



# Conserving America's Wetlands Implementing the President's Goal

Council on Environmental Quality  
Executive Office of the President  
April 2005



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This report to Congress shows how federal agencies are implementing President George W. Bush's 2004 Earth Day goal to "work to restore and to improve and to protect at least three million acres of wetlands over the next five years." The report includes the accomplishments of the first year and the requested budget and planned accomplishments of FY 2006, with descriptions of contributing federal programs.

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Department of Agriculture  
Department of Commerce  
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Environmental Protection Agency

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Council on Environmental Quality  
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April 2005

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EXECUTIVE OFFICE OF THE PRESIDENT  
COUNCIL ON ENVIRONMENTAL QUALITY  
WASHINGTON, D.C. 20503

*Members of Congress:*

On Earth Day 2004, President Bush announced his Wetlands Initiative, which set a goal of moving beyond the federal policy of “no net loss” of wetlands, and called for a new commitment to attain an overall increase in the quality and quantity of wetlands in America. To achieve this objective, President Bush set an aggressive goal to restore, improve, and protect at least three million acres of wetlands over the next five years.

I am pleased to report that the Administration is on track to meet President Bush’s performance goals. With expanded programs and funding, including over \$40 billion in conservation funding in the 2002 Farm Bill, and the reauthorization of the North American Wetlands Conservation Act, we are making progress in partnership with states, communities, tribes, and private landowners.

The following report is the first comprehensive look at progress toward the President’s goal. It tracks wetlands progress across the federal government and outlines measures underway that are helping to meet President Bush’s ambitious wetlands goal.

As the report documents, in the first year since the President made his announcement, the Bush Administration has achieved remarkable success: according to data collected from across the federal government, we have created, improved, or protected over 832,000 acres of wetlands.

To continue tracking our progress, the Fish and Wildlife Service, at President Bush’s direction last April, is accelerating completion of the next National Wetlands Inventory Status and Trends Report. Instead of the current 2010 due date, the Fish and Wildlife Service will complete the report by the end of 2005.

Over the past four years, the Bush Administration has implemented policies to increase wildlife habitat, improve water quality, and protect America’s most treasured natural resources. President Bush strongly supports using innovative programs and incentives to encourage private stewardship and cooperative conservation partnerships. Working collaboratively with private landowners and local officials has proven remarkably effective in improving and sustaining America’s wetlands.

The Bush Administration has worked with Congress to pass bipartisan legislation improving forest health, revitalizing brownfields, cleaning up the Great Lakes, and conserving America’s natural resources. Congress is an essential partner in meeting the President’s wetlands goal, and we look forward to working with you on this and many other important environmental initiatives.

*Sincerely,*

*James L. Connaughton*  
*Chairman*

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# Executive Summary

On Earth Day 2004, President Bush celebrated the opportunity to move beyond the federal policy of “no net loss” of wetlands, and called for a new commitment to attain an overall increase in the quality and quantity of wetlands in America.

As President Bush said last April, *“The old policy of wetlands was to limit the loss of wetlands. Today I’m going to announce a new policy and a new goal for our country: Instead of just limiting our losses, we will expand the wetlands of America.”*

President Bush set an aggressive goal to create, improve, and protect at least three million wetland acres over the next five years to increase overall wetland acres and quality. The President’s goal includes:

- Restoring and creating at least one million wetland acres;
- Improving or enhancing at least one million wetland acres;
- Protecting at least one million wetland acres.

This report is the first comprehensive look at progress toward the President’s goal. The Bush Administration, in partnership with states, communities, tribes, and private landowners, and with additional program funding, is on track to meet or exceed the President’s goal.

*Since April of 2004, 832,000 acres of wetlands have been restored, created, protected or improved.*

More specifically, over the past year:

- 328,000 acres were restored or created;
- 154,000 acres were improved;
- 350,000 acres were protected.

This report also highlights anticipated progress from April 2005 through the end of FY 2006, in which *the Bush Administration expects an additional 1.6 million acres to be restored, created, improved, or protected.*

To continue tracking wetlands progress, the Fish and Wildlife Service (FWS), at President Bush’s direction, has accelerated by five years completion of the next National Wetlands Inventory Status and Trends Report. Instead of the 2010 deadline, the Fish and Wildlife Service will complete the report by the end of 2005.



*“Wetlands have been called the nurseries of life, and their well-being is vital to the health of our environment.”*  
— President George W. Bush, Earth Day 2004





# Introduction

Wetlands have long been recognized as critical to a clean, properly functioning environment and to ecosystem health. They provide important ecological benefits, contributing to water quality, supplying life-sustaining habitat to hundreds of species, and serve as a critical connection between aquatic and terrestrial ecosystems. The Nation's wetlands provide an array of benefits to society, and their continued ability to exist and thrive affects the economic, ecological, and cultural heritage for all Americans. The importance of wetlands stewardship is reflected in the array of public-private partnerships, enhanced through efforts at the federal level. Recognizing the need for more effective use and coordination of federal activities, President George W. Bush announced in April 2004 a new national policy on wetlands to achieve an overall increase of U.S. wetlands each year.

One year after the President underscored the importance of wetlands, significant progress is being made toward achieving the Earth Day goal to increase overall wetland acreage and its quality by restoring or creating, improving, and protecting at least three million wetland acres over the next five years. One year after the President announced his goal, 328,000 acres have been restored or created, 154,000 acres have been improved, and 350,000 acres have been protected. Between Earth Day 2004 and September 30, 2006, it is expected that a total of



Wetlands provide life-sustaining habitat to hundreds of species, and serve as a critical connection between aquatic and terrestrial ecosystems.

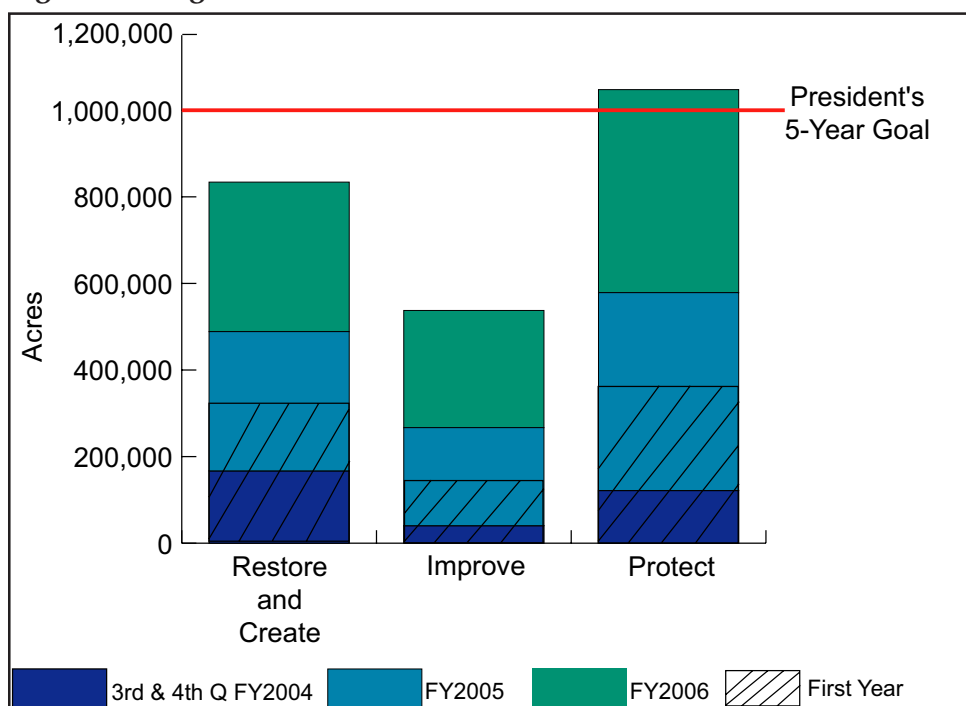
834,000 acres will be restored or created, 538,000 acres will be improved, and 1,048,000 acres will be protected (Figure 1).

Recognizing that more than 85 percent of our Nation's wetlands are on non-federal lands, the effectiveness of federal efforts in improving the health, quality, and use of the Nation's

wetlands will be greatly enhanced through the expansion of public-private partnerships. The federal government can serve as an important facilitator by providing matching grants, technical assistance, and opportunities for recreation and other activities. The success of federal actions to encourage and partner with non-federal parties – state and local governments, tribes, and nongovernmental entities – is crucial. The coordinated use of public-private efforts focused on wetlands opportunities has and will yield significant ecological benefits.

This report was developed to provide a comprehensive picture of federal efforts to achieve the President's goal. Information was provided by the participating agencies using terminology similar to what was previously developed by the

**Figure 1. Progress toward the President's Wetlands Goal**



Values have been adjusted to subtract double-counted acres.



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White House Wetlands Working Group. Agencies reported notable accomplishments toward the President’s goal in the year the project was completed, or projected to be completed, rather than when the project was funded. Corrections were made to account for projects that were reported by multiple agencies. A

more thorough discussion of the terminology and methodology is provided in Appendix A. Program-level information and descriptions that support wetlands conservation are presented in Appendix B through Appendix I.

## **Important Functions and Values of Wetlands Include:**

### **Fish and Wildlife Habitat**

More than one-third of the Nation’s threatened and endangered species live only in wetlands, and nearly half use wetlands at some point in their lives. Estuarine and marine fish and shellfish, various birds, and certain mammals must have coastal wetlands to survive. Most commercial and game fish nurseries are located in marshes and estuaries. Menhaden, flounder, sea trout, spot, croaker, and striped bass are among the more familiar fish that depend on coastal wetlands. Shrimp, clams, and crabs likewise need these wetlands for food, shelter, and breeding grounds. Many of the U.S. breeding bird populations—including ducks, geese, wading birds, and many songbirds—feed, nest, and raise their young in wetlands. Migratory waterfowl use coastal and inland wetlands as resting, feeding, breeding, or nesting grounds for at least part of the year. Many reptiles are common wetlands residents. Nearly all of the 190 species of amphibians in North America depend on wetlands for breeding. Other animals, such as beaver, otter, black bear, raccoon, and moose rely on wetlands for food, water, or shelter.

### **Water Quality and Hydrology**

Wetlands have important filtering capabilities for intercepting surface-water runoff from higher, dry land before the runoff reaches open water. As storm water runs off the land surface and passes through wetlands, excess nutrients, sediment, and other pollutants are retained. The retention of nutrients prevents the downstream impacts that can contribute to fish kills and dead zones in lakes and estuaries, and sediment retention prevents the smothering of plants and fish eggs. Many wetlands also maintain stream flow during dry periods and replenish groundwater, which is a drinking water source for many Americans.

### **Flood and Shore Protection**

Wetlands reduce flooding and erosion by trapping and slowly releasing surface water, rain, snowmelt, and floodwaters. The holding capacity of wetlands helps control floods and prevents waterlogging of soil, which damages crops. Preserving or restoring wetlands can often provide the level of flood control otherwise provided by expensive levees. Wetlands also provide protection from erosive forces. In coastal areas, tidal wetlands help buffer the land from storm surges caused by hurricanes and tropical storms. Wetlands on the edge of lakes, rivers, and estuaries protect the shorelines and stream banks from erosion.

### **Economic Values<sup>1</sup>**

Wetlands are a critical component of the Nation’s economy. Approximately 75 percent of the fish and shellfish commercially harvested from U.S. waters depend on coastal estuaries and their tidal wetlands. Commercial fisheries were valued at \$3.4 billion nationwide in 2003 and contributed \$31.5 billion to the GDP. U.S. residents spent \$36 billion on their recreational fishing in 2001. Bird watchers spend \$31.7 billion for trip-related and equipment expenditures, and nearly half of all watchers visit wetlands while on trips. Wetland areas also host 3 million hunters who spend \$1.4 billion annually pursuing migratory waterfowl there. Americans regularly harvest and use a wealth of other natural products from wetlands, including: grains, such as wild rice; produce, such as marsh hay and cranberries; landscape and building materials, such as timber; medicines derived from wetland soils and plants; and fur-bearing animals, such as muskrat, beaver and mink. Wetland resources are critical to ensuring sustainable economic development.

# Accomplishments

The President's goal for wetlands has led the responsible federal agencies to focus their resources to achieve better results. Agencies do this by managing programs more strategically, leveraging resources, and partnering with others whenever possible.

