

OVERVIEW

INTRODUCTION

Introduction

Mission and Organization

The Government Performance and Results Act

FY 1997 Selected Measures of Performance by Strategic Goal (Figure 1)

Performance Highlights as Guided by the Strategic Plan Goals

Strategic Goal #1: Restore and Protect Ecosystems

Strategic Goal #2: Provide Multiple Benefits for People

Strategic Goal #3: Ensure Organizational Effectiveness

...to ensure the long-term health, diversity, and productivity of the land in our care.

The Forest Service was established in 1905 to conserve our Nation's forests. Today, the agency's multiple-use mandate expands to 191.8 million acres of forested, grass, and shrub lands comprising the National Forest System (NFS). The Forest Service provides leadership in the protection, management, and use of the Nation's forest, grassland, and aquatic ecosystems. Our approach to natural resource management integrates ecological, economic, and social factors to maintain and enhance the quality of the environment to meet current and future needs. Through implementation of land and resource management plans, the agency will ensure sustainable ecosystems and provide recreation, water, timber, minerals, fish, wildlife, wilderness, and aesthetic values on NFS lands for current and future generations .

Through technical and financial assistance, the Forest Service will assist State and private landowners to practice good stewardship, promote rural economic development, and improve the natural environment of cities and communities. The agency will conduct research and development and provide the best scientific information to facilitate achievement of our goals. Domestically and internationally, activities will be directed at developing values, products, and services in such a way as to maintain ecosystem health.

MISSION AND ORGANIZATION

Our primary mission is to ensure, for present and future generations, the long-term health, diversity, and productivity of the land in our care. The phrase "Caring for the Land and Serving People" captures the essence of this mission.

To accomplish its mission and goals, the Forest Service employs just over 37,000 people across the country. The Chief of the Forest Service reports to the Under Secretary for Natural Resources and Environment, U.S. Department of Agriculture. Within the Forest Service, the National Forest System provides for the protection, management, and utilization of national forests and grasslands for a wide variety of purposes and values. Programs run the spectrum from the preservation of our wilderness areas to intensive resource utilization for timber harvest or developed recreation areas.

Forest and Rangeland Research and Development covers four broad areas: Vegetation Management and Protection Research; Wildlife, Fish, Watershed, and Atmospheric Sciences Research; Resource Valuation and Use Research; and Forest Resources Inventory and Monitoring. Each day, field foresters, land managers, farmers, ranchers, urban foresters, public interest groups, and many others apply the know-how developed by Forest Service scientists and cooperators in academia and industry. Long-term scientific research provides many tools used to provide early warnings and solutions for potential problems.

The goal of State and Private Forestry (S&PF) is to maintain and improve, through collaborative stewardship, the health and productivity of the Nation's urban and rural forests and related economies. The S&PF programs provide technical and cost-sharing assistance to help assure sound stewardship and

use of the vast State and private forest lands, utilizing nonregulatory approaches. S&PF also helps State, local, and tribal governments and small nonindustrial private forest landowners manage forest resources to meet economic, social, and environmental goals. Funds are leveraged through cost-shares to provide increased on-the-ground project funding.

Two additional Deputy areas (Operations, and Programs and Legislation) provide support services essential to accomplishing the agency's mission. The primary contribution of these Deputy areas is to ensure organizational effectiveness by providing legislative, budget, and human resource support for the Washington Office and the field.

Through international assistance and scientific exchange activities, the agency helps promote sustainable forest management domestically and throughout the world, by increasing the sharing of knowledge and technology.

THE GOVERNMENT PERFORMANCE AND RESULTS ACT

In compliance with the Government Performance and Results Act (GPRA), the agency has prepared a Strategic Plan to establish strategic goals and objectives that will be used to implement our mission, promote accountability, and focus on agency priorities through 2000. The goals in the Strategic Plan provide the basis for developing the program objectives and performance measures for the Annual Performance Plans. The Annual Performance Plans are the basic management tool used to direct resources, implement key strategies, and identify specific efforts that will be used to achieve our goals and objectives. FY 1997 was the final year that the agency completed a Performance Plan under the pilot phase of implementing GPRA, and therefore it represents an interim approach to compliance with the Act.

Three objectives form the basis of the GPRA Strategic Plan, annual performance plans, and the RPA Program.

Both the Strategic and the Annual Performance Plans were developed from the 1995 Draft Forest and Rangeland Renewable Resources Planning Act (RPA) Program. The following objectives form the basis for these plans:

- Ensure Sustainable Ecosystems.
- Provide Multiple Benefits for People Within the Capability of Ecosystems.
- Ensure Organizational Effectiveness.

FY 1997 SELECTED MEASURES OF PERFORMANCE BY STRATEGIC GOAL

	Accomplishments	
	1996	1997
Ensure Sustainable ecosystems		
Wildlife/TE&S terrestrial habitat restored/enhanced (acres) 1/	158,583	328,347
Inland/anadromous fish stream habitat restored/enhanced (miles) 1/.....	1,752	1,850
Inland/anadromous fish lake habitat restored/enhanced (acres) 1/	7,851	10,344
TE&S aquatic stream habitat restored/enhanced (miles) 1/.....	129	161
TE&S aquatic lake habitat restored/enhanced (acres) 1/.....	177	118
Soil & water resource improvements (acres) 1/ 2/	66,314	65,570
Reforestation (acres) 1/ 2/	357,512	321,498
Timber stand improvement (acres) 1/ 2/	258,764	257,881
Range nonstructural improvements (acres) 1/	41,699	36,856
Noxious weed treatment (acres) 1/	36,101	72,358
Abandoned mine sites reclaimed (sites) 3/	117	296
Pest suppression activities (million acres)	1.2	1.2
Federal/State rural tree planting (acres)	760,742	867,000
Fuels treatment - appropriated (acres) 1/.....	616,163	887,145
Landowners enrolled in stewardship program (#)	15,303	15,357
Provide multiple benefits for people within the capabilities of ecosystems		
Road construction (miles) 4/	463	400
Road reconstruction (miles) 4/	2,853	3,594
Land ownership adjustment (acres) 1/	56,333	102,994
Land exchange (acquired acres) 1/.....	65,848	244,178
Land line location (miles) 1/	1,424	878
Energy operations processed (operations) 1/	493	455
Bonded nonenergy operations processed (operations) 1/	1,744	961
Timber volume offered (billion board feet) 1/.....	4.0	4.0
Fuels treatment - brush disposal 1/	165,803	131,255
Wildlife structures completed (structures)	4,008	3,445
Grazing allotments administered to standard (allotments) 1/.....	4,730	4,735
Grazing allotments analyzed/decisions implemented (allotments) 1/.....	664	621
Recreational use (million recreational visitor days)	341.2	N/A
Recreation trails available (excluding wilderness) (miles)	89,466	99,686
Ensure organizational effectiveness		
Urban communities provided assistance (communities)	8,079	10,110
Rural communities provided assistance (communities)	1,583	2,205
Research communication items (#) 5/.....	3,005	2,616
Employment/skills training provided (persons)	105,388	134,792
Job Corps students hosted (#)	9,060	8,903
Law enforcement incidents handled (incidents)	126,203	297,150
Coop. law enforcement agreements negotiated (agreements)	785	717

1/ FY 1997 CFO measure.

2/ Includes appropriated and Knutson-Vandenberg (K-V) funds.

3/ FY 1996 indicator was sites treated. Comparison is not exact.

4/ Includes appropriated, timber purchaser credit, and purchaser election funds.

5/ Includes books, papers, reports, audiovisual materials, and others.

PERFORMANCE HIGHLIGHTS AS GUIDED BY THE STRATEGIC PLAN GOALS

Strategic Goal #1: Ensure Sustainable Ecosystems

Vegetation Management to Maintain Healthy Forests and Provide Other Benefits

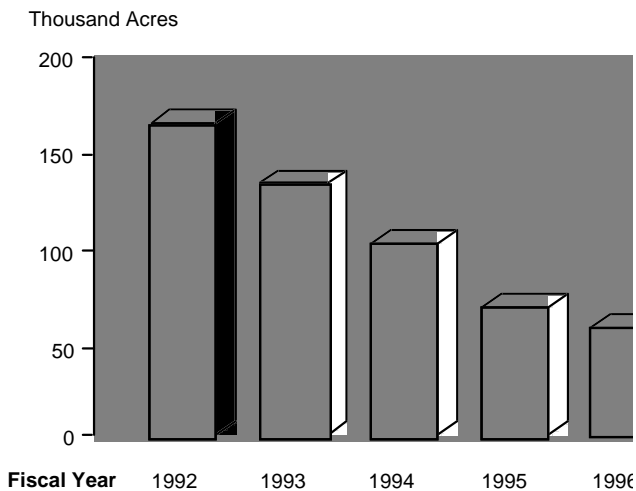
Reforestation ensures that NFS lands remain productive.

A total of 321,498 acres of NFS lands were reforested in FY 1997, primarily using genetically improved seedlings, compared to 357,512 acres in FY 1996. Aggressive reforestation practices continue to ensure that NFS lands remain productive to provide for healthy ecosystems and to meet stated management objectives. Timber stand improvement (TSI) treatments on NFS lands totaled 257,881 acres, 883 acres less than in FY 1996. TSI activities include timber stand release, precommercial thinning, pruning, and fertilization. Reforestation and TSI treatments continue to decline as a result of timber harvest reductions and lower funding levels.

The number of acres treated annually through the regular and salvage timber sale programs is indicative of the extent of maintenance and restoration of forested ecosystems on NFS lands and the implementation of forest plan goals and objectives. Timber sales are usually designed to incorporate multiple objectives, which may include insect and disease control, fuels treatment, and habitat restoration in addition to the production of wood. Because of this, reporting accomplishments in terms of acres treated better reflects the work being done to accomplish these objectives than do other measures of accomplishment. Harvest treatments were employed on 457,848 acres, compared with 473,127 acres in FY 1996. The decrease reflects a reduced timber sale program. Total clearcut acreage declined from 56,617 acres in FY 1996 to 45,854 acres this past year. The use of clearcutting as a standard commercial harvest method has declined over the past few years (figure 2).

