16. NATURAL RESOURCES AND ENVIRONMENT

Table 16–1. FEDERAL RESOURCES IN SUPPORT OF NATURAL RESOURCES AND ENVIRONMENT

(In millions of dollars)

Function 300	1997 Actual	Estimate					
		1998	1999	2000	2001	2002	2003
Spending:							
Discretionary Budget Authority	22,426	23,180	22,613	22,284	21,990	22,027	22,343
Mandatory Outlays:							
Existing law	51	1,059	712	846	739	544	682
Proposed legislation	.....	.....	203	223	304	337	327
Credit Activity:							
Direct loan disbursements	31	42	40	44	46	48	51
Tax Expenditures:							
Existing law	1,700	1,710	1,740	1,740	1,735	1,725	1,710
Proposed legislation	.....	.....	–86	–78	–78	–83	–91

The Federal Government spends over $20 billion a year to protect the environment, manage federal land, conserve resources, provide recreational opportunities, and construct and operate water projects.[1] The Federal Government manages about 700 million acres—a third of the U.S. continental land area.

Federal lands include the 376 units of the National Park System, with such unique resources as Grand Canyon National Park, Yellowstone National Park, and Gettysburg National Military Park; the 156 National Forests; the 510 refuges in the National Wildlife Refuge System; and land managed by the Bureau of Land Management (BLM) in 11 Western States (see Chart 16–1).

Within this function, Federal efforts focus on providing cleaner air and water, conserving natural resources, and cleaning up environmental contamination. The major goals include:

- Protecting human health and safeguarding the natural environment—air, water, and land—upon which life depends.
- Restoring and maintaining the health of federally managed lands, waters, and renewable resources.
- Providing recreational opportunities for the public to enjoy natural and cultural resources.

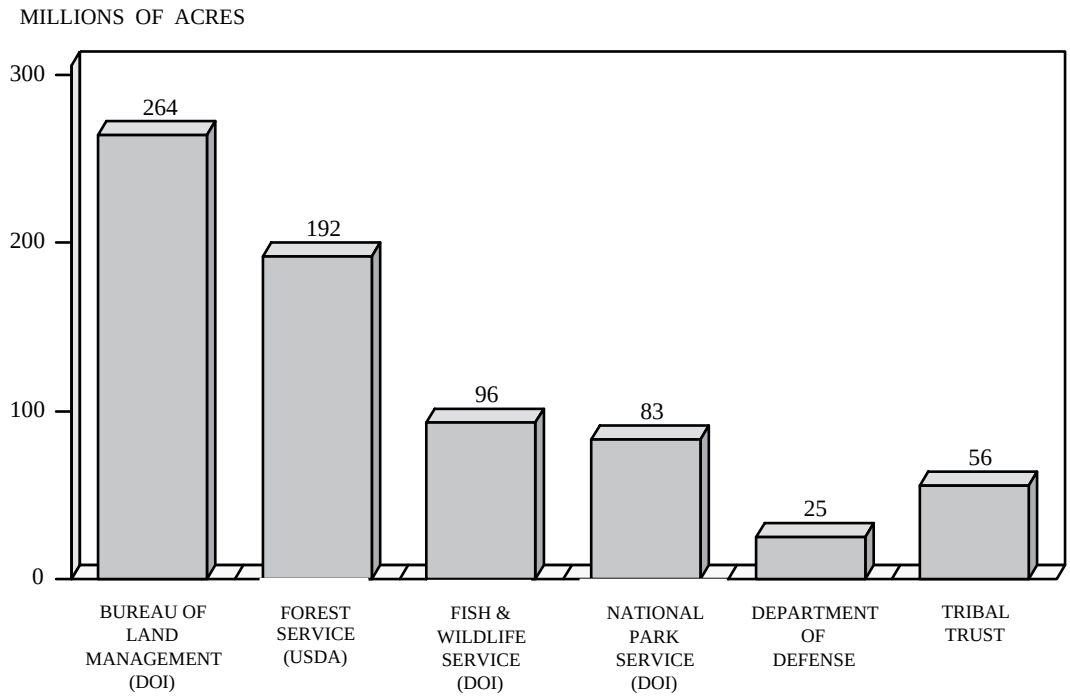
National Parks

The Federal Government invests over $1.6 billion a year to maintain a system of national parks that covers over 83 million acres in 49 States, the District of Columbia, and various territories. Although funding for the National Park Service (NPS) has steadily increased (almost five percent a year since 1986), the popularity of national parks has generated even faster growth in the number of visitors, new parks, and additional NPS responsibilities.