The following sections summarize accomplishments planned for each of the three goal areas as included in the President's FY 2006 budget. Major contributing programs are identified and highlighted.

## Restoring or Creating Wetlands

Estimated First Year Accomplishment: 328,000 acres  
 Planned FY 2006 Accomplishment: 345,000 acres  
*(totals adjusted for double-counting)*

Wetlands can be constructed, thus adding acreage, by creating new wetlands or by restoring former wetlands that have been lost to conversion. Agencies create wetlands that did not previously exist in upland areas or deepwater sites. A gain in wetland acres may also be achieved by re-establishing former wetlands to restore functions and values close to the natural/historic condition. Difficulties establishing wetlands in upland areas

have led agencies to prefer re-establishing wetlands lost to conversion. Also, in many cases the necessary soils and seed stock still exist, and by simply restoring the hydrology wetlands flourish.

During the first year, federal agencies report restoring or creating 328,000 acres of new wetlands. In FY 2006, federal agencies plan to create or restore an additional 345,000 acres of wetlands. Of the planned gains, 95 percent will result from re-establishing former wetlands and only five percent from establishing wetlands primarily on upland sites.

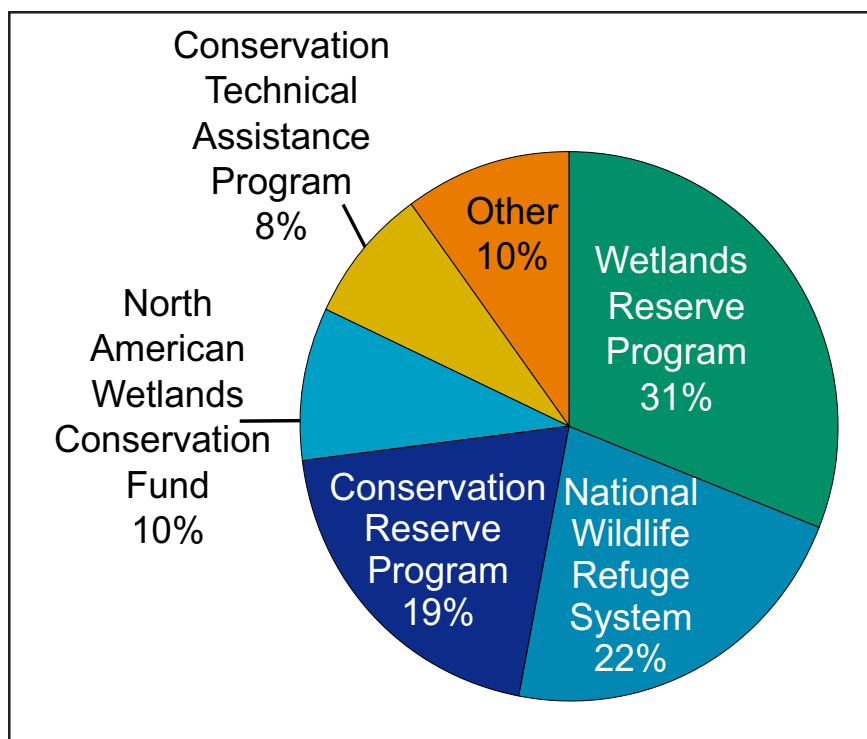
The federal government will restore wetlands in FY 2006 primarily through the Wetlands Reserve Program, the National Wildlife Refuge System, the Conservation Reserve Program, the North American Wetlands Conservation Fund, and the Conservation Technical Assistance Program (Figure 2).

### Wetlands Reserve Program

Wetlands restored through the Wetlands Reserve Program range from floodplain forest to prairie potholes to coastal marshes. Floodplain forest and associated sloughs and small emergent marsh wetlands account for approximately 65 percent of the program's restoration activity. In FY 2004, over 65 percent of all restoration involved hydrology restoration, with or without a vegetative compo-

ment. An example of recent success is the Four Rivers Conservation Area in Missouri. The Missouri Department of Conservation (MDC) had an existing major wetland complex totaling 6,696 acres in Vernon and Bates counties in southwestern Missouri. The acreage was noncontiguous and divided into three tracts. The land between these tracts, totaling 7,036 acres, was enrolled in a 30-year Wetlands Reserve Program easement and simultaneously purchased by the MDC. Coordination between the USDA Natural Resources Conservation Service (NRCS), MDC, and Ducks Unlimited, as well as a donation by a private individual, provided a unique opportunity to consolidate this bottomland piece into a contiguous 13,732-acre complex. This effort also fostered working partnerships in the design and management of the Wetlands Reserve Program site. Restoration is nearly complete on the Wetlands Reserve Program easement area, with 2,400 acres of emergent marsh, 300 acres of prairie cordgrass, and 850 acres of bottomland hardwoods.

**Figure 2. Proportion of Wetland Acres Anticipated to be Created or Restored by Major Programs in FY 2006**



Estimated first year accomplishments through the Wetlands Reserve Program were approximately 123,500 acres restored or created. In FY 2006, the USDA anticipates restoring or creating 123,300 acres of wetlands through the Wetlands Reserve Program.

*Last year, President Bush set a bold objective to restore, improve, and protect three million acres of wetlands in five years and USDA is on track to help achieve that goal. By partnering with private landowners and other government agencies through cooperative conservation, USDA is ensuring that wetlands continue to provide fish and wildlife habitat, contribute to a healthy environment and help to improve water quality.*

Secretary Mike Johanns  
U.S. Department of  
Agriculture

### **Conservation Reserve Program (CRP)**

Wetlands restored through the USDA's Conservation Reserve Program range from prairie potholes to floodplain wetlands to bottomland hardwoods. Currently, 1.93 million acres of wetlands and associated buffers are under contract. An

### **National Wildlife Refuge System (NWRS)**

Many FWS refuges have active programs to re-establish former wetlands within existing refuge boundaries. For example, at the 152,000-acre Alligator River National Wildlife Refuge in coastal North Carolina, half the area was covered with pocosins (a type of heavily vegetated wetlands). Because previous logging and farming operations altered these wetlands, a major refuge objective is to restore natural flooding regimes by plugging man-made ditches and installing water control structures that allow seasonal changes to mimic natural conditions. There is now an ongoing effort at the refuge to restore this important habitat.

Estimated first year accomplishments through the NWRS were 89,131 acres created or restored. In FY 2006, the NWRS expects to restore or create 86,000 acres of wetlands.

example of CRP wetland successes include partnerships with states through the Conservation Reserve Enhancement Program (CREP). Currently, over 92,000 acres of wetlands and associated buffers are enrolled through CREP. Also, in August 2004, President Bush announced a 250,000 acre Non-Floodplain Wetland Restoration Initiative to encourage landowners to enroll into the CRP 250,000 acres of large wetland prairie pothole complexes and playa lakes located outside the 100-year floodplain. These wetlands provide important environmental benefits including critical breeding habitat for ducks and grassland birds. Wildlife biologists at the Department of the Interior have estimated that CRP efforts have resulted in a 30 percent increase in duck populations and significant increases in grassland bird populations on CRP lands versus cropland.

From Earth Day 2004 through Earth Day 2005, an estimated 33,698 acres of wetlands were created or restored through CRP. In FY 2006, the CRP anticipates restoring or creating 76,500 acres of wetlands.

### **North American Wetlands Conservation Act (NAWCA) Program**

This FWS program promotes long-term conservation of North American wetland ecosystems and the waterfowl and other migratory birds, fish, and wildlife that depend on them. For example, last year in one project—the Wetlands Protection, Restoration and Enhancement on Private Lands in the Lower Mississippi Valley and Gulf Coastal Plain Project in Arkansas, Louisiana and Mississippi—Wildlife Mississippi and other partners restored 12,045 acres of wetlands habitat by restoring the wetland hydrology to prior wetlands using NAWCA funding. The



*Last year through NAWCA, Wildlife Mississippi and other partners restored 12,045 acres of wetlands providing valuable habitat for migratory birds and other wildlife.*



project installed water control structures to create shallow, moist soil areas of varying depths, wet and drying mudflats, and varying densities of vegetation. In addition, water was pumped to impound water on project sites, and early spring drawdowns increased the availability of invertebrates for waterfowl.

Estimated first year accomplishments using the NAWCA program were 32,931 acres of wetlands created or restored. In FY 2006, the FWS expects to restore and create 37,987 acres of wetlands through NAWCA.

### Conservation Technical Assistance Program (CTA)

This program assists private landowners in making wetland determinations, developing wetland mitigation and restoration plans, establishing or re-establishing wetlands for scenic beauty, and increasing and improving wildlife habitat.

Through CTA, the NRCS:

- Provides soils information and interpretation to individuals or groups of decision makers, communities, states, and others to aid sound decision-making in the wise use and management of soil resources;
- Collects, analyzes, interprets, displays, and disseminates information about the status, condition, and trends of soil, water, and related natural resources to inform decisions on natural resource use and management;
- Assesses the effects of conservation practices and systems on the condition of natural resources; and
- Develops, adapts, and transfers effective science-based technologies and tools for assessment, management, and conservation of natural resources.

The CTA also supports state and tribal wetlands programs. For example, in 2004 the program provided technical assistance to the Grand Portage Band of the Minnesota Chippewa Tribe to complete

construction of a 42-acre wetland restoration. The Tribe secured financial assistance from other sources, and NRCS provided planning and application technical assistance, including survey, design, layout, and construction inspection. In partnership with the Tribe, a project was designed to restore culturally significant native wild rice lakes.

Estimated first year accomplishments using CTA were 35,950 restored or created acres. In FY 2006, 31,780 acres of wetlands are expected to be restored or created using CTA.

### Improving Wetlands

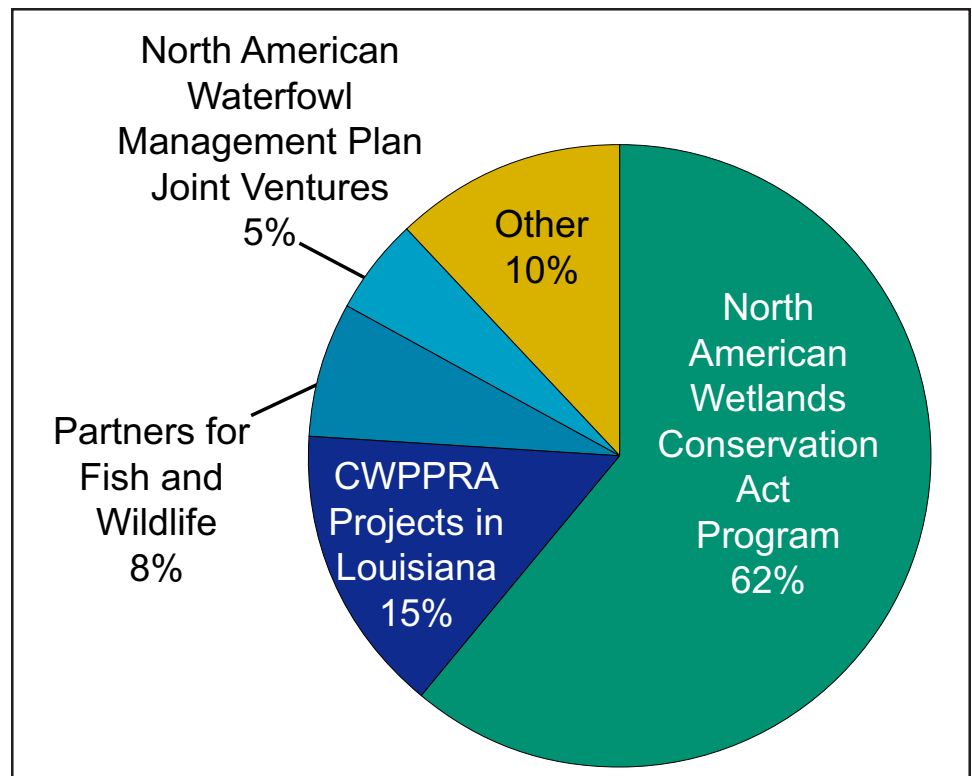
Estimated First Year Accomplishment: 154,000 acres

Planned FY 2006 Accomplishment: 271,000 acres

*(totals adjusted for double-counting)*

Some degraded wetlands do not function properly because of past or present stressors. Agencies may improve wetlands by modifying the physical, chemical, or biological characteristics of a degraded wetland site with the goal of repairing its natural/historic functions and associated values (Figure 3). They also improve wetlands by modifying the physical, chemical, or biological characteristics of a wetland site to

**Figure 3. Proportion of Wetland Acres Anticipated to be Improved by Major Programs in FY 2006**



heighten, intensify, or improve specific functions or to change the growth stage or composition of the vegetation present. These actions are undertaken for a specific purpose, such as water quality improvement, floodwater retention, or wildlife habitat. This type of improvement, called enhancement, results in a change in wetland functions and associated values and may lead to a decline in other wetland functions

*Wetlands are one of our Nation's most valuable natural resources. In fact sixty-six percent of all spawning and nursery areas for commercial fisheries rely on healthy, robust wetlands. It is imperative that the public and private sectors find ways to join forces to protect and maintain these vital assets. The Corporate Wetlands Restoration Partnership provides the framework to bring federal, state, and local governments together with their private sector partners. The Commerce Department is proud to participate in these efforts and we pledge our continued support to protect and restore our Nation's wetlands.*

Secretary Carlos M. Gutierrez  
U.S. Department of Commerce

Conservation Fund, the multi-agency Coastal Wetlands Planning, Protection, and Restoration Act, Partners for Fish and Wildlife, and the North American Waterfowl Management Plan Joint Ventures.

and values and does not result in a gain in wetland acres.

