) 264-4690

Region III: DE, MD, PA, VA, WV
Barbara D'Angelo, Chief
Wetlands Protection Section (3ES42)
U.S. EPA-Region III
841 Chestnut Street
Philadelphia, PA 19107
Tel: (215) 597-9301
Fax: (215) 597-1850

Region IV: AL, FL, GA, KY, MS, NC, SC, TN
Tom Welborn, Chief
Wetlands Regulatory Section
U.S. EPA-Region IV
345 Courtland Street, N.E.
Atlanta, GA 30365
Tel: (404) 347-4015
Fax: (404) 347-3269

Region V: IL, IN, MI, MN, OH, WI
Douglas Ehorn, Chief
Wetlands and Watersheds Section (WQW-16J)
U.S. EPA-Region V
77 West Jackson Boulevard
Chicago, IL 60604
Tel: (312) 886-0243
Fax: (312) 886-7804

Region VI: AR, LA, NM, OK, TX
Beverly Ethridge, Chief
Wetlands Protection Section (6E-FT)
U.S. EPA-Region VI
1445 Ross Avenue, Suite 900
Dallas, TX 75202
Tel: (214) 655-2263
Fax: (214) 655-7446

Region VII: IA, KS, MO, NE
Gerry Shimek, Acting Chief
Wetlands Protection Section (ENRV)
U.S. EPA-Region VII
726 Minnesota Avenue
Kansas City, KS 66101
Tel: (913) 551-7540
Fax: (913) 551-7863

Region VIII: CO, MT, ND, SD, UT, WY
Gene Reetz, Chief
Wetlands Protection Section (8WM-WQ)
U.S. EPA-Region VIII
999 18th Street
500 Denver Place
Denver, CO 80202-2405
Tel: (303) 293-1570
Fax: (303) 391-6957

Region IX: AZ, CA, HI, NV, Pacific Islands
Stephanie Wilson
Watersheds Protection Branch (W-7-4)
U.S. EPA-Region IX
75 Hawthorne Street
San Francisco, CA 94105
Tel: (415) 744-1968
Fax: (415) 744-1078

Region X: AK, ID, OR, WA
William Riley, Chief
Wetlands Section (WD-128)
U.S. EPA-Region X
1200 Sixth Avenue
Seattle, WA 98101
Tel: (206) 553-1412
Fax: (206) 553-1775

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

United States
Environmental Protection
Agency

Office of Water,
Office of Wetlands,
Oceans and Watersheds (4502F)

EPA843-F-95-001gg
February 1995

EPA

33 Corps of Engineers Regulatory Program Directory

Michael L. Davis
Chief, Regulatory Branch (CECW-OR)
U.S. Army Corps of Engineers
20 Massachusetts Avenue, NW
Washington, DC 20314-1000
Tel: (202) 272-1782
Fax: (202) 504-5069

Lower Mississippi Valley Division

Susan Hampton
U.S. Army Corps of Engineers
Lower Mississippi Valley Division
(CELMV-CO-R)
P.O. Box 80
Vicksburg, MS 39180-0080
(601) 634-5821

Memphis District

Larry D. Watson
U.S. Army Corps of Engineers
Memphis District (CELMM-CO-R)
B-202 Clifford Davis Federal Building
Memphis, TN 38103-1894
(901) 544-3471

New Orleans

Ronald J. Ventola
U.S. Army Corps of Engineers
New Orleans District (CELMN-OD-R)
P.O. Box 60267
New Orleans, LA 70160-0267
(504) 862-2255

St. Louis District

Michael Brazier
U.S. Army Corps of Engineers
St. Louis District (CELMS-OD-R)
1222 Spruce Street
St. Louis, MO 63103-2833
(314) 331-8575

Vicksburg District

E. Guynes
U.S. Army Corps of Engineers
Vicksburg District (CELMK-OD-F)
2101 N. Frontage Rd.
Vicksburg, MS 39180-5191
(601) 631-5276

Missouri River Division

Mores V. Bergman
U.S. Army Corps of Engineers
Missouri River Division
12565 W. Center Road
Omaha, NE 68144
(402) 697-2533

Kansas City District

Mel Jewett
U.S. Army Corps of Engineers
Kansas City District (CEMRK-OD-R)
700 Federal Building
Kansas City, MO 64106-2896
(816) 426-3645

Omaha District

John Morton
U.S. Army Corps of Engineers
Omaha District (CEMRO-OP-N)
215 North 17th Street
Omaha, NE 68102-4978
(402) 221-4133