Figure 2.

Clearcut Harvests



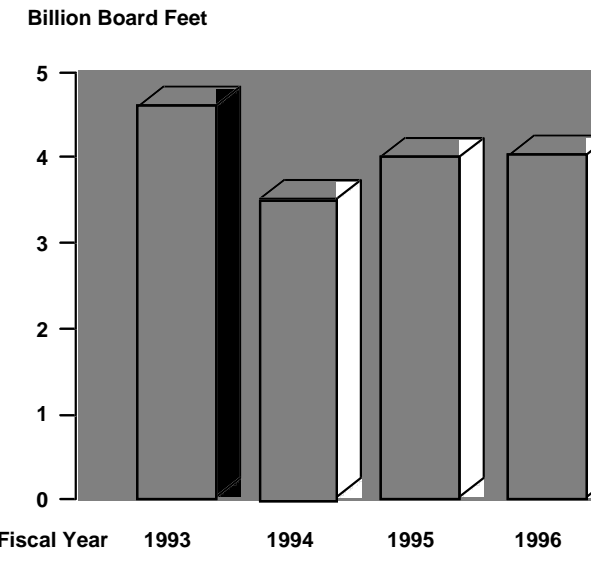
Partnerships are formed to help prevent and manage noxious weeds across jurisdictional boundaries.

In FY 1997, emphasis remained focused on the management and control of noxious weeds by treating 72,357 acres. As the designated lead agency for noxious weed management activities within USDA, the Forest Service coordinates the noxious weed strategy. The strategy identifies priority action items and agency responsibilities, and outlines opportunities for cooperation to ensure an efficient and cost-effective approach to noxious weed management. A partnership, "Pulling Together," continued between the Department of the Interior, the National Fish and Wildlife Foundation, and USDA to leverage funds through cost-share challenges to neighbors and partners. This program encourages the formation of local partnerships to prevent and manage noxious weeds by consensus across jurisdictional boundaries in a cost-efficient manner, to restore ecosystem health and biodiversity, and to ensure future productive use of natural resources.

Wood Fiber Production

In FY 1997, the Forest Service offered 4.0 billion board feet (BBF) of timber for sale (figure 3) and sold 3.7 BBF from NFS lands. Salvage volume accounted for 1.7 BBF of the amount offered. Volume harvested on NFS lands was 3.3 BBF. Providing a continuing supply of forest products, while complying with applicable laws and regulations, provides goods in demand by the public and economic benefits to local communities.

Figure 3.
Total Timber Offered



Protecting Soil and Water Resources

During FY 1997, the agency completed soil resource inventories on 4.7 million acres. These inventories combine soils with related vegetation, geology, landform, and climate to assess inherent capability and predict the impacts of potential management actions. On over 65,500 acres of NFS lands, the agency improved watershed conditions, including revegetating denuded areas, reshaping erosion-prone lands, and controlling runoff.

In partnership with other Federal agencies, the Forest Service developed interagency protocols for updated procedures for conducting watershed assessments. These protocols provide a framework for analyzing the hydrologic condition of watersheds and ensuring consistency within and across agency boundaries so that results of watershed assessments can be aggregated or disaggregated easily.

Environmental Compliance Projects—Significant progress was made in the Forest Service hazardous substances site program. The Forest Service completed 26 removal actions at hazardous substances sites, bringing the total number of removal actions completed to over 300. Negotiations are ongoing with parties responsible for the pollution at several sites, and settlements were completed at five sites with a cost avoidance to the Government of over \$39 million. The underground storage tank removal program is almost complete with the exception of ongoing remediation work at about nine sites where tanks have leaked. Over 1,600 tanks have been removed since 1988.

Protecting, Maintaining, and Restoring Ecosystem Health

Ecosystem health is our highest priority.

The Forest Service's highest priority is to restore and protect the health of the Nation's forest and grassland ecosystems for future generations. Efforts include:

- Providing the leadership for USDA in the Federal Non-Native Invasive Species Task Force, which was established by Vice President Al Gore to develop the Administration's strategy for eradicating, controlling, and monitoring non-native invasive species including insects, diseases, invasive plants, and aquatic pests.
- Expanding the Forest Health Monitoring Program's network of permanent observation plots to include the States of Oregon and Washington. Fifty-one percent of the forested area of the lower 48 States was monitored as part of this program, compared to 40 percent in 1996. The program, conducted in cooperation with State forestry agencies, provides data on long-term trends in forest health for early detection and diagnosis of changes in condition.
- Along with USDA's Animal and Plant Health Inspection Service (APHIS), assisting in the eradication of the Asian long-horned beetle in New York. Spread of this insect could have resulted in significant economic, social, and ecological impacts on urban, rural, and forest areas in North America.
- Completing detection and evaluation surveys on 203,000 acres of Federal lands (162,000 acres on NFS lands and 41,000 acres on other Federal lands). Surveys were also completed for 569,000 acres of cooperative State and private lands. Survey findings, recommendations, and advice about suppression needs and available alternatives were provided to land managers.
- Along with other Federal agencies, suppressing and preventing the spread of gypsy moth, southern pine beetle, dwarf mistletoes, and other insects and diseases on 1.2 million acres of Federal land and an additional 294,000 acres of cooperative land.

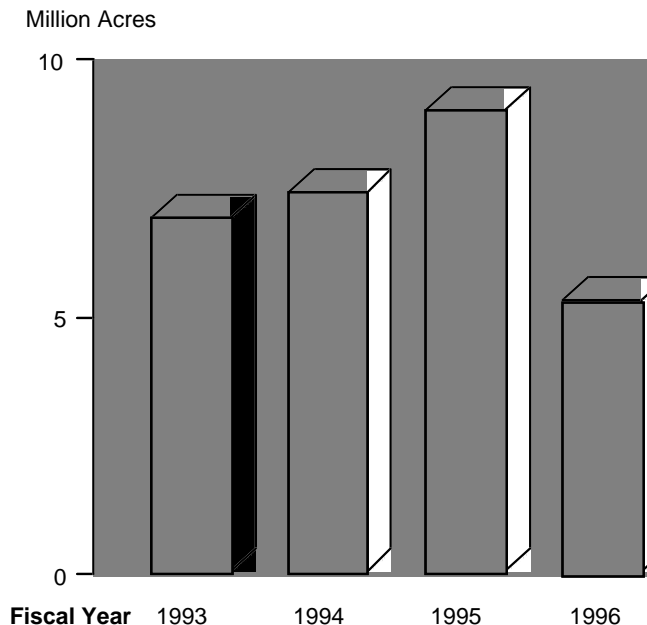
- Funding a total of 32 pilot and demonstration projects to assess the use of pesticides for controlling non-native species and the effect on native plants and animals. Forest Service Research and Development targeted projects that tested the use of biological controls to limit the spread of noxious weeds and insects including the hemlock woolly adelgid.
- Completing fuel reduction treatments (prescribed burning and mechanical methods) on about 1.1 million acres of NFS and adjacent lands. Through contributed funds, the agency treated 3,360 of those acres.
- The Fire and Aviation Management program initiating FIRE 21, part of the Federal Fire Policy. Under FIRE 21 the agency champions firefighter and public safety, supports the role of fire in restoring and sustaining healthy ecosystems, and integrates fire and aviation management into the land management planning process.

Landowner Assistance to Provide for Healthy Ecosystems and Vital Communities

Trees were planted on over 867,000 acres of private land through stewardship programs.

The Forest Stewardship Program (FSP) and Stewardship Incentive Program (SIP) provide technical and financial assistance to nonindustrial private landowners. Multiresource management plans are developed and implemented. A total of 2.1 million acres were enrolled under FSP in FY 1997. Another 2.1 million acres were enrolled in forest resource management plans (figure 4). Thanks to strong Federal and State cooperation, trees were planted on over 867,000 acres. This represents an increase of over 106,000 from FY 1996.

Figure 4.
State and Private Forestry Multiresource Plans



The Idaho Department of Lands and Washington Department of Natural Resources assisted woodland owners in each watershed to meet and identify resource management priorities. SIP allocations were determined based on these priorities. Over 250 landowners participated in a 1-day field workshop to review innovative stewardship projects and discuss solutions to common problems. As a result, coordination across the watersheds has increased. An additional 112 Landowner Forest Stewardship Plans and 72 SIP practices were completed due to these efforts, and the National Woodland Owners Association recognized the Idaho and Washington Forest Stewardship Committees with the “Forest Stewardship State of the Year Award.”

Forest Legacy Program

This program continues its success in protecting private forest land from conversion to nonforest uses. Most funds are provided to the States for land purchases, conservation easements, and donations. In FY 1997, Legacy purchases protected an additional 43,503 acres of forest land across the United States.

Through a collaborative effort with King County, Washington State, the Mountains to Sound Greenway Trust, and the Trust for Public Land, the Forest Service purchased 840 acres in the Mountains to Sound Greenway east of Seattle. King County is developing recreational and management projects for the land. Under one innovative proposal, approved by the Environmental Protection Agency, King County will fertilize the forest with wastewater biosolids and conduct sustainable harvesting, while supporting healthy and enjoyable recreational opportunities.

Urban and Community Forestry (U&CF)

In collaboration with other Federal agencies, State agencies, nonprofit and community groups, and educational institutions, the U&CF program provides management expertise, technology, matching grants, and financial support for program development to build local capacities for community forest ecosystem management. Through these joint efforts, the Forest Service offers technical and financial assistance to local managers to assess, improve, and expand forests in metropolitan areas, which encompass 80 percent of the Nation’s population.