Between Earth Day 2004 and Earth Day 2005, federal agencies report improving the quality of 154,000 acres of existing wetlands. In FY 2006, federal agencies plan to improve the quality and associated values of an additional 271,000 acres of existing wetlands. Of the planned improvements, it is anticipated that 22 percent of the gains in wetlands quality will come from rehabilitating the natural/historic functions and associated values of degraded wetlands, while 78 percent will result from enhancing specific functions and values.

The major programs through which FY 2006 wetlands improvements are planned include: the North American Wetlands

## **North American Wetlands Conservation Act Program (NAWCA)**

Improvement projects funded with NAWCA funds modify a functioning wetland ecosystem to provide additional long-term wetlands conservation benefits and include the installation of nest boxes, creation of habitat islands, and land management activities such as fencing and installing signs. In 2004, the California Waterfowl Association worked with partners to enhance 7,448 acres in private wetlands through cost-sharing projects throughout north-central California. The project enhanced the degraded wetlands by improving water delivery and drainage systems necessary for optimal moist-soil management; constructing channels, potholes, and loafing islands to increase habitat diversity; reconfiguring or raising levees to better control water; and transplanting hardstem bulrush to speed establishment of thermal protection and escape cover for waterfowl and other wetland-dependent wildlife. Private landowners, in accordance with agreements made with the California Waterfowl Association, will maintain these project sites.

During the first year of implementing the President's goal, it is estimated that 112,676 acres of wetlands were improved through NAWCA. In FY 2006, the FWS NAWCA program will improve 249,065 acres of wetlands.

## **Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) Louisiana**

The U.S. Army Corps of Engineers (Corps) chairs the Louisiana Coastal Restoration Task Force, composed of the National Marine Fisheries Service, Fish and Wildlife Service, Natural Resources Conservation Service, Environmental



Coastal Louisiana loses about 42 acres of critical wetlands every day. In FY 2006 CWPPRA will improve 60,184 acres of wetlands in Louisiana.

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Protection Agency, and the State of Louisiana. The task force meets annually to select the top priorities from a group of candidate projects and develops a Priority Project List. Projects have a 20-year life and are implemented in three phases: construction, operation and maintenance, and monitoring. In FY 2006, the Black Bayou Hydrologic Project proposed by the Natural Resources Conservation Service will improve more than 51,000 acres of cypress wetlands and fresh marsh by repairing the natural hydrologic regime.

Estimated first year wetlands improvements through CWPPRA are 12,460 acres. In FY 2006, it is anticipated that the federal-state interagency CWPPRA program in Louisiana will improve 60,184 acres of wetlands.

### Partners for Fish and Wildlife

Through the Partners program, FWS works with others to create or improve fish and wildlife habitats on private and tribal lands. The program provides both financial and technical assistance to landowners who wish to enhance the value of wetland habitats for wildlife. For example, in a 2004 Partners project in the Lake Champlain watershed in Vermont and New York, The Nature Conservancy, Vermont Department of Environmental Conservation, Corps, EPA, the FWS Aquatic Nuisance Control Program, Ducks Unlimited, and private landowners removed invasive water chestnuts from the emergent wetlands directly connected to Lake Champlain. Removal and control of water chestnuts consists of hand-pulling and mechanical harvest. By removing the seed source for the following year's crop of water chestnuts, native plants can again dominate the wetlands and provide better food and cover for migratory birds and native fish.

It is estimated that through the Partners program, 17,701 acres were improved in the first year of the President's goal. In FY 2006, the FWS Partners for Fish and Wildlife Program anticipates improving 30,578 acres of wetlands.

### North American Waterfowl Management Plan - Joint Ventures

Joint Ventures are regional-scale, self-directed partnerships involving federal, state, and local government agencies, corporations, tribes, individuals, and a wide range of non-governmental organizations. Joint ventures deliver science-based, on-the-ground conservation in support of the North American Waterfowl Management Plan and other bird conservation initiatives. In 2004, the Atlantic Coast Joint Venture partners improved 11,000 acres of wetlands in 12 states. Activities included repairing

hydrology or tidal flow, enhancing beaver created wetlands, enhancing managed wetland impoundments and rehabilitating ditched and partly drained wetlands.

It is estimated that in the first year, Joint Ventures were used to improve 20,894 acres. In FY 2006, the FWS North American Waterfowl Management Plan Joint Ventures anticipates improving 21,580 acres of wetlands.

## Protecting Wetlands

**Estimated First Year Accomplishment:** 350,000 acres

**Planned FY 2006 Accomplishment:** 469,000 acres

*(totals adjusted for double-counting)*

Priority wetlands facing activities that may imperil their existence or condition can be protected. Protection is defined in the report as removing a threat to or preventing the decline of wetland conditions through acquisition of land or long-term easements of at least 30 years. Protection maintains the base of existing wetlands and thus does not result in a gain of wetland acres or function.

During the first year, it is estimated that federal actions extended protection to 350,000 acres of existing wetlands. In FY 2006, federal agencies plan to protect an additional 469,000 acres of existing wetlands. The principal federal programs that are planned to be used to make the most significant contributions to protecting wetlands are: the North American Wetlands Conservation Act, the Wetlands Reserve Program, and the National Wildlife Refuge System (Figure 4).

*Partnerships point to a compelling strategy. If government is to meet its goal of wetlands conservation, it must reach beyond traditional regulations. By leveraging public dollars to expand volunteer partnerships, we can address the needs of wetlands and meet or exceed the goals we have set for ourselves.*

**Secretary Gale Norton**  
**U.S. Department of**  
**Interior**



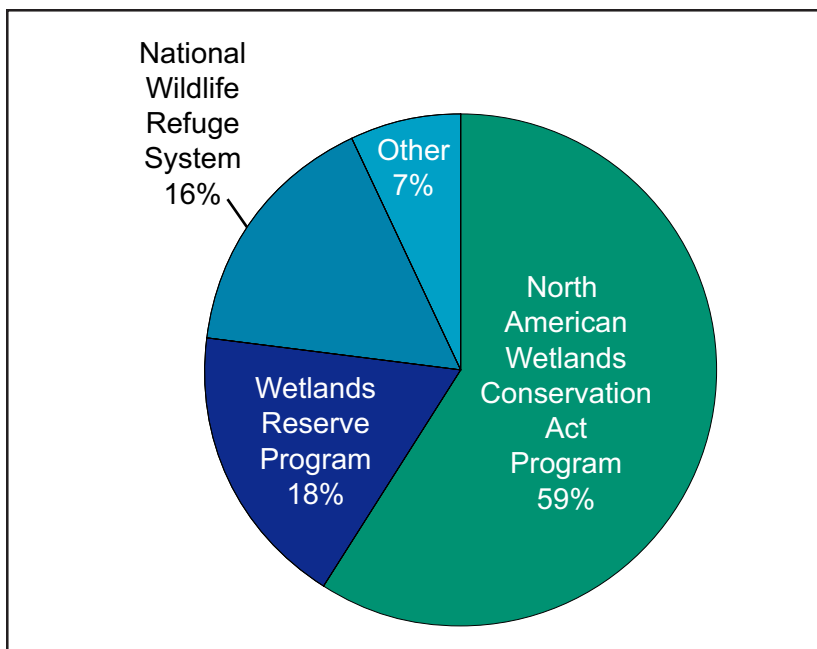
## North American Wetlands Conservation Act (NAWCA) Program

Projects funded by FWS through the NAWCA program often involve partnerships of state and local governments and nongovernmental and private organizations seeking to acquire wetlands habitat. These acquisitions may be incorporated into the FWS National Wildlife Refuge System or, more commonly, into a state's protected area system. For example, in 2004 in the Choctaw Island Project, the Arkansas Game and Fish Commission, using NAWCA funds and working with Ducks Unlimited and other partners, purchased approximately 9,000 acres of forested and emergent wetlands habitat in southeastern Arkansas along the Mississippi River. This acreage will be managed as a wildlife management area, providing for uses including hunting, fishing, protection of endangered species and habitat, wildlife viewing, and access to the Mississippi River.



*In FY 2006, it is expected that 109,000 acres of wetlands will be protected through USDA's Wetlands Reserve Program. The program provides financial incentives to farmers to protect wetlands in exchange for retiring marginal land from agriculture.*

**Figure 4. Proportion of Wetland Acres Anticipated to be Protected by Programs in FY 2006**



First year wetlands protection accomplishments using the NAWCA program are estimated to be 168,436 acres. In FY 2006, the NAWCA Program anticipates protecting 349,077 acres of wetlands.

### Wetlands Reserve Program (WRP)

The Wetlands Reserve Program is a voluntary program providing technical and financial assistance to eligible landowners to address wetland, wildlife habitat, soil, water, and related natural resource concerns on private lands in an environmentally beneficial and cost-effective manner. The program provides landowners with financial incentives to restore, protect, and enhance wetlands in exchange for retiring marginal land from agriculture. Enrollment options include permanent easements, 30-year easements, and restoration cost-share agreements. The WRP was reauthorized in the Farm Security and Rural Investment Act of 2002 (Farm Bill). The program is administered by the NRCS and funded by the

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Commodity Credit Corporation. In FY 2004, NRCS state offices secured 734 easements on approximately 160,000 acres. Louisiana had the highest level of easements recorded with 94, followed by Minnesota with 68 and New York with 64.

The WRP was used to protect an estimated 116,300 acres during the first year of implementation of the President's goal. In FY 2006, it is expected that 109,000 acres of wetlands will be protected using the WRP.

### **National Wildlife Refuge System (NWRS)**

The FWS has historically protected large tracts of wetlands through acquisition and easements as part of the NWRS. During 2004, FWS added significant wetlands tracts in California; for example, in Merced County, 1,905 acres were purchased to protect critical wetlands for migratory waterfowl within the boundaries of the Grasslands Wildlife Management

Area. In FY 2005, 2,681 acres were purchased in Galveston County, Texas, to protect wetlands for migratory waterfowl within the boundaries of McFaddin National Wildlife Refuge. FY 2006 acquisitions will support the Lower Mississippi Valley Migratory Bird Conservation initiative, acquisition of the Barnes Ranch in the Upper Klamath watershed for restoration of critical emergent wetlands, and acquisitions in support of the North American Waterfowl Management Plan. Other acquisitions will preserve endangered species in the Pacific Northwest, South, and Southwest.

Estimated first year wetlands protection accomplishments are 76,773 acres. In FY 2006, the NWRS anticipates protecting 94,639 acres of wetlands.



*In FY2006, the NWRS anticipates protecting 94,639 acres of wetlands including acquisitions in the Klamath Watershed.*





# Perspective

This report documents the individual and collective accomplishments of federal agencies to implement the President's wetlands goal using available programmatic tools with particular emphasis on public-private partnerships. The President's FY 2006 budget provides for continuation of these efforts to make important gains for the Nation's supply and health of wetlands. Federal agencies will continue to leverage personnel, budgets, and authorities to ensure the best possible results. Interagency coordination at the national and regional levels can advance the implementation of cooperative wetlands restoration projects when the jurisdiction or expertise of more than one federal agency is involved. Because the vast majority of wetlands are in non-federal ownership, the federal agencies will continue to foster and support collaborative strategies and innovative public-private partnerships such as the Corporate Wetlands Restoration Partnership, which provides matching funds for federal wetland efforts.