With demands growing faster than available resources, NPS is taking new, creative, and more efficient approaches to managing parks

[1] The Natural Resources and Environment function does not reflect total Federal support for the environment and natural resources. It does not include, for instance, the environmental clean-up programs at the Departments of Energy and Defense.

Chart 16-1. FEDERAL LAND MANAGEMENT BY AGENCY



and has developed performance measures against which to weigh its progress.

- Using higher funding from the proposed Environmental Resources Fund for America, the NPS will begin systematically addressing the backlog of priority construction and maintenance projects at national parks and, in 1999, will develop a five-year list of the highest priorities to address and allocate funds to address about 20 percent of them.
- NPS is focusing construction and maintenance funds on the highest priorities based on objective criteria and, in 1999, will implement controls, reengineer the measurement process, and establish capital plans with approved cost, schedule, and project goals for each major construction project.
- NPS will use the receipts from recreation and user fees to finance park improvements and, in 1999, will increase the receipts by 14 percent, compared to 1997 levels.
- NPS will implement park management reforms that will increase returns to the Government from park concessions to eight percent in 1999, compared to a baseline of six percent in 1997.
- NPS is establishing broader cooperative arrangements through partnerships with public and private groups and, in 1999, will use those partnerships to protect an additional 220 miles of trails, 240 miles of rivers, and 7,000 acres of parks and open spaces.

Conservation and Land Management

The 75 percent of Federal land that comprises the National Forests, National Grasslands, National Wildlife Refuges, and the BLM-administered public lands also provides significant public recreation. BLM provides for nearly 55 million recreational visits a year, while over 30 million visitors watch wildlife each year at National Wildlife Refuges.

With its 125,000 miles of trails, the Forest Service is the largest single supplier of public outdoor recreation, providing 348 million recreational visitor days last year.

Federal lands provide other benefits. BLM and the Forest Service, with combined annual budgets of about $4.4 billion, manage for multiple purposes. Federal laws require that the Forest Service manage the National Forests for outdoor recreation, range, timber, watershed, wildlife and fish, and wilderness, and that the BLM manage the public lands that it administers for multiple uses.

The agencies concentrate on the long-term goal of providing sustainable levels of multiple uses while ensuring and enhancing ecological integrity. Their performance measures include the following:

- The Forest Service will target its higher funding to needed watershed restoration work by increasing acres of watershed restoration work by 43 percent (to 40,000 acres) over 1998 levels of 28,000 acres; increasing the acres of range restoration by 24 percent (to 42,000 acres) over 1998 levels of 34,000 acres; increasing the number of miles of road obliterated to 3,500 miles, as compared to a 1998 baseline of 1,200 miles in 1998; and increasing the number of acres treated for fire hazard reduction to 1.6 million, compared to a 1998 planned level of 1.3 million.
- For priority watersheds, BLM will enhance the ecological integrity of 25 percent more miles of riparian areas and 35 percent more acres of wetlands in 1999, compared to 1996, and increase the number of acres treated for fire hazard reduction by prescribed fire and mechanical means by 12 percent.

The Interior Department's Fish and Wildlife Service (FWS), with a budget of $1.3 billion, manages 93 million acres of refuges and, with the Commerce Department's National Marine Fisheries Service (NMFS), protects species on Federal and non-Federal lands.

- Proposed 1999 funding increases will enable the refuge system to protect, enhance, and restore 661,000 more acres, over the 1997 baseline of 96 million acres.
- FWS' 1999 funding increase will double the number of acres covered by Habitat Conservation Plans (HCPs); improve the development and implementation of HCPs through increased public participation, monitoring, and adaptive management; extend Candidate Conservation Agreement protections to another 80 species; keep 20 candidate species off the endangered species list; and help ensure that 60 percent of listed species are stabilized or improved in status.
- NMFS will implement programs in 1999 to continue fully assessing 79 percent of fish stocks, cutting commercial by-catch by 15 percent, and increasing the number of listed species that improve in status to 15, over a baseline of 12.