Provided technical and financial assistance to 11,675 communities

To assist in building local community forest management capabilities, technical and financial assistance were provided to 11,675 communities in FY 1997. Approximately 2,608 communities are actively managing their forests at “developmental” or “sustained” levels, indicating internal actions to plan, enact local operating policies, provide for program continuity, engage local citizens in volunteer activities, and/or secure local budgets for urban forest management. This level of program mastery reflects sustained accomplishments, a level of independence from federally and/or State-sponsored programs and the highest level of effort affecting the health and functioning of urban forests.

An additional 5,280 communities are at the “project” or “formative” stage and engage in networking, public awareness building, establishment of local tree boards, and preliminary assessments of urban forest resources.

Grants made available through Federal funding from this program totaled \$9.9 million and supported a full range of program development activities from the national to local level. Matching grants generated \$49 million in funds, goods, and services supporting tree planting, care, and protection.

Educational programs include efforts to teach program technologies to professionals, train citizens in tree planting and care, and support the Treeture program for pre-kindergarten to third grade children. Actual instructional hours totaled 8,011 "seat hours," equivalent to about 1,001 individuals each receiving one 8-hour training session.

International Programs

To meet its global leadership responsibility, the Forest Service promotes the sustainable management of forests both domestically and internationally. As part of this effort, the agency participates in collaborative assistance, technical exchanges, and scientific studies on common forest management problems. The Forest Service is also successfully incorporating U.S. perspectives into important multilateral international documents and agreements, and lends its disaster assistance expertise to countries in need.

In FY 1997, the Forest Service provided assistance to revamp timber sales methods in Honduras, which immediately stimulated higher and more efficient yields in harvested volumes. In partnership with the Tropical Forest Foundation (TFF), and based on joint TFF and Forest Service reduced-impact-logging research, the agency conducted three training courses for Brazilian loggers, government officials, and local organizations. The success of the training led the International Tropical Timber Organization (ITTO) to fund the training for other Amazonian countries. The Indonesian Government has requested similar training in reduced-impact logging.

In Russia, 7 weeks of training in efficient greenhouse management resulted in the production of 420,000 containerized Siberian pine seedlings. This compares to 8,000 produced in 1995. Further use of this technology will enable the Russian foresters to replant extensive areas of poorly stocked forest lands.

International policy reflects U.S. perspectives on forest management as a result of Forest Service participation in the United Nations' (UN) Intergovernmental Panel on Forests, international work on sustainable forest management, the Convention on Biodiversity, and other policy-related forums.

Assisting and training others in disaster response

Based on years of fighting fires, the Forest Service has developed unique skills in disaster response and logistics. This experience has been crucial to assisting and training others to respond to disasters such as fires, floods, famine, and civil strife. Last year, the Disaster Assistance Support Program provided these services (totaling 137 person weeks) in Yugoslavia, Rwanda, Sudan, Peru, and southern Africa. Through the program, the agency also trained 200 U.S. Agency for International Development, Department of Defense, and Public Health Service personnel in international disaster assessment and response.

The United States hosted a UN Food and Agriculture Organization meeting of the North American Forestry Commission, which featured research collaboration and technical exchanges on forest fire, neotropical species, insects and diseases, and sustainable forest management.

Researching the Understanding of Ecosystem Health and Productivity

The Forest Service, in cooperation with several universities, has established a national network of long-term soil productivity experiments that will run a full forest rotation. This information, evaluated every 5 years, provides insight into the effects of disturbance on soil productivity and guidance on soil quality monitoring standards. Participants in a Soil Science Society of America symposium noted that the first set of 5-year measurements were exemplary of the benefits of long-term research.

The Forest Service led the production of the First Approximation Report for Sustainable Forest Management of Temperate and Boreal Forests, which was presented at the 11th World Forestry Congress in Antalya, Turkey, in October 1997. Forest Service Research and Development continues to refine these criteria and indicators to help assess forest management and monitoring capability in the United States. The Forest Service also made a partnership commitment with the National Association of State Foresters to help ensure sustainable development on those lands.

The Sierra Nevada Ecosystem Project (SNEP) was requested by Congress in 1993 to scientifically evaluate the remaining old-growth in the national forests of California, and the Sierra Nevada ecosystem in particular. The study was completed in 1997, with technical assessments of the historical, physical, biological, ecological, social, and institutional conditions in the region.

The Columbia River Basin ecological assessment has resulted in informed decisionmaking.

The ecological assessment of the Columbia River Basin identifies gaps in our understanding of ecological processes, and suggests ways to manage resources to meet a broader range of goals. Results are being used in decisionmaking in the Forest Service and the Bureau of Land Management. Interagency cooperation is a hallmark of this effort.

With the USDA Office on Sustainable Development, Forest Service Research and Development initiated a workshop to introduce local communities to the Southern Appalachian Assessment geographic information system (GIS) data base. This event tested the utility of the data base for decisions that require an integration of social, economic, and environmental information. More than 100 citizens, and State and Federal representatives used assessment data in evaluations of tradeoffs between resource use and conservation, such as development of more housing units versus conservation of farm lands and forests. The region covered by the assessment is predominated by private landowners.

Genetics research led to improvements in pest control and new applications for tree breeding. DNA analyses were developed to better use a virus for controlling the Asian gypsy moth, an exotic pest that feeds on more than 500 tree species (U.S. Patent No. 5571672). Genetic mapping was completed for loblolly pine genes that control wood density and lignin content, and for Douglas-fir genes that control spring bud flush and fall cold-hardiness. This kind of information can be used in marker-aided breeding for tree improvements essential to meeting future wood fiber demands.

New field techniques developed by agency scientists are leading to the restoration of degraded lands in Puerto Rico. Tree plantings in degraded areas were shown to dramatically increase the otherwise slow rate of recolonization of native forest species by making the soil and climate near the forest floor more favorable to plant establishment. Moreover, the plantings

attracted seed-dispersing wildlife that further increased plant biodiversity. In the lower Mississippi Valley, researchers have evaluated the fast-growing eastern cottonwood as a nurse crop for slower growing red oaks. The interplantings resulted in a diverse stand with a forest-like vegetative structure in 2 to 3 years. This occurred in an area where 90 percent of the approximately 10,000 acres previously planted had failed to regenerate.

...maintaining stream flows to balance the needs of aquatic species.

Municipal, industrial, and agricultural uses of water essential to people, wildlife, and the economy have grown dramatically during this century, resulting in severely diminishing flows in some rivers and streams. Forest Service scientists are conducting studies on the ecological, social, and economic costs/benefits of removing water from streams. Of particular concern in the West is identifying critical times when stream flows must be maintained if fish and other stream organisms are to complete their life cycle. The book "Instream Flow Protection: Seeking a Balance in Western Water Use" (Island Press) provides guidance for stream flow management plans. Scientists are also evaluating impacts from fire, logging, roads, grazing, and recreation on fisheries and aquatic habitats.

In 1997, a Forest Service fire research team initiated national cooperation to build a computer model for predicting the effects of fire on air quality. Studies showed that 10 percent of firefighters experienced smoke exposure that could cause adverse health effects, and up to 5 percent of exposures exceeded the legal health and safety limits. New ways to protect firefighters from excessive smoke exposure are now being developed based on these findings. In tests of the Regional Atmospheric Model under trade wind conditions in Hawaii, predictions on smoke transport were improved.

In the southern Appalachians, fire is being studied as a tool for forest restoration. Although in the past fire helped shape the structure and function of forest ecosystems, it had been effectively excluded from this region since the turn of the century. As a result, fire-dependent ecosystems deteriorated and fire-intolerant species became more dominant. There was also an increase in the associated problems of diminished species diversity, and the incidence of catastrophic wildfire and insect infestations. New prescriptions are available for the use of fire to restore pine and oaks with a minimal loss of soil nutrients.

Sharing research findings and technology helped assure eradication of the newly introduced Asian long-horned beetle. Discovered infesting maple trees in Brooklyn and Long Island, New York, the beetle also threatened birch, aspen, and willow in the region. Fast eradication efforts were possible due to the ready provision of research findings on the beetle's biology and chemical control options. The information also helped local residents to understand the scientific basis for undertaking a drastic quarantine and eradication program, which removed 1,400 urban trees.

Strategic Goal #2: Provide Multiple Benefits Within the Capabilities of Ecosystems

Restoration of Wildlife and Fish Habitat

In FY 1997, the Forest Service restored or enhanced 206,067 acres of wildlife habitat and constructed 3,444 habitat improvement structures. Key accomplishments included prescribed burning, constructing nesting structures, restoring open meadows and aspen stands, restoring wetlands and water-

fowl habitat, and providing enhanced opportunity for viewing, photographing, and learning about native animals, plants, and fish—the fastest growing forms of nature-related recreation.

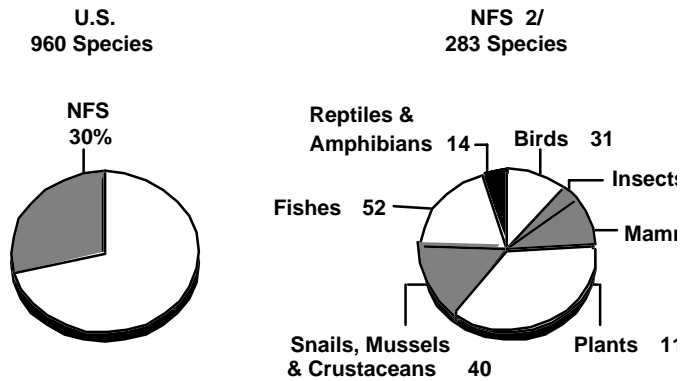
In 1997, the Forest Service restored or enhanced 6,631 lake acres and 950 stream miles of inland fish habitat, and an additional 3,713 lake acres and 900 stream miles of anadromous fish (saltwater fish that migrate upriver to spawn) habitat. These accomplishments were achieved through a variety of structural and nonstructural improvements such as installation of fish passages at migration barriers, placement of logs and rocks to create nesting areas and trap spawning gravel, re-establishing vegetation to protect eroding stream banks, and enhancing the fish production capability of lakes.