To accomplish the President's Earth Day goal, the fiscal year 2006 budget request is \$692,725,000 (see Figure 5). The budget proposal indicates an increased emphasis in FY 2006 on improving the quality of existing wetlands. The requested funding represents a prudent and necessary course to ensure



*Active citizen involvement is an important component of efforts to restore, improve, and protect wetlands. The Administration remains committed to fostering volunteer efforts that advance and promote individual stewardship to ensure conservation for future generations.*

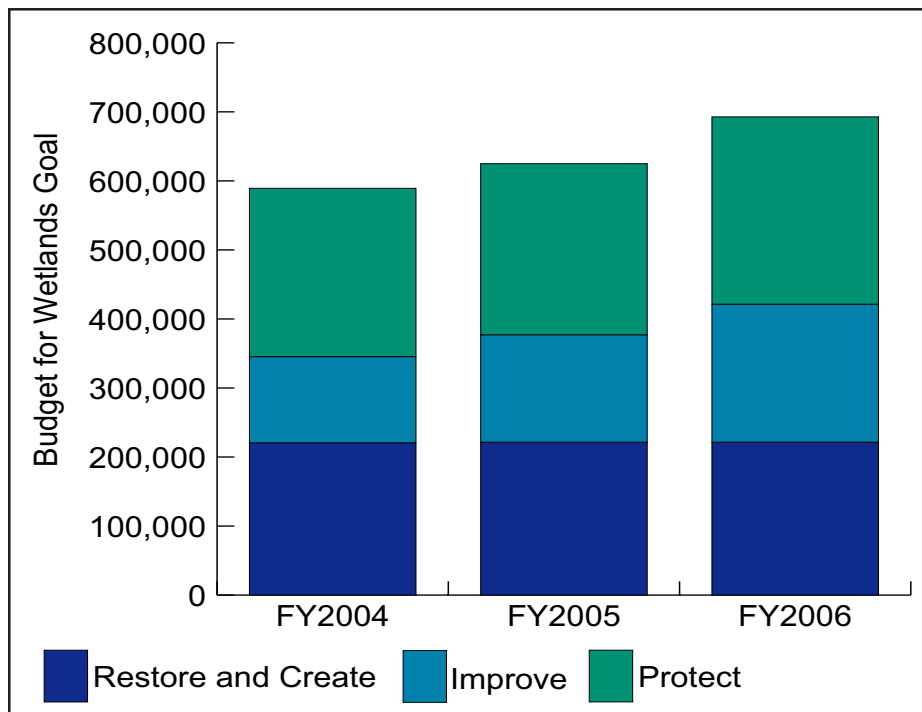
that the Nation's wetlands will continue to meet the needs of current and future generations.

The FY 2006 budget reflects a focus on cooperative conservation partnerships and large-scale ecosystem restoration efforts. There is continued emphasis on voluntary programs through which agencies work closely with individual landowners, such as the FWS's Partners for Fish and Wildlife and the USDA's Wetlands and Conservation Reserve Programs. In addition, cooperative conservation efforts with states, tribes,

localities, and nongovernmental organizations are a priority, including the North American Wetlands Conservation Act program. There is also an emphasis on large-scale ecosystem restorations in areas such as South Florida and Louisiana, where a holistic approach is critical to restoring an ecosystem. More detailed information on how the requested funds will be used appears in the appendices to this report and congressional justifications of the participating agencies.

Increased federal attention to wetland efforts highlights the importance of wetlands and heightens public awareness. Active citizen involvement is an important component of many aspects of efforts to restore, improve, and protect wetlands. This Administration remains committed to fostering volunteer efforts that advance and promote individual stewardship. An informed public working in partnership

**Figure 5. Budget for Wetlands Goal for FY 2004, FY 2005, and FY 2006 Budget (millions of dollars)**



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with federal, state, tribal and local agencies will ensure conservation of wetlands for future generations.

Conservation and stewardship efforts depend on accurate and reliable data. The planning, design, and implementation of collaborative efforts depend on useful, timely, and accurate data in which the participating decision makers share confidence. The National Wetlands Inventory and the National Resources Inventory provide a base of information for that purpose. However, an integrated national, regional and local information system would provide a valuable means of achieving a real-time base of information. In the future, state and federal efforts are likely to share geographic information systems for wetlands. Policy officials and managers at all levels will then have the real-

time information they need to determine the appropriate courses of action that are compatible with the President's wetlands conservation goal.

This report is the first comprehensive effort to aggregate wetlands accomplishments from the responsible federal agencies. The lessons learned from the process of developing this document will be invaluable for future efforts. Already federal agencies have committed to improving how they track progress toward the President's wetlands goal. The knowledge gained through this year's effort will be applied to future efforts.



*The President's FY 2006 budget provides for continuation of these efforts to make important gains for the Nation's supply and health of wetlands. Federal agencies will continue to leverage personnel, budgets, and authorities to ensure the best possible results.*

# Appendix A.

## Methodology and Definitions

### Data Call to the Agencies

In December 2004, the Council on Environmental Quality and the Office of Management and Budget sent a request for wetlands performance and budget data to the Secretaries of Agriculture, the Interior, Transportation; Administrator of the Environmental Protection Agency; Under Secretary of Commerce for Oceans and Atmosphere; and the Assistant Secretary of the Army for Civil Works. The purpose was to provide a comprehensive estimate of performance progress and federal funding contributing to the achievement of the new national wetlands policy. The new policy calls for moving beyond a policy of “no net loss” of wetlands to an “overall increase” in the quantity and quality of wetlands.

### Scope of Data

Performance and funding data for programs covered the following time periods:

- FY 2004 enacted budget and performance results
- FY 2005 enacted budget and estimated performance results
- FY 2006 President’s requested budget and estimated performance results based on the President’s requested funding levels.

To assess progress for the first year since the President’s April 2004 announcement, half of the reported achievements for FY 2004 were used and combined with half of the planned accomplishments for FY 2005. Programs that perform both wetland activities and non-wetland activities reported funding and performance related only to the wetland component, not their entire program.

### Scope of Funding Included in the Report

Wetlands activities funded by both discretionary and mandatory funds are included.

### Definitions of Goal Areas

In 2000, the White House Wetlands Working Group (WHWWG)—composed of representatives from all major federal agencies involved in wetlands work—agreed to use wetlands terminology and definitions that had been developed during the mid-1990s. The WHWWG re-affirmed that these were sound definitions in 2004 immediately after the President announced the Wetlands Initiative on Earth Day. Agencies were asked to report performance and funding using the

definitions developed by the WHWWG to ensure comparable and replicable results for future data calls.

### To “Restore or create” wetlands result in a gain of wetland acres and includes:

- Creation of wetlands that did not previously exist on an upland or deepwater site. These actions are referred to as “establishment” by the WHWWG.
- Restoration of a former wetland to its natural/historic function and resulting value. Typically, such a former wetland had been drained for some purpose. These actions are known as “re-establishment” by the WHWWG.

### To “Improve” wetlands results in a gain of wetlands functions or quality, rather than additional acreage, and includes:

- Repair of the natural/historic functions and associated values of a degraded wetland. The WHWWG refers to these actions as “rehabilitation” of wetlands. Rehabilitation results in a gain in wetland quality.
- Heightening, intensification, or improvement of one or more selected functions and associated values. The WHWWG called these types of actions “enhancement.” Enhancement is undertaken for a purpose such as water quality improvement, flood water retention, or wildlife habitat. Enhancement results in the gain of selected wetland functions and associated values but may also lead to a decline in other wetland functions and values.

### To “Protect” wetlands includes:

- Acquisition of land or easements of at least 30 years duration. This term also includes activities commonly associated with the term “preservation.” These activities do not result in a gain in wetland acres or quality. These activities were included in the “protection/maintenance” category by the WHWWG.

### Activities Excluded from Acreage Counted toward the President’s Goal

#### Cyclical work

Work that was carried out to sustain wetlands (e.g., habitat maintenance on a National Wildlife Refuge to maximize wetland habitat values) was not reported in this data call. Only new activities on a footprint of wetlands not previously manipulated for increased value were counted in the “enhance” or “improve” categories.



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## Uplands work

Many programs carry out activities in upland areas that are key to the health and sustainability of wetlands. These upland acres were not counted toward the President's wetland goal.

## Maintenance activities

Periodic additional work involves the manipulation of the physical, chemical, or biological characteristics critical to maintaining the existing quality. Cessation of maintenance activities triggers loss in wetland quality. Maintenance includes activities to mimic a natural regime and repair of water control structures, fences, or structural protection. Maintenance activities do not result in an increase in wetlands acreage or function.

## Management activities

Effective wetland management is critical to maintaining fish and wildlife populations. An example of a management activity is the control of water levels in a restored wetland.

## Mitigation

Wetlands created as a mitigation for the loss of other wetland values were not reported in this data call.

## Reporting of Other Wetlands-Related Activities

Agencies were also asked to include programs that support the President's goals through wetlands conservation, research and assessment. The programs included in the following appendices are not exhaustive but do represent the major activities that support the President's wetlands goal.

## Correcting for Over-Reporting of Acreage

Since some programs work cooperatively with a variety of partners, including other federal programs, agencies identified those areas where "double-counting" of performance occurred. A separate worksheet was provided to identify contributions of other federal programs and non-federal partners toward shared accomplishments. Programs were asked to specifically identify the other federal agency programs by name and the acreage accomplished through partnerships.

Corrections to specific programs could not be made individually because partners' accomplishments were not assigned prorated shares. Thus, a correction was necessary to avoid over counting the acres created, restored, improved, and protected. To calculate this double-counting adjustment, all the acreage reported as accomplished through partnerships was summed by

category. The report assumes two federal partners were involved in situations where double counting took place so half of the acreage total accomplished through partnerships by category was subtracted from the raw total by category. Because partnership data only exist for FY 2004, the FY 2004 acreage correction was used as a model, and FY 2005 and FY 2006 anticipated performance reduced to account for potential over-reporting in those fiscal years. Accordingly, adjusted acreage totals will always be smaller than the sum of the raw data.

## Moving Toward a Performance Measurement and Tracking System

This document was developed to provide an initial snapshot of the federal government's wetlands efforts. It is the first comprehensive effort to aggregate wetlands accomplishments data from responsible federal agencies for the President's new goal. The lessons learned while developing this document will facilitate future efforts. The Department of the Interior's National Wetlands Inventory has been charged with producing a report on the "status and trends" of wetlands by the end of calendar year 2005, five years earlier than previously planned, in order to provide a better and more current understanding of the status of the nation's wetlands. The combination of the wetlands performance and budget data reported here and the future status and trends effort will contribute toward developing a shared report on performance indicators that may serve as a model for future efforts.

To effectively track wetlands programs and their contribution toward the national goal, it would be valuable if the agencies tracked project accomplishments using geographic information system (GIS) technology. Agencies would need to provide their project area boundaries in a format that could be used in a shared GIS. This approach would have the additional advantage of allowing the information to be overlaid on a digital map of the United States. These maps would allow agencies to develop an audit program to ensure areas restored, improved, and protected are functioning wetlands that provide habitat and other valuable aquatic functions. As project data are input and displayed on maps in the U.S. Geological Survey National Atlas, a picture will emerge of how restoration projects are meeting priority needs.

Tracking systems require agreement on common performance measures. They assess whether the restoration and enhancement projects quantitatively and qualitatively meet national planned goals. The President noted this need in his 2004 Earth Day announcement by committing the federal government to "gain further experience and develop useful protocols for measuring wetland outcomes."