Half the continental United States is crop, pasture, and range land owned and managed by two percent of Americans—farmers and ranchers. The Agriculture Department's (USDA) Natural Resources Conservation Service provides technical assistance to ensure sound management of this land:

Under USDA's Wetlands Reserve Program (WRP), the Federal Government buys long-term or permanent easements from landowners for cropland, which is taken out of production and restored to wetlands. Landowners receive fair market value for the land and cost-share assistance to cover the restoration expenses. The budget proposes to enroll another 164,000 acres, bringing total cumulative enrollment to over 655,000 by the end of 1999. The Administration's goal for WRP remains one of reaching total enrollment of 975,000 acres by the end of calendar 2000.

- To enhance water quality along streams and lakes, and provide important new riparian wildlife and fish habitat, USDA will retire at least 50,000 miles of conservation buffers in 1999, the same high level as in 1998.
- In 1999, USDA will restore two million acres of native grassland vegetation (the same as the 1998 level), and complete conservation management systems for grazing lands, which help control erosion and

benefit habitat, on 6.4 million acres, compared to six million acres in 1998.

In 1999, the Environmental Quality Incentives Program, which provides funds to farmers and ranchers to adopt sound conservation practices and comply with environmental requirements, will better target areas of environmental need requiring that funding be allocated in conservation priority areas.

Federal and non-Federal agencies are carrying out long-term restoration plans for several nationally significant ecosystems, such as those in South Florida and the California Bay-Delta. The South Florida ecosystem is a national treasure that includes the Everglades and Florida Bay. Its long-term viability is critical for the tourism and fishing industries, and for the water supply, economy, and quality of life for South Florida's six million people. Low water quality in the San Francisco Bay-San Joaquin Delta ecosystem has degraded wildlife habitat, endangered several species, and reduced the estuary's reliability as a water source.

- The U.S. Army Corps of Engineers will complete its comprehensive review of the central and southern Florida project by July 1, 1999, thus providing a master plan for restoring the Everglades while accommodating other demands for water and related resources in South Florida. By September 30, 2002, 10 percent of all known federally endangered and threatened species in South Florida will be able to be "down listed."

The Bay-Delta program is undergoing National Environmental Policy Act review of three major alternatives for the Bay-Delta, and it will develop specific, measurable goals after the analysis is complete and an alternative is selected.

The Land and Water Conservation Fund (LWCF) is an important tool for species and habitat conservation. It uses the royalties of offshore oil and gas leases to help Federal, State, and local governments acquire land for conservation and outdoor recreation.

- In 1999, LWCF funds will provide for the acquisition of parcels to enhance National Parks, provide habitat for species, protect our natural and cultural resource heritage, and improve land ownership patterns for greater efficiency.

The management of lands, the availability and quality of water, and improvements in the protection of resources is based on sound natural resources science. The U.S. Geological Survey (USGS) provides research and information to land managers and the public to better understand ecosystems and species habitat, land and water resources, and natural hazards.

- In 1999, USGS, in partnership with other Federal natural hazards information providers, will develop an integrated disaster information network to improve mitigation and preparedness for natural disasters.
- In 1999, USGS will provide water quantity and quality information on 1,000 U.S. watersheds that the Clean Water Action Plan identified as impaired (half of the Nation's watersheds). These data, together with completed water quality assessments, will help develop water quality management models that resource managers need to forecast results from changing land use.

The Commerce Department's National Oceanic and Atmospheric Administration (NOAA) manages ocean and coastal resources in the 20-mile Exclusive Economic Zone. Its National Ocean Service and National Marine Fisheries Service manages 201 fish stocks and 163 marine mammal populations. NOAA's National Weather Service (NWS), using data collected by the National Environmental Satellite and Data Information Service, provides weather forecasts and flood warnings. Its Office of Oceanic and Atmospheric Research provides science for policy decisions in areas such as climate change, air quality and ozone depletion.

- In 1999, NWS' ongoing modernization will increase the lead time of flash flood warnings to 32 minutes and the accuracy of flash flood warnings to 82 percent; increase the lead time of severe thunderstorm warnings to 19 minutes and the accuracy of severe thunderstorm warnings to 84 percent, and achieve a six-month lead time for El Nino Southern Oscillation forecasts.