Threatened, Endangered, and Sensitive Species Habitat Improvement

Completed strategies for managing aquatic and terrestrial species at risk

In FY 1997, the agency restored or enhanced 122,280 terrestrial acres, 118 aquatic acres, and 161 stream miles of threatened, endangered, and sensitive (TES) species habitat, and constructed 2,912 habitat improvement structures. Key accomplishments include: broad management strategies for many grassland, wetland, and forested riparian ecosystems species now at risk; aquatic resources restoration and enhancement activities; and native plant conservation and restoration. Figure 5 shows the distribution of federally listed species.

Figure 5.
Species Federally Listed as Endangered or Threatened—
FY 1997 1/



1/ These species include all varieties of life—from mammals to plants to
2/ No change in numbers of species listed on NFS lands, mainly due to moratorium.

Forage Production

In FY 1997, analysis processes were continued on grazing allotments. Work was completed and decisions implemented on 621 allotments. The program continues to reflect an ecosystem perspective emphasizing restoration and long-term health of grasslands. The agency permitted use of forage for 9.3 million head months of privately owned livestock on NFS lands.

Recreational Use of the National Forests

During FY 1997, the Forest Service concentrated its resources on populating the recreation components of the INFRASTRUCTURE data base. Therefore, we did not require field units to interrupt that work to generate national-level reporting elements on Recreation Visitor Days (RVD's), capacity, trail miles, etc. The need to focus our workforce on creating the new data base was determined to be critical and have the greatest long-term benefits to the program.

Recreation revenues exceeded \$45.2 million to the Treasury.

The Forest Service is the single largest supplier of public outdoor recreation in the Nation. During the 5-year period between FY 1992-96, there was a steady increase in the number of visits to national forests. Outdoor recreation provides the largest contribution to national economic activity of any national forest program. Revenues to the Treasury from national forest recreation user fees exceed \$45.2 million annually.

The Forest Service manages over 23,000 developed facilities, including campgrounds, trailheads, boat ramps, picnic areas, and visitor centers, in addition to permitted, privately owned facilities. These facilities can accommodate approximately 2.1 million persons at one time (PAOT's). The 5-year period between FY 1992-96 reflected an upward trend in public use of developed recreation sites.

The National Ski Area Association estimates 60 percent of all downhill skiing in the United States occurs on NFS lands. In cooperation with the 135 ski area operators, through the National Winter Sports program, the national forests provided downhill skiing opportunities to approximately 31 million people in FY 1997. Partnering with the National Ski Area Association continues to provide dividends in providing environmental education programs and improving relations with the ski industry. In FY 1997, the Forest Service worked very closely with the ski industry to implement the new ski fee system passed by the 104th Congress. Also, the first new ski area since 1978 was permitted to operate on NFS lands in Montana.

Interpretive Services—During FY 1997, 15 million people visited Forest Service visitor centers and interpretive sites to learn about cultural and natural resources on the national forests. These interpretive programs work closely with other public outreach and environmental education programs to forge links between the American public and their natural and cultural heritage.

In FY 1996, the Forest Service, along with other agencies, began developing a National Recreation Reservation Service (NRRS) that provides an easy, innovative way for the public to reserve Federal recreation facilities. In FY 1997, a new state-of-the-art national reservation system with internet access was developed to enhance customer service. The Forest Service and U.S. Army Corps of Engineers completed a Request For Proposals and are in the process of awarding a new contract for the NRRS to provide advanced reservation services for both agencies.

Accessibility—The agency continued interagency development of the Universal Trails Assessment process to provide important trail information for all trail users, regardless of age or ability. The process provides for an objective trail survey, evaluation, and mapping of trail conditions with direct benefit to

individuals with disabilities. It is responsive to the agency's responsibilities under Section 504 of the Vocational Rehabilitation Act of 1973, providing programmatic information for dispersed trails. The project was developed under a Federal grant by Beneficial Design Inc., and is being implemented through partnership with them and other Federal and State agencies.

The Forest Service began participating in a Regulatory Negotiation committee for the U.S. Architectural and Transportation Barriers Compliance Board to determine accessibility requirements in outdoor recreation areas including campgrounds, picnic areas, beaches, and trails.

Scenic Byways—The National Forest Scenic Byways Program identifies roadways that traverse scenic corridors with outstanding aesthetic, cultural, or historical values, and provides for increased rural tourism development. In FY 1997, the program included 136 national scenic byways within NFS lands, covering nearly 8,000 miles in 35 States.

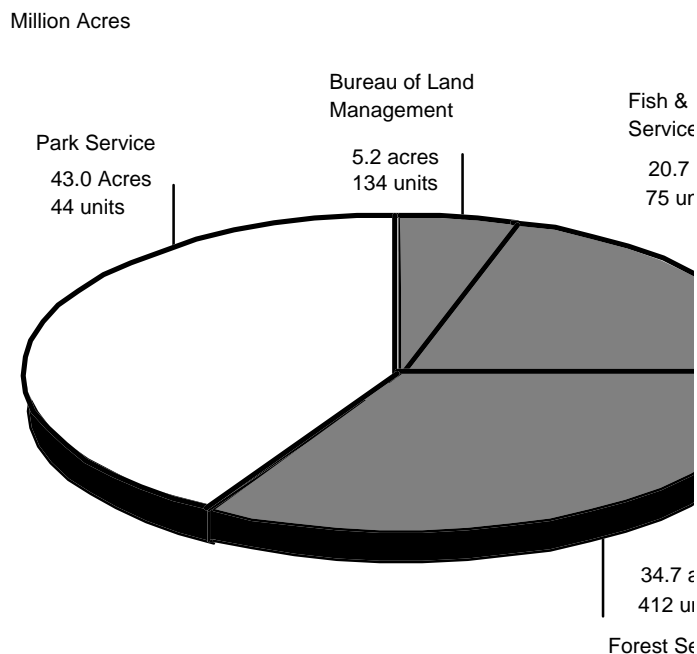
Congressionally Designated Areas

Almost 23 percent of the NFS is included in specially designated congressional areas, such as wilderness, wild and scenic rivers, national recreation areas, and national monuments. These areas encompass some 43 million acres of NFS lands that are managed under specific congressional mandates.

The Forest Service manages 34.7 million acres of wilderness lands.

Wilderness is land retaining its primeval character and influence, affected primarily by the forces of nature, with human influence substantially unnoticeable. The total National Wilderness Preservation System (NWPS) contains 665 units and over 103 million acres. The portion of the NWPS managed by the Forest Service contains 412 units in 38 States and includes 34.7 million acres, or almost 18 percent of NFS lands (figure 6). The Forest Service objectives in wilderness management are to protect and restore natural ecological conditions and processes in wilderness, provide for primitive and unconfined recreation and for public use and enjoyment as wilderness, and create greater public understanding and appreciation of the purposes and benefits of the NWPS.

Figure 6.
FY 1997 Wilderness Management by Agency 1/



1/ National Wilderness Preservation System (NWPS) contains a total of 103.6 million acres and 665 units. A unit is specific wilderness area.

Recreation use in wilderness showed an upward trend during the period FY 1992-96. At the end of FY 1997, there were about 33,000 miles of wilderness trails providing visitor access.

We protect over 4,300 miles of wild and scenic rivers.

Wild and Scenic Rivers—The National Wild and Scenic Rivers (WSR) System was created in 1968 to assure a heritage of free-flowing, protected waterways. The total system includes 154 rivers and 10,815 miles, of which 96 rivers and 4,348 miles are managed by the Forest Service. Each river has specific values for which it was included in the WSR system; Forest Service management focuses on protecting these values while providing for appropriate public use of the rivers.

The Forest Service includes assessment of rivers as candidates to the WSR System in land management planning, and with public support, places suitable rivers into protective management until Congress makes the final decision on WSR designation.

Recreational Fishery Resources Conservation Plan—On June 7, 1995, President Clinton signed the Recreational Fisheries Executive Order, directing Federal agencies to “improve the quantity, function, sustainable productivity, and distribution of U.S. aquatic resources for increased recreational fishing opportunities.” The supporting Recreational Fishery Resources Conservation Plan established a shared vision: “All waters of the United States will be capable of sustaining healthy fish populations, and all Americans will have access to and opportunity for a diverse array of quality fishing

16 *Expanding opportunities
for recreational fishing*

experiences.” The Forest Service is uniquely positioned to contribute significantly toward achieving this vision. In 1997, with funding from all sources, the agency stepped up to:

- Restore or enhance 15,827 acres of lakes and reservoirs and 2,898 miles of streams.
- Eliminate barriers and restore fish passage to 17,256 acres of lakes and 274 miles of stream habitat.
- Cooperatively restore or establish 60 self-sustaining fishable populations.
- Restore 16,808 acres of riparian habitat.
- Open 2,055 acres of lakes, 82 miles of shoreline, and 391 miles of streams to public fishing and improve fishing access or facilities on an additional 39,174 acres of lakes and reservoirs, 50 miles of shoreline, and 95 miles of streams.
- Enhance or restore 96 facilities such as boat ramps, parking areas, fishing piers, docks, etc.
- Conduct over 3,985 aquatic education events, reaching over 274,000 people.
- Construct 7 new aquatic interpretive sites and restore or enhance 27 existing aquatic interpretive sites.
- Complete 1,000 partnership projects, including contributions worth over \$10 million.