# Appendix B.

## Conserving Wetlands

Federal agencies engage in various actions that help maintain the existing base of wetlands. The President's goal helps sharpen focus on these activities. A policy of having an "overall increase" of wetlands must be built on a strong foundation of "no net loss." Key programs that contribute to that base, but outside the President's initiative, fall into the following categories:

- Managing wetlands
- Cooperative conservation
- Regulation and mitigation
- Support activities

### Managing Wetlands

Approximately 13 percent of the Nation's current base of wetlands is managed by federal agencies. Many units of the National Wildlife Refuge System were established for their wetland values, and the U.S. Fish and Wildlife Service (FWS) spends approximately \$25 million annually to actively manage over 1.1 million acres of wetlands. Wetland management activities include creating desired conditions through the use of canals, levees, water control structures, and pumps. Cyclical water level and management activities—including mechanical disturbance, prescribed burning, or chemical treatment—also are used to produce native wildlife foods in wetlands. Other federal agencies managing wetlands include the National Park Service, U.S. Forest Service, Bureau of Land Management, National Oceanic and Atmospheric Administration (NOAA), Bureau of Reclamation, Bureau of Indian Affairs, and Department of Defense. All of these wetlands are being conserved for sustainable benefits.

### Cooperative Conservation

Seventy-four percent of the land in the United States is privately owned. To better conserve privately-owned wetlands, the federal government relies on voluntary, incentive-based conservation programs. For example, technical and financial assistance provided by the NRCS and the FWS help private landowners apply needed conservation techniques on their land. When private landowners use these programs to restore, protect, and improve wetlands on their property, they serve as stewards of our environment. Other cooperative conservation efforts include:

### Private-public Partnerships

The success of federal actions to encourage and partner with non-federal parties—state and local governments, Indian tribes, and nongovernmental entities—heighten opportunities to make progress through cooperative endeavors. Recent trends are encouraging. For example, through the Corporate Wetlands Restoration Partnership, some 200 private firms and 100 nongovernmental organizations are working with federal agencies to implement wetlands projects (<http://www.coastalamerica.gov/text/cwrp.html>). The number of partnerships is projected to increase in the future. The coordinated use of public-private efforts focusing on priority wetlands opportunities should yield major ecological benefits.

### Technical Assistance

Most federal agencies involved with wetlands activities provide federal, state, and local partners with technical (biological, engineering, hydrological, etc.) expertise to support various development, conservation and restoration projects across the country. These programs offer technical assistance to help conserve, restore and protect a variety of fish and wildlife and their habitats. Among the laws providing a foundation for technical assistance and conservation partnerships are the Fish and Wildlife Coordination Act, National Environmental Policy Act, Clean Water Act, Federal Power Act, Estuary Restoration Act, and Environmental Restoration Act.

### Regulation and Mitigation

#### Water quality

An important aspect of the President's initiative is its continued emphasis on the goal of "no net loss" of wetlands by the existing programs that regulate certain activities in wetlands and other waters. Section 404 of the Clean Water Act regulates the discharge of dredged or fill material into waters of the United States, including wetlands, and is jointly administered by the Corps and EPA. The Corps has primary responsibility for day-to-day regulation of discharges into jurisdictional "waters of the United States," a broad category of aquatic resources that includes wetlands. A comprehensive permit review requires applicants to first avoid, and then minimize impacts, and finally replace wetland functions lost through compensatory mitigation. Regulated activities 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

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for farming and forestry. During the past two years, more than 160,000 permit applications were processed requiring applicants to avoid impacts to more than 10,000 acres of wetlands, and maintaining a ratio of at least two acres of mitigation for every acre of permitted impacts to wetlands. In addition, the Corps has developed new performance standards that increase the emphasis on field evaluations of mitigation sites, and is providing guidance to improve mitigation success through interagency efforts associated with the National Wetlands Mitigation Action Plan.

## Farmland

The Wetland Conservation (“Swampbuster”) provision established in the 1985 Farm Bill, and amended in the 1990 Farm Bill, requires all agricultural producers to protect the wetlands on the farms they own or operate if they wish to be eligible for certain USDA farm program benefits. Producers are not eligible if they have planted an agricultural commodity on a wetland that was converted by drainage, leveling, or any other means after December 23, 1985, or if they have converted a wetland for the purpose of agricultural commodity production, or for making such production possible, after November 28, 1990. Through the Conservation Technical Assistance (CTA) of NRCS, the agency makes wetland determinations, develops wetland mitigation and restoration plans, and administers other Swampbuster-related provisions.

## Transportation

Under the Federal Aid Highway legislation (Title 23, United States Code, Highways), state transportation agencies may use National Highway System and Surface Transportation Program funds to finance wetland and natural habitat conservation planning and implementation, as well as compensatory mitigation and restoration projects that offset unavoidable losses from transportation projects. The Department of Transportation (DOT) has a goal of 1½-to-1 wetland acre mitigation; under the Federal Aid Highway Program it has achieved over 38,000 acres of wetland mitigation since 1996, with a net gain from mitigation of over 23,000 acres. Through the Federal Highway Administration, DOT also funds research on wetlands mitigation in connection with highways.

## Support Activities

### Inventory

The FWS strategically maps our Nation’s wetlands and deepwater habitats to gather information on their characteris-

tics, extent, and status and trends through the National Wetlands Inventory (NWI). The President has asked FWS to complete its scientifically based statistical national wetlands status and trends report by the end of 2005, five years ahead of schedule. The Department of the Interior and a consortium of federal agencies (*i.e.*, EPA and the Departments of Agriculture, Commerce, and Defense) are cooperatively funding the estimated \$2.7 million analysis and updated report by FWS. The administration’s report to Congress will provide the nation with conclusive scientific and statistical results on progress toward national wetlands goals.

The NRCS conducts the National Resources Inventory (NRI), also a scientifically-based statistical survey of the Nation’s natural resources that provides updated information on the status, condition, and trends of land, soil, water, and related resources on the nation’s non-federal land. The NRI is unique in that it is a nationally consistent database constructed specifically to estimate five-, ten-, and 15-year trends for natural resources. The NRI process has reported a gain of 263,000 acres of wetlands from 1997 to 2003, an average annual increase of 44,000 acres.

## Monitoring and Evaluation

When actions to restore or enhance natural resources or ecosystems occur, a considerable amount of time may pass before the full effects are evident. For this reason, the responsible federal agencies often monitor the targeted wetlands to measure and track progress. Results from monitoring are useful for evaluating the effectiveness of the actions taken; in some cases, management goals or actions to meet those goals may be modified. In addition, the federal government provides both financial and technical assistance to states and tribes to help them monitor their wetlands conservation work.

## Research and Education

Federal agencies also are engaged in research to better understand wetlands, wetland plants, and their responses to targeted actions. Among the most prominent programs are the National Wetlands Research Center (U.S. Geological Survey), Engineer Research and Development Center (Corps), Plant Materials Centers (NRCS), and the Center for Forested Wetlands Research (U.S. Forest Service).



# Appendix C.

## United States Department of Agriculture

**Table C-1. USDA Programs Supporting the President's Wetlands Goal in FY 2006. Funding (millions of dollars)**

Agency	Program	Restore or Create	Improve	Protect	Total wetlands funding for goal FY06	Difference from FY05
NRCS	Wetlands Reserve Program	47.913	1.482	159.320	208.715	34.515
NRCS	Conservation Technical Assistance Program	31.78	3.173	0	34.953	-2.266
NRCS	Wildlife Habitat Incentives Program	3.5	0.5	0	4	0
NRCS	Farm and Ranchlands Protection Program	0	0	7	7	-1
NRCS	Grasslands Reserve Program	0	0	0.1	0.1	0
FSA	Conservation Reserve Program	19.171	3.148	0	22.319	3.108
USFS	Wetlands Management Programs	0.04	0.374	0.04	0.454	0
<b>Totals</b>		<b>102.404</b>	<b>8.677</b>	<b>166.460</b>	<b>277.411</b>	<b>34.357</b>

**Table C-2. USDA Programs Supporting the President's Wetlands Goal in FY2006. Planned Accomplishments (in acres).**

Agency	Program	Restore or Create	Improve	Protect	Total	Difference from FY05
NRCS	Wetlands Reserve Program	123,300	4,000	109,000	236,300	-29,200
NRCS	Conservation Technical Assistance Program	31,780	12,690	0	44,470	-8,406
NRCS	Wildlife Habitat Incentives Program	3,500	500	0	4,000	800
NRCS	Environmental Quality Incentives Program	1,000	0	0	1,000	0
NRCS	Farm and Ranchlands Protection Program	0	0	7,000	7,000	-5,400
NRCS	Grasslands Reserve Program	0	0	100	100	-14,900
FSA	Conservation Reserve Program	76,500	0	0	76,500	3,836
USFS	Wetlands Management Programs	600	1,600	300	2,500	0
USFS	Land Acquisitions, Exchanges Donations	0	0	3,700	3,700	0
<b>Totals</b>		<b>236,680</b>	<b>18,790</b>	<b>120,100</b>	<b>375,570</b>	<b>-53,270</b>

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## USDA Programs Supporting the President's Wetlands Goal

### Natural Resources Conservation Service (NRCS)

#### Wetlands Reserve Program (WRP)

Voluntary program that assists landowners with restoring and protecting wetlands through conservation easements and cost-share agreements. Since 1992, 1,074,245 wetland and associated upland acres have been enrolled in the program. The 2002 Farm Bill requires, to the maximum extent practicable, an additional 250,000 acres to be enrolled in the program each year for a total program enrollment of 2,275,000 acres by the end of 2007. Total program enrollment at the end of FY 2003 neared 1.5 million wetland acres and associated upland acres. <http://www.nrcs.usda.gov/programs/wrp>

#### Conservation Technical Assistance (CTA) Program

Technical assistance program that has helped landowners protect and conserve 477,000 acres to protect water quality and improve habitat, including the restoration and enhancement of wetlands. <http://www.nrcs.usda.gov/programs/cta>

#### Wildlife Habitat Incentives Program (WHIP)

Voluntary program that provides technical and financial assistance to enable eligible participants to develop upland wildlife, wetland wildlife, threatened and endangered species, fish and other types of wildlife habitat in an environmentally beneficial and cost-effective manner. The purpose of the program is to create high quality wildlife habitats that support wildlife populations of local, state, and national significance. In fiscal years 2004 through 2006, approximately 12,000 acres of wetlands were created, improved or protected under this program. <http://www.nrcs.usda.gov/programs/whip>

#### Environmental Quality Incentives Program (EQIP)

Voluntary conservation program that promotes agricultural production and environmental quality as compatible national goals. Through EQIP, farmers and ranchers may receive financial and technical help to install and maintain conservation practices that enhance soil, water, and related natural resources, including wetlands. The program has restored 27,769 acres of wetlands and an additional 106,667 acres have been enhanced or improved since the program was established in 1996. The 2002 Farm Bill authorized \$400 million for FY 2002, \$700 million for FY 2003, \$1 billion for

FY 2004, \$1.2 billion in both FY 2005 and FY 2006, and \$1.3 billion in FY 2007. <http://www.nrcs.usda.gov/programs/eqip>

#### Farm and Ranchlands Protection Program (FRPP)

Provides matching funds to help purchase development rights to keep productive farm and rangeland in agricultural uses for the purpose of protecting topsoil by limiting conversion to nonagriculture uses of land. <http://www.nrcs.usda.gov/programs/frpp>

#### Grassland Reserve Program (GRP)

This program helps landowners restore and protect grassland, rangeland, pastureland, and shrubland by providing several enrollment options for rehabilitating grasslands. The purpose is to conserve vulnerable grasslands from conversion to cropland or other uses by helping maintain viable ranching operations. <http://www.nrcs.usda.gov/programs/grp>; <http://www.fsa.usda.gov/dafp/GRP/>

### Farm Service Agency (FSA)

#### Conservation Reserve Program (CRP)

Originally authorized in 1985 and re-authorized through 2007. Establishes a permanent cover on eligible acreage of environmental sensitive lands (including cropped wetlands) through long-term rental agreements. Currently, 1.93 million wetland acres, including upland buffers, have been restored. The 2002 Farm Bill authorized that, at any one time, up to 39.2 million acres may be enrolled in CRP during 2002 through 2007, an increase from 36.4 million acres authorized to be enrolled through 2002. <http://www.fsa.usda.gov/dafp/cepd/crp.htm>

### U.S. Forest Service (USFS)

#### Wetlands Management Programs - Watershed Restoration

Approximately 12 percent of the 192 million acres managed by the U.S. Forest Service are estimated to be classified as wetlands. It has been estimated that more than 25 percent of all wetlands found on public lands are administered by the U.S. Forest Service. The management of these wetlands is accomplished through various management standards and guidelines of the individual forest plans for the 156 National Forests. While there is no current agency budget specific to wetlands restoration/protection activities, wetlands establishment, enhancement and protection are provided through several integrated budget line items including watershed and