New England Division

William R. Lawless
U.S. Army Corps of Engineers
New England Division (CNEED-OD-P)
424 Trapelo Road
Waltham, MA 02254-9149
(617) 647-8057

North Atlantic Division

Lenny Kotkiewicz
U.S. Army Corps of Engineers
North Atlantic Division (CENAD-CO-OP)
90 Church Street
New York, NY 10007-9998
(212) 264-7535

Baltimore District

Donald W. Roeseke
U.S. Army Corps of Engineers
Baltimore District (CENAB-OP-PN)
P.O. Box 1715
Baltimore, MD 31203-1715
(410) 962-3670

New York District

Joseph Seebode
U.S. Army Corps of Engineers
New York District (CENAN-PL-E)
26 Federal Plaza
New York, NY 10278-0090
(212) 264-3996

Norfolk District

William H. Poore, Jr.
U.S. Army Corps of Engineers
Norfolk District (CENAO-OP-N)
803 Front Street
Norfolk, VA 23510-1096
(804) 441-7068

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated).

US Army Corps of Engineers

Directory Continued

Philadelphia District

Frank Cianfrani
U.S. Army Corps of Engineers
Philadelphia District (CENAP-OP-N)
Wanamaker Building
100 Penn Square East
Philadelphia, PA 19107-3390
(215) 656-6725

North Central Division

Dr. Michael Loesch
U.S. Army Corps of Engineers
North Central Division (CENCD-CO-MO)
111 N. Canal Street, 12th Floor
Chicago, IL 60606
(312) 353-7762

Buffalo District

Paul G. Leuchner
U.S. Army Corps of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199
(716) 879-4313

Chicago District

Mitchell Isoe
U.S. Army Corps of Engineers
Chicago District (CENCC-CO)
111 N. Canal Street, 6th Floor
Chicago, IL 60606
(312) 886-3555 or (312) 353-6428

Detroit District

Gary R. Mannesto
U.S. Army Corps of Engineers
Detroit District (CENCE-CO-OR)
P.O. Box 1027
Detroit, MI 48231-1027
(313) 226-2432

Rock Island District

Steven J. Vander Horn
U.S. Army Corps of Engineers
Rock Island District (CENCR-OD-R)
P.O. Box 2004
Clock Tower Building
Rock Island, IL 61204-2004
(309) 794-5370

St. Paul District

Ben Wopat
U.S. Army Corps of Engineers
St. Paul District (CENCS-SO-PO)
1421 USPO & Custom House
190 - 5th Street East
St. Paul, MN 55101-1638
(612) 290-5376

North Pacific Division

Laura Kemp
U.S. Army Corps of Engineers
North Pacific Division (CENPD-CO-R)
P.O. Box 2870
Portland, OR 97208-2870
(503) 326-3780

Alaska District

Robert K. Oja, Regulatory Branch
U.S. Army Corps of Engineers
Alaska District (CENPA-CO-NF)
P.O. Box 898
Anchorage, AK 99506-0898
(907) 753-2712

Portland District

Burt Paynter
U.S. Army Corps of Engineers
Portland District (CENPP-OP-PN)
P.O. Box 2946
Portland, OR 97208-2946
(503) 326-7146

Seattle District

Tom Mueller
U.S. Army Corps of Engineers
Seattle District (CENPS-OP-PO)
P.O. Box 3755
Seattle, WA 98124-2255
(206) 764-6695

Walla Walla District

Brad Daly
U.S. Army Corps of Engineers
Walla Walla District (CENPW-OP-RM)
City-County Airport
Walla Walla, WA 99362-9265
(509) 522-6720

Ohio River Division

Rodney Woods
U.S. Army Corps of Engineers
Ohio River Division (CEORD-CO-OR)
P.O. Box 1159
Cincinnati, OH 45201-1159
(513) 684-6212

Huntington District

Mike Gheen
U.S. Army Corps of Engineers
Huntington District (CEORH-OR-F)
502 8th Street
Huntington, WV 25701-2070
(304) 529-5487

Louisville District

William Christman
U.S. Army Corps of Engineers
(CEORH-OR-R)
P.O. Box 59
Louisville, KY 40201-0059
(502) 582-6461

Nashville District

Joseph R. Castleman
U.S. Army Corps of Engineers
Nashville District (CEORN-OR-R)
P.O. Box 1070
Nashville, TN 37202-1070
(615) 736-5181