Pollution Control and Abatement

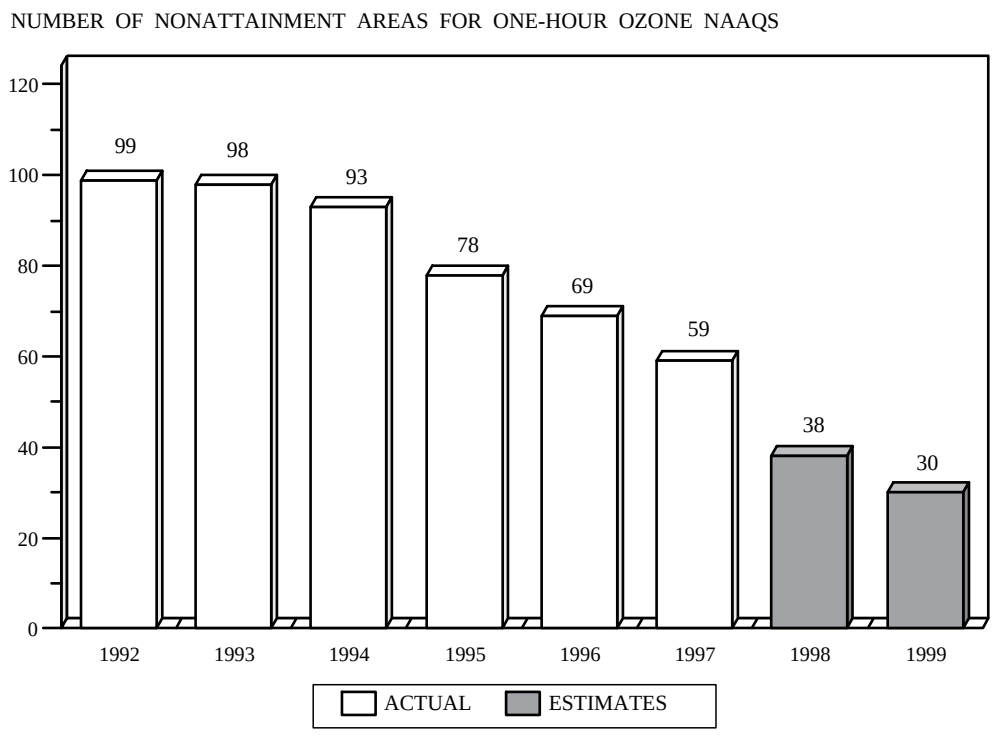
The Federal Government helps achieve the Nation's pollution control goals by: (1) taking direct action; (2) funding actions by State, local, and Tribal governments; and (3) implementing the Nation's environmental regulatory system. The Environmental Protection Agency's (EPA) $7.8 billion in discretionary funds and the Coast Guard's $100 million Oil Spill Liability Trust Fund (which funds oil spill cleanups in U.S. waters) finance these activities. EPA's discretionary funds include three major components—the operating program, Superfund, and water infrastructure financing.

EPA's $3.6 billion operating program provides the Federal funding to implement most Federal pollution control laws, including the Clean Air, Clean Water, Solid Waste Disposal, Safe Drinking Water, and the Toxic Substances Control Acts. EPA protects human health and the environment by developing national pollution control standards, largely enforced by the States under EPA-delegated authority. For example, under the Clean Air Act, EPA has developed health-based National Ambient Air Quality Standards (NAAQS) for six air pollutants: ozone, particulate matter, carbon monoxide, sulfur dioxide, lead, and nitrogen dioxide. Among these, ground-level ozone and particulate matter are the most complex, difficult to control, and pervasive. EPA recently revised the standard for ozone and promulgated a new standard for particulate matter to further protect human health.

- In 1999, EPA will certify that eight of the estimated 38 remaining nonattainment areas have achieved the current NAAQS for ozone (See Chart 16–2).
- In 1999, EPA will certify that 13 of the 58 estimated remaining nonattainment areas have achieved the NAAQS for carbon monoxide, sulfur dioxide, or lead.

Under the Resource Conservation and Recovery Act (RCRA), EPA and authorized States prevent dangerous releases to the environment

Chart 16-2. AIR QUALITY TRENDS



of hazardous, industrial nonhazardous, and municipal solid wastes by requiring proper facility management. EPA and authorized States also implement the RCRA corrective action program to clean up environmental contamination at sites where hazardous wastes are being stored, treated, or disposed.