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vegetation management, wildlife and fisheries, road maintenance, recreation, land and water procurement, and capital improvements. The Forest Service is an active partner in wetlands restoration/protection, with nationwide activities and projects with other federal, state, tribal and local agencies and communities. Current agency partnership efforts are demonstrating a 2-to-1 dollar match (partners/Forest Service). <http://www.fs.fed.us>

### **Land Acquisitions, Exchanges, Donations**

While no funding is currently identified, under the Forest Service's agency budget specific to wetlands acquisition, there remains significant potential for the agency to become very active in the procurement and subsequent protection of various wetlands nationwide. Should additional funding become available it is estimated that between \$1 million and \$5 million annually could be employed for wetlands acquisition, primarily in the southeastern United States. <http://www.fs.fed.us>

## **Other USDA Programs**

### **NRCS Plant Materials Program**

Plant Materials Centers (PMC) focus on development of plants and technology to help conserve natural resources including wetland plants. There are currently 26 PMCs located

across the country. Each Center develops vegetative solutions to natural resource problems and issues. In the wetlands arena, PMCs have selected plants for restoration work as well as for nutrient filtering in constructed wetlands. The PMCs also develop the technology to successfully propagate, establish and manage plant materials in wetland settings. In FY 2004, Centers were working on over 45 studies to further the technology of vegetation in wetlands. This included technology to protect and restore coastal marshes, restore or enhance wetlands, protect shorelines of wetlands, and enhance wetlands for wildlife uses. <http://plant-materials.nrcs.usda.gov>

### **NRCS National Resources Inventory (NRI)**

The NRI serves as the federal government's principal source of information on the status, condition, and trends of soil, water, and related resources on private lands in the United States. The NRI provides trends and analysis about the distribution and loss of wetlands and other resource categories on non-federal lands. The NRI provides not only overall estimates of change in resource conditions but also the dynamics of the changes. Between 1977 and 1997, the NRI was conducted every five years, but began a transition to an annual inventory process in 1999. FY 2006 funding request is \$6.6 million. <http://www.nrcs.usda.gov/technical/NRI>

# Appendix D. Department of Commerce

## National Oceanic and Atmospheric Administration

**Table D-1. NOAA Programs Supporting the President's Wetlands Goal in FY 2006. Funding (millions of dollars)**

Agency	Program	Restore or Create	Improve	Protect	Total wetlands funding for goal FY06	Difference from FY05
NOAA	Community-based Restoration Program	0.000	12.948	0.000	12.948	-3.052
NOAA	Great Lakes Restoration Program	0	1.5	0	1.5	1.5
	Total	0	14.448	0	14.448	-1.552

**Table D-2. NOAA Programs Supporting the President's Wetlands Goal in FY 2006. Planned Accomplishments (in acres)**

Agency	Program	Restore or Create	Improve	Protect	Total	Difference from FY05
NOAA	Community-based Restoration Program	710	3,800	0	4,510	-10

### NOAA Programs Supporting the President's Wetlands Goal

#### Community-based Restoration Program (CRP)

The CRP applies a grass-roots approach to restoration by actively engaging communities in on-the-ground restoration of fishery habitats around the nation. The CRP emphasizes partnerships and collaborative strategies built around restoring NOAA trust resources and improving the environmental quality of local communities. [http://www.nmfs.noaa.gov/habitat/restoration/projects\\_programs/crp/index.html](http://www.nmfs.noaa.gov/habitat/restoration/projects_programs/crp/index.html)

#### Great Lakes Restoration Program

In FY 2006, NOAA will establish a cross-NOAA Great Lakes Habitat Restoration Program Office to coordinate habitat restoration and protection efforts. Taking into account the priority needs identified by the Great Lakes Interagency Task Force, NOAA will focus its restoration and protection to support ongoing efforts at watersheds within Great Lakes

Areas of Concern (AOC). <http://www.publicaffairs.noaa.gov/budget2006/pdf/chap4-2006-orf.pdf>

### Other NOAA programs

#### National Estuarine Research Reserve System (NERRS)

NERRS is a network of protected areas established for long-term research, education, and stewardship. This partnership program between NOAA and the coastal states protects more than 1 million acres of estuarine land and water, which provides essential habitat for wildlife; offers educational opportunities for students, teachers, and the public; and serves as living laboratories for scientists. <http://nerrs.noaa.gov>

#### Coastal Zone Management Program (CZMP)

CZMP is a voluntary federal-state partnership dedicated to comprehensive management of the Nation's coastal resources. States enter into cooperative agreements with NOAA to use federal and state matching funds to implement and improve state programs. <http://www.ocrm.nos.noaa.gov/czm>

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### **Coastal and Estuarine Land Conservation Program (CELCP)**

The CELCP was established to protect coastal and estuarine lands considered important for their ecological, conservation, recreational, historical, or aesthetic value. The program provides funding for projects that ensure conservation of these areas for the benefit of future generations, and that can be effectively managed and protected.

<http://www.ocrm.nos.noaa.gov/landconservation.html>

### **Pacific Coast Salmon Recovery Fund (PCSRF)**

The PCSRF was established to provide grants to the states and tribes to assist state, tribal, and local salmon conservation and recovery efforts. The fund supplements existing state, tribal, and federal programs to foster development of federal-state-tribal-local partnerships in salmon and steelhead recovery and conservation, and promotes efficiencies and effectiveness in recovery efforts through enhanced sharing and pooling of capabilities, expertise, and information.

<http://www.nwr.noaa.gov/pcsrff/index.htm>

### **National Estuaries Restoration Inventory (NERI):**

The NERI has been created to track estuary habitat restoration projects across the nation. The purpose of the inventory is to provide information on restoration projects in order to improve restoration methods, as well as to track acreage restored toward the million-acre goal of the Estuary Restoration Act. <http://neri.noaa.gov>

### **Damage Assessment and Restoration Program (DARP) and Coastal Protection and Restoration Division (CPRD)**

As a natural resource trustee, NOAA acts on behalf of the public to restore resources injured by oil spills, releases of other hazardous substances and vessel groundings. DARP collaborates with other federal, state and tribal natural resource trustees in: assessing and quantifying injuries to natural resources; seeking damages for those injuries; implementing restoration actions; and monitoring progress to ensure restoration goals are met. <http://response.restoration.noaa.gov/index.html>



# Appendix E. Department of the Army

## U.S. Army Corps of Engineers Civil Works

**Table E-1. Corps programs supporting the President's Wetland Goal in FY 2006. Funding (millions of dollars)<sup>2</sup>**

Agency	Program	Restore or Create	Improve	Protect	Total wetlands funding for goal FY06	Difference from FY05
Corps Civil Works	Aquatic Ecosystem Restoration Program	91.459	90.686	5.431	187.576	74.697

\* Includes non-regulatory programs directed at restoration, improvement, or protection of aquatic resources.

**Table E-2. Corps programs supporting the President's Wetland Goal in FY 2006. Planned accomplishments (in acres)<sup>3</sup>**

Agency	Program	Restore or Create	Improve	Protect	Total	Difference from FY05
Corps Civil Works	Aquatic Ecosystem Restoration Program	1,787	12,517	50	14,354	540

\* Includes non-regulatory programs directed at restoration, improvement, or protection of aquatic resources.

### Corps Projects Supporting the President's Wetland Goal

#### Aquatic Ecosystem Restoration

The Corps has numerous study, project specific, and programmatic authorities for implementing aquatic ecosystem restoration projects. Additionally, activities contributing to the President's goal may occur on the 12 million acres of water and land managed by the Corps for other purposes such as flood damage reduction, navigation, and recreation. An example is the use of dredged material to create, restore or improve wetland habitat as part of routine maintenance dredging of federal channels. The data in the tables above represents a subset of the total Corps commitment to achieving the President's goals. Most Corps restoration projects take several years to complete. Therefore the funds appropriated in any one fiscal year have a minimal correlation to the number of acres that count towards the President's goal in the same fiscal year. Projects are included in the budget based on the effectiveness in addressing significant regional or national aquatic ecological problems. The aquatic ecosystem studies and projects proposed by the Corps for funding in FY 2006 include the following examples (the

large number of projects preclude a comprehensive list within this document):

#### Comprehensive Everglades Restoration Plan (CERP)

The primary and overarching purpose of CERP is to restore the South Florida ecosystem, which includes the Everglades. The plan provides the framework and guidance to restore, protect, and preserve the water resources of the greater Everglades ecosystem. It has been described as the world's largest ecosystem restoration effort, and includes restoring natural flows of water, water quality, and more natural hydro-periods within the remaining natural areas. The plan is intended to ensure a sustainable South Florida by restoring the ecosystem, ensuring clean and reliable water supplies, and providing flood protection. <http://www.evergladesplan.org>

#### Louisiana Coastal Area (LCA) Environmental Restoration

In 1998, the State of Louisiana and the federal agencies charged with restoring and protecting Louisiana's valuable coastal wetlands adopted a new coastal restoration plan, *Coast 2050: Toward a Sustainable Coastal Louisiana*. The underlying principles of *Coast 2050* are to restore and/or mimic the natural

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processes that built and maintained coastal Louisiana. The plan subdivides Louisiana's coastal zone into four regions with a total of nine hydrologic basins.

<http://www.mvn.usace.army.mil/prj/lca>

#### **Hamilton Airfield Wetlands Restoration Project, California**

The project will restore approximately 980 acres of wetlands previously isolated by levees from San Francisco Bay. The beneficial use of dredged material to raise the elevation of the wetlands that have subsided behind the levees has been coordinated through the Long Term Management Strategy in San Francisco Bay with the California State Coastal Conservancy as the non-federal sponsor.

<http://www.spn.usace.army.mil/projects/hamilton2004.html>

### **Other Corps Programs**

#### **U.S. Army Engineer Research and Development Center (ERDC)**

The ERDC is one of the most diverse engineering and scientific research organizations in the world, consisting of seven laboratories at four geographical sites in Vicksburg, Mississippi; Champaign, Illinois; Hanover, New Hampshire; and Alexandria, Virginia. The ERDC employs more than 2,000 engineers, scientists, and support personnel, has \$1.2 billion in facilities, and conducted an annual research program exceeding \$700 million in FY 2002. Within the Environmental Labora-

tory, the Wetlands and Coastal Ecology group conducts field and laboratory investigations on biotic and abiotic resources in wetlands and coastal systems and develops product/systems supporting assessment, restoration, and management of wetlands and coastal ecosystems. Emphasis is placed on the interrelationships of these resources with their biological, physical, and chemical environments; fundamental understanding of ecological processes and dynamics in wetland and coastal ecosystems; and the effects of natural and man-induced activities. Research is conducted to understand the trophic-dynamic relationships of organisms in order to predict impacts, mitigate losses, restore habitat, and assess ecosystem functions and ecological relationships. FY 2006 funding request is \$10 million. <http://el.ercd.usace.army.mil/org.cfm?Code=EE-W>

#### **Regulatory Clean Water Act 404 Program**

The Corps manages the nation's wetlands through a regulatory program requiring permits for the discharge of dredged and fill material into jurisdictional waters of the United States. In a typical year the Corps receives permit requests to fill about 25,000 acres of jurisdictional waters. Of these, about 5,000 acres are not permitted and, with respect to the 20,000 acres that are permitted, the Corps requires mitigation of more than 2 acres of mitigation for each permitted acre lost. FY 2006 funding request is \$160 million.