Other Congressionally Designated Areas—Over 8 million acres of the NFS are designated as national recreation areas, national scenic areas, national monuments, and national management emphasis areas. These 58 areas include the special values and opportunities recognized by the public in their designations and management; they are critical to regional and local tourism, educational, and ecological programs. A detailed listing of congressionally designated areas administered by the Forest Service is available at the headquarters office in Washington, DC, upon request.

Heritage Resources

The Heritage program protects the historic and cultural heritage of NFS lands and shares related information with the public for its enjoyment and education. In FY 1997, approximately 367,568 acres were inventoried for heritage resources. A total of 5,763 heritage properties were preserved through restoration, rehabilitation, stabilization, and repair in order to extend their existence and availability to the public.

Windows on the Past—This public access/interpretive initiative is designed to increase public participation in heritage activities on NFS lands. In FY 1997, 935 new public interpretive projects were completed, and 1,318 new public outreach efforts were made to educate and inform the public about heritage values on NFS lands.

Passport In Time (PIT)—During FY 1997, approximately 2,328 volunteers contributed 81,480 hours through PIT projects. Working with agency archaeologists, these volunteers restored historic structures, evaluated heritage sites, surveyed for sites in wilderness, monitored and restored sites damaged by looters or natural elements, developed interpretive materials, helped with classroom projects, and served as public hosts at historic interpretive facilities. The volunteers contributed a total of 39.04 person years on Forest Service projects. This partnership provides \$1 million in savings to the agency. (Person years are calculated using 2,087 hours in a year.)

Minerals and Geology Resources

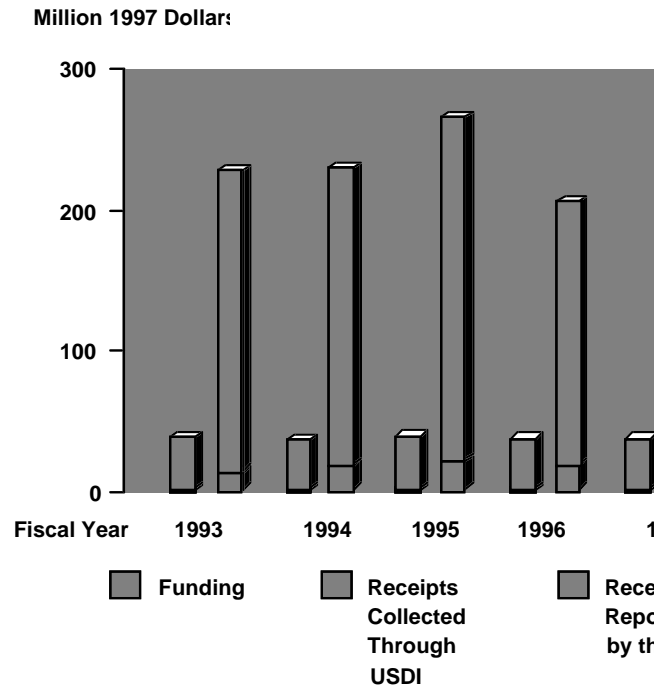
Protecting and managing significant geologic and paleontologic resources

The Forest Service is mandated to foster economic activity by facilitating energy and mineral development on NFS lands, and to protect historic and natural values. During FY 1997, Minerals and Geology Management (M&GM) programs addressed these mandates by requiring appropriate design, mitigation, and reclamation measures of both mineral and nonmineral projects, and by monitoring and inspecting operations to ensure compliance; by helping to restore ecosystems and protecting public health and safety by reclaiming abandoned mines; and by evaluating geologic conditions, and protecting and managing significant geologic and paleontologic resources.

Exploration, development, and production of energy and minerals within NFS contributes to economic growth, creates jobs in rural communities, and raises revenues for the Treasury and States. The minerals program is directed at obtaining these benefits in an environmentally responsible manner. Ecologically sound leasing on Forest Service lands permits the extraction of minerals including oil and gas, coal, and geothermal energy. Extracting locatable minerals such as gold, silver, copper, and zinc is permitted under the 1872 Mining Law. Under this law, the Forest Service reviews proposed operations to ensure that environmental protections exist, then monitors and inspects operations until final reclamation.

The minerals program manages approximately 5.4 million acres leased for oil, gas, and other commodities; over 150,000 mining claims; about 7,000 mineral material pits and quarries; over 2,000 new operations each year requiring bonds; and more than 20,000 operations to monitor and inspect. The largest coal mine in the United States is on NFS lands and much of the Nation's phosphate and lead production comes from these lands. The value of energy and minerals produced from NFS lands in FY 1997 is estimated at \$2 billion. The M&GM program, funded at \$35.7 million, returned \$155.4 million in revenues to the Treasury (figure 7). These revenues are from annual lease rentals, royalties on production, bonus bids for competitive leases, and sales. Revenues are in turn distributed to the States and counties.

Figure 7.
Minerals—Funding and Receipts



NFS lands provide mineral and nonmineral resources.

During FY 1997, 10 million barrels of oil, 250 billion cubic feet of natural gas, 115 million tons of coal, 11 million troy ounces of precious metals, 9 billion pounds of industrial minerals, and 498 million pounds of base metals were produced from NFS lands.

The geology program provides basic information about the Earth's materials and processes. The Forest Service interprets geologic and paleontologic conditions for making land management decisions, and it evaluates sites for geologic resources such as ground water, and caves for paleontologic resources such as fossils. Many sites have scientific, educational, recreational, or aesthetic values.

Real Estate Management

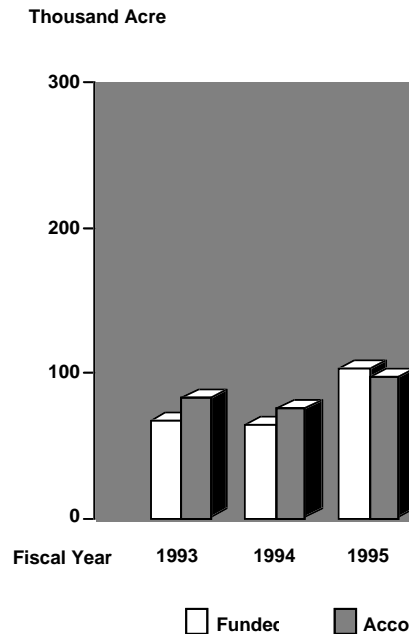
Real estate management includes such activities as boundary management (surveys), land exchange, special use administration, establishing and protecting the United States' title, resolving encroachments, and maintaining accurate landownership records.

The Hydropower Relicensing Initiative was adopted in April 1997 to respond to a significant workload increase due to the relicensing of over 180 Federal Energy Regulatory Commission (FERC) projects on NFS lands. Beginning in 1998, the Forest Service will be faced with a workload of 78 such projects. The FERC relicensing process presents the only window for the agency to reverse resource damage that has occurred from past operations, mitigate future impacts, and potentially provide increased recreation opportunities to forest users. This will allow the agency to adequately address the increased workload, implement a cost recovery program, and implement collection of fair market value fees for hydropower projects on NFS lands.

Acquiring lands to protect wildlife habitat and aquatic resources

Land Exchange—Land exchanges between NFS and other ownerships are needed to protect key resources, eliminate conflicting uses, and reduce fragmented ownership. Much of the non-Federal land acquired through land exchanges lies within classified wilderness areas, national recreation areas, wild and scenic river corridors, national trails, and other congressionally designated areas. In FY 1997, the Forest Service completed equal value exchanges involving 133,046 acres of NFS land for 244,178 acres of non-Federal land (figure 8), a 27-percent increase over FY 1996. The acquired lands include thousands of acres of critical wildlife habitat, wetland, and riparian areas. These exchanges resulted in adjustments to 1,000 miles of NFS property boundary lines, saving approximately \$5.0 million in future land line location costs.

Figure 8
Land Exchange Accomplishments



Boundary Management—The boundary management program is a group of activities which defines and protects the public estate administered by the Forest Service. This program is responsible for describing, surveying, and locating the legal boundaries between NFS lands and other ownerships for the purpose of protecting the land and resources of the public estate, as well as the adjoining owners. In previous years this program was funded primarily with landline location activity funds (NFLL). Beginning in FY 1995, the boundary management program was funded with NFLL funds and contributing, benefiting function activities. In FY 1997, 1,119 miles were surveyed and located with funding from all sources. The agency maintained 3,210 miles of boundary line. A slight downward trend continues in the landline location activity due to reductions in commodity production and funding, and higher unit costs. Nationwide, approximately 56 percent (143,353 miles) of the total boundary line has not yet been properly surveyed or located.

Landownership Status Data—Accurate, current ownership records must be readily available for resource management to resolve title disputes. The national Automated Lands Project (ALP) will automate and maintain land status data in an easy-to-understand format. The ALP combines GIS and relational data base technology to place all land status data, including ownership, use restrictions, and boundaries, within GIS.

Acquisition of Lands—The Forest Service acquired 103,023 acres needed to protect critical wildlife habitat, cultural and historical values, congressionally designated areas, and other outdoor recreation and conservation purposes.

Rights-of-Way—The rights-of-way acquisition program secures road and trail access easements across non-Federal lands, which is essential for the protection, administration, and use of NFS lands. At present, approximately 10 percent of the lands within NFS, or 17 million acres, are without legal public or administrative access. A total of 569 access cases were resolved in FY 1997. Completion of land exchanges and real estate acquisitions that eliminate the need for access across non-Federal lands accounted for the largest number of access cases resolved. The number of rights-of-way easements acquired has declined steadily over the past several years.

Nonrecreation Special Uses—The nonrecreation special use program authorizes the use of NFS lands for over 200 different types of activities, providing benefits to other Federal, State, and local governments; commercial and industrial entities; and private individuals. Many special use permits authorize use of facilities and services necessary for public health, welfare, safety, convenience, and national security, such as pipelines, highways, communications, and telephone lines. These authorizations may be of short- or long-term duration, and generally involve substantial private financial investment. Law and regulation require the Forest Service to collect annual rental fees, which are based on fair market value. This value can be determined by appraisal, negotiation, prospectus and bid, or other sound business management practice. In FY 1997, the Forest Service and the Bureau of Land Management (BLM) adopted and implemented identical fee schedules, authorization documents, and similar policies for the administration of communications uses on NFS- and BLM-administered lands. Consistency between agencies has improved service to the communications industry.