- In 1999, 153 more hazardous waste management facilities will have approved controls in place to prevent dangerous releases to air, soil, and groundwater, for a total of 2,080 facilities (62 percent of the total outstanding).

Superfund's $2.1 billion program pays to clean up hazardous spills and abandoned hazardous waste sites, and to compel responsible parties to clean up. The Coast Guard implements a smaller but similar program to clean up oil spills. Superfund also supports the Federal "Brownfields" program, designed to assess, clean up, and re-use formerly contaminated sites.

- In 1999, EPA will complete 136 cleanups, in order to reach 900 completed cleanups (60 percent of those outstanding) by the end of 2001.
- In 1999, EPA will fund Brownfields site assessments in 100 more communities, in order to reach 300 communities by the end of 2000.
- In 1999, the Coast Guard will reduce the amount of oil that marine sources spill into the water by 20 percent below the 1993 level of 7.76 gallons per million gallons shipped.

Federal water infrastructure funds provide capitalization grants to State revolving funds, which make low-interest loans to help municipalities pay for wastewater and drinking water treatment systems required by Federal law. The Administration plans to capitalize these funds to the point where the Clean Water State Revolving Funds and the Drinking Water State Revolving Funds provide a total of $2.5 billion in average annual assistance. The more than $68 billion in Federal assistance since passage of the 1972 Clean Water Act has dramatically increased the portion of Americans enjoying better quality water.

- In 1999, another three million people will receive the benefits of secondary treatment of wastewater, for a total of 183 million.
- In 1999, 85 percent of the population served by community water systems will receive drinking water meeting all health-based standards, up from 81 percent in 1994.

USDA gives financial assistance to rural communities to provide safe drinking water and adequate wastewater treatment facilities to rural communities. The budget proposes $1.3 billion in combined grant, loan, and loan guarantees for this assistance.

- The Water 2000 initiative is bringing indoor plumbing and safe drinking water to under-served rural communities, and USDA plans to fund 250 Water 2000 facilities in 1999.

Water Resources

The Federal Government builds and manages water projects for navigation, flood control, irrigation, and hydropower generation. The Army Corps of Engineers operates Nationwide, while Interior's Bureau of Reclamation operates in the 17 Western States. The budget proposes $4.1 billion for the agencies in 1999—$3.2 billion for the Corps, $0.9 billion for the Bureau. The Administration will work with Congress to address the problem of project delays and growing future liabilities that result from Congress' addition of many new projects in 1998.

While navigation and flood damage reduction remain the Corps' major focus, its projects, programs, and regulatory responsibilities increasingly address environmental objectives, including wetlands protection.

- In 1999, the Corps expects to maintain its commercial navigation and flood damage facilities so that they will be fully operational at least 95 percent of the time.
- In 1999, the Corps' regulatory program expects to achieve "no net loss" of wetlands by creating, enhancing, and restoring wetlands functions and values that are comparable to those lost when the Corps allows wetlands to be developed.

Congress created the Bureau of Reclamation to support economic development in the West by financing and constructing reliable water supplies for irrigation and power generation. The West is now developed, and the Bureau is remaking itself into a customer-oriented "water resources management" agency by providing expertise on improved water management practices. The budget also proposes funding for several local projects that reclaim and reuse wastewater in urban areas in order to demonstrate the benefits of this alternative to constructing more dams and reservoirs.

- In 1999, the Bureau plans to complete evaluations of current practices on at least one project in each of its 26 area offices, with the goal of finding ways to more effectively manage competing demands for water.

Tax Incentives

State and local governments (and private companies) benefit from a tax break, costing about $600 million in 1999, that allows State and local governments to construct private waste disposal facilities with tax-exempt bonds. The tax code also offers incentives for natural resource industries, especially timber and mining. The timber industry can deduct certain costs for growing timber, pay lower capital gains rates on profits, take a credit for investments, and quickly write-off reforestation costs—in total, costing about $600 million in 1999. The mining industry benefits from percentage depletion provisions (which allow deductions that exceed the economic value of resource depletion) and can deduct certain exploration and development costs—together, costing about $400 million in 1999.