Pittsburgh District

E. Raymond Beringer
U.S. Army Corps of Engineers
Pittsburgh District (CEORP-OR-R)
1000 Liberty Avenue
Pittsburgh, PA 15222-4186
(412) 644-6872

Pacific Ocean Division

Mike Lee
U.S. Army Corps of Engineers
Pacific Ocean Division (CEPOD-CO-O)
Building 230
Fort Shafter, HI 96858-5440
(808) 438-9258

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated)

US Army Corps of Engineers

Directory Continued

South Atlantic Division

James M. Kelly
U.S. Army Corps of Engineers
South Atlantic Division (CESAD-CO-R)
Room 313
77 Forsythe Street, SW
Atlanta, GA 30335-6801
(404) 331-2778

Charleston District

Clarence H. Ham
U.S. Army Corps of Engineers
Charleston District (CESAC-CO-M)
P.O. Box 919
Charleston, SC 29402-0919
(803) 727-4604

Jacksonville District

Dr. John Hall
U.S. Army Corps of Engineers
Jacksonville District (CESAJ-CO-OR)
P.O. Box 4970
400 West Bay Street
Jacksonville, FL 32232-0019
(904) 232-2907

Mobile District

Ron Krizman
U.S. Army Corps of Engineers
Mobile District (CESAM-OP-R)
P.O. Box 2288
Mobile, AL 36628-0001
(205) 690-2658

Savannah District

Nick Ogden
U.S. Army Corps of Engineers
Savannah District (CESAS-OP-R)
P.O. Box 889
Savannah, GA 31402-0889
(912) 652-5347

Wilmington District

G. Wayne Wright
U.S. Army Corps of Engineers
Wilmington District (CESAW-CO-R)
P.O. Box 1890
Wilmington, NC 28402-1890
(910) 251-4630

South Pacific Division

Theodore E. Durst
U.S Army Corps of Engineers
S. Pacific Division (CESPD-CO-O)
630 Sansome Street, Room 1216
San Francisco, CA 94111-2206
(415) 705-1443

Los Angeles District

John Gill
U.S. Army Corps of Engineers
Los Angeles District (CESPL-CO-O)
P.O. Box 2711
Los Angeles, CA 90053-2325
(213) 894-5606

Sacramento District

Art Champ
U.S. Army Corps of Engineers
Sacramento District (CESPK-CO-R)
1325 J Street
Sacramento, CA 95814-2922
(916) 557-5250

San Francisco District

Calvin C. Fong
U.S. Army Corps of Engineers
San Francisco District
(CESPN-CO-O)
211 Main Street
San Francisco, CA 94105-1905
(415) 744-3036, ext. 233

South Western Division

Vicki Dixon
U.S. Army Corps of Engineers
Southwestern Division (CESWD-CO-R)
1114 Commerce Street
Dallas, TX 75242-0216
(214) 767-2436

Albuquerque District

Andrew J. Rosenau
U.S. Army Corps of Engineers
Albuquerque District (CESWA-CO-R)
P.O. Box 1580
Albuquerque, NM 87103-1508
(505) 766-2776

Fort Worth District

Wayne A. Lea
U.S. Army Corps of Engineers
Fort Worth District (CESWF-OD-M)
P.O. Box 17300
Fort Worth, TX 76102-0300
(817) 334-2681

Galveston District

Marcos De La Rosa
U.S. Army Corps of Engineers
Galveston District (CESWG-CO-MO)
P.O. Box 1229
Galveston, TX 77553-1229
(409) 766-3930

Little Rock District

Louie C. Cockmon, Jr.
U.S. Army Corps of Engineers
Little Rock District (CESWL-CO-L)
P.O. Box 867
Little Rock, AR 72203-0867
(501) 324-5296

Tulsa District

Dave Manning
U.S. Army Corps of Engineers
Tulsa District (CESWT-OD-R)
P.O. Box 61
Tulsa, OK 74121-0061
(918) 669-7400

Waterways Experiment Station

Russell F. Theriot, Manager
Wetlands Research Program
U.S. Army Corps of Engineers
Waterways Experiment Station
Environmental Laboratory
(CEWES-EL-W)
3909 Halls Ferry Road
Vicksburg, MS 39180-6199
(601) 634-2733
(601) 634-3528 (fax)

For more information, contact the EPA Wetlands Information Hotline at 1-800-832-7828 (contractor operated)

NOAA COASTAL SERVICES CENTER LIBRARY
3 6668 00004 2178