<http://www.usace.army.mil/inet/functions/cw/cecwo/reg>

# Appendix F.

## Department of the Interior

**Table F-1. DOI Programs Supporting the President's Wetlands Goal in FY 2006. Funding (millions of dollars)**

Agency	Program	Restore or Create	Improve	Protect	Total wetlands funding for goal FY06	Difference from FY05
FWS	Partners for Fish and Wildlife Program	5.000	10.000	0.000	15.000	3.800
FWS	Coastal Program	1.550	0.129	2.627	4.306	0.470
FWS	National Wildlife Refuge System	15.426	0.000	15.167	30.593	0.937
FWS	National Wildlife Refuge System (non appropriated Duck Stamp) <sup>4</sup>	0.000	0.000	43.250	43.250	1.000
FWS	North American Wetlands Conservation Fund (appropriated)	0.853	5.723	8.021	14.597	3.322
FWS	North American Wetlands Conservation Fund (non appropriated from CWPPRA)	0.725	4.861	6.814	12.400	0.000
FWS	National Coastal Wetlands Grant Program (all non appropriated from CWPPRA)	0.000	0.000	12.440	12.440	0.000
FWS	Fish and Wildlife Management Assistance	0.000	0.042	0.000	0.042	0.000
FWS	North American Waterfowl Management Plan - Joint Ventures	0.067	0.639	0.133	0.839	-0.001
BLM	Land Acquisition (Total)	0.000	0.000	8.500	8.500	-8.350
NPS	NPS exotic plant management teams	0.000	0.577	0.000	0.577	0.000
	Other DOI programs <sup>5</sup>	0.126	0.569	0.000	0.695	0.060
	Totals	23.747	22.540	96.952	143.239	1.238



**Table F-2. DOI Programs Supporting the President's Wetlands Goal in FY 2006. Planned Accomplishments (in acres)**

Agency	Program	Restore or Create	Improve	Protect	Total	Difference from FY05
FWS	Partners for Fish and Wildlife Program	15,290	30,578	0	45,868	7,801
FWS	Coastal Program	4,320	360	6,277	10,957	0
FWS	National Wildlife Refuge System	86,000	0	12,639	98,639	-1,770
FWS	National Wildlife Refuge System (non appropriated Duck Stamp) <sup>6</sup>	0	0	82,000	82,000	534
FWS	North American Wetlands Conservation Fund (appropriated)	20,540	134,669	188,746	343,955	108,638
FWS	North American Wetlands Conservation Fund (non appropriated from CWPPRA)	17,447	114,396	160,331	292,174	33,387
FWS	National Coastal Wetlands Grant Program (all non-appropriated from CWPPRA)	0	0	7,600	7,600	0
FWS	Fish and Wildlife Management Assistance	0	225	0	225	0
FWS	North American Waterfowl Management Plan - Joint Ventures	2,280	21,580	4,500	28,360	-1,243
BLM	Land Acquisition (Total)	0	0	4,088	4,088	-14,724
NPS	NPS exotic plant management teams	0	1,280	0	1,280	0
	Other DOI programs <sup>7</sup>	6	237	0	243	54
	Totals	145,883	303,325	466,181	915,389	132,677

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## DOI Programs Supporting the President's Wetlands Goal

### U.S. Fish and Wildlife Service (FWS)

#### Partners for Fish and Wildlife Program

This voluntary partnership program, begun in 1987, works with landowners to restore wetlands on private lands using cooperative agreements. The FWS has entered into more than 35,000 agreements with partners. The program has restored 722,500 acres of wetlands, more than 1.57 million acres of uplands, and more than 5,900 miles of riparian and in-stream habitat. The FWS also provides technical assistance to other federal agencies under this program. <http://partners.fws.gov>

#### Coastal Program

The Coastal Program works in 18 specific coastal communities to improve the health of watersheds for fish, wildlife, and people by building partnerships; identifying, evaluating, and mapping important habitats; restoring habitats; and providing technical assistance and financial support to help protect important coastal habitats. Since 1994, the program has restored 112,000 acres of coastal wetlands, 26,000 acres of coastal uplands, and over 1,100 miles of coastal streamside habitat. It has also helped protect 1.33 million acres of coastal habitat. <http://www.fws.gov/cep/cepcode.html>

#### National Wildlife Refuge System

About one-third of the 96-million-acre Refuge System consists of wetlands, not including the tundra of Alaska. The FWS has programs to protect, restore, and conduct research for these wetlands. The Refuge System manages these wetlands to enhance their value for migratory waterfowl; threatened and endangered species; and a myriad of native fish, wildlife, and plants. The wetland restoration and conservation program of the Refuge System protects the essential ecological services of these habitats across diverse landscapes, while providing wildlife-dependent recreational opportunities for the American public. <http://refuges.fws.gov>

#### North American Wetlands Conservation Act Program

Encourages voluntary public-private partnerships to conserve North American wetlands ecosystems. This program provides matching grants to public and private groups and agencies for wetlands restoration and protection in the United States, Canada, and Mexico. Over 11.6 million acres of wet-

lands and associated uplands have been affected by protection, restoration, or enhancement activities since 1991. <http://birdhabitat.fws.gov/NAWCA/grants.htm>

#### National Coastal Wetlands Conservation Program

Since 1992, the program has protected 130,000 acres of wetlands and associated uplands along the coasts and Great Lakes through federal cost-share grants. <http://www.fws.gov/cep/cwgcover.html>

#### Fish and Wildlife Management Assistance

Delivers scientific information and on-the-ground projects that support cooperative efforts to conserve America's fisheries and wildlife resources. FWMA conducts on-the-ground conservation activities, including assessing the condition of habitats; restoring stream and wetland habitats; restoring fish passage; and controlling aquatic nuisance species through physical, chemical, and biological means. <http://fisheries.fws.gov/FWSMA/mamain.htm>

#### North American Waterfowl Management Plan

This tri-national strategic plan fosters the creation of partnerships between state and federal governments, tribes, corporations, private organizations, and individuals to cooperate in the planning, funding, and implementation of projects to conserve and enhance wetland habitat in high-priority "joint venture" regions. The plan calls for 16.1 million acres of wetlands and associated uplands to be protected and 12.1 million acres to be restored or enhanced. <http://birdhabitat.fws.gov/NAWMP/nawmphp.htm>

### Bureau of Land Management (BLM)

#### Land and Water Conservation Fund (LWCF) Wetland Acquisitions Program

The program is focused on consolidating land ownership and conserving resource values within 2,300 units, which compose the Bureau's Special Management Areas. Acquisition—through exchange, purchase, and donation—is an important component of the BLM's land management strategy. BLM acquires land and easements in land when in the public interest and consistent with publicly approved land use plans. Wetlands in concert with other important resource values in these Special Recreation Management Areas play an integral role in developing purchase, donation and exchange initiatives. <http://www.blm.gov/nhp/what/lands/realty/exchange.htm>

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## National Park Service

### Exotic Plant Management Team

A new weapon to combat exotic plant species was launched by the National Park Service in 2000. Called the Exotic Plant Management Team (EPMT), the new capability was modeled after the coordinated rapid response approach used in wildland firefighting because it is also effective in controlling exotic plants. The first test of the EPMT concept was made in 1997 at Lake Mead National Recreation Area (Nevada and Arizona) and served park units throughout the Southwest. Its success led to a request to fund the establishment of four EPMTs in other parts of the country. [http://www2.nature.nps.gov/YearInReview/yir2000/pages/01\\_confluence/01\\_01\\_drees.html](http://www2.nature.nps.gov/YearInReview/yir2000/pages/01_confluence/01_01_drees.html)

## Other DOI Programs

### FWS National Wildlife Refuge System

Cyclic water-level and management activities are funded at \$25 million in FY2006 (*see description above*).

### FWS National Wetlands Inventory

The goal of the National Wetlands Inventory is to produce information on the characteristics, extent, and status of the nation's wetlands and deepwater habitats in order to promote the understanding and conservation of these resources. Federal, state, and local agencies; academic institutions; Congress; and the private sector, use this information and digital maps to guide natural resource planning, management and project development. Wetlands status and trend data and reports provide contemporary information for decision-making and for wetlands policy formulation and assessment. FY 2006 funding request is \$4.777 million. <http://wetlands.fws.gov>

### FWS Natural Resource Damage Assessment and Restoration Program

Employees from the Division of Environmental Quality provide approximately \$1.5 million worth of technical expertise in environmental toxicology, ecology and habitat restoration to advise EPA and other federal and state partners on how to minimize impacts to wetlands during the clean up of contaminated areas, thereby further helping to maintain the baseline number of wetland acres. They make substantial contributions to both maintaining the baseline of wetland acres as well as restoring and improving wetlands at former hazardous waste

sites and areas impacted by oil and chemical spills. <http://contaminants.fws.gov/Issues/Restoration.cfm>

### USGS Prairie Pothole Region/Great Plains

The USGS Northern Prairie Wildlife Research Center conducts research and provides scientific information to expand ecological understanding of processes that influence wetland functions and values. The program also supports research on global climate change, sediment and nutrient dynamics, the effectiveness of wetland restoration and enhancement for flood storage and wildlife habitat, and the potential of prairie pothole wetlands to sequester carbon. FY 2006 funding request is \$0.377 million. <http://www.npwrc.usgs.gov/info/factsheet/wetlands.htm>

### USGS Great Lakes

The USGS Great Lakes Science Center provides scientific information to support the restoration, conservation, and management of wetlands and studies the effects of Great Lakes water-level fluctuations on them. Global climate change studies of wetlands focus on interactions between climate change, lake levels, ground-water hydrology, and wetland response. FY 2006 funding request is \$0.842 million. <http://www.glsc.usgs.gov>

### USGS Gulf Coast

The USGS National Wetlands Research Center conducts research, spatial analyses, predictive modeling, technology development, and information synthesis and outreach related to the nation's critical coastal wetlands and habitats. The program provides to resource managers and planners scientific information needed to stabilize, restore, and manage wetlands, including seagrass beds, inland grass beds, coastal saltwater and freshwater marshes, and forested wetlands. Global climate change studies focus on coastal wetland response to CO<sub>2</sub> levels and sea level rise. FY 2006 funding request is \$6.638 million. <http://www.nwrc.usgs.gov>

### USGS Atlantic Coast

The USGS Patuxent Wildlife Research Center conducts research and provides scientific information on restoration, enhancement, and creation of coastal and estuarine wetlands for their ecological services. Global climate change studies of wetlands focus on wetland response to sea level rise and wetland management. FY 2006 funding request is \$2.376 million. <http://www.pwrc.usgs.gov/wetlands/>



## Department of Transportation

### Federal Highway Administration Programs

#### Summary

Under the Federal Aid Highway legislation (Title 23, United States Code, Highways), state transportation agencies may use National Highway System and Surface Transportation Program funds to finance wetland and natural habitat conservation planning and implementation, as well as compensatory mitigation and restoration projects that offset unavoidable losses from transportation projects. The Department of Transportation/Federal Highway Administration has a goal of 1½-to-1 wetland acre mitigation; under the Federal Aid Highway Program it has achieved over 38,000 acres of wetland mitigation since 1996, with a net gain from mitigation of over 23,000 acres. Through the Federal Highway Administration, DOT also funds research on wetlands mitigation in connection with highways.

#### Eligibility

In 1980, the Federal Highway Administration (FHWA) issued 23 CFR Part 777, Mitigation of Impacts to Privately Owned Wetlands, which gave sponsors of federally assisted highway projects the flexibility to use federal-aid funds to mitigate impacts to wetlands. The regulation was updated in 2000 to include more recent legislative, regulatory, and policy developments. The regulation specifies that funds eligible for mitigation and enhancement apply to all projects carried out under the Federal Aid Highway Program.

#### Funding

Since Federal Aid Highway Programs operate under contract authority implemented through the states, total annual expenditures of federal assistance occur at the discretion of the states within obligation limits established by Congress for each program. The total of all expenditures each year for a given program must be at or below the congressional obligation limit. But the federal government does not direct program expendi-

tures under the annual limit; instead, the states determine how and where the funds are spent based on levels allocated to them by formula each year. Therefore, the states determine what portion of their total allocated funding authority will go to finance wetland mitigation and enhancement. The federal government provides projections that estimate and provide recommendations only on the total annual program obligation limits, not on specific authorizations for wetland mitigation and enhancement.

#### Performance

As a measure of performance under the FHWA's net gain policy and commitments made under the Clean Water Action Plan, the agency monitors annual wetland loss and gain under the federal-aid highway programs nationwide. Monitoring began in FY 1996. Data collected by FHWA over the past nine years indicate that, nationwide, Federal Aid Highway Programs have achieved a 160 percent gain in wetland acreage (2.6:1 gain/loss ratio). In terms of acres, Federal Aid Highway Programs produced a total net gain of 23,283 acres of wetlands nationwide between 1996 and 2004.