Fees for use of NFS lands continue to increase, slowly closing the gap between Federal fees and fees charged in the private marketplace for similar land uses. Receipts to the Treasury from annual rental fees for nonrecreation special uses for FY 1997 were over \$9 million.

Research to Provide Multiple Benefits to People

Understanding the impacts of pollution on forest growth

Air Quality Effects on Forests & Trees—Joint atmospheric sciences research with Pennsylvania State University and the University of New Hampshire showed that ozone reduced white pine growth in the Acadia National Park, an area that preserves 40,000 acres of Atlantic coast shoreline and is the seventh most visited national park. Air pollution studies for pines in California and Mexico, "Evaluating Ozone Air Pollution Effects on Pines in the Western U.S." (PSW-GTR-155, USDA Forest Service, Pacific Southwest Forest and Range Experiment Station, Albany, CA), also revealed chronic ozone effects. A third study, "The Productivity and Sustainability of Southern Ecosystems in a Changing Environment" (Springer-Verlag Press), demon-

strated that increased photosynthesis and growth of loblolly pine from elevated carbon dioxide were offset by 3- to 5-percent annual reductions in tree growth from ozone. Studies such as these help resource managers adjust management actions and expectations in areas where detrimental ozone exposures occur.

Recent atmospheric research also concluded that trees can improve air quality in urban environments and save money. Research found that trees remove 12 million pounds of air pollutants per year in the Chicago area, for an estimated saving of \$ 9.2 million. In Philadelphia, where there is about 22 percent tree cover, trees decreased concentrations of ozone and sulfur dioxide by 1.5 to 3.0 percent. Results also showed that savings of \$50 to \$90 per year in heating and cooling costs per home can accrue from urban tree shade in the summer and reduction of wind chill in the winter. The public is benefiting from these findings as power companies tell their customers about energy conservation through careful tree planting.

Ownership Effects on Land Use—Forest Service scientists are providing information to support landscape-level resource management. For example, researchers analyzed satellite photos of the Olympic Peninsula and the southern Appalachians to measure land cover change over a 15-year period. This revealed distinct land use changes and landscape patterns for different landowner categories. Public managers can now anticipate where change is most likely to occur on lands adjoining national forests, and are developing management strategies to offset these changes.

Scientists find new uses for waste wood and wood products.

Wise Use of Wood Resources—In recent decades, forests of southeast Alaska have experienced extensive mortality of yellow-cedar with decreased regeneration of the species. To stretch use of this resource, researchers are giving dead Alaska yellow-cedar new life by developing technology to support use of salvaged snags. Adhesive bonding has been developed, and tests show above standard resistance to delamination and shear, and above average wood strength. The results are positive for the future, since products manufactured from Alaskan yellow-cedar are more likely to have commercial value (Research Paper FPL-RP-565, USDA Forest Service, Forest Products Laboratory, Madison, WI).

Utilization research has provided consumers with new answers to questions often asked about home projects, such as painting and staining exterior wood surfaces. The Forest Service Forest Products Laboratory has produced a comprehensive consumer handbook that takes the guesswork out of selecting an appropriate exterior wood finish. The lab has also worked with the U.S. Postal Service and a variety of manufacturers to develop an environmentally benign adhesive for postage stamps, envelopes, labels, and stickers. The new adhesive can be processed by current paper and fiber recycling systems.

Although improved and expanded recycling efforts reduce the volume of waste wood and paper going to landfills, some wood and paper products treated with preservatives such as creosote remain unsuitable for recycling. Agency scientists successfully used creosote-treated utility poles in the production of laminated composites. Recovered creosote-treated wood was used to prepare laminated beams as strong as defect-free southern pine lumber. The potential development of high-value products from hazardous waste material is an exciting technological direction for recycling research.

Providing Access to the National Forests

In FY 1997, 400 miles of new road were constructed, 3,600 miles were reconstructed, and 1,790 miles were obliterated. The agency constructed 31 new bridges and reconstructed another 44. Much of the road system required to meet public and administrative needs on the national forests is currently in place. The future emphasis of the road program is toward reconstruction to mitigate environmental impacts, ensuring safe use of the existing road system, and obliteration of roads. Road obliteration will be used when roads can no longer be maintained to standard, are considered unnecessary and too costly, and where removal is necessary to protect the ecosystem.

Approximately 133,000 miles of trails are provided on NFS lands, including wilderness trails. About 33 million recreation visitor days, 10 percent of all recreation use on NFS lands, are spent using trails each year.

Mapping and Digital Spatial Data

In FY 1997, the Geometronics Service Center (GSC) updated 645 primary base series maps and 32 secondary base series maps. The GSC built 242 Digital Elevation Models (DEM's) and produced 1,862 DEM's for the U.S. Geological Survey (USGS). Under the Single Edition Map Interagency Agreement with the USGS, the Forest Service and USGS cooperated to update, print in color, and distribute primary base series maps for NFS lands. Bureau of Land Management-approved Amended Protraction Diagrams for unsurveyed land areas were used in support of the Single Edition program.

A total of 34,418 individual data files were distributed by the GSC; 23,723 to Forest Service units and 10,695 to other Federal, State, and private interests. The center provided training and technical assistance to Forest Service GIS users and others in the principles and applications of cartography, and the integration and use of GSC data products.

Remote Sensing

Detecting changes in vegetation and land cover through satellite imagery

In 1997, the Remote Sensing Applications Center (RSAC) coordinated a national purchase of satellite imagery covering the conterminous United States. This procurement was sponsored by the Interregional Ecosystem Management Coordination Group for use in Large Area Analysis and forest plan revisions. The satellite images will be used to map vegetation-land cover and detect change. RSAC also completed a report that provided guidelines, standards, and recommendations on how to prepare consistent products using satellite imagery. RSAC provided training and technical support to Forest Service field offices on using remote sensing technology.

Forest Products Conservation and Recycling

The Forest Products Conservation and Recycling (FPC&R) program provides technical assistance to communities and businesses that fosters conservation through proper utilization of forest products including efficient processes, marketing, and recycling. Creating or adding economic value to previously undervalued tree species has a positive effect on protecting public and private ecosystems by providing new market-based incentives to manage forest land economically. Through these efforts, natural resource amenities can be enjoyed in harmony with production of wood commodities while keeping the Nation's forest land from converting to nonforestry uses.

Generating market demand for underutilized species is a significant step toward conserving forest resources because it increases economic value for a range of resources. Most underutilized species are found on forest lands owned by nonindustrial private and public owners. For example, the FPC&R technical staff has provided leadership to the Juniper Steering Committee. In the last year, 35 companies began using juniper in their product lines, and average juniper production has increased from the low thousands to over 12,000 board feet per month. Juniper store displays are now in 38 Pendleton retail outlets across the country.

Rural Community Assistance

In FY 1997, 2,205 rural communities, including over 130 tribes and minority communities, received direct technical and financial assistance through the Rural Community Assistance (RCA) effort. In addition to these communities, over 1,050 organizations and enterprises also received assistance. The RCA helps to build skills, knowledge, and abilities within communities that desire to be more self-sufficient and practice good natural resource stewardship. For example:

- Through RCA technical assistance and grant funding, the Guavate ecotourism training and management project in Puerto Rico is generating economic benefits, and diverse partnerships with universities, legislators, environmental groups, and the Carite State Forest in Puerto Rico.
- Through an RCA grant, Wasatch County is one of the first counties in Utah to establish a fully functioning GIS program and staff. Their GIS is used for revising the County Master Plan, updating the 20-year transportation plan, and providing current data for the County Planning Commission.
- In 1993, Seward, Alaska, with a population under 3,000, received a grant for \$32,000 to complete a feasibility study and designs for a sea-life center. In 1998, the \$55 million Alaska Sea-Life Center will open as a center of excellence for research, rescue, rehabilitation, and interpretation to an estimated 250,000 visitors per year.

Wood in Transportation Program

Improving wood preservation helps in rebuilding our Nation's infrastructure.

The Wood in Transportation program (WIT) expands the 1988 Congressional Timber Bridge Initiative to provide effective utilization of wood as a structural material for highway bridges and other transportation structures. A key element is a demonstration program that provides matching funds to local governments to demonstrate wood-in-transportation technology through construction of demonstration bridges. With 41 percent of 478,000 highway bridges across the Nation in need of repair or replacement, a severe impact is being placed on the economy. Recent advances in wood preservation and design provide for the increased use of wood as a renewable construction material to assist in the cost-effective rebuilding of our Nation's infrastructure.

Strategic Goal #3: Ensure Organizational Effectiveness

Partnerships in Recreation Programs—In FY 1997, the agency continued to build momentum in attracting and sustaining partnerships. These partnerships expand agency capability to accomplish recreation, heritage, and wilderness objectives; to develop a knowledgeable, supportive constituency; and to foster collaborative stewardship. To support this agency-wide emphasis, the field friendly “Partnership Guide” was created to help employees navigate through the partnership community of corporate America, nonprofit organizations, and government agencies at all levels. New training has been developed to support this alternative way of getting work accomplished. The agency is experiencing a noticeable organizational shift as units create partnership positions and become more entrepreneurial.

Partnerships with concessionaires continue to grow. There are approximately 26,000 special use permittees operating on NFS lands who are providing one form of recreation or another. As the Forest Service continues to increase partnerships, the tool of choice will be special uses to deliver the recreation experience to the public. To accommodate this expected workload increase, NFS has embarked on a national effort to streamline the permitting system and rewrite regulations where necessary.