Costs of wetland mitigation have increased several-fold during the past 25 years. Costs of mitigation were estimated in 1995 as approximately \$16,000 per acre of mitigation nationwide, based on available data obtained from 1992 to 1994. This results in an estimated total cost from 1996 to 1999 for all federally assisted highway programs of approximately \$50 million to \$80 million per year for replacement of wetlands (in pre-1995 dollars). A GAO report to the Transportation Subcommittee on Highway Planning (August 1994) quotes data from 1992 for wetlands costs from 37 states. Average annual costs reported for 1988 to 1992 were \$79 million. Current estimates by FHWA average \$35,000 per acre of replaced wetland. During the most recent years, the total estimated annual expenditures for wetland establishment are running \$100 million to \$125 million for all federally assisted highway programs.

Fiscal Years 1996-2004	Acres of Compensatory Wetland Mitigation	Acres of Wetland Impacts	Mitigation Ratio/Percent increase	Net Acreage Gain
Totals	38,084	14,801	2.6:1 / 160%	23,283 <sup>8</sup>

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## **Research and Other Cooperative Efforts to Support Wetlands Goal**

The FHWA coordinates wetland programs and research initiatives with other federal agencies, including the EPA and DOI. FHWA wetlands research is not identified separately. However, \$235,000 of research funds was spent for wetland-related research, and \$385,000 is planned for wetland-related research. Estimates are not yet available for FY 2006. The FHWA, EPA, and the Army Corps of Engineers implemented guidance on how the Transportation Equity Act for the 21<sup>st</sup> Century preference on the use of mitigation banks can be exercised under the Section 404, Clean Water Act permitting process, one of the first actions completed under the National Wetlands Mitigation Action Plan.

## **Federal Aviation and Transit Programs**

The programs of the Federal Transit Administration (FTA) and Federal Aviation Administration (FAA) provide federal funding for wetland mitigation related to assisted transit

and airport projects as part of project costs.

In 1996, FAA issued a Wetlands Banking Mitigation Strategy to provide guidance to ensure that federally assisted airport projects and FAA projects effectively and efficiently meet Section 404 permit requirements and environmental responsibilities. This document provides a framework for the FAA to mitigate unavoidable impacts before they occur by purchasing credits from a wetlands bank. The use of wetlands mitigation banking is voluntary, and is considered on a project-by-project basis. If chosen as an option for an airport project, the airport sponsor may recover the cost of purchasing wetland bank credits from Federal Airport Improvement Program funding. In July 2003, FAA signed an inter-agency memorandum of agreement that addresses wetland mitigation and restoration projects near airports and ways to reduce aircraft-wildlife strikes and maintain aviation safety.

# Appendix H.

## Environmental Protection Agency

**Table H-1. EPA programs supporting the President's Wetland Goal in FY 2006. Funding (millions of dollars)**

Agency	Program	Restore or Create	Improve	Protect	Total wetlands funding for goal FY06	Difference from FY05
EPA	National Estuary Program <sup>9</sup>	3.422	2.311	2.667	8.400	-5.600
EPA	CWA S. 319 Nonpoint Source Grants	0.250	0.021	0.000	0.271	0.000
EPA	Five Star Challenge Grants	0.034	0.216	0.000	0.250	0.000
	Totals	3.706	2.548	2.667	8.921	-5.600

**Table H-2. EPA programs supporting the President's Wetland Goal in FY 2006. Planned Accomplishments (in acres)**

Agency	Program	Restore or Create	Improve	Protect	Total	Difference from FY05
EPA	National Estuary Program	6,834	4,614	5,325	16,773	-11,185
EPA	CWA S. 319 Nonpoint Source Grants	24	2	0	26	13
EPA	Five Star Challenge Grants	118	758	0	876	438
	Totals	6,976	5,374	5,325	17,675	-10,734

### EPA Programs Supporting the President's Wetland Goal

#### National Estuary Program (NEP)

The Program works to restore and protect these sensitive and vital ecosystems. The NEP provides funding and technical assistance to citizens, governments, businesses, researchers, and organizations in local communities to create and implement plans they develop collectively. These plans address problems facing their estuaries, such as excess nutrients, pathogens, toxic chemicals, introduced species, overfishing, and habitat loss and degradation. With its partners, the NEP works to safeguard the health of some of our nation's most productive natural resources and transfer the lessons learned to other watersheds.

<http://www.epa.gov/owow/estuaries>

#### Clean Water Act Section 319 Program

Under section 319, states, territories, and Indian tribes receive grant money that supports a wide variety of activities, including technical assistance, financial assistance, education, training, technology transfer, demonstration projects, and monitoring to assess the success of specific nonpoint source implementation projects some of which include wetland restoration projects. <http://www.epa.gov/owow/nps/cwact.html>

#### Five Star Challenge Grants Program

The EPA and its partners [National Fish and Wildlife Foundation, National Association of Counties (NACo), and Wildlife Habitat Council] have helped catalyze over 350 projects in 49 states, the District of Columbia, and U.S. Virgin Islands. Each year, 50 to 60 grants of \$5,000 to \$20,000 are awarded. The purpose of the Five Star Restoration Program is

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to support community-based efforts to restore wetlands, river streams/corridors, and coastal habitat; build diverse partnerships within the community; and foster local stewardship of resources through outreach. <http://www.epa.gov/owow/wetlands/restore/5star>

## **Other EPA Programs**

### **Wetlands Grants Program**

The EPA has annually provided \$15 million to states, local governments, tribes, and non-governmental organizations to strengthen non-federal regulatory and non-regulatory

wetlands programs. FY 2006 funding request is \$20 million. <http://www.epa.gov/owow/wetlands>

### **Clean Water Act (CWA) Section 404 Program**

The EPA and the Corps share regulatory responsibility pursuant to CWA section 404. EPA and the Corps establish the regulations and policies for implementation of the program, including development and implementation of the Section 404(b)(1) guidelines. The guidelines establish the substantive environmental criteria used to evaluate applications for permits to discharge under section 404. FY 2006 funding request is \$20.4 million. <http://www.epa.gov/owow/wetlands/>



# Appendix I.

# Coastal Wetlands Planning, Protection and Restoration Act

The Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) is funded by the Aquatic Resources Trust Fund (a.k.a.) Wallop-Breaux trust fund, which was passed in 1990 and is authorized until 2019. The fund is created from excise taxes on fishing equipment and fuels for motorboat and small engines. Funds are distributed to the Louisiana Coastal Restoration Task Force, North American Wetlands Conservation Act Program, and the National Wetlands Conservation Grant Program at rates of 70 percent, 15 percent, and 15 percent respectively. The Louisiana CWPPRA accomplishments are presented in this appendix. The other CWPPRA accomplishments are presented in DOI Appendix F under the appropriate Fish and Wildlife Service Program areas.

The CWPPRA funding distributed to the Louisiana Coastal Restoration Task Force is used to design and construct projects to preserve and restore Louisiana's coastal landscape. The Louisiana portion of CWPPRA is provided on average \$50 million per year. The Corps administers the funding and tracks project status of all CWPPRA projects. With the Corps as chair, a task force consisting of the National Marine Fisheries Service, U.S. Fish and Wildlife Service, Natural Resources Conservation Service, Environmental Protection Agency, and the State of Louisiana (the non-federal sponsor) manages the program. Currently, the program has 131 approved projects of which 64 are complete and 12 are under construction. [http://www.mvn.usace.army.mil/pd/cwppra\\_mission.htm](http://www.mvn.usace.army.mil/pd/cwppra_mission.htm)

**Table I-1. CWPPRA funding supporting the President's Wetland Goal in FY 2006 (millions of dollars)**

	Restore or Create	Improve	Protect	Total wetlands funding for goal FY06	Difference from FY05
CWPPRA	0.000	61.00	0.000	61.00	3.00

**Table I-2. Potential CWPPRA Acres by Agency for FY 2006**

Agency	Restore or Create	Improve	Protect	Total	Difference From FY 2005
Corps	649	2,435	50	3,134	1,358
NMFS	1,417	755	32	2,204	-1,244
FWS	52	305	27	384	-17,926
NRCS	19	56,689	48	56,756	56,755
EPA	7	0	6	13	-384
CWPPRA Total	2,144	60,184	163	62,491	38,560



# Notes

1. Commercial fisheries data from NOAA's 2003 Fisheries of the United States. Recreational fishing, bird watching and hunting data from the DOI 2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.
2. Partial data set from select Corps District offices, excluding the regulatory program and CWPPRA data. May include funding for acres that will be counted in future Fiscal Years.
3. Partial data set from select Corps District offices, excluding the regulatory program and CWPPRA data. Funding may have been provided in previous Fiscal Years.
4. Funds from the Duck Stamp tax are directed to land acquisition for the National Wildlife Refuge system.
5. "Other DOI programs" contributing to the President's Wetland Goal include BLM's work with the National Fish and Wildlife Foundation, BLM Yuma East Wetlands Riparian Restoration Project (AZ), BLM Tres Rios Wetland Demonstration, NPS NRPP-NRM funding, and NPS WRD Competitive funding.
6. Funds from the Duck Stamp tax are directed to land acquisition for the National Wildlife Refuge system.
7. "Other DOI programs" contributing to the President's Wetland Goal include BLM's work with the National Fish and Wildlife Foundation, BLM Yuma East Wetlands Riparian Restoration Project (AZ), NPS NRPP-NRM funding, and NPS WRD Competitive funding.
8. Gains from mitigation programs are not counted as acres toward the President's Wetland Goal.
9. NEP resources represent full grant funding. Unable to differentiate funding resources specifically associated with wetlands projects.





# Acronyms

AOC	Areas of Concern, Great Lakes, NOAA	NOAA	National Oceanic and Atmospheric Administration
BLM	Bureau of Land Management, DOI	NPS	National Park Service, DOI
CELCP	Coastal and Estuarine Land Conservation Program, NOAA	NRCS	Natural Resources Conservation Service, USDA
CERP	Comprehensive Everglades Restoration Plan	NRI	National Resources Inventory, USDA/NRCS
Corps	U.S. Army Corps of Engineers	NRPP-NRM	Natural Resource Preservation Program - Natural Resource Management, DOI/NPS
CPRD	Coastal Protection and Restoration Division, NOAA	NWI	National Wetlands Inventory, DOI/FWS
CRP	Conservation Reserve Program, USDA/FSA	NWRS	National Wildlife Refuge System, DOI/FWS
CRP	Community-based Restoration Program, NOAA	PCSRF	Pacific Coast Salmon Recovery Fund, NOAA
CTA	Conservation Technical Program, USDA/NRCS	PMC	Plant Materials Centers, USDA/NRCS
CWA	Clean Water Act	USDA	U.S. Department of Agriculture
CWPPRA	Coastal Wetlands Planning, Protection and Restoration Act	USFS	U.S. Forest Service
CZMP	Coastal Zone Management Program, NOAA	USGS	U.S. Geological Survey
DARP	Damage Assessment and Restoration Program, NOAA	WHIP	Wildlife Habitat Incentives Program, USDA/NRCS
DOI	Department of the Interior	WHWWG	White House Wetlands Working Group
DOT	Department of Transportation	WRD	Water Resources Division Competitive funding, DOI/NPS
EPA	Environmental Protection Agency	WRP	Wetlands Reserve Program, USDA/NRCS
EPMT	Exotic Plant Management Team, DOI/NPS		
EQIP	Environmental Quality Incentives Program, USDA/NRCS		
ERDC	Engineer Research and Development Centers, U.S. Army		
FAA	Federal Aviation Administration, DOT		
FHWA	Federal Highway Administration, DOT		
FRPP	Farm and Ranchlands Protection Program, USDA/NRCS		
FSA	Farm Service Agency, USDA		
FTA	Federal Transit Administration, DOT		
FWS	Fish and Wildlife Service, DOI		
GAO	Government Accountability Office, Congress		
GIS	Geographic Information System		
LCA	Louisiana Coastal Area Environmental Restoration		
LWCF	Land and Water Conservation Fund		
MDC	Missouri Department of Conservation		
NAWCA	North American Wetlands Conservation Act, DOI/FWS		
NEP	National Estuary Program, EPA		
NERI	National Estuaries Restoration Inventory, NOAA		
NERRS	National Estuarine Research Reserve System, NOAA		

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- Page 11: U.S. Fish and Wildlife Service (Klamath Watershed, Oregon)
- Page 13: National Oceanic and Atmospheric Administration (Chesapeake Bay, Maryland)
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