Working cooperatively to prepare for the 2002 Winter Olympics in Salt Lake City, Utah

In preparation for the next Winter Olympics, Salt Lake City and the Wasatch-Cache National Forest in Utah created the 2002 Olympic Planning Team. The team’s goal is to create partnerships to accomplish critical projects related to reconnecting an ever-increasing urban population with the landscape and the importance a healthy landscape plays in enhancing our quality of life. By working collaboratively with communities, key partnerships have been formed providing the opportunity for groups to find common ground, share visions, and accomplish essential work to prepare for the Olympics.

The Forest Service cooperated with the Western States Tourism Policy Council to develop a memorandum of understanding (MOU) to guide Federal and State tourism planning and promotion efforts. Major progress was made in implementing government efforts for the Northern California Tourism Strategy through cooperative funding of a new tourism extension agent and welcome center.

Congressionally Designated Areas Partnerships—NFS lands included in areas of special congressional designation require an emphasis on partnerships for successful management. For example, the Interagency Wild and Scenic Rivers Coordinating Council addresses the implementation of the Wild and Scenic Rivers Act and consistent management of rivers in the national WSR system. This year the Council issued the “Wild & Scenic Rivers Reference Guide,” providing river managers, governments, and citizens with an interagency interpretation and application of the Act.

The Arthur Carhart National Wilderness Training Center is funded and staffed by all four Federal wilderness managing agencies. In FY 1997, the center trained about 200 people in the specifics of wilderness management and wilderness issue resolution. It also registered 100 new participants for the Wilderness Distance Education Program at the University of Montana, a wilderness management course that was successfully offered via the Internet and earned the Regional Outstanding Credit Program of The Year Award from the University’s Continuing Education Association.

Working with partners to improve wildlife and fish habitat and increase recreation opportunities

Partnerships in Wildlife, Fish, and Rare Plants Programs—The Forest Service accomplished a significant share of wildlife, fish, and rare plant habitat management through partnerships with over 1,800 organizations and agencies, such as the National Fish and Wildlife Foundation, Rocky Mountain Elk Foundation, National Wild Turkey Federation, Trout Unlimited, Ducks Unlimited, The Nature Conservancy, other Federal resource agencies, 44 State fish and wildlife agencies, and 43 State natural heritage inventory programs. About one-quarter of the wildlife, fish, and TES habitat management program is accomplished through the challenge cost-share (CCS) program. In FY 1997, over \$16 million in Federal funds were matched by partners' contributions for a total of \$44 million to accomplish 2,160 partnership projects on the national forests and grasslands.

Challenge Cost Share—In FY 1997, total recreation appropriated funding for the CCS program was \$16.9 million (figure 9). The CCS program, including agency, contributed, and in-kind funds, totaled approximately \$55 million. In addition, the National Forest Foundation (NFF) and the Forest Service collaborated to leverage \$1 million in recreation funds, through partnerships, to accomplish \$4 million in improvements to trails, recreation and wildlife facilities, interpretation, and fishing access.

Volunteers—Volunteers in the Touch America Project (TAP) contributed work valued at \$23.7 million on recreation-related projects in FY 1997. This represents 61 percent of the total work contributed.

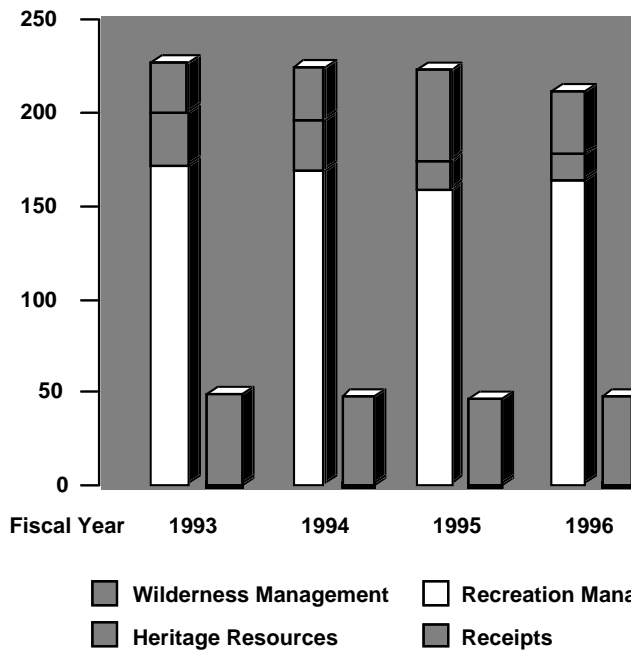
Providing Quality Information to Support Sound Decisions—The Meaningful Measures Process (MMP) is a recreation management concept that sets standards of quality for all aspects of the recreation program (facilities, sites, areas, etc.), determines realistic costs, helps prioritize work, assists in

budget allocation, and sets the stage for effective monitoring of results. In FY 1997, training of field units in the MMP was completed. Refinement of the process is continuing while implementation has begun at the forest level.

Infrastructure—The implementation of the integrated information system for the Recreation, Heritage, and Wilderness Resources programs is progressing. FY 1997 saw completion of a real property inventory for these program areas giving managers the opportunity to see a comprehensive picture of the assets they are managing. This information will be verified and form the basis for overall real property accounting and reporting requirements for the agency’s Financial Health initiative.

Financing Recreational Services—In FY 1997, recreation receipts totaled \$45.2 million, a 1-percent decrease from FY 1996. Campgrounds and other facilities generated \$9 million compared with \$10 million in FY 1996. The fees recovered represent 21.4 percent of the total recreation use appropriation of \$211.1 million (figure 10).

Figure 10.
Recreation—Funding and Receipts
 Million Dollars Actual



Recreation fee demonstration projects collected \$7.7 million to improve resource conditions at the collection sites.

The Interior and Related Agencies Appropriation Act of 1996 (P.L. 104-134) authorized the development of up to 50 recreation fee demonstration projects. Authorization for 50 more projects and a 1-year extension was given under the Interior Appropriation Act for FY 1997 (P.L. 104-208). Currently 83 projects have been selected from 25 States and Puerto Rico. FY 1997 collections totaled \$7.7 million. Public support runs close to 4 to 1 in favor of the fee program where the dollars are spent on the sites where they are collected.

Providing Scientific Information and New Technologies

Forest Service Research and Development provides the scientific information and new technologies to manage and sustain the natural resources of the Nation's 1.6 billion acres of forests and grasslands. In FY 1997, the agency produced more than 2,616 research outputs, including books, papers, reports, and audiovisual materials. Research is focused on vegetation management and protection; wildlife, fish, water, and air sciences; resource valuation and use; and forest resources inventory and monitoring.

The Committee of Scientists will work to improve forest planning regulations.

The Forest Service has chartered a Committee of Scientists to provide scientific and technical advice to the Secretary of Agriculture and the Chief of the Forest Service on improvements to the land management planning process. The committee will also identify material that should be incorporated into the revised planning regulations and recommend improvements in coordination with other Federal land management or resource protection agencies. The committee will be composed of 13 members representing a variety of natural resource related disciplines.

Forest Inventory and Analysis (FIA) data that is collected and analyzed consistently across all land ownerships can provide a landscape perspective to resource managers. For example, land managers use FIA data to identify rare resources located on NFS lands. In FY 1997, forest inventory was conducted on 42 million acres of forest lands across all ownerships, and 90 reports were prepared relating to status and trends of the resources inventoried.

To manage natural resources at the landscape level, the Forest Service requires social and economic information about other landowner needs. Research into the Northern, Southern, and Western United States revealed that 9.9 million ownerships are responsible for 330 million acres of private forest lands. Many of these owners intend to harvest trees from their land in the next decade, and nearly half have harvested timber from their holdings in the past. Only 5 percent of the owners, with 39 percent of the private forest land, have land management plans.

Senior, Youth, and Volunteer Programs

The Forest Service continues its commitment to provide work, volunteerism, training, and educational opportunities to the unemployed, underemployed, elderly, youth, and others with special needs.

During FY 1997, the programs described below offered employment and skills training to 134,792 persons, including many women and minorities. For an investment of \$119.2 million, \$116.4 million in accomplishments were returned from all programs. The participants constructed campgrounds, trails, office buildings, fences, and roads; planted trees; fought fires; improved timber stands; and provided office support.

Job Corps—The Job Corps program continues to advance the twin goals of the Forest Service mission “Caring for the Land and Serving People” in exemplary fashion. The Forest Service, in partnership with the Department of Labor, has participated for over 30 years. The Job Corps, the only Federal residential, educational, and training program for disadvantaged youth 16-24 years old, provides the skills necessary to obtain and hold a good job at a living wage.

The 18 Job Corps Centers managed by the Forest Service accomplished \$20 million of work in support of NFS. Emphasis focused on recreation, facilities and road construction, water and soil improvement, range management, and fire prevention and suppression. The centers placed 4,176 graduates in jobs that lead to career ladders with an average starting wage of \$6.14 per hour, and offered educational development, vocational training, and socialization skills development to 8,903 young people this past program year. Women comprised 17 percent and minorities 46 percent of these students.

Volunteers in the National Forests—The Volunteers program offers individuals and sponsored groups or organizations the opportunity to contribute their talents and services to assist in managing the Nation's natural resources. The international component to the Volunteers program continued with regions hosting 129 participants from 12 different countries. A total of 112,384 volunteers, 32,289 over FY 1996, assisted in the management of NFS lands. Volunteers contributed 2,193 person years of resource protection and management work valued at \$38.6 million.

Youth Conservation Corps (YCC)—The YCC provides 8 weeks of summer employment for youths 15-18 years old. Youths earn and learn while performing conservation and maintenance work on NFS lands. In FY 1997, the enrollees performed work valued at \$1.05 for every dollar spent.

Youth Forest Camps (YFC)—The Forest Service continued its Youth Forest Camp program for the fifth year. Under the YCC authority (P.L. 93-408) and through a partnership with the NFF, the agency operated one Youth Forest Camp, Camp TIPS, in Colorado during the summer of 1997. The camp served 25 youths, ages 14-20, 44 percent of whom were women, completing resource projects with an appraised value of about \$62,000 in recreation, range, and timber management on NFS lands.

Provided conservation training for 7,793 participants and received \$15.9 million in contributed work

Hosted Programs—In FY 1997, the 7,793 hosted program participants received conservation training and contributed work valued at \$15.9 million to national forest programs. The programs are administered through agreements with State and local county agencies, colleges, universities, Native American tribes, and private and nonprofit organizations. Funds are supplied by the sponsors of the partnerships.

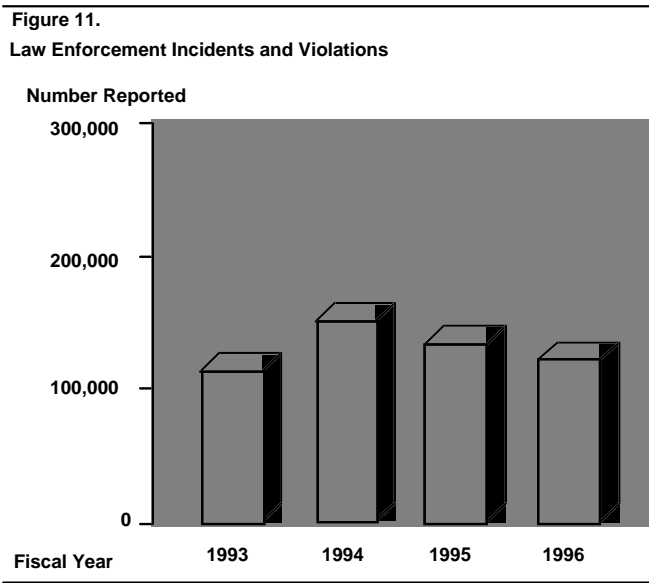
The Forest Service continues to serve as a host agency for the cooperative minimum security inmates work program through an interagency agreement with the U.S. Department of Justice and the Federal Bureau of Prisons. In FY 1997, through this unfunded initiative the Forest Service hosted approximately 93 projects with over 300 inmate participants completing conservation work on NFS lands.

Senior Community Service Employment Program (SCSEP)—The SCSEP program provides part-time employment and training opportunities for disadvantaged enrollees aged 55 and older. In FY 1997 (Program Year 1996), a total of 5,055 enrollees upgraded their work skills through a variety of projects and training programs. Over 18 percent of the funded positions were placed in unsubsidized employment. Participants accomplished almost \$40 million worth of conservation work. Seniors play a key role in hosting millions of visitors to the national forests.

Law Enforcement and Investigations

The Law Enforcement and Investigations (LE&I) program mission is to protect the public, employees, natural resources, and property within the authority and jurisdiction of the Forest Service.

During FY 1997, a total of 297,150 petty offense violations, warning notices, and incidents were handled on NFS lands by field personnel (figure 11). A total of 1,130 felony and/or serious misdemeanor investigations were conducted with 443 being closed. These resource crimes included timber theft, arson, and archeological resource violations.



In addition to these resource crimes, 150 Hotline/Whistleblower complaints were received from the Office of Inspector General and internal sources, with 52 being closed. There has been a steady decline in the number of complaints received from a high of 225 in FY 1993.

Eradicated 316,013 cannabis plants on NFS lands

During calendar year (CY) 1997, approximately 316,013 cannabis plants were eradicated from 4,429 sites on NFS lands. A total of 2,402 individuals were arrested in connection with controlled substances on NFS lands. Drug enforcement efforts resulted in the seizure of over \$1.3 million in assets. The number of physical assaults and related injuries increased over 1996 totals.

In FY 1997, the funding of 546 regular cooperative law enforcement agreements allowed the Forest Service to enhance relationships with State and local law enforcement agencies. Another 171 drug control agreements were negotiated to cooperate in combating illegal drug activities on NFS lands. The combined total of 717 agreements in FY 1997 was 68 fewer than in FY 1996.

Acquisition Management

The agency spent approximately \$700 million for goods and services in FY 1997. Over 72 percent of total contract and purchase order dollars went to small businesses. Awards included more than \$49 million to small disadvantaged businesses and \$29 million to women-owned firms.

Forest Service dollars benefited States, research, international organizations, and other organizations through a variety of grants and cooperative agreements totaling more than \$273 million.

The agency managed approximately 22 million square feet of owned office and related space plus 6 million square feet of agency leased and General Services Administration controlled space with an annual rental of \$62 million. The Forest Service also manages approximately 4,000 units of living quarters for employees, with annual rent receipts exceeding \$6.9 million.

Property managers oversee more than \$2.7 billion worth of Forest Service personal property, including property on loan to State forestry departments. The agency supports the President's initiative on recycling, with emphasis on both procurement and disposal of recyclable materials. The agency national strategy for waste prevention and recycling is available via the Internet's World Wide Web at: <http://www.fs.fed.us/land/recycle.html>.

Employee Satisfaction—Continuous Improvement Process

In FY 1997, the Forest Service conducted an employee survey to assess how practices, procedures, and policies are working in the organization. The 1997 survey gathered baseline data to track change over time through the use of subsequent surveys. Servicewide, 38,318 questionnaires were distributed to employees, and 21,508, or 56 percent, were returned.

This survey represents the agency's commitment to building our strengths and opportunities for improvement. The survey is a tool that work units can use to improve work processes and increase employee satisfaction. Managers will discuss survey results with employees as a basis for a team-building experience to design actions that improve work processes. As a result, the Forest Service will be better able to meet customer needs through enhanced employee performance and efficient organizational processes.

Information Resources Management

Improving access and use of management information systems

The Forest Service is moving toward an integrated environment for information related to managing all program areas. The Forest Service Information Management Framework provides an acquisition vehicle for all Forest Service offices to receive hardware and software for GIS and replacement of the old Data General technology. The objective is to implement easy-to-use technology Servicewide, which will facilitate the access, use, and sharing of management information about resources to help the Forest Service achieve its mission.

Project 615 (IBM) consists of a series of contracts through which the Forest Service is replacing the current infrastructure of technology supporting administrative processes (Data General) and adds GIS capability. Administrative processes include the support of data bases, automated office systems, electronic mail, computer-generated graphics, and administrative functions or applications. GIS capability provides the information technology

platform to handle spatial data normally found on maps, blueprints, and drawings to support managers, planners, and resource specialists in making decisions relative to planning and monitoring objectives of the National Forest Management Act (NFMA).

Extensive employee computer training complements the move to the IBM system.

Full implementation of the IBM system started in the third quarter of FY 1997 and will continue until everyone has access to and training on the new technology. Currently there are over 11,000 operational IBM users and that should double by this time next year. The agency has held over 500 employee training sessions this year and has worked with staffs to transition to the IBM environment.

Telecommunications—The Forest Service has reduced government network costs by sharing telecommunications networks with other USDA agencies and the Department of the Interior (DOI). This effort will reduce the cost of telecommunications to the taxpayer. The Forest Service has also developed a data base to account for telecommunications equipment and services. This inventory data base is linked into the USDA data base to optimize efficiencies in telecommunications throughout the department.

Wireless Telecommunications—The Forest Service has been involved in reallocating Federal wireless radio spectrum to be used for private and commercial interests through auction by the FCC. Through this involvement, the Forest Service has obtained additional public safety wireless spectrum for Federal use. The USDA is the fifth largest user of Federal wireless radio spectrum, and the Forest Service represents 85 percent of USDA's spectrum use.

Records, Forms, Reports—The Records Management and Forms and Reports Management programs are again operational and employees are now being actively assisted on day-to-day issues in these areas. Some major projects currently underway are:

- Migration of all forms from the DG to the IBM.
- Determining records status to electronic data bases and determining their retention periods.
- Developing a comprehensive records management training program for all FS employees.
- Developing procedures for handling e-mail messages deemed to have record value.
- Assigning electronic recordkeeping functional requirements to the Forest Service file structure.
- Acquiring OMB clearance for all expired information collection reports.

Forest Service/Bureau of Land Management (FS/BLM) Systems Coordination—Joint agency groups have accomplished a series of actions to improve FS/BLM system coordination, including telecommunications/network sharing, firewalls and shared network access, e-mail connectivity, shared helpdesk, shared LAN's and co-location, data standards and applications (e.g., Automated Lands Project/Automated Lands and Resource Management System (ALP/ALMRS) interoperability), FS/BLM contract sharing, and hardware/software licensing.

Introduction of New Electronic Procedures—The Information Resources Management (IRM) Staff led the way toward installing, implementing, establishing policy and procedures for, testing, using, and training others in the use of the IBM system. Accomplishments include such diverse actions as transferring staff e-mail over to the IBM from the Data General, drafting policy and procedures for file structures and official mail, creating an Intranet (FSWeb) and helping others to use it, implementing the requirements of Electronic FOIA (E-FOIA), testing use of new contract PC workstations and software, etc.

Public Access to Forest Service Information

Providing accurate and prompt information to our customers

Web technologies present new opportunities for providing data and information to the public. We are taking advantage of these technologies through our use of the Internet, Intranet, and Extranet. Some current measures of use and accomplishment are:

- Average 300,000 visitors a month.
- Moving 25 gigabytes of information through the server monthly.
- Nationwide effort to post land management planning documents, EIS, scoping, decision notices, and other public involvement material on forest pages with many forests participating.
- Nationwide forest health homepage system, with a network of other forest health homepages available on-line.
- International Programs posts “grants and fellowships” document, one of the most popular resources on the Forest Service web server.
- The Annual Report of the Forest Service was put on-line for the